

# CRB NPS Update

Yellowstone NP  
Grand Tetons NP



Glacier NP



Lake Roosevelt NRA



# Lake Roosevelt NRA

- 130 mile long reservoir created in 1941 by Grand Coulee Dam
- Managed by NPS, BOR, STI, CCT, and WDFW
- 22 NPS owned boat launches
- \*New\* MOU with WDFW to enforce state AIS laws



# Program Components

- Public awareness
  - AIS signs at all launches
  - Stencils at majority of launches
  - Educational/outreach materials
  - Informational displays at boat shows/fairs
  - Lake Roosevelt specific AIS brochure
- Prevention of new introductions
  - Boat inspections
  - Inventory and monitoring
  - Early detection/rapid response



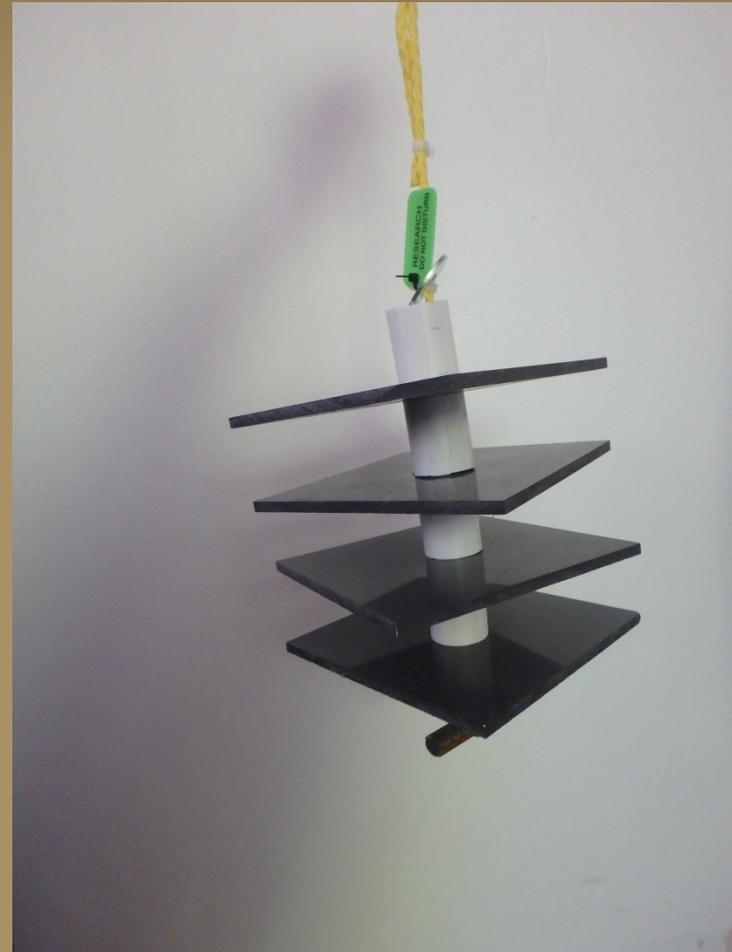
# Boat inspections

- 2017- Voluntary
- 2018- Mandatory with new MOU with WDFW
- Rotating inspection stations on weekends at ramps
- Staff- 1 Permanent, 2 interns (seasonally only)
- 2016- 99 boats inspected
- 2017- 280 boats inspected



# Monitoring

- Monthly veliger tows
- Artificial substrates and visual shore surveys
- 9 sites in 2017 and nothing found
- Collaborative effort with WDFW and STI
- 19 sites planned for 2018



# Boater Self-Certification Program

## Lake Roosevelt

National Park Service  
U.S. Department of the Interior  
Lake Roosevelt National Recreation Area



### Quagga and Zebra Mussel-Free Certification

You are requested to comply with Lake Roosevelt National Recreation Area's quagga and zebra mussel prevention program before you launch your boat.

For most boaters, this will be a simple process.

#### Here's what you need to do before you launch:

- Answer the questions on the other side of this page.
- If your answers to these questions tell you to get your boat professionally decontaminated before launching at Lake Roosevelt, you must do so!
- If your boat is ready to launch now, just complete the self certification statement.

#### Be sure to display the certificate through your windshield while your vehicle is parked in Lake Roosevelt National Recreation Area!

