

# MINUTES

## **SMP Work Group**

September 5, 2015

10:00 am – 3:00 pm

Location: North Spruce Conference Room, US Forest Service Office, 2250 Hwy 50, Delta, Co.

Conference Call Line: 1-866-541-2318

Passcode: 6191202

**Attendees:** John Sottolare (Reclamation), Lesley McWhirter (Reclamation), Jenny Ward (Reclamation), Ed Suppes (UVWUA), Ken Leib (USGS), Mike Baker (Interested Party), Theresa McGovern (NRCS), Sonja Chavez de Baca (STF), Dave Kanzer (CRWCD), Allen Distel (BPWCD), Todd Ohlheiser (CO Stone, Sand, & Gravel Assoc.), Ralph D'Alessandro (DCD), Bonnie Pate (CDPHE – WQCD), Steve Miller (CWCB), Travis Schmidt (USGS)

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10:00 – 10:15     **Introductions and Discussion of Agenda**

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10:15 – 11:00     **General Updates**

- Salinity Program 2015 FOA
  - Reclamation received applications from all four Upper Basin States. About 30 applications were received requesting just a little over \$75 million in funding. About 15 projects were recommended by the Application Review Committee (ARC) for funding, at a total cost of approximately \$40 million. Approximately \$35 million will be funded under the Basinwide Program and the remaining \$5 million under the Basin States Program. Cumulatively, the selected projects will reduce about 35,000 tons of salt loading per year into the Colorado River Basin. Reclamation is currently setting up the Cooperative agreements. Awards should be completed by February 26, at which time work may begin.
  - Selenium reduction was included as a tie-breaker in the decision making process. Steve Miller would like to work on getting pounds Se/ton of salt data. Because Steve is providing State money, he'd like to know which projects to support in future FOAs based on their selenium control benefits. We will have a more informed discussion on this at a future time.
- Critical Conservation Area Designation & RCPP Application
  - Per irrigation entities and conservation district members at the meeting, 2 of the 4 focus areas were successful in getting FOA projects (UVWUA's East Side Laterals Phase 9 and Fire Mountain Canal & Reservoir Company in the North Fork area). We need to

- discuss the selenium benefit contributions applicable to the RCPP and NRCS.
- Combined FOA and RCPP funding is a bit of a challenge because of the need for a watershed plan for RCPP funding. This plan is coming along slowly. Projects on Reclamation land or facilities will have NEPA documentation lead by Reclamation. Private projects will have the NRCS as their NEPA lead.
  - The River District is working on the 2016 RCPP application and is soliciting input with regard to potential projects, both on- and off-farm. Dave Kanzer is meeting with on-farm and off-farm groups over the next few weeks. Dave anticipates meeting with NRCS and Reclamation biologists to try to streamline NEPA and cultural resources compliance work.
  - A large portion of the North Fork was assessed in the Smith Fork report. There is not a large load of selenium in this area, relative to the Uncompahgre basin, however there is quite a bit of salt loading.
  - Meaker Big Gun Irrigation Project Tour Results
    - Tours were given to a diverse selection of groups, including:
      - NRCS (state conservationist and regional director) and regional NRCS staff
      - CWCB board and staff
      - Interim committee of Water Resources Review Committee (House, Senate and ag folks)
    - After one year of the study, we are not seeing any deep percolation. There are still two years of the study remaining.
    - There was discussion on getting an ET meter on Silt Mesa. This will help with ground truthing for a larger model which shows regional conveyance of energy.
    - Sonja will remind Randy Meaker ASAP that he needs to fill the pond before water gets shut off so that the clay liner won't dry out over the winter.
  - Selenium Task Force Items
    - The STF hasn't had a separate meeting in a while, as the STF and SMP have been overlapping quite a bit. The STF focuses on clean water compliance, while the SMP focuses on clean water compliance and the recovery of the endangered fishes. The STF is able to advocate/lobby for activities and funding, and the SMP can coordinate project implementation.
    - There has been a Selenium TMDL in place on the Gunnison River (confluence with the Uncompahgre River) since 2011.
    - The STF will likely get more involved again with the proposed 303(d) listing of the 18-mile reach in the Colorado River.

- Mike Baker, Sonja Chavez de Baca, Justyn Liff, and Paul Kehmeier are members of the Education and Outreach Committee.
- October 28-29<sup>th</sup> is the 5<sup>th</sup> Annual Upper Colorado River Basin Water Forum at Colorado Mesa University. The SMP could fall under the topic “Managing Flows for Multiple Purposes.” Having a poster at this event is an idea for future outreach activities. The Committee will look at next year’s schedule for the Water Center at Colorado Mesa University to see if there are any upcoming education/outreach opportunities.
- This Committee tries to target specific audiences, such as farmers.
- Potentially going to do a combined outreach for SMP and STF website updates. This will be an agenda item for the next quarterly meeting.
- Sonja will schedule a meeting of the Committee.
- Sonja will get updates on potential speakers/dates for the Annual Soil Health Conference, which is scheduled for February 11-12, 2016 at the Delta Center for the Performing Arts. She will encourage the STF to continue to support the event. The STF sponsored this event last year.

