



Big Hole Watershed Committee

Committee Report & Updates

March 18th, 2020

March Meeting Cancelled due to Coronavirus

Our March meeting was planned for Wednesday, March 18th, 2020, 7pm at the Beaverhead County Fairgrounds 4-H Building in Dillon, Montana. We had planned to discuss Cloud Seeding, and local rancher and BHWC Board Member Jim Hagenbarth was scheduled to present. Unfortunately, we had to make the difficult decision to cancel the meeting in response to Governor Bullock's directive for social distancing to help limit the spread of Coronavirus/COVID-19. It is important to us to protect our stakeholders and staff, but we also want to keep the ball moving and keep our members informed. So in lieu of meeting minute, we are providing this electronic report with committee & project updates as well as information on conservation topics relevant to the Big Hole watershed and its stakeholders.

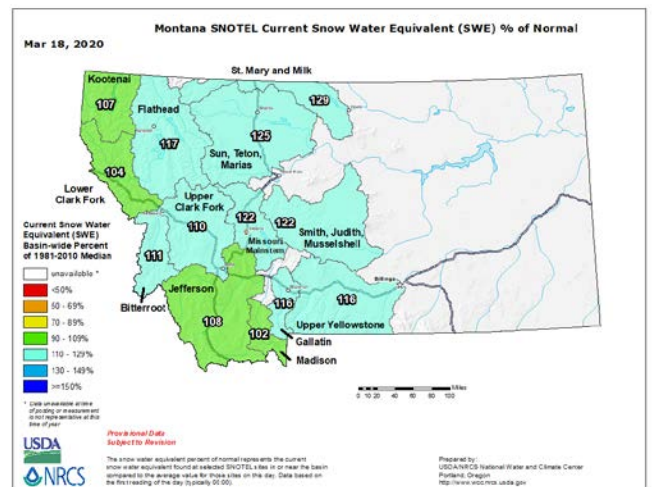
February Meeting Minutes

February 2020 meeting minutes are available here: <https://bhwc.org/about/monthly-meetings/> (scroll down for past meeting minutes). In February, we discussed Land Easement & Partnership Opportunities with the Lemhi Regional Land Trust in Divide. Please contact us at info@bhwc.org if you would like to suggest additions or corrections to the February meeting minutes or to this report.

Reports

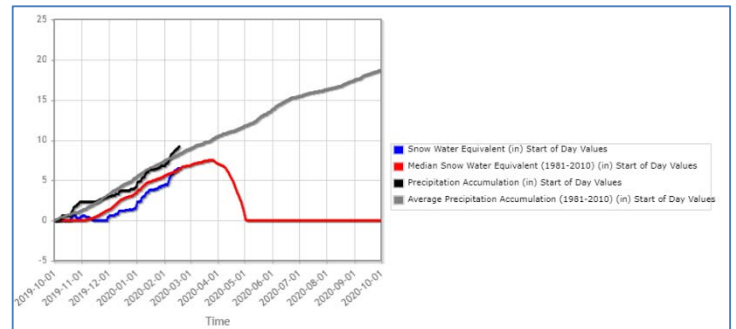
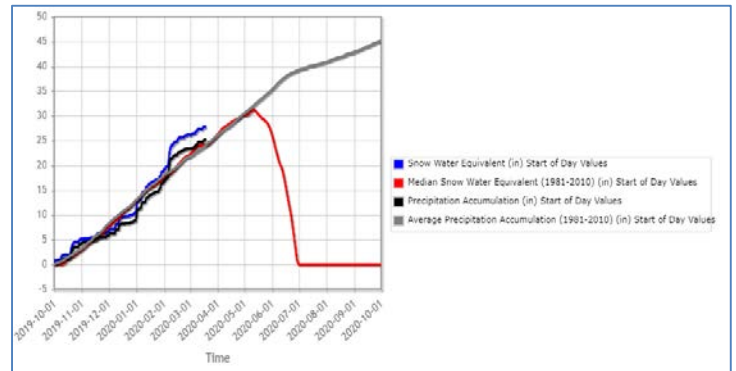
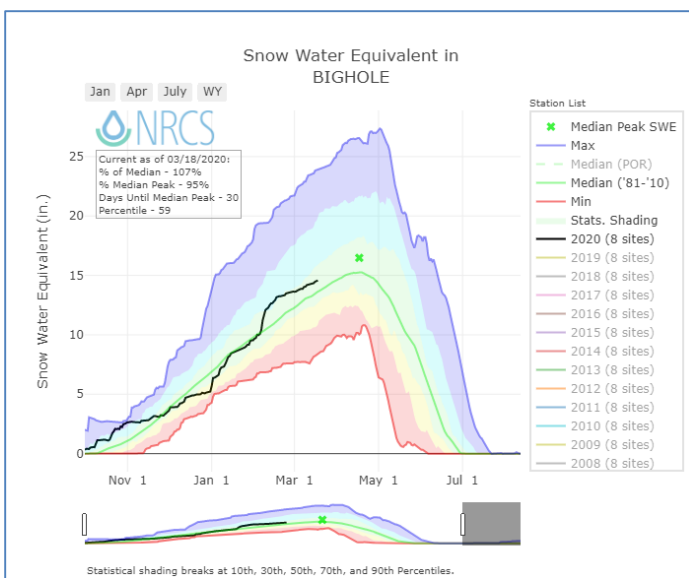
Streamflow/Snowpack Report – Matt Norberg, Montana Department of Natural Resources and Conservation

