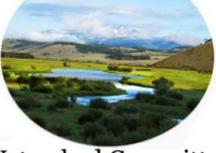


# Big Hole



Watershed Committee

## Big Hole Watershed Committee

Monthly Meeting Minutes  
September 18, 2013 - 7-9pm  
Divide Grange

### In Attendance

Jen Downing, BHWC; Jodi Kountz, Jefferson River Watershed Council Contractor; Gary Nelson, Jefferson River Watershed Council; Ron Spoon, Montana FWP; Phil Ralston, rancher; Bill Cain, resident; Doug Finnicum, BSB Water; Paul Siddoway, resident/State Water Plan Council Rep; Steve Armigen, BLM; Tom Welsch, Big Hole River Foundation; Jim Hagenbarth, rancher; Rick Hartz, Beaverhead County Planner; Ward Flora, resident; Garth Haugland, Beaverhead County Commissioner; Steve Luebeck, sportsman; Scott Reynolds, George Grant Trout Unlimited; Jeanne Caddy, resident

### Introduction & Snowpack Report

*Attendees introduced themselves.*

*Big Hole streamflow report provided by Mike Roberts, DNRC. – see attached.*

*Big Hole River Drought Management Plan Status – Jen Downing, BHWC – see attached.*

### Presentation: Jefferson River Watershed Council

*Part I: Gary Nelson, Jefferson River Watershed Council Chairman*

Gary has been chair of the council since 1999. He owns a ranch north of Silver Star. The Jefferson River has long suffered from extreme dewatering. In 1966 his father walked across the river near their ranch and didn't get wet. In 1988 the river dropped to 3 cfs – nearly dry. In 1994 flows dropped to 25 cfs at Parsons Bridge, 10 miles from Whitehall. It was at that point that the Montana Governor became involved. After a strong public outcry, the Lutenient Governor came to the Jefferson River to work with irrigators to keep the river from running dry. Irrigators agreed to work together to maintain river flows. The more formal idea for Drought Management came a few years later when Ron Spoon, Montana FWP and Dave Amman, DNRC brought flow triggers and targets for river flows and worked with irrigators that were willing to contribute. This was the start of the Jefferson River Watershed Council. The biggest concern is the river section near Twin Bridges where the Beaverhead and Big Hole River converge. The irrigators in this section work off a series of 4 canals shared by near 150-180 water users.

*Part II: Ron Spoon, Montana Fish, Wildlife and Parks Fish Biologist*

This August the Jefferson River Watershed Council reached out to upstream watershed groups and agency representatives because river flows had dropped to critical levels. Interests were invited to a meeting held in Whitehall. The flows at Twin Bridges had dropped to 190 cfs near August 9. In comparison, the 1988 low flow year had flows of 2.5 cfs in the lower Big Hole, 4.7 cfs below Waterloo Bridge, and 79 cfs at Twin Bridges (for reference, there are near 800 cfs allocated water rights). After the plea for help, Jefferson River flows more than doubled within a week.

The Jefferson River Drought Management Plan was modeled after the Big Hole River Drought Management Plan and started in 1999. The main target in the plan is to maintain a minimum of 50 cfs at Waterloo Bridge. The limiting factors for the fishery are flow depletion, juvenile fish production and survival due to lack of healthy tributaries, lack of public agency interest – overall, the main problem is a lack of water. Since 1999, 8 years have been drought years and those years are the most severe droughts on record and even more severe than the droughts of the 1930's. During a drought season the four main ditch flows are measured weekly. Ditch operators are more engaged when they know what their neighbors are doing or contributing. Smaller ditches

do not participate at this time (account for near 5 ditches, and near 50 cfs combined flow). Jefferson River is considered at low flow when below 400cfs. Ron proposes working with ranches to coordinate when waters are used, for example alternating when ranches turn water back onto fields in the fall or to turn on later in the season. Typically the Ruby reservoir helps alleviate low flow conditions, but this year needed repairs and problems prevented the reservoir from contributing needed flows.

Ron proposes seeking “Chronic Dewatering” status. This would force all irrigators to measure flows.

The Big Hole River gage near Hamilton Ranch placement makes the lower Big Hole look bad because flows are pulled above the gage, but re-enter the system below the gage as ditch flows re-enter on the Beaverhead.

Fish: Angling pressure follows drought patterns (more angling pressure in good water years). 2013 was a good year from 2 year old Brown Trout and may be due to good water years the two years prior.

### *Part III: Jodi Kountz, Jefferson River Watershed Council Drought Coordinator*

Thank you Jim Olsen, MFWP and Dave Ashcraft, rancher for attending the Jefferson River Drought Meeting in August.