This certificate is valid only for the time you are at Lake Roosevelt. If you launch your vessel at another body of water, you are requested to recertify before your next launch at Lake Roosevelt.

Quagga and zebra mussels can be spread by your boat, and they live out of the water for up to 30 days. Cleaning and draining equipment and allowing it to fully dry is an effective way to reduce the risk of spreading these aquatic hitchhikers.

Zebra mussels and other harmful plants and animals may be hiding under your trim tabs, in your engine, or even on your anchor chain! Quagga and zebra mussels are microscopic in their earliest life stages, so make the effort to clean, drain, and dry your boat.



#### Quagga and zebra mussels have the potential to:

- Disrupt the food chain and fishing
- Foul facilities like docks and ramps,
- Encrust boats and clog engines
- Litter beaches with sharp smelly shells.

If you have any questions, check with a park ranger or call 1-888-WDFW-AIS (1-888-933-9247) during normal business hours.

THIS CERTIFICATE SHOULD BE VISIBLE THROUGH YOUR WINDSHIELD

## MUSSEL FREE

I affirm that my vessel does not threaten Lake Roosevelt with quagga or zebra mussels.

Please check one:  Boat not used in last 30 days in states other than WA, ID, or OR.  
 Boat cleaned, drained and dried according to recommendations.

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

## Lake Roosevelt

National Park Service  
U.S. Department of the Interior  
Lake Roosevelt National Recreation Area



Has your boat been in waters outside of the states of WA, ID, or OR in the past 30 days?

YES

NO

Was your boat and trailer cleaned, drained and dried for, at least, the time indicated in the adjoining table?

- This includes:
- Removing all dirt, plants, and grit.
  - Draining and flushing all live wells and bilge areas.

YES

Ensure that your boat complies with the cleaned and drained requirements. Now you are ready to launch!

Sign the certificate on the bottom of page 1 and display it through your windshield at all times while your vehicle and boat trailer are parked at Lake Roosevelt.

NO

Your watercraft is required to be cleaned and drained before launching. (RCW.77.135.110)

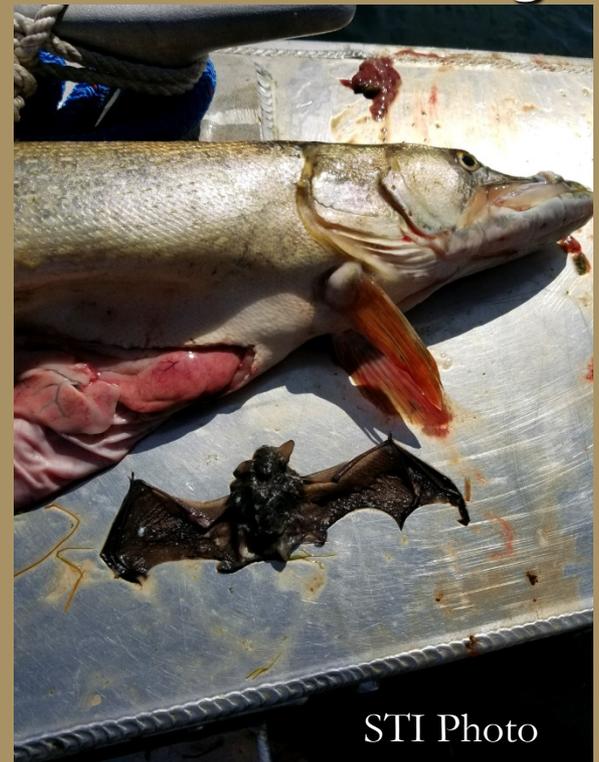
Violators are punishable by up to 6 months in jail and a \$5,000 fine.

Call 1-888-WDFW-AIS (1-888-933-9247) during normal office hours to schedule an inspection.

