

Greybull River Watershed Study

Scoping Meeting Notes

Date: August 29, 2017; 6:30 pm

Location: Meeteetse Conservation District Office; 1906 State Street, Meeteetse, WY 82433

Date: August 20, 2017; 6:00 pm

Location: Burlington Town Hall; 101 West Poplar Avenue, Burlington WY 82411

Sponsors: Meeteetse Conservation District and South Big Horn Conservation District

Attendees:

See attached meeting attendance forms.

Two public meetings were held; one for the upper basin and Meeteetse Conservation District (MCD) and the other for the lower basin and the South Big Horn Conservation District (SBHCD). Future public meetings for the Greybull River Watershed Study will be held jointly.

Summary of Meetings

- Dave explained the roles between WWDC, the sponsors (Meeteetse Conservation District (CD) and South Big Horn Conservation District) and Woodard & Curran (WC). WC is contracted with WWDC, but WC and the sponsors will be working closely together to complete the Watershed Study. Dave's role will be primarily for support. WC will inform Dave of all upcoming meetings, although his attendance may/may not be necessary.
- Dave stressed that landowners were not required to participate in this study, but were highly encouraged to participate. Stacey presented introductory slides, there were no questions from the audience regarding project administrative information. She reiterated the importance of public input (governmental agencies, public land owners, private land owners, etc.)
 - An attendee asked what non-profits the study will involve. Stacey noted Trout Unlimited, Rangeland and others that may approach W&C.
 - Trout Unlimited has been working on fish ladders at the major diversions in the watershed and W&C will likely attempt to get data and feedback from them regarding fisheries and function of the ladders.
- George Kelso with SBHCD introduced himself and provide the reason behind the study from the SBHCD point of view.
- Dave asked about scheduled public meetings in the future. Stacey noted there will be a meeting after rehabilitation projects are identified for stakeholder response, and then another meeting after the Draft Report in late August or early September 2018. All future meeting will be joint meeting with both sponsors in attendance (per contract, Task 1).
 - Public meetings will include the following:
 - Scoping Meeting
 - 2 Public Project Meetings
 - Draft Report Presentation
- Public communication was presented and the consensus was there was adequate existing coverage including Trail News (bi-weekly newsletter from Meeteetse CD), South Big Horn CD's Facebook and Meeteetse CD's Facebook pages that an additional website specific to this project was not needed. WC will provide updated information to the CDs for these sites.
- The scope of services were presented and the key tasks were identified to be:





- Inventory and Evaluate the watershed
- Development of the Management and Rehab Plan.
- Review of Background information was presented and several items of data gaps were listed including getting stakeholder feedback and conducting interviews; irrigation system data including return flow data, among others.
 - Questionnaires will be sent via mail and available through an on-line survey for landowners to provide feedback and areas of concern for the study.
 - Drone activities may be utilized to assist in field assessments, but landowner clearance will be obtained first. The drone will always be flown in a direct line of sight of the pilot.
- Portions of the Inventory list were presented and comments are provided below:
 - The Forest Service has a watershed assessment for the Upper Greybull and Upper Wood River watersheds. They have also performed a lot of stream health monitoring and inventory.
 - For wetlands, Steffen would like us to focus on areas within the Conservation District boundaries. It was noted that some of the outer areas are often forgot during studies like this and that although focus will likely be concentrated in the CDs, other areas will be assessed if determined to be of importance. Dave Myer and Barry Lawrence stated the conservation district area could have a higher priority, but the study does need to look at Dry Creek to avoid “orphan areas”.
 - Tim Morrison would like to see a quantification of how many wetlands are supported by irrigation and possibly created from irrigation or produced water (produced water is present in the Dry Creek basin).
 - Tim asked if the study could look at how reclamation impacts the watershed and specifically the non-reclaimed areas.
 - Charlie stated salt cedar is becoming a nuisance invasive species on top of the existing Russian olive problem.
- Regarding completing stream characterization, Sarah presented on the intended geomorphology techniques. It was proposed to field check approximately 5% of the 600 miles of streambed in the watershed. Comments are provided below:
 - Tim Morrison stated the 30 miles of analysis may not be enough field check to categorize the geomorphology. Greg Bevinger stated the Forest Service has Rosgen analysis of streams on forest land, and robust field study to check desktop analysis. Exclusion of streams in the forest service area should significantly reduce the total miles that need to be evaluated. Stacey stated the geomorphology field study will be refined after reviewing forest data and other reports.
 - Charlie noted the Wood River has significant geomorphology change. In addition, the Greybull River and Wood River may have had significant channel alteration and would need to be taken into account for the Rosgen Study.
 - Multiple people mentioned when the Greybull River reached 7,000 to 12,000 cubic feet per second (cfs) this causes significant damage, mostly bank erosion and channel migration which damage head gates and diversion structures.
 - The Greybull River was noted to be a very high gradient stream, lots of energy during spring run off.
- Jeb presented on intended streamflow hydrology techniques. Comments are provided below:



