

**Water Resources Technical Advisory Committee  
Final Meeting Minutes  
January 19, 2016  
Noxon Emergency Services Building**

**WRTAC Representatives Attendees:**

Avista–Joe DosSantos  
Bull River Watershed Council–Kathy Ferguson (arrived at 10:05 a.m.)  
Elk Creek Watershed Council–Mike Miller  
Green Mountain Conservation District–Howard Bakke  
Idaho Department of Fish and Game–Ken Bouwens  
Kalispel Tribe–Ken Merrill  
Montana Fish, Wildlife and Parks–Ryan Kreiner (arrived at 9:55 a.m.)  
Montana Department of Environmental Quality–Randy Apfelbeck  
U.S. Forest Service Cabinet Ranger District–Doug Grupenhoff  
U.S. Fish and Wildlife Service–Wade Fredenberg

**Other Attendees:**

Avista–Nate Hall, Lisa Vollertsen, Shana Bernall, Eric Oldenburg, and Sean Moran; Lower Clark Fork Watershed Group–Brita Olson (arrived at 9:55 a.m.)  
Montana Fish, Wildlife and Parks–Mark Deleray and Jason Blakney (arrived at 9:55 a.m.)

**Welcome**

Joe DosSantos welcomed those in attendance and invited participants to introduce themselves. DosSantos announced this will be his last WRTAC meeting, as he plans to retire at the end of July 2016. Eric Oldenburg will facilitate future WRTAC meetings.

The purpose of today's meeting is to review the draft 2016 Annual Implementation Plans (AIPs) and approve recommending them to the Management Committee (MC) for their review and approval. The AIT members met in December to review the aquatic portion of the draft 2016 AIPs. On January 5, 2016 WRTAC members ranked and discussed appendices A and B habitat and Appendix F5 mitigation projects. There was an issue with Avista's graphics department and project packets were sent to WRTAC members on January 6 and January 13. DosSantos noted that draft AIP budgets do not contain carryover dollars and those edits will be made between now and the March MC meeting.

DosSantos reviewed the 2015 hydrograph and explained the unusually low flow year. The lower Clark Fork River flows were 59% of normal, and the recorded peak flow at Cabinet Gorge Dam was 35,148 cfs on April 4.

Two consent mails were sent to MC members for their review and approval:

- December 17, 2015–Radio transmitters for Westslope Cutthroat Trout passage (appendices C and F5): Approved.
- January 15, 2016–Design and printing of the Cabinet Gorge Reservoir Bathymetric Map (Appendix B): Approved.

## ANNUAL IMPLEMENTATION PLANS

### **Appendix A: Idaho Tributary Habitat Acquisition and Fishery Enhancement Program**

Ken Bouwens, Aquatic Program Leader for Appendix A, reviewed the draft 2016 Appendix A actions, tasks, and decisions:

**Habitat Restoration and Monitoring Fund:** Continue to monitor and maintain previously funded restoration projects as needed. In 2015, during informal surveys one Japanese knotweed plant was discovered in the Trestle Creek drainage. A formal survey and possible treatment is planned for 2016.

**Continuation of Acquired Properties:** Continue to pursue opportunities cooperatively with Kaniksu Land Trust and others for protection of Lake Pend Oreille (LPO) high priority Bull Trout habitat in Trestle, Johnson, Granite, North and South Gold, and Grouse creeks and the Pack River through purchase or easement actions. One project of interest include a conservation easement on the Pack River for approximately 400 acres utilizing a Natural Resource and Conservation Service (NRCS) Farm and Ranch Grant that was received that will pay for 50%, match funds will be used from appendices A and K, and the landowner will donate 25% towards the acquisition of the easement. Once due diligence is completed the final cost will be sent to the MC for review.

Another project includes the potential acquisition on 330 acres with frontage on Twin Creek and the lower Clark Fork River. An appraisal was secured, and negotiations between Avista and the landowner continue. Once a tentative agreement is reached, a full proposal will be sent to the MC for review.

**Twin Creek:** Original stream channel/ habitat work was completed in 2000. A grade control structure is failing and needs to be repaired prior to the next high water event to prevent a potential head-cut from perpetuating into an undamaged section of the project. This Phase I repair work was scheduled for 2015, but landowner access issues delayed it to 2016. A conceptual Phase II design was developed for landowner approval and negotiations continue.