Jodi began working with the council in 2007. Jodi is contracted to measure water, coordinate the Jefferson River Drought Plan, and calibrate gages. Jodi also contracts with the ditch companies for water rights. The Jefferson River Watershed Council director is Ted Dodge.

The Jefferson River Drought Management Plan key points are at Twin Bridges and Waterloo Bridge. There are 4 ditch companies that are the focus of the plan. Council is beginning to engage smaller ditch companies. There are 7 USGS gages on the river and 3 physical gages that serve the ditches (two ditches share one headgate). The plan is available on their website: [jeffersonriverwc.org](http://jeffersonriverwc.org). The goal is to maintain 50cfs at Parsons Bridge. When flows reach 280 cfs at Twin Bridges irrigators are notified of declining flows. When flows are below 280 cfs, irrigators attend weekly meetings and are asked for voluntary reductions. Ditches are measured by Jodi using staff gages. Ditch companies consent to reading and reporting results privately. The measurements are reported publically as a combined flow. This year the DMP was implemented beginning the first week of August.

Jefferson River has a “temporary preliminary decree” in adjudication – same as Big Hole River.

The council reached out to BHWC this year due to the significant drop in flows in the Big Hole that occurred August 9. Jodi forecasts flows for irrigators based on upstream flows, but this significant drop was not predicted and the council was interested to know how far it would drop and why. For example, a Jefferson River irrigator repaired a gravel diversion to divert flows when the river flows were low. However, the August 9 dropped occurred just as this project was finished and rendered the new diversion useless – a waste of time and money. The Beaverhead River called for water from the Ruby reservoir in August which helped to increase flows. Clark Canyon released more than 800 cfs through July.

### *Discussion:*

Add Jodi/Jefferson River Watershed Council to the Big Hole DMP Phone Tree and contact list.

1. Need to quantify the Big Hole River water that leaves the lower Big Hole to enter the Beaverhead and evades the Big Hole River Hamilton Ditch gage. – **This is a high priority.**
  - Perhaps groups (Big Hole/Beaverhead/Jefferson) and biologists (Olsen/Spoon) can work together to solve this. Are ditches in this area willing to measure?
  - We have considered these systems independent in drought management. Can the systems be combined for one uniform trigger?
  - Does the 8/9 drop in flows cause actually send its water to the Beaverhead?
  - Need to know more about this because Jefferson calculates flows and time lags in their river.
  - Could MBMG help with this?
2. Patterns of Water Use

- Jefferson River wants to understand irrigation practices of upstream rivers more to aid in flow predictions (patterns of water use).
  - The water use patterns may change with adjudication as water use gears towards older rights.
  - Water value and the cost to pump water are increasing and may change water use.
  - Most efficient to store water underground (groundwater). This does not help to meet instream flow targets, but may provide alternate benefit.
3. More Data
- Need more accurate and complete data for flows and groundwater levels across the area.
  - BLM supports gages in this area
  - Gage funding is always a problem. Can we fund gages regionally – work together on funding?
4. Chronic Dewatering Status
- Andy Brummond, Montana FWP (past DNRC) first brought up this idea when he came to a meeting with MFWP Murphy Water Rights. In Montana the Musselshel and one tributary of the Yellowstone have it. It is done through DNRC. The result is to have all irrigators' measure. May be done by petition by a local group. Resulted in great success in the Musselshel. DNRC is not interested in being a catalyst for this – must be a local effort. The Big Hole may have more points of diversion than the Jefferson (Jefferson River Council area has 10 points of diversion).
  - Could Jefferson fund 10 water measurements without having the chronic dewatering status? *Ans:* The new status would include the entire Jefferson, not just the council area.
  - What would be the consequence in adjudication?
5. Eurasian Milfoil
- What is status of movement upstream? *Ans:* Upper distribution is Jefferson Slough and has stayed there for 2 years. A project is in the works to repair the slough and remove milfoil that will take 5 years to complete over the 4 miles of slough.

## Reports

### *Directors Report, Jen Downing*

- Upcoming Dates:
  - October 5 – 11:* Transferability Workshop and Trainings in Salmon, ID. Still looking for BHWC representatives to go. Jim Magee and Jen will attend. Bill Cain will attend 2 days.
  - October 16:* BHWC Monthly Meeting, 7pm
  - October 29:* Interagency Meeting in Dillon USFS office
  - October 30:* Missouri Headwaters Partnership Meeting, 5:30pm
- Projects:
  - Middle-Lower Big Hole River Watershed Restoration Plan Complete
  - California Creek Proposal due October 4
  - French Creek continues
  - Montana DEQ 2011 contract nearly complete – finish Wise River report this month
  - Met with Salmon Valley Stewardship Gina Knudson to discuss partnerships and BHWC capacity.

