



Big Hole Watershed Committee

Virtual Monthly Meeting Minutes

April 21st, 2021 – 7pm via Zoom

In Attendance

Pedro Marques, BHWC; Tana Nulph, BHWC; Ben LaPorte, BHWC; Jane Wierzba; Brian Wheeler, Big Hole River Foundation/BHWC; Jarrett Payne, MFWP; Valerie Manne; Peter Frick, Rancher/BHWC; Greg (no last name); Paul Gilmore; Robert Miller; Roy Morris, GGTU/BHWC; Sierra Harris, TNC/BHWC; Shirley J. Johnson, Divide Grange Hall; Rich Harris; Jim Hagenbarth, Rancher/BHWC; Gail Caron; Max Hanson, UM; Paul Cleary, Resident/BHWC; Sandy Cleary, Resident; Rory Trimbo, MFWP; Doug Mahugh; Todd Myse, MBMG; Ed Scott; and Dean Peterson, Rancher/BHWC.

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.

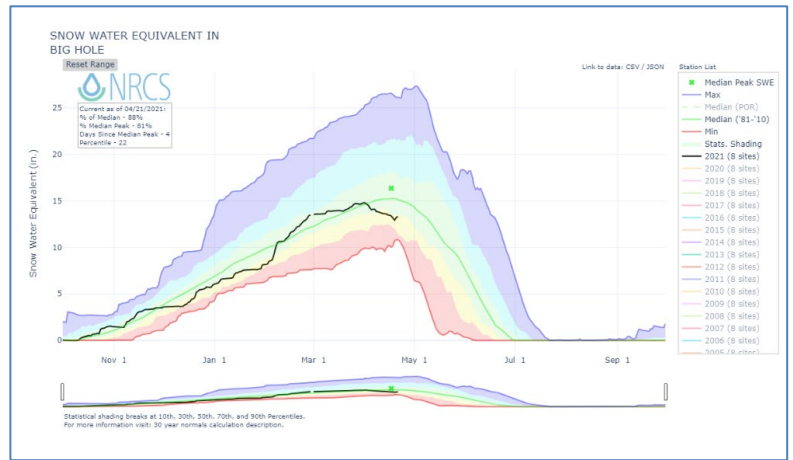
Reports

Streamflow/Snowpack Report as of April 21, 2021 – Matt Norberg, Montana Department of Natural Resources and Conservation

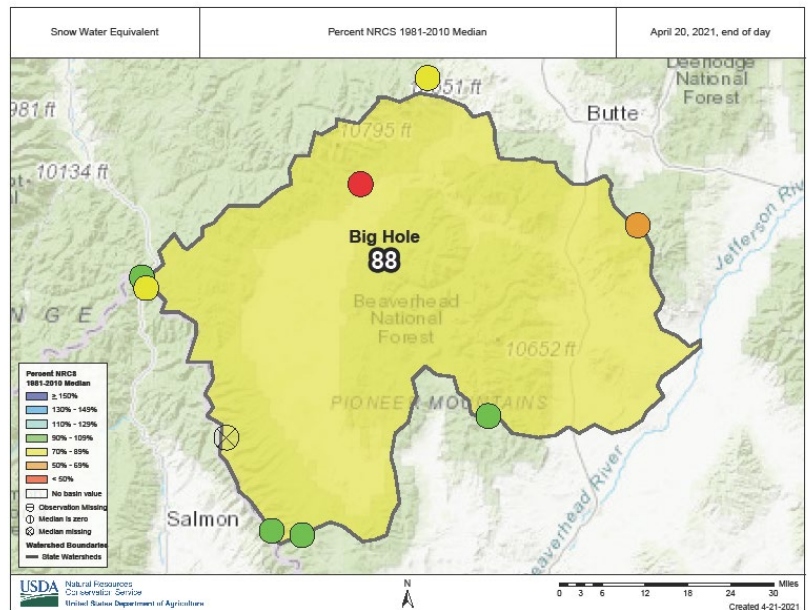
- *Streamflows:* Stream gages across the basin are active and reporting, however sites in the upper Big Hole are still reporting ice conditions. Discharge values are currently below the median values mostly due to recent cooler temperatures holding melting snowpack back, as well as lack of precipitation along the valley bottoms.