- *Streamflows:* Gages are seasonal and are not currently reporting flows.
- *Snowpack:* Snowpack conditions across Montana are currently above to well above normal. Currently the snowpack in the Big Hole Basin is slightly above average, sitting at 107% of normal and the Jefferson Basin as a whole is 108% of normal. High elevation snowpack conditions for this year are reporting average to above average conditions and well above high elevation 2019 snowpack conditions. Keep in mind that 2019 was an above average snow year but the high elevation conditions (Big Hole) were below to average and the mid to low elevation snowpack was above to well above average which resulted in early runoff and coupled with diminished precipitation during the May and June months streamflow



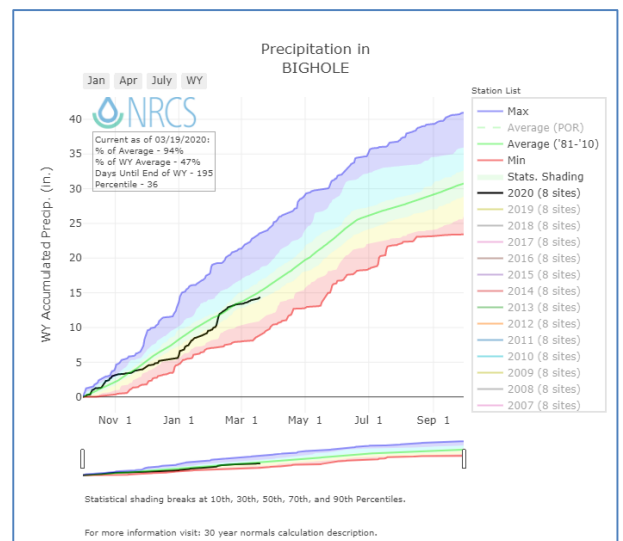
conditions receded earlier than normal. Currently, according to the NRCS, near to above normal snowpack has resulted in Jefferson River basin forecasts that are near to slightly above

Big Hole River Representative SNOTEL Sites		18-Mar-19	Mar 18 2020	1981-2010	
		WY 2019	WY 2020	median	WY 2020
Station	elevation		inches	inches	% avg
Barker Lakes	8250	12.6	13	11.9	109%
Basin Creek	7180	7.7	6.6	6.4	103%
Bloody Dick	7600	9.1	11.2	10.4	108%
Calvert Creek	6430	8.9	7.3	7.4	99%
Darkhorse Lake	8600	23.2	27.8	24.1	115%
Moose Creek	6200	14.2	15.5	14.9	104%
Mule Creek	8300	13	13.4	12.6	106%
Saddle Mtn.	7940	20.4	21.8	21.4	102%
TOTAL		109.1	116.6	109.1	
BASIN AVERAGE %		100	107		



average for the April 1st – July 31st period.

