



## MEMO:

**To:** Sun River Watershed Water Management Work Group  
**From:** Tracy Wendt  
**Subject:** October 30, 2018 Water Management Work Group meeting summary  
**Date:** 11/19/2018

On October 30, 2018, the Sun River Watershed Group conducted a Water Management Work Group (WMWG) meeting at the First Interstate Bank in Great Falls. Partners in attendance are listed in Attachment 1. The following is a summary of some key points discussed.

### Meeting called to order.

- Larry Dolan opened the meeting at 1:00 PM, then proceeded with introductions. Alan informed the group that a new SRWG coordinator, Tracy Wendt, was been hired and began work on October 10.
  - Prior to joining SRWG, Tracy worked on rivers in Colorado and Wyoming, as well as Montana's Clark Fork, Blackfoot, and Rock Creek rivers. Tracy has degrees in Resource Conservation from the University of Montana.
- John Chase said he and Tracy recently met with Robin Baker from Senator Daines' office to discuss the group's concerns about the USFS Helena-Lewis & Clark National Forest draft Land and Resource Management Plan (comments submitted September 25, 2018). Al and John suggested we have a follow-up call with the USFS to further discuss the comments SRWG submitted. ACTION: Robin agreed to set up the call. ACTION: Al will forward past communication with USFS.

### 2018/19 Weather forecast and Water Supply Outlook.

BoR/Stephanie Micek gave an overview of the 2019 moisture predictions. Steph sends out a report monthly with the outlook and a range of potential future conditions and operations for the next 12 months. Anyone that would like to receive the monthly reports should contact Stephanie. The weather service's outlook is for warmer and potentially dryer winter but snowpack still may be ok.

### 2018 Fall/winter proposed operations.

- GID/Erling Juel summarized their winter operations. GID has dropped Pishkun way down so that the destroyed fish screen can be replaced with trash racks this winter that are ready to go for the next irrigation season.
- Given the current inflow to Gibson, carry-over storage in the system, forecasted range of future moisture conditions and operations criteria the BoR is suggesting a fall/winter release from Gibson that will result in a flow of 105-120 cfs over the diversion dam. Erling stated it is the snowpack runoff timing that has become an issue for water users.
- There was also discussion on keeping winter flows stable to reduce ice damage. FWP also would like to see winter flow rates that are similar to those during the fall, when the brown trout spawn, to protect Brown Trout eggs from desiccation.
- Broken O/Lance stated they are diverting 60 cfs at this time but will cut that back by half soon.

### 2018 irrigation season debrief and lessons learned.

- Erling stated the 2018 flooding caused many problems for GID. The natural inflow to Willow Creek reservoir peaked at about 2,500 cfs and, since outlet only releases a maximum of 350 cfs, the spillway was used. Since the spillway had not been used for many years there was concern of erosion and dam safety. Hard work by the GID crews prevented problems from occurring. Lessons learned from this year's flood were how to effectively manage Willow Creek Reservoir with high inflow; communications are critical; Pishkun Reservoir without fish screen meant more



water being released with same gate openings; and continue operation of the USGS gages are crucial for accurate tracking of flows and coordinated operations of the system.

- There was a question about the performance of the new FSID main canal water measuring flume. It is a ramp flume and there is a problem with the height of the ramp resulting in flow estimates which are not accurate at this time. Adjustments to the new flume need to be made as well as calibration.

#### **Flow Gages – status, repair needs, and issues.**

- DNRC/Larry Dolan reported on the 2018 synoptic flow run which was accomplished on August 8<sup>th</sup>. The goal was to improve our understanding of gains and losses on the entire Sun River. It was a check and update and previous synoptic measurement runs that were conducted during 2004 and 2005. Thanks to the team who supported the project which included DNRC, BoR and FWP. ACTION: Establish a schedule now for when to accomplish future synoptic measurements.
- Larry summarized status of the DNRC maintained gages damaged by the flooding this last spring and summer: Upper and lower Elk Creek gages were damaged beyond use and Sun River below mouth of Elk Creek bubbler system was damaged.
- ACTION: The SRWG should develop a plan on repair of all gages damaged by the 2018 flooding and prioritize which gages are most important to repair and keep operational and adequately funded.
- Gage Funding discussion included:
  - Muddy Creek water quality nutrient monitoring was discontinued due to a lack of funding.
  - Erling suggested an "Adopt a gage" program to pay for operations and maintenance. This could be shared on the website with the site sponsors' logos listed as a promotion/thank you. Could refer to the USGS site for example. The sponsor pays for but does not do the work related to the gage – recreation groups, angler groups, flyshops, etc could do the work.
  - The USGS gage at Simms and Augusta have a cooperative agreement with USGS paying 50% and SRWG acquiring donations for the other 50%. The SRWG struggles to get enough donations to pay for these gages.
- Elk Creek gages were further discussed including on the need and if they are reinstalled should at least one be converted to "real time". LCCD/Chris stated they may be interested in helping fund real-time gage on Elk Creek. ACTION: LCCD and DNRC discuss costs and location options for a potential real-time Elk Creek gage.
- Robin asked about how USGS gages are funded. Because USGS has limited funding and groups have difficulty acquiring the required match, many gages across Montana have been discontinued. Maybe the Montana Congressional delegation can help with USGS budget? Alan stated that many groups use this important data to predict floods including National Weather Service but do not contribute to gage funding. ACTION: Get Robin information on the USGS budget.