Big Hole River Stream Gages							
Station Number	Station name	Date/Time	Gage height, feet	Dis-charge, ft ³ /s	Long-term median flow 3/17	Temperature, water, deg C	
UPPER MISSOURI RIVER BASIN							
06023500	Big Hole River near Jackson MT	04/21 14:15 MDT	1.02	16.1	60.0	--	
06023800	Big Hole River ab Spring Creek nr Jackson MT	04/21 14:00 MDT	2.19	Ice	93.0	--	
06024020	Big Hole River at Miner Creek nr Jackson MT	04/21 14:15 MDT	1.44	131	356	--	
06024450	Big Hole River bl Big Lake Cr at Wisdom MT	04/21 14:45 MDT	5.40	Ice	377	7.0	
06024540	Big Hole River bl Mudd Cr nr Wisdom MT	04/21 14:30 MDT	2.93	Ice	927	--	
06024580	Big Hole River near Wise River MT	04/21 14:30 MDT	3.58	Ice	1,640	6.8	
06025250	Big Hole River at Maiden Rock nr Divide MT	04/21 13:45 MDT	3.75	1,010	1,590	Ssn	
06025500	Big Hole River near Melrose MT	04/21 14:15 MDT	2.44	1,020	1,650	7.4	
06026210	Big Hole River near Glen MT	04/21 14:30 MDT	3.09	1,060	1,460	Ssn	
06026420	Big Hole R bl Hamilton Ditch nr Twin Bridges, MT	04/21 14:30 MDT	Ssn	Ssn	1,350	Ssn	

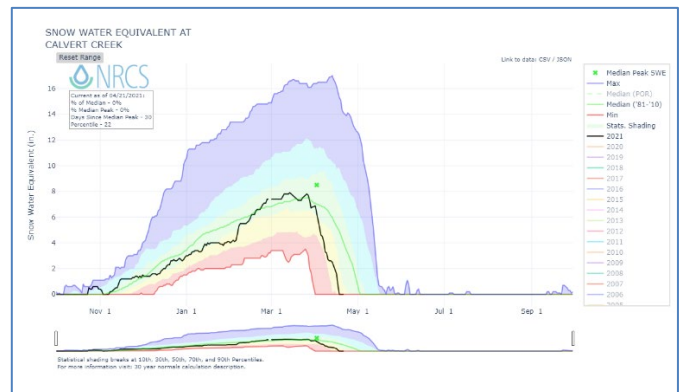
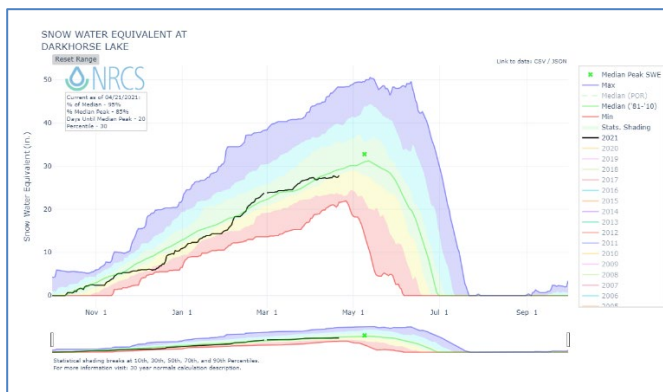
- **Snowpack/Precipitation:** March snowpack started off above average, however as we transitioned into April the low elevation snowpack started melting off, coupled with a warm spell, this has brought the snowpack below average. Currently, snowpack in the Big Hole River based on representative SNOTEL sites is 88% of median and the Jefferson is 83% of median. Precipitation YTD in the Big Hole is 92% and the Jefferson Watershed is 85% of normal. The median snowpack date for the Big Hole is April 17th, so let's hope for some late spring snowstorms and cooler temperatures to slow down the declining snowpack.



- The high elevation Darkhorse Lakes SNOTEL is currently at 95% of average and historically peaks around May 9th. The Calvert Creek SNOTEL has melted out with the warmer temps at the end of March and beginning of April coupled with below average precipitation. Snowpack in the basin has declined since the start of April, melting out faster than the historical average.

