

Biology Committee Webinar Summary, December 13, 2016**PARTICIPANTS**

Biology Committee: Dave Speas, Melissa Trammell, Jerry Wilhite, Dale Ryden, Krissy Wilson, Brandon Albrecht, Pete Cavalli, and Tom Pitts (Harry Crockett was unavailable).

Others: Tom Chart, Kevin McAbee, Jana Mohrman, Julie Stahli, Angela Kantola, Tildon Jones, Michael Mills, Kevin Bestgen, Katie Creighton, George Weekley, Jerrad Goodell, Matt Breen, and Randy Staffeldt.

CONVENE: 9:00 a.m.

1. Review/modify agenda - Dave Speas mentioned Bill Stewart from USBR is working to organize a nonnative fish management symposium at the next [national AFS meeting](#) in Tampa from August 20-24, 2017. He mentioned that if the symposium is accepted, we may consider presenting some information from the Program.
2. Tusher Wash Diversion - George Weekley described work at the site to address remaining debris after coffer dams were not fully removed in spring; NRCS will ask the contractor to remove the debris from the channel. Tildon said part of coffer dam was left because construction crews had to get out of the channel before high water. Shallow, rocky cobble/boulder material will be removed because it blocks the low flow access channel downstream of the fish passage (from power plant return where most water returns to river). This work should be completed before the end of the year. The channel and access to the fish passage is required in the biological opinion, so Green River Canal Company wants this done before the contract is fully paid and they accept ownership.
3. Wetland partnership with BLM - Jerrad Goodell and Matt Breen have discussed this potential for some time and recently elevated it within BLM and held a meeting to explain current and planned work and what we can achieve with active wetland management. BLM was very interested. Jerrad said his Associate District Manager (Chris Conrad) approves his moving forward to work on these projects on BLM land; pending adequate staffing/funding and any competing interests/BLM priorities. Matt, Jerrad and Justin Jimenez (State Riparian/Fisheries Lead) did a site visit at Stirrup and Above Brennan where some of berms and breaches are already in place. Will have engineers review and see if Brennan is feasible (it's the larger site). Tildon thinks Stirrup will be more feasible because the Above Brennan flooded area is so broad. Stirrup is a more "discrete" site with a single breach and deep water. Evaluations of both Stirrup and Above Brennan depths are still needed. Above Brennan may turn out to be a site we can't manage as intensively (e.g., a place we stock bonytail). Matt thought Above Brennan may have potential for bonytail similar to Stewart Lake. Pete recommended we should consider which of these sites would be good for stocking bonytail. Reclamation will be looking at the Stirrup, Above Brennan and perhaps other BLM sites site this week, weather permitting (this trip was postponed due to weather). Matt Breen said the Stirrup outlet channel at the Stirrup will require dredging if this site is to be managed.

** Post-meeting addition from Matt Breen: Stocking bonytail was just an additional item to consider at either site if that's the direction we choose in the future (not to take away from LTSP management considerations). Bonytail worked at Stirrup in 2011 because fish were stocked well in advance of the peak (April) and there was sufficient connection for a long period of time. This should be reworded to explain that any such decision for either location would have to be based on annual hydrology, with the number one priority being razorback recruitment when feasible.

4. Floodplain site visits follow-up – The Committee discussed what actions should occur as follow-up to their October floodplain site visits. Tom Chart noted that the PD’s office will get reports #164 and #165 up on the web as soon as possible. Tildon said they confirmed bonytail reproduction in Johnson Bottom this year (which occurred in the presence of nonnative fish). These YOY were spawned by adults stocked into the breach during spring flows in 2016; both adults (43 BT from draining and electrofishing during draining) and YOY were captured during fall draining. YOY samples were sent to Kevin Bestgen and confirmed. Matt said they didn’t keep any bonytail or suspected bonytail from the traps at Stewart this year, but agreed they will want to do so going forward.