- **Precipitation:** Year to date precipitation across the Big Hole Basin is currently at 94% of average. Precipitation accumulations were below average during the November and December months. January and February brought the precipitation totals to 42% of the total WY average. Currently, month-to-date precipitation for the Big Hole has been variable across the basin with sites reporting total precipitation at 62% of average for the month of March.
- **Forecast:** ENSO-neutral conditions are expected to continue through the spring (65% chance) and into the summer months (50% chance). Generally, the three-month outlook calls for above normal temperatures and equal chances of above, normal, or below normal chances of precipitation



during the March, April, and May time frame. SST have remained at or above the 0.5°C threshold for the last couple of months, but forecasters are still favoring ENSO-neutral conditions instead of El Nino conditions to persist through the summer. Most recent NOAA 3-month outlook is for equal chances of above average temperatures and equal chances of average precipitation through the spring/early summer.

Director's Report – Pedro Marques, Executive Director

- Weighing heaviest on my mind is making sure BHWC has the resources we need to support our staff, which in turn supports the resource and keeps our board engaged and coordinated. I've reached out to many individual donors and foundations in the past month and am heartened by people's renewed commitments to our organization. Private donations from last year's appeal continue to come in!
- BHWC has been awarded a \$100,000.00 grant from the Bureau of Reclamation for water quantity planning in the lower section of the river. This grant will support our work to engage lower river stakeholders in implementing irrigation and restoration projects to improve the availability of late season flows, water use efficiency, and fish habitat. Funds will also provide for contracting hydrology and geomorphology consultants to design a solution to impending problems at Pennington Bridge and also provides capacity for us to update our Watershed Restoration Plan for the Middle/Lower river.
- BHWC was also awarded a \$12,000 capacity grant from Patagonia! Thanks to Eric Thorson and Sunrise Fly Shop, our Patagonia distributor partner, for connecting us to this program!
- Two films funded by the Wildlife Conservation Society demonstrating our work on natural water storage are in final edits. Thank you to Dean Peterson, Randy Smith, and Jim Hagenbarth for providing interviews! We look forward to launching the films at the right time/place given current uncertainties.
- I participated in a workshop of the Beaver Working Group, led by National Wildlife Federation, and co-led a focused discussion on improving the regulatory environment for restoration that mimics or uses beaver to improve the land's natural water storage capacity.

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

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

Wildlife Report – Jim Hagenbarth, BHWC Vice-Chairman/Rancher; Dean Peterson, BHWC/Rancher; Tana Nulph, Associate Director

- Carcass removal services are available March 1 – middle of May. Call John Costa (*information on attached flier*). Carcasses are hauled to our livestock carcass compost site near Wisdom. Removing carcass attractant from local ranches can help prevent conflict with predators like bears and wolves.
- BHWC also has bear-resistant garbage cans available, free-of-charge, to Big Hole Valley residents. Contact us if you would like to make arrangements to get one of these.
- BHWC has been working with People and Carnivores to put together a Livestock Loss Prevention Loaner Toolkit, which includes scare devices, electric fencing, resource guides, and more. *See announcement included as attachment.*
- Wildlife Speaker Series – We are planning to feature Arctic grayling this year, to commemorate BHWC's 25th Anniversary. (Assuming we are able to hold public meetings in July.)

Restoration Report – Ben LaPorte, Program Manager

- Ben and his wife Joanna, welcomed their little boy Rowan John LaPorte into the world on March 17th! We are thrilled to add a new member to our growing BHWC family! Welcome Rowan and congratulations Ben and Joanna!
- The BHWC in partnership with the Beaverhead Conservation District and USFS submitted a DNRC Reclamation and Development Grants Program (RDGP) Planning Grant proposal to investigate the legacy impacts from historic underground hard rock mining in and around the Elkhorn Mine and Mill on the Beaverhead Deerlodge National Forest. The Elkhorn Mine (upper Wise River) has had ongoing significant impacts on water quality and aquatic life in Elkhorn Creek and the Wise River downstream. There is active adit (horizontal mine shaft) discharge of metal laden waters to Elkhorn creek in addition to many seeps that leach through old tailings and discharge to the stream. Our planning grant proposal will look at potential ways to slow the flow of contaminated water coming from the adit and seeps, as well as gain more insight to the level of contamination to the site.
- Ben attended the Beaverhead Deerlodge Working Group meeting in Butte on March 4th.
- Formulating DNRC RDGP Project Grant proposal for French Gulch Fish Barrier project.
- Ben and Pedro are working with Montana Tech to help guide 2020 restoration efforts on the Mount Haggin WMA. Sediment cores (taken in 2019) from an old beaver pond in Muddy Gulch are giving us valuable insight to the levels of contaminated sediment at the site and potential time frame of sediment deposition rates. Applied science and adaptive management at work!

