



Big Hole Watershed Committee

Monthly Meeting Minutes

April 15, 2026 – 7:00 pm at the Divide Grange
Zoom option also provided

In Attendance

In-person: Pedro Marques, BHWC; Tana Lynch, BHWC; Nolan Salix, BHWC; Karly Noetzel, BHWC; Luke Lutz, DNRC; Katelin Killoy, MFWP; Kristina Kennedy, MFWP; Tom Bowler, Butte Resident; Betty Bowler, Butte Resident; Dean Peterson, Rancher/BHWC; Dianna Peterson, Rancher; Diane Hutton, BHWC; Pat Fosse, Southwest Montana Sagebrush Partnership; Jim Olsen, MFWP; Collin Peterson, TNC; Jim Berkey, TNC; Jeff Wolk, Resident; John Reinhardt, Rancher/BHWC; Roy Morris, GGTU/BHWC; Dan High, Big Hole Grazing Association; Colt High, Big Hole Grazing Association; Jim Hagenbarth, Rancher/BHWC; JM Peck, Rancher/BHWC; Erik Kalsta, Rancher/BHWC; and Jack Magee, MSU.

Zoom: Danika Holmes, DNRC; Randy Smith, Rancher/BHWC; and Caleb Barville.

Meeting Minutes

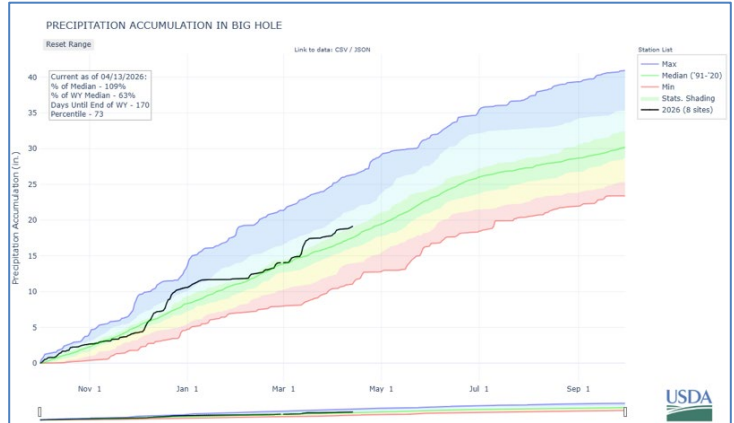
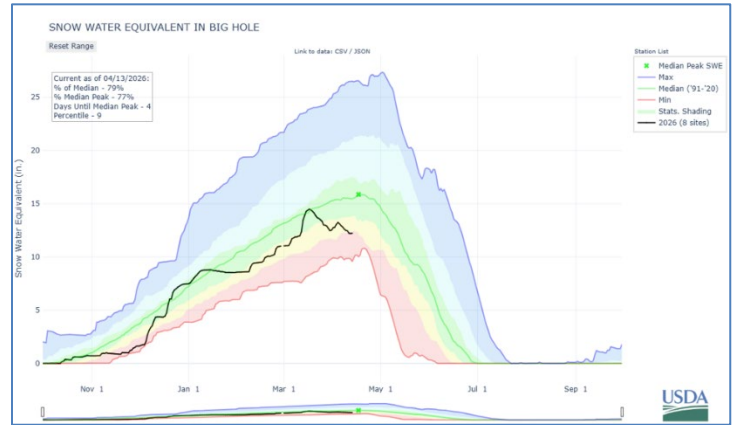
BHWC monthly meetings are held at the Divide Grange with a virtual (Zoom) option provided thanks to Southern Montana Telephone Company, who donated the internet service. Meeting minutes and recordings are available at <https://bhwc.org/monthly-meetings/> (scroll down for meeting minutes archive). Printed 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, Department of Natural Resources and Conservation