Sampling comments - Tildon said their scope of work calls for fall sampling of all the floodplains that connected the previous spring; he recommends instead focusing on a few key sites, especially ones where larvae are present and which had been reset the previous year to prevent overwinter survival of nonnative adults.. Tildon would like to focus most of their time at Johnson next year. If there are a number of sites that reset in a dry year, then crews would go back in when they reconnect (unlikely next year). Tildon said they still intend to light trap all the sites for larval entrainment, just not conduct fall sampling at all sites. Matt agreed, saying we’ve gathered enough information over the years to demonstrate larval fish get eaten by nonnatives and fall sampling does not provide us substantial information. In contrast, the light-trapping data has great value because it demonstrates that the larval trigger flows are working to entrain fish in the wetlands. Tom Chart asked if we could do any comparative analysis to get at what light traps indicate in terms of densities (are there places we want to focus on for future management actions, for example)? Kevin Bestgen agreed the light-trapping has utility to show presence/abundance and inform site management. We do want to look at transport mechanisms of razorback larvae, particularly for sites further downstream. Tildon said they might consider drift nets at a few sites, for example at upstream and downstream breaches at Above Brennan (debris loads may be a problem, however). Kevin Bestgen recommended entrainment is best approached experimentally (bead release) to look at the dynamics of individual wetlands and how they function. Tildon agreed it takes a lot of light trapping to capture relatively few razorback in some of these wetlands. Right now, they’re doing more presence / absence sampling. >Tildon and Kevin Bestgen will discuss and make recommendations. Kevin reiterated that we need to conduct experiments to determine if light traps can indicate abundance. Dave asked if Tildon could consider continuing summer and / or fall sampling at the BLM sites (Stirrup and Above Brennan) if light traps confirm entrainment. Tildon thought they could (they teamed up with UDWR crews to do that this year, for example.) Jerrad said BLM may be able to help, as well.

The group summarized wetland characteristics, current management, and potential future efforts. Subsequent to the meeting, Julie Stahli and Kevin McAbee summarized the wetland site rankings and recommendations in a table, found in Attachment 2.

- a. Johnson - GRBFWCO is working on some kind of screen for the Johnson breach to prevent large-bodied nonnatives from entering the wetland during higher flows in future years. Nonnative entrainment through the breach is believed to be the primary reason that razorback sucker were not collected in wetland draining in 2016. Perhaps they could fabricate something similar to what Paul Badame used in the Starvation spillway channel and install it further back from the river in the breach to avoid fouling by debris (lower velocities are present and don’t want it to foul and potentially break/fall over). Krissy thought beavers building on top of a structure like that could be a greater concern at Johnson (Tildon agreed). Tildon said beavers are more likely to try to dam the canal, and also might chew through the net. Cargo net like that used in military transport planes may be an option per discussion with an engineer (might have metal strands woven into it). Tom Chart asked about expected connection flow. Tildon thinks the small gully within the breach may still connect at 12,000 cfs, though it would be a smaller connection than we saw in the past. The full

connection would likely be at 14-15K cfs. Over time, the breach had filled in by fall of 2016, and may continue to create an effective levee. Dave said we need to see any changes to the scope of work, if needed.

**Post meeting addition: Suggestion for Tildon to inherit Paul's screen after Starvation work is finished or borrow it during off-season and use it in both places.