**Grouse Creek:** This project is a continuation from 2011, and is a cooperative effort between USFWS, USFS, Avista, and adjacent landowners. The project includes completing additional large woody debris complexes to upper Grouse Creek.

**Smorgasbord Creek Culvert Replacement:** This project was removed by the proponents, since the USFS has a backlog of projects to complete in 2016. This proposal will not be forwarded to the MC.

**Lightning Creek Large Wood Salvage:** This project involves salvaging usable trees from nine acres of blow down. These trees will be stored (decked) for use on future restoration projects. Wade Fredenberg asked is the site located downstream of where the road washed out. Bouwens replied no, the site is upstream and he is unsure where the trees will be stored.

Pack River Temperature Monitoring: The project was initiated in 2012 and continued through 2015, in conjunction with the Pack River Watershed Council (WSC) to monitor water temperatures and identify limiting factors to native fish in the Pack River drainage. The 2016 proposal includes funding for WSC time and expenses to maintain monitoring sites and retrieve data.

Spring and Mosquito Creeks Pathogen Survey: This is a carryover cost-share project between appendices A and C. This project was to evaluate the distribution and frequency of viral fish-pathogens within Spring and Mosquito creeks. The majority of fieldwork for this project was completed in 2015; however, laboratory and data analysis will continue in 2016.

Fishery Management Assistance: In 2016, continue annual Bull Trout redd surveys on LPO tributaries. Population assessment efforts will be focused in Caribou, Morris, and Trestle creeks in an effort to describe fish distribution. In addition, continue to monitor fish passage needs at potential passage limiting sites, monitor barriers in sampled drainages. Fredenberg asked if a follow-up survey was conducted on Lightning Creek. Bouwens replied Kevin Davis performed a follow-up survey and will send the results to Lisa Vollertsen to distribute to WRTAC members.

***With no further discussion, the WRTAC approved forwarding Appendix A as revised (removal of the Smorgasbord Creek Proposal) to the MC for review and approval.***

### **Appendix B: Montana Tributary Habitat Acquisition and Recreational Fishery Enhancement Program**

Ryan Kreiner and Jason Blakney reviewed the 2016 Appendix B actions, tasks, and decisions:

Habitat Restoration Monitoring and Maintenance Fund: This fund is used for maintenance of properties, taxes, etc. In 2016, maintenance funds will be used in the Prospect Creek and Bull River drainages.

Monitor Habitat Restoration and Native Salmonid Abundance: Efforts will be focused on revisiting long-term monitoring sites on the South Fork Bull River, Crow Creek, and upper Prospect Creek, as well as establishing new monitoring sites in Swamp Creek. Budget line item revision: remove funding associated with camper for seasonal employees (\$20,000) and add \$22,500 (a cost-share with Reservoir Fisheries Monitoring) to purchase a replacement vehicle.

Montana Key Streams Outreach: Continue to contact landowners in each targeted tributary and provide information regarding Avista, Kaniksu Land Trust, and Montana Fish, Wildlife and Parks (MFWP) interests in acquiring fee title or conservation easements on stream habitat in their watershed. Blakney will continue to discuss a potential acquisition on the Bull River with Nate Hall and Ken Bouwens.

Rock/Graves Stream Flow Gages: In 2011, stream flow gages were installed in Rock and Graves creeks. This project is a cost-share with Appendix C. The 2016 field activities include annual calibration and maintenance of these gages.

Cabinet Ranger District Automated Snow Recording Site O&M: This station provides real-time data for snow levels, precipitation, air temperature, humidity, solar radiation, and wind. The information is available for public access online through the National Oceanic and Atmospheric Administration website. Doug Grupenhoff noted a precipitation sensor was replaced. Blakney will send the website link to Brita Olson and Mike Miller.

Lower Clark Fork Watershed Coordination Agreement: This agreement is used to fund Lower Clark Fork Watershed (LCFWG) administrative costs associated with habitat project implementation.

Bull River Riparian Forest Revegetation: This is a carryover project, originally proposed by LCFWG and Green Mountain Conservation District. Preliminary treatments to the site were installed in 2014 (installation of exclusion fencing and weed mats) to suppress non-native reed canary grass. Additional planting and fencing were installed in 2015. The WRTAC members discussed beaver activity in the Bull River drainage.

