



## Big Hole Watershed Committee

### Monthly Meeting Minutes

June 21, 2023 – 7:00 pm at the Divide Grange  
*Zoom option also provided*

#### In Attendance

*In-person:* Pedro Marques, BHCW; Tana Nulph, BHCW; Ben LaPorte, BHCW; Allyson Allen, BHCW Conservation Fellow; Tom Bowler, Resident; Betty Bowler, Resident; John Reinhardt, Rancher/BHCW; Jenna Dohman, MBMG; Ann Hanson, MBMG; Jim Hagenbarth, Rancher/BHCW; Craig Fellin, Big Hole Lodge; Steve Luebeck, Sportsman/BHCW; Randy Smith, Rancher/BHCW; Roy Morris, GGTU/BHCW; Scott Reynolds, Resident; Peter Frick, Rancher/BHCW; Paul Siddoway, Resident; Wade Fellin, Big Hole Lodge; Dan Kambich, Rancher; Mark Kambich, Rancher/BHCW; Will Steyh, Resident; Tom Schrapps, Resident; Gavin Lower, Resident; Jarrett Payne, FWP; Kaitlin Boren, DNRC; Howard Varner, Resident; Dean Peterson, Rancher/BHCW; Jeff Wolk; Diane Hutton, Resident/BHCW; Jeff Wolk; Resident; Mark Raffety, Rancher/BHCW; Jim Olsen, MFWP; Craig Jones, Great Divide Outfitters; Travis Thompson; Eric Thorson, Sunrise Fly Shop/BHCW; Katelin Killoy, MFWP; Cass Kohler, MFWP; John Craig, Resident; Erik Kalsta, Rancher/BHCW; Chris Edgington, Montana Trout Unlimited; Dave Duffy, Resident; Jyl Duffy, Resident; Cyrena Kirkpatrick, Rancher; Kayla Kirkpatrick, Rancher; Kari Nichols, Rancher; Allen Schallenberger; Dixie Schallenberger; Lindsey Falkenburg, Jessie Cubberly, Rowan McHugh, Devan Kajan, Taylor, Eli, and Anna; Wild Rockies Field Institute.

*Zoom:* Andy Suenram, Resident/BHCW; Dan Holland; Jim Keenan, BSB-Water/BHCW; Johnathan's iPhone; Kevin Lynch, Resident; Ray Schonsberg; Resident; Lia Jones, Great Divide Outfitters; and Brian Wheeler, BHRF/BHCW.

#### Meeting Minutes

BHCW monthly meetings are held at the Divide Grange with a virtual (Zoom) option provided thanks to Southern Montana Telephone Company, who donated the internet service. Meeting minutes and recordings are available at <https://bhwc.org/monthly-meetings/> (scroll down for meeting minutes archive). Printed copies are available during in-person meetings. Contact Tana Nulph, BHCW Associate Director, at [tnulph@bhwc.org](mailto:tnulph@bhwc.org) or (406) 267-3421 to suggest additions or corrections.

#### Reports

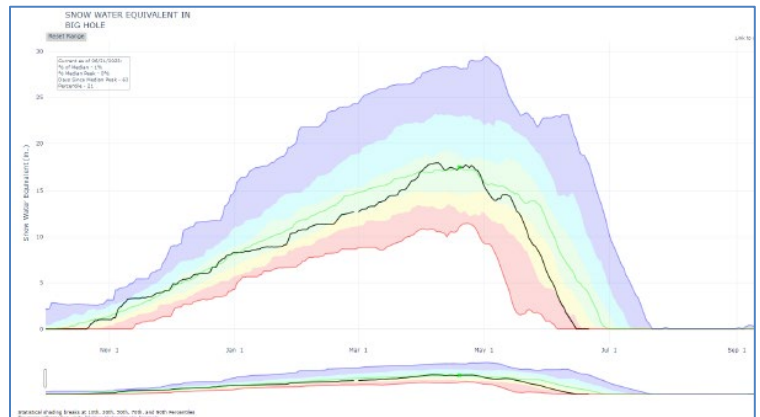
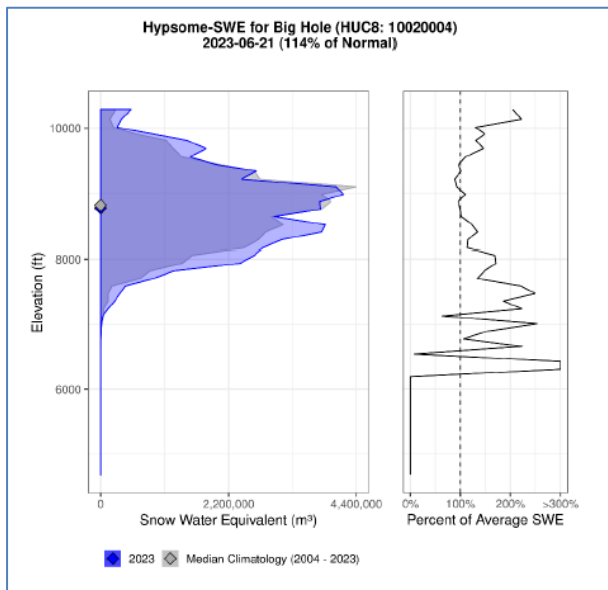
*Streamflow and Snowpack Report – Kaitlin Boren, Department of Natural Resources and Conservation*

