

Big Hole



Watershed Committee

Big Hole Watershed Committee Monthly Meeting Minutes - UNAPPROVED January 16, 2013 - 6 -8pm Divide Grange Hall

In Attendance

Jen (Titus) Downing, BHWC; Pete Kamperschroer, Rancher; Ray Weaver, Rancher; Jim Olsen, FWP; Mike Bias, BHRF; Steve Parker, BHRF; Dean Peterson, Rancher; Jim Hagenbarth, Rancher/Co-Chair; Jim Magee, USFWS; Peter Frick, Rancher; Floydena Garrison, Rancher; M. Bennet; Katy Harris, KXLF; Liz Jones, Rancher; Bill Garrison, Rancher; Tim Garrison, Rancher; Doug Finnicum, BSB Water; Scott Reynolds, George Grant Trout Unlimited; Harold Peterson, Rancher; John Mocko, Arcadis; Connie Cole, Arcadis; Mark Kambich, Rancher; Mike Roberts, DNRC; Rick Hartz, BVD County; Jim Carpita, Beaverhead County; Steve Hess, BSB; Jennifer Boyer, FutureWest;

Introduction

Attendees introduced themselves. November meetings will be available for next meeting.

Streamflow Report: *Mike Roberts, DNRC*

NRCS is using a new snowpack average period of record, now 1981 - 2010 replacing 1971-2000, which changes the average calculation slightly. In addition, the average used is based on median rather than mean. The median is more accurate, but makes comparisons to past years difficult. Current conditions are near average. The full report is provided at the end of these minutes.

Note: *Katy Harris, KXLF videoed the meeting and interviewed both Steve Osterberg and Jim Hagenbarth regarding the Highlands Gold Mine.*

Presentation: Highlands Gold Mine, by Steve Osterberg, Timberline Resources - PowerPoint

The Highlands Gold Mine is located in the Highlands 15 miles south of Butte, Montana. Timberline Resources was the project originator. Since 2009, the project has operated as a joint venture partner as Highland Mining Co, in 2007.

The area was mined historically, first in the 1860's with the building of Highland City and placer mining. In 1919, Highlands Consolidated was formed. The mining operations ended in 1942 with the onset of the war. Modern exploration began in the 1980's with efforts of several companies. Historic mining included underground mining through adits and shafts which are still evident on the site.

The current exploration has occurred from 2010-2011 underground. The mineral deposit occurs at the site because of the past existence of metal-bearing hot fluids, permeability below the surface that allows fluid transport, and host rock that promotes deposition. Faulting in the region is common, allowing water to move easily throughout the rock. Potential quality and grade is 170,000 to 200,000 ounce, which is a small scale operation. Work to this point has been exploratory only. The company plans to continue development and is in the permitting process. Development will occur underground.

Development is expected to mine 400 tons/day with .25-.36 ounces of gold/day. The underground development will need to be dewatered using pumps and the water treated, then discharged. After rock

is mined, waste rock will be mixed with lime and placed back into underground openings. Expected mine life is 4-5 years. Ore processing is planned to be offsite. There is potential for mining to continue more than 4-5 years if greater than expected yields occur. The mine footprint is planned for 20 acres and will be reclaimed after mining is complete. The current facility has two retention ponds, a waste rock pile, offices, and an infiltration field. Travel to the site will be on the Highland Road and will require road upgrades. A warehouse will be constructed and used as an ore transfer facility.

Water monitoring has occurred 2008-2012 at 16 sites. Water quality is very good and there have been very few exceedences. Most of the water meets drinking water standards. Materials of concern are aluminum, copper, iron, and lead.

The project is in the permitting process for development. Permits are required from DEQ, EPA, USFS and Conservation District. The permitting standard for water discharge is non-degradation, therefore water released after treatment must meet existing water quality. Since the existing water quality is very high, this is a very high standard. Water will be discharged into three streams (Basin Creek, Moose Creek and Fish Creek).

Upon closure, a hydraulic plug will be installed into the historic Highlands Adit, which currently allows groundwater to escape. It will take 7-8 years for groundwater to equalize. Because of the plug, the water level could raise 100 feet higher than current levels, which could possibly cause seeps to develop that have been dry since historic mining. This reclamation approach will be restored to pre-historic mining conditions.

Next steps:

- MPDES Permit draft is expected within a month or so and will have a 30 day public comment period
- HROP Permit draft complete December 7, 2012.
- Other permits will include stormwater permit, air quality permit, 310 permit for road culverts, EPA UIC Class 5 permit. No Army Corps of Engineer permit is required.
- Build ore transfer facility
- Upgrade road
- Build water treatment facility
- Install pumping wells
- Construct assay lab
- Conduct further exploration
- Hire staff and contractors - 65 expected.
- RFP is out for independent consultant to complete EIS.

Reports & New Business

Directors Report:

Financial: Annual Appeal was successful, bringing a 42% response rate and donations are still rolling in. Our financial picture is much more positive now than in months prior.

