



Big Hole Watershed Committee

Monthly Meeting Minutes
 September 20, 2017 – 7:00pm
 Divide Grange – Divide, Montana

In Attendance

Jennifer Downing, BHWC; Tana Nulph, BHWC; Jim Hagenbarth, BHWC/Rancher; Betty Bowler; Tom Bowler; Jim Gross; Deb Gross; Benjamin Cross, USFS-BDNF; Peter Frick, BHWC/Rancher; JM Peck, Rancher; Jim Roscoe, Lemhi Regional Land Trust; Graham Neale, MTSGHCP; Wade Fellin, BHRF; Eric Thorson, BHWC/Sunrise Fly Shop; Lee Gault, MT Conservation Corps; Mike Cleary; Scott Reynolds, GGTU; Jane Wierzba; Jim Wierzba; Vanna Boccadori, MFWP; Jim Magee, USFWS; Johnathan Costa, BHWC.

Introductions *Attendees introduced themselves.*

Meeting Minutes *August 2017 meeting minutes were reviewed, no additions or corrections.*

Reports

Streamflow/Snowpack Report – Mike Roberts, DNRC

- **Streamflows:** Streamflows are recovering nicely this week after weeks of dry conditions. Section I closed just over a week ago but will very likely be able to open back up again if precipitation continues. Water temperatures have benefitted from cold nights and hoot owl restrictions were lifted in mid-August. Upper basin streamflow contributions from CCAA landowners began in August and enrolled landowners continue to comply with site plans. Section V remains closed at this time. Despite less than average summer precipitation and above average air temperatures, the river remained open for the majority of the summer. Streamflows are currently above normal in response to the rain and snow from the last week which should continue through the weekend.

06023500	Big Hole River near Jackson MT	15.0	24.7	1.17	--	09/20 07:15 MDT
06023800	Big Hole River ab Spring Creek nr Jackson MT	22.0	27.3	1.92	--	09/20 08:00 MDT
06024020	Big Hole River at Miner Creek nr Jackson MT	53.0	88.4	1.34	--	09/20 07:15 MDT
06024450	Big Hole River bl Big Lake Cr at Wisdom MT	35.0	90.7	2.15	5.6	09/20 07:45 MDT
06024540	Big Hole River bl Mudd Cr nr Wisdom MT	121	120	2.77	4.4	09/20 07:30 MDT
06024580	Big Hole River near Wise River MT	210	253	2.70	4.2	09/20 07:30 MDT
06025250	Big Hole River at Maiden Rock nr Divide MT	308	341	2.96	7.2	09/20 07:45 MDT
06025500	Big Hole River near Melrose MT	307	430	1.57	7.6	09/20 07:15 MDT
06026210	Big Hole River near Glen MT	311	456	2.49	8.1	09/20 07:30 MDT
06026420	Big Hole R bl Hamilton Ditch nr Twin Bridges, MT	147	205	1.19	9.2	09/20 07:30 MDT

- **Precipitation:** During August the same ridge of high pressure that built up over July lingered which produced below normal precipitation once again. Wildfires and smoke continued to be one of the bigger issues this month as red flag warnings and dangerous fire conditions continued through just last week. The cold front that moved in late last week has helped to control smoke and fire conditions, has bumped up streamflows, and has finally added rain to the 0.52 inches that were recorded at Wisdom in August. Record low humidities were recorded throughout Montana this summer and recorded precipitation was less than 60% of average in the upper basin and approximately 15% near the mouth for July and August.