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11:15 – 12:00

#### **Science/Technical Team Updates**

- The last meeting was on September 2, 2015.
- Most of our data is showing declining trends in selenium, however tributaries are still exceeding the standard. The USGS recently collected a water quality sample on the Gunnison River at the Whitewater gage that had the lowest concentration of dissolved selenium ever recorded at that site.
- Travis Schmidt (USGS) is conducting an ecosystem modeling effort to study the role that particulates may play in the transport of selenium into the food web. Selenium can be a limiting factor for endangered fish recovery, and Travis is trying to determine at what point selenium ceases to affect fish and no longer becomes a limiting factor in their recovery.
- The EPA is proposing new rules in standards and methods to look at not just water column selenium concentrations, but also fish tissue and food items. There is uncertainty on how best to respond to the proposed new rule.
- There is a meeting scheduled with the CDPHE – WQCD on November 12 at the USGS Science Center in Fort Collins. There will be a technical discussion regarding selenium issues and toxicity impacts.
- The 2014 Water Quality Assessment is being drafted by USGS for inclusion in the 2015 Annual PBO Report to the FWS.
- Quite a bit of work is being done by the USGS on the 30 well groundwater network. Bi-annual groundwater quality samples are collected and monthly groundwater levels are taken at each well. In addition, continuous groundwater level monitors have been installed in 10 of the 30 wells. Age dating information has recently come back from the lab. The results indicate that some of the deeper water is older than we had previously thought, but support the theory of a shallow and deeper groundwater system. The Science Team is currently working with Steve Miller to obtain funding in order to put together a written summary of the results.

- It was suggested to add a future agenda item for the Science Team with regard to whether or not we should continue to monitor all of the well sites or a smaller selection of them.
- Barb Osmundson continues to sample in-channel for pharmaceuticals (Sunflower Drain, Dry Creek, North Fork, etc). She would like to run pharmaceuticals on the groundwater wells to determine if there are other non-ag sources to the groundwater system, such as septic systems.
- The USGS is starting Version 3 of their regression model (aka LOGUNN). They are doing a whole new set of regression equations to predict selenium concentrations based upon different basin characteristics. They use this information to put together a “ranking report” which looks at selenium and salinity. John Sottolare uses this information for determining basin salt load contributions.
- The Bostwick Park water balance doesn’t account for about 9,000 acre-feet of outflow. USGS needs to initiate an agreement with Steve Miller to help do more work on this.
- In response to a request by the Bostwick Park Water Conservancy District to Reclamation for a salinity study east of Cerro Summit, the USGS made synoptic measurements of flow on the Cimarron Canal to determine seepage loss. They will be collecting data in Squaw Gulch next to determine salinity load. Some significant losses in flow were noticed, along with very salty seepage areas down gradient of the canal. The Science Team plans to discuss any recommendations USGS may have for sampling for selenium or salt on Squaw Creek.
- Sediment sampling in lower Gunnison (synoptic). Looking at doing more work after irrigation water turned off. Most work funded through the State, USGS, and Reclamation.

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12:00 – 1:00    **LUNCH**

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1:00 – 1:45    **Overview of CWCB and Species Conservation Trust Fund Funded Projects and Process for Identifying Future SCTF Request for FY15-16, and Documentation of Accomplishments with Prior Expenditures**

- Steve Miller has requested a wish list of projects to be funded by the SCTF in 2016. Sonja will schedule a meeting of the Science Team to develop this list. Steve needs a draft by December 1<sup>st</sup>. Lesley suggested the Science Team forward their suggestions to the SMP for distribution over email and then schedule a meeting for formal recommendations from the SMP. Different topics initially brought up included:
  - Sediment Selenium: Does this need more funding for the next phase?
  - Groundwater characterization report
  - Continued Ecosystem model development
  - New projects? The SOW would need to be able to tease out specific accomplishments of the funding/projects.

- Fish tissue sampling or analysis
- CWCB Technical Assistance Funds: CWCB issued about \$120K and FOA funds were successfully awarded on 4 of the projects. There is \$130-150K remaining. Steve wants to sit down to see what they can do to make other projects successful.
- CWCB has \$500K to help with RCPP proposals throughout the state. At least half of this money can possibly be used to help NRCS, local RCPP, etc. Some of this funding is being used in the Crawford, North Fork, and Bostwick Park Water Conservancy Districts for developing master plans. We can use these funds for things we can't do with SCTF funds (need a selenium nexus). The CWCB would like to see how we performed with these funds before they give another \$500K.
- Lesley or John will send out the SMP Master Plan Spreadsheet to get updates from the SMP about projects to list as accomplishments in the 2015 Annual Aspinall PBO Report to FWS.
- Dave Kanzer asked how much State RCPP funds they can show in the 2016 RCPP application. He will discuss this with Steve Miller.
- In the new 2016 RCPP, we may want to use BSP for smaller projects that are ready to go.
- The question was posed as to how we can help those projects where the cost-effectiveness is high, and how can we help make them competitive?