- *Precipitation:* Total precipitation in the Big Hole is currently slightly below median values (99%).
- *Snowpack:* Snowpack in the Big Hole is currently 53% of NRCS median values, however the modeled Hypsometric-SWE value is 114% (2004-2023). The modeled snowpack for the basin indicates that the lower elevation snowpack is gone for the season, the mid-range and high elevation snowpack is

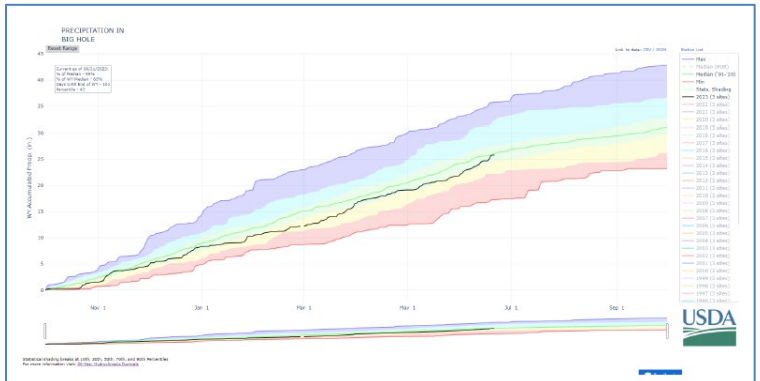
average overall. Below are the current SNOTEL observations as well as the % median for individual sites across the watershed.

- **Precipitation:** Total precipitation in the Big Hole is currently slightly below median values (99%).
- **CFS and Spring Runoff:** Spring conditions exhibited lower temperatures, keeping the Big Hole in ice-conditions longer than normal. This transitioned into warmer temperatures at the end of April, resulting in low elevation snowmelt. Runoff conditions currently remain for the tributaries and main stem in the upper reaches, with the peak runoff reached around the beginning of June. Early

Station	Network	Elev. (ft.)	Obs	NRCS Median	% NRCS Median
Barker Lakes	SNOTEL	8250	0.0	0.0	
Basin Creek	SNOTEL	7180	0.0	0.0	
Bloody Dick	SNOTEL	7600	0.0	0.0	
Calvert Creek	SNOTEL	6430	0.0	0.0	
Darkhorse Lake	SNOTEL	8945	0.0	11.4	0%
Moose Creek	SNOTEL	6200	0.4	0.0	
Mule Creek	SNOTEL	8300	0.1	0.0	
Saddle Mtn.	SNOTEL	7940	0.1	0.0	
Slagmelt Lakes	SNOTEL	8620	0.1	0.0	
<b>Basin Index (Missouri River Basin)</b>					<b>108%</b>

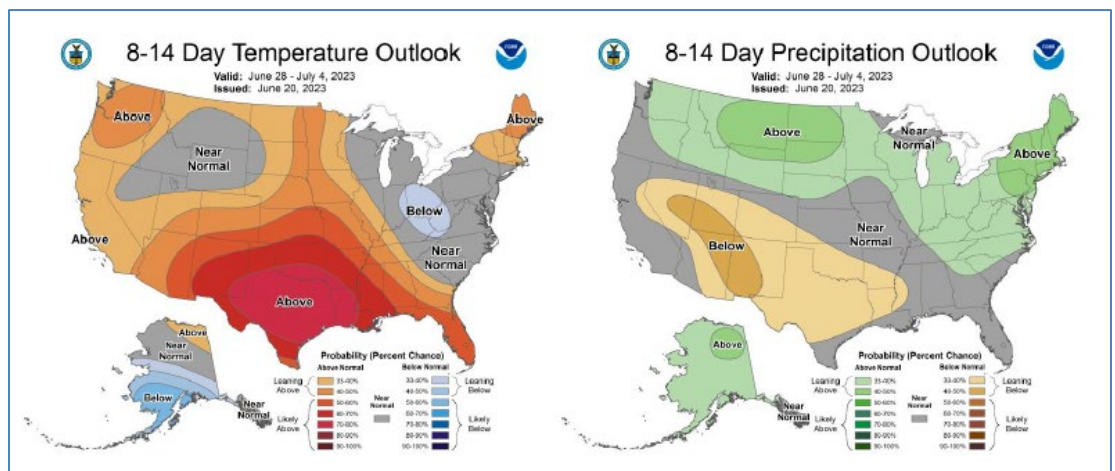


summer precipitation events have also contributed to the higher flow conditions and will “hopefully” continue