- *Temperatures:* August temperatures were once again above normal across the state and averaged 0.6° above normal. Wisdom recorded above average temperatures for about half the days in August but averaged just below normal for the month as a whole.
- *Forecast:* While most forecasts are still leaning toward ENSO-neutral conditions the most recent predictions are showing an increasing chance (55-60%) of La Nina conditions forming late this fall and continuing through the winter. The ENSO alert system has officially issued a La Nina watch for the fall/winter of 2017-2018. This is good news for our snowpack if this past winter was any indication since it, too, was a La Nina winter. While back-to-back La Nina winters are not common they have happened at least 5 times since 1950; the most recent years were 2010-2011. La Nina conditions will be taken into account as forecasters work on winter predictions which will be published in October.
 - Based on the current forecast for the next three months we can expect a continuation of above average temperatures in Southwest Montana. Precipitation has an equal chance of being above average, below average, or average through November.
- This is Mike's last BHWC meeting reporting streamflow for DNRC. Mike started attending BHWC meetings in 1999. The CCAA will continue and is stronger than ever. Jacqueline Knutson, MFWP, will fill in with hydrology work. Austin McCullough, MFWP, will fill in for grayling work. CCAA is entering monitoring phase. This was a good year for the CCAA – irrigators contributed a lot of water to maintain flow in the river.
 - *From Mike: "BHWC is an amazing stakeholder group and I am honored to have been a part of it. I will still be around, just not working for the DNRC in the Big Hole watershed."*
 - *"You've had a really tough job, working with a lot of ranchers, and you had the ability to pull those people together. You ran the show, you made the calls, and there's not too many people who have done that. So thank you." – Jim Hagenbarth.*
 - *"I trust Mike and Mike is our go to when it comes to water issues, when it comes to revising the drought plan figuring out what our triggers are, the monthly streamflow report, and so much more. Mike has been around and he's had a relationship with the ranchers, and he's been our guy. Seeing someone who's stayed around this long and put so much of his life into this valley is really awesome. This valley really owes you. Congratulations, Mike!" – Jennifer Downing*

Drought Management Plan – Jennifer Downing, Executive Director

- *"Thank you to every irrigator who has put water back this year. I know it was a rough year and we held on really long without any river closures (until September). I think in general, this was a good year all-around; even though the river did get low in some sections, it could have been worse."*

Director's Report - Jennifer Downing, Executive Director

- We've been finishing up a lot of projects and closing out contracts this year.
- We're gearing up for the fall newsletter, annual appeal, end of the year reporting, etc.
- Mount Haggin Restoration:
 - We had a tour on Mount Haggin on Friday. We had a lot of snow, but still had 21 attendees. We had lunch at Sugar Loaf Lodge and provided presentations on the Mount Haggin restoration.
 - The California Creek project recently wrapped up; the contract is closed and this project is COMPLETE!
 - Construction was recently completed on the French Gulch and Moose Creek restoration project; monitoring and reporting continue.
- BHWC hosted a pint night at Quarry Brewing on August 31st as part of our 2017 push to provide more outreach and connect with the community more, especially in terms of drought.
- French Creek Fish Barrier: Montana FWP has proposed the installation of a fish barrier at the bottom of French Creek, which would provide 40 miles of stream for native fish including Arctic grayling and

Westslope cutthroat trout. This plays into the restoration work that we recently completed on Mount Haggin repairing the streams up there to provide habitat for the native fishery. BHWC released a statement in support of the fish barrier, and a public meeting was held in Wise River on August 31st as a result of community concerns about the project. There has been a lot of coverage via fliers, social media, the Montana Standard, and word of mouth regarding this project. At the meeting, Jim Olsen and Travis Horton from MFWP discussed the benefits of the fish barrier, how this plays into native fish restoration and MFWP's long-term goals, cost, etc. The meeting was tense, but we hope something good came out of it. *BHWC's Statement of Support included as attachment.*

○ Discussion:

- *“If this has been done in other places where it's been done long enough to say look what's been accomplished by this, if there's precedent and it's been shown that it works, even though it's an artificial intrusion into the river, does it work?”*
 - *“I'm not an FWP employee, but the use of Rotenone is a very common practice and has been used several times, even within this valley, just not to the scale of this project. The reasons why native cutthroat trout and nonnative brook trout can't live together is also well documented; brook trout spawn and hatch first and easily outcompete and feed on cutthroat when they hatch at a later date. Rainbow trout will hybridize with cutthroat. I think it's wise to think about the long game, because although this project will cause short term changes to the ecosystem, it will hopefully prevent increased controls in the future in the case that cutthroat gets listed under the Endangered Species Act.”*
 - *“From a rancher's perspective, I think this is a good thing because if we can show that there is a certain number of streams that support native fish, it will be less likely that they'll be listed.”*
 - *“This project helps both Arctic grayling and Westslope cutthroat trout quite a bit. Besides the fact of seeing these fish go extinct, if either of these fish become listed, it would be devastating to ranchers and local conservation efforts. For every action they could take, the question would be asked, 'How will this action affect the endangered species?' I know change is hard, it's been hard for me, but it's for the best interest of the watershed. You can't just stick your head in the sand – you need to get involved, be informed, and be educated.”*
 - *“Thank you for taking those punches at that meeting – it was rough. But the people who are engaged and informed are the people who continually show up at these meetings. But there's a gap in information. I think for a lot of the residents of Wise River and the whole watershed, the notions of 'wild' and 'native' are conflated. Native means all of the fish that were here before us. We brought the nonnatives out on train cars.”*
 - *“You're right, it was a good reminder that not everyone is as up-to-speed as everyone else. We tend to forget that. We need to bring those people along with us, bring them into the fold, include them.”*
- *“Tools can be used very easily to remove grazing from the resource if these fish were to be listed. I applaud FWP for realizing that it's important to address these concerns before the species do become too limited. The way they're going about it is a much better way than just throwing the livestock producers off the grazing range which happens to be on Forest Service ground. It's important to remember that these areas that are picked by FWP – it's important to choose the right ones – ones with a lot of small tributaries over a lot of area so you get the most bang for your buck. It has to be the right area, and I think FWP is doing a good job of choosing those areas. When it's on your own ground, it's touchy – and I understand those feelings.”*
- *“Is it true that there are 4 strains of cutthroat trout?”*
 - *“No, there's just one strain. Westslope cutthroat have been considered for listing under the ESA since the 1970s, but that has never gone forward. I think that's because of a lot of the combined efforts of conservation groups, agencies, etc. I don't think it's an immediate threat that cutthroat may be listed. They're still*

hanging on and still doing very well in some places, although the majority of their historic populations have been lost.”

- *“Most of these projects are done on the east side of the Continental Divide – the remaining population strongholds are generally west of the divide.”*
- *“There have been several of these projects in the Big Hole watershed already, and they’ve been successful.”*
- *“I keep hearing the term ‘poison’ and I think that’s the scary part for a lot of people. I’ve heard they’re actually being suffocated. Maybe there’s a better term that wouldn’t scare people so badly?”*
 - *“You’re correct and that’s a good point. Rotenone is a plant derivative and is not harmful to people. It disrupts gill function and causes fish to suffocate.”*
 - *“There has been a lot of misinformation going around about Rotenone.”*
 - *“Rotenone is a respiratory inhibitor, but only if you have gills.”*

Steering Committee – Jim Hagenbarth, Vice-Chairman; and Roy Morris, Secretary

- The steering committee is happy with the progress BHWC is making.

Wildlife Report – Jim Hagenbarth, Vice-Chairman and Tana Nulph, Conservation Programs Coordinator