- *Streamflows: (April 13th, 2026)*
 - Section 1: Wisdom (06024450): 402 cfs
 - Section 2: Big Hole River near Wise River (41D 08000): 1,802 cfs
 - Section 3: Maiden Rock (06025250): 2,110 cfs
 - Section 4:
 - Melrose (06025500): 2,130 cfs
 - Glen (06026210): 2,090 cfs
 - Section 5: Hamilton Ditch (06026420): gage not yet reporting
 - Stream And Gage Explorer (StAGE): <https://gis.dnrc.mt.gov/apps/stage/>
- *NWCC Snow Water Equivalent:*
 - Median peak date: Apr 17

- Current Peak: Mar 17
- Big Hole: 79% of median
- **Precipitation:** 109% of median
- **Hypsometric-SWE:** 68% of Normal
- **Climate Outlook (NOAA):**
 - **Outlook:** The 8-14 day outlook predicts near normal temperatures and near normal precipitation.
 - **Seasonal Outlook:** The seasonal outlook predicts equal chance of above or below normal temperatures and equal chances of below or above normal precipitation.
 - Drought conditions are forecast to worsen or develop for many areas in the West and south-central Plains, according to NOAA's Spring Outlook released today for April through June. Forecasters from also predict above-normal temperatures for the majority of the U.S.



- **U.S. Drought Monitor:** The Big Hole watershed is characterized as abnormally dry to moderate drought as of April 9, 2026.

Director's Report – Pedro Marques, Executive Director

- **BHWC's Technician Summer**
 - Noah Dowler
 - Simon Shepherd
 - Cora Johnson
 - Madelyn Hanson
 - Marieke Jeffries (Mt. Haggin Uplands)
 - Jon Peterson (Hydrology Monitoring)
- **Governing Board Openings**
 - 2 candidates Board review
- **Staff Mini-Retreat**
 - Team synergy on internal systems and roles/responsibilities = Efficiency in delivering our mission
 - Staff float
- **Partnerships!!**
 - USFS: Request for Consensus- details coming next week
 - Montana Beaver Working Group: 2026 Action Plan
 - DEQ: French Creek fall sampling for de-listing
 - TU: Instream Flow Workshop next week and Gage Funding
- **Watershed Planning**

- TELL US WHERE TO WORK!

Steering Committee Report – Dean Peterson, Chair

- The steering committee met with Pedro in March and reviewed BHWC’s finances and activities.

Communications and Wildlife Report – Tana Lynch, Associate Director

- Communications:

- Upcoming monthly meetings:

- May 20 – Fishery Update (FWP)
- Measuring Water for Conservation (BHWC)
- June 17 – Protecting Your Water Rights from Abandonment Claims (DNRC)
- July – No Meeting
- August 19 – TBD (ideas?)
- September 16 – Grizzlies and Range Riding (FWP & BHWC)
- October 21 – Invasive Weeds (Big Hole counties & agencies)
- November 18 – Wisdom MAR Update (GWIP)

- Branded BHWC Gear:

- bhwc.org/shop-to-support or scan QR code to right w phone camera
- Branded BHWC gear
- Supports the Big Hole Conservation Fund
- Let us know if there’s anything you want to see in the store!



- Film Screenings:

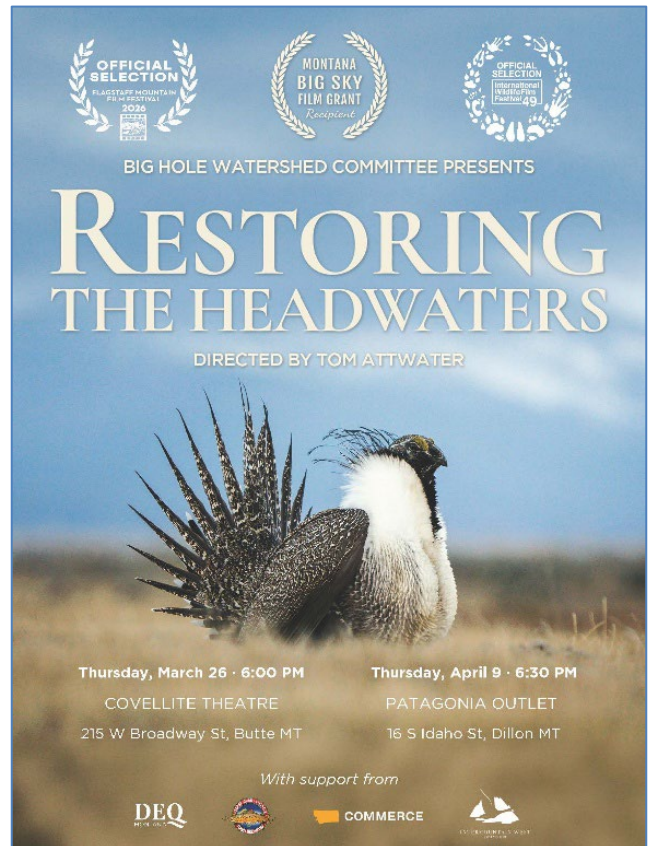
- Butte
 - March 26th
 - Covellite Theatre
 - ~80 attendees
- Dillon
 - April 9th
 - Patagonia Outlet
 - ~30 attendees
 - Honored Jim Magee!

- Wildlife:

- Carcass Removal and Composting:

- Now Operating
- Eric Lewis, Conflict Reduction Coordinator
 - Based in Melrose
- Compost site located near Wisdom
- Supporting a shared landscape
- Recently featured in the *Montana Standard!*
- Contact Eric at:

- 307-343-3803
- elewis@bhwc.org



- 10 carcasses composted so far in 2026 (as of 4/15/26)
- Range Riding:
 - Chet Robertson, Rider (2011)
 - Monitors 8 USFS allotments (7 producers) in the Upper Big Hole
 - July – September
 - Monitors: livestock condition, carnivore activity
 - Reports: Injured/sick/dead livestock, carnivore activity & approximate location
 - 2026:
 - Added 2 additional allotments
 - Starting season earlier (June 1)
 - Chet engaged in education & outreach
 - Wildlife-Resistant Garbage Infrastructure
 - Wisdom, Jackson & Mill Point
 - Partnership: FWP, Beaverhead County, HRI, Vital Ground Foundation?
 - Secured lids + remote access
 - Cameras installed at all sites
 - Reducing bear attractants
 - Major win for grizzly & black bear conflict prevention

Restoration Report – Nolan Salix, Restoration Specialist

- In-Progress:
 - Beaverhead CD- Elkhorn Mine
 - Mill structure rehab out to bid
 - Biofiltration demo this summer
 - 30% to 80% Design
 - Elkhorn Preserve/Lazy S Ranch
 - 3 miles of riparian planting/1 mile fencing
 - California Creek Flume Area
 - Mechanical treatment of eroding basin
 - Kamperschroer Riparian
 - Creating a spawning channel from ponds to river
 - Smith Sage Springs Reconnect
 - Phase 1 will install culverts; Phase 2
 - Ditch siphon to allow entire SS to connect to NF Big Hole
- Designing, Scoping, Funding:
 - Johnson Creek Area Fencing
 - Wise River Headgates
 - Jerry Creek Headgate
 - Melrose Diversion
 - Pennington Bridge
 - Burma Road Sediment Project
 - Proposed to DEQ 319 program
 - Smart Creek relocation
- Bidding, Contracting, Hiring:
 - High Meadow Storage Ground-truthing
 - Stockwater project