Time of Year	Drying Days
February	28 days (3 days if continually frozen)
March	18 days
April	11 days
May-September	7 days
October	11 days
November	28 days (3 days if continually frozen)
December-January	28 days (3 days if continually frozen)

# Northern Pike

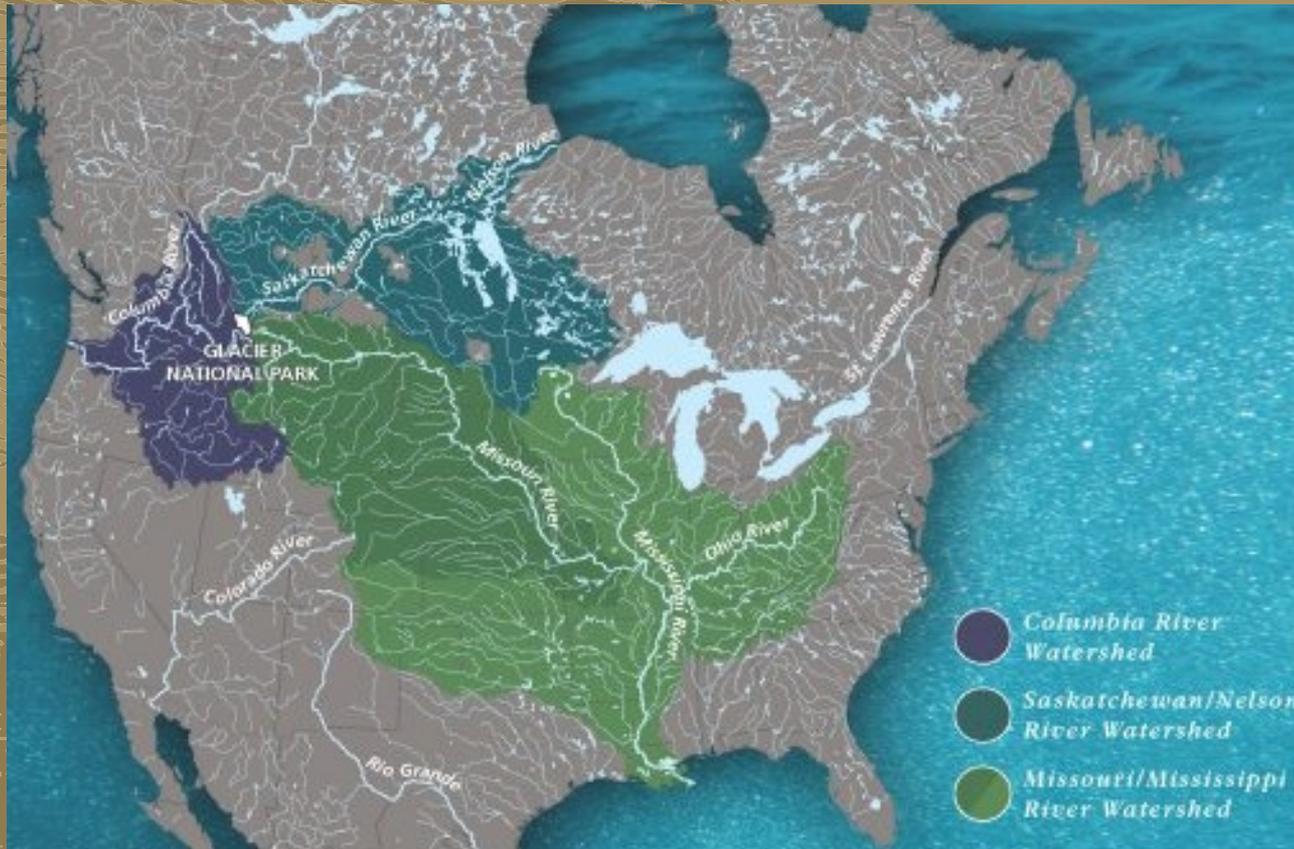
- Breeding population established in upper portion of reservoir
- Bounty Program began spring 2017 and continuing this year
- Ongoing removal efforts for adults and juveniles



STI Photo

# Glacier National Park

- Crown of the Continent
- 3 major watershed- Columbia, Missouri and Saskatchewan River to Hudson Bay



# Emergency AIS Response Plan

## Two Tiered Response:

Tier 1: New infestation or substantial change in the distribution of invasive mussels in adjacent State .

*Response: GLAC Leadership Team to meet to determine the immediacy of the threat to park waters, review existing prevention procedures for adequacy, and determine appropriate management response(s).*

Tier 2: A detection of invasive mussels in a waterway within the State of Montana.