### *Steering Committee - N/A*

### *Weed Committee – Jeanne Caddy*

- WWB 2014 grossed \$25,000. Huge success. Lots of new people involved in event. Thank you Steve Luebeck for a donated framed photo that auctioned for \$375. Number of attendees was down to near 300 (from 325 average).

### *Wildlife Committee – Jim Hagenbarth*

- Range Rider program ends this month
- Montana Livestock Loss Board received funding from USFWS – BHWC was a supporter
- Carcass removal program development continues

### *Land Use Planning Committee*

- Big Hole River Floodplain Map state adoption continues to move forward. Wisdom stands largely opposed to the maps, but the remainder of the watershed has shown support.

- The incentive program DNRC proposal is nearly complete, one of three Montana requests for support.
- A local resident brought the Ed Scott place (Wise River) to our attention noting that it appears new construction may be occurring on the Big Hole River.

## **New Business**

### *State Water Plan Advisory Council – Paul Siddoway, BHWC Representative*

First council meetings were September 5 and 6 and largely informational. The plan will be big picture and whole basin. The council will work for 1.5 years and make recommendations to the legislature for the state water plan. Issues at the forefront included, but not limited to:

- Balance agriculture with instream needs
- Water right transfers are greater than the volume of flow
- Adjudication
- Catch early season flow
- Storage
- Use or lose water rights
- Water right enforcement

There will be public meetings in October. Closest to Big Hole will be in Dillon. Important to have BHWC represented. Dates and locations TBA. Montana tourism was cited as a multi-billion dollar industry because of water value and this will be used to “speak” to legislature. BHWC was mentioned several times in meetings as being a pioneer in water management. Paul is grateful to be part of this process.

### *Adjudication Discussion*

- Public trust doctrine/downstream water rights – does it exist? Legislature is not funding DNRC for adjudication; therefore, water rights owners defend right in court.
- Would it be appropriate for BHWC to support adjudication? BHWC pushed for adjudication 5 years ago. The effort brought it to the “Temporary Decree” but still not finished. BHWC has been a past advocate of adjudication. Consider conversing with a water lawyer or lobbyist to understand other routes and the implications – there are 18 months to the next legislative session. Have we prioritized/listed water rights in the Big Hole? *Ans.:* No
- Send a clear message with Paul for council – Adjudication is a high priority for Big Hole to protect Big Hole water from downstream users.

### *Ed Scott Property*

Rick Hartz/ Beaverhead County will send notice to owners to identify plans and location. BHWC supports Beaverhead County investigation. It would be premature for BHWC to question at this point. Enforcement in the floodplain is county responsibility; however, BHWC should keep track of what is occurring in floodplains as it pertains to the producing the updated regulations.

## **Future Agendas**

- October 16
- November 20

## **Adjourn**

## Big Hole River Streamflow Outlook (Mike Roberts, Hydrologist, DNRC) September 17, 2013

(Data sources include NRCS, USGS, and DNRC)

Mainstem and tributary streamflows throughout the entire Big Hole watershed continue to exhibit low flow conditions in all five sections with 24-hour fishing closures in-place for DMP Sections I and above (mouth of North Fork to headwaters) and DMP Section V (Notchbottom FAS to mouth).

While air temperatures were still slightly above average in the past month, above-average precipitation and shorter days have improved streamflows and temperatures considerably since the mid-August report.

### Flows (9/17/13, 1000 hrs)

Most of the real-time streamflow gages are at the 35th to 40th percentile level (below average) which is about a 10 to 15% improvement over last month.

Percentile Flows for Three LONGTERM Gages in Big Hole:

