

MEETING SUMMARY

SMP Work Group Meeting

August 2, 2016

10:30 AM – 3:30 PM

Location: Bureau of Reclamation, Conference Room A, 445 West Gunnison Ave., Suite 221,
Grand Junction, CO

Conference Call Line: 1-866-541-2318

Passcode: 6191202

Attendees: John Sottolare (Reclamation), Lesley McWhirter (Reclamation), Jenny Ward (Reclamation), Brent Uilenberg (Reclamation), Ken Leib (USGS), Cory Williams (USGS), Jude Thomas (USGS), Barb Osmundson (FWS), Jed Sondergard (BLM), Dave Kanzer (CRWCD), Steve Miller (CWCB), Allen Distel (BPWCD), Ed Suppes (UVWUA), Mike Baker (Public)

Conference Call-In: Suzanne Paschke (USGS), Sonja Chavez de Baca (CRWCD), Alisa Mast (USGS), Joe Mills (USGS)

Introductions and Discussion of Agenda

A discussion on the recently published 2016 USGS paper “Controls of Selenium Distribution and Mobilization in the Uncompahgre River” was added to the agenda as agenda item number VII. c.

GENERAL UPDATES

Salinity Program 2015 FOA (John Sottolare)

Seven salinity projects were awarded in the lower Gunnison basin. Five agreements have been signed. Two agreements are reliant on RCPP funding, and still need to be signed. The five agreements which have already been signed are:

| Project | Length | Awarded | Salinity Reduction |
|------------------------|-----------|---------|--------------------|
| Clipper Center Lateral | 4.3 miles | \$3.15M | 2,606 tons/year |
| Cattleman’s Phase II | 6.0 miles | \$2.67M | 2,183 tons/year |
| North Delta Phase I | 6.0 miles | \$5.56M | 4,383 tons/year |
| Orchard Ranch | 2.0 miles | \$1.28M | 1,004 tons/year |
| Minnesota L-75 Lateral | 0.6 mile | \$153K | 129 tons/year |

John Sottolare will try to get a map together of these projects before the next SMP meeting.

Steve Miller asked if there was a way we could get a selenium reduction estimate added to the table above. The USGS may be able to get a reasonable selenium reduction estimate for these

projects based on USGS modeling. The Salinity Control Forum (Forum) directed the Bureau of Reclamation (Reclamation) to not look at selenium while determining awards for salinity projects, but there is the potential the State could look at selenium reduction estimates and use it as a tool to choose which projects they will help buy down.

Some salinity projects incur increased costs due to issues in modifying rights of way on Bureau of Land Management (BLM) managed land. Currently, the canals go along land contours. To save money, canal companies want to pipe across contours, but often this requires new right of ways across BLM land. BLM has certain policies they need to follow for all utility entities for new right of ways. New right of ways differ from canal companies' existing right of ways because the new right of ways often require an annual fee (such as \$50 or \$100 annually), and include other terms and conditions such as a 30 year term. Currently, the canal companies do not pay BLM a fee and their right of way carries on in perpetuity. Steve led a discussion as to whether or not canal companies may be able to get a waiver from the new right of way policy. Steve will aid canal companies in pulling together examples of cases where this policy was problematic in delaying piping projects. Jed Sondergard will talk to the Lands group at the BLM Uncompahgre Field Office, but he believes this issue goes way above the field office level. Non-federal Salinity Program Forum members will likely need to sit down with the appropriate DOI political appointees and discuss. Steve will make this issue an agenda item in the October Forum meeting in Moab. John will work with Mark Wernke and get examples of the amount of money which can be saved by not piping in the existing, meandering ditch prisms on BLM land, but instead piping by using the most efficient and economical route.

Critical Conservation Area Designation & RCPP Application (Dave Kanzer)

Two salinity projects are receiving RCPP funds: 1) The Fire Mountain Canal is receiving approximately \$1.4M in RCPP funds to go towards an approximately \$4.6M piping project which would result in a salinity reduction of approximately 2,000 tons/year. The State is helping by looking at re-regulation of the facilities. 2) The UVWUA is receiving approximately \$1.3M in RCPP funds. A combination of RCPP, FOA, and CRSP MOA funds will be used to implement Phase IX of the Eastside Laterals Piping Project and enhance the GK and GH lateral with a regulating reservoir. This project will result in a salinity reduction of approximately 6,000 tons/year.

