



Big Hole Watershed Committee
Monthly Meeting Minutes
November 18, 2009 ~ 6:00 pm
Divide Grange Hall

In Attendance:

Andrew Hanson, outfitter; Art Christenson, BCD; Carl Malesich, Conservation District; Cindy Ashcraft, rancher/outfitter; Darren Olsen, USFS; Emma MacKenzie, BHWC; Erik Kalsta, rancher; Garth Haugland, Beaverhead Country Commissioner; Jami Murdock, rancher; Jeanne Caddy, BHWWC; Jim Hagenbarth, rancher; Jim Olsen, FWP; Kevin Brown, BHWC; Kyle Tackett, NRCS; Marty Hovan, BSB Water; Mike Bias, BHRF; Noorjahan Parwana, BHWC; Peter Frick, Green Bridges; Peter Kamperschroer, rancher; Phil Ralston, rancher; Randy Smith, Chair, rancher; Scott Reynolds, GGTU; Shane Vatland, MSU-Bozeman; Steve Luebeck; sportsman; Steve Parker, BHRF.

Introductions/Review of Minutes

Introductions were made and the October minutes were reviewed and approved with no changes.

Precipitation and Stream Flow Report

Neither Dave Amman nor Mike Roberts were available for this meeting. The information for the November and December reports are appended to the minutes.

Evaluating The Availability And Use Of Cold-Water Thermal Refugia For Arctic Grayling And Nonnative Salmonids In The Upper Big Hole River Watershed

Shane Vatland, PhD Student at MSU, USGS, Montana Cooperative Fishery Research Unit, presented a PowerPoint about his research that has been partially funded by BHWC. The presentation is available as a pdf file. Please contact Emma (info@bhwc.org) if you would like a copy.

Shane discussed his dissertation project which focuses on refugia in the Big Hole. He emphasized that while there is a great deal of raw data, it is too soon to draw definite conclusions. He also stressed that native fish loss is a problem despite ongoing research and growing understanding of the problem. Some of the preliminary conclusions are:

1. a key to the health of the fisheries is movement within and between refugia;
2. most stress is experienced by the grayling in summer—especially during low flows and high temperatures; and
3. adult grayling are more sensitive to warmer temperatures

Shane also demonstrated some of the equipment that he uses in his research. Discussion after the presentation included:

- **Tags:** he is able to tell the difference between live and dead fish when the equipment monitors the tags, but he is finding that fish are shedding a lot of tags. The tags will broadcast indefinitely as they are not dependent on batteries. The worst retention rate is female brook trout (losing up to 50%), the grayling shed very few tags. Each

tag has its own unique number so when equipment tracks the tag he can tell exactly which fish (species, age, etc) is passing by.

- Coldwater refugia: used by all salmonids, not just the grayling.
- Harm to fish: Although there is stress to fish from handling, there is not a significant effect on the population (one study has found a 0% mortality rate from tagging).
- How many tags: (details are available on the presentation pdf)
 - 2007: 933 tags on 8 separate species (brook trout=371; grayling=28)
 - 2008: 1313 tags on 8 separate species (brook trout=704; grayling=53)
- Although the table is not representative of population, it is indicative of the very small number of grayling.

Committee reports

- Weed Working Group

Jeanne Caddy reported on the most recent meeting held on November 16th. The weed contractors for the river gave their final reports—finding significantly fewer noxious weeds in places that have been monitored over the years but more in the canyon areas. Leafy spurge was particularly dense on both banks of the lowest stretch of the river from Pennington Bridge to the confluence. The group is looking at incorporating a more integrated management system such as sheep grazing and bio-control.

Economic stimulus funds and BLM challenge grant funds will cover the cost of weed management for the 2010 season from Jerry Creek to the confluence. Jeanne has applied for a Montana Noxious Weed Trust Fund Grant to cover the cost of weed management from the Mudd Creek Bridge to Jerry Creek Bridge with focus on Oxeye-Daisy. Jeanne plans to establish an Oxeye-Daisy test site and will involve the Wise River School students.

Weed days have been set up in all communities for 2010 except Glen which will be scheduled later.

The next Weed meeting will be February 11, 2010. Keep an eye on the BHWC website or contact Jeanne at jcaddy@bhwc.org or (406) 267-3354 for the time and location.

