SOUTHEAST UTAH RIPARIAN PARTNERSHIP
FULL PARTNERSHIP MEETING JANUARY 21, 2020, 10 - 3
Grand Center, Moab Utah
Meeting Notes

In attendance: Kara Dohrenwend (Rim to Rim Restoration), John Leary (RiversEdge West), Matt McEttrick (Rim to Rim Restoration), Izzy Weimholt (Grand County Weeds), Rob Wood (Grand County Weeds), Duncan Fuchise (FFSL), Tony Mancuso (FFSL), Jake Deslauriers (UCC), Nicole Croke (UCC), Tim Higgs (Grand County Weeds), Tim Graham (individual), Josh Doucette (NPS), Liz Ballenger (NPS), Kelli Quinn (NPS SouthEast Utah Group), Nicole Nielson (DWR), Gabe Bissonette (BLM), Makeda Hanson (DWR), Rani Derasary (City of Moab, council member), Linda Whitham (The Nature Conservancy), Elaine Gizler (Moab Area Travel Council)

Please note highlighted action items.

Introductions/Partner Updates
FFSL (Tony): There is a Green River cross-watershed restoration initiative, contact Tony if you are interested or if you are a stakeholder. There will probably be a WRI project for next year (January 2021).
Potential SURP involvement with the Green has been discussed in the past. The SURP boundary is the state line to the confluence with the San Juan. We considered expanding boundaries in the past, a few years ago the partnership decided not to. If the same stakeholders are involved in the Green River project then it may make sense.

NPS (Kelli): Phragmites ID project is ongoing. Looking to collect samples of early spring growth-hopefully compiling them and sent to the lab in July. It may take a few months to get the results back. Kelli will send an email about how and when to collect. She can also provide envelopes and supplies (Tupperware, cat litter, coin envelopes)

BLM (Gabe): There is a new BLM Weeds Lead for the local BLM office, Logan Lefevre. Gabe will email the group to make it official. Logan gave some input on the WRI proposal. Gabe has been working on a number of things outside of the SURP scope but of possible interest to the group:
Considering implementation of prescribed grazing (goats) at Roberts Bottom. It might be a better approach in combination with seeding than using herbicide. It was submitted as part of DRRP proposal. There are environmental assessments to do still. He is looking for info/data that can weigh in. Spring 2021 planned implementation, simple and small in scope. Planning for about 100 acres near cottonwoods, but there's a lot of tamarisk w/kochia understory. If they eat some of the kochia it may be easier access for the cutting crews to get to the tamarisk. It's close to bighorn sheep herds (disease transmission potential). Colorado Parks and Wildlife has used goats for knapweed, but not Kochia. Derek Lavoy (CPW) found a lot of disturbance, Liz will connect Gabe with him. Tim Higgs (GCWD) noted that knapweed is deeprooted perennial, kochia is annual so goats might work better with kochia.

Also: the DRRP proposal and San Juan proposal contain a focus on side channel and critical habitats for fish. Finished random sampling, now doing target sampling for river attributes on BLM land. Hopefully will be similar to goals for geodatabase

Jake (UCC): Colorado Plateau River Guides formed again and wants to partner with SURP. They want to focus on river cleanup and volunteer events for now. They've been around a long time, more recently became a non-profit. No T-shirts yet.
Working on San Juan River project w/Gabe, trying to partner with ancestral lands. Christina has left CCYC, so there will be a transition.

Nicole (UCC): Getting crews ready for spring.