Bostwick Park is receiving some RCPP funds which will pipe a non-federal lateral. This will not utilize salinity money. Planning for this project is ongoing.

The Crawford Clipper Ditch Company is receiving some RCPP funds to construct a regulation pond which will provide opportunities to meet demands downgradient. They are working on entering into an agreement with sub-districts.

The River District is creating a Lower Gunnison Centric Website which will serve as a roundtable for lower Gunnison basin information. The RCPP doesn't provide money for outreach and education, so this website is intended to help with that. There will be environmental, recreational, agricultural, and domestic sub-pages. The website will be a living website, as the River District will continue to add new content. The website should come online within the next two months. The SMP questioned how we're going to archive the information we've been generating and make it available (ditch mapping, salt loading, GIS coverages, etc.). This goes a bit beyond the scope of the website. The website intention is to be more narrative and not a go to for raw data. The USGS is a better place for this type of information, although

data sets which cannot be archived easily by the USGS could potentially be included on the website. It is USGS policy to make raw data publically available. Some selenium reports the SMP generates could be included on the website. A discussion took place regarding the STF website, which has gone stale. We want a unique identifier for the STF, so we don't want to fold the STF website into the new website.

The River District is waiting to complete an alternative funding arrangement which will include \$8M for the four project areas (Uncompahgre, North Fork, Bostwick Park, and Crawford). They are also putting together an application for a \$10M grant which would provide an additional \$2.5M for each of the 4 focus areas. The River District is trying to integrate service areas, and this application is due September 19th.

The STF hasn't moved forward with any specific items. There was a discussion about updating the layout of the STF website and making it more user-friendly. The STF doesn't have a contractor right now to move items forward and coordinate activities. We want to keep the STF going. The STF includes the Grand Valley, whereas the SMP is strictly Gunnison-based. The STF can do things outside the realm of the SMP, as the SMP is in response to the Gunnison PBO. The SMP doesn't have the room to go out and talk to county governments, etc. and help inform land use decisions. The River District can no longer lead the STF; there needs to be a new person leading the STF, and we need to come up with a subgroup which can help provide resources. Sonja Chavez de Baca will come up with a date for the STF to meet to discuss this issue.

USGS 2014 Annual Summary Report – Water Quality Monitoring (Ken Leib)

The USGS usually has this draft report to Reclamation by January, but new policy requires an Open File Report (OFR), with a higher level of review. This report is not approved yet, however Ken anticipates it will be approved today. This will be a citable report now, whereas we would have to wait five years and combine the reports to make them citable in the past. Ken isn't sure of the additional expenses required to produce an annual OFR as compared to a draft report, but he thinks it would be on the order of a couple more weeks of time by a hydrologist. Work will start on the 2015 report this October. 2015 will be incorporated into the five year trend analysis Scientific Investigative Report (SIR) report, which won't be completed until July 2017. Reclamation paid approximately \$25K for the annual draft reports, and approximately \$80K for the five-year reports. Water samples which inform these reports are paid for by the monitoring program.

Ken presented a PowerPoint presentation on the report for WY2014. Ken will email this PowerPoint and the report to the SMP workgroup. The report objective is to look at the downward trend in selenium, which is a requirement of the PBO. There is a downward trend in selenium at the Whitewater gage from 1992-2014. The annual 85th percentile of estimated daily dissolved selenium concentrations in micrograms per liter has decreased 1.9 ug/L from 1992 to 2014. The trend looks like it is flattening out over time, but this could be due to some obvious low hanging fruit projects being implemented early on.

This USGS report is a component of the annual SMP Gunnison basin PBO report Reclamation submits to FWS by January 31st each year. The 2014 SMP annual report included the 2013 USGS report. The 2015 Aspinall Unit and Dolores Project sections of the SMP annual report

were submitted to FWS in January without the 2014 USGS report and the remaining sections of the SMP report. This was due to the USGS report not being ready, and the FWS was agreeable to this. The 2014 USGS report, once completed, will be combined with the remainder of the 2015 SMP annual report and submitted as one report to the FWS. Reclamation will look at how often we are required to submit a trend report if the USGS report is going to come later every year.