- Wildlife Working Group

Jim Hagenbarth reported that the next meeting may be in December. The date and location of the next meeting will be posted on the website and sent to the Wildlife Working Group members. Right now the wolves are raising hell and the hunters are raising hell. Jim expects to have stimulating meetings about the wolf. If you would like to be on the list for upcoming meetings, email Emma.

- Director's Report

Kevin Brown gave a brief update on current projects: The Big Hole ditch gateway will be started shortly and the Kalsta project is moving ahead. The deadline for bid proposals is November 27. The bids will be reviewed and a contractor selected in December. The work will begin asap, as long as permitting goes through. The project should be completed in the Spring of 2010.

Kevin reported that the membership drive is going slower than he had hoped. Memberships in the amount of \$5,400 and donations of \$1,900 have been received as of the meeting. He anticipates that the number and amount received will increase by the end of the year.

Kevin also read a statement from Doug Peterson, USFWS, on the status of the Fluvial Arctic grayling litigation. That statement, along with other information, is available on the BHWC website at: http://www.bhwc.org/bhwc_information.html. If you would like a copy of the statement mailed to you, please contact Emma at 490-4364. Jim Hagenbarth discussed a legal memo he recently received regarding attorneys fees from environmental litigations. That memo is available from Emma or Jim.

New Business

- Jim Hagenbarth gave an update on the Big Hole Dam regarding the DNRC regulation on water rights scrutiny if the Point of Diversion is moved more than one foot. Also discussed was the lack of objections filed to the 1901 Butte Silver Bow water rights.
- Noorjahan Parwana has applied for a 319 Grant for 2010 for \$100,000.
- Noorjahan has also applied for a Norcross Grant for \$5,000 to be applied to office equipment and computer software.

Determine Future Agendas

- December 16: The group decided to cancel the December meeting.
- January 20: Senator Tester's staff will present information and listen to comments on the Forest Jobs and Recreation Act.
- Kevin and Noorjahan are also researching other grants to fund BHWC projects.

Adjourn

The meeting adjourned at 9:00 pm.

November 2009 - Big Hole Snowpack Report

Mike Roberts, DNRC

General Comments:

The Big Hole is off to a good snowpack year with most SNOTEL sites reporting above average snowpack and precipitation. The higher elevation snowpack (>8000') is doing the best.

El Nino continues to strengthen which typically means a warmer, drier winter for this part of the country. That remains to be seen as we are still in a cool-phase PDO which may have an effect on winter temperatures.

Precipitation

Mountain precipitation = 139% of average (since October 1)

Temperature

In general November temperatures have been about average and October temperatures cooler than average .

Flows

All upper gages in Big Hole are seasonal and therefore shut down until next April. The Big Hole at Melrose is operating and showing average flows.

Snowpack

Basin snowpack is 141% of average.

Individual Sites:

<u>SNOTEL Site</u>	<u>Elevation</u>	<u>% Avg Snowpack*</u>
Barker Lakes	8250	256.0
Basin Creek	7180	181.0
Bloody Dick	7600	76.0
Calvert Creek	6430	100.0
Darkhorse Lake	8600	140.0
Moose Creek	6200	175.0
Mule Creek	8300	179.0
Saddle Mtn.	7940	85.0
BASIN AVERAGE		141.1

*NRCS SNOTEL data

BIG HOLE BASIN SNOWPACK UPDATE

December 11, 2009

At this early point in the winter, the snow pack for the Big Hole Basin is limping along at about 84 percent of normal. Although that is not too bad as an overall basin average, much of the upper basin is lagging behind. Saddle Mountain and Moose Creek are near the headwaters of the North Fork of the Big Hole River and are especially lacking snow pack right now. The following listing shows snow water equivalent at this time.

SWE in Percent of Normal

Barker Lakes	175
Basin Creek	114
Bloody Dick	50
Calvert Creek	36
Darkhorse Lake	88
Moose Creek	48
Mule Creek	98
Saddle Mtn.	53
BASIN AVERAGE	84

But there is a lot of winter ahead. Snow water accumulation typically peaks in late April.

The latest CPC forecast points to above-normal air temperatures through the winter and for below-normal precipitation for December and January, then equal chances of below normal, normal and above normal precipitation for the rest of winter.

At this early time, there are no NRCS flow volume forecasts yet available.