

JARBIDGE RIVER BULL TROUT RECOVERY TEAM

Draft Meeting Summary

Dates and Times: December 18, 2007 – 8:00 a.m. – 4:30 p.m. (PST)
December 19, 2007 – 8:00 a.m. – 12:30 p.m.

Location: Great Basin College, Elko, Nevada

Recovery Team (RT) Members Present: John Elliott (NDOW), Kate Forster (BLM), Jim Harvey (USFS), Gary Johnson (NDOW), Allen Taylor (FWS)

RT Members Absent: Sonny Buhidar (IDEQ), Rich Haskins (NDOW), Maija Meneks (USFS), Rob Ryan (IDFG), Rob Sharpnack (IDEQ), Scott Stanton (IDEQ), Selena Werdon (FWS)

Others Present: Brady Allen (USGS) via conference call, Pat DeHaan (FWS) via conference call, Ted Koch (FWS)

AGENDA and DISCUSSION NOTES

(not listed in exact order discussed)

1. Revised RT Representative List: The RT briefly discussed the representative list. A few changes to the list were noted.

- Laurie Sada has accepted the Deputy Field Supervisor position with FWS Klamath Falls.
- Selena Werdon has accepted Laurie's previous position and will not regularly attend RT meetings.
- Tim Dykstra (Duck Valley Shoshone-Paiute Tribes) has expressed an interest in participating in RT meetings and has been added to the contact list.
- Nate Fisher (Idaho OSC) expressed an interest in keeping informed of our meetings and has been added to the list for informational purposes.

2. Current Status of PIT Tag Antenna Equipment: The RT briefly discussed if we should leave the PIT tag detectors in the field through the winter. There have been concerns that the transceivers lose power and can be damaged if they freeze. We talked about the various options, which include leaving all antennas and transceivers in place and risking damage, leaving just the confluence site in place, pulling all antennas and transceivers, and pulling all transceivers and pass-through antennas but leaving pass-by antennas in place (to enable quick restart in March). The last data download was at Thanksgiving.

- USGS recommended that the transceivers and pass-through antennas should be pulled until March.
- The RT thought the threats of ice damage to antennas and freezing of transceivers should be gone by late March and peak flows would probably occur in May. If the antennas are replaced in March we can miss the threat of ice and only need to be concerned about damage from high flows.
- The RT decided to pull the transceivers and the pass-through antennas to avoid ice damage in the winter when fish are not likely to be moving. An additional consideration is that there is only about 3K available to replace damaged equipment. The RT decided to restart antenna operation after freezing

temperatures but before high flows (and check antenna operation before plugging transceivers in). The RT also decided to convert the pass-through antennas at the confluence site and Murphy site to a pass-by configuration in 2008.

- Kaleb with NDOW will travel to Jarbidge on Dec. 19 and remove transceivers and most of the batteries. Kaleb will join USGS staff on January 4 to remove all other equipment except pass-by antennas. All pulled equipment will be stored at the USGS lab in Cook, WA.

3. PIT Tag Antenna Operation 2008: Allen explained that FWS extended the funding agreement with USGS to allow for approximately monthly USGS trips to Jarbidge from approximately April through December 2008 to conduct antenna maintenance and troubleshoot equipment as necessary. Funds were also allocated for USGS completion of an addendum to the final report which would include data collected during 2008. Additionally, the FWS hired James Harter (starting Jan 9th) through the Great Basin Institute to assist with field work in 2008, including Jarbidge antenna maintenance. The RT was confident that between USGS, NDOW, USFS, USFWS, and BLM, we would be able to fill out the schedule for 2008 antenna maintenance. The RT decided to plan and schedule antenna maintenance around March 2008.

4. Preliminary Results of 2007 Bull Trout Surveys and Monitoring: Brady Allen with USGS joined the RT (on conference call) to discuss the preliminary results of 2007 bull trout surveys and antenna operations, referencing a set of figures provided. See the following report: USGS Jarbidge River Bull Trout Project, Draft Summary/Results, December 2007). A few of the highlights included:

- Mark/Recap on Jack Creek above confluence with Jenny Creek resulted in an approximately 33 percent capture efficiency, which Brady thought was applicable to all other streams surveyed except Jack Creek below the confluence with Jenny.
- Much fish movement between Pine Creek and the West Fork was detected. PIT tag antenna detections indicate that temporal barriers may occur on the West Fork immediately upstream of the confluence with Pine Creek.
- PIT tag antennas showed more downstream movement of bull trout in July than the RT expected. Concerns were raised that these fish may become lost to the DPS population due to lethal summer water temperatures in the lower basin.
- PIT tag antennas are not proving to be as efficient as we had hoped, however preliminary detection information shows more than a dozen fish detected on more than one antenna array. USGS presented preliminary information on movements of several individual fish.
- Length frequency analysis can be used to determine age for the first two or three year classes, however resolution decreases substantially beyond that. Spawning age is still not known for Jarbidge fish. Fish aging technology for char is limited (fin ray cross-sections, otoliths, scales). Recaptures and antenna detections may be our best source of information for determining age of larger fish.
- Areas where USGS did not survey all high-density bull trout habitat include the headwater reaches of both Pine Creek and the East Fork Jarbidge River, totaling roughly 500 meters of stream. Brady roughly estimated that hundreds of more bull trout were not detected.