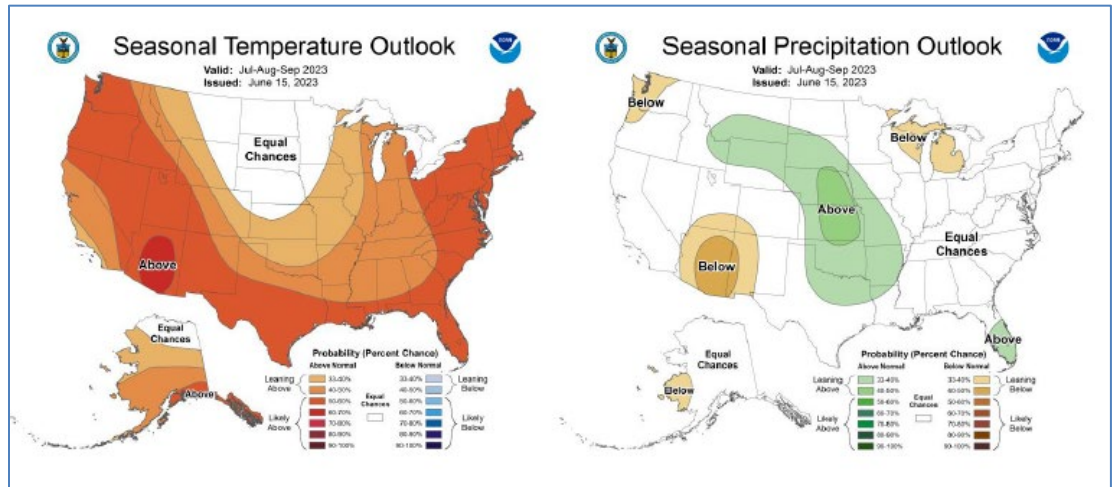


to sustain higher flows into July.

- **Outlook:** The 8-14-day outlook predicts near normal temperatures and average to above average precipitation.



- *Seasonal Outlook:* The three-month outlook (May/June/July) predicts leaning above to equal chance temperatures and equal to above average chances for precipitation.



- *ENSO Alert System Status (from NOAA):* El Niño Advisory
  - *Synopsis:* El Niño conditions are present and are expected to gradually strengthen into the Northern Hemisphere winter 2023-24. There is currently a 55% chance of conditions to remain Nov-Jan, with an 84% chance of exceeding moderate strength Niño.

#### *Director's Report – Pedro Marques, Executive Director*

- Allyson Allen Conservation Fellow!!!
- Drought Management
  - Lots of phone calls
  - Discussion to follow Jim's presentation
- Outreach
  - Wise River Flows and Irrigation Infrastructure
  - Beaver conflict mitigation
  - PERC (Property and Environment Research Council)
  - Vital Ground Foundation
  - Delivering Carnivore Conflict Prevention
  - Future Fisheries Review Panel tour
  - Anaconda- Assessment of County Lands
  - Wild Rockies Field Institute
- Newsletter coming soon



#### *Steering Committee Report – Randy Smith, Chair; Jim Hagenbarth, Vice-Chair; Roy Morris, Secretary, Steve Luebeck, Treasurer*

- The steering committee had nothing to report.

#### *Communications and Wildlife Report – Tana Nulph, Associate Director*

- Outreach and communications
  - Summer 2023 Newsletters is now out! Read it here: [https://bhwc.org/montana/uploads/2023/06/BHWC-Newsletter\\_Spring-2023\\_FINAL.pdf](https://bhwc.org/montana/uploads/2023/06/BHWC-Newsletter_Spring-2023_FINAL.pdf)
  - Wildlife Speaker Series
    - Annual event held June 14th





- 15 attendees
- Topic: macroinvertebrates @ Melrose Bar
- BHWC will be at the Butte Folk Festival, July 14th-16th – come out and see us!
- Wildlife
  - 2023 carcass removal provided May 2023
  - Grizzly Bear meeting June 8th @ Jackson
  - Conflict Reduction Workshop @ Missoula (Tana, Pedro, and Chet attended) – June 14th
  - Bear spray trainings (People and Carnivores) – June 22nd @ Divide, June 29th @ Wisdom