- Moose Creek Headwaters
 - Pilot beaver transplant site (pending commission approval)
- Next Up:
 - Elkhorn Preserve/Lazy S Ranch
 - 3 miles of riparian planting/1 mile fencing
- Kamperschroer Riparian
 - Creating a spawning channel from ponds to river
- Smith Sage Springs Reconnect
 - Ditch siphon to allow entire SS to connect to NF Big Hole
- French Gulch
 - Maintenance on 2 step-pools
 - To-be Contracted:
 - MCC- Selway and Trail Creek Meadow

New Business

- None

Break – 10 minutes

Meeting Topic:

Flexible Grazing in the Missouri Headwaters of Southwest Montana

Presented by: Pat Fosse, Southwest Montana Sagebrush Partnership (retired BLM)
Dan & Colt High, Upper Big Hole Ranchers/Big Hole Grazing Association

A collaborative, community-based conservation Project designed to trial new technologies, tools, and practices with the aim to increase flexibility of grazing practices, improve rangeland and Habitat condition, and help working ranches become more resilient and sustainable in SW Montana.

REGENERATION/Sustainability – an overarching goal

- Economic: To enhance profitability of working ranches by improving efficiency and flexibility of livestock management on rangelands, thereby encouraging the next generation to continue ranching.
- Environmental: To promote or improve land health and resilience – including soil health, carbon sequestration, wildlife habitat, and vegetative diversity and production.
- Social: To preserve open space, wildlife habitat, rural western traditions and lifestyle, natural scenic vistas, clean water, clean air, carbon sequestration and other ecosystem services.

Why now?

- Tremendous increase in human population expected in the next 50 years in the world, country and region and people moving from urban to rural areas at greatly increased rates.
- #1 Challenge of range managers in the 21st century is “sustaining ranching as an occupation and way of life”
- Fluctuations in climate have increased the need for more resilience in rangelands.
- Demand for property continues to soar across the west. Land prices are at an all-time high tempting owners to sell land to recreational or development interests.

- The cost of barbed wire fences, both construction and maintenance has increased sharply.
- There is increased availability of innovative tools and technology and their use in other regions has shown potential for successful implementation (e.g. virtual fence, GPS eartags, intensive cattle herding, innovative stock water)
- Some federal permits do not have “solid” or consistent AUMs available.
- New funding sources have become available from federal and nonprofit organizations to support rangeland improvement projects and help offset the risks and costs associated with collaborative conservation efforts.

Why in Southwest Montana?

- A strong partnership of agency and nonprofit partners, forward thinking working ranches, and a collaborative spirit already exists to successfully implement and learn from pilot efforts.
- The rangelands here form some of the healthiest and most intact sagebrush steppe habitat remaining in the West – preserved due to a thriving ranching and agricultural community.
- The area’s open spaces and natural beauty attract many amenity buyers, who may lack the stewardship ethic and knowledge, or community ties found in traditional ranching, potentially shifting the view of land from a resource to care for to a commodity to own.
- There is strong community support for the ecosystem benefits that working ranches provide, including open space, scenic vistas, clean air and water, healthy wildlife habitats, recreational opportunity, and the rural culture and way of life where people care about each other.

Long-term Goals of the Project

- Continue to share knowledge, lessons learned and successful management strategies from each pilot ranch with other local and regional ranchers, supporting them in achieving their environmental and economic objectives.
- Regularly update and provide best management practices to federal, state and local land management agencies to help them broaden the reach of flexible, profitable grazing systems.
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- Through this entire effort, foster a locally led “community of practice” that encourages knowledge sharing across generations and among private and public land managers, local businesses, and community leaders – to strengthen common goals and nurture deeper connections to the land and its’ resources within the community.