- **Carcass Management:**
 - Kim Bingen, BHWC’s Wildlife Programs Technician since 2015 and manager of our compost site, has resigned and moved to Wyoming. Kim has been a huge asset to BHWC and we’re sorry to see her leave, but excited for her next adventure! We’ve hired John Costa, who lives near Wisdom and works for MDT, to take her place.
 - On September 8, BHWC and partners met with the Washington Post for an interview at the compost site. The finished products should be available in October.
 - Why compost carcasses? Removing and composting carcasses removes predator attractant to prevent predator-livestock conflict and help manage predator populations by limiting food supply. It also helps keep predators honest and prevent them from forming bad habits like feeding on livestock.
- **Range Riders:** The 7th season of our Upper Big Hole Range Rider program ends September 30th.
- **Landowner-led Conflict Reduction:** BHWC has been meeting with other conservation groups and landowners to discuss wildlife-livestock conflict issues, potential solutions, funding sources, etc. through a landowner-led conflict resolution group initiated by the Blackfoot Challenge. The BFC has submitted an application for NFWF funding to be shared amongst these landowner-led groups.
- **Sage Grouse:** BHWC participating in sage grouse and sagebrush conservation efforts along with several partners.
- **Grizzly bears:** The grizzlies are coming. There have been a few grizzly bear attacks recently in neighboring watersheds. Be aware of carcasses and the potential of grizzly bear presence. BHWC will be sponsoring bear safety awareness trainings later this year or in the spring.
- **Brucellosis confirmed in the Madison Valley.** This is an issue that will be difficult to deal with, especially with the current budget situation for testing and treatment. In the future, it is likely that the livestock producer will have to foot the bill for this issue.

Land Use Planning

- Updated the Big Hole River Channel Migration Zone maps this year. Will be the topic of our November meeting. This will be a very helpful tool for development.
- Big Hole River Incentive Program (BHRIP) progressing. Pedro attended a Society for Ecological Restoration conference in Brazil at the end of August and presented BHWC’s work on the incentive program on an international scale.

New Business

- None.
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Meeting Topic: Big Hole Sage Grouse Update

Vanna Boccadori, Montana Fish, Wildlife and Parks

Jim Magee, United States Fish and Wildlife Service

Background: Members of the Big Hole Sage Grouse Working Group will provide an update on current sage grouse population trends, habitat and collaring projects, and more.

Vanna Boccadori, Montana Fish, Wildlife and Parks

- About the Big Hole Sage Grouse Working Group (BHSGWG):
 - Started a few years ago as a spinoff from BHWC Wildlife Subcommittee working on sage grouse/sagebrush issues.
 - Proactive, collaborative approach to sage grouse conservation in a sustainable working landscape.
 - BHWC Sage Grouse Working Group:
 - Jim Hagenbarth, BHWC
 - Dean Peterson, BHWC
 - Tana Nulph, BHWC
 - Vanna Boccadori, MFWP
 - Tim Egan, DNRC
 - Jim Berkey, TNC
 - Kelly Bockting, BLM
 - Kyle Tackett, NRCS/SIGI
 - Lindsay Schmitt, NRCS
 - Jenna Roose, USFS-BHDL
 - Jim Magee, USFWS
 - Rollie Miller, Vigilante Electric Cooperative
 - Adam Braddock, USFWS
 - Others.
- ESA Status:
 - 2010: Warranted but Precluded
 - 2015: USFWS found that the Greater Sage Grouse remains relatively abundant and well distributed across the species' 173 million acre range and does not face the risk of extinction now or in the foreseeable future. The decision followed an unprecedented conservation partnership across the western United States that has significantly reduced threat to the great sage grouse.
 - 2020: USFWS will review again.
- Sage Steppe Conservation: Recognize the need to conserve the habitat and the species will follow.
 - BLM/USFS
 - State Plan
 - Sage Grouse Initiative
 - CCAAs
 - USFWS Partners for Fish and Wildlife
- Montana Sage Grouse Core, General, and Historic Habitat
 - The Big Hole is primarily general habitat, but is still important for satellite populations. General habitat often borders core habitat.
- Sage Grouse Lek Counts: The BHSGWG conducted sage grouse lek counts primarily in April during breeding season. Birds return to the same lek each year if possible. Males are very flamboyant and dance on the leks to impress and attract female sage grouse, which are less flashy and more skittish. Sage grouse counts measure male populations because they're easier to see – assumes that male populations are indicative of overall populations. Survey leks 3 times per month. Counts inform management decisions, including whether or not to have hunting season on sage grouse. There is currently a hunting season in place for sage grouse – bag limit: 2/day. This is adaptive management – bag limit varies based on counts.