The next report the USGS will prepare is the five year publication. USGS requires a publication for annual reports. Could we drop the five year report and only do annual summaries? The USGS has the ability to publish data summaries, which lists out the data and compares information to exceedances. The data summaries do not include a lot of loading analysis, which could be a weakness. Would a data summary suffice for the PBO report requirement to give annual information without bumping up against the analytical report requirement? The PBO directs Reclamation to provide an annual water quality summary. Reclamation and FWS will look to see if we would be in compliance with the PBO if every five years we look at the trend and make sure it is not increasing.

We need to keep in mind that there are two tiers to the PBO. Tier one focuses on water quality: The initial goal of the program is to meet the State water quality standard for selenium in critical habitat in the Gunnison and Colorado Rivers by the timeframe established in the Long Range Plan. The long term goal will be to sufficiently improve water quality conditions by reducing selenium to assist in recovery of the Colorado pikeminnow and razorback sucker. Tier two focuses on fish health, relates to selenium levels in fish tissue: Recovery occurs when natural occurring, reproducing populations are self-sustaining, with all life stages present and there is natural recruitment into the adult population. The goal of the SMP with respect to endangered fish in the Gunnison River should be to ensure that selenium levels in the Gunnison River and Colorado River do not impede the achievement of recovery goals and downlisting and delisting of endangered fish.

Reclamation Science and Technology Proposal (John Sottolare)

Reclamation has an annual grant program through their Science and Technology Program. Under this program, you can apply for a one year scoping grant or for a full study one to three year grant. John has submitted a proposal for a grant to investigate available technologies for in situ selenium removal from groundwater, and to identify locations within the study area best suited for a demonstration project. Work involved will include a literature search and site visits. This work will result in a scoping report which will most likely be written by John with USGS input. Results of the competitive grant will be announced in October.

Lunch

EPA Final Aquatic Life Criterion for Selenium (Barb Osmundson)

At the end of June 2016, the EPA finalized their new criteria for selenium. This is a criteria, and it does not become a regulation until the states adopt it, at which point it becomes part of the state's water quality standards. States often adopt EPA criteria, however they can also choose to make the standards stricter. States go through cycles of adopting water quality standards, so the

timeline for states to adopt this criteria depends of where each state is in their adoption cycles. Until the states adopt the criteria, the FWS will probably stick with the old standard in terms of tier 1 of the PBO. In terms of tier 2, the State currently does not have standards for fish tissue, however the FWS has been using Lemly numbers as guidance. Lemly's guidance numbers are more stringent than the new EPA criteria.

For water quality, the current standard is 4.6 ug/L. Under the new criteria, the suggested standard is 3.1 ug/L for flowing water and 1.5 ug/L for ponded water. If fish tissue samples are available, the criteria for fish tissue overrides the water quality criteria. The standard is tiered because selenium is bioaccumulated and not just a water quality issue. Page 99 of the EPA criteria document describes the new suggested standards. A challenge is the EPA did not come up with any implementation guidance. Another challenge is, depending on which species you collect samples from, the selenium level vary. One species will show above the criteria while another species can show below the criteria. The EPA left some species out of their consideration who really push selenium into their eggs instead of in their tissue. While putting selenium into an egg can lower the selenium in the fish, some fish spawn once every three years, while others can spawn eight times in one breeding season, so the ability for fish to get rid of some selenium in their eggs varies.

Barb is making a push to finalize a report she has written on the topic. The report is based on fish tissue samples she has collected.

The new criteria could change what we're shooting for in the future if the state adopts the criteria, however our job and the purpose of the SMP is to recover the four endangered fish species. If the fish recover before we meet the criteria, then our job is done. A new standard doesn't change what was agreed to in the PBO.

