

**Water Resources Technical Advisory Committee  
Meeting Notes  
September 12, 2017  
Noxon Emergency Services Building**

**WRTAC Representatives Attendees:**

Avista – Eric Oldenburg  
Bull River Watershed Council – Kathy Ferguson (departed at 12:30 p.m.)  
Idaho Department of Fish and Game – Ken Bouwens  
Kalispel Tribe – Ken Merrill  
Montana Fish, Wildlife and Parks (MFWP) – Ryan Kreiner  
U.S. Fish and Wildlife Service – Kevin Aceituno (departed at 12:30 p.m.)  
U.S. Forest Service (USFS) – Doug Grupenhoff

**Other Attendees:**

Avista – Nate Hall, Heide Evans, Shana Bernall, Ruth Watkins, and Sean Moran; Lower Clark Fork Watershed Group – Brita Olson; Montana Fish, Wildlife and Parks – Jason Blakney; Public entity – Dave Free (left at 12:30); Soil and Water Conservation District of Montana – Samantha Tappenbeck; U.S. Fish and Wildlife Service – Marshall Williams

**General Updates:**

- New license manager: Tim Swant is retiring on October 1, and Nate Hall will be the new Avista Clark Fork River license manager.
- Hydro One acquisition: Hall discussed Avista’s acquisition by Hydro One, a Canadian transmission company operated out of Ontario. The acquisition will not be final until the summer of 2018 and the Avista officers took a proactive approach to this merger and developed a mutual agreement and governances that allow Avista to continue to operate separately; nothing will change for at least three years. The Management Committee (MC) process is part of Avista’s FERC license; therefore, this process will continue in the future.
- Clark Fork Settlement Agreement Amendment: Oldenburg noted the signature pages for Amendment #1 to the Clark Fork Settlement Agreement were sent to the MC.
- Meeting minutes: Oldenburg discussed proposed changes to the WRTAC meeting minutes that include a reduced level of detail and capture only topics discussed, to-do items, and consensus decisions. These “notes” will not be sent out of formal review; however, if there are any omissions or mischaracterizations that are brought to Avista’s attention those modifications will be reviewed and can be made. Merrill noted Avista would be providing notes verses minutes and that the adaptive license needs to have good records to capture decisions and changes over time. The proposed changes will be discussed further at the fall MC meeting.

**Other Business:**

- Consent mails: Four consent mails were sent to the MC for their review and approval.
  - May 22: Appendix F2 Criteria Adjustment (approved 6/19)

- July 14: Appendices B and C for additional Bull Trout capture effort during the fall of 2017 (Approved 8/4)
- July 20: Appendix B Purchase of 5-acre parcel along the lower Bull River (approved 8/11)
- July 26: Appendix B Purchase of Thompson Falls Field Station Facility (approved 8/11)
- Project Evaluation and Ranking Criteria:
  - This topic was discussed at the spring WRTAC meeting and the group agreed that the ranking criteria and procedures need to be updated. With the MC's blessing the WRTAC working group was formed and updated the criteria and process. Key points regarding the new criteria include; more simple and objective, eliminated need for winter ranking meeting, focus thought and discussion on important elements of project, and serve as tool to help WRTAC evaluate and compare projects. The group discussed the need for Appendix C ranking criteria and noted if there was a budget shortfall the ranking criteria would come into play. Only those projects proposed within the appendices A, B "Tributary Habitat Acquisition and Enhancement" funds and F5 "mitigation" fund will be ranked and all recommendations are forwarded on to the MC for the final review and approval. Project proponents will be invited to the WRTAC meetings to discuss their proposed projects.
  - Oldenburg noted a correction to the project evaluation and ranking criteria for Appendix F5—area of the proposed project is within; he is proposing to remove "from Albeni Falls Dam" from number 3. The proposed change was made, although there were no concerns directly related to this change, discussion continued regarding whether or not functionally the Pend Oreille River should be included as part of Lake Pend Oreille for a portion of the summer. Oldenburg will discuss this topic with Joe Maroney prior to the MC meeting.
- 2018 Project Plans:
  - Project Plans are due earlier this year (November 1<sup>st</sup>).
  - The AIP guidelines and Project Plan templates will be sent to Program Leaders on Thursday, project proponents should contact the appropriate Program Leader (Bouwens, Blakney, Moran, Kusnierz, Oldenburg, or Bernall) to request a copy.
  - The template is similar to last year, slight re-formatting and the addition of a "required permits" section.
- Grant writer update:
  - Watkins provided an update on grants received to date for 2017. She noted they have received every grant they have applied for except for those associated with Eurasian watermilfoil. To date, \$95,450 grant funds have been acquired; of which \$66,700 are associated with aquatic resources. Several of these grants will help with lower Clark Fork River restoration planning to help prioritize restoration efforts in the lower Clark Fork River. These updated watershed restoration plans are needed to apply for grants from the state of Montana. They also received grant funding for the Trout and About Festival in 2017 and 2018

(\$2,500 for next year). Hall reminded everyone that Watkins and Drumheller were hired to support Clark Fork Settlement Agreement implementation, and these efforts and the grant funding does not reduce Avista's obligations. Watkins noted herself and Drumheller are available to help assist in finding outside funding sources and with formatting and developing Project Plans. Merrill noted that there is an event in Spokane, Washington on January 27-28, 2018 related to Columbia Basin Flowering rush weed management.