*Restoration Report – Ben LaPorte, Program Manager*

- Smith Sage Springs Restoration Project
  - Pre-construction meeting w/Glacier
  - Project planning and prep
- Trail Creek Conifer Encroachment and Riparian Enhancement
  - 507 acres of conifer removal
  - Future stream enhancements
- Browns Gulch and Trapper Creek Tributaries
  - YEP maintenance and new structures
- Upper Oregon Creek/Anaconda Uplands
  - Watershed Consulting, WRFI class, and MCC
- Mount Haggin Culvert Removal and Replacements
  - Secured full funding through FFIP!
- Ally Orientation
  - HUGE HELP-grant reporting, crew oversight



## New Business

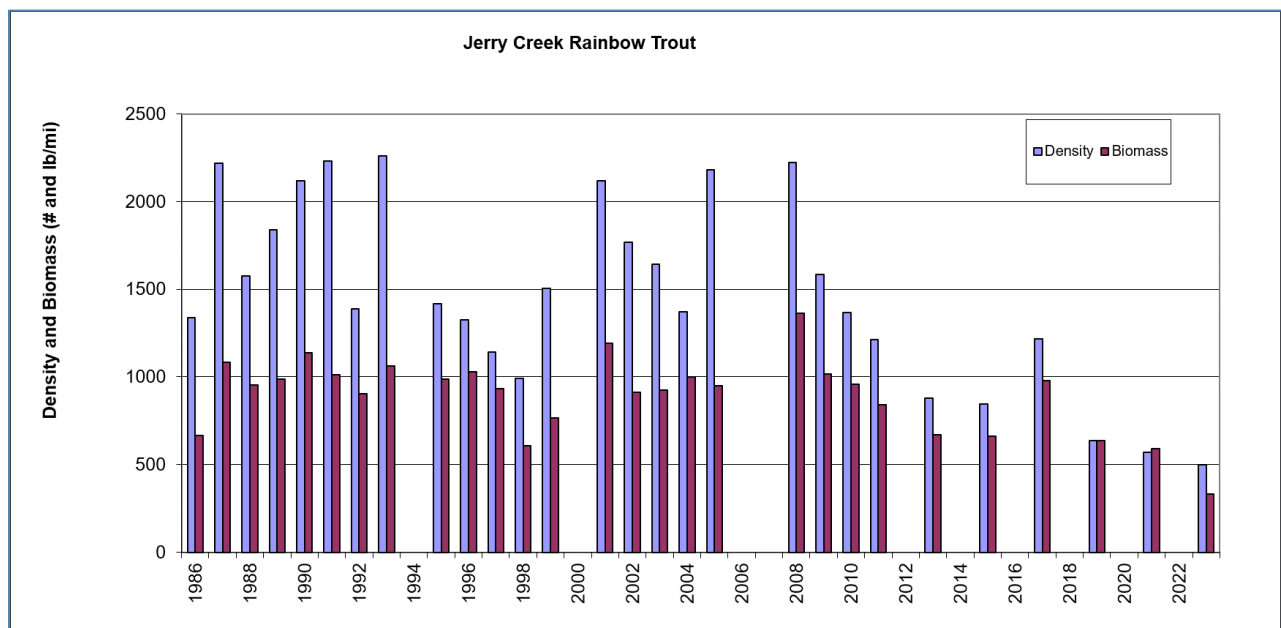
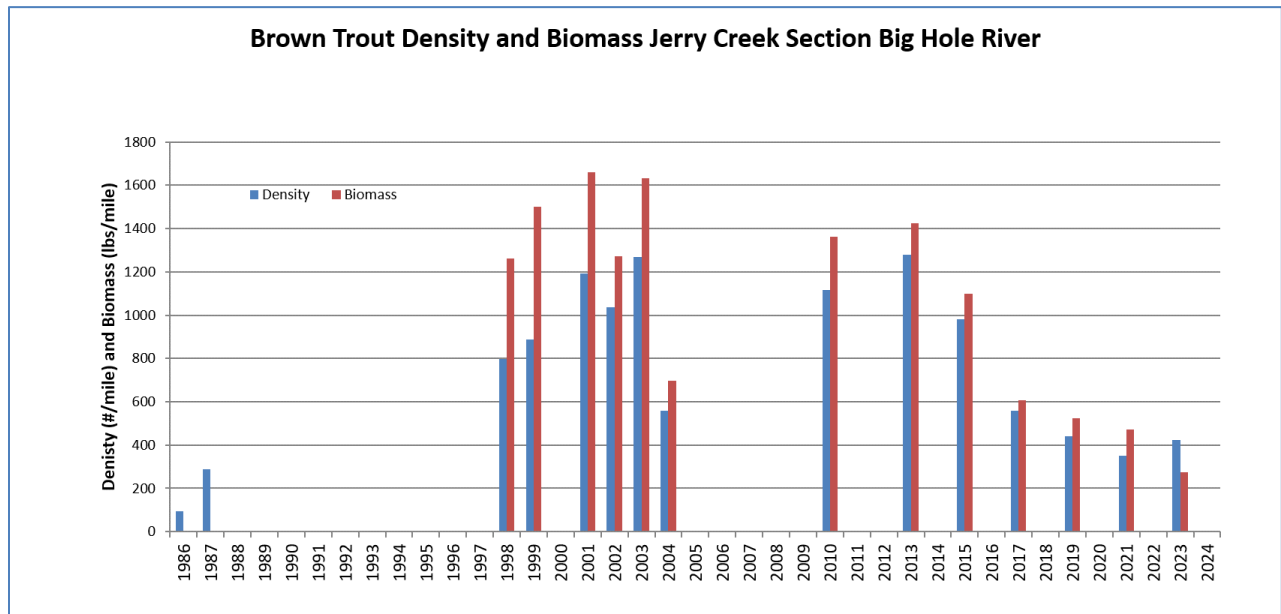
- State Drought Management Plan update: DNRC is encouraging any and all water users and members of the public who may be impacted by drought (which as we know is everyone!) to peruse the draft plan and send them their thoughts. Starting this Monday, comments on the draft plan can be made – and the draft plan itself will be available – on the drought plan website ([MTDroughtInfo.org](https://MTDroughtInfo.org)).

