



Big Hole Watershed Committee

Virtual Monthly Meeting Minutes

March 17th, 2021 – 7pm via Zoom

In Attendance

Pedro Marques, BHWC; Tana Nulph, BHWC; Ben LaPorte, BHWC; Matt Norberg, DNRC; Roy Morris, GGTU/BHWC; Steve Luebeck, Sportsman/BHWC; Amber Burch, Beaverhead County; Audra Bell, Ruby Valley CD; Dean Peterson, Rancher/BHWC; Jane Wierzba; Jim Hagenbarth, Rancher/BHWC; Kara Maplethorpe, CVA/Beaverhead County; Max Hanson, UM; Vanna Boccadori, MFWP; and Liz (no last name).

Meeting Minutes

Due to COVID-19, BHWC's monthly meetings have been held virtually (via Zoom) since August 2020. Meetings were cancelled March through June 2020. Meeting minutes and Zoom meeting recordings are available on our website: <https://bhwc.org/monthly-meetings/> (scroll down for past months' meeting minutes). Contact Tana Nulph, BHWC Associate Director, at tnulph@bhwc.org or (406) 267-3421 to suggest additions or corrections to previous minutes or to this document.

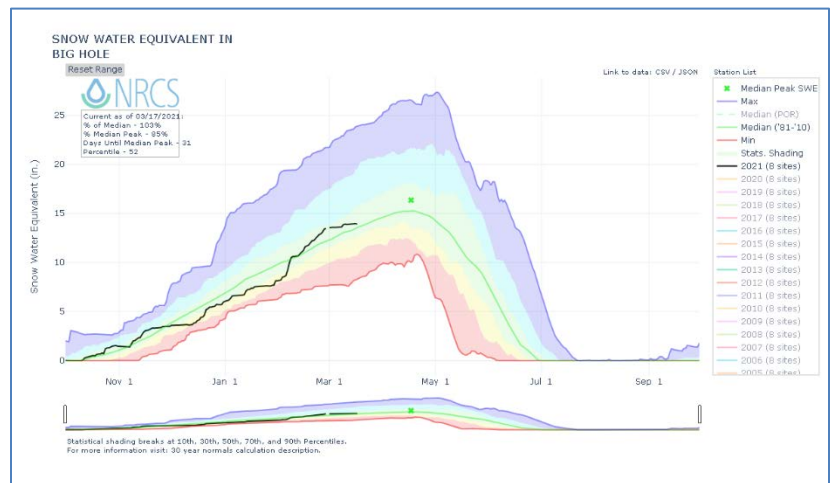
Reports

Streamflow/Snowpack Report as of March 17, 2021 – Matt Norberg, Montana Department of Natural Resources and Conservation