1:45 – 2:05

**Coordination on Current, New, and Multi-Party Studies**

- We need to get Ken out with Perry Cabot so we can coordinate greater on-farm selenium monitoring.
- The Science Team needs to have a discussion on water and soil chemistry as it relates to on-farm. Is there a reasonable, effective way to analyze on a watershed level?
- Steve Miller mentioned a study between Colorado State University and No Chico Brush which he plans to bring up at the November 12<sup>th</sup> meeting in Fort Collins.

2:05 – 2:30

**EPA Draft Aquatic Life Ambient Water Quality Criteria for Selenium and our Current Science Team Studies/Coordination on New Studies, Multi-Party Studies**

- The comment period on the criteria has been extended to October 10<sup>th</sup>.
- The proposed criteria has four prongs, with two being fish tissue based and two being water quality based.
- Bonnie will check with Stephanie Baker to see what her comments on the criteria might entail.
- Sonja reviewed Barb Osmundson's comments regarding the criteria she made at the September 2<sup>nd</sup> Science Team meeting: Using one single conversion factor for fish tissue is not representative of what happens in all fish species. The criteria might not protect endangered fish.

- Travis Schmidt is working on studying coal mining on federal lands and its associated selenium deposition impact on endangered species throughout the Upper Colorado River Basin. The list of endangered fish being sampled will be very similar to those found in the Gunnison. USGS is serving as the clearing house for this data for all fish. This study will help determine the distribution of selenium and mercury concentrations throughout Colorado.
  - We need to discuss how this project ties into our work, and should this study be identified in the Science Plan?
  - If you don't have fish tissue data, you have to meet aqueous standards. The important thing is that we have local ecological studies that tell us how the fish are reacting/doing.
- Every two years, the State WQCD assesses and re-evaluates the 303(d) list. There is a public hearing on December 14, 2015. Anyone can propose a listing. The Lower Colorado River Segment 3 (the 18-Mile Reach) is proposed to be impaired based upon recent data collected in the mixing zones of the mouths of tributaries on the north side of the Grand Valley. The River District is requesting party status; this is a formal process, so if interested, the STF would have to request interested party status. Reclamation conducted earlier studies on pre-feasibility, and it was determined it is limited to what we can do on tributaries due to costs. The River District will likely discuss their role in the SMP and talk about on-going accomplishments. Does the STF want to provide testimony at the hearing?

2:30 – 2:55

**Need for Reasonable Selenium Reduction Quantification Methodology. What Data Would be Required to Accurately Quantify Selenium for Individual Projects?**

- The Irrigation Training & Research Center's October 2013 draft report *Salt and Selenium Reduction: A Review of Assumptions – Eastern Side of the Uncompahgre Valley* has been discussed in an earlier SMP meeting. It was decided in the previous meetings that the SMP should stay with Reclamation's salt numbers. Reclamation had issues with the procedures used in the report, among them being the failure to reference any of the salt and selenium studies Reclamation conducted on the eastern side of the Uncompahgre Valley.
- The USGS Model Update will give us the best information with regard to selenium load in individual sub-basins or HIDs.

**Action Items**

- Sonja will remind Randy that he needs to fill the pond before water gets shut off.
- Mike will visit with Hannah at Colorado Mesa University to see if there is a future program schedule at the Water Center on which it can highlight recent work in the SMP.
- Sonja will schedule a meeting of the Education and Outreach Committee.
- Sonja will encourage the STF to continue to support the Annual Soil Health Conference.

- Future agenda items for the Science Team: Whether or not we should continue to monitor the 30 well groundwater sites, or just a number of the sites. Should we collect FWS pharmaceutical samples from the well network in order to help determine any septic influence on the groundwater system?
- The Science Team will determine if the USGS has a recommendation for sampling for selenium or salt on Squaw Creek.
- Sonja will schedule a meeting of the Science Team to develop a wish list for SCTF 2016.
- Lesley or John will send out the SMP Master Plan Spreadsheet to get updates from the SMP about projects to list as accomplishments.
- Dave will discuss RCPP funds they can show in their 2016 RCPP application with Steve Miller.
- The Science Team will discuss water and soil chemistry as it relates to on-farm, and determine if there is a reasonable, effective way to analyze it on a watershed level.
- Bonnie will check with Stephanie on WQCD comments concerning the EPA's proposed, ambient water quality criteria.
- The Science Team will determine how Travis' coal mining and deposition impact study ties into current SMP studies/research, and if this study should be identified in the Science Plan.
- The STF will determine if they want to provide testimony at the 303(d) list hearing.

**The next Science Team meeting will potentially be held on November 13<sup>th</sup>, 18<sup>th</sup>, or 19<sup>th</sup>.  
The CACD meeting is on-going all this week.**

**The next SMP Workgroup meeting will be held in early December. Possibilities include December 2<sup>nd</sup>, 8<sup>th</sup>, 9<sup>th</sup>, or 10<sup>th</sup>.**