



Big Hole Watershed Committee

Monthly Meeting Minutes
 September 19, 2018 – 7:00pm
 Divide Grange – Divide, Montana

In Attendance

Tana Nulph, BHWC; Pedro Marques, BHWC; Randy Smith, BHWC/Rancher; Peter Frick, BHWC/Rancher; Cindy Ashcraft, BHWC/Rancher; Dave Ashcraft, Rancher; Breele Skaggs, Montana Conservation Corps; Kenshin Okubu, Montana Conservation Corps; Bonite Pernot, Montana Conservation Corps; Augustus D.S. Buckman, Montana Conservation Corps; Eric Thorson, BHWC/Sunrise Fly Shop; Scott Reynolds; Corey Meier, BLM; Chris Edgington, USFS; Zach Owen, Beaverhead Watershed Committee; Ander Ailler, Montana Conservation Corps; Jeff Copeland, Watershed Consulting; Jim Wierzba; Jane Wierzba; Graham Neale, Montana Sage Grouse Habitat Conservation Program; Jim Hagenbarth, BHWC/Rancher; Kristin Manas; Alan Manas; Tom Bowler; Betty Bowler; JM Peck, Rancher; Jim Magee, USFWS; Jim Boyd, USFWS; Kyle Tackett, NRCS; Brian Ohs, Montana Trout Unlimited; Matt Barnes, Morrison-Maierle, Inc.; Jim Dennehy, Butte-Silver Bow Water Utility; Jarrett Payne, FWP/MSU; Jacqueline Knutson, FWP; Steve Shezman; Bill Stock; Ben Laporte, BHWC; Mark Kambich, BHWC/Rancher; Steve Luebeck, BHWC/Sportsman; Roy Morris, and BHWC/GGTU.

Introductions *Attendees introduced themselves.*

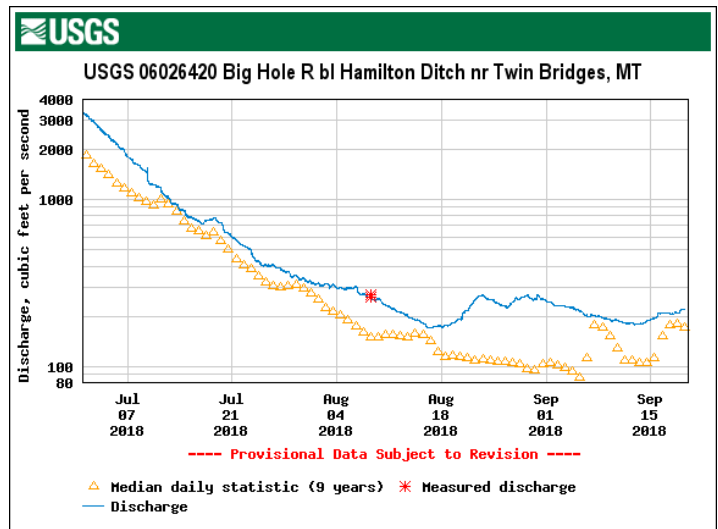
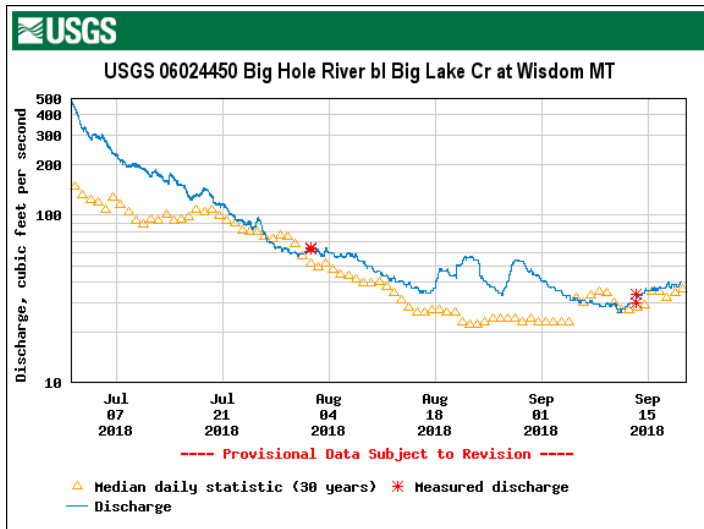
Meeting Minutes *June 2018 meeting minutes were reviewed, no additions or corrections.*