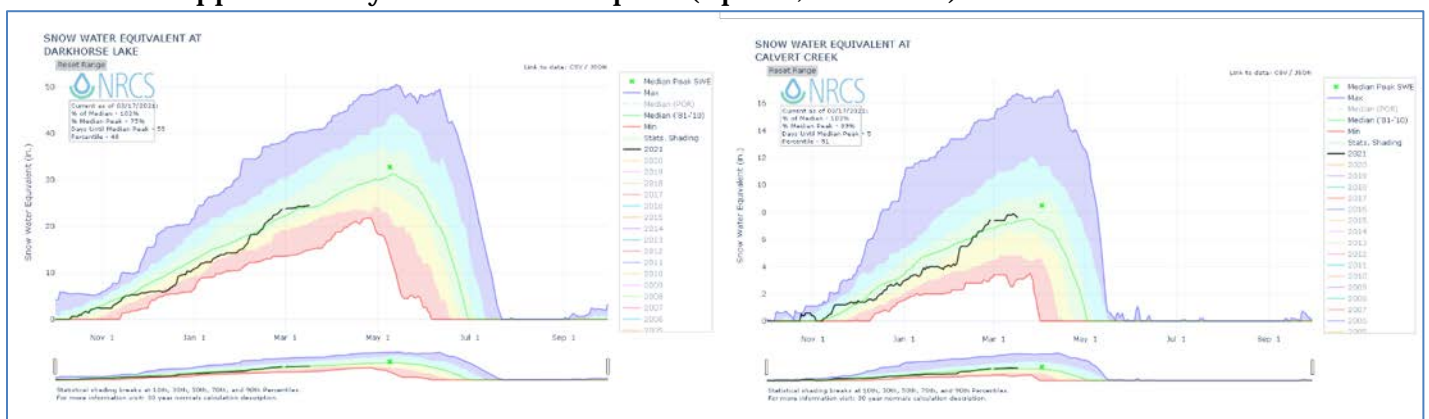
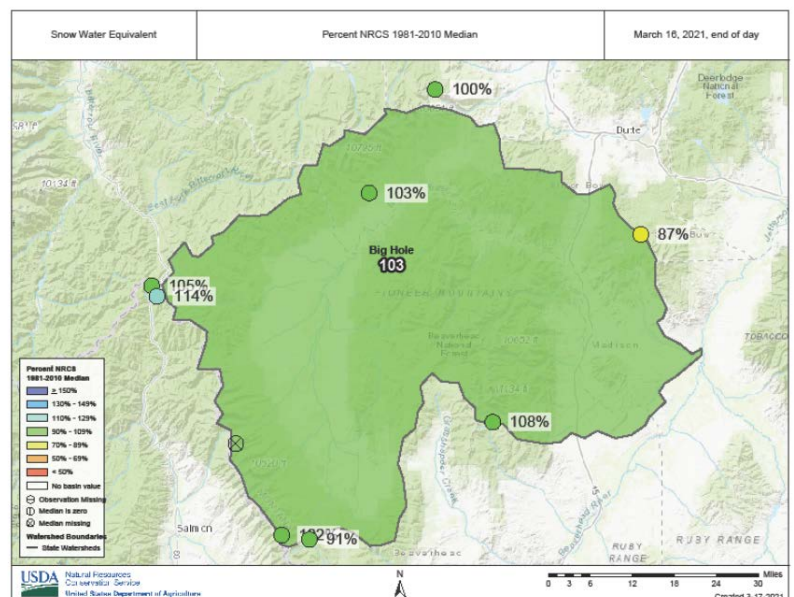
- *Streamflows:* Gages on the lower river have started reporting data. Freeze/thaw patterns will continue to show fluctuations in daily stage and discharge values until valley bottom snow/ice conditions have completely melted off. Upper river gages will be online April 1st.

Big Hole River Stream Gages					Gage height, feet	Dis-charge, ft ³ /s	Long-term median flow 3/17	Temperature, water, deg C
Station Number	Station name	Date/Time						
■ UPPER MISSOURI RIVER BASIN								
06023500	Big Hole River near Jackson MT	03/17 13:15 MDT	Ssn	Ssn	9.00	--		
06023800	Big Hole River ab Spring Creek nr Jackson MT	03/17 14:00 MDT	Ssn	Ssn	---	--		
06024020	Big Hole River at Miner Creek nr Jackson MT	03/17 13:15 MDT	Ssn	Ssn	---	--		
06024450	Big Hole River bl Big Lake Cr at Wisdom MT	03/17 13:45 MDT	Ssn	Ssn	---	Ssn		
06024540	Big Hole River bl Mudd Cr nr Wisdom MT	03/17 13:30 MDT	Ssn	Ssn	175	--		
06024580	Big Hole River near Wise River MT	03/17 13:30 MDT	--	--	---	-0.7		
		01/06 15:15 MST	Ssn	--	---	--		
		01/06 15:00 MST	--	Ssn	340	--		
06025250	Big Hole River at Maiden Rock nr Divide MT	03/17 13:45 MDT	2.88	343	412	Ssn		
06025500	Big Hole River near Melrose MT	03/17 13:15 MDT	1.58	413	400	3.9		
06026210	Big Hole River near Glen MT	03/17 13:30 MDT	2.68	615	506	Ssn		
06026420	Big Hole R bl Hamilton Ditch nr Twin Bridges, MT	03/17 13:30 MDT	Ssn	Ssn	---	Ssn		

- **Snowpack/Precipitation:** February brought some significant winter storms to the Big Hole, however; March to date has been relatively quiet compared to last month. Currently, snowpack in the Big Hole River based on representative SNOTEL sites is 103% of median and the Jefferson is 93% of median. Precipitation YTD in the Big Hole is 97% and the Jefferson Watershed is 92% of normal. We are approximately 84% into the Big Hole snow accumulation period with approximately one month left with peak conditions typically occurring around April 17th.