Mainstem Bull River Revegetation on USFS Lands and NEPA Process: This is a carryover project. Three sites were identified in the Bull River Watershed Assessment Prioritization Document and this proposal is requesting funds to complete site analysis and a subsequent NEPA process prior to implementing the project.

EF Blue Creek Reach II Survey and Design: The project is a continuation from 2013 for spatial surveys and preliminary design work. The new landowners expressed interest in signing a landowner agreement to ensure that all future restoration efforts are protected over the long-term. Surveys were initiated in 2014; however, due to dense vegetation additional funds were needed to complete the survey and design work. Blakney will provide project updates to Olson and Ruth Watkins, as it progresses.

Miner's Gulch Restoration: This is a carryover project, with an additional funding request included in the packet as a separate proposal. This multi-year project is located one mile downstream of the Chapel Slide restoration reach. Miner's Gulch is the next major source of sediment and presently is an incised and unstable channel. The original proposal was approved in 2014, to provide funding that would be used as "seed money" in order to secure other funding sources in 2015. The NEPA process will be initiated in 2016. Outside grants have also been secured for this project, with one still outstanding. These grants will decrease the Appendix B contribution to the project.

Dry Creek: This is a carryover project and involves removing four culverts, re-contouring portions of the road prism, and revegetation of disturbed areas. Grupenhoff noted this area is a popular recreation site for snowmobilers. The public scoping process was initiated in 2014 and the NEPA process is expected to be completed in 2016.

Crow Creek Bull Trout Investigation: This is a new project to conduct electrofishing surveys, habitat assessments, spawning-incubation conditions, and redd surveys for 2016-2017 in Crow Creek and associated tributaries.

Cabinet Gorge and Noxon Reservoir Fisheries Monitoring: Reservoir monitoring is an annual effort including: summer beach seining, fall gill netting series, bass tournament (seven proposed for Noxon Reservoir) monitoring, and Walleye monitoring for 2016.

Noxon Reservoir Fisheries Status Predictive Model: The purpose of this project is to develop a science-based predictive model to estimate the status of each resident fish species in the Noxon Reservoir over the next 20 years under two management scenarios. In 2014, a researcher from the University of Idaho was selected to develop the model. Aquatic Implementation Team members recently received and are reviewing the revised model, which is anticipated to be finalized in early 2016.

Fredenberg suggested MFWP provide a presentation on the Walleye studies at the upcoming March MC meeting. Mark Deleray replied the results are premature and would prefer to provide a presentation after the reports are finalized. It was suggested that Oldenburg add a Walleye studies presentation to the September WRTAC meeting agenda.

Walleye Economic Study: This is a carryover project from 2014; the purpose is to analyze impacts of a proposed investigation of Walleye suppression in Noxon Reservoir on the local economy. A researcher was hired from University of Montana to build a bio-economic model that relates current and historical fish populations in Noxon Reservoir to angling pressure and incorporates MFWP data and concurrent Walleye studies to predict the future economic situation. A final report is anticipated in 2016.

Update of Walleye Expansion in Montana Environmental Assessment: This is a carryover project; in 2014 a researcher was hired from Montana State University to update the original Environmental Assessment, including updating four case histories for Walleye introduction into western waters and the effects on existing fish communities, as well as information on Canyon Ferry Reservoir following illegal introduction of Walleye. This information will assist with future management decision on the lower Clark Fork River. The contractor is working with MFWP to complete the draft report. Fredenberg asked if the intent is to revise the draft Environmental Assessment. MFWP explained that in this instance, the term Environmental Assessment relates to the title of the report being updated, "Environmental assessment of the introduction of Walleye beyond their current range in Montana" (i.e., Colby-Hunter). Deleray explained the results from the three contracted Walleye studies will provide further information as will the ongoing field studies and that there is not a date set or a plan to release a revised draft Environmental Assessment at this time.

Cabinet Gorge Bathymetric Map: This is a carryover project. In 2013, a contractor completed bathymetric surveys of Cabinet Gorge Reservoir. A consent mail was recently sent out to the MC for additional funding to finalize design and printing of the map.

Bull River Fishing Access Site: Continue to investigate two adjacent 5+ acre parcels for purchase on the lower portion of the Bull River. Due diligence will resume once landowner litigation is resolved.