### **Highlights of 2017 Annual Implementation Plan Project Plans:**

- Idaho Tributary Habitat Acquisition and Fishery Enhancement Program: Appendix A
  - Habitat Restoration Scoping Allocation
    - There is a site visit planned next week for Strong Creek to find solutions related to a short, dry stretch near the mouth of the creek that inhibits fish passage during dry months. In addition, Bouwens is working with Bonner County who received funds to rebuild the county road on Trestle Creek. There is a plan to pave the road and he is interested in sediment control. The grant program notes a need for improved access and Bouwens plans to dove tail habitat work into their proposed road work since there is a need to stabilize the road and improve fish habitat.
  - Lightning Creek Large Woody Debris Recruitment Project
    - This project was not implemented due to the long spring run-off.
  - Pack River Temperature Monitoring
    - No new funds requested this year as there were funds available from previous years. Bouwens talked to the Project contact about installing additional temperature loggers, since this is a cost effective way to collect additional data and this data will be useful as we start looking into future projects for Grouse Creek.
  - Priority Bull Trout Habitat Acquisition and Conservation Allocation
    - Bowens looked at properties in Trestle Creek and the Pack River, but none have been priorities for purchase. Many are small properties with limited water frontage and lots of infrastructure/buildings. Hall noted that Appendix K, Natural Resources Conservation Service, and Kanisku Land Trust closed on a 350-acre conservation easement on the Pack River.
  - Operation and Maintenance of Acquired Property Allocation
    - Consent Mail request was approved by the MC for the Twin Creek Property project. The project involves opening the property to the public (temporary signs) and a parking area will be constructed this fall.
  - Fish Resource Monitoring, Enhancement, and Management Plan
    - Ongoing tributary monitoring occurred in East Fork Lightning, Porcupine, Rattle, and Savage creeks. Also surveyed North Gold Creek and found abundant Westslope Cutthroat Trout in the upper portion.
- Montana Tributary Habitat Acquisition and Recreational Fishery Enhancement Program: Appendix B

- Habitat Restoration Monitoring and Native Salmonid Abundance Monitoring Plan
  - Monitoring important native salmonid tributaries: Deep Creek, Granite, upper Graves, upper Prospect, Crow Creek, and Swamp creeks. A Consent Mail was approved by the MC to rescue Bull Trout from dewatered sections of upper Prospect Creek. Nine Bull Trout were rescued and released in Crow Creek.
- Miners Gulch Stream and Riparian Restoration Project
  - Revegetation efforts for 2017 involved flying in fencing materials (approximately 1 mile of fence); 1,600 fence posts; utilized 5 pumps to irrigate plantings weekly natural cottonwood regeneration were utilized and enclosed to help stabilize streambanks.
- Cabinet Ranger District Automated Snow Recording Site Operation and Maintenance
  - Data is available on the NOAA website. The total precipitation recorder is still not functioning correctly and Natural Resources Conservation Service is interested in taking over maintenance and operation of the site in the future.
- Lolo National Forest Priority Native Salmonid Habitat Restoration Assessment and Planning
  - This project was not initiated in 2017, due to USFS Lolo National Forest staff availability during the extended wildfire season. This will be a carryover project for next year.
- EF Blue Reach 2 Survey and Design – Phase I
  - The proposed restoration is on private land and will need the private landowner’s permission, which has not been granted. Neesvig is in contact with the landowner.
- Dry Creek Sediment Reduction, National Environmental Policy Act Compliance
  - Grupenhoff had hoped to have an Environmental Assessment out later this month, but was delayed due to wildfire activity in the area. The 319 grant funds associated with implementation of the project has deadlines and it will be a challenge to meet the end of year deadline. The hope is to extend the contract with Department of Environmental Quality and conduct the work next year.
- Managing aquatic invasive plants on Noxon and Cabinet Gorge reservoirs
  - Reservoir treatments did not occur this year, due to lack of funding and high water. Monitoring is occurring and there is a contract with Montana State University to evaluate the treatment/herbicide response between hybrid and native and non-native Eurasian watermilfoil.
- Eurasian Watermilfoil Literature Review and Noxon Reservoir Existing Data Analysis
  - Paul Kusnierz is conducting a literature review to look at the interaction between Eurasian watermilfoil and fish and has found 200 literature reviews. The conclusion so far, is there is a lot of variation in the

interaction between Eurasian watermilfoil and fish that is dependent on species. Kusnierz also looked at the overlap between Eurasian watermilfoil treatment and data on fisheries in the project area and did not see any relationships.