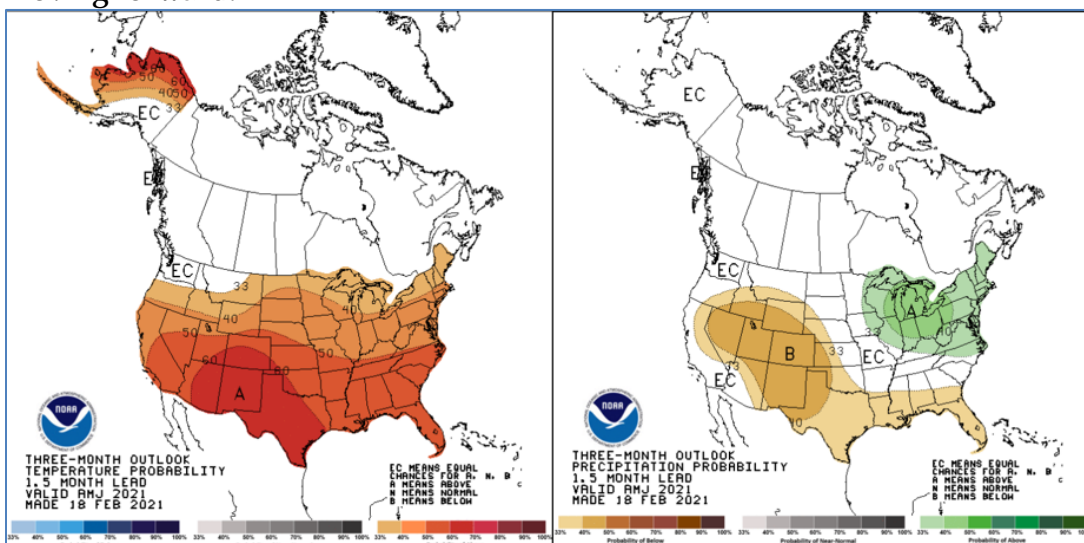


- The Slagmelt Lakes and Darkhorse SNOTEL sites reported Delta SWE values within the top 15 sites across Montana. Slagmelt Lakes had +9.9" of SWE from Feb. 1st to March 1st which is accounts for approximately 39% of the total snowpack at this site. Darkhorse Lakes reported a +8.7" increase in SWE for the same time period which accounts for approximately 37% of total snowpack at this site and 189% of the monthly normal.
- Currently, the Darkhorse SNOTEL is reporting 102% of median with 24.5" of SWE which is approximately 75% of the median peak (May 9, 32.8" SWE). The mid elevation SNOTEL Calvert Creek in the upper basin is currently reporting 103% of median with 7.6" of SWE and is approximately 89% of median peak (April 2, 8.5" SWE).