*Response: An immediate closure of surface water access points within GNP (boat launch areas) until such time it can be determined that GNP can adequately ensure that invasive mussels will not be introduced into park waters. There will be an initial “assessment” period during which the NPS will determine the risk of infestation to park waters. It may result in longer-term prohibition/restriction of watercraft use on park waters.*

# Current Status

- All motorized and non-motorized boats inspected prior to use on park waters.
- Motorized/trailerred watercraft permitted on Lake McDonald with a 30 day “self-quarantine” (boat sealed to trailer for 30 days)
- Concession boat tours and motorized boat rentals available
- Non-motorized boat use with NPS AIS inspection
- Participating on Upper Columbia Conservation Commission (UC3) planning team

## ■ Monitoring:

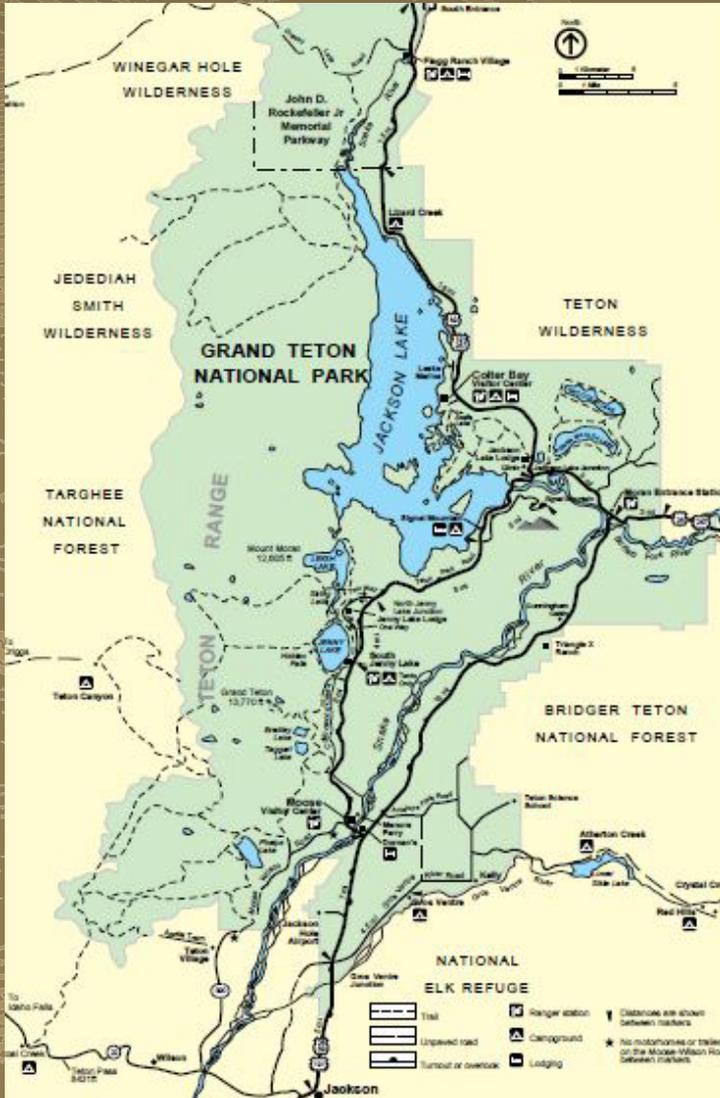
- Veliger Sampling: Late summer annually since 2011
- eDNA Sampling: Late Spring annually starting in 2017
- All tests have been negative to date

## ■ Potential Future Plans:

- Employ Colorado boater tracking database to use/share information on boat movement.
- Participate in State of Montana boater AIS “passport” program.
- Develop boater inspection MOU’s with State, local, and Tribal entities



# Grand Teton National Park



- 2 lakes legal for motorized watercraft Jackson & Jenny Lakes
- Non-motorized watercraft permitted on 10 other lakes and the Snake River (largest tributary to the Columbia River)
- Increased visitation 6 of last 7 years with > 3 million recreational visits each year 2015 - 2017

# Boat Inspections - GRTE

- WY has statutes and regulations regarding AIS
  - Requires AIS decal, inspections for boats transported from out of state and mandatory stop at open inspection stations
- GRTE inspectors trained by WG&FD, utilize their laws, regs, and protocols
  - NPS LE staff not recognized as peace officers under WY law - enforcing laws problematic