- Greg Bevenger noted he would like to see the median value rather than average value of flow in addition to dry, average and wet years. W&C will present both average and median values.
 - Tim Morrison also commented on wanting to see modeling of channel hydraulics if possible, due to the bank erosion and damage to head gates during spring / early summer flow. This model may help to predict channel erosion for high flow events and provide ideas for rehabilitation, channel protection or management options for part of the study. W&C will develop a scope for high flow and identify the flood return interval to study portions of the Greybull River for vulnerability.
 - Joe Thomas said it was the second time in 15 years that the stream has taken out diversions on his property.
 - Dave Myer mentioned the availability of FEMA flood mapping for review. W&C will obtain this information from Dave.
- Irrigation infrastructure was discussed and comments are provided below:
- There are several long (5 and 8 miles) irrigation ditches that are unlined and they lose about half of the flow by the time it reaches their fields.
 - Famers Canal is failing.
 - 70-80% of Bench Canal infrastructure is aged/failing. There was a Level I irrigation study completed for Bench canal within the last few years.
 - A Level I irrigation study was completed recently for the Bench and Farmer's canal. W&C will review and incorporate work not completed into the rehab plan.
 - The entire watershed is irrigated from surface water, no groundwater used for irrigation.
 - One landowner said that irrigation practices are changing south of the Town of Burlington because rich people are buying land, but are not irrigating it. Another landowner mentioned this was not necessarily true and that the Redwall Ranch irrigates a lot and they own several miles of the river. In addition, more landowners upstream are also irrigating.
 - One landowner mentioned that he pays an annual fee for the Roach Gulch Reservoir but he does not use any water from it.
- The topic of surface water / groundwater interaction and return flow was discussed.
- Dave stated that looking into this interaction could quickly become out of scope but Woodard and Curran should look into the situation and determine the complexity. Stacey stated W&C expertise in GW/SW interaction could discuss high level concepts without running a model. Sam May with Antler Creek Ranch hasn't seen a change in return flows after 10 years since changing to sprinkler irrigation. A few attendees are convinced return flows will change if irrigation is changed from flood to sprinkler.
 - If farmers switch from flood irrigation to sprinklers, they expect zero return flows to the Greybull River. WC proposed to start with a literature review and discuss with California offices to see if we could use their models to provide some estimates.
- Economic analysis from a large-scale perspective was determined to be unnecessary. The scope of work for this task will be to identify funding opportunities. The extent of a large-scale analysis was clarified for several attendees. It was agreed that money budgeted to economic analysis would be better spent elsewhere.



- Tim asked if there could be a one page table or summary of rehabilitation projects that would be qualified for small water program funding. Barry stated the operating criteria and rules/regs for the WWDC could change concerning the small water program. A decision will be made by late spring 2018 which gives time for incorporation into the study.
 - W&C will produce 1-page information sheet for each identified project as a “pull-out” summary as part of this report.
- Additional comments include:
- Attendees stated they have issues with the Army Corps, EPA and DEQ. One attendee mentioned they would like to see the State of Wyoming manage the river rather than the federal government.
 - The Army Corps permit to dig in stream channels is a barrier for maintenance activities.
 - One attendee stated the changing in irrigation and land us above Slenker’s property is changing the lower River.
 - One landowner wants the State to take over the management of Greybull River. They have had a problem in the past when they wanted to use a dozer to do in-stream work. They mentioned the Army Corps of Engineers permitted the work, but when another party found out about it, they reported the work to the COE and they ended up getting fined.
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Meeting Attendance Form

Meeting Topic:

Greybull River Watershed Study Scoping Meeting

Date:
29 August 2017
6:30 pm

Handout(s):

Wetland mapping
Perennial River Mapping
Contract Scoping Language

Location:

Meeteetse Conservation District Office
1906 State Street
Meeteetse, WY 82433

Name

Company

Signature Email/Phone

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