Break – 10 minutes

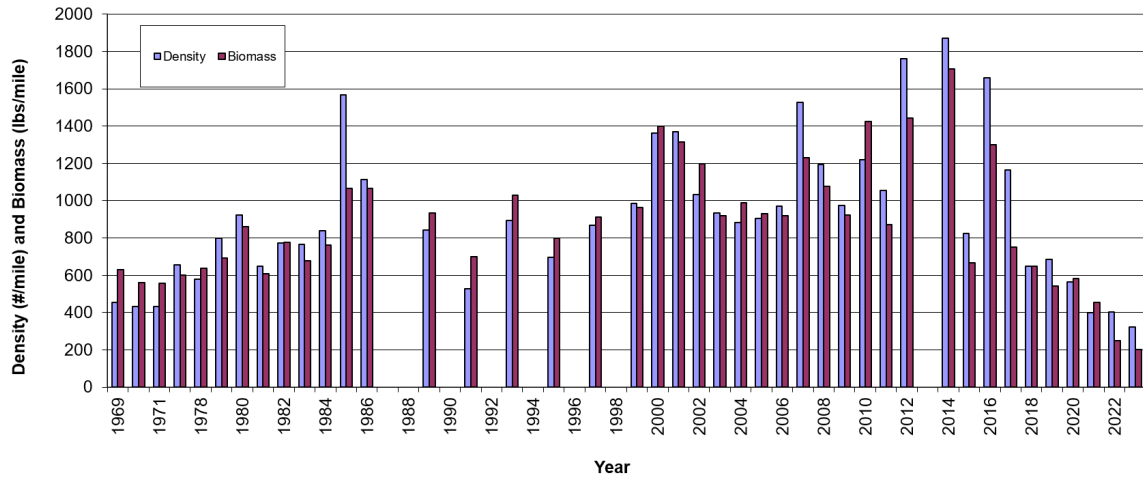
## Meeting Topic: Big Hole River Fishery Update

*Presented by: Jim Olsen, Montana Fish, Wildlife and Parks*

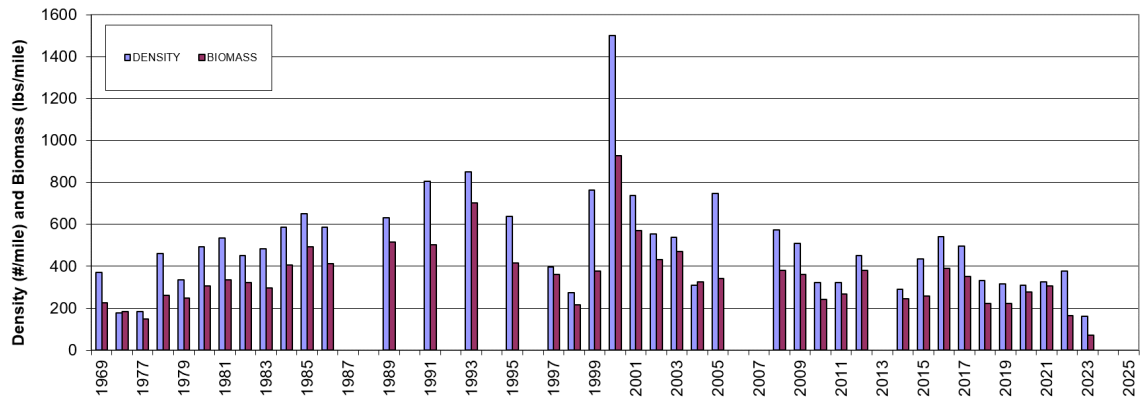
Fish Counts (see graphs)