Reports

Streamflow/Snowpack Report – Jacqueline Knutson, Montana Fish, Wildlife and Parks

- *Streamflows:* There are 42 days left for flow-based restrictions in the DMP but who’s counting? (Hint: it’s me...I’m counting.) Streamflows remained near or above average in both the upper and lower basins this summer aided by a great start from above average snowpack. Lack of precipitation was our nemesis this year and we went 52 days without measureable precipitation in some places between June and September. We were fortunate to have great temperatures, especially cool at night, which succeeded in keeping Hoot Owl restrictions at bay. We dropped below CCAA flow targets in the upper basin in mid-July and I began working with landowners on July 18 to implement flow plans which have aided in keeping the river unrestricted thus far. As of this morning we are above conservation targets at all CCAA and DMP gages!

06023500	Big Hole River near Jackson MT	09/19 10:15 MDT	0.97	18.0	15.0	--
06023800	Big Hole River ab Spring Creek nr Jackson MT	09/19 10:00 MDT	1.42	21.5	22.0	--
06024020	Big Hole River at Miner Creek nr Jackson MT	09/19 10:15 MDT	0.87	50.5	54.0	--
06024450	Big Hole River bl Big Lake Cr at Wisdom MT	09/19 10:45 MDT	1.91	40.8	36.0	9.0
06024540	Big Hole River bl Mudd Cr nr Wisdom MT	09/19 10:30 MDT	2.57	101	131	8.5
06024580	Big Hole River near Wise River MT	09/19 10:30 MDT	2.53	183	217	8.6
06025250	Big Hole River at Maiden Rock nr Divide MT	09/19 10:45 MDT	2.91	331	315	11.0
06025500	Big Hole River near Melrose MT	09/19 10:15 MDT	1.50	364	300	10.6
06026210	Big Hole River near Glen MT	09/19 10:30 MDT	2.40	390	309	11.8
06026420	Big Hole R bl Hamilton Ditch nr Twin Bridges, MT	09/19 10:30 MDT	0.96	219	172	12.5



- **Precipitation:** July and early August were extremely dry this year. We didn't see measureable precipitation until the week of August 20. July was well below normal and once the snowpack was gone flows rapidly dropped with no input from precipitation.
- **Temperatures:** Temperatures through the summer remained near average to slightly below average. Daily high temperatures in the Big Hole Valley were about 2 degrees above average and daily low temperatures were about 2 degrees below average.
- **Forecast:** We are still in ENSO-neutral conditions but the likelihood that El Nino is on its way are increasing through the fall and are up to 70% for this winter. While we are still under an El Nino watch it is increasingly likely that El Nino will be here by December. El Nino winters typically bring milder and drier winters to Montana so this is something to keep in mind as we watch our snowpack (hopefully) build and prepare for next year.
- The outlook through November currently favors average precipitation and above average temperatures.

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

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

Wildlife Report – Tana Nulph, Conservation Programs Coordinator

- **Carcass Management:** 44 carcasses removed from 8 ranches in the spring. Site is currently winterized.
- **Range Rider:** Our range rider helped identify 2 possible wolf kills this year; one was confirmed for reimbursement, but the other was scavenged by a bear before Wildlife Services could investigate despite Chet's best effort to cover and preserve the carcass. We recently purchased 6 new game cameras and mounting systems for the Range Rider program and look forward to seeing the new and improved photos they will provide. Chet has done a stellar job this year riding the range, identifying sick & injured animals, finding carcasses for investigation, and working with reporters. There was an article published this summer about our Range Rider program by the Montana Standard; it is available here: https://mtstandard.com/news/local/big-hole-range-rider-tracks-wolves-toward-middle-ground/article_Off4ac6d-5311-5e8c-8ad5-f151fd17fd4c.html.
- **Landowner-led Conflict Reduction:** Still working on conflict reduction coordination & planning with various other groups throughout the region.
- **Sage Grouse:** BHC participating in sage grouse and sagebrush conservation efforts along with several partners.
- **Grizzly bears:** Will be hosting a Bear Safety Awareness training prior to the October meeting at 5 pm at the Divide Grange.