- USGS expected to have a revised report in Feb 2008.
- The 2007 surveys and monitoring were a huge success, thanks to both a tremendous effort by USGS and major contributions by the various RT agencies!

5. FWS 2006 Genetic Analyses: Pat DeHaan with the FWS Abernathy Fish Technology Center joined the RT to discuss the results of genetic analysis of bull trout tissue samples collected during USGS surveys in 2006 (on conference call). See the following report: Genetic Analysis of Bull Trout in the Jarbidge River Watershed, Nevada, Idaho, 2007 Progress Report, 11/29/07. A few of the highlights included:

- Most of the genetic samples analyzed were from the East Fork.
- Results of samples collected from fish in Dave Creek indicated that those individuals were closely related. It is yet unclear whether this result is an artifact of collecting samples from a limited spatial scale or whether the Dave Creek population has experienced a bottleneck. The 2007 samples should clarify this.
- Most of the fish movement is within the East Fork and the West Fork, not between the two forks.
- Fish in Pine Creek and the West Fork are identified in the draft recovery plan as two separate local populations, however genetic results indicate a high degree of fish movement between them. This is also supported by the PIT tag data. Analysis of samples collected in 2007 should provide greater resolution here, but the RT should begin considering whether these two local populations should be considered one.
- Pat recommended that running about 60 samples per stream should provide very good resolution of the genetic picture in the Jarbidge. Additional samples (over the 60 per population) should be focused on the known movers and on achieving spatial differentiation. For example, we could be run ones for populations where we are seeing significant fish movement (West Fork and Pine Creek), for individual fish detected on one or more PIT Tag antennas, and/or for individuals contacted in areas with few samples collected (i.e. Cougar Creek). We also may want to focus on individuals tagged in the lower East and West Forks.
- The next task will be to do a population estimate for Jarbidge bull trout.
- A phylogenetic analysis will also be done to put the Jarbidge bull trout in context of bull trout rangewide.
- FWS expects to have the next draft report in late March or early April, 2008.

6. Renewed Effort to Complete Bull Trout Rangewide 5-year Review: Ted Koch gave an overview on FWS plans to finish the 5-year status review for bull trout throughout its range in the U.S. Ted will be the point of contact for the FWS (Boise) for this effort.

- It's a high priority for the FWS to complete the 5-year status review. This effort could result in a "relisting" for some populations of bull trout. There is some urgency to complete this process due to litigation brought on the FWS in relation to how population segments were grouped and how critical habitat was designated for bull trout and the documentation of their findings in the administrative record.
- The 5-year review process will include an evaluation of potential distinct population segments. Bull trout are currently listed coterminously throughout its

range in the U.S.; however it is likely that a recommendation for listing multiple DPSs will result from the 5-year review.

- Reclassification of these DPSs would occur with input from the States and Tribes and will have a public review process. The Service plans to compile and consider new information and make their recommendations for listing significant portions of the range of bull trout by the end of April 2008. Jarbidge bull trout genetics collected in 2007 will likely be included, even if a draft report hasn't yet been completed.
- Agencies will be asked to provide the most recent data they have on the status of bull trout within their administrative area for consideration on the status review (i.e. habitat data, temperature data, population data, grazing management/fences, culvert/barrier corrections, road reconstruction to improve riparian condition, etc).
- Jarbidge bull trout DPS may be ahead of the process in that threats have already been identified, good population and genetics data are available, numerous restoration actions have occurred, and management changes have taken place to reduce threats to bull trout and their habitat.
- Once recovery plan goals have been met, the FWS may consider implementing ESA 4(d) rules (fishing, etc.) that would allow greater management of bull trout by the states.
- There will be policy and technical team meetings in Boise, ID on January 15-16 to discuss the Service's plans with the various agencies.
- Ted recommended the RT prepare a 2-page flyer on recovery actions we have taken or are currently implementing. The audience would be the FWS, RT, and our partners.

7. RT Review of Progress on Revised Recovery Criteria: The RT spent roughly a third of the meeting reviewing progress on, and further developing, threats-based recovery criteria for incorporation into the recovery plan. Recovery criteria for threats that fall under Listing Factor A (present or threatened destruction, modification, or curtailment of its habitat or range) represent the majority of criteria, and have now been fleshed out. The RT will review/comment on criteria developed and provide edits and recommendations for threats-based recovery criteria for the other four listing factors (see timeline below).

8. Other Recovery Plan Revisions and Timeline:

Allen briefly outlined a timeline for revising the Draft Recovery Plan.