- b. Leota - Dave expressed concern about not pursuing more construction and monitoring at Leota in light of past collections there, available water, federal ownership, and existing facilities. Pete agreed Leota has a lot going for it (especially compared to Escalante, for example). Leota would need a fish screen in the kettle and periodic re-setting, though, as it has so many black bullhead. Matt mentioned any rotenone treatments for floodplain wetlands would need to be added to the statewide treatment list prior to pursuing. Dave said it seems Leota has many leaks, so screening one may not solve the problem. Tom Chart said he doesn't know how much of Leota can be drained, but likes Dave's idea of trying to identify portions we could manage with the downstream gate structure. Dave noted a number of levees need repairs, but Tildon noted those were breached intentionally to manage Leota as a larger site. Tom Chart thought perhaps some control structures would allow flexibility for both endangered fish management and meeting other Refuge goals. Tildon agreed Leota would have to be managed in some smaller units to achieve depth. Leota water from Pelican Lake can be screened. Sheppard Bottom water from Pelican lake can also be screened or not, depending on the route. Dave suggested it would be helpful to have USBR engineers review the site to consider management options (the same group of engineers has done most of the work on the Ouray wetlands and perhaps other sites in the Jensen/Ouray reach). Engineers are willing to do site reviews if they fit within their schedule (wouldn't need to happen before spring; Kevin McAbee suggested this might be coordinated with their work on Sheppard bottom); compliance work and construction would take more planning. In light of the intensive management required at all these sites, Kevin McAbee asked who would manage Leota. Kevin and Dave both thought it would require new resources. Kevin suggested we may need to wait on Leota until we learn more from these other sites, but it makes sense to be prepared to get something done there when the opportunity presents itself. Dave suggested this is a site we will consider addressing some years into the future, although discussions should continue with the ONWR regarding management options.
- ** Post meeting addition: Dave notes we should continue conversations with Dan Schaad to evaluate how often the refuge would be willing to drain and reset Leota – it seems this may be possible at least every 5 years on a rotational basis. He further suggests that a conceptual design be moved forward to increase depth in some smaller units to discourage cattails but provide regular use to endangered fish.
- c. Stewart - >Matt will draft a revised scope of work. With regard to raising the breach elevation, Matt said he doesn't know if area landowners would be amenable (various properties may be inundated with a higher wetland elevation). However, a structure like the one Paul Badame installed at Starvation may be an option for more of a permanent solution than block nets to exclude large-bodied NNF from entering the wetland through the two breaches in the berm (i.e., water gets through at flows > 18-19k cfs). Matt said he thinks there may be considerable flexibility to deal with the cattails (e.g., just spray a "path" to the supplemental water inlet?), so they're considering options. They'll also be modifying the trap to make it more user-friendly.
- d. Old Charlie - Tildon noted this might be our easiest (and highest priority) option, assuming negotiations are completed with the tribe. The wetland already has screens, gates and kettles in place. Pete asked if Tildon's shop would be able to sample Old Charlie if it came back online this year. Tildon said yes, he'd prioritize screened, managed wetlands with fish kettles, etc. Pete

suggested this site may be one where we primarily just manage water levels. Old Charlie has two connected units (outer and inner) and has uncontrolled flooding in a year like 2016. It would be self-contained below average to median flows. Tildon said it might be possible to isolate the inner unit. It also can be operated as a flow-through wetland, but that isn't ideal.

- e. Sportsman's Lake - Matt still plans to follow up on this, but it may have been modified to the point it no longer holds water. Tom Chart suggested this site probably isn't a higher priority than others we're considering so we probably should set it aside. No one disagreed.
- f. Bonanza Bridge - Tildon said that although they've caught larval razorbacks there, it's similar to Above Brennan because it has a large, broad breach which would make it more difficult to manage. Trespassing/public use would be a concern here if we were to consider installing control structures. Tildon doesn't expect it will over-winter fish this year. This is not our highest priority.
- g. Richens/Slaugh - Need basic information on terms of the easement. Low priority for now.
- h. Horseshoe Bend - Tildon hasn't sampled this and doesn't know how long it holds water. This is one of three smaller wetlands in this area; >Tildon will ask Bruce about them. Low potential at this point. **Post Meeting Update: Tildon asked Bruce and was pointed to the Levee Removal Project report from 2002.
- i. Stirrup – see above notes
- j. Above Brennan – see above notes
- k. Baeser Bend - Likely only useful in fairly high water years (e.g., 2011) and is a fairly large non-discrete site that would be difficult to control. Dave said the Reclamation engineers may be able to look at this site Friday, as well.
- l. Wyasket Lake and Pond - Tildon said Wyasket Pond is small, on Refuge land, and has a control structure. Wyasket Lake is very large and on Tribal land and does not have a control structure. Low priority at this time.
- m. Sheppard Bottom - A fish screen will be installed on an internal levee. USFWS will monitor after completion. One unit will be managed specifically for fish, but those fish may be difficult to remove to return them to the river. Whether fish are entrained this year will depend on the construction schedule.
- n. Escalante (Thunder Ranch) - Unlikely to work on this site in the near term in light of nonnative fish, ownership, etc. Pete asked if we can do anything about flooding liability (this liability and the costs of administrative oversight are something we may need to consider for all easement sites that we don't expect to use going forward). Perhaps reviewing the terms of these easements and making recommendations would be an assignment for those managing the easements. >The PDO will discuss this with Ouray NWR (Dan Schaad, Sonja Jahrsdoerfer, and Andrew Pettibone). Tildon noted that the easements may be protecting these floodplains from other development.
- o. IMC? Conduct site visit to determine present condition, potential mgmt. actions. PDO will discuss terms of the lease with Ouray NWR