Restoration Report

- Working on Mount Haggin with new Restoration Specialist, Ben Laporte. MCC crews are helping out. Please get out there and see the work we've been doing and ask Pedro any questions you may have. There is also a handout attached with more details.
- On September 12th Tana and Pedro took a group of students from the University of Montana Western on a tour of our restoration projects on Mount Haggin.

New Business

- **Arctic grayling update – Jim Boyd, United States Fish and Wildlife Service**
 - Background:
 - 2014: Status review for Arctic grayling
 - Found that Arctic grayling did not warrant ESA protection
 - Litigated in District Court (Judge Haddon) – won in District Court in Helena
 - Appealed in the 9th Circuit Court out of Seattle
 - Judges remanded decision back to District Court in Helena/USFWS.
 - Determined that the decision was “Arbitrary and Capricious”. There will potentially be another full status review completed on Arctic grayling OR the USFWS will respond to the 4 points brought up in the remanded decision (decision attached). The USFWS deals with a lot of litigation and they're well versed in it – they see this as just another blip in the road. “The things that are going on in the Big Hole area – especially the CCAA area from Dickie Bridge up – were a huge part in the grayling recovery and the 2014 decision that they did not warrant listing. I don't want anyone to be discouraged or think any of that was for naught, because that is not the case. For anyone enrolled in the CCAA, this doesn't change their Site Specific Plans or anything else. We're going to plow forward and go from there.” – Jim Boyd
 - Discussion:
 - *Aren't grayling pretty easy to count?*
 - *They're not that easy to count actually.*
 - *What were the 4 points?*
 - *The first one was that the judges didn't like the way we talk about low flows and water temperature in the Big Hole. We presented water temperature data from before the CCAA was going to now, and our argument was that we still have water temps over 70 degrees in the mainstem Big Hole. That probably happened historically, and that's ok, but at those temperatures, grayling get stressed. But we have added fish ladder and helped grayling access cold water refugia in tributaries. The judges say, there are still tributaries reaching 70 degrees, and that's true, but that's at the mouth of the tributaries where the gages are. If you go up just a little bit, those tributaries are cooler, closer to 60 degrees. So we need to emphasize that point to the judges.*
 - *The 2nd point is that we talked about the Ruby River grayling population. It was decided that we needed 10 years of monitoring to assess how recovery was happening in that system. But we've since developed genetic testing and decided that we don't need 10 years to show that grayling are recovering. So we'll need to explain that better.*
 - *We had a couple different studies looking at how grayling were doing in the Big Hole. We had one study showing the decline over time in grayling populations with one data set showing populations from 1980s on. We also have a data set showing how grayling are recovering on a year-to-year basis. The judges didn't understand why we were using 2 data sets and how they relate to each other. It's our job to explain this to judges who are not biologists and have limited knowledge about Arctic grayling.*
 - *The 4th point was regarding climate change. We can expect to see lower flows and higher water temperature due to changing climate. We talked about that, but we didn't talk about synergistic changes in water temperatures due to*

conservation projects, like providing bank shading by planting willows. Although climate is increasing, these projects are making great strides in reducing water temperatures and that is going to outweigh the increasing temperatures due to climate change. We will make sure to show these trends and display the great data that we have on Arctic grayling.

- *Was the decision unanimous?*
 - *I don't know that for sure.*
- *Do you consider the Mount Haggin WMA – which is part of the grayling habitat I believe – and all of the upstream restoration projects going on? Haggin has quality refugia for grayling, and that may help the case. We will have 40 more miles of headwater tributaries, and all of this work is being done to support native fish restoration. It might be worth mentioning to the judges.*
 - *Yes, those projects were in an early design phase in 2014 and that information wasn't available, but we will certainly consider it in our new review/response.*
- *Does FWP have an Arctic grayling biologist in the Upper Big Hole?*
 - *Yes, they recently hired Jarrett Payne (who is here tonight) as a fish biologist specializing in grayling in the Upper Big Hole.*

Meeting Topic: Big Hole Sage Grouse Update

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.

