



Big Hole Watershed Committee

Monthly Meeting Minutes

September 17, 2025 – 7:00 pm at the Divide Grange
Zoom option also provided

In Attendance

In-person: Tana Lynch, BHWC; Tom Bowler, Butte Resident; Betty Bowler, Butte Resident; Roy Morris, GGTU/BHWC; Jim Hagenbarth, Rancher/BHWC; Dave Duffy, Wise River Resident; JM Peck, Rancher; John Jackson, Rancher/BHWC County Commissioner/BHWC; Katelin Killoy, MFWP; Jim Keenan, BSB Water; Luke Lutz, DNRC; Emily Downing, IWJV; Ellie Ross, BSWC/MTU; Jeff Dunn, WGM Group; Aria Crootof, UMW; and Liz Jones, Rancher/BHWC.

Zoom: Pedro Marques, BHWC; Ryan Hammond; Nolan Salix, BHWC; Craig Fellin, Big Hole Lodge; Duncan Adams, Montana Standard; Alzada Roche, WGM Group; and Danika Holmes, DNRC.

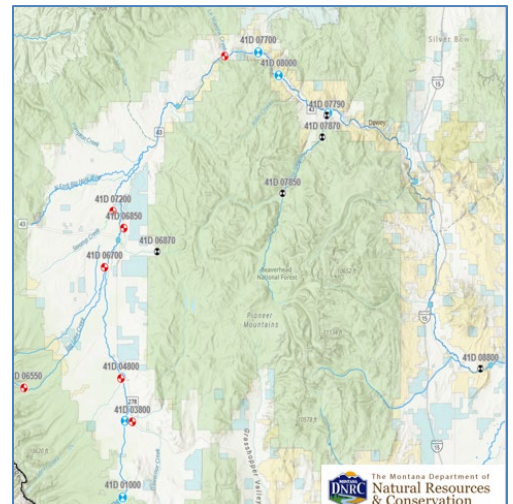
Meeting Minutes

BHWC 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 Lynch, BHWC Associate Director, at tlynch@bhwc.org or (406) 267-3421 to suggest additions or corrections.

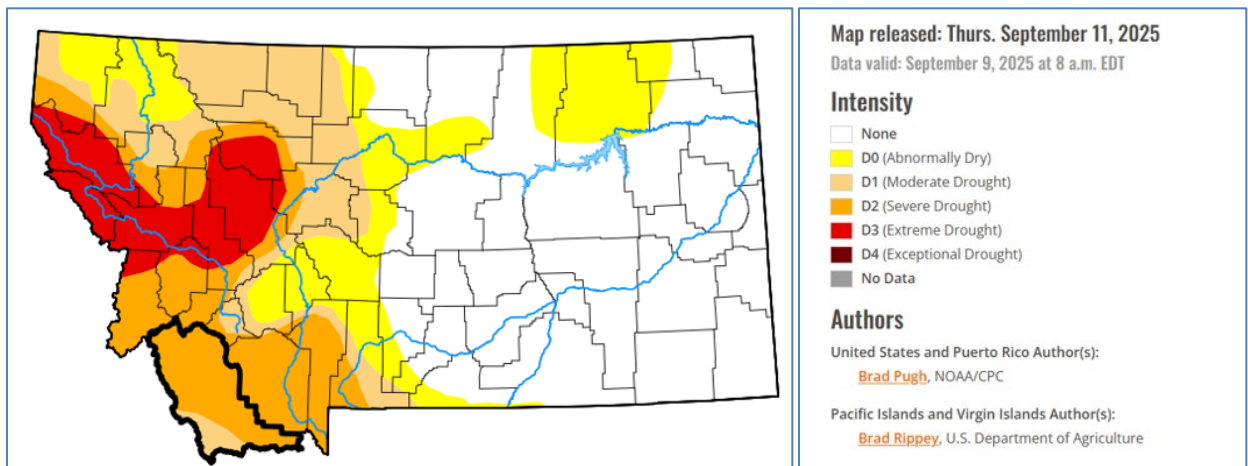
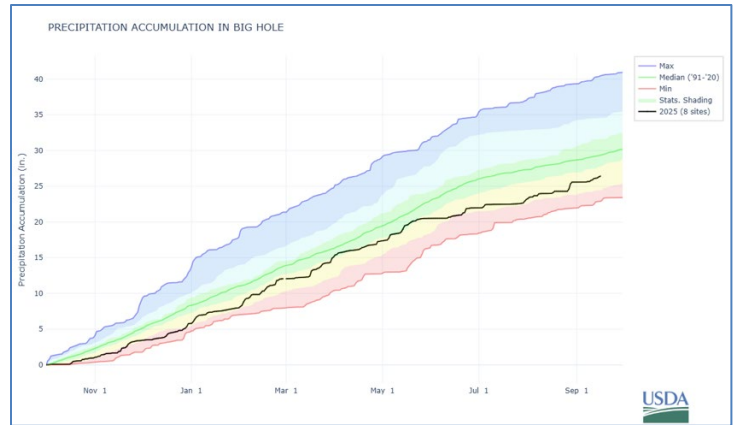
Reports