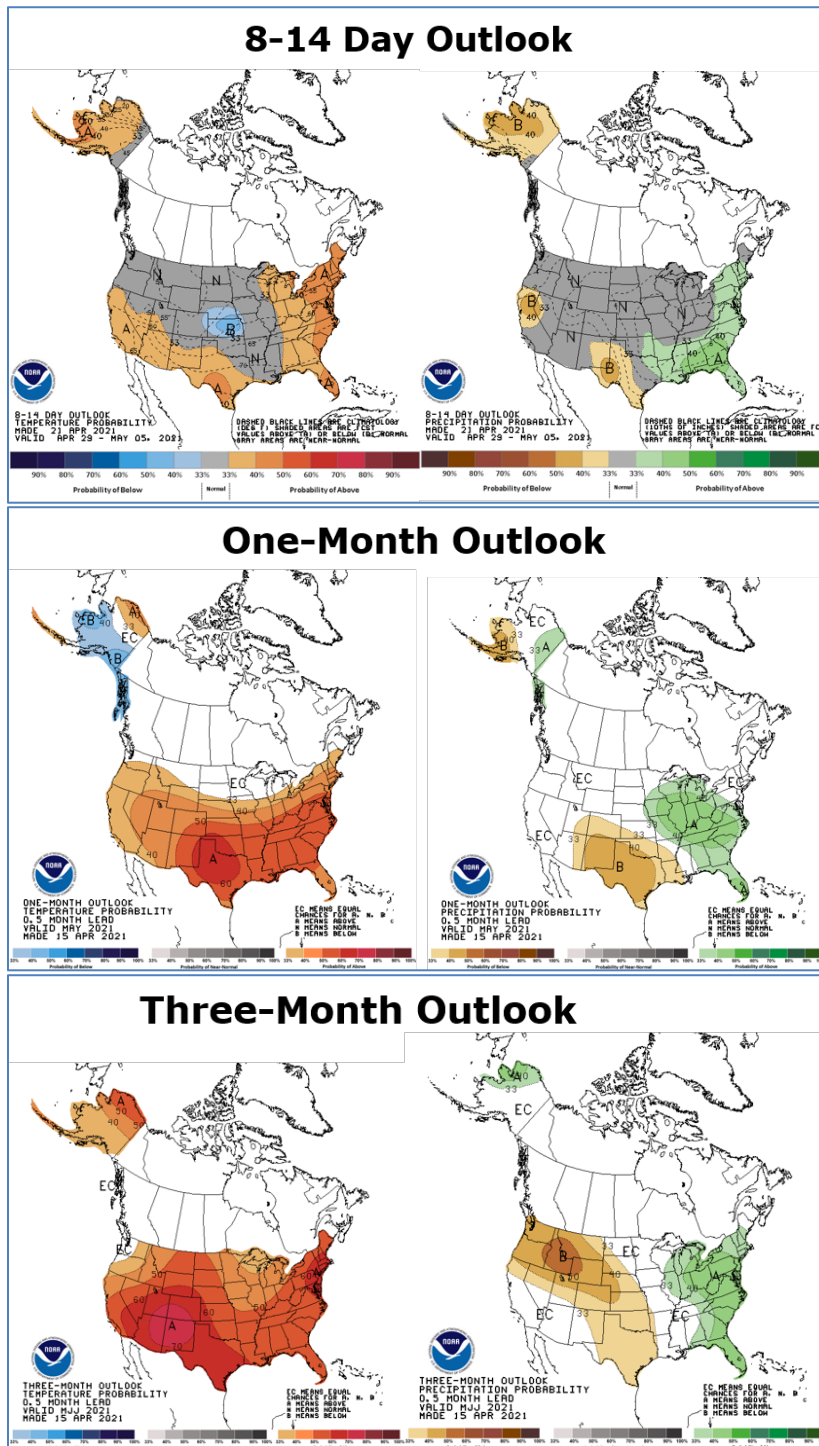


- **Forecast:** (from NOAA)
 - ENSO Alert System Status: La Niña Advisory



- Synopsis: A transition from La Niña to ENSO-Neutral is likely in the next month or so, with an 80% chance of ENSO-neutral during May-July 2021. [April 2021 discussion.](#)