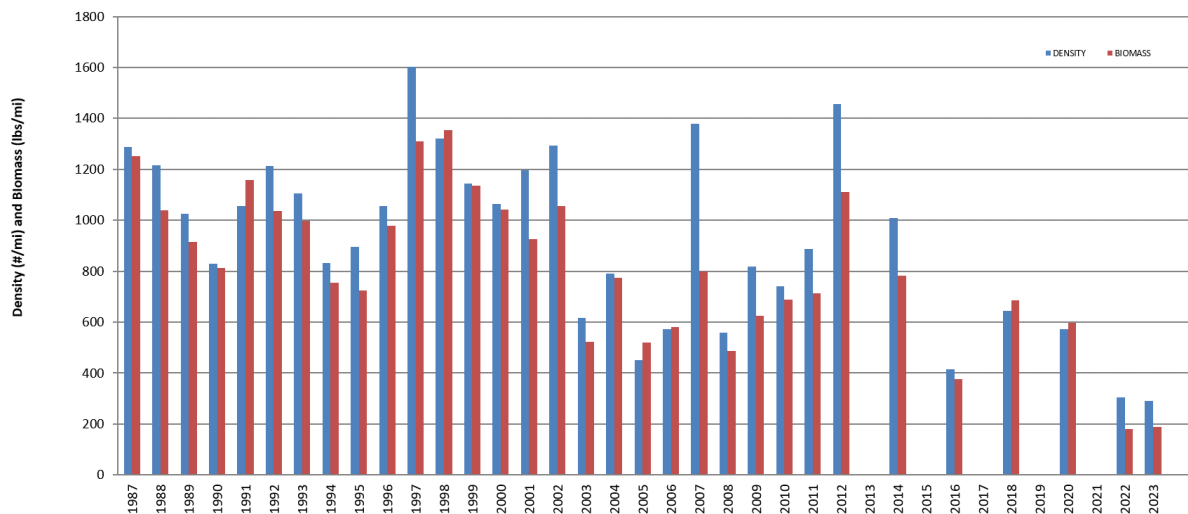
Melrose Section Age 2+ Brown Trout

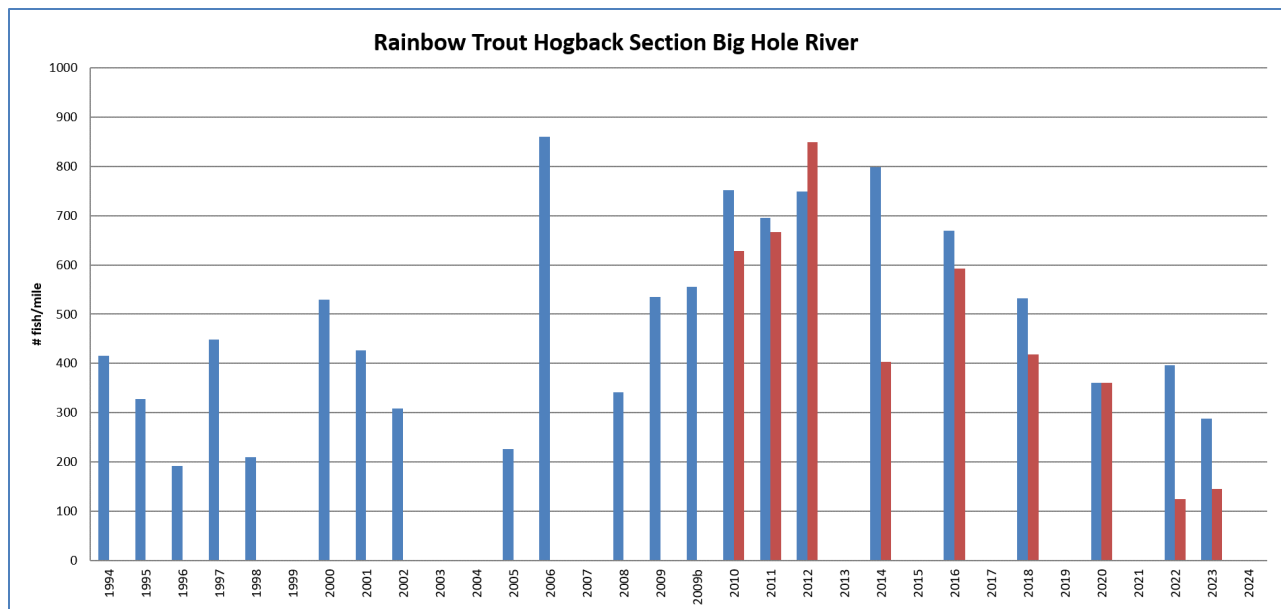