Streamflow and Snowpack Report – Luke Lutz, Montana Department of Natural Resources and Conservation

- *Streamflows: (September 17th, 2025)*
 - Section 1: Wisdom (06024450): 23 cfs
 - Full closure since 7/19
 - Section 2: Big Hole River near Wise River (41D 08000): 113 cfs
 - Full closure since 8/23
 - Section 3: Maiden Rock (06025250): 185 cfs
 - Reopened 9/16
 - Section 4:
 - Melrose (06025500): 168 cfs
 - Glen (06026210): 192 cfs
 - Reopened 9/16

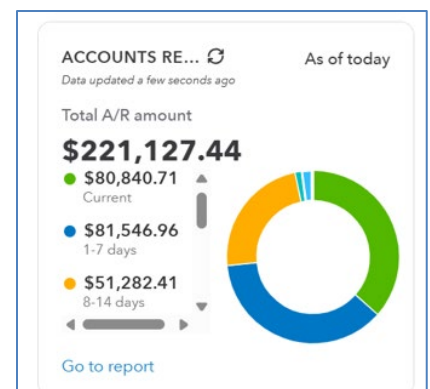


- Section 5: Hamilton Ditch (06026420): 101 cfs
 - Full closure since 7/23
- Stream And Gage Explorer (StAGE): <https://gis.dnrc.mt.gov/apps/stage/>
- **Precipitation:** 90% of average (1991-2020)
- **Climate Outlook (NOAA):**
 - **Outlook:** The 8-14 day outlook predicts above normal temperatures and above normal precipitation.
 - **Seasonal Outlook:** The seasonal outlook predicts slightly above normal temperatures and equal chances of above or below normal precipitation.
 - **El Niño/La Niña:** A transition from ENSO-neutral to La Niña is likely in the next couple of months, with a 71% chance of La Niña during October - December 2025. Thereafter, La Niña is favored but chances decrease to 54% in December 2025 - February 2026 (11 Sep 2025).
- **U.S. Seasonal Drought Outlook:** Severe drought persists in our watershed.



Director's Report – Pedro Marques, Executive Director

- BHCW welcome new staff:
 - Karly Noetzel- Communications Specialist
 - Part-time 2025. Full time 2026
 - Consistent content, science communications, engagement
 - Nolan Salix- Restoration Specialist
 - ½ time winter; ¾ time field season
 - On-site project coordination and enthusiasm!
 - Keeping our restoration program pipeline flowing
- **Funding:**
 - **Scoping:**
 - RDGP Planning: Continuation of storage investigations
 - National Forest Foundation- Public engagement and high meadow restoration
 - BoR Water Storage: Continuation of MBMG feasibility
 - DEQ 319 program: Burma Road Sediment Project



- Charlotte Martin Foundation
- BHCW & Blackfoot Challenge Speak Up: [Montana's Water Future Depends on Cooperation, Not Conflict | Opinion](#)
 - Reflections on Drought Plan:
 - Collective effort is happening
 - But participation is uneven; optics of late-season sprinklers
 - Late Sept temp. reopening
- BHCW signed letter with other watershed groups in favor of sustained funding for BoR WaterSmart program
- Restoration Project Update:
 - Completed:
 - Rock Creek Fish Barrier – RE Miller
 - Smith Sage Springs Wetland Restoration – Phase 1
 - Final Report delivered



Table 3. Sediment Load Reduction Summary			
Streambank	Retreat Rate (Feet/Year)	Volume (Cu Yards/Year)	Mass (Tons/Year)
1	.17	1.7	2.2
2	.87	38.0	49.4
3	.25	11.9	15.4
4	.25	20.5	26.6
Headcut	3.00	55.6	72.2
Total Sediment Load Reduction	N/A	127.7	165.8

