JARBIDGE RIVER BULL TROUT RECOVERY TEAM
Draft Meeting Summary

Dates and Times: February 27, 2007 – 8:00 a.m. - 4:30 p.m. (Pacific)
February 28, 2007 – 8:00 a.m. - 12:30 p.m.
Location: Conference Room, Fish and Wildlife Service, Reno, Nevada
Recovery Team (RT) Members Present: John Elliott (NDOW-Elko), Kate Forster (BLM-Twin Falls), Jim Harvey (USFS-Sparks) *1st day only*, Rich Haskins (NDOW-Reno), Gary Johnson (NDOW-Elko), Rob Ryan (IDFG-Jerome) *via conference call*, Laurie Sada (FWS-Reno) *1st day only*, Allen Taylor (FWS-Reno), Selena Werdon (FWS-Reno)
RT Members Absent: Sonny Buhidar (IDEQ-Twin Falls), Maija Meneks (USFS-Elko), Scott Stanton (IDEQ-Twin Falls)
Others Present: Matt Mesa (USGS-Cook, WA)

AGENDA and DISCUSSION NOTES

(*not listed in exact order discussed*)

1) **Introductions and Changes to Draft Agenda**
Additional agenda items were added (included below) while waiting for Matt Mesa to arrive from the airport.

2) **Revise RT Representative List**
Allen Taylor is taking over from Selena as the FWS's RT co-lead.

3) **Recovery Implementation Project Updates**

Jarbidge Mines Project

FWS has a conference call with Entrix (contractor) scheduled for March 1 to discuss the lab results of water and sediment sample analyses. In an earlier call to FWS, Entrix reported that the lab accidentally contaminated the samples for Zinc testing.

Based on the October 2006 survey of the stream channel morphology within the Phase I project area (Elkoro mine site to Trading Post bridge), Entrix has developed two alternatives for stream channel and bank restoration. Both alternatives provide for developing three pools (using submerged rock V weirs), as well as reducing stream bank erosion along residential properties. Alternative 1 involves moving the existing river channel east towards the mine site and creating a vegetated floodplain in the previous channel location. Alternative 2 leaves the existing channel in place, but incorporates rock-armored stream bank protection with interstitial plantings. Allen passed around a set of engineering plans for the two alternatives during the meeting. Allen will e-mail copies of the plans to all RT members with comments due in 2 weeks. Cost estimates for implementing the alternatives were $220,000 and $330,000 for Alternatives 1 and 2, respectively. Most of the expense is associated with obtaining rock. Jim noted that most of the rock for the USFS's Jarbidge Canyon road project was obtained from BLM-managed lands due to existing BLM cultural

resource clearances.

Gary and Allen observed new boulders placed in the river at the bend in the upstream portion of the project area during a field trip last week. These boulders may deflect flows towards homes on the opposite bank and contribute to existing bank erosion.

Genetic Sample Analyses

Based on cost estimates and use of the latest BT genetic markers, FWS selected the Abernathy Fish Technology Center to process the BT fin clips collected by USGS in 2006, as well as some NDOW samples collected in 1999 from the upper EFJR and Jack Creek. A Scope of Work has been written and results will be available by May 31, 2007, if not earlier. RT members information on how tissue samples should be stored (*e.g.*, percent ethanol).

USFS's Jarbidge Canyon Project

Jim invited the RT members and coworkers to participate in pole cutting (willow, cottonwood, etc.) along the WFJR starting near the USFS boundary and working upstream. Activities will occur during the third week of March. USFS's Lucky Peak Nursery will grow out plant specimens from these poles for use in revegetation of stream banks along the road.

The USFS's contractor has one WFJR bridge left to replace. A Bailey bridge has been installed at the former Deer Creek bridge site. This site has potential soil compaction issues. Jim invited all RT members, especially NDOW, to participate with USFS engineers on field trips to review completed road work before and after the high spring flows this year. The RT also recommends that USGS be invited to attend the field trips in May/June.

Atna Resources Mineral Exploration Project

Jim noted that Atna is proposing further exploration and target development activities that could affect Jack Creek and the EFJR. The USFS is holding a Level 1 Team (consultation streamlining) meeting on March 15 (9:00-12:00) at their State Office. Jim invited NDOW to the meeting, which will also be attended by Atna representatives.