Science/Research/Technical Team Updates

Species Conservation Trust Fund Status/Updates (Steve Miller)

Steve provided a spreadsheet illustrating funding provided by the SCTF (see attached). The SCTF is funded out of severance tax the state levies for oil, gas, and other minerals to remediate some of their environmental impacts. The tax is based on income at the well head, not pounds produced. Since the price of oil is going down, production at the well head is going down – there is a couple year lag between when this happens and when we see a change in severance tax. Declining revenue is why the SCTF went down to \$250K from its usual \$500K this year. In late April/early May this year an energy company was successful in appealing how the Department of Revenue calculates this tax. Because of the outcome of this dispute, we can only use \$100K of the \$250K authorization. The impact of the decline in revenue will have future impacts on the SCTF budget unless energy prices go back up. We will likely have to live with this current situation for a few years. The Science Team's recommendation on how to best spend this \$100K is lined out in Steve's table.

Reclamation committed some CRSP MOA and SMP money to fund several USGS water quality monitoring stations which previously were funded by other programs. There had been an agreement for \$70K/year of CRSP MOA funds from Ted Kowaltzki which authorized approval of water efficiency projects in the area of the East Canal.

It would be helpful to have a list of unfunded stations which can be prioritized by the Science Team as a wish list. Right now, CRSP MOA is funding those sites the Science Team indicated they wanted to keep. The discontinued sites were sites which we would revisit at a later time. Ken will put together a wish list based on data gaps and submit it to the Science Team. John will follow up and see if the real-time water quality monitor installed at the CO/Utah State Line gage will be funded by the BSP. CWCB can cover the cost for the water quality monitor at the Loutzenhizer gage in FY17 if we give up something else that the Science Team has recommended for SCTF funding in FY16-17 or FY17-18.

USGS Controls of Selenium Distribution and Mobilization in the Uncompahgre River 2016 Paper (Joe Mills and Alisa Mast)

This paper has been published in *Science of the Total Environment*. Joe will email the link to access this paper to the SMP workgroup.

One thing to keep in mind while reviewing this paper: You cannot relate the solid material at one point to the water at that point, because the water has traveled through other material (bedding planes, weathering factors, weathering zones, etc.), but it is representative of the overall aquifer. The water may not have touched some of the sediment samples.

The majority of selenium in the core samples was in an immobile form that is not easily extracted. These areas are most likely a sink for selenium, rather than a source. This could help inform BMPs. Could we create a sink like this or is this something that happens over geologic time?

Jude Thomas is working on a characterization report, which will be published next year. The report will give us a little bit more of an idea of how selenium looks in the area. We still don't know what is controlling the spatial differences in selenium concentration throughout the area. Given the amount of data we have and how much variability we see, it would be hard to get a good look at selenium at the scale of the basin.

It is important to think about whether we're going about this as an academic exercise or to validate actionable plans. Going after the effectiveness of BMPs may have more bang for our buck. Is there a limiting reagent we should be looking at? Can we limit the selenium by managing the nitrate?

Are there recommendations which go along with the conclusions? Don't know what to do besides not applying water, which is not really an option.

Subcommittee Membership List

We ran out of time to discuss this agenda item, and it will be tabled until the next work group meeting.

Education and Outreach Updates

Subcommittee Membership List

We ran out of time to discuss this agenda item, and it will be tabled until the next work group meeting.

Other Topics

None.

Schedule for next SMP Meeting

Reclamation is no longer authorized to use Doodle Poll, so USGS will send out a Doodle Poll on behalf of Reclamation to determine when the next SMP meeting will occur. We are anticipating a November timeframe.