Tim and Rob (Grand County Weeds): ISM grant for purple loosestrife and some for knapweed along the river and in the Book Cliffs. Overlapping WRI with ISM to do repeat projects on same areas. Looking at Ravenna grass and Arundo treatments in town. Trying to get Ravenna Grass listed by the county.
Doing phragmites in the Book Cliffs and doing some of the genetic collections for Kelli.
anyone who wants Giant Reed removed in town or in Castle Valley let them know. Been putting notices on doors and in the paper. Kara can put something up in the nursery webpage and facebook and provide fliers. Robbie will provide verbage to Kara
Ravenna grass is still for sale in the Salt Lake area and some education/outreach through non-governmental entities was discussed as a possible opportunity to help with the problem. Better mapping of Ravenna is being done throughout the county to help explain the problem

Liz (NPS): Tamarisk removal in Lower Court House Wash, and Salt in Canyonlands. Biocontrols are being monitored. There is knapweed gall midge and gall wasp, the wasp seems to be more effective in one place.
Canada thistle has 3 biocontrols released: rust, stem weevil, and stem gall fly. Hasn't seen any establishment for the rust yet.
NPS filled the shared position with Resource Management and the river shop. Jason McDanald is coming from the Tetons. Has been running their IPM, he starts early next month.
Salt Wash project is shifting to hydroseeding. Awarded to Horizon, out of Durango. Did the seed acquisition by collecting through a semi-pro who assembled a crew, and they were cheap, about $16/hour for crew members. They collected 100s of pounds in a few weeks. Would be interesting to see the cost comparison vs. purchasing. They will send it to Bend OR to get it cleaned. NPS very focused on genetic integrity of local species. Also provided seeds for species that are difficult to purchase. It was easy contracting with them. Partners would like to see a cost analysis. Liz and Josh to provide cost analysis once project is complete.

Matt (RRR): Matt is back with RRR. Has worked there previously. In the meantime he has been working for Grand County and the Park Service in a wide range of places.

John (REW): Riparian Restoration Conference is February 4-6 in Grand Junction. REW and RRR have been revising the Mission, Vision, and Values statement, the Mission was approved by the group last year, and the Vision and Values have been revised and accepted by the Core Team. Ready for approval by the full partnership.

Nicole (DWR) and Linda (TNC): Matheson Reserve partnered with UCC and TNC for thinning. They are bringing a Marshmaster in March to treat about 100 acres of bulrush with the intent to burn it later this fall. Currently contracting for a burn plan. The goals are to control mosquito habitat, reduce bulrush, and reduce wildfire threat. FFSL is developing an ISM proposal for Russian olive in the WUI areas of the preserve.

They are writing grants for native fish (razorback sucker) sucker larvae entrainment in the preserve.
Also working on the maintenance of sites previously treated for tamarisk.
Preserve is changing the name from Scott Matheson to Scott and Norma Matheson.
Developing an audio interpretive tour in English and Spanish for the preserve

The travel council inform visitors about this through their monthly newsletter, the Moab Snapshot. It goes to tour operators, travel agents, and anyone else interested can sign up too.
Link: https://lp.constantcontact.com/su/yI7B1Jo/moabsnapshot

FFSL is seeding the channel in the preserve next week.

Tim Graham: Tracks beetle numbers and movements and foliage response. Has torn tendons, operated before Christmas. 4/6 weeks with no weight allowed on it. It was a chronic injury. Good luck in recovery.

WRI Project Proposal Update – project in process and 4.0 proposal submitted (Kara et al)
Information is also available on the powerpoint from the meeting.
3.0

- Used new protocol on site assessments at legacy sites
- Spent ½ day with UCC crews to introduce project, helped w/understanding and continuity
- Grand county doing a lot of Ravenna Grass scouting
- CCYC is doing their training at Jackson Bottom. Jake to send a reminder to Kara re: match

4.0

- Includes a Yellow-billed Cuckoo project at May Flats, some land is in Colorado
- Are they doing knapweed control? This was not known as the project is being coordinated with Pam and the Colorado BLM
- Project includes expectation of a full training day at start of work for youth corps when partners will spend time there for training-side channel morphology, plant id, herbicide application and other big picture concepts. This was done in fall 2019 and was very helpful for the project.
- Total project cost is estimated just short of $1 million
- Total WRI ask is 556,948.50 with $270,924 of other funds and $143,604.5o of in-kind match

Geodatabase progress (Gabe and Group)
How the geodatabase can connect managers to information
Where will the database be housed/access?