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

- Started the Sage Grouse Working Group with BHWC in 2015.
- Participants include:
 - Jim Hagenbarth, BHWC
 - Dean Peterson, BHWC
 - Vanna Boccadori (FWP)
 - Tim Egan (DNRC)
 - Jim Berkey (TNC)
 - Jenna Roose (USFS)
 - Kelly Bockting (BLM)
 - Kyle Tackett (NRCS)
 - Tana Nulph (BHWC)
 - Jim Magee (USFWS)
 - Rollie Miller (Vigilante Coop)
 - Adam Braddock (USFWS)
- Mission is to have proactive collaborative approach to sage grouse conservation in a sustainable working landscape.
- Status:
 - 2010: Warranted but Precluded
 - 2015: The 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 recognized an unprecedented conservation partnership that has reduced threats.
 - Threats still exist.
 - Conservation must continue.
 - 2020: USFWS status review to evaluate the sage grouse conservation.
- Sage Step Conservation: Recognizing the need to conserve the habitat and the species will follow.

- Public lands:
 - BLM/USFS plans – amended 98 land use plans
 - State plans: Most states. Montana MSGOT
- Private Lands:
 - NRCS Sage Grouse Initiative (SGI)
 - USFWS: CCAAs and Partners for Fish and Wildlife
 - NGOs: TNC, Pheasants are Forever, Mule Deer Foundation, etc.
- Science:
 - SGI Science Team
 - Intermountain West Joint Venture
 - Western Association of Fish and Wildlife Agencies
 - Agencies
 - National Fish and Wildlife Refuges
 - Universities
- In Montana, 2/3 of sage grouse are on private lands. In most states, they're mostly on Federal (BLM) land. Similar to grayling, if we don't engage private landowners, we're really going to be limited in terms of sage grouse conservation.
 - 67% Montana Sage Grouse Habitat on Private Lands
 - Core: >75% of Breeding Birds
- SW Montana Lek Data:
 - 21 leks
 - 476 males
 - 13% decline from 2017
- Big Hole 2018 Lek Counts:
 - 10 Big Hole leks
 - Monitored 6 leks in 2018
 - Counts lower than last year, possibly because of heavy snowfall. Couldn't get to many leks until late spring and by then, biologists were busy doing sage grouse captures.
- Big Hole Sage Grouse Ecology Project:
 - Objectives:
 - Define SG seasonal habitat use in the upper Big Hole Valley
 - Determine movement patterns of the upper Big Hole sage grouse population
 - Identify migration corridors between the upper Big Hole and the surrounding area, (SW MT, ID)
 - Investigate genetic connectivity of Big Hole SG with sage grouse populations in SW MT and ID by identifying migration during the breeding season and through DNA analysis.
 - Determine importance of Big Hole satellite populations to greater whole, including leks on BLM property in Idaho. BLM has been very supportive of this study.
 - Product: Conservation plan with threat assessment and conservation alternatives
 - Timeline: 2018-2021
 - GPS Satellite Telemetry: 22 Grams, Solar charged, 3-year battery
 - Goal: 30 hens
 - Track year-round
 - Lekking, nesting early brood rearing: 5 locations every 2 days
 - Late brood rearing, winter: 5 locations every 5 days
 - Characterize seasonal habitat and movements
 - Funding:
 - BLM: \$140k
 - USFS: \$13k + in kind labor + lodging
 - USFWS: \$10k + in-kind
 - TNC: \$8k
 - FWP: In-kind
 - Total: \$171k
 - Budget: \$210k