Timeframe of Project

- 2023 - Collaborated with a broad cohort of stakeholders including SW Montana Range and Ranch community to identify shared objectives, promising tools to test, and criteria to select rangelands and ranches to pilot the project; facilitate a workshop in October to learn more about these tools and technology. Sent letters to local ranchers inviting them to submit proposals. Received eight proposals from December 2023 – January 2024.
- 2024 – Met with eight pilot ranchers and applicable agency specialists to identify tools to test, develop goals and objectives and draft grazing plans to meet the objectives. Drafted project budgets and identified and applied for sources of funding to fund the project. Hired an Ecological Effectiveness Monitoring Coordinator to help with monitoring and formed a team to develop an Economic monitoring process. Three of the pilot ranches implemented the use of Vence virtual fence in 2024. Environmental monitoring was completed where the project was initiated.
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Pilot Ranches

- The eight pilot ranches include five traditional family ranches that are in some phase of transferring the business to the next generation and three corporate ranches managed by families. They include relatively small to large ranches. This wasn't by design, but it is very helpful in sharing information, successes and lessons learned to a variety of ranches both locally and regionally.
- Pilot ranches include: Holland Ranch, Johnson Ranch, Boyd Angus Ranch, SRI River Holdings (old Hamilton Ranch), J Bar L Ranch, Lee Martinell Co. family ranch, Broksle Ranch, and Matador Ranch.
- For the remainder of this presentation, we will focus on the Broksle Ranch project in the Big Hole Valley and near Twin Bridges.

Broksle Ranch Goals

- Improve livestock distribution; increase utilization of under-utilized areas and decrease utilization of over-utilized areas.
- Limit or exclude livestock use of sensitive areas (wetlands, riparian habitat).
- Improve rangeland health and forage production.
- Increase the rest period of each area during the growing season.
- Get a more accurate record of AUMs harvested and in the long term increase sustainable AUMs
- Reduce conflict with elk and improve Arctic grayling and sage grouse habitat.
- A longer-term goal is to expand adaptive livestock grazing to other areas owned/used by the Big Hole Grazing Association. This may lead to reducing miles of interior fences.
- Extend the grazing season and feed less hay by rationing out stockpiled feed in the irrigated pastures.

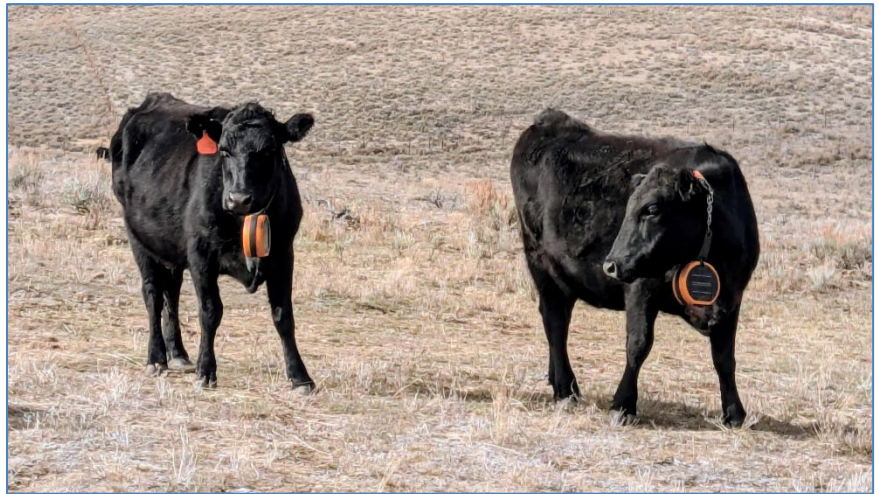
Broksle Ranch Environmental Objectives

- Big Hole North and South Pastures:
 - Increase the cover, composition and production of native cool-season bunchgrasses and vegetative diversity and decrease invader species in upland areas.
 - Improve soil health.
 - Decrease bare ground
 - Where canopy cover of mountain big sagebrush is greater than 25%, reduce canopy cover to 15-25%.
 - Increase the composition and cover of deep-rooted riparian species (willows, sedges) along the greenline of Swamp Creek.
 - Reduce the greenline-to-greenline stream width of Swamp Creek by reducing streambank impact.

- Increase production, cover and diversity of vegetation in the meadows adjacent to Swamp Creek.