- Progress has slowed slightly- working with DIGIT lab working w/BLM legacy data, not many challenges remaining.
- 1st feature class (legacy treatments) almost ready-dates back to 2000 or 2001
- Is REW going to house this with the other GDBases?-John to follow up. Meeting on January 23rd established that REW will house the SURP database with the others for the region. REW will also provide information as to what this costs in funds and in time so that SURP can be prepared in future if the group needs to help cover these costs.
- What is the access to this information as far as private land? This needs to be determined in future

- Is making it public increasing the chance of people addressing plant issues on land that isn't theirs?
- If REW can house it, can we lay out the info and start putting in data sets.
- Ben Bloodworth (REW) would be worth tying in with a conference call w/Gabe. Shannon W. confirmed it was possible. John will send an email to connect Ben, Gabe, Kara, and Tony on this topic
- What funding is available for this?

Review Conservation Planning for the Colorado River Christine Rasmussen tool (Tony & Matt)

- Tony (FFSL): in 2010-2011 the government did a bunch of data crunching. There is a USGS study. The Colorado River Conservation Planning Project. Lots of downloadable data, but its 10 years old. Geomorphology and other data sets may be relevant still. Info got lost for a while b/c of publishing rights issues.
- They modelled restoration potential, risk of fire, restoration cost estimates. You can identify least costly and most likely to succeed areas for restoration prioritization.
- Some polygons would need groundtruthing eg inundation and how vegetation and side channel shape has changed over time since this database was set up
- SURP geodatabase can complement this tool too.

LiDAR from 2015 is available at 3 inch or 6 inch resolution for the Colorado River-It's an expensive high-res DEM. Every river mile from Yampa confluence is available. The file size is huge. Can be used for modelling elevation contours. Probably more practical at a site-specific scale.

- Jake: Steve Bowman from USGS has a discounted LiDAR program.
- Tony: There is also 1m resolution lidar from 2010.
- Gabe: there is probably some imagery available, too
- USGS Study: https://my.usgs.gov/crcp/
- John will send an email to connect Gabe, Ben Bloodworth and anyone else interested in the Geodatabase talk as far as will/how will REW house it. Also file size issues when photos are involved.

Site Assessment Review

RRR developed a presence/absence datasheet for site assessments for common riparian plants. For areas that have undergone initial treatment (rapid monitoring). Its quick and simple assessment useful for developing proposals. Would be cool to link it with plant id. It's been vetted internally by RRR.

- Gabe: assess for user error and perspective influences by having different people do the same site independently. See how well it works. Troubleshoot.
- Kara: once the GDB is functional, we can use it for a quick monitoring assessment
- Tony: the "time needed" column is very subjective. Tree size, access, density, and acreage would allude to this and help inform decision-making
- The file size is large b/c of the quantity of photos.
- Discussion about this topic suggests that the summer meeting should be a field trip that is also a time to critique this tool and refine it so that it ideally can be functional for all agencies and entities in SURP.

Moab Travel Council: What information can be shared with visitors as far as spreading invasives across state lines? They already have one for firewood. 300-500 words would be helpful. Liz will draft a paragraph for educating visitors before they come here and send it to the group.

Mesa County installed boot cleaning kiosks. BLM does them too, in the Rec. department. City of Moab will be developing signs about the importance of staying on-trail.