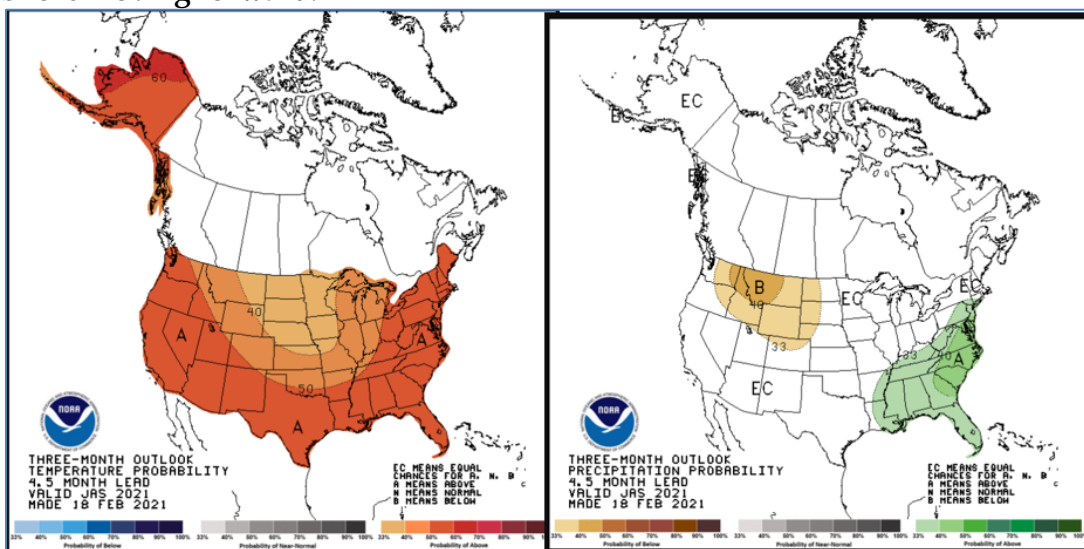


- **Forecast:** (from NOAA)

- ENSO Alert System Status: La Niña Advisory
- Synopsis: There is a ~60% chance of a transition from La Nina to ENSO-Neutral during the Northern Hemisphere spring 2021 (April-June). Forecasters are predicting that El Nino is unlikely to develop this upcoming fall and there are equal chances that conditions will be La Nina or ENSO-neutral. For more information regarding ENSO update, here is a [link](#) to the March 2021 discussion.
- The next three months (April/May/June) are forecasted to be above normal temperatures, and below normal precipitation. Not good news for the Big Hole and southern/eastern Montana. ENSO-Neutral conditions can be variable so be prepared for all types of weather and prepare for water shortages if precipitation falls short moving forward.



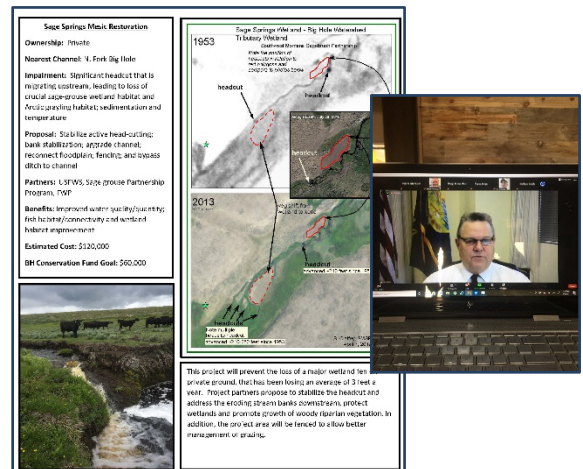
- Moving forward to the peak summer months (July/August/September); the forecast is for above normal temperatures, and below normal precipitation. Not good news for the Big Hole and Montana in general. ENSO-Neutral conditions can be variable so be prepared for all types of weather and prepare for water shortages if precipitation falls short moving forward.



Director's Report –Pedro Marques, Executive Director

- Partnerships Deepening
 - UM Western- Student outreach for 1% Fund

- UM Missoula- Max Hanson: Watershed Health Intern
- BLM and USFS agreement in works to deliver conservation outcomes
- FWP and NRDP signing 7-year MOU for continued Superfund work- BHWC management at center
- Outreach to lower river stakeholders in progress
- Hope Center labor force
- Beaver Work Group
- Legislation to watch
 - Sb-29- (H) Natural Resource Comm- March 19th.
 - Sb-153- Latest Draft
 - SJ-6- (H) Natural Resource Comm- March 15th
 - Tester acknowledges BHWC during soil conference
- Conservation Fund
 - 1% Conservation Fund branding over Spring Break
 - Board feedback mid-March
 - *Packets to Businesses early April*



Steering Committee Report – Jim Hagenbarth, Vice-Chairman; Steve Luebeck, Treasurer; and Roy Morris, Secretary

- Steering Committee is happy with the progress BHWC is making.