- 2018 Results:
 - Captured 15 hens from April 17-29, 2018 (peak lekking season)
- Habitat Assessment Framework Surveys (HAF):
 - USFS Botany Crew
 - Characterize cover, understory, species diversity, abundance, etc.
- 2019 Plans:
 - April sage grouse captures: 30 total GPS units
 - Expand to Palisade and Spencer leks
 - Deploy cameras on some nests
 - Complete HAF surveys on nesting habitat
 - Lek counts
 - Big Hole CCAA site plan (fence modification, grazing plan, mesic restoration, conifer removal)
- Discussion:
 - *Did any of the radio collared birds leave the valley?*
 - *No we didn't have any of them leave.*
 - *Were there any fatalities?*
 - *Yeah, we lost 4 birds to fatalities. One is still out there but it's location is not changing, so we'll have to look at that.*
 - *Also doing habitat surveys.*
 - *Are you assessing habitat after they leave the nest?*
 - *We're looking on the estimated hatching date.*
 - *What kind of fence modification is it (in the CCAA site plans)?*
 - *If the fences are too close to leks, they can be a collision hazard. So we're either moving or marking those fences.*
 - *So you don't find it concerning that there were low lek counts in 2 consecutive years?*
 - *No, knowing their movement patterns and life history, we don't see the low counts as concerning. We also don't have a long data history on many of these leks.*
- SW Montana Sagebrush Partnership:
 - Mission: Conservation of sage steppe ecosystems in working landscape in SW Montana.
 - TNC, NRCS, BLM, USFWS, IWJV, Private landowners, DNRC, FWP, USFS, SW Montana Watershed Groups
 - Conservation Coordination
 - Mesic Restoration
 - Conifer removal
 - Fence modification
 - Education & outreach
 - Discussion:
 - *Is there still a state coordinator for the sage grouse program?*
 - *Yes, there is still a state program and it is very active in working with the stewardship fund and providing grants for habitat conservation and preservation. There is a second round of grant funding available soon and it will focus more on reclamation and restoration of sage grouse habitat. For more information, visit <http://sagegrouse.mt.gov>. – Graham Neale*
 - *Are you working in general habitat?*
 - *Yes, we focus on core and general habitat throughout the state, and the Big Hole is certainly a part of that.*
 - *Have you done any studies on the major predators of sage grouse?*
 - *Yeah we think maybe coyotes, fox, and birds of prey – but there hasn't been a lot of studies done on this yet.*
 - *There is a study being done in Southern Idaho assessing the effects of creating fuel breaks using fire and herbicides to preserve sagebrush habitat. Prescribed fire removes*

sagebrush, which will come back in about 18 years. Early sprouters come back sooner. This helps remove huge fuel loads that are present in some areas. Once that is done, work will be done to conserve sagebrush habitat – major fires scorch seedbanks and can destroy sagebrush habitat, but prescribed fires are actually beneficial to the landscape.

- How many nests did you find this year?
 - We found about 12 nests. 2 birds nested twice.
 - And how far were the birds you captured from the leks?
 - About 3 miles.
 - Do you think that is due to the topography in the Big Hole?
 - Yes, they are somewhat restricted to valleys, so they don't have a huge area in which to move around.
- What is the potential for using fire for sagebrush conservation?
 - That is a great question and that's something we're all trying to figure out. I'm probably not the best person to talk about that.
- The birds that re-nested – do you know why they did that?
 - We're not sure, we need to get some more expertise on that.
- Contact Vanna or Jim with additional questions RE: sage grouse or to sign up for volunteer opportunities helping count & capture sage grouse in the late spring:
 - Vanna Boccadori: or vboccadori@mt.gov or 406-494-2082
 - Jim Magee: james_magee@fws.gov or 406-683-3893

Upcoming Meetings

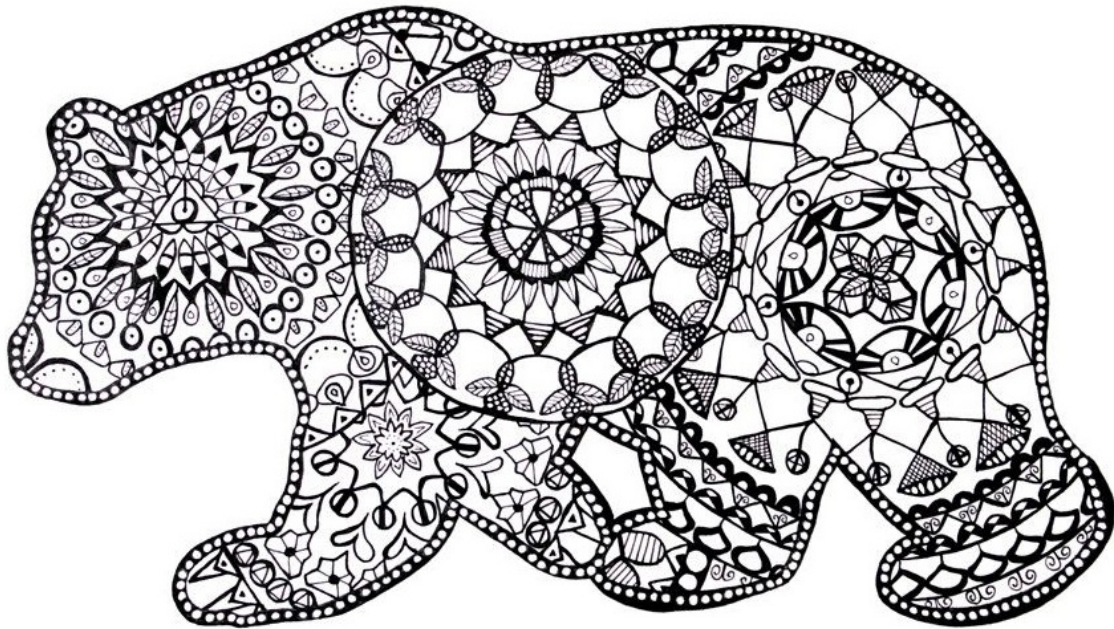
- October 17, 2018, 5pm @ the Divide Grange. *Bear Safety Awareness Training.*
- October 17, 2018, 7pm @ the Divide Grange. BHWC Monthly Meeting. *Topic: Forestry in the Big Hole Watershed.*
- November 14, 2017, 6pm @ the Divide Grange. BHWC Monthly Meeting. *Topic: BHWC Restoration Projects Update.*
 - Note the time change from 7pm to 6pm due to daylight savings time AND the November meeting has been rescheduled from November 21st to November 14th so as not to conflict with Thanksgiving.