ACTION ITEMS

- USGS will work on getting reasonable selenium reduction estimates for the next round of FOA salinity control projects, anticipated to be in 2018.
- The River District will work with John to get information on the 2015 FOA for the new website.
- The State and canal companies will start pulling together examples of cases where the BLM policies regarding new right of ways was a hindrance to routing new pipeline in the most economical and efficient way for current and past salinity projects.
- Jed will talk to the BLM-UFO lands group regarding the policies for new right of ways.
- Steve will make the BLM policy regarding new right of ways an agenda item for the October Forum meeting in November.
- John will work with Mark Wernke to get examples of the amount of money which can be saved by routing new pipeline in the most economical and efficient way across BLM lands, as compared to installing pipeline in existing prisms that may meander along contour lines.
- Sonja will come up with a date for the STF to meet and begin the process of getting a new coordinator.
- Ken will email the PowerPoint he presented to the SMP workgroup.
- Reclamation will combine the USGS Annual Summary Report, once completed, with Reclamation's portion of the Annual Report. The combined report will then be forwarded to the FWS and emailed to the SMP members.
- Reclamation will talk to FWS to determine if we would be in compliance with the PBO if we submit USGS' annual data summaries annually, and only submit a report on the downward selenium trend when the USGS completes their 5-year reports.
- John will find out if the CO/Utah State Line station will be funded by BSP.
- Ken will put together a station wish list based on data gaps, and he'll submit it to the Science Team.
- Joe will email the PowerPoint he presented and the link to the 2016 USGS paper to the SMP workgroup.
- USGS will send out a Doodle Poll on behalf of Reclamation to determine when the next SMP meeting will occur.