- The 6-10 and the 8-14-day outlooks are favorable for normal temperature and normal precipitation conditions, however as we transition out of early spring the forecast is for warmer and drier conditions to move in. The forecast for May is for above average temperatures and equal chances of above below or normal precipitation conditions. As we move into the summer months, the three-month forecast is for above average temperatures and below average precipitation. The 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

- Deepening Partnerships
 - UM Missoula- Max Hanson interview results- 4/22
 - Mtech- Carly Peach Masters presentation 3/31: Beaver dams sequester metals
 - USFS Partnership Agreement- Elkhorn mine
 - BLM Partnership Agreement- East Pioneers Riparian and Conifer work
 - FWP and NRDP longterm MOU: BHWC management at center
 - Hope Center labor force
 - Beaver Work Group- Moving the Army Corps
 - Interstate Council on Water Policy- Stream gage support
 - Grant proposals for Weeds, Climate Adaptation and groundwater/surface water study
- Legislation updates
 - Sb-29- 35-65 defeated
 - Sb-153- Latest Draft
 - Many others too numerous to mention
- Conservation Fund
 - 1% for the River Partnership with local businesses
 - Harness Giving- TEXT “BIGHOLE” to 269-89.

Steering Committee Report – Jim Hagenbarth, Vice-Chairman 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.
 - OR texts “CARCASS” to 269-89 to get all this information on your phone.
 - 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.

- Conservation Innovation Grant (CIG):
 - Collecting and reporting agreed-upon data to help CIG research team evaluate effectiveness of existing programs and innovate new solutions to livestock depredation.
 - Grant provides funding for our wildlife programs over 3 years (\$18K total).
- Wildlife Speaker Series:
 - BHWC and Southwest Montana partners (Beaverhead CD/Watershed Committee, Ruby Valley CD/Watershed Council, Madison CD, Centennial Valley Association, and Ruby Habitat Foundation) are holding 3 virtual events this year. Click the links to pre-register. Events begin at 6:30 pm and are expected to be done by 8:00 pm.
 - [May 27: Pollinators](#)
 - [June 24: Trumpeter Swans](#)
 - [July 22: Arctic grayling](#) (hosted by BHWC, featuring Jim Magee, Jarrett Payne, and Ryan Kreiner)

Restoration Report – Ben LaPorte, Program Manager

- Pennington Bridge Restoration
 - Phase 1 completed!
 - Survey and design for Phase 2 underway.
 - First Big Hole Conservation Fund project to campaign on Harness!
 - TEXT BIGHOLE to 269-89!!
- Project Developments:
 - Elkhorn Mine and Mill
 - USFS Participating Agreement
- Eastern Pioneers-BLM and TNC Partnership
 - Trapper Creek and Browns Gulch Tributaries
 - Riparian Conifer Encroachment Treatments
 - In-Stream Low Tech Enhancement Treatments
 - BDAs
 - Post-Assisted Log Structures
- Lower Big Hole Streambank Restoration