Wildlife Report – Tana Nulph, Associate Director

- Loaner toolkits available for producers/residents:
 - Producers and residents can borrow/use/test tools.
 - Livestock Loss Prevention:
 - Scare devices, temporary electric fencing, bear spray, books about wildlife conflict, wolves, livestock guard dogs, etc.
 - Bear Safety:
 - Bear-resistant garbage canisters (free to residents while supplies last), scare devices, bear-resistant backpacking containers, bear spray, inert practice bear spray, books about bears and bear safety
 - Contact Tana Nulph, BHWC Associate Director, for more information: tnulph@bhwc.org or (406) 267-3421.
- Carcass removal offered free to Big Hole Valley residents/ranchers:
 - Offered now through May 2021.
 - Service is free but donations are optional.
 - To arrange for carcass removal, contact John Costa, Wildlife Programs Technician, at 209-628-2225 or jcosta@bhwc.org.
 - John works full-time for MDT so leave a message if he doesn't answer and he'll get back to you within a day or two. You can also text him.
 - Dump truck borrowed from Red Rock Lakes NWR.
 - Carcasses composted at BHWC's compost site outside of Wisdom.
 - Carcass removal & composting reduces predator attractant, helps keep predators honest (no free meals).
 - Producer information is always kept confidential!

- More and more grizzly bears are being confirmed in the Big Hole Valley each year, and bears are about to wake up, so it's especially important to take precautions this time of year.

Restoration Report – Ben LaPorte, Program Manager

- 2021:
 - 1% for the River Conservation Fund
 - Development/coordination
 - Project page updates
 - Lower River Irrigation Infrastructure
 - Outreach
 - Site visits
 - Pennington Bridge Restoration
 - Phase 1 underway
- 2020 Hi Rye Cooperative Biocontrol Project:
 - Contracted with MFWP to:
 - Conduct biocontrol releases at designated sites on the Fleecer and Mt Haggin WMA to control for spotted knapweed.
 - Released knapweed root weevils, which feed on the plant's vascular system until the plant eventually dies.
 - A total of 152 releases-122 of FS, 28 on FWP and 2 on private ground.
 - Conduct a comprehensive weed inventory in designated portions of the Beaverhead-Deerlodge National Forest adjacent to Fleecer and Mt Haggin WMAs (more on this in MFWP update, below).
 - Conduct biocontrol releases at designated sites on BDNF identified through the comprehensive weed inventory.
 - Partners: Watershed Consulting (Jeff Copeland), MFWP, BDNF.



Meeting Topic: Invasive Weeds in the Big Hole Watershed

Presented by: Amber Burch, Beaverhead County Weed District Coordinator; and Vanna Boccadori, Montana Fish, Wildlife and Parks Wildlife Biologist and WMA Manager

Big Hole Noxious Weeds – Beaverhead County

- 2020 Accomplishments
 - 13 spray days (3 more than previous year)
 - Treated 281 acres
 - Provided weed information for Wise River Community Newsletter
 - Zero Rush Skeleton plants (pictured, right) at 3 sites in Big Hole where previously found (Mystic Lake trailhead, Miner Lake Road, side of 278).
 - If you think you see this, please contact Amber ASAP (contact info below)
 - EDDMapS: www.edmaps.org A tool for individuals to mark locations/upload photos of potential invasive weeds. Amber will receive an email with a link to the picture. From there she can follow up and respond as needed.