ATTACHMENT – SCTF Spreadsheet

| GUNNISON SMP - CWCB COSTSHARE ASSISTANCE SUMMARY updated January 25, 2016 | | | | | | | |
|---|-----------------------------|---------------|---------------------------------|---------------|---|------------------|---|
| Species Conservation Trust Fund (SCTF) | | | | | | | |
| | Authorization = \$500,000 | | Appropriation Code = | | | | Notes |
| Projects | Committed | CumCommit | Obligated | Cum Obligated | Purchase Document | Expended | |
| FY 2009-10 SCTF, SB09-1289, section 2(a)(III) UCRRP | Authorization = \$500,000 | | Appropriation Code = | | | | |
| UVWUA lateral lining demo | \$ 500,000.00 | \$ 500,000.00 | \$ 500,000.00 | | Cont# | \$500,000 | Essentially complete, final documentation pending, SMP Tech Comm. to review |
| FY 2010-11 SCTF, HB10-1398, section 3(b)(I) UCRRP | Authorization = \$1,500,000 | | Appropriation Code = | | | | |
| No SMP funding from SCTF | \$0.00 | | \$0.00 | | | \$0.00 | |
| [Shull # UC01] | Authorization = \$500,000 | | Appropriation Code = UC01 | | | | |
| CRWCD/UVWUA Optimization Study | \$280,000 | \$280,000 | \$280,000 | \$280,000 | PDAA2015-1792 | \$280,000 | see also HB12-1349 for amendment #1 |
| USGS #1 Water Table Influence Study (4 well irrigation impacts study) | \$99,500 | \$379,500 | \$99,500 | \$379,500 | PO PDA13_0013 | \$99,500 | IFA12-138 complete June 2014 |
| Delta CD Tech Assist for 2012 FOA | \$98,500 | \$478,000 | \$98,500 | \$478,000 | PO PDA13_0038 | \$98,500 | completed June 2014 |
| Shavano CD soil testing technician Phase 1 | \$4,303 | \$482,303 | \$4,303 | \$482,303 | invoice only | \$4,303 | completed 12/1/12 |
| Shavano CD - 2013-14 NRCS Mancos soil mapping & misc tech assist | \$8,232 | \$490,535 | \$8,232 | \$490,535 | invoice only | \$8,232 | Cal. Year 2013 work complete |
| SHIFTED TO UC02 | \$9,465 | \$500,000 | | | | | \$9,465 remainder added to UC02 for GS#10 |
| total | \$500,000 | | \$490,535 | | | \$490,535 | |
| FY 2012-13 SCTF, HB12 - 1349, sec 2(a)(II) Colo RIP | Authorization = \$500,000 | | Appropriation Code = UC02 | | | | |
| USGS #2A Groundwater Monitoring Network (install 10 wells) | \$50,000 | \$50,000 | \$50,000 | \$50,000 | PO PDA13_0034 | \$50,000 | IFA12-139 complete 9/13/13 |
| USGS #3 Science Plan | \$70,520 | \$120,520 | \$70,520 | \$120,520 | PO PDA13_0035 | \$70,520 | IFA12-141 complete 11/18/13 |
| USGS #4A Loutsenhizer Gage Installation | \$31,750 | \$152,270 | \$31,750 | \$152,270 | PO PDA13_0070 | \$31,750 | IFA13-131 complete 9/13/13 |
| USGS #4B Loutsenhizer Gage O&M | \$16,740 | \$169,010 | \$16,740 | \$169,010 | PO PDA14_0077 | \$16,740 | IFA14-128 complete 9/29/14 |
| CRWCD Opt. Study Amend #1 balance / UVWUA SCADA Pilot Project | \$47,000 | \$216,010 | \$47,000 | \$216,010 | Updated Contract # CTGG1 PDAA2015 -1792 | \$47,000 | essentially complete, final invoice paid 7/12/16 |
| USGS #2B Groundwater Monitoring Network Expansion (install 20 wells) | \$99,500 | \$315,510 | \$99,500 | \$315,510 | PO PDA14_0031 | \$99,500 | IFA13-142 complete 9/29/14 |
| Shavano CD, On-farm BMPs demo project | \$99,000 | \$414,510 | \$99,000 | \$414,510 | PO PDA14 0120 | \$98,913 | complete 7/31/15, Meaker "Big Gun" , Shavano CD |
| USGS #5A Groundwater Quality sampling (10 sites) | \$50,000 | \$464,510 | \$50,000 | \$464,510 | PO PDA14_0030 | \$50,000 | IFA13-137 Complete 10/31/13 |
| USGS #10 Cimarron Canal Load Study | \$45,000 | \$509,510 | \$45,000 | \$509,510 | PDAA16-0349 | \$45,000 | IFA CO15-135, complete 11/14/15 |
| total | \$509,510 | | \$509,510 | | | \$509,423 | used \$9465 from UC01 to cover excess |
| FY 2013-14 SCTF, HB13 -1283, sec. 2(1)(a)(II) - "Gunn. SMP" | Authorization = \$500,000 | | Appropriation Code = SM03 | | | | |
| USGS #5B 2014 Groundwater sampling (30 sites, 2014) | \$99,500 | \$99,500 | \$99,500 | \$99,500 | PO PDA14 - 0116 | \$99,500 | IFA14-140 complete 2/6/15 |
| USGS #6 Science Plan - Mancos GeoChem Characterization | \$99,500 | \$199,000 | \$99,500 | \$199,000 | PO PDA14 -0119 | \$99,500 | IFA14-044 complete 9/18/15 |
| USGS #8 Science Plan - Geospatial Statistical Model update/enhance | \$99,500 | \$298,500 | \$99,500 | \$298,500 | PDAA15_0013 | \$89,372 | IFA14-133as of 6/30/16, time ext to 03/17 |