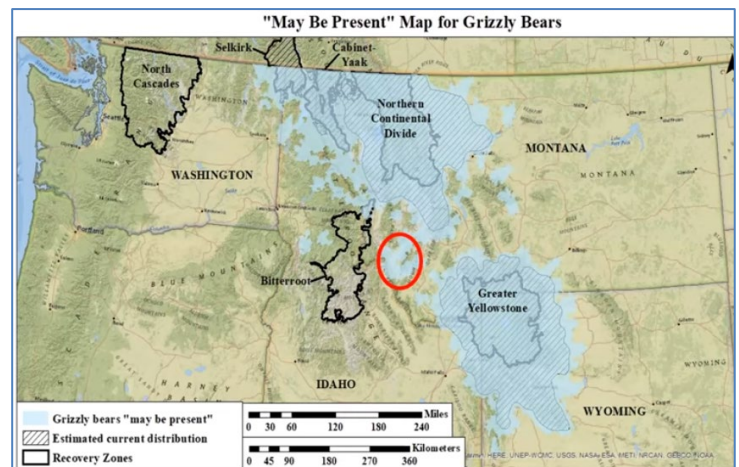
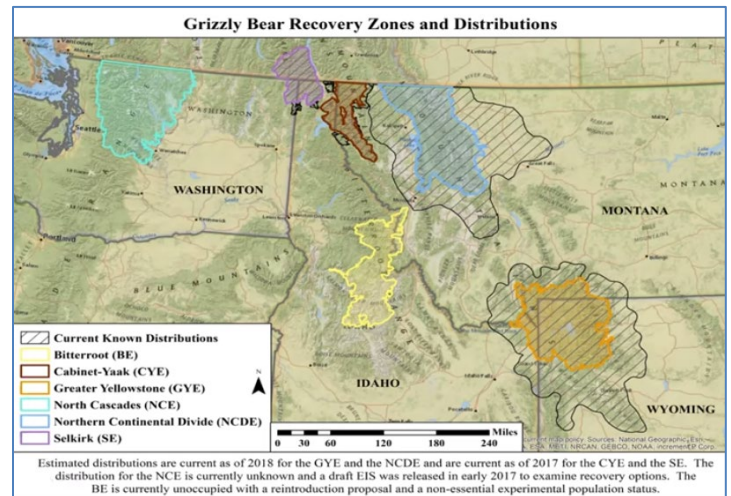
Meeting Topic: Grizzly Bears in the Big Hole Watershed

Presented by: Rory Trimbo, Grizzly Bear Specialist, Montana Fish, Wildlife and Parks

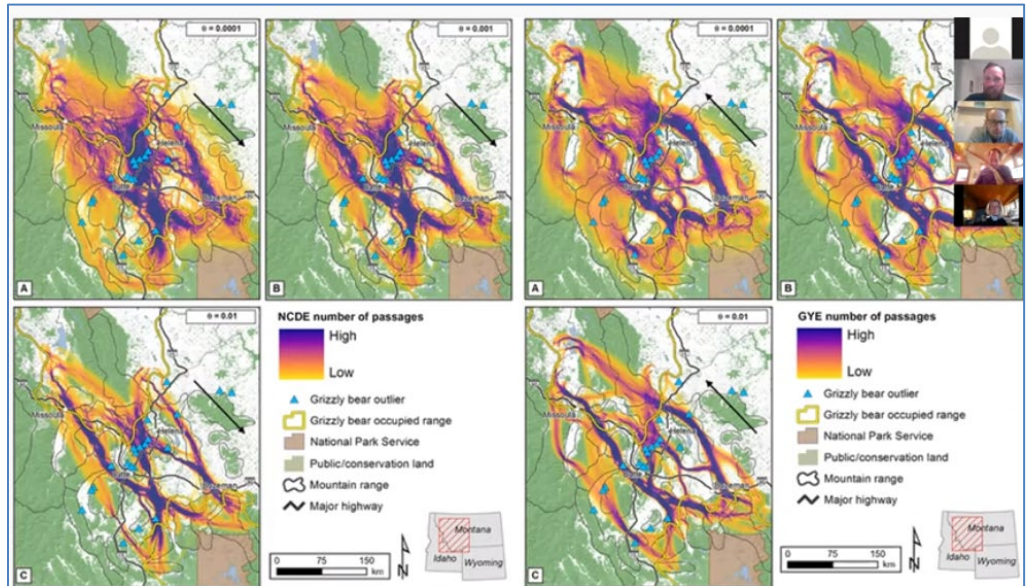
- Historic distribution map (right): Grizzly Bears historically occupied all of Montana and most of the Western United States and Western Canada.
- Grizzly Bear Recovery Zones and Distributions:
 - “Females with cubs” main indicators of grizzly bear recovery
- “May Be Present” Map for Grizzly Bears
- Collared male grizzly bears to study movement patterns over 15 years. Produced map of expected future Grizzly Bear movement.