Funding Source	Purpose	Amount
Montana DEQ (cash)	All aspects	\$110,081.43
Montana DEQ (cash)	Education/Outreach funds for film	\$2,000.00
USFWS through CVA	Project implementation	\$61,484.00
Trout and Salmon Foundation (cash)	Installation of the 2022 in-stream structures	\$5,000.00
Bass Pro Shops	Project Implementation	\$30,000.00
GGTU	Project Implementation	\$11,087.00
BHCW	Funding for film project	\$996.80
InterMountain West Joint Venture	Funding for film project	\$12,617.68
Montana Film Office	Funding for film project	\$2,675.00
Clearwater Credit Union	Funding for film project	\$500.00
Project Total		\$236,441.91

- Contracts Underway:
 - High Meadow Storage Capacity – WGM Group
 - Smith Sage Springs ditch siphon design – Confluence Consulting
 - California Creek “demo area” design – WET
 - Beaverhead CD -> Elkhorn Mine
- Next Up:
 - Elkhorn Preserve/Lazy S Ranch
 - Landowner Agreement 95%
 - Kamperschroer Riparian

Site Enhancement	Units	Quantity
Floodplain Enhancement-Hummocked area	Acres	3.1
New Floodplain	Acres	2.6
New channel	Feet	1313

- Negotiating with contractor for reduced scope
- California Creek Designs
 - Low Intensity Option under design: FY '26 Contract Signed
- East Pioneers – 5-Star Forestry
 - >1000 acres done
 - Funded by MDF, RMEF, USFS, BLM
- Stock Tank Projects
 - Support for FWP to fund 2 tanks
- In Design/Scoping/Funding:
 - Elkhorn Mine and Mill
 - BHCW is subcontractor to Beaverhead CD
 - Mill structure being designed
 - Biofiltration design contracted
 - Moose Cr. Headwaters
 - Beaver and dynamite!
 - MCC – Selway and Trail Creek Meadow
 - Wise River headgate
 - Jerry Creek headgate
 - Melrose Diversion
 - Moose Creek Headwaters – TNC, USFS
 - Burma Road sediment project
 - Pennington Bridge Phase 2 – Madison County

Steering Committee Report – Jim Hagenbarth, Chairman; Dean Peterson, Vice-Chairman; Roy Morris, Secretary

- The Steering Committee has been fairly active discussing things with Pedro and overseeing the hiring of new staff members.
- Keeping an eye on the budget.
- Helped Pedro field negative publicity.
- Appreciate Tana and all the work she and the rest of the staff has done.

Communications and Wildlife Report – Tana Lynch, Associate Director

- Communications:
 - Hired Karly Noetzel, Content Creator (contractor)
 - Summer 2025 – Contractor
 - September 2025 – Hired on as staff!!!
 - Communications Specialist
 - Films produced for us so far:
 - *Watershed Win: French Gulch Restoration* (Reel)
 - *Everybody is Downstream* (Reel)
 - *Arctic Grayling Fish Spawning with Montana FWP*
 - *Arctic Grayling at the Washoe Park Trout Hatchery*
 - Set up Shopify store:
 - Branded BHCW gear



- Available via our website bhwc.org – click “Shop to Support”
 - Supports the Big Hole Conservation Fund
 - Let us know if there are specific products/types of items you would like to see in the store.
- Recent Speaking Opportunities:
 - [Supporting Vibrant Rural Communities Through Place-Based Collaboration](#) (Webinar)
 - Pedro featured
 - Western Landowners Alliance
 - August 13
 - Recipes for Success (Panel Discussion)
 - Tana featured
 - Montana Watershed Coordination Council
 - 2025 Watershed Symposium
 - September 16
- Press & Publications:
 - [Want to adopt a bridge? Big Hole River structure seeks a new home](#)
 - Montana Standard – September 17
 - [Hoot-owl restrictions lifted on portions of Lower Madison and Big Hole Rivers](#)
 - Montana FWP – September 16
 - [Bureau of Land Management solicits timber sale bids for project north of Wise River](#)
 - Montana Standard – September 11
 - [Montana’s water future depends on cooperation, not conflict | Opinion](#)
 - Montana Standard – September 4
 - Pedro Marques, BHWC, and Seth Wilson, Blackfoot Challenge
 - [Déjà Vu on the Big Hole | Paul Siddoway](#)
 - Montana Standard – September 2
 - [Groups Sue to Force FWP to Enforce River Flow Minimums](#)
 - Missoula Current – August 14
 - BHWC Summer Newsletter is out and can be read here:
https://bhwc.org/montana/uploads/2025/09/BHWC-Newsletter_Summer-2025_FINAL.pdf
- Wildlife:
 - Carcass Removal
 - Compost site ready for winter
 - Carcass removal spring 2026
 - Range Rider
 - July 1 – September 30
 - Purchased used 4-wheeler for program
 - Funding:
 - 2026 Livestock Loss Board
 - Awarded \$8,500
 - Accepting donations to offset cost of 4-wheeler!
 - bhwc.org/#donate