Aquatic Invasive Plants on Noxon and Cabinet Gorge Reservoirs: Sanders County Aquatic Invasive Plants Task Force (Task Force) is requesting Appendix B funds to assist with controlling Eurasian watermilfoil (EWM) and Curly Leaf Pondweed in Noxon and Cabinet Gorge reservoirs. The overall goal of the project is to control the spread of EWM through a variety of methods (herbicides, diver dredging, bottom barriers, boat check stations, and educational public outreach).

Delaray asked what Avista's long-term plan is for funding the program and if the project continues into perpetuity how will the project be funded. Hall replied the herbicide treatment is effective at targeting EWM and does not appear to impact native vegetation; the goal of herbicide treatment is to reduce EWM, so that it can be maintained on a smaller scale.

There were unique challenges in controlling EWM during 2015, when environmental conditions (i.e., low flows and high water temperature) were ideal for rapid, early growth of all aquatic plant species, including EWM. Due to these conditions, areas of EWM that were previously reduced to maintenance levels in Noxon Reservoir saw significant re-growth. Therefore, focus shifted and the planned approach for 2015 of aggressive treatment on Cabinet Gorge Reservoir was redirected to treatments to Noxon Reservoir to avoid losing the progress that had been made over the past six years. Dr. Getsinger provides technical guidance to the Task Force on herbicide applications. The Task Force is in the process of developing a long-term maintenance control plan.

The WRTAC members discussed the effects of EWM on recreation and fisheries. This project is a cost-share between appendices B, G, and H, MDNRC, Noxon-Cabinet Shoreline Coalition, and in kind support from Sanders County, Task Force, and Montana State University. Program leaders need to continue discussions on how to fund the project in the future. Hall stated that if CFSA dollars continue to be utilized, funding will have to come from an existing program. Delaray will contact the MFWP Helena Office to discuss participation on the Task Force.

Blakney noted hybridized plants were discovered in Noxon Reservoir, and these plants are more resistant to herbicides and have a fast reproductive rate. Hall replied that is why it makes sense to continue efforts to reduce EWM to a maintenance level.

DosSantos confirmed the WRTAC members are comfortable with moving this project proposal forward to the MC, with the commitment to continue discussions in 2016 on long-term funding options for the project.

Blakney requested revisions to the project proposal including: 2015 results and benefits to recreational fisheries.

Thompson Falls State Park Improvement Project: This is a carryover project to continue pond enhancements (deepening to 20 feet), improve the parking area, create a pedestrian trail, and install universally accessible restrooms and fishing platforms.

Noxon and Cabinet Gorge Reservoirs and Bull River Creel Survey: This is a carryover project. A creel survey was conducted on Noxon and Cabinet Gorge reservoirs and the Bull River in

2015. The survey resulted in over 1,700 angler interviews. The data will be analyzed and a final report in 2016.

Mountain Lakes Fisheries Monitoring: This proposal is to conduct a four-year survey of high-mountain lake fisheries. Fish populations will be sampled in top priority drainages.

DosSantos and Deleray are working to develop a Thompson Falls Field Station Feasibility Study proposal which will be included in the MC packet.

***With no further discussion, the WRTAC approved forwarding Appendix B as revised (include addition of funds for vehicle replacement, remove seasonal housing funds, and include Thompson Falls Field Station Facility Feasibility Study) to the MC for review and approval.***

#### **Appendix D: Bull Trout Protection and Public Education Project**

In June 2015, the MC approved the 5-Year Appendix D Implementation Plan (2015–2020) via consent mail. The study plans contained in the packet provided to the WRTAC are similar to past years and are representative of the collaborative/cooperative efforts between IDFG, MFWP, and Panhandle Chapter Trout Unlimited.

In 2016, IDFG will focus efforts on providing fish identification and proper release techniques to anglers participating in the LPO Angler Incentive Program, the WaterLife Discovery Center project, and other educational activities within the local community. While MFWP will continue the “hooked-on-fishing not on drugs” program in the public schools.

Panhandle Chapter Trout Unlimited will continue to ensure an adequate supply of Bull Trout materials are available for field personnel to aid in educating the public. Events include: Panida Theater Fly Fishing Film Festival, Trout and About Festival, etc., as well as a new fundraising effort to support “Casting for Recovery”.