- Mountain Lake Fisheries Monitoring Project
  - In two years 12 lakes have been sampled (25 lakes are scheduled to be sampled over the next 2 years). A lake in upper Prospect Creek represents a threat and has Brook Trout and needs to be treated. Blossom Lakes were previously treated (Brook Trout removal) in the past and only Westslope Cutthroat Trout were found this year.
- Thompson Falls Field Station Facility Feasibility Study
  - American Land Exchange found a site, previously a taxidermy shop, and will close on purchase today. The plan is to have MFWP and Avista staff move into the building next spring.
- Thompson Falls State Park Improvement Project
  - Improvements this year include the fishing pond, new restroom, handicap access fishing dock, and a trail from the park to Thompson Falls.
- Lower Bull River Property–Consent Mail
  - Purchased a property along the lower Bull River. The site has buildings and the current plan is to keep the trailer over the winter and develop a site management plan next year.
- Fish Passage/Native Salmonid Restoration Plan: Appendix C
  - Upstream Fish Passage Program
    - The agencies are discussing the potential to pass some fish captured downstream of Cabinet Gorge Dam that genetically assign to Idaho tributaries into the EFBR. The proposal will be discussed more this fall and may be included in the 2018 AIP.
  - Tributary Trapping and Downstream Juvenile Bull Trout Transport Program
    - Trapping during July and August discontinued due to low return rates of fish captured during that time and a new transport length criteria of 120–250 mm was implemented.
    - The new Biomark Passive Integrated Transponder (PIT) array is fully operational this spring (48,000 detections of 95 individual fish (83 Bull Trout) so far in 2017)—crucial to the M&E Plan for the permanent weir.
    - Vermilion River: experimenting with other capture techniques (baited minnow traps, snorkeling with dip nets, and fall electrofishing) this year.
    - Potential changes that will be discussed and possibly proposed in 2018 AIP: modify Graves Creek permanent weir, PIT array for East Fork Bull River final site selection and permitting, propose to experiment with PIT technologies,, discontinue trapping Rock Creek and temporarily cease trapping in the Vermilion River. Instead focus capture efforts on the East Fork Bull River and use targeted research (likely PIT array) to learn more about Vermilion River adfluvial fish population movements and behavior.

- Bull Trout Protection and Public Education Project: Appendix D
  - Bull Trout Protection and Public Education Project, Idaho Department of Fish and Game
    - Five Bull Trout heads were turned in under the Lake Pend Oreille Angler Incentive Program and 185 boats were checked with one violation. Additional contacts were made with the public related to fire restrictions and the warden noted two Bull Trout mortalities in lower East Fork Lightning Creek.
  - Bull Trout Protection and Public Education Project, Panhandle Chapter Trout Unlimited
    - Aquatic macroinvertebrate life cycle posters have been displayed at public events (fly fishing field event and track event). The Trout and About Festival and Whizpops! concert occurred again in 2017.
  - Bull Trout Protection and Public Education Project, Montana Fish, Wildlife and Parks
    - Education activities included: 15 presentations to 5 schools; 3 presentations to Thompson Falls Accent Camp; 4<sup>th</sup> grade fishing days at Thompson Falls State Park pond; a new message for the boater/angler radio station, which needs a new antenna. Concerns arose regarding swimmer dam construction in tributaries and public outreach will occur in the future. The warden contacted many anglers with no citations and game cameras were installed at three sites.
- Watershed Councils Program: Appendix E
  - Pack River Watershed Council, Bonner Soil and Water Conservation District
    - Pack and Grouse temperature monitoring devices have been installed and are monitored and the council is involved in public outreach and education.
  - Lower Clark Fork Watershed Council Projects
    - Working closely with Appendix B staff on restoration work including: Bull River revegetation project (work on 10 different properties); Reed Canary grass matting (7 properties) funded through the 319 grant; there was concern with spread of invasive weeds and lack of vegetation on the sites where work was contracted, so the contractor sent a crew out and performed maintenance on all enclosures and will do more work this fall. New efforts this fall will shift from large fencing enclosures to smaller enclosures and may work with a landowner upstream of Wood Duck property this fall to try individual plantings where the landowner agreed to do the majority of maintenance.
- Clark Fork Water Quality Monitoring Program: Appendix F1
  - There was discussion during the spring MC meeting regarding bringing costs of this PM&E down to meet the budget. The Water Quality Monitoring Committee met on May 9 and came to agreement to reduce sampling upstream of Cabinet Gorge Dam to occur during the months of

July, August, and September (sampling downstream of Cabinet Gorge Dam will be unchanged).