New Business

- None

Special Topics:

- **Census 2020:** This is a Census year, and it is vitally important that all Montanans are counted in order to ensure that Montana receives the correct amount of Federal funding for things like highways, infrastructure, schools, and health care. Montana may even qualify for an additional U.S. House of Representatives seat this year, depending on the results of the Census. Census data is also very critical to understanding local issues, planning, allocating resources, and applying for funding.
 - Here are some ways you can help:
 - Take the Census now at <https://2020census.gov/>. It's really quick and easy!
 - Remind others to complete the Census.
 - Learn more about available resources at <https://census.mt.gov/>.
- **One Montana's Master Hunter Program:**
 - This program, which was presented at a BHWC committee meeting when it was first starting, has generated substantial interest from hunters and landowners alike who want to see more ethical hunting on private land. Ownerships in the Big Hole that want to reduce wildlife depredation on their fields but are wary of allowing more access are encouraged to look into the program. More information is available here: <https://www.mtmasterhunter.com/> and also included in an attachment.

Upcoming Meetings

As we all know by now, the current COVID-19 situation has made things uncertain over the next few months. We will resume our regular monthly meeting schedule (the 3rd Wednesday of each month, 7pm, except for July and December) when conditions allow and will make the necessary announcements when that time comes.



BIG HOLE
WATERSHED COMMITTEE
Conservation Through Consensus.

Free Livestock Carcass Removal Offered Spring 2020 *in the Big Hole Valley*

CALL TO MAKE ARRANGEMENTS

John Costa: (209) 628-2225

The Big Hole Watershed Committee offers free carcass removal each spring, when mortality rates can be higher due to calving and lambing. We will meet you at your ranch with a dump truck and we ask that you help load the carcasses. We do this to remove predator attractant from the landscape in hopes of deterring livestock depredation. Carcasses are hauled to our compost site near Wisdom (next to the MDT maintenance shop). All information regarding livestock operations & mortality is kept confidential.

Bears are waking up in the Big Hole Valley...



Photo credit: Steve Heiland

Grizzly bear tracks were reportedly seen this past weekend west of Wisdom off the Foothills road, a sign of Spring and a reminder that bears are waking up around the Big Hole Valley.

With calving season underway, bears waking up across the landscape, and wildlife returning to the Valley, we want to let landowners, ranchers, and residents know that we have various tools and resources to help reduce conflicts with wildlife. The Big Hole Watershed Committee (BHWC) is partnering with People and Carnivores (P&C) to prevent conflicts with large carnivores throughout the Big Hole Valley, keeping people and their property safe and large carnivores wild. This is a good time of year to check around your property for anything that may attract a bear or other wildlife: pull down birdfeeders, store garbage inside hard-sided buildings or in a bear-resistant manner; and the same goes for other attractive items such as livestock feed and pet food. Barbeques and other smelly items can also attract bears and should be stored properly. Vulnerable livestock can be protected using electric fences.

BHWC offers free livestock carcass removal to ranchers in the Big Hole Valley (and in the Sage Creek area on behalf of the Centennial Valley Association), removing boneyards and carcasses that may lure carnivores to your property. With grizzly bear populations expanding and recent grizzly bear reports in the Valley, removing carcasses improves the safety of both people and livestock. Ranches interested in participating in the program can contact John Costa, BHWC Wildlife Program Technician, at 209-628-2225 or contact the BHWC for more information.

We also have conflict prevention tool kits available right now for ranchers to check out for free that come with various scare devices and information about ways to prevent conflicts. Tool kits can help protect vulnerable livestock during times of high risk like calving or lambing. Additional tools like electric fencing may also be available.

Bear-resistant garbage canisters are also available to any Big Hole Valley resident in need. These specialized containers can be used to keep bears and other wildlife from accessing garbage as well as livestock feed. Canisters are available on first-come, first-served basis.