***With no further discussion, the WRTAC approved forwarding Appendix D as presented to the MC for review and approval.***

#### **Appendix E: Watershed Council Program**

This PM&E provides funding for administrative support to the established watershed councils. The watershed councils funding requests contain information that ties 2016 activities to the Clark Fork Settlement Agreement (CFSA).

***With no further discussion, the WRTAC approved forwarding Appendix E as presented to the MC for review and approval.***

#### **Appendix F1: Clark Fork River Water Quality Monitoring Program**

DosSantos noted the name of the appendix was revised this year, since the Tri-State Water Quality Council ceased operations in 2012. Avista is obligated through Appendix F1 to continue water quality monitoring at the three lower river sites. The Clark Fork Coalition now leads coordination of the subgroup, posting of final data, and reporting with information available on their website. Avista will implement the 2016 nutrient sampling at the three sampling locations

on the lower Clark Fork River (March–November). HydroSolutions, Inc. provides quality control and analysis support for the program. This will be the fourth year of the new 5-year cycle.

**With no further discussion, the WRTAC approved forwarding Appendix F1 as presented to the MC for review and approval.**

### **Appendix F2: Monitoring of Noxon Reservoir Stratification and Mobilization of Sediment Nutrients/Metals**

DosSantos explained there are no proposed activities for 2016 in conjunction with this PM&E.

**With no further discussion, the WRTAC approved forwarding Appendix F2 as presented to the MC for review and approval.**

### **Appendix F3: Aquatic Organism Tissue Analysis**

The Noxon Reservoir Fish Tissue Study was implemented in 2014 and 2015 due to several industrial sites upstream of Noxon Reservoir which are probable sources of dioxins, furans and PCBs previously found in fish in the lower Clark Fork River. Kreiner reviewed the study results from 2014 PCB, dioxin, and furan study in Noxon Reservoir. In summary, although PCBs, dioxins, and furans were found in all three species, only the levels found in Northern Pike over 30 inches exceeded the DPHHS consumption guidelines. This consumption advisory was incorporated into MFWP’s online fish advisory chart, and signs were placed at Noxon Reservoir boat ramps. Samples from the 2015 mercury study are currently being processed. A final report is anticipated in early 2016.

**With no further discussion, the WRTAC approved forwarding Appendix F3 as presented to the MC for review and approval.**

### **Appendix F4: Water Quality Protection and Monitoring Plan for Maintenance, Construction, and Emergency Activities**

DosSantos explained that this is essentially a “best-management-practices” plan. If Avista should violate reservoir operating criteria or go below the 5,000 cfs minimum flow below Cabinet Gorge, a variety of notification and/or monitoring activities are initiated. In 2015, the contact list for the plan was updated. 2015 was an unusually low flow year, with peak flow occurring on April 4 (Cabinet Gorge Dam 35,148 cfs). For the period of April through September, Clark Fork River flows were only 59% of normal. Between August 21 and September 2, average daily flows fell below the Cabinet Gorge minimum flow on 12 days, averaging 4,507 cfs. After discussions with IDFG, Avista personnel deployed water temperature loggers directly downstream of the dam to better understand river water temperatures during low flow conditions. The water temperature data showed the river was experiencing a slight cooling trend and the low flow period did not have an effect on the water temperature. DosSantos will send the water temperature data to Ken Bouwens.

Relays need to be replaced at the Cabinet Gorge Dam powerhouse and switchyard. This project is anticipated to begin in 2016 or 2017 and the plant will be shut down for a short period of time.



This work will not affect the minimum instream flow below Cabinet Gorge Dam, instead flow will be provided through the spillway during that time.

**With no further discussion, the WRTAC approved forwarding Appendix F4 as presented to the MC for review and approval.**

### **Appendix C: Fish Passage/Native Salmonid Restoration Plan**

DosSantos reviewed the draft 2016 AIP for Appendix C.

Clark Fork River Native Salmonid Restoration Five-Year Plan (2016–2020): The draft Clark Fork River Native Salmonid Restoration Five-Year Plan (Plan) was sent to members for review on January 11, 2016. DosSantos provided background information and the purpose of the Plan is to be utilized as a guidance document for the next 5-years. The Aquatic Implementation Team members worked on developing the draft plan from May through November, 2015. The WRTAC members reviewed the Plan components.