- In addition, the field QA/QC audit by Hydrosolutions will be discontinued until deemed necessary in the future.
- Monitoring of Noxon Reservoir Stratification and Mobilization of Sediment Nutrients/Metals: Appendix F2
  - Sampling was modified by the MC through the Consent Mail process. In order for sampling to occur, the flow trigger (4 of 7 consecutive days with Noxon discharge less than 8,000 cfs) must be met by August 7. The change was made to increase the likelihood that the DO and temperature triggers will be met and water chemistry sampling performed.
  - A contract is now in place with Hydrosolutions so that we are ready when the trigger is reached.
  - The trigger was not met by August 7 (16 days < 8kcfs as of yesterday).
- Aquatic Organism Tissue Analysis: Appendix F3
  - We received the draft 2015 Mercury report for Noxon and Cabinet Gorge reservoirs from MFWP and provided comments in early June and are awaiting the final report. Blakney will reach out to Trevor Selch and request the final report.
- Water Quality Protection and Monitoring Plan for Maintenance, Construction, and Emergency Activities: Appendices F4 and T
  - Maintained general operating limits for forebay elevation and draft rate for Noxon.
  - Maintained general operating limits for forebay elevation and discharge out of Cabinet.
  - Merrill asked why flows out of Cabinet Gorge Dam doubled last week and may have increased flows at Albeni Falls Dam. Hall replied that Avista does not have the storage to have a large effect on Lake Pend Oreille water levels. Cabinet Gorge Dam outflows increased slightly, due to increased flow at Kerr Dam as they are lowering Flathead Lake, but did not think that slight increase of flows at Cabinet Gorge Dam would have much impact on flows at Albeni Falls Dam. Hall will investigate further and contact Merrill to let him know why flows increased and then dropped at Albeni Falls Dam last week.
- Dissolved Gas Supersaturation Control, Mitigation, and Monitoring: Appendix F5
  - Clark Fork River Westslope Cutthroat Trout Experimental Transport Program
    - A total of 41 Westslope Cutthroat Trout were transported and released at the Big Eddy boat ramp in Cabinet Gorge Reservoir between March 22 and June 20. Blood samples were collected from all of these fish to look at maturity and compare to movements. Thirteen of the 40 with functioning radio transmitters entered tributaries to Cabinet Gorge Reservoir (Bull River = 10; Rock Creek = 3). In 2018, depending on the success of the steroid hormone analysis, plan to look more closely at evaluating maturity

- for all WCT greater than 300 mm to better define transport size range; install PIT array in the Bull River; and focus efforts on evaluating an appropriate release location.
- Water Quality Trophic Monitoring in Lake Pend Oreille
  - Idaho Department of Environmental Quality successfully completed 3 of the water quality monitoring events. The last monitoring event is scheduled for the mid-September. Due to high winds, the August event was condensed to one day and data on plankton was not collected.
- Demography of Adfluvial Bull Trout in Lake Pend Oreille
  - Matt Corsi heading up the work from IDFG. The model is similar to what has been used for mule deer and will provide in-lake population estimates and help further develop methodologies and sampling plans. Currently meeting with stakeholders to develop the model and determine appropriate inputs.
  - Future potential Appendix F5 projects include creel study on the Clark Fork River, Lightning Creek and Pack River (look at magnitude of fishery); will want to implement in February. This Project Plan will be sent out to the MC as a Consent Mail and discussed at the fall MC meeting.
- Gas Supersaturation Control Program Total Dissolved Gas Abatement
  - Sustained high flows and the loss of Unit 1 on April 4 resulted in a prolonged spill year at Cabinet Gorge Dam.
  - Flows peaked at 90 kcfs and spill occurred every day from March 17 to July 3.
  - Total Dissolved Gas (TDG) levels exceeded 110% during 109 of 117 days from March 17 to July 11 and exceeded 120% on 74 of 85 days from April 2 to June 26. The TDG levels were exacerbated by the loss of Unit 1.
  - During this time, we evaluated 1,139 fish that were captured by the Appendix C Upstream Transport Program. Despite the elevated and prolonged TDG levels evidence of minor gas bubble disease (i.e., 1-5% of fin covered with bubbles) was found in less than 10% of those fish. Bull Trout did not show evidence of gas bubble disease and one Westslope Cutthroat Trout showed signs of gas bubble disease and was transported to Cabinet Gorge Reservoir and is still alive.
  - Modifications to spillways 1 and 3 began in mid-July and the crew is ahead of schedule.
  - If possible, TDG testing will begin this fall and during the 2018 spill season and decisions regarding any further modifications will occur pending the results of that testing.

**Winter WRTAC meeting:** Proposed for Tuesday, January 23, 2018 and no ranking meeting. Meeting was adjourned at 3:30 p.m.