- Upper Clark Fork verified grizzly activity, 2008-2020 (info from Jamie Jonkel)
 - Drummond, 2008, “Dingwall” (bee yard depredation)
 - Flathead, 2010 “Kyle”, collared, traveled extensively
 - Deer Lodge Area, 2010
 - Deer Lodge Area, 2011
 - Leadville area, 2010
 - Georgetown Lake, 2013
 - Garrison area, 2013
 - Spotted Dog Creek, 2013
 - Hat Creek, 2016
 - Telegraph Creek, 2017
 - Leadville area, 2019 (DNA/photo)
 - Flint Creek Range, 2019
 - Anaconda, 2020, (Northeast of 1-90 Fairmont Exit, trail camera photo)
 - Gold Creek, 2020, “Lingenpolter” (Collared. Livestock depredation – ducks, captured and relocated North of Lincoln. Returned to Drummond area, denned near Seeley Lake)
 - Drummond, 2020, video/photo of bear trying to cross I-90 (possibly “Lingenpolter” but don’t know for sure).
 - Drummond, 2020, (grizzly bear photographed on trail camera, possibly “Lingenpolter”)
 - Gold Creek, 2020, (tracks, definitely NOT “Lingenpolter” based on his collar information.)
- Butte/Boulder verified grizzly activity, 2010-2018:
 - Cataract Basin, 2015, (female with cub)
 - Eagle Creek, 2016
 - Butcher Gulch, 2016
 - Boulder River, 2016
 - Berkeley Pit, 2016
 - Parke Lake, 2016
 - Cottonwood Lake, 2016
 - Bison Mountain
 - Cataract Basin, 2018, (lone grizzly)
 - Bakers Meadows, 2019
 - Slate Creek, 2019
 - Nez Perce Creek, 2019
 - Elk Park Railroad Grade, 2019
 - Maney Lake, 2019
 - Nez Perce Creek, 2020
 - Bull Mountains, 2020
- Big Hole Bears – are they coming from the Yellowstone Ecosystem or the Northern Continental Divide Ecosystem (NCDE)?
 - Trail Creek area, 2020, tracks
 - Set up game camera, got photos
 - East Pioneer Mountains, 2020
 - Jackson, 2020
- How to tell the difference between a black bear and a grizzly bear:
 - Nose shape



- Shoulder hump (grizzly – can be misleading)
- Ears (black bear ears are large and pointy)
- Claws (grizzly claws are much longer, for digging)
- Color is not a good indicator – both black bears and grizzlies can come in many different colors.



- Tracks: if you come across what you think are grizzly bear tracks, please report it to Rory (or Kim Johnston, Graeme McDougal, etc.) so it can be confirmed and added to the database.

- Take a photo of the front foot track if possible.

• Southwest Montana Grizzly Bear DNA Monitoring:

- USFWS
- Hair snare monitoring
- Study location includes the Big Hole
- Similar to 2008-2009 DNA/Camera Survey in the Clark Fork/Bitterroot Area:

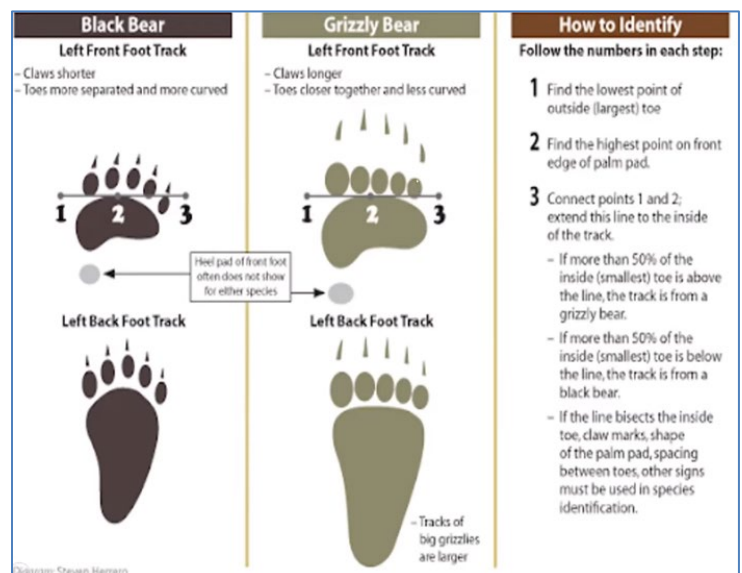
- Did not ID any bears through this study but want to repeat it.