- p. Lamb property - Tildon said it floods, but is very terraced and doesn't hold water, thus he doesn't see this as a high priority (>PDO will discuss terms of the lease with Ouray NWR [see Escalante])
- q. Grand Valley wetlands - Dave mentioned that these discussions on floodplain management have applicability in the Grand Valley where we have a number of off-channel ponds. Dave said he and Brent Uilenberg discussed building a control structure at Butch Craig, for example. Dale said he and Tom Chart also have discussed this. Many of the Grand Valley sites are deep and would be difficult to drain. Bonytail and razorback have been stocked at Butch Craig for years, but the predator load has eliminated any small excess bonytail stocked there (though razorback have survived). Several others connect at higher water (Beswick's, Jarvis, etc.). Because these sites are pretty high in the system, structures to entrain larvae may not make sense, but we could consider seeding larvae there. Beswick's, Butch Craig, and several of the other sites are gravel pit ponds and generally deeper than Green River sites. Dale noted that Butch Craig's location could make it susceptible to trespassing. The 2016 annual report for Project 126 describes the nonnative and native fish collected in various off channel ponds this year. Dave asked how larval production compares to the Green River; Kevin Bestgen said they see handfuls of larvae compared to hundreds or thousands. Tom Chart asked Katie if she has high densities of larvae around Matheson; Katie said they don't, but they have caught ~800, for example. Dave Speas said we definitely need to consider this. Follow up is needed with Katie regarding density of larvae.

Dave has wondered if some of our nonnative fish management effort would be better spent in managing floodplains. Tildon noted he and Matt have discovered that one wetland like Stewart can take up all of an office's time during operations. If the sites have kettles and are in close proximity, managing two sites may be possible, but three would require additional staff. Matt said another biologist would be needed to cover additional projects, not just additional seasonal staff, Tildon agreed. Dave would like to see scopes of work that would identify what this would cost. Tom Chart agreed the big-picture questions about where to direct resources to best achieve recovery are crucial. Within floodplain management, we seem to be honing in on sites we can manage and reset, so perhaps we need to shift our prioritization to those. Tom asked the committee for their thoughts of differing levels of management, i.e. could there be sites where we continue the Stewart Lake intensive management and others where we only manage water level (and don't collect data, or nearly as much data, to show immediate results). Tom recognized that wholesale release of nonnatives produced in a floodplain is certainly a consideration when / if we did a less labor-intensive drain (essentially pulling the plug and walking away) in the fall which would allow all natives and non-natives into the river. He suggested there might need to be rotational management with an intensive focus on two or three sites each year; less intensive at others. Successful flow and floodplain management will ultimately result in increased abundance of wild produced recruits detected through other monitoring efforts (nonnative fish management, population estimation). It seems all were in agreement that we need more managed (structurally speaking) floodplain sites, but we'll have to figure out how to monitor the biological / physical conditions and results (either by borrowing from other recovery elements, doing rotational management, etc.).

Dave suggested we may need to schedule regular calls to discuss floodplain management. Tom Chart recommended we get USBR engineers' review of Above Brennan, Stirrup, and probably Leota. Meanwhile, if there are changes to Tildon and Matt's scopes of work for these sites, Dave will need those in the January-February timeframe. Tildon said it sounds like Johnson, Stirrup, and Above Brennan would be the sites he'd sample in the fall (also recommend a contingency plan if Old Charlie opens); they would not sample Leota and Escalante. Matt Breen said he needs to change a few tasks in his Stewart scope of work. Pete asked if the Program Director's office may be able to provide more staff support on floodplains going forward and

Tom Chart said he'll have to see. At this point he's likely to replace Jana with a hydrologist who will have their hands full managing water, and working on reviewing/developing/protecting flow recommendations.