Broksle Ranch Economic Objectives

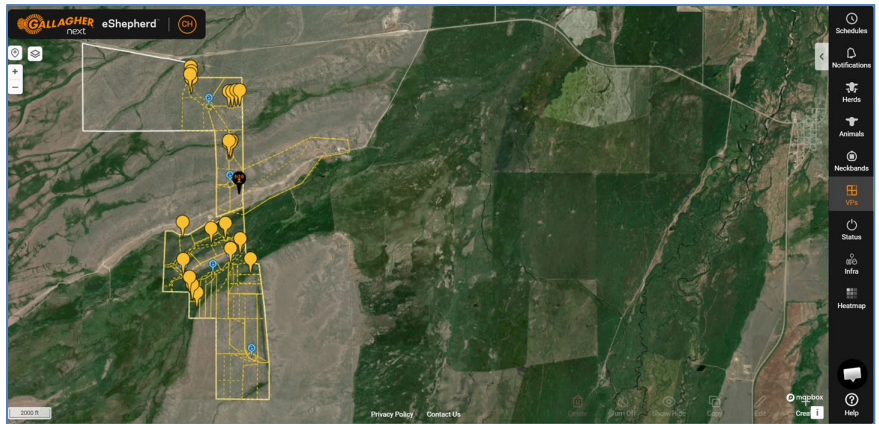
- Big Hole North and South Pasture
 - Increase sustainable AUMs
 - Reduce labor costs
 - Reduce equipment and supply costs
 - Decrease cost/head/day
 - Increase average daily gain of calves
- Twin Bridges Irrigated fields
 - Extend the grazing season into the winter
 - Reduce the amount of hay fed
 - Reduce labor costs



Gallagher's eShepherd Virtual Fence

Adaptive Grazing Plan – 2025

- In the past cattle started in the North Pasture every spring due to lack of water later in the season. With more flexibility due to an additional watering location in the North pasture, cattle started on the south end of the South pasture on July 1.
- Cattle were in the South pasture from July 1 – Sept 30.
- The South pastures was divided into 30 sub-pastures averaging about 23 acres (ranged from 4-63 acres). Each sub-pasture was grazed for an average of about 3 days (ranged from 1-7). The virtual fence was also used to keep the cattle from impacting Big Swamp Creek except for a few water gaps.
- Cattle grazed the North pasture from Oct 1 – Nov 5.
- Eight sub-pastures were created and used in the SE portion of the North pasture and grazed for an average of 4-5 days each. Sub-pastures in the North pasture averaged about 37 acres. Cattle were taken home to Twin Bridges on November 6.
- The NW portion of the North pasture was completely rested from cattle grazing this year.