For more information on any of the tools and resources mentioned, contact us at:



Big Hole Watershed Committee

Tana Nulph, Associate Director

(406) 267-3421

tnulph@bhwc.org



People and Carnivores

Kim Johnston, Field Project Manager

(406) 599-9424

Kjohnston@peopleandcarnivores.org

Livestock Carcass Removal

John Costa, Wildlife Program Technician

(209) 628-2225

jcosta@bhwc.org



Butte FO collaborates to convert root wads to fish habitat

Michael O'Brien, Forester, Butte Field Office

Bureau of Land Management

Montana/Dakotas

March 10, 2020

In the past 20 years, insect and disease activity has been on the rise in the western United States and Canada's forests. Periodic infestations are natural elements of the landscape, but past management decisions and changing forest conditions have elevated them to epidemic levels.

In Montana, one of the most impactful insects has been the mountain pine beetle (MPB) (*Dendroctonus ponderosae*). The most recent MPB epidemic started in the 1990s and peaked around 2006-2008.

The beetle has had a significant ecological force at the landscape level, causing high levels of mortality in mature timber stands. Within Montana, this epidemic spread across more than six million acres, or 23 percent of the state's 25.6 million acres of forest on private, state, and federal lands. Tree mortality was greater than 90 percent in some timber stands within the BLM's Butte Field Office.

After the epidemic, many forestry projects designed to address the MPB mortality have been completed and continue to be implemented by land owners and agencies within Montana (BLM, United States Forest Service, Montana Department of Natural Resources, Montana Fish Wildlife and Parks, private landowners, and others).

The Butte Field Office ran into a rather unique challenge and had to get creative when treating some of the high-use campgrounds within the Big Hole River Valley, known for blue-ribbon trout fishing and spectacular high mountain scenery.

Determining the right course of action was complicated. BLM specialists had to look at many issues, including the safety of campground users, maintaining the integrity of campsites, retaining wildlife habitat and movement corridors, and visual resources. Hundreds of large, mature lodgepole pine trees had to be removed.

Residual live trees presented one of the largest issues. As the stand was thinned, the shallow root systems on



The wind blew this tree down, exposing its root wad and damaging a picnic table. Photo by Michael O'Brien

the live lodgepole pine were not able to withstand spring moisture and high winds. Those wind-thrown trees were hazardous to both campground users and campground facilities. When the trees inevitably toppled, their root wads came up as well, creating large holes and a mess to clean up.

Beginning in 2011, two timber sales were used to help remove hazard trees and clean up the sites. They provided sawlogs that went to local lumber mills, posts and poles for fencing, houselogs, logs to be carved into bears (which the carver donates to charities around Butte), and plenty of firewood.

After the timber sales, BLM staff spent time each summer cleaning up the sites and removing root wads from wind-thrown trees. Residual down trees were cut up and stacked for firewood for campground users.

"This was a big hit," said Michael O'Brien, BLM Forester with the Butte Field Office and Project Lead. "Folks really appreciated having easily accessible firewood throughout the summers."

Although the firewood was a big hit, there was still one BIG issue. What to

do with all the root wads? During the summer of 2017, while O'Brien was visiting his in-laws in Salmon, ID, an idea came to mind. The family owns a small mill in Salmon and they had been selling a lot of short logs with root wads attached for different fish habitat projects.

"I knew there were a number of different stream restoration projects around the Butte area and once the idea had been presented to the field office staff, it didn't take much time at all to find a home for the root wads," O'Brien said.

more...

For more information on the Big Hole Watershed Committee and this project visit:

<http://bhwc.org/projects/french-gulch-restoration/>

Kelly Scarbrough, Supervisory Outdoor Recreation Planner with the Butte Field Office, had been working with the Big Hole Watershed Committee and they quickly accepted the donation.

“This was a great opportunity to support multiple resources and strengthen local partnerships,” Scarbrough noted.

Project leads on both sides were excited for the donation, all the BLM had to do was transport the root wads to a useable location.

In 2018, a local logger provided a self-loading log truck to transport the root wads. The State of Montana provided a location within the Mount Haggin Wildlife Management Area for the material to be stored.