5. Review/finalize white paper "Updated floodplain wetland priorities for recovery of endangered fish in the Middle Green River" from Dave Speas – Dave's white paper formed the foundation for much of the Biology Committee's discussion on the recent floodplain tour. It was founded primarily on previous, peer-reviewed studies and it summarizes where the Program has been with floodplain management and recommends future direction. Tom Chart has recommended Dave Speas present this white paper to the Management Committee in the near future as part of an effort to potentially increase our floodplain habitat restoration activities to achieve recovery. Dave re-sent the paper to the Biology Committee on November 30 seeking technical input so that he can finalize it prior to presentation to the Management Committee. Tildon and Pete have provided comments. Kevin McAbee asked if the site visits and follow-up discussions have caused Dave to want to modify the recommendations or the priorities in the report; Dave said his recommendations are pretty broad, but the highest priorities remain the same (though Leota might change). Dave said he would appreciate any feedback/suggestions from the Committee. Pete recommended that once Dave incorporates the comments received so far and today's discussion, this is ready to go to the Management Committee. The group agreed. Tom Chart suggested that we put it on the February 13 Management Committee webinar. Brandon thanked Dave for pulling this together, and said it provides a very helpful update and summary. Tom Pitts suggested that the recommendations should be made more action-oriented. Tom Chart and others noted the main reason to put this before the Management Committee is to recommend to them that we need to consider floodplain projects in our capital projects work plan. >Any additional comments should be submitted to Dave by December 27.
6. Review process for "*Population Estimate for Humpback Chub (Gila cypha) in Desolation and Gray Canyons, Green River, Utah 2001-2015*"(Howard) – The humpback chub population estimate for Desolation/Grey Canyons report was sent to the Biology Committee on November 28th. Because the lead author, Julie Howard, had moved on to a new job, this report slipped outside our normal report review process. A previous draft was peer reviewed by Rich Valdez, Randy Van Haverbeke and Paul Badame. Normally, that draft would have gone to the coordinator first for review, been sent back to the author for changes, and then sent to peer reviewers and Biology Committee at the same time, giving peer reviewers 30 days and Committee members 45 days to comment. The Program Director's office didn't receive a copy of the earlier version that was shared with the peer reviewers, just the latest version that was sent to the Committee as well as "a response to peer review comments" that referenced the earlier version. Tom Czapl has recommended the Biology Committee review period begin December 6 with comments due on January 20, 2017. The Committee agreed.
7. Pending workshops with principal investigators – Workshops are planned with PIs to discuss population estimation, sampling, and related topics (in February 22-24, in conjunction with AFS, and in March, in conjunction with STReaMS meeting). Tom Chart said we may be able to begin discussing these issues for an hour at the January 12 Biology Committee, also.
 - For the March STReaMS workshop, Amy has a request out to the Best Western (same hotel as last year) for a group government rate for 20 rooms from March 13-16. She will let us know when that is a done deal and what the rate will be. She also has a lead on a good room for the March 14th discussion. It will have AV equipment so we can show presentations, but is flexible so we can arrange chairs in a semi-circle or whatever we think makes the most sense to foster discussion and collaboration. She has the computer labs reserved for March 15 & 16 for our STReaMS workshop.

8. Agenda items for January and March meetings – January 12 agenda items will include a few hours to review 2016 nonnative fish work and discuss plans for 2017; initial discussion of population estimates; review of UDWR’s red ear sunfish proposal; and election of a new Vice-Chair (the current Vice-Chair, Dale Ryden, assumes Chair in January). March 6–7 agenda items will include: review a draft revised RIPRAP and assessment and draft FY18-19 Program guidance.
9. Consent item: Review and approve October 24–26, 2016, Biology Committee webinar summary – Approved as written; Angela Kantola will post the final to the listserv (done).

ADJOURN: 12:00 p.m.

Attachment 1: Assignments (not discussed)

The order of some assignments has been changed to group similar items together.
For earlier history of items preceded by an ampersand "&", please see [previous meeting summaries](#).