Melrose Section Age 1+ Rainbow Trout

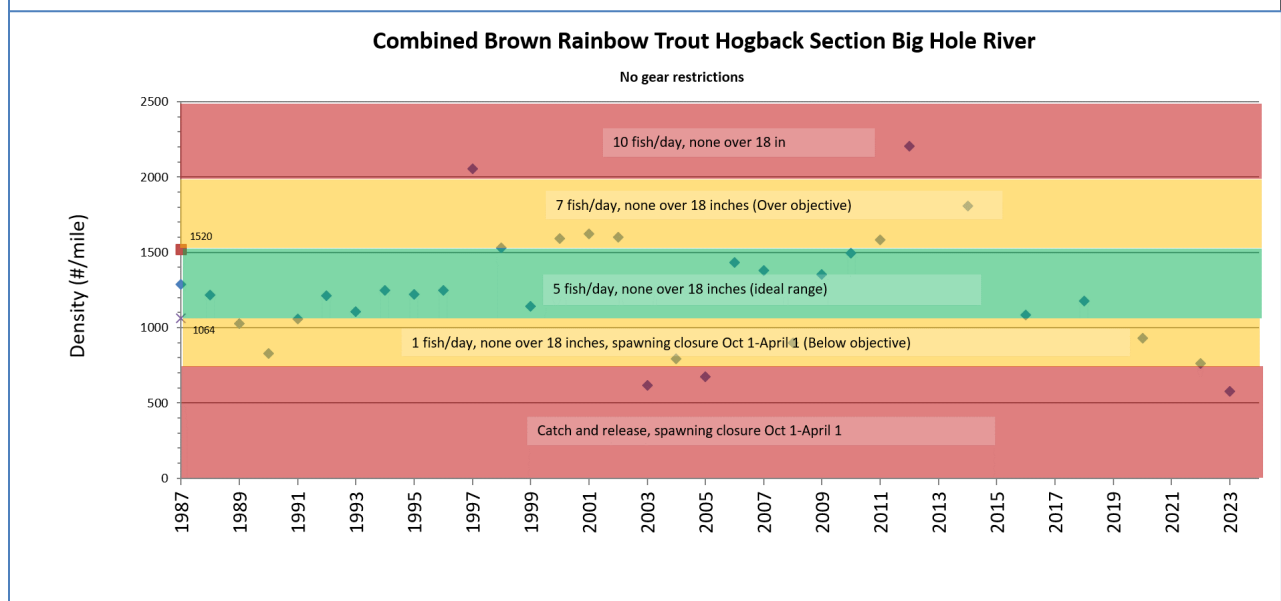
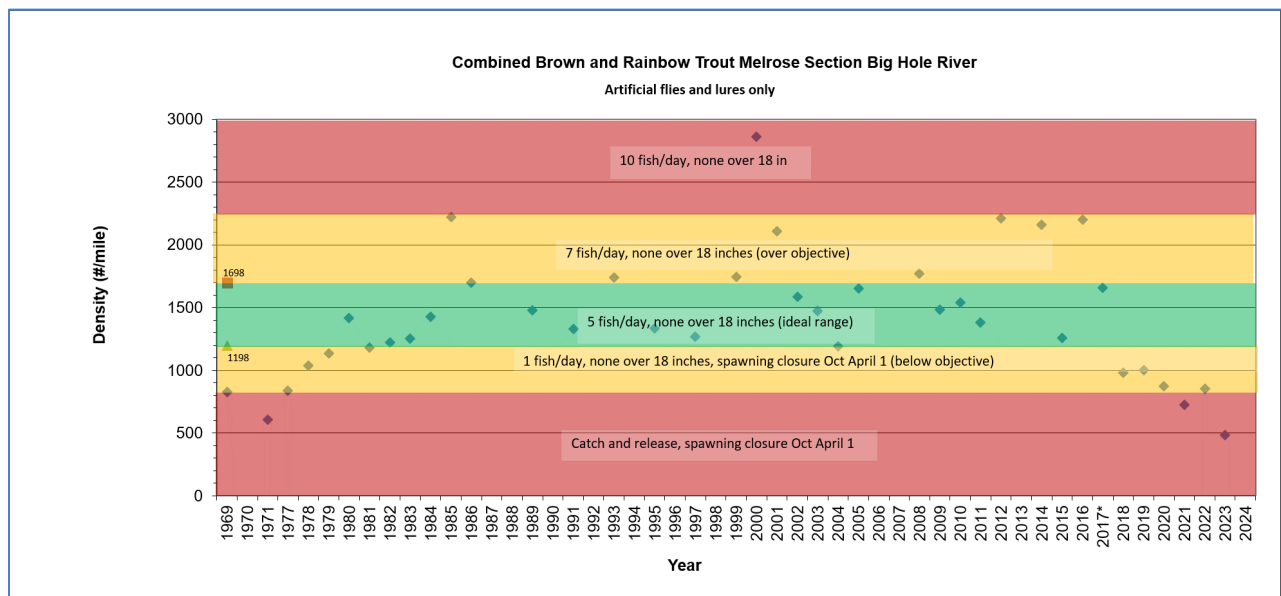