- SW Montana uses 19 leks for trend data. There are several other leks in the area, these are just the sample leks from which population data is recorded.
 - This helps keep consistency across the area. Meant to be a random sample.
- We have a fairly robust sage grouse population in southwest Montana, which speaks to the habitat conditions and thus the land management practices in this area.
- Big Hole Sage Grouse:
 - We now have 10 known, active leks in the Big Hole watershed. We've found 5-6 new leks in the last few years. These are not new to the birds, just were not previously identified by land managers. Some leks are smaller (4-5 males) while others are quite large (40-50 males).
 - If you're interested in assisting Vanna and others with lek counts, you are welcome to do so. It will be early morning near April. Contact Vanna if interested. Contacted information included below.
- Discussion:
 - *"So you do the counts in April – where are the birds the rest of the year?"*
 - *"We have those same questions. We're putting together a research proposal to look into exactly that."* (More information below.)
- Big Hole Sage Grouse Life History and Connectivity Project
 - Objectives:
 - Define seasonal habitat use in the upper Big Hole Valley.
 - Determine migratory status of the upper Big Hole sage grouse population and what time(s) of year birds are migrating.
 - Identify potential migration corridors between the upper Big Hole and surrounding area (SW MT, ID, ??)
 - Determine how the Big Hole population contributes to genetic connectivity across the greater sage grouse population in SW MT and ID by identifying migration during the breeding season.
 - Further define important seasonal sage grouse habitat in SW MT by identifying sage grouse movements out of the Big Hole valley throughout the year.
 - Timeline: 2018-2020
 - GPS collar 15-20 hens/year
 - Track year-round
 - Capture from Big Hole leks
 - Start April 2018
 - Characterize seasonal habitat and movements
 - Funding: GPS collars cost ~\$4,000 each
 - BLM: \$90k
 - USFWS: ?
 - MFWP: ?
 - Other: ?
- Discussion:
 - *"Traditionally the knowledge was that sage grouse are habitual in their movements. We've found through collaring that these birds go all over the place, all the time. It's only been in the last 20 or so years that we've been able to recognize this and the capacity problem has prevented us from having a better idea of where they're going and what they're doing. As we collar more of them, I suspect we'll have more questions."*
 - *"How do you capture the sage grouse?"*
 - *"General protocol has been to use a spotlight and large net. We will be looking for volunteers to help."*

Jim Magee, United States Fish and Wildlife Service – Montana Partners for Fish and Wildlife

- Montana Greater Sage Grouse/Declining Grassland Songbirds Programmatic CCAA (similar to grayling CCAA but statewide):
 - Any landowner can sign up voluntarily through either the USFWS or TNC, when the program begins.