Mission, Vision, Values

- update it to 2025 since we're approving it in 2020. Everyone agrees.
- what does the vision of "community communication" look like?-yes , we have "provide accurate and useful information to the community…
- Mission, Vision, and Values document was approved by the group!
- John (REW) will update the SURP website

Quantitative Monitoring Efforts – Linking Information to Managers Geospatially (GROUP DISCUSSION)
summary of data collected to date (Matt with PIs): follows information in meeting powerpoint
Summary of Grand County report

- Grand county work started after beetle introduction to monitor beetle spread
- Started moving to what it does in addition to where it is
- Beetles preference for mature tamarisk over resprouts was surprising initially
- A certain size population needs to be introduced
- There have been changes in the methods of beetle surveys
- Tamarisk weevil monitoring-presence/absence study by County
- Is there interaction b/t coniatus and the leaf beetle? Not sure how coniatus got here.
- Pupal counts are the easiest method
- Grand County (Tim) and Tim will review document

Tim Graham

- Expected first generation to live 5-6 weeks, but the life span is longer than the early studies and literature showed
- More opportunities for larva to persist later into the fall
- 2013-2015 least amount of data collected, but it indicates that the time of lowest percent green
- Can include a deeper level of detail in the slide?
- Colorado River has more natives coming back, Green River is primarily annual exotic regrowth. Is it flow regulation? Is it b/c there is more grazing on the Green? Weather plays a significant role, both locally and its impacts on river flows.
- Can we put these monitoring sites into the geodatabase?
- Tim is trying to synthesize this monitoring information this year.
- Are we at an equilibrium of beetles and tamarisk? Will we likely see increases in tamarisk mortality? Beetle caused mortality likely, slower b/c less canopy for food and its more dispersed. We can look at where mortality hit hard early.
- Can we map the mortality? Yes.
- Grand County has 89 sites across the county and its varied and site-specific, it's hard to discern a pattern
- Anna Sher, GIS, and statistics people at U Denver looked at the data and weren't able to make anything out of it

BLM

- Secondary invasion of understory weeds post tamarisk removal
- Broadcast burning showed most native regrowth and least negative impact on Fremont cottonwood. This may have more to do with transect location than actual results. Further research is needed before banking on this result.

Rim to Rim Restoration

- RRR does veg monitoring – transects to compare native vs nonnative
- Further statistical analysis for more sites possible with 5 years of more data collection
- Warming trends may inhibit native recovery, relative native veg cover lower in warmer years, previous years' number of freezing days also important.

Papers from monitoring work

- Authors associated with Anna Sher
- Three papers that we are aware of. If collaborators are familiar with other papers please pass them along to the group

What are we missing from data collection efforts or papers?

- This seems to capture most of the local efforts
- Looking at sites' understory before removing the tamarisk. Once sites w/o tumbleweed (Salsola) were connected w/ sites with tumbleweed presence, the tumbleweed presence increased on the previously non-tumbleweed sites
- A lot of monitoring is reactionary.
- Do we have anything formal as far as what works and what doesn't for herbicide?
- Tim-triclopyr with garlon is working well on tamarisk
- Jake/UCC has recommendations, results are more qualitative at this point
- 2010 Rasmussen has polygons classed by dominant vegetation cover and the next 3 most abundant vegetation types in that polygon.
- Useful: Rim to Rim will work w/each partner from handout to flush out the document, add hypotheses section, add interpretation section, add a column identifying the shortcomings of each data source/collection
- Adding in monitoring sites to geodatabase to allow better coordination?

Moving forward:

- In terms of treatment types and implementation we have moved towards chainsaw/herbicide as opposed to mastication or broadcast burning. Is there a need to explore these options? Do we want to analyze treatment methods and effectiveness? Can we do a meta-analysis with the data we have as far as the results of past mastication or burning treatments?
- NPS is looking into mastication on the White Rim.
- An issue is that project funding rarely has funding for monitoring
- 3-4in chip depth inhibits growth of natives and non-native species. It's hard to apply herbicide to masticated stumps.
- FFSL last did mastication in 2008. RRR has transects on the site.
- Can we use the data we have to find areas where we're having success and can we use it to nudge other areas to success?
- DRRP may have a lot of information, potentially. We should look into their monitoring. It has similar soils to the SURP area.
- NPS also considering extraction method, increases soil disturbance but if you get below root crown it should work.
- San Rafael had full tree extraction and some cutting and burning. Upper section had full tree extraction Dan Keller, UDWR, would be the contact.