Projects: DEQ Wetlands Project is nearly complete with a final report expected by the end of January. The Middle/Watershed Restoration Plan will be completed spring 2013. The temperature/flow report is expected complete in two weeks. The Wise River Monitoring project data collection is complete with a report expected spring 2013. We will also host 1-2 newsletters and 1 watershed tour prior to June 2013. Land Use Planning Committee's Floodplain Map Adoption and Incentive program remain busy (update provided under Land Use Planning Committee). The Range Rider program received final approval and will start spring 2013. Next month we will conduct our Drought Management Plan review.

Steering Committee - Jim Hagenbarth: Jim reports that the Steering Committee concurs that our financial situation is improving and we will continue to remain on even keel with faith in Jen to continue to bring the BHWC back up.

Wildlife Committee - Dean Peterson: A Wildlife Committee meeting was held December 5, 2012 6-9pm at the Jackson School. Agenda included presentations by several Montana Fish, Wildlife and Parks Wildlife Biologists on Moose populations and Elk Brucellosis. See their minutes for more. Wildlife Conservation Society hosted a community exchange day January 11 in Wisdom to visit the livestock guard dogs. While the turnout was good, more producers would have been nice to see at both events. Wildlife Conservation Society is planning another community exchange day, potentially with the topic of carcass composting.

Weed Committee - Mark Kambich: The Montana Weed Control annual meeting is held this month. Cost-share checks will be paid this month. Hoping to increase cost-share participation next year. The first meeting for the weed committee in 2013 will be in Dillon in February. Ideas welcome.

Land Use Planning Committee - Jen Boyer: Floodplain Maps are in near final draft form. The state will seek adoption spring 2013, involving a public hearing process. Three public meetings are planned for March/April 2013 - Wisdom, Twin Bridges and Divide. The incentive program completed a report that will be available on the BHWC website soon. The report suggests that the incentive program would do well to seek a small number of anchor funding sources, such as Butte-Silver Bow Water & NRCS.

New Business

Jim Olsen/Mount Haggin: The upper drainages of Mount Haggin are suffering from sediment inputs as a result of smelter impacts on Mount Haggin. Jim is working on potential projects to remedy the site. The NRDP program has \$6.5 million allocated to repair smelter related damages, but the boundary is the continental divide, which this site is within 1 mile of. A second related project downstream on French Creek seeks to repair habitat impacted by historic placer mining. This area of French Creek was the first gold strike in the Big Hole.

Future Agendas

- February 20, 2013: Annual Business Meeting
- March 20, 2013: CCAA Program Update
- April 17, 2013: Floodplain Map Adoption Public Meeting (the group agreed this will replace the standard monthly meeting)

Adjourn: The meeting was adjourned at 8:00pm

General Comments:

We are approximately half way through Big Hole snow accumulation for the 2013 water year. Snow, precipitation, and temperatures have been near average. At one time, climatologists were predicting the development of an El Nino this winter but at this time all indications for that development are neutral.

The Natural Resources Conservation Service (NRCS), the information resource for precipitation, snowpack, and streamflow forecasting presented in these reports, has updated its 30-year period of record for comparison of climatic and hydrologic normals. The new period, 1981-2010 replaces the 1971-2000 period associated with basin snowpack and precipitation reporting to the Big Hole Watershed Committee prior to the 2013 water year. In addition, the NRCS now reports snowpack (snow water equivalent) averages based on the median (previous reports used the mean). Therefore, while 2013 snowpack percentages represent an accurate value based on the new base period and median, they are typically 10% higher than the pre-2013 data. For example, as of January 2015, the Big Hole Basin mountain precipitation and snowpack are 102% and 99% of average. Based on pre-2013 NRCS methods, those values would be 93% and 88% respectively.

The following NRCS data was compiled by Mike Roberts, DNRC.

<http://www.mt.nrcs.usda.gov/water.html>

BIG HOLE BASIN APPROXIMATE MOUNTAIN PRECIPITATION				
		15-Jan		
	elevation	current	normal	% avg
		inches	inches	
Barker Lakes	8250	9.2	8.8	115
Basin Creek	7180	3.1	5.2	85
Bloody Dick	7600			104
Calvert Creek	6430	8.1	6.4	96
Darkhorse Lake	8600	16.3	15.5	107
Moose Creek	6200	11.8	11.5	75
Mule Creek	8300	10.2	9.2	117
Saddle Mtn.	7940	11.9	12.9	92
TOTAL		70.6	69.5	
BASIN AVERAGE		102%		

BIG HOLE BASIN APPROXIMATE SNOW WATER EQUIVALENT

		15-Jan		
	elevation	current	normal	% avg
		inches	inches	
Barker Lakes	8250	7.7	6.7	115
Basin Creek	7180	3.4	4	85
Bloody Dick	7600	7	6.7	104
Calvert Creek	6430	4.6	4.8	96
Darkhorse Lake	8600	16.4	15.3	107
Moose Creek	6200	7.1	9.5	75
Mule Creek	8300	8.9	7.6	117
Saddle Mtn.	7940	12.2	13.2	92
TOTAL		67.3	67.8	
BASIN AVERAGE				99%