4M Mine Cleanup

Jim reported that USFS may schedule cleanup of the 4M Mine site on the WFJR this year. Ken Maas in the State Office has the lead for the project.

USGS Surveys and Long-term BT Monitoring

2006 Surveys

USGS has prepared an executive summary of the fish data from their 2006 field work; no habitat data are included. However, habitat data have been graphed out and fish/habitat associations and fish movement data are reported. In summary, from mid-July to mid-September 2006, USGS surveyed over 44,000 m of stream using

electrofishing. This averaged out to 1-2 miles of stream electrofished per day. Three general habitat groupings used were: 1) pools; 2) smooth, non-pools (glides); and 3) rough, non-pools (riffles). Approximately 21.4 percent of BT captured were in pools. More small BT were caught in upstream areas. Five fish movements were detected by antennas in November 2006. These BT measured 147-310 mm. Ratios of small to large BT were 60-40 or 70-30. About 10 BT were observed but not captured during sampling. The antenna systems ran, in tune, nearly continuously once in place. BT movements were recorded during dusk or overnight. To date, only approximately 75 percent of the antenna data has been reviewed for BT records, so additional movements are possible. USGS needs to look at weather and flow conditions in November 2006. BLM has downloaded data from 12 temperature loggers, which have already been redeployed. Kate noted that BLM can adjust the temperature logger locations to be at the exact antenna sites. USGS will inform BLM of their spring field trip to install the antennas, so BLM can relocate the loggers at that time. The RT is especially interested in obtaining length-frequency data and scale age data relative to developing the recovery criteria for the draft recovery plan.

2007 Surveys

USGS plans a different staffing approach for the 2007 surveys. They are looking to station four staff in either Twin Falls or Jarbidge to avoid the loss of field time due to travel. USGS is currently advertising for seasonal positions. Brien Rose will also assist on the Jarbidge project again this year, as available. One or two pack trips into the Jarbidge Wilderness will be planned. Maija is the USGS's contact for scheduling use of USFS's pack animals. USGS also bought an ATV using their own station funds for the Jarbidge project.

USGS needs to have at least one person (two ideal for safety considerations) dedicated to antenna maintenance (replace batteries and download data) on a weekly basis. Maintenance of more antennas this year could take 2 days per week. NDOW noted that their radio technician lives in Jarbidge and might be available to assist on weekends. Brien and Kyle will go to Jarbidge to reinstall the existing and new antenna equipment asap. The RT determined that it is worth the risk of equipment loss to try and keep the antennas operational through the high flow period (May-June) in 2007 to try to capture upstream BT movements.

Due to new USGS policies on purchasing non-FCC approved radio-frequency devices, USGS is no longer able to order the multiplex antenna receivers. FWS already transferred money to USGS for purchasing two of these units for 2007. FWS and USGS will work out the details of how to modify the existing interagency agreement, so funds are available for FWS to order these two units asap.

USGS will reinstall the three 2006 antennas. There was some discussion of moving the WFJR site from near Deer Creek further downstream to just upstream of the Buck Creek confluence. Matt will discuss this with Pat Connolly when he returns from New Zeeland and inform the RT of USGS's position on the information costs/benefits of such a move. FWS will check with Three Creek Highway District on the status of

the bridge replacement in Murphy Hot Springs, which may affect antenna placement in 2007.

New antenna sites discussed and generally agreed to by the RT were around Pine Creek, Dave Creek, and the EFJR at Robinson Hole, although the specific placement details may vary, as described below. Also, the private landowner will need to be contacted for approval of antenna placement at Robinson Hole and potentially Dave Creek.

- A multiplex unit will run a total of six antennas in combination on the WFJR and/or Pine Creek near the mouth using either: 1) bracketing the mouth of Pine Creek with antennas on the WFJR (one pair upstream of the confluence; two pairs downstream) or 2) bracketing the mouth of Pine Creek with antennas on the WFJR (one pair upstream and downstream of the confluence) and placing two single antennas in Pine Creek itself. Jim and John noted that the RT can also determine BT stream fidelity using recaptures and genetics data.
- A small "cheese block" antenna unit with a solar panel will run a single antenna on Dave Creek. Potential sites on Dave Creek are either at the road crossing on private land or at the livestock crossing further downstream on BLM land at Morgan Draw. The RT agreed there are benefits to having the antenna several miles further downstream by using the BLM site even though ATVs could not be used to go down to the stream from the canyon rim.
- A multiplex unit could be used on the EFJR at Robinson Hole. An ATV could be used to easily access this site and driven all the way from Pole Creek Guard Station on existing dirt roads.