1. Humpback Chub (population estimates)
& Humpback Chub (broodstock development / genetics)
As identified in the 2012 sufficient progress assessment and requested by the Management Committee, the **Program** will develop an action plan for establishing refugia for humpback chub (avoiding getting bogged down in genetic analysis). Mike Roberts has recommended building in limiting factor/life history studies to better understand what's going on in the system that's affecting humpback chub populations. *After Wade's report is received, a workshop should be held to include discussion of when and where fish would be stocked. Tom Chart recommended outlining questions for a workshop, conducting the workshop, and then finalizing the action plan. 10/27/14: Reclamation awarded contract to SNARRC for analyzing remaining fin clips and completing report (including lower basin data). 1/15/15: data on upper basin chubs will be written up within about a year. The subgroup developed a list of questions for Wade to address (Tom Czaplá sent to BC 1/21/15); >**Melissa Trammell will find and send the plan development proposal document to Tom Czaplá** by January 21 and Tom will send it to Wade with a courtesy copy to the Biology Committee and Kevin Bestgen. (Done). Wade said he will revise the scope of work (done; any comments due by January 29). Additional work pending results from Wade.*
2. Regarding white sucker hybrids, **Harry Crockett** will talk to **Kevin Bestgen** about any further work needed subsequent to the identification guide that Pat Martinez distributed last year. *8/26/14: Ongoing (very complex issue that really deserves a combined genetics and morphological study). This could be put into the next round of Program Guidance (PD's office did) and we should be considering potential outside funding sources, as well, since this relates to more than listed fish. 1/13/16: The 2016 Colorado-Wyoming AFS meeting will have a dry lab workshop on sucker identification and hybrids. Kevin Bestgen recommends a genetics study linked to a morphological study. 3/11/16: The joint meeting of the CO/UT/WY AFS chapters next year may be an appropriate venue to have another mini-workshop on identifying hybrid suckers. 8/22/16: Some support from the AFS chapters/members may be needed for Dr. Bestgen to lead this; Harry Crockett will discuss with Kevin Bestgen.*
3. **Krissy Wilson** will find out if PIT tag data from the San Rafael and Price rivers are being submitted to Travis. *3/4/15: Some has been submitted in past years, but not the most recent year or two; UDWR will submit to Krissy who will submit to Travis by March 15. 5/28/15: Krissy submitted a partial list, but will submit more once the antenna data is available. 7/28/15: Dan Keller will update this shortly. 10/13/15: Krissy said all the San Rafael data have been submitted; **Krissy and Dave** will check with others (Peter McKinnon) about the Price and Dolores river data. Peter and CNHP are aware that all of the antenna data needs to go into STReAMS. 7/22/16: Data are being provided to STReAMS, but not yet automatically loaded (still building that interface).*
4. Kevin McAbee suggested the **database manager's** first assignment should be summarizing and analyzing the STReAMS bonytail data, to provide the committee and hatcheries with an initial idea of the number of fish that remain in the system over time, and the characteristics of those fish. The Committee agreed.

5. The Committee endorsed an experiment to tag smaller hatchery razorback and bonytail (for fish coming out of floodplains); >**Tom Czapla** will investigate which hatchery could do this. **Tom Czapla** will check the BO written for scientific take permits to see if any change in permitting would be required. *1/13/16: Matt Fry is experimenting with tagging smaller fish and will document this work for the Committee in the Ouray NFH 2016 annual report.*
6. **Angela Kantola** will make a note for the FY18-19 work plan review it would be good to have more introduction of new or significantly revised scopes of work from PIs (perhaps on a webinar a week in advance of the work plan review meeting). *Pending*
7. **Darrel Snyder** will send the “Fishes of the Upper Colorado River Basin” information that includes a map of the UCRB with boundaries for its 8 HUC (4-digit) sub-basins and a table summarizing the recent (past decade) distribution and general relative abundance in lotic and lentic habitats within those sub-basins information to Tom Czapla (*done*). The **Program Director’s Office** will maintain this information on the Program website (*pending*).
8. **Biology Committee members** can share any thoughts/comments on proposed graduate research projects back to the Committee and the Committee will track as a future agenda item to determine any next steps or specific projects we want to focus on.
9. **Tom Czapla** will schedule a follow-up call of Dave Speas, Kevin McAbee, Tom Chart, and Kevin Bestgen to focus the topics related to a potential workshop/s to discuss data collection and use from Colorado pikeminnow abundance information. *Pending*.
10. Floodplain follow-up assignments:
 - In light of the planned cattail treatment at Stewart Lake, **Dale Ryden** will check to see if his shop has information on effects of the herbicide Rodeo on fish. This hasn’t been used at Ouray, but Dan Schaad thought Refuge Biologist, Diane Pentilla, may have some knowledge of it
 - **Matt Breen** will check into the possibility of filling the Stewart Lake low-spot breaches with dirt rather than netting them in the spring. Matt also will confirm current ownership of Sportsman’s Lake and recommend where to go from there.
 - **Tildon Jones** and **Kevin Bestgen** will discuss the potential to use light trap sampling to measure larval drift densities and make recommendations to the Committee.
 - **Matt Breen** will prepare revised scope of work for Stewart Lake.
 - **Tildon Jones** will ask Bruce Haines about the small wetlands in the Horseshoe Bend area.
 - The **Program Director’s Office** will discuss terms of the Escalante wetland and Lamb property leases with **Ouray NWR (Dan Schaad, Sonja Jahrsdoerfer, and Andrew Pettibone)** . Tildon noted that the easements may be protecting these floodplains from other development.
 - Any additional comments on Dave Speas’ floodplain sites white paper should be submitted by December 27.