Fredenberg clarified the Plan will not be included with the 2016 AIPs and will be presented to the MC as a separate topic. DosSantos replied the Plan is included in the 2016 Appendix C AIP as the first bullet. Fredenberg stated the USFWS is not ready to support the Plan as written today, and requested the Plan be removed from the 2016 AIP. The previous Plan was developed for 2011–2015 implementation efforts; however, it was not approved by the MC until 2012. DosSantos stated the previous Plan took 18 months to finalize.

Fredenberg stated the MC ultimately approved the previous Plan with the Joint Agreement. The previous Plan contained language for constructing permanent upstream and downstream passage while the current Plan is non-committal. Fredenberg prefers the draft Plan be a standalone document, because the USFWS does not support the document at this time. Fredenberg acknowledged that a good faith effort was made by participants in creating a draft Plan. Fredenberg suggested that further action on the draft Plan be deferred until the CFSA amendment and its associated issues are resolved.

Ferguson asked are these the same issues that have been under discussion for the past two years. Fredenberg replied the USFWS and Avista are under pressure to resolve the issues in a timely fashion. The USFWS does not want to delay 2016 implementation projects by including the Five-Year Plan in the AIPs.

DosSantos will remove the Plan from the 2016 Appendix C AIPs. After WRTAC discussion it was decided that the draft Five-Year Plan will be sent to the MC as a standalone document for their review and approval.

Upstream Fish Passage Program: The objectives for 2016 are to continue to capture adult bull trout by electrofishing, Twin Creek weir trap, Cabinet Gorge Hatchery fish ladder, or hook-and-line methods in the Clark Fork River downstream of Cabinet Gorge Dam. In addition, continue “rapid response” genetic analysis in cooperation with the Abernathy Fish Technology Laboratory and use these results to help make upstream transport decisions. Bull and Westslope Cutthroat trout pathogen sampling will also continue downstream of Cabinet Gorge Dam.

Another objective is to implement the second year of upstream transport of 40 Westslope Cutthroat Trout. An ArcGIS based database to store information on genetic purity of Westslope Cutthroat Trout populations in the lower Clark Fork River will also be investigated.

Tributary Trapping and Downstream Juvenile Bull Trout Transport Program: For 2016, install screw, weir, and partial weir traps in Montana tributaries (East Fork Bull River, Rock, and Graves creeks). Continue to implement the Monitoring and Evaluation Plan to evaluate the Graves Creek permanent trap. In 2015, the permanent trap proved effective at capturing downstream moving juvenile bull trout; however, issues were identified with blockage of adult bull trout movement (upstream and downstream). The permanent trap was modified to rectify the issues associated with hindering adult bull trout movement. Continue stream electrofishing in Cooper Gulch, Prospect Creek, and Vermilion River and transport juvenile bull trout downstream of Cabinet Gorge Dam.

Continue efforts to evaluate site locations for a future permanent weir site. In conjunction with USFS staff, continue physical site evaluations (bedload movement monitoring, property ownership, access logistics, etc.) in the East Fork Bull River.

Non-Native Fish Suppression Project in the East Fork Bull River 2015 through 2018: The proposal is to continue less intensive suppression efforts through 2018. Deleray is comfortable with continuing the project at a lower level as outlined in the 2016 AIP, without reinitiating the MEPA process. However, the project will need to be evaluated on an annual basis, and if a new activity is proposed the MEPA process will need to be initiated. Deleray asked how many non-native salmonids were transported downstream and how many brown trout redds were excavated in 2015. Moran replied 170 non-native salmonids were transported downstream (majority were brook trout) and seven brown trout redds were excavated, with a small sub-sample of eggs collected for future genetic testing. Moran will revise the AIP and study plan (remove MEPA bullet).

Fish Abundance Monitoring: Continue redd surveys in conjunction with Appendix B personnel. Complete fish abundance monitoring utilizing electrofishing in lower Graves Creek drainage. If time permits, initiate less intensive fish abundance sampling in Pilgrim, Blue, and Deadhorse creek drainages.

Fish Capturing Facilities Operations, Development and Testing: Continue moving forward with ancillary components of the Cabinet Gorge HED Permanent Fishway project. Once the CFSA amendment is approved by the MC, award the contract for construction. Continue all other construction permitting and required ESA consultation require for the Cabinet Gorge HED Permanent Fishway project.