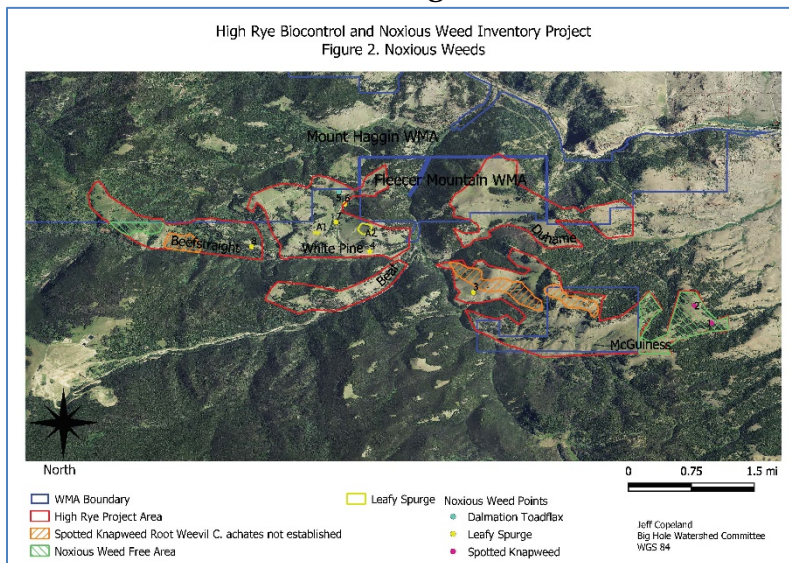


- 2020 – Beaverhead County had a MCC Fellow, will have another join in 2021.
 - Monitored 2019 biocontrol (yellow toadflax) in 2020
- Resource Advisory Council (RAC) & RMEF Projects:
 - Pioneer Scenic Byway
 - Quartz Hill/Triangle Gulch
 - 350 acres treated aerially
 - Johnson Creek (Butte-Silver Bow County but Beaverhead County weed board has assistance agreement with USFS – protecting Beaverhead County by treating these neighboring weeds)
 - 200 acres treated aerially
 - Mussigbrod
 - West Big Hole Valley roads
- Weed Species of Concern (in the Big Hole)
 - Oxeye Daisy
 - Common Tansy
 - Spotted Knapweed
 - Hound's Tongue
 - Yellow Toadflax
 - Canada Thistle
 - Musk Thistle
 - Black Henbane
 - Leafy Spurge
 - Dalmatian Toadflax
 - 2 plants found in Wise River in 2018
 - Rush Skeletonweed (3 locations)
 - Ventenata
 - Found in 2019 along Pioneer Scenic Byway
- Plans for 2021
 - Commercial applicator will treat 100 feet of river corridor
 - Provide cost share to landowners
 - 13 spray days scheduled
 - Private applicator training
 - Tailgate weed identification, calibration, and safety meetings before spray days
 - WWB – September 11th
 - RAC project proposal
- 2021 Big Hole Spray Days (volunteers encouraged to join): full list with meeting locations attached. Bring spray equipment and gloves if you have them.
 - Burma – June 10th
 - Glen – June 16th
 - Maiden Rock – June 17th
 - Melrose – June 23rd
 - Pioneer Scenic Byway – June 24th
 - Dewey Cemetery – June 25th
 - Wisdom – July 14th
 - Wise River – July 16th
 - Beaverhead/Ravalli – July 20th
 - Mussigbrod – July 21st
 - Divide – July 23rd
 - Wise River Pull – July 30th
 - Wisdom – August 17th

- Wise River – September 17th
- Contact info (for questions or to report weed sightings):
 - Amber Burch, Beaverhead County Weed Coordinator
 - 2 S. Pacific CL#12, Dillon, MT 59725
 - 406-683-3790 (office)
 - 406-925-1346 (cell)
 - aburch@beaverheadcounty.org

Montana Fish, Wildlife and Parks Update

- Vanna has been managing the Fleecer and Mount Haggin WMAs for about 16 years
- FWP has gone through a series of weeds coordinators that are spread thin (serve large area) and often don't stay long enough to build institutional/local knowledge.
- In 2019, using funding from NRDP, FWP partnered with BHCW, BVHD-DLNF, and Watershed Consulting to do a weeds inventory to map current weed infestations.
 - It also classified infestations by proposed management actions (containment, eradication).
 - Georeferenced.
 - Marked with best potential treatment method (biocontrol, herbicide, mechanical treatment, etc.).
 - Very useful to Vanna for planning weed treatments, building institutional knowledge/plans.
 - Systematic, comprehensive, consistent approach to weed management.
 - Plan management over next 10 years.
 - Produced inventory report as well as 10-year management plan.
- In 2020, began applying some of the proposed treatments.
 - Herbicide
 - Biocontrol releases (see more information in restoration report, above)
- Successful project gives MFWP leverage to work with additional partners to coordinate activities across boundaries.
- Three major focus areas:
 - Clark Fork side of Mount Haggin:
 - Big Hole Side of Mount Haggin: Hoping to do comparable project here (small infestations, eradication recommended)
 - Fleecer: a mix of both eradication and containment
 - Nutrafix:
 - Doing a test plot on Fleecer.
 - Basically, a fertilizer that promotes growth of early-season, annual grasses – makes cheatgrass grow itself to death. Nutrients are re-released to feed native grasses.
 - Created by Stuart Jennings who Vanna and BHCW have worked with.
 - Results so far have been very promising, application rates feasible.