Adjourn

Bear Aware Event

Wed. Oct. 17th

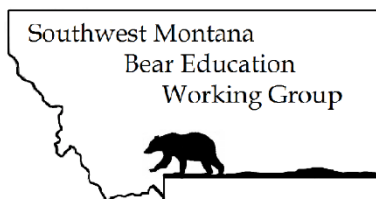
5-7PM at the Divide Grange



**Learn how to react during different encounter scenarios!
Practice with inert bear spray and a charging bear decoy!**

Get a chance to win free bear spray!

Free bear-resistant garbage cans for Big Hole residents!



BIG HOLE
WATERSHED COMMITTEE
Conservation Through Consensus.

Big Hole Watershed Committee

Restoration Programs Status Report: 9/19/2018
Contract/Grant value under BHWC management: \$1.2 million

Current Projects	Location	Owner	Secured Funds	Pending Grants	Design and Permitting	Construction
1. Lower French Creek	Mt. Haggin WMA	FWP	DEQ-319	MFWP-Future Fisheries; TNC	Fall 2018/Winter 2019	Fall 2019
	Re-construct 1800' of channel away from eroding terrace. <u>Monitoring:</u> 1 stream gauge installed 4/2018. Groundwater wells to be installed Fall 2018.					
2. Oregon Creek	Mt. Haggin WMA	FWP	Wildlife Conservation Society	DEQ 319	Fall 2018/Winter 2019	Fall 2019
	Placer mitigation- construct step-pool wetland complex along 1200' of channel. <u>Monitoring:</u> 2 stream gauges installed 4/2018.					
3. Anaconda Smelter Superfund	Mt. Haggin WMA	FWP	NRDP		Winter 2019	Ongoing through 2019
	Fall 2018- Creating large check structures and sediment basins in upper Joyner Gulch. Dozer pits on steep slopes. MCC fertilizing and seeding 60 acres of bare uplands. <u>Monitoring:</u> 1 stream gauge installed California Creek 4/2018. Aerial survey (topo and infrared) flown summer/fall 2018					
4. E.Fk.Divide Cr.	Highland mountains	USFS	Wildlife Conservation Society		Fall 2018/Winter 2019	Spring 2019
	Plug-up failed beaver dams and measure water storage gains <u>Monitoring:</u> 3 stream gauges installed 4/2018 + 2 piezometer curtains installed					
5. E.Fk.Divide Cr.	Highland mountains	Morris Ranch	Soil and Water Conservation District (Ranching for Rivers); Montana Watershed Coordination Council (DEQ 319)		Fall 2018/Winter 2019	Spring 2019
	Beaver mimicry structures in 3 locations on ranch; riparian fencing on lower pasture. <u>Monitoring:</u> 3 stream gauges installed 4/2018					
6. Incentive Program	Lower Big Hole River	Numerous	DNRC		Completed	October/November 2018
	3 streambank stabilization projects using root wads, willow trenches and fascines, bank re-grading. <u>Monitoring:</u> Estimates of sediment reduction from bank stabilization					
7. Fleecer 10-year Weed Plan	Mt. Haggin WMA	FWP	FWP		Ongoing through 2019	
	Mapping weeds on Fleecer and developing 10-year weed management plan. Sub-contracts: Jeff Copeland					