***With no further discussion, the WRTAC approved forwarding Appendix C as revised (removing two bullets from the 2016 AIP and associated study plans) to the MC for review and approval.***

**Appendix F5: Dissolved Gas Supersaturation Control, Mitigation, and Monitoring**

DosSantos pointed out that there are four basic components in Appendix F5 as it is now structured: 1) project operations, 2) TDG monitoring, 3) TDG alternative mitigation and monitoring program, and 4) GSCP alternative.

Operations: In 2016, continue to follow the spill gate procedures as defined in the GSCP. For Cabinet Gorge Dam this now includes the operation of the ice and trash gates, and was amended in 2013 to include operation of the modified spillway #2 during spill. Spillway operations will be amended in 2016 to include use of spillways #4 and #5.

TDG Monitoring: All of the monitoring equipment was sent back to the manufacturer for annual calibration and maintenance. Continue seasonal TDG monitoring at three locations. Merrill asked what protocol is used to determine sensor depth. DosSantos replied Avista personnel utilize the USGS protocol and will send the protocol information to Merrill.

TDG Alternative Mitigation and Monitoring: The LPO Angler Incentive Program is the same as last year, however at a reduced funding amount.

Components of the LPO Trap and Gill Net Program are the same as previous years. In 2015, funding for the 2016 program was approved by the MC. Bouwens noted a revision to the 2016 budget for this program was reduced to reflect an increased cost-share from Bonneville Power Administration. Fredenberg asked when the program will be run at a maintenance mode level. Bouwens explained the program was scaled back to 12 weeks of netting in the spring and 12 weeks of netting in the fall. Idaho Department of Fish and Game personnel will continue to modify strategies in an attempt to improve catch efficiency and reduce by-catch mortality.

The LPO Bull Trout Survival Study is a continuation from 2011. The work will be continued in 2016 and efforts will be focused on maintaining PIT-tag antenna arrays.

A Clark Fork Field Station Feasibility Study is a carryover project from 2015. This site is used by IDFG and Avista personnel as field offices. A contractor uses the facility as a base of operations for the LPO Trap and Gill Net Program. The proposal is to conduct an environmental review to determine what facility repairs are needed.

Continue water quality trophic monitoring with the goal of identifying the trophic status of LPO, compared to lower Clark Fork River and Pend Oreille River. A new task was added to the 2016 proposal to monitor phytoplankton.

Strontium isotope baseline collection is a new proposal for 2016, to collect water samples to establish baseline data throughout the system. This information will be used to help develop future projects.

Continue to implement the Box Canyon Reservoir Northern Pike Suppression Program through the use of gill nets to target Northern Pike with the goal of reducing the population. The 2015 results indicate success in Northern Pike suppression efforts. This will be the second year of implementing the program at a reduced level.

GSCP Alternative: Complete construction of modifications to spillways #4 and #5. Afterwards, conduct post-construction TDG testing. Based upon those tests, begin final design engineering for further spillways to be constructed in 2017.

**The WRTAC approved forwarding the Appendix F5 and associated budget as revised (budget revision for LPO Trap and Gill Net Program) to the MC for review and approval.**

#### **Appendix T: Project Operations Package**

DosSantos provided an overview of the measures contained in this appendix; all costs for these measures are borne by Avista.

Cabinet Gorge Minimum Flow: At the March 2013 MC meeting the members continued their discussion of returning to the original 3,000 cfs minimum flow. The USFWS indicated that it would need Avista to provide additional analysis of how the proposed minimum flow change would impact Bull Trout in order to support the change. Avista provided the USFWS with an Effects Analysis on Bull Trout Paper. The USFWS requested additional information, which Avista provided. Agreement was reached as to returning to the original 3,000 cfs minimum flow, except for the period September 15 through October 31 where it will remain at 5,000 cfs. This agreement is included in the draft CFSA Amendment.

**With no further discussion, the WRTAC approved forwarding Appendix T as presented to the MC for review and approval.**

#### **Next WRTAC Meeting**

The WRTAC members agreed to meet on September 13, 2016 at 10:00 a.m. (MST). As the meeting concluded, DosSantos thanked those in attendance for their participation at today's meeting.