New Business

- None

Meeting Topic: *Water Storage Opportunities in the Big Hole Watershed*

Presented by: Jeff Dunn, WGM Group

Background: With support from a DNRC planning grant, BHWC has partnered with Deer Lodge Valley Conservation District (DLVCD) and WGM Group to assess the potential for storing water in high alpine meadows. This work involves mapping and prioritizing locations where meadow-based water storage could realistically and effectively be implemented. These natural systems act like sponges—holding snowmelt and precipitation longer into the season, helping to maintain streamflows when water is most needed.

Part 1 – High Meadow Storage

Existing Data for Meadow Identification

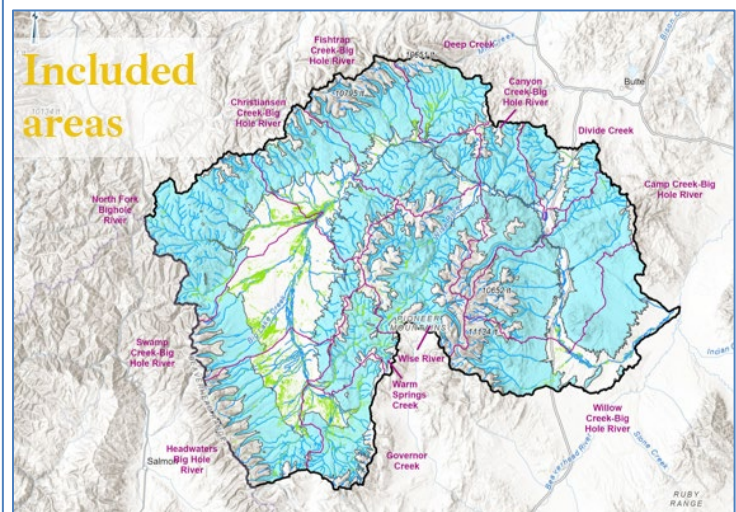
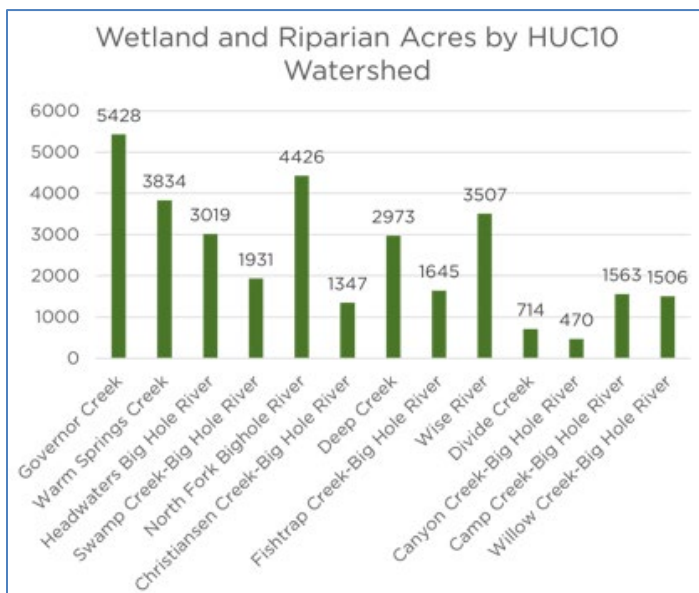
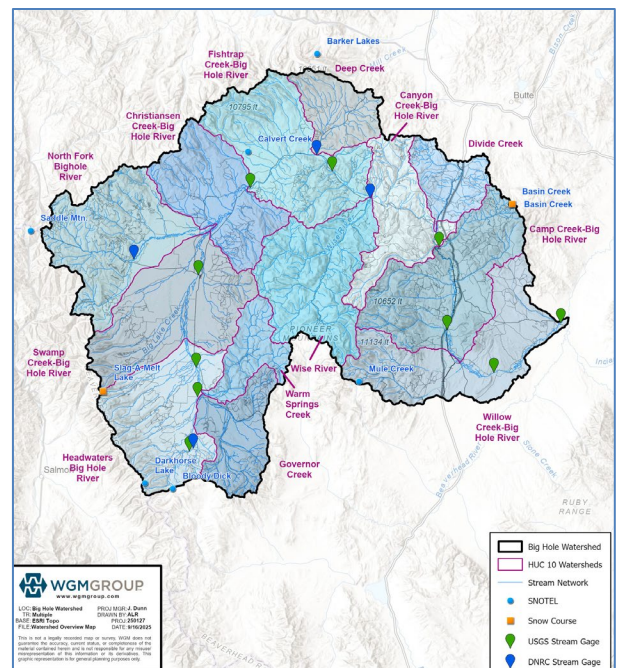
- Valley Bottom Extraction Tool (from the Beaver Restoration Assessment Tool, BRAT)
- Montana Natural Heritage Program streams and wetlands layer (MTNHP)