Attachment 2: Floodplain Wetland Ranking for FY2017 activities

Wetland	Priority	Ownership	Access	Control Structure	Screen (non-native exclusion potential)	Fish Kettle	Supplemental Water Source	Can drain and reset?	Needs Improvement	Can Improve?	Action Items in 2017
Johnson Bottom	1 - Current	Refuge	Yes	Yes	Yes	Yes	Yes, pumping	Yes	No	Yes	Continue to actively manage wetland with spring light trapping and fall outlet monitoring. Pump consistently. Add nonnative exclusion to breach.
Stewart	1 – Current	UDWR	Yes	Yes	Yes	Yes	Yes, Irrigation	Yes	No	Yes	Continue to actively manage wetland with spring light trapping and fall outlet monitoring. Manage cattails, potentially install permanent screen over breach location. Potentially transition to rotational management.
Old Charlie	2 - High	Ute Tribe	No	Yes	Yes	Yes	No?	Yes	No?	No?	Refuge staff will continue to work with the Tribe to negotiate easement and access. If access is granted, spring light trapping and fall outlet monitoring will become a priority. Modde has pumped in previously. Clay layer may have been breached which causes the wetland to drain.
Sheppard Bottom	2 - High	Refuge / Ute Tribe	Yes	Planned for portion	Planned for portion	No	Yes, Pelican Lake	Maybe not	Yes	Yes	Renovate property for active management.
Stirrup	2 - High	BLM	yes	no	no	no	pumping?	no	yes	yes	Candidate for BLM managed site, with improvements completed by BOR. Jerrad Goodell will work with Matt and Dave, UDWR, BLM, and BOR engineers to evaluate feasibility.
Above Brennan	2 – High	BLM	Yes	No	No	No	Pumping?	No	Yes	Yes	Candidate for BLM managed site, with improvements completed by BOR. Jerrad Goodell will work with Matt and Dave, UDWR, BLM, and BOR engineers to evaluate feasibility
Leota	2 - High	Refuge	Yes	Maybe?	No	Yes	Yes, Pelican Lake	Difficult, but yes	Yes	Yes	USBR engineers should evaluate to determine steps necessary to make Leota or parts of Leota a functioning wetland for endangered fish.
Wyasket Pond	3 - Medium	Refuge	Yes	Yes	No	No	No	Yes	Yes	Yes	Possible for future development but low priority.
Escalante (Thunder Ranch)	3 - Medium	Private with easement	Yes	No	No	No	No	No	Yes	Maybe	Maintain spring light trapping.
Matheson	3 - Medium	TNC	Yes	No	No	No	No	Yes?	Yes	Yes	Continue pursuing use at RZB wetland through UDWR Moab.
Bonanza	4 - Low	BLM	Yes	No	No	No	No	No?	Yes	Yes	No action proposed, accessible to public

Bridge												
Baeser Bend	4 - Low	USBR?	Yes	No	No	No	No	No	Yes	Yes	USBR engineers should evaluate to determine potential actions.	
Lamb Property	4 - Low	Private with Lease	Yes	No	No	No			Yes	Yes	No action proposed	
Grand Valley Wetlands	4 - Low	Multiple	Yes	No	No	No	No	No?	Yes	Yes	Tour Grand Valley Wetlands to determine possibilities. Nonnative presence is significant and may be located too far up in the basin to serve as reproductive wetland.	
Sportsman's Lake	5 - Low	Private	No	No	No	No	?	?	Yes	No	Matt Breen will follow up with owners, no action proposed in wetland at this time	
Richens / Slauch	5 - Low	Private	?	No	No	No	?	?	Yes	No	Assess easement information to determine actions in future years.	
Horseshoe Bend	5 - Low	?	?	No	No	No	?	?	?	?	Tildon Jones will research characteristics of this wetland.	
Wyasket Lake	5 - Low	Ute Tribe	?	No	No	No	No	No	Yes	No	No action proposed.	
IMC	Low	easement										