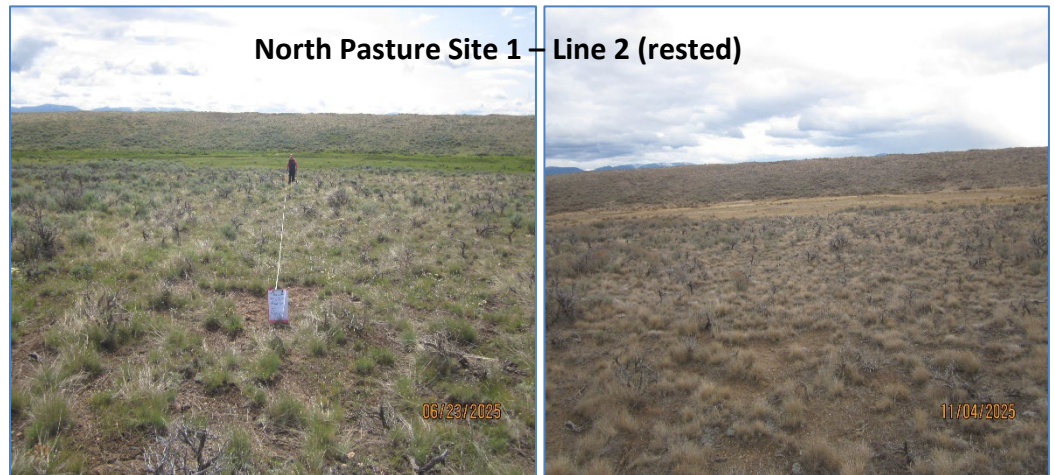
2025/2026 Fall and Winter Grazing

Monitoring Methodologies to Measure Progress toward Objectives

- Environmental Monitoring
 - Line-Point Intercept Transect
 - Vegetative species Diversity
 - Identify Ecological Site

- Water Infiltration
- Production sampling (clip and weigh)
- Soil samples (Haney Test)
- Utilization monitoring annually

- Economic Monitoring
 - Spreadsheet completed annually tracking economic metrics determined by team of partners
 - Qualitative information gathered through interviews each fall.

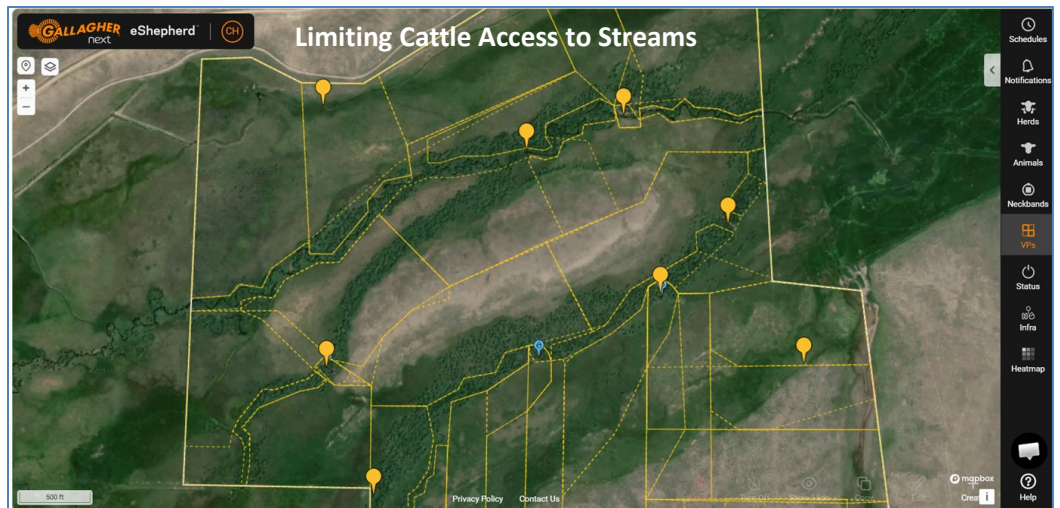


Monitoring

- See photos

Lessons Learned in 2025 – Plans for 2026 and Future Years

- In 2026, grazing will start in the NW portion of the North pasture that was completely rested during 2025.
- Livestock and forage conditions will be monitored more closely, and cattle moved through the paddocks accordingly. (When forage use reaches about 50%).
- Different sizes and configurations of pastures may be tested each year.
- A portion of one of the pastures will be rested each year and the rested area will be rotated each year.



- Livestock use along sensitive stream banks or wetland areas along or adjacent to Swamp Creek will be excluded from grazing or periodically grazed for only a very short duration (1 – 2 days).
- Allowing younger cows to graze ahead of older cows, reduce competition and prevent loss of body condition on younger cows.
- A new solar powered portable water system will also be tested during 2026.



Sundog Portable Self-Contained Solar-Powered Water Trough

- See right

Upcoming Meetings

- Wednesday, June 17, 2026: BHWC Monthly Meeting
 - 7:00 PM at the Divide Grange Hall/Zoom – Topic: Protecting Water Rights from Abandonment Claims

Adjourn