- Tim-what are we missing? Why isn't there a pattern, what else can we be looking for? What other parameters should we look at?
- Its been hard to integrate the weather data into it. Is there a lag in how weather affects beetle population? Do you use current weather or the previous year's weather? Both?
- DIGIT lab grad students are looking for projects-Phoebe McNeally-some students are doing projects on the Escalante right now. Wouldn't require funding, just potentially time to oversee a student.
- Are people who have been collecting data open to share data?
- County data needs to have an agreement established. Must have a specific person identified that the information will be shared with. Tim has done this with Phoebe in the past
- If FFSL provided the funding to the county for data collection, they share it with FFSL.

Are efforts complementary? Are some efforts redundant?

- Tim doing same sites since 2009. Includes plant recruitment.
- Tim and County folks will get together to compare sites and to coordinate timing with consistent consideration of phenology. Tim has 17 sites, county has 89. Will also compare how data is being collected. County does transects. Foliage/nonfoliage or dead. ½ meter intervals.
- County will do their monitoring in May, Tim will do it in the fall.

How can monitoring be funded?

- Qualitative data could be useful and quick/easy for NPS to implement to have more consistent tracking of observations
- Standardized qualitative data would be useful for working across jurisdictional boundaries and on different properties
- Summer field trip potential-take the vegetation monitoring document from Duncan and Kara and test it out.
- Qualitative is cheaper, quantitative is very time consuming. Qualitative can lead us to locations where we want to implement quantitative data.
- Tim-The time frame of surveys needs to account for the life cycle of the beetle. If its too spaced out, it misses the entire life of the beetle and the data shows that the trees browned w/o beetle presence. 8 surveys is a good number, at 60 sentinel trees (minimum number, would like to have more during dynamic periods like when larva are increasing in late June into July).
- County has 89 sites and is considering dropping one because it has 100% mortality.
- Which sites would make more sense to prioritize if we had to? There are 30 sites with mortality.

Russian Olive

- Linda: When we use $ for initial treatment there usually isn't funding for follow-up monitoring.
- Did what we did work? Do we need retreatments before it becomes the cost of initial treatment all over again? We should make sure that we are monitoring the work that we did and that we are securing funding for post treatment monitoring. How do we do this moving forward? It's about protecting the initial investment. Citizen scientists with the sheets developed by Duncan and Kara could accomplish that. Grand Canyon Trust has a lot of volunteers Mary O'Brien is contact at GCT.
- Kara-this is especially pertinent with the growth of Russian olive in the declining tamarisk.
- Tim- Goals: "work to understand…" we need to emphasize educating funders on the importance of project follow-up.
- Public agents are not allowed to lobby.
- Potential focus of the year could be on coordinating monitoring funding and implementing the monitoring

- The site assessment form could be a solution to this. Its qualitative-fast and easy. It would have to be tied to WRI proposal. And tie it into the GDB
- Baseline data?
- Jake: also trying to implement this on the White w/REW and BLM
- Developing the arc schema is time-consuming, but we have it mostly established through DIGIT lab
- Its hard to notice kochia depending on the timing of the year when the pre-assessment is completed.
- Building it into the proposal process: has been done with WRI proposal before. Also included Ravenna grass scouting, and some monitoring data collection.
- Veg transects every 3-5 years works well, beetle data should still be collected every year
- Webmap for internal use of monitoring sites would be helpful
- Annual report will come out digitally. Kara has a few printed copies.

Kelli: data-USGS has transect data. They have long term transect data on vegetation in riparian areas. Not sure on status of data, if its been processed or not. Rim to Rim will connect with USGS to capture their monitoring efforts with the rest of our work.

NEXT MEETING TOPIC: SITE ASSESSMENT TOOL REVIEW AND REVISION. Date TBD in the next month. Core Team may meet in the meantime. Expect a mid-summer meeting if possible to cover this topic