# Boat inspections cont. GRTE

- In 2017 two inspection stations open 116 days during primary boating season (May 22- September 10, Sept 16-17, 23-24)
  - 2<sup>nd</sup> year with 2 watercraft inspection/ decontamination stations
- Stations located in Moose and Moran operated 7:30 AM – 4:30 PM
- Grand Teton NP requires boat permits
  - 10,593 permits in 2017
  - 85% non-motorized
  - 15% motorized



# Boat inspections cont. GRTE

- 2017 - 20,562 watercraft passed through the two stations
  - 3,625 commercial float trips
  - 16,857 private parties, guides or rentals
- High risk inspections on 492 boats, 36 of these resulted in a decontamination
- 2017 – average 177 boats per day, a 13% increase in daily average boats over pervious year



# Monitoring in GRTE

- WG&FD
  - Veliger tows – Jackson, Jenny and Sting Lakes
  - Inspect marina infrastructure for adult mussel
- Bureau of Reclamation
  - Veliger tows – Jackson Lake
  - Dive program transitioning to settling plates in 2018



# Kelly Warm Spring GRTE

- Aquarium dumping ground for decades
- A-typical pathogens
- 5 species of non-native fish
  - 2 warm water species consistently found in adjacent creek



# Kelly Warm Spring - GRTE

- Rotenone treatment planned for 2018
- Permitting and compliance still in progress
  - Utilizing CE
- No strategy to remove bullfrogs and red rimmed melania (snail)



# Yellowstone National Park

- 2.22 million acres; 6 entrances
- Headwaters – Columbia and Missouri River Basins
- 2 lakes open to motorized watercraft
  - 3 boat ramps
- Most lakes and ponds open to non-motorized watercraft
- All but one river is closed to boating per CFR
  - Except the Lewis River Channel to Shoshone Lake
- 8 total AIS: New Zealand mudsnails, red-rimmed melania, whirling disease & 5 nonnative fish
  - 3 have significant detrimental affect: lake trout, NZ mudsnail, whirling disease



# AIS program overview

- Boat inspections started in 2011 (attempts were made starting 2006)
  - 2012: 17% of boats were inspected  
AIS stickers first used
  - 2013: Policy requiring mandatory AIS inspections  
AIS exit seals for returning boats
  - 2014: First dedicated certified boat inspectors
  - 2016: 6 seasonal certified boat inspectors  
7-day coverage
  - 2018: Boating season (May 26 – Nov 4)  
Felt-soled boot ban

# Permits & Inspections

- Yellowstone does its own inspections, regardless of previous state seal or inspection
  - Sealed boat with mussels - Inspected twice, sealed with valid receipt, no mussels noted, no decon
- All watercraft and angler float tubes must be inspected at the time of purchasing a boat permit or re-entering Yellowstone waters (AIS stickers expire after 7 days)
- Boat permits: 3 locations (motorized boat & non-motorized)
- Float tube permit sales & inspection: 8 locations

# Yellowstone AIS by the Numbers - 2017

- 3,576 boat permits; 4,359 inspections
  - 10,400 people contacted
- 99.3% of permitted boats were inspected (76% in 2013)
  - 100% motorized watercraft inspected (approx. 650) – for last 3 seasons
  - 83 determined to be high risk
  - 26 decontaminations; 136 “cleaned”
    - 161 total (Up 39% from 2016)
- Most boats are non-motorized (82%)
- Half the boats enter through South Entrance (Jackson, WY)
- Shoulder season use is growing

# AIS Monitoring and Surveys

## ■ Current

- Veliger Tows: Late summer annually in both motorized lakes (Yellowstone and Lewis) by WYF&G (All negative to date)
- eDNA and visual surveys: 16 sites parkwide by USGS - Northern Rocky Mountain Science Center
- Aquatic vegetation surveys annually (no AIS plants found to date)

## ■ Looking to the Future

- Settling plates and visual surveys (Yellowstone and Lewis Lakes)
- Participate in State of Montana boater AIS “passport” program



Questions??

EXPERIENCE YOUR AMERICA