In the fall of 2019, the root wads finally found their home on the Lower French Creek sediment reduction project. This project is a critical piece to a larger initiative where the Big Hole Watershed Committee is working with the BLM, Montana Fish, Wildlife and Parks, Bureau of Reclamation, the Montana Department of Environmental Quality,

The Nature Conservancy, Morrison-Maierle, Inc, and Watershed Consulting to establish a native fish stronghold for Westslope cutthroat trout and the Arctic grayling along more than 40 miles of the Big Hole River’s headwater tributaries.

In the 1860s, extensive placer mining in the French Gulch drainage left the area in a highly degraded state. The project’s objective was to remove placer tailings from the floodplain, re-establish natural stream meanders, and reconnect the floodplain and wetlands to reduce sedimentation.

“These root wad structures are a vital piece of the project,” said Ben LaPorte, Program Manager for the Big Hole Watershed Committee. “They are being used to protect the



Root wads are loaded on a log truck to be hauled to Mount Haggin Wildlife Management Area. Photo by Michael O’Brien

streambanks and give stabilization to the outer meander bends. They have all been placed strategically to help decrease the stress on the banks, especially in high-flow events. These structures provide good fish habitat, especially for juveniles. They also help with sediment and debris catchment. The root wads and logs that the BLM donated have been the most robust, construction friendly logs we have available. Thank you so much for the donation!”

Last autumn, O’Brien watched the logs and root wads being placed in Lower French Creek, the end of a nine-year project.

“This was a great project to see so many of the aspects of what the BLM does,” he said. “We were able to improve the safety of our campgrounds, provide jobs for loggers and timber products for local industries, and in the end contribute to the restoration of one of our most valuable resources. This is certainly one of those feel-good kinds of projects where thinking outside of the box has provided us with more benefits than I would have ever initially thought. This was my first timber treatment in the Butte Field Office and is a project I am sure I will reflect on throughout my career.”



Root wads were strategically placed in the New French Creek stream channel to stabilize and protect stream banks and create fish habitat. Photo by Ben La Porte, Big Hole Watershed Committee.

Master Hunter's Program

One Montana

Landowners and Sportsmen Working Together on Private Lands

One Montana's Master Hunter Program (MHP) educates sportsmen and women and prepares them to help landowners manage wildlife. Now in its third year, MHP has graduated 90 people from the program and has about 90 currently enrolled spread across three classes (Bozeman, Helena, and Missoula). The program aims to field more ethical, educated, and effective hunters. This happens through a rigorous education program of 50+ hours in classroom study, lectures, and skills training and a thorough certification process. Participants are required to excel in a variety of areas—history of conservation, hunting ethics, landowner relations, noxious weed identification, wildlife management, and shooting proficiency just to name a few.

The program provides landowners with a pool of competent, ethical and responsible hunters to draw from when weighing options to manage wildlife populations on their land and considering who to allow on their property to hunt. Of the 17 ranches in the program last hunting season (2019), half identified wildlife management as the primary reason they work with the MHP. Landowners also identified building constructive long-term relationships with sportsmen and telling their stories of land stewardship as the additional reasons they allow access to Master Hunters.

Nine of the ranches already in the program for the 2020 hunting season are Region 3, with one of the nine ranches in Beaverhead County. One Montana is looking for more thoughtful landowners who are seeking help managing their wildlife populations, building relationships with sportsmen and women, or telling their stories of land stewardship specifically in the Big Hole. Each participating ranch can fully customize the hunting experience on their property to meet their specific objectives and preferences. Landowners and managers choose the species and sex of the animals to be hunted, the locations and timeframes in which hunting can occur, and the ways in which they care to interact with hunters. Landowners may also ask for services days to help with tasks on the ranch in exchange for offering hunting. The 19 ranches (and growing) currently enrolled in the MHP for the 2020 hunting season each have a unique package shaped by each landowner's specific goals and facilitated by One Montana. The Master Hunter Program benefits ranchers, farmers, and absentee owners as well as Montana hunters and helps build community and connect folks from both urban and rural areas across the state. The program is working to repair relationships between sportsmen and landowners in the Big Hole and across Montana.

Want help managing wildlife from a network of thoughtful hunters who are committed to partnerships with Montana Fish Wildlife and Parks, and to establishing good working relationships with landowners?

Interested landowners can learn more and can enroll on the Montana Master Hunter website-www.mtmasterhunter.com. For questions and further information, email Kelly Beevers at kellyb@onemontana.org.