- The RT agreed it would be good to get a revised draft of the recovery plan out so it can be considered in the 5-year review and subsequent relisting actions.
- What remains to be completed is: 1). Finish criteria revisions, fix formatting problems that resulted from conversion of the Plan from Wordperfect to Word, incorporate new information (contaminants report from Entrix, survey and monitoring info from USGS and NDOW, genetics data), and generally update the plan. The FWS hopes to have this done early in 2008. To accomplish this, the following actions need to occur:

- Allen will send out the rough draft of threats-based recovery criteria on Dec. 20th. The RT will review criteria, flesh out remaining criteria (including population-based recovery criteria), and get to Allen by Jan 22nd.
- Allen will ask USGS to prepare an abstract summary of the survey/monitoring results and ask the FWS Abernathy Lab to prepare an abstract summary of the genetics data.
- Allen will correct formatting problems, incorporate previous comments and edits, incorporate new genetics and survey information, and incorporate revised recovery criteria into the plan. Allen will then send out the entire draft plan to the RT for review around January 25th. The RT will provide comments back to Allen by February 25th.
- Allen will make edits to the Plan, send back out to the RT for a very brief review, incorporate final comments and then send to the FWS Region 8 office for Regional review of the Plan. Note that Nevada was previously considered part of the FWS CNO office, within FWS Region 1. As of late 2007, the CNO office became an independent FWS Regional office, Region 8.

9. Entrix Contract Program: Allen gave the RT a brief update on the status of the FWS contract with Entrix.

- Entrix collected water and sediment samples and deployed temperature and invertebrate settlement monitoring equipment in the vicinity of the adit at Elkoro Mine in late 2006. The FWS has commented on a draft report and expects to receive the final report in early 2008. The report will be posted on the bull trout website once completed.
- The primary constituent of concern in both sediment and water was iron. Other constituents of concern in the water (zinc and manganese) and sediment (zinc, silver, arsenic, and manganese) had elevated concentration levels in the mixing zone of the adit outflow, but were significantly reduced downstream of the mixing zone. None of the data analyzed in the study suggest that habitat restoration under consideration approximately ¼ mile downstream in downtown Jarbidge would be affected by the adit discharge.
- The FWS has received two stream channel restoration/bank stabilization proposals from Entrix. One includes extensive rip-rapping and the other includes relocation of the stream channel thalweg away from an eroding bank. Both proposals include three instream grade control structures. Both would require substantial funds (NRCS or OSC may be possible source), with the proposal to relocate the thalweg being more economical.
- The RT had concerns about both proposals, mostly that they covered extreme opposites of the restoration spectrum. In addition the team questioned the wisdom of relocating the stream channel through a tailings/waste rock pile.
- The RT would like to see a restoration proposal that is somewhere in the middle of the first two proposals, and includes more passive restoration techniques and bioengineering, such as rock barbs to passively move the thalweg away from the eroding bank, and willow or juniper revetments to protect eroding banks and trap sediment. Rock barbs placed in the West Fork by the USFS have thus far proven effective and should be considered. Allen will discuss this with Entrix.

- Since private land would be affected by the channel restoration, the RT recommended to have a meeting (~May 08) with appropriate agency representatives to identify resource concerns and possible funding sources, and develop a solid restoration plan. The RT would then approach private landowners with that plan and determine interest and next steps.
- The RT also noted that Katie Fite has requested to review the Jarbidge Road reconstruction work completed by the USFS in 2007. The USFS will be scheduling a field tour with her in the spring/summer of 2008.

10. Updates on Other Projects:

Murphy Complex Fire Rehab Update - Kate

- The IDT for the fire rehab developed a variety of seed mixes and application methods to reseed and stabilize the burned area.
- For the most part the seed mixes were native but seed availability and input from the public varies the seed mixes in some areas.
- The weather allowed the BLM seed crews to work until mid December and much more acres were completed than the IDT originally thought could be completed.
- Additional seeding will be completed in the spring 2008 (aerial and ground).
- Fire rehab crews also installed erosion control features in several of the burned tributaries to redband trout streams in the Jarbidge foothills.
- If the RT would like any specifics on the rehab efforts they can contact Kate.

Jarbidge RMP Update - Kate

- Due to the Murphy Complex Fire, progress on the Jarbidge RMP was delayed as per direction from the Idaho BLM State Office. This was done so the RMP team could focus on the immediate need for fire suppression, resource advising and developing the ES&R Plans.
- Beginning in January 2008, the RMP Core Team will be once again working on the RMP as a top priority. The Team expects to be working on the RMP four days a week until sometime in June.
- The BLM State Office made some revisions to the Alternatives that had been developed by the RMP Core Team and provided input to the Jarbidge staff on December 17th. The most significant change was the addition on one alternative that would significantly increase fire and fuels management and would be using targeted livestock grazing as a tool to manage fuels.
- The emphasis for the RMP Team for the next several months will be to complete Chapters 1 (Purpose and Need), 2 (Alternatives), and 3 (Affected Environment) of Draft EIS and continue to gather information to be forwarded to the contractor for the preparation of Chapter 4 (Analysis of Affects).
- Kate will continue to provide the RT with updates on the status of the Jarbidge RMP. Basically all of her and Dan Armichardy's time will be committed to the RMP until June.