- Can put granular form down without precipitation.
 - If anyone wants to see test plots on Fleecer, June or July would be a good time to do it. This will be the 4th growing season after initial application (no re-application).
- Next steps:
 - Vanna and Pedro have had initial discussions planning to apply this type of approach in the Divide Basin: mapping and prioritizing weeds and determining best approach (containment, eradication), and treatment method (herbicide, biocontrol, mechanical).
 - Vanna could help leverage funding to apply landscape scale, collaborative approach to weed management.
- Discussion:
 - *There was some discussion over whether Nutrafix is now available for individuals to purchase.*
 - *Distributor is ACF West. Stuart Jennings developed Nutrafix product.*
 - *Pedro suggested highlighting Fleecer test plot at Montana Range Days in 2021.*
 - *How does it (Nutrafix) work with Ventanata?*
 - *Good question. Worth asking Stuart Jennings about that.*
 - *Vanna and Stuart tested Nutrafix on knapweed on Mount Haggin. Will check those test plots this spring to see how they did.*
 - *Amber: Nutrafix is very promising, but because it's a soil amendment and not an herbicide ... Mr. Jennings might want to look into the product's registration status so as to avoid any backlash from Montana Department of Agriculture (MDA).*
 - *"Just from some previous experience, a few years ago, there was a soil amendment out of Idaho, it was a fungus or bacteria. We have to be very, very careful about how the product is presented and making sure that that language keeps that soil amendment, because if its perceived or marketed as weed control or cheatgrass control, it kind of grays the water as far as registration of that product. I sit on the Trust Fund council and Nutrafix was in some of the proposals that we reviewed last week. The council did not end up funding those portions of the projects because when MDA looked into those, there was that gray area of whether or not they needed to be registered."*
 - *Has that feedback been delivered to Stuart?*
 - *I don't think so, but it would be a good idea to let him know.*
 - *Pedro: The Divide Basin in particular is going to fall outside of Beaverhead County. Curious to hear from Amber and Kara about your process for prioritizing weeds and is it worth pursuing something like this (collaborative project proposed for the Divide Basin)?*
 - *Amber: We don't have anything as systematic as Vanna has described, and this is a pretty intriguing approach to weed management. Typically, we meet with partners and base our priorities and focus areas off feedback from those meeting, but I like the idea of doing a longer-term plan like this.*
 - *Pedro: What's the experience with the WHIP (Wildlife Habitat Improvement Program) grant? BHCW has the capacity to help coordinate/manage a project/grant like this.*
 - *Kara and Amber both have experience with the WHIP grant, in different ways. Amber is on the WHIP council. Kara has secured and managed a WHIP grant.*
 - *Kara:*
 - *WHIP is a "beast" of a grant. 5-year grant with multi-year monitoring. Having a long-term plan in place like Vanna described would fit really well into this grant programs priorities.*

- *Doesn't allow any overhead or admin – all on-the-ground work. (No funding for reporting, monitoring, coordination, etc.) BUT funds would allow for a lot of work on the ground. Easier to pay contractors than support staff time.*
- *Kara offered to share WHP grant materials with BHWC so we can get an idea of the intensity of the grant and what a proposal will require.*
- *All non-federal match and NO in-kind accepted.*
- *Kara and Amber encouraged BHWC to go forward with proposal.*
- *Amber:*
 - *At the last WHIP Council meeting, they discussed adding funding for admin/oversight and monitoring during the next Legislative session, when WHIP is up to be reauthorized.*

New Business

- Max Hanson, UM Student/BHWC Intern, introduced himself. Has been enjoying having conversations with people/getting to know people in the watershed. Looking forward to getting into the field this summer.
 - Max was on a tour with a UM class that came to look at our superfund work on Mount Haggin. He was enthusiastic and wanted to know what he could do to get involved, so we'd taken him in as an intern! We look forward to working with Max.

Upcoming Meetings

- BHWC Virtual Monthly Meeting: Wednesday, April 21st, 2021 – 7pm via Zoom.
 - Topic: Grizzly Bears in the Big Hole Watershed.
- BHWC Virtual Monthly Meeting: Wednesday, May 15th, 2021 – 7pm via Zoom.
 - Topic: Big Hole River Fishery Update.

Adjourn