- Goal: Document presence of grizzly bears in Southwest Montana outside current distributions.

- Sex and age class of bear
 - Where are they coming from? NCDE or GYE?

- Project description:

- USFWS (1 crew of 2 people) and Defenders of Wildlife (volunteers).



- Survey sites: ~10-30 sites each (USFWS, DOW), based on sighting and recommendations of biologists.
- Timing: Summer 2021 (mid-May through August)
- Methods: Hair corrals (with fish oil lure, no bait) and cameras (CYE/SE protocol).
 - >100 meters from closed roads and trails
 - >200 meters from open roads
 - >500 meters from campgrounds
- Potential Sampling Areas:
 - USFWS:
 - Big Hole
 - Pintler Range
 - Anaconda Range
 - Flint Creek Range
 - John Long Mountains
 - Defenders of Wildlife:
 - Sapphire Mountains
 - Lower Clark Fork
 - Ninemile Divide
 - Logo National Forest
- Contact Rory with questions: 406-465-9343, rory.trimbo@mt.gov.
- Discussion:
 - *It seems like the Eastern and Western Pioneers would be a good place for bears to cross through the Big Hole.*
 - *Yes, if you look on the heat map (above) it shows a lot of movement in that area. This is a pilot study though. If the Pioneers aren't included this year, they will likely be added in the future if the study continues.*
 - *If a bear were to get in trouble in our watershed, where would you drop it back off?*
 - *That's a really good question and that's why this study will be really helpful, because it will (hopefully) tell us which ecosystem the bears came from so we know where to put them back.*
 - *There's a lot of interesting wildlife legislation going on right now and some of them involve grizzly bears. One of the proposed bills included FWP no longer relocating bears. So, it's tough to say what the future will be.*
 - *Have there been any grizzly/human conflicts in the Big Hole in recent years and what do you do if you encounter a grizzly bear?*
 - *The main conflict has been either mistaken ID (black bear hunter killing a grizzly bear) and an incident or two in which grizzlies took over elk carcasses during hunting season. To my (Rory) knowledge, no one has been hurt in those situations.*
 - *Recommendations when out recreating:*
 - *Make noise (talk, sing, break sticks, etc.)*
 - *Travel in groups of at least 3.*
 - *During hunting season:*
 - *Make sure you're with at least 1 other person.*
 - *Carry bear spray. Can be a great tool for close/fast encounters, also works for moose, etc.*
 - *Are there recommendations for how to facilitate getting MFWP the information that they need from potential bear sightings?*
 - *Photos, if you are able to safely get them.*

- *Track photos*
 - *All potential sightings are recorded, even if they can't be confirmed by a photograph or other evidence.*
 - *What can you get DNA evidence from? Is that what you would need to determine if they're from GYE or NCDE?*
 - *We can usually tell from a good hair sample, which can be found on barb wire or a good rub-tree.*
 - *Sometimes you can get DNA from scat, but please don't start sending MFWP bear scat. Stick to hair.*
 - Additional bear safety/conflict reduction information (from People and Carnivores) included in attachments.
-

New Business

- BHWC is looking into securing Wi-Fi at the Divide Grange so we can provide a Zoom option once we return to in-person meetings (in May).
- The “Opportunity to Object on the Draft Decision Notice” for the Pintler Face project is open until around June 9. More information attached.
- List of Big Hole Valley cooperative weed spray days attached.

Upcoming Meetings

- May 6-7, 13-14, 2021
 - **Volunteer Days with MFWP:** Willow Gathering and Staking at French Creek.
 - Meet at 9:30 am. (Directions attached.)
 - Please bring a lunch, suitable clothing and shoes for working in wet conditions and up to 1 ft of standing water, and bring loppers/mallets if you have them (if not, they will be provided). Gloves will be provided and there is no cell service at the project location.
 - Directions and locations attached.
 - Contact Jarrett Payne for more information or to let him know you're coming: 406-560-7103 or jarrett.payne@mt.gov.
- May 19, 2021
 - **BHWC Monthly Meeting**
 - 7:00 pm at the Divide Grange Hall.
 - Topic: Big Hole River Fishery Update.
 - There will likely be a Zoom option for this meeting as well. That link will be sent out soon.
- May 27, 2021
 - **Wildlife Speaker Series event: Pollinators**
 - 6:30 pm via Zoom.
 - Register here: https://zoom.us/webinar/register/WN_T7cu0EvLSIqic3C0ReHXaw (event is free).