RT priorities for electrofishing in 2007 include surveying areas not reached in 2006 or not adequately surveyed due to encountering spawning BT. Gary will provide USGS with UTM coordinates for potential fish barrier locations. USGS will prioritize surveys of the upper EFJR (to the forks), all of Slide Creek and tributaries, Cougar Creek, and Fall Creek with its two tributaries. Next on the RT priority list are upper Pine Creek, upper Jack Creek, and the upper WFJR above Sawmill Creek. The RT also prioritized a mark-recapture survey of Jack Creek due to the high potential for future disturbance in this watershed (mine exploration) and needing to create a solid population and habitat baseline for ESA section 7 purposes. The RT is also interested in a spawning surveys of Jack Creek. USGS will send the RT a field schedule in March/April. They will start electrofishing surveys in mid-June if flows permit. USGS needs to contact USFS (Maija) regarding use of USFS packer and schedule them for 2 weeks in July (after the 4th).

Future Long-term Monitoring and Surveys

The RT requested input from Matt on long-term monitoring strategies to evaluate population trend. His suggestions for RT consideration were to either implement single-pass "cosmic" shocking on a small scale each year (with all fish weighed and measured) or to have standardized "reference" reaches (100m, 300m, or 500m) on each stream that would be surveyed at the same time each year with a mark-recapture

(one stream per year equals a 1-2 day effort; multiple streams per year would be a week-long effort). Other things to consider would be to do length-frequency and age-class analysis every year with a population estimate every 5 years. Matt recommended the RT review a 2006 article in either TAFS or NAJFM by Gabe Temple and Todd Pearsons.

The issue of funding for continued surveys (2008 and beyond) was discussed. The importance of continuing surveys and monitoring is related to the fact that any smaller tagged BT (65-75 mm) which are migratory will start to move in 2 years. Matt noted that USGS is already providing a ~25 percent cost share on this project to date due to USGS policies on overhead charge reductions for other DOI agencies like FWS. DOI agencies still do not have a budget for FY2007. If internal end-of-the-year funding becomes available in the future (~fall 2007), the RT's FWS members will try to obtain some additional funding for the BT surveys. Kate offered to initiate a Challenge Cost Share where funding could be pooled from several agencies. Jim indicated that USFS could potentially participate in a cost share (*e.g.*, $5-10,000) starting in October, which could go towards field work and report preparation. NDOW's funding through section 6 of the ESA is essentially flat each year, so there is little or no opportunity to obtain new funding for BT. However, there is some potential to swap funding around within section 6. USGS's Quick Response and Science Support Programs have small amounts of money available, but with overhead costs would net only $8-10,000, if even selected at the FWS's regional/CNO office level as a priority. A priority task for the RT is to work with USGS to develop a budget for continued survey and monitoring efforts to present to agency managers and attempt to obtain additional funding.

Matt indicated that if no additional funding is available starting in October 2007 alternate arrangements will need to be made to maintain the antenna stations. There must also be funding to replace any damaged antennas. If other agencies are going to perform the maintenance, USGS will need to provide training and SAS software may need to be purchased to analyze the downloaded tag data. USGS has a core group of experts that perform this task. The FWS will check into the availability of Fisheries Program personnel to provide long-term assistance to the RT, if needed. NDOW also has an employee who just graduated that is helping Trout Unlimited for 2 days a week with similar work on Lahontan cutthroat trout. NDOW could potentially pick him up to help USGS with early (April/May) and late fall antenna maintenance. These conservation aide positions are usually for 9 months.