- Option 1: Landowner develops Private Landowner Agreement (PLA) with USFWS Partners Program to address all SG threats.
 - PLA becomes SSP and landowner receives COI.
- Option 2: Landowner develops SSP with TNC and receives COI.
- Benefits to enrolling:
 - Landowner receives regulatory assurances/incidental take if listed.
 - Conservation of sage steppe and sage grouse.
 - Landowner develops conservation plan with financial assistance for projects.
 - Based on sustainable ranching.
 - Builds landscape, community, and wildlife conservation.
 - Brings in additional funding.
- Sage Grouse CCAA potential threats checklist:
 - Habitat fragmentation/loss
 - Improper livestock grazing management
 - Conifer encroachment
 - Noxious weeds
 - Nonnative vegetation
 - Infrastructure
 - Fences
 - Range management structures
 - Recreation
- Discussion:
 - *“If USFWS can do the plans, what’s the relationship with TNC and how are they involved?”*
 - *“Some people don’t like working with the Federal government, so this just provides them another option. There’s the same end goal, just a different process.”*
- Mesic or wet meadow habitat restoration/preservation:
 - Mesic areas are important because:
 - Green areas with sedges/forbs and insects.
 - Provide AUMs for livestock.
 - Important habitat for sage grouse and many wildlife species.
 - Resiliency: stores water in the uplands.
 - Mesic degradation: head-cuts and incision erode, drain, and reduce wetlands.
 - Head-cuts and incision can get worse and worse until you lose the mesic habitat. Dry up landscape and change veg to dryer species composition.
 - Gunnison sage grouse restoration – Bill Zeedyk: “Think like water.”
 - 2015-2016: restored over 1,000 acres mesic habitat, 1,000 structures on 21 miles of stream.
 - Restoring wetlands by spreading and storing water, stopping headcuts and incision.
 - Zeedyk:
 - One-rock dam slows down water and stores sediment. Dams consist of several rows of medium-large size rock piles one-rock high.
 - Media luna: spreads and stores water.
- Southwest Montana Conifer Removal Project:
 - Conifer encroachment is a major threat to sage grouse because the conifers will take over the sagebrush habitat and change the landscape, eliminating sagebrush habitats and mesic areas that are vital to sage grouse survival and reproduction.
 - Private, State, BLM property – NRCS SGI funded.
 - Removed 810 acres of Phase I conifers.
 - More conifer removal projects coming up in the Big Hole – USFS Pintler Face project, MFWP, etc.
- Discussion:
 - *“You’re talking about spreading water – how is that different from irrigating?”*
 - *“It’s not really, it’s the same concept – we’re trying to spread the water and keep it in the soil.”*

- *“What’s the Certificate of Inclusion for the CCAA?”*
 - *“That’s basically your permit – once you enroll in the program, you get a COI.”*
- *“How do you prioritize areas on the landscape?”*
 - *“That’s why we’re doing the collaring project – we need to know where they’re going, what they need, when they need it, etc. Once we know that, we’ll be able to prioritize habitats and threats. In the next few years, we’ll learn a lot more about what’s going on.”*
- *“We went on a tour yesterday at Erik Kalsta’s place, and he has set up windrows perpendicular to the stream that have created a lot of green habitat.”*
- *“Last month, Patrick Donnelly with Intermountain West Joint Venture showed us the Sage Grouse Initiative’s interactive map. What did you think of it – will that help create priorities?”*
 - *“Yes, I think it will. The map shows green areas in the long-term. They take an area and look at, over the last 30 years, what are the areas that are always green – those will be the most productive areas. The areas that stay green most years may be able to be tweaked to be green more often. The brown areas that are consistently brown may not be worth working on. This allows us to know where our mesic areas are and to prioritize which areas need the most work and will give us the most bang for our buck.”*
- *“When will the sage grouse CCAA come out?”*
 - *“Likely around the beginning of the year (2018).”*
 - *“Will some of the goals align with the goals of the grayling CCAA program?”*
 - *“Yes, many of them will, especially those related to grazing.”*
- *“What are the main predators that kill sage grouse, besides man?”*
 - *“Nest predation by crows and ravens, coyotes and skunks, and avian predators. Mortality from hunting is lower than you would expect and has not been found to be a major driver of population trends. Mortality from predatory birds is higher than that of hunting, based on studies of marked sage grouse.”*
- *“How can BHWC help support sage grouse efforts?”*
 - *“Sign up for sage grouse CCAA when it comes out, help secure funding for collars, help with lek counts and collaring, provide educational outreach at watershed committee meetings. Also fence marking (volunteer days).”*
 - *Contact Vanna or Jim to sign up for volunteer opportunities.*
 - *Vanna Boccadori: or vboccadori@mt.gov or 406-494-2082*
 - *Jim Magee: james_magee@fws.gov or 406-683-3893*

Upcoming Meetings

- October 18, 2017, 7pm @ the Divide Grange. BHWC Monthly Meeting. Topic: Mount Haggin Restoration
- November 15, 2017, 6pm @ The Divide Grange. BHWC Monthly Meeting. Topic: Big Hole River Channel Migration Zone Maps. **Note the time change from 7pm to 6pm due to daylight savings time.*

Adjourn