Adjourn

People and Carnivores Meeting Minutes Addition

Kim Johnston, Large Carnivore Conflict Prevention Specialist, for Montana based non-profit, People and Carnivores

I work across Beaverhead County and SW MT, helping people prevent conflicts with large carnivores like grizzly and black bears, wolves, and mountain lions. I'm based in Dillon and work across the Big Hole Watershed with residents and landowners, ranchers, communities, and the county on finding ways to keep people and their property, including livestock safe, and large carnivores wild.

I was hoping to give a presentation during the April BHWC monthly meeting on *Preventing conflicts with grizzly bears when ranching, recreating, and living in the Big Hole Watershed*, however unfortunately was unable to present that night due to a family emergency. I hope to be able to present to the BHWC another time in the future. In the meantime, I want to let folks know, if you would like to know more information on ways to prevent conflicts with large carnivores, resources that may be available, or would like to chat further, reach out anytime.

With grizzly bears expanding into more places of their historical range, such as the Big Hole Watershed, it is becoming increasingly important to prevent conflicts between grizzly bears and humans. The past few years, there have been an increasing number of grizzly sightings being reported around the watershed and Western Montana.

I will be offering free bear safety training opportunities throughout the season. For ranches and businesses who would like bear safety training for employees, or families who would like bear safety information, reach out for a training this season. We can discuss *How to prevent a negative encounter with a bear, what to do in the event of an encounter, and how to use bear spray*. We have practice training materials and cost-share options for bear spray.

The BHWC and P&C have bear-resistant garbage canisters, that keep out not only grizzly and black bears but also other wildlife including raccoons, skunks, pets, mice, etc. These canisters can be a great solution to keep bears and wildlife out of garbage. They also work great to store grain, livestock feed, pet food, bird seed, or other similar attractants that may be attractive to a bear. Reach out to Tana or me for more information.

There are also other bear-resistant products and innovative methods for securing attractants around the ranch or property, as well as in the backcountry. Electric fencing, along with innovate deterrents using electric wires, can be an effective solution to secure buildings, chicken coops, residential yards, fruit trees and gardens, and livestock areas. I can help with designing, installing, and cost-share opportunities on electric fencing to deter large carnivores. We also have temporary electric fencing available to loan out if residents are in need of short-term protection or are experiencing bear conflicts.

Scare devices, such as motion-activated alarms and flashing Foxlights, can also provide temporary prevention. We have toolkits available with various conflict prevention scare devices, along with information and resources on more long-term solutions, and are available for check-out free of charge. The BHWC has these devices available for loan as well.

Livestock carcasses in certain situations can create a potential for conflict with grizzly bears and wolves. Removing carcasses from areas near livestock and human areas can reduce your risk for conflict. Whenever possible, removing the carcasses from the property all together is the best way to reduce the chance of attracting in predators from far distances. Using the BHWC carcass removal program can be a great way to annually remove boneyard piles and livestock carcasses. I can also assist with securing areas to deter predators until carcasses can be removed or decomposed. Burying carcasses in areas where grizzlies are present is not an option. Grizzly bears are known to dig up carcasses and other attractants. If carcasses are unable to be removed, locating them away from human and livestock areas, ideally in an open area where you can see from a distance before going into the site. Carcasses are known to attract grizzly bears, and bears can be defensive with carcasses. Avoid going near these areas during night, dawn, or dusk hours, ensure people, especially kids, avoid these areas, and stay alert, watching for sign of bear activity in the area.

For more information on ways to prevent conflicts with bears, avoid negative encounters, and bear safety tips, reach out. Any conflict prevention questions or needs, feel free to reach out to myself or Tana.

(406) 599-9424, kjohnston@peopleandcarnivores.org.