#### **Missouri Basin Study Update.**

- Larry updated the group on status of the Missouri River Basin study. One key piece of information is that average annual water supplies in the future are projected to remain similar to the past but it is the flow timing how it the moisture gets to the water users that is changing. This change may require new water management and irrigation infrastructure needs. Preliminary update for the Sun River drainage include:
  - Increasing capacity of Willow Creek feeder canal will help.
  - Increasing capacity of Pishkun reservoir will not help so much, especially if it does not increase a corresponding increase to the inflow canal capacity.
  - Back-to-back droughts is huge problem needing to be addressed to help irrigation and fish.
  - ACTION: Does the SRWG need additional "models" to prepare for different scenarios?

#### **SRWG work-plan revision.**

- The group discussed the status of the revised workplan and how to move forward. There are two components to the workplan including strategic plan and annual plan. Travis had accomplished partner interviews and summarized data. Bruce Farling took that information and put into one document for the group to start working on. With Tracy's set of fresh eyes and outside perspective will work with all partners to refine the new plan. ACTION: Contact Tracy with any suggestions on the new workplan.



- NRCS/John George updated the group on the new NRCS State Conservationist's program that will develop geographic-based focus areas to address issues so can get the biggest bang for the buck. They will be accepting proposals for 2019. John will be working with Teton, Lewis & Clark and Jefferson Counties toward identifying areas and possible projects. They want to work with landowners like those in our watershed. State and private lands (state-leased), projects over multiple years will qualify.
- Need to get NRC involved now with any potential projects for the new geographic-based focus areas or any other project that focuses on private lands. **ACTION:** Add new Cascade County DC to the SRWG list. **ACTION:** Each SRWG workgroup compile list of projects that can then be compiled into a final document to work with NRCS.

#### **Water Projects – idea sharing.**

- FSID is completing pipeline project and starting wastewater monitoring project.
- GID identified erosion locations on the Willow Creek feeder canal. About 15 years ago they did work for erosion control and need to monitor and re-evaluate the work. They are working with LCCD and SRWG on this. They did a study and applied for a grant but the landowner changed their mind about involvement so the project may not occur.
- GID also updated the group on the restart of the J-wasteway project that will reduce excess flows into Muddy Creek.
- Larry Dolan announced that he is retiring on December 21 but offered to assist the group on a voluntary basis during retirement.

#### **Action Items review included:** (tasks for SRWG Executive Committee and Coordinator, unless otherwise noted)

- Robin Baker from Senator Daines' office will try to set up a call with USFS to discuss concerns about the new draft forest plan.
  - Al will forward past communication with USFS.
- Establish a schedule now for when to accomplish future synoptic measurements.
- The SRWG should develop a plan on repair of all gages damaged by the 2018 flooding and prioritize which gages are most important to repair and keep operational and adequately funded.
- LCCD and DNRC will discuss costs and location options for a potential real-time Elk Creek gage.
- Does the SRWG need additional "models" to prepare for different drought scenarios?
- All committee members should review the SRWG draft 10-Year Strategic Plan and contact Tracy with any suggestions.
- Add new Cascade County DC to the SRWG list.
- Each SRWG workgroup should compile list of projects that can then be compiled into a final document to work with NRCS.

#### **Meeting adjourned at 4:00 PM.**

Meeting summary submitted by Tracy Wendt and Alan Rollo

#### **Attachments:**

1. List of attendees



**Attachment 1: List of Attendees**

Name	Representing
John Chase	Sun River Watershed Group & Cascade Conservation District
Alan Rollo	Fort Shaw Irrigation District
Larry Dolan	MT Department of Natural Resources and Conservation
Jason Mullen	MT Fish, Wildlife, & Parks
Erling Juel	Greenfields Irrigation District
Laura Ziemer	Trout Unlimited
Stephanie Micek	US Bureau of Reclamation
Dan Wilkins	Great Falls Public School
Lance Rosenkrance	Broken O Ranch
Jane Weber	Cascade County Commissioners
Ross Fitzgerald	Power Water & Sewer District
Bruce Farling	Past MTU Director
Tracy Wendt	Sun River Watershed Group
Chris Evans	Lewis & Clark Conservation District
Matt Norberg	DNRC
Robin Baker	Sen. Steve Daines
Jim Forseth	US Bureau of Reclamation
Scott Brown	Montana Salinity Control Association
Sarah Howe Cobbe	Lewis & Clark Conservation District
Chuck Davis	MMI
John George	NRCS
Paul Roos	Self / Conservation Community