Criteria for Inclusion

- MTNHP wetland or riparian areas over 5 acres
- Within elevation band (max 8,000 feet, min varied by subwatershed but averaged 6,000 feet)
- 750 meadows identified from aerial imagery
- First and second order neighbors of the above

Storage Estimates

- 32,364 acres of high elevation meadows and wetlands
- 3,236 acre feet of late season storage



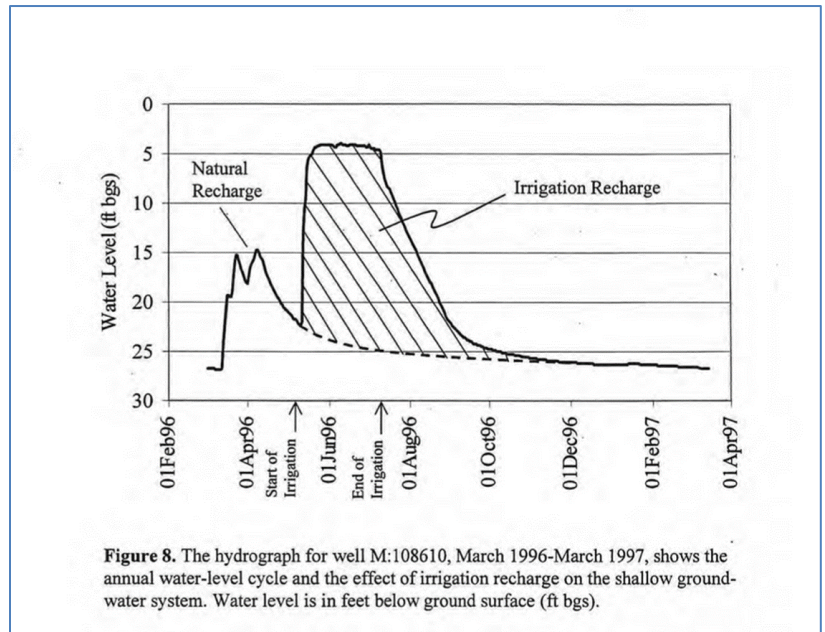
- 0.1 AF per acre treated is based on July-October water storage estimates from the East Fork Divide Creek storage analysis
- 32,364 acre feet of seasonal inundation
 - BDA projects can raise water levels by 0.5-2 ft locally (1 AF per acre), providing longer residence time for seasonal snowmelt
- High end estimates are similar in volume to Ruby Reservoir or Lake Como

Case Study

- Moose Creek Meadows

Project Prioritization

- Size
- Accessibility
- Land ownership
- Beaver presence
- Upstream drainage area
- Highlight potential projects in each subwatershed
- Useful attributes for all projects will be stored in a database for future project development



Part 2 – Off-Stream Storage

Overview

- Big Hole summertime flows are heavily influenced by irrigation recharge
- Late season flow augmentation is needed to supplement existing irrigation recharge (August-October)
- Both infiltration and surface water discharges were investigated as potential mechanisms

Infiltration

- Stakeholder-identified storage locations were matched with basin characteristics.
- Infiltration based projects should be located 500-1,000 feet from the river for a 90-day return period.
- Governor Creek and Warm Springs Creek areas are promising.

Surface Water Discharge

- Efficient way to boost flows once river is losing late in the season.
- Low dams could be constructed to impound water in draws.
- May be able to capture used irrigation water in the subsurface and store for later in the season.
- Temperature of released water is a consideration.
- Water rights for these types of projects are a consideration.

Upcoming Meetings

- Wednesday, October 15, 2025: BHWCM Monthly Meeting
 - 7:00 PM at the Divide Grange Hall – Topic: Big Hole Wildlife Update: Pronghorn

Adjourn