| USGS #7A Science Plan - EcoSystem Modeling Year 1 | \$99,950 | \$398,450 | \$99,950 | \$398,450 | PDAA15_0011 | \$99,950 | IFA14-053, complete 1/14/16 |
| USGS 2C Geoframework, 30 well network | \$49,990 | \$448,440 | \$49,990 | \$448,440 | PDAA2015_0012 | \$49,990 | IFA14-052 completed 6/30/15 |
| USGS #9 Selenium on Sediment | \$51,560 | \$500,000 | \$51,560 | \$500,000 | PDAA16_0350 | \$51,560 | split funding, see also SB14-188 |
| total | \$500,000 | | \$500,000 | | | \$489,872 | |
| FY 2014-15 SCTF, SB14 -188, section 2(1)(a)(II) "Gunn. SMP" | Authorization = \$500,000 | | Appropriation Code = SM04 | | | | |
| USGS #5C 2015 Groundwater sampling (30 sites, 2015) | \$99,500 | \$ 99,500 | \$99,500 | \$99,500 | PDAA15_0047 | \$99,500 | IFA15-102 complete 1/15/16 |
| USGS #9A Selenium on Sediment | \$28,440 | \$ 127,940 | \$28,440 | \$127,940 | PDAA16_0350 | \$28,440 | IFA15-137 complete 6/30/16 |
| USGS #5D 2016 Groundwater sampling (30 sites, 2016) | \$56,000 | \$ 183,940 | \$56,000 | \$183,940 | PDAA16_0351 | \$56,000 | IFA CO15-138, as of 6/30/16 |
| CRWCD WCD master Planning | \$186,000 | \$ 369,940 | \$186,000 | \$369,940 | CT GG1 2015-3110 | \$117,466 | as of 2/28/16, final pay pending |
| USGS # 11 Gunn. @ Delta Synoptic, baseline WQ | \$99,500 | \$ 469,440 | \$99,500 | \$469,440 | PDAA16_0348 | \$89,871 | IFA CO15-139, as of 6/30/16 |
| Shavano CD Soil Health and Big Gun enlargement | \$ 30,500 | \$ 499,940 | \$30,500 | \$499,940 | PDAA16.0352 | \$30,500 | partial, split funding balance from HB15-1277 |
| total | \$ 499,940 | | \$499,940 | | | \$421,777 | |
| FY 2015-16 SCTF, HB15 -1277, sec. 2(1)(vi) - "Gunn. SMP" | Authorization = \$500,000 | | Appropriation Code = PC024 GS15 | | | | |
| USGS #7B Science Plan - EcoSystem Modeling Year 2 | \$99,950 | \$ 99,950 | \$99,950 | \$99,950 | PDAA19-0933 | \$28,375 | IFA CO16 045, as of 6/30/16 |
| Delta CD IWM and FOA assist | \$72,470 | \$ 172,420 | \$72,470 | \$172,420 | PDAA16.0353 | \$28,000 | also \$24,000 from CF salinity tech assist, total PO \$96,470 |
| Shavano CD Soil Health and Big Gun enlargement | \$16,140 | \$ 188,560 | \$16,140 | \$188,560 | PDAA16.0352 | \$12,000 | \$30,500 from SB14-188, as of 6/30/16 |
| USGS #5E 2016 Groundwater Analysis Concluding Report | \$99,500 | \$ 288,060 | \$99,500 | \$288,060 | PDAA16-0932 | \$15,882 | IFA CO16 133, as of 6/30/16 |
| USGS #12 fish tissue sampling | \$20,000 | \$ 308,060 | \$20,000 | \$308,060 | PDAA16_0754 | | IFA CO16 041 Travis Smith, add-on to BLM study |
| USGS #2D 2016 Groundwater levels, 10 wells continuous | \$60,000 | \$ 368,060 | \$60,000 | \$368,060 | PDAA16-0934 | \$15,000 | IFA CO16 100, as of 6/30/16 |
| USGS #7C Science Plan - EcoSystem Modeling Year 3 | \$100,000 | \$ 468,060 | | \$368,060 | | | funds reserved for 2017 |
| UVWUA - 319 Project costshare | \$0 | \$ 468,060 | | \$368,060 | | | cancelled, not needed for FOA |
| GS 9B, Sediment Sampling, 2 sites | \$ 31,940 | \$ 500,000 | | | | | Need SOW, partial, split funding balance from HB16-1458 |
| total | \$ 500,000 | | \$368,060 | | | | |
| FY 2016-17 SCTF, HB 16-1458, sec. 2(1)(iv) - "Gunn. SMP" | Authorization = \$250,000 | | Appropriation Code = | | NOTE, only \$100,000 of \$250,000 authorization will be available in FY16-17. | | |
| USGS #5F 2016 water quality sampling 10 wells age dating | \$36,940 | \$36,940 | | | | | need revised SOW for scaled back effort |
| USGS #13 In-situ treatment feasibility study | \$0 | \$36,940 | | | | | USBR may fund a \$15,000 scoping study |
| USGS 9B sediment Sampling, 2 new sites | \$8,060 | \$45,000 | | | | | Need SOW, partial, split funding balance from HB15-1277 |
| USGS #14A Sunflow Drain Inflows and loads with FLIR | \$55,000 | \$100,000 | | | | | need revised SOW for combined work with Loutsenhizer |
| USGS #14B Sunflower Drain gage and sampling | \$0 | | | | | | USBR or CRWCD funding requested for fed FY16-17 |
| USGS 4C, Lotzenhizer gage operation | \$0 | | | | | | USBR or CRWCD funding requested for fed FY16-17 |
| USGS #15 Pharmaceuticals in groundwater | \$0 | | | | | | |
| USGS #16, Update realtime selenium regression equations | \$0 | | | | | | |
| total | \$100,000 | | | | | | |