Brown trout Hogback Section Big Hole River





## Proposed Management Plan





### Emergency Regulations

- Dickie Bridge to the Mouth
- Open April 1 through September 30
- Catch-and-release only
- Artificial lures and single-pointed hooks only
  - No treble or double hooks. Anglers may remove treble or double hooks from the lure and replace them with a single hook, or the shanks may be cut off the other hook points to leave a single hook. Lures with multiple hook attachments may still be used but any treble hook must be replaced by a single hook.

### MFWP Plans Going Forward

- Fisheries mortality study
  - Begin in 2024
  - Goals of study:
    - Catch and release mortality
    - Direct angling mortality
      - Need to modify regulations to test this on Big Hole
    - Role of disease and potential causes
- River-wide creel survey (2023)
- Adaptive management modeling
- Disease research
- Tributary research study

### French Creek

- Treated in 2021 and 2022
- Early July 2022 EDNA collected
  - 354 EDNA samples collected in 3 days
  - FS Lab quick turnaround, 2 weeks
  - 23 positive hits
    - 3 wells = 1
    - 2 wells = 2
  - Re-treated positive areas in 2022
  - Found 1 fish in Moose Creek (3,1,2,0,1)
  - Retested EDNA in August: 0 positive
    - Tested tributaries
    - Retest mainstem 2023
- Restocking
  - 2022
    - 12,350 Arctic grayling (350 age-1)
    - 22,000 age-0 WCT from Big Hole brood
  - Pending EDNA...
    - Stock 3 consecutive years
      - Arctic grayling from Axolotl brood (Big Hole)
      - WCT from Big Hole brood

### Bryant Creek

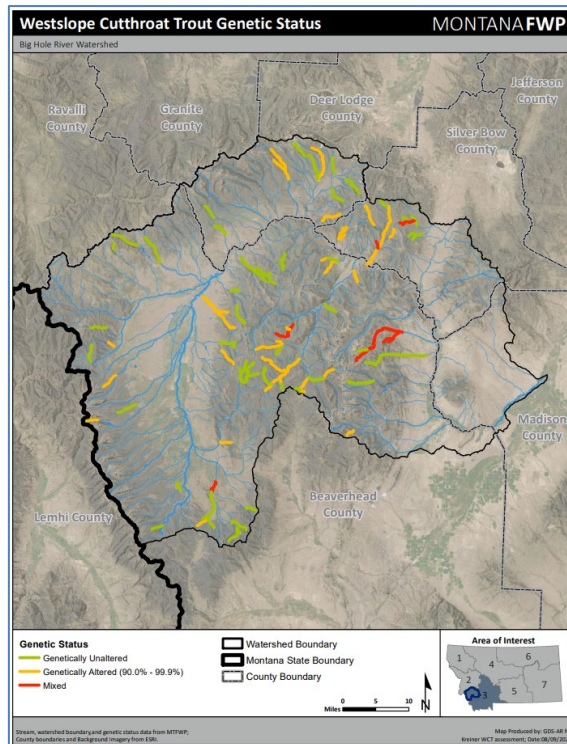


### Calvert Mine Pond

- Proposing to stock with WCT

### WCT Restoration Goals

- 20% goal is 319 miles
- Currently occupied = 10.3 % total, 3.7% unaltered, 64% at risk
- Next 5 years complete 8 smaller projects = 68 miles
- $177 + 68 = 245$  occupied miles
- Only 74 miles to reach goal



Stream	Miles
Cherry Creek	11
McVey Creek	11
N Fk Doolittle Creek	3
W Fk Mudd Creek	3
York Gulch	3
Twelvemile Creek	2
S Fk N Fk Divide	3
Pintler Creek	12
Dry Creek	3
Bender Creek	4
Long Branch Creek	6
Mule Creek	2
Skull Creek	2
W Fk Mudd Creek	4
<b>Total</b>	<b>69</b>
<b>French Creek</b>	<b>40</b>
<b>Total</b>	<b>109</b>

### Upcoming Meetings

- August 16, 2023: **Old Salt Co-Op Farm to Market Meats**
  - 7:00 pm at the Divide Grange/Zoom

### Adjourn