(06025500) Big Hole nr Melrose (89 yrs) – 40th %ile flows

(06024540) Big Hole nr Mudd Cr (15 yrs) – 60%ile flows

(06024450) Big Hole nr Wisdom (25 yrs) – 35%ile flows

Station		Median	Flow (cfs)	Stage (ft)	T (C)
<a href="#">06023500</a>	Big Hole River near Jackson MT	14.0	15	1.03	-- 09/17 10:15 MDT
<a href="#">06023800</a>	Big Hole River ab Spring Creek nr Jackson MT	20.0	26	2.24	-- 09/17 10:00 MDT
<a href="#">06024020</a>	Big Hole River at Miner Creek nr Jackson MT	53.0	42	0.91	-- 09/17 10:15 MDT
<a href="#">06024450</a>	Big Hole River bl Big Lake Cr at Wisdom MT	30.0	23	2.09	10.7 09/17 09:45 MDT
<a href="#">06024540</a>	Big Hole River bl Mudd Cr nr Wisdom MT	98.0	107	2.60	-- 09/17 10:30 MDT
<a href="#">06024580</a>	Big Hole River near Wise River MT	193	178	2.48	-- 09/17 09:30 MDT
<a href="#">06025250</a>	Big Hole River at Maiden Rock nr Divide MT	305	257	2.67	-- 09/17 09:45 MDT
<a href="#">06025500</a>	Big Hole River near Melrose MT	299	251	1.23	13.0 09/17 10:15 MDT
<a href="#">06026210</a>	Big Hole River near Glen MT	284	277	2.20	-- 09/17 10:30 MDT
<a href="#">06026420</a>	Big Hole R bl Hamilton Ditch nr Twin Bridges, MT	154	83	0.84	14.6 09/17 09:30 MDT

### **Instream Flow Mitigation (Upper River)**

In the upper two Sections of the river, CCAA water conservation measures have been intermittently in place as river flows have fluctuated above and below action levels in most reaches. Plan implementation and landowner voluntary support has resulted in 265 cfs (documented thus far for Segments I and II combined) of streamflow contributions this season. Twelve ranches have actively participated in water conservation.

# Big Hole



Watershed Committee

## BIG HOLE WATERSHED COMMITTEE

### BIG HOLE RIVER DROUGHT MANAGEMENT PLAN - VERSION 2013

#### QUICK REFERENCE

SECTION	FLOW TRIGGERS	TEMPERATURE TRIGGERS
I: Headwaters to North Fork Big Hole River confluence <i>Today = 27 cfs</i>  <i>Reopen = &gt; 40 cfs for 7 days</i>	160 cfs - May 1 to June 30 target for Arctic grayling spawning. 60 cfs - Prepare for Conservation 40 cfs - Conservation <u>20 cfs - MFWP River Closure</u> <a href="#">Measured at USGS Wisdom Gage (06024450)</a>	<b>Step 1:</b> <b>MFWP Hoot-Owl Fishing Restrictions:</b> Hoot-owl fishing restriction will be in place when daily maximum water temperature reaches or exceeds 73° F (23° C) for at least some period of time during three consecutive days. Hoot-owl fishing closure prohibits fishing between the hours of 2:00 p.m. and 12:00 a.m. (Midnight). They will remain in place until September 15 or until re-opening criteria are met.  <b>Step 2:</b> <b>MFWP River Closure Due to High Temperatures:</b> River closure based on water temperature may be implemented if hoot-owl restrictions are inadequate to protect the fishery (e.g., prolonged period where water temperatures exceed 73° F and forecasts are not favorable for cooler temperature, thermal stress in fish observed by biologist, etc.). Closure will remain in place until September 15 or until re-opening criteria are met.  Sections temperature measured at: I: <a href="#">USGS Wisdom Gage (06024450)</a> II: MFWP Dickie Bridge Thermograph III: <a href="#">USGS Melrose Gage (06025500)</a> IV: MFWP Notch Bottom Thermograph  <a href="#">MFWP Statewide River Restrictions and Closures</a>  <a href="#">USGS Montana Real-Time Gages</a>
II: North Fork of Big Hole River confluence to Dickie Bridge <i>Today = 120 cfs</i> <i>Hoot owl lifted 9/15/13</i>	350 cfs - May 1 to June 30 target for Arctic grayling spawning. 100 cfs - Prepare for Conservation 80 cfs - Conservation 60 cfs - MFWP River Closure <a href="#">Measured at USGS Mudd Creek Gage (06024540)</a>	
III: Dickie Bridge to Melrose Bridge <i>Today = 290 cfs</i>	250 cfs - Prepare for Conservation 200 cfs - Conservation 150 cfs - MFWP River Closure <a href="#">Measured at USGS Maiden Rock Gage (06025250)</a>	
IV: Melrose Bridge to Notch Bottom FAS <i>Today = 312 cfs</i> <i>closure lifted 9/13/13</i>	250 cfs - Prepare for Conservation 200 cfs - Conservation 150 cfs - MFWP River Closure <a href="#">Measured at USGS Glen Gage (06026210)</a>	
V: Notch Bottom FAS to confluence of Big Hole River with Jefferson River <i>Today = 114 cfs</i>  <i>Reopen = &gt; 200 cfs for 7 days.</i>	200 cfs - Prepare for Conservation 150 cfs - Conservation <u>100 cfs - MFWP River Closure</u> <a href="#">Measured at USGS Big Hole River below Hamilton Ditch near Twin Bridges Gage (06026420)</a>	