4) <u>Recovery Criteria</u>

The RT continued discussions on developing recovery criteria from the last meeting. There was general agreement to proceed with the FWS's new threat-based recovery criteria format, as per the Showy Stickseed RP. Rob noted that through this the RT's focus is shifting away from abundance estimates and that the RT needs to look at the data being collected. For example, these data include age class information, length frequencies, growth, biomass per area, presence/absence of BT in stream reaches, CPUE, distribution by habitat type (spawning/rearing/FMO) and conditions, migratory

life forms and movement, and genetic variability of local populations. Although they do not focus specifically on abundance, together they do address some level of the existing (May 2004) draft recovery criteria (abundance, distribution, connectivity, trend). Also, most threats in the draft RP are habitat related. Looking for "no net loss" of physical habitat for distribution, and therefore, the RT needs to identify where we expect to find BT. Rob noted that Tim Burton previously provided a publication on sample size requirements for determining presence/absence of BT via various sample methods. The RT may wish to include in the criteria that local populations exhibit stable or increasing distribution over a certain number of years and also correlate age structure over a range of time. One associated task for habitat condition suitability would be to keep temperature loggers in place at stream mouths within the core area.

Allen will take the old draft RP and the threats table developed by the RT to take the first step in developing recovery criteria for review by the RT. Laurie will check with the RO/CNO on the RT's ability to have "place holders" in the criteria for items where we are waiting for data (*e.g.*, genetics). Rich suggested running an early draft of the criteria in the new format past FWS RO/CNO staff.

Rich noted that the draft RP needs to clearly place historical watershed habitat conditions in the past. Selena recommended incorporating a statement to the effect that the RT does not expect historical habitat conditions affecting BT populations to deteriorate further. Rich also pointed out that the criteria need to be based on what is needed for recovery goals and then activities switch into a normal species conservation mode. We want to get to a point where human-caused effects are not causing a reduction in the natural range.

Selena mentioned the lack of information from current surveys on overwinter habitat use. Gary does not think overwintering is an issue for BT because redband are abundant in lower reaches of the watershed. Matt noted that radio telemetry tags are the way to address this issue. Tags suitable for the sizes of adult BT present can last 6 months now. Ten to 12 BT could be tagged from each stream. Tracking these fish would be an effective use of staff hired to maintain the antennas during the remainder of their week late in the year. Another initial way to address overwintering is with year round temperature monitoring.

5) Other Topics Discussed:

Draft RP Due Date

Selena and Laurie approached Bob Williams (FWS Field Supervisor) about potentially extending the draft RP due date beyond May 2007 due to potential delays in receiving genetics data. The request for an extension was denied. However, maintaining this schedule has several advantages including being the first revised draft RP for BT to go through FWS regional-level review, and potential publication in summer 2007 would maximize stakeholder input.

FWS's Draft Threats Analysis Guidance

Laurie provided copies of FWS's latest (Oct. 2006) internal agency guidance on evaluating threats to the RT for use in preparing the draft RP.

8) RT Member Assignments

ALL RT MEMBERS SHOULD COME TO THE NEXT MEETING WITH POPULATION-BASED RECOVERY CRITERIA EXAMPLES

- **Dave Creek Land Acquisition**
  - NDOW is still pursuing acquisition, but has no updated information for the past 2-3 months. Bert Brackett is still pursuing an appraisal on his own.
- **RP Edits**
  - Allen has been working on incorporating previous RT edits to the draft RP edits. He is converting the draft RP to Wordpad and then back into Word to eliminate old WordPerfect formatting issues. All track changes and other edits will disappear then, so they are being fixed now. The Executive Summary will also be reformatted into the new threats-based format. Allen will be using six local populations as place holder wording.
- **USGS 2007 Work Starting**
  - RT members should send updates on weather/river conditions to USGS if visiting Jarbidge over the next several weeks, so they know when to make a trip to reinstall the three antennas asap.
- **Stakeholder Interview**
  - The RT agreed with Gary to not include information directly from Chris' stakeholder (Mr. Milo Price) interview on historical watershed conditions/fishing in the draft RP due to the anecdotal nature of the information.
- **FWS BT RT Web Page linked to NDOW's Web Page**
  - IT staffs have set up the link.

9) Next meeting logistics

- The next meeting will likely be March 29-30 or April 4-5, 2007. Locations under consideration are Elko or Twin Falls.