The Clark Fork Project
FERC Project No. 2058

2020 Annual Implementation Plan Summaries

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY – APPENDIX A

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Idaho Tributary Habitat Acquisition and Fishery Enhancement Program

Implementation Staff Lead
Ken Bouwens, Idaho Department of Fish and Game (IDFG), (208) 769-1414, ken.bouwens@idfg.idaho.gov

Background
The purpose of this program is to offset the impacts of the power peaking operation of the Cabinet Gorge Project to native salmonids through the restoration and enhancement of lower Clark Fork River and Lake Pend Oreille (LPO) tributary watersheds, fishery monitoring and management support, and a public education and enforcement initiative focused on Bull Trout and their associated habitats in Idaho.

Outlined below is the 2020 annual implementation plan for Idaho Tributary Habitat Acquisition and Enhancement and Fish Resource Monitoring, Enhancement, and Management portions of this program. The public education and enforcement component of this program is described in Appendix D of the Clark Fork Settlement Agreement (CFSA). In addition, other CFSA appendices also support watershed and native salmonid protection, restoration, and enhancement (e.g., Fish Passage/Native Salmonid Restoration Plan, Watershed Council Program), and thereby augment the efforts to be initiated under this program.

2020 Project Plans
Tributary Habitat Acquisition and Enhancement
1. Habitat Restoration Scoping Allocation
2. Habitat Restoration and Acquired Property Maintenance and Monitoring Allocation
3. Priority Native Salmonid Habitat Acquisition and Conservation Allocation
4. Idaho Field Station Construction
5. Habitat Prioritization Evaluation for the Upper Pack River and McCormick Creek
6. Pack River Watershed Management Plan Addendum
7. Johnson Creek Fish Passage Improvement Design and Construction
8. Lower Clark Fork River Minimum Flow and Water Temperature Monitoring
9. Trestle Creek Habitat Enhancement Project Phase I (***New***)

Fishery Resource Monitoring, Enhancement, and Management
10. Fish Resource Monitoring, Enhancement, and Management Plan

Work Products
Habitat Restoration Scoping Allocation
- Annual Work Summary; due December 1, 2020
- Designs and cost estimates for specific projects will be reported in the form of a

Technical Memoranda or other appropriate documentation

Habitat Restoration and Acquired Property Maintenance and Monitoring Allocation

- Annual Work Summary; due December 1, 2020

Priority Native Salmonid Habitat Acquisition and Conservation Allocation

- Annual Work Summary; due December 1, 2020

Idaho Field Station Construction

- A technical memorandum or other appropriate work product summarizing work from Objective 1 will be produced including but not limited to building plans, cost estimates, as well as associated permitting requirements; due date: March 1, 2020
- All work performed for this project plan in 2020 will be documented in an Annual Work Summary; due December 1, 2020

Habitat Prioritization Evaluation for the Upper Pack River and McCormick Creek

- Project Completion Report; due July 1, 2020
- Annual Work Summary; due December 1, 2020

Pack River Watershed Management Plan Addendum

- Annual Work Summary; due December 1, 2020
- Addendum to the Pack River Watershed Management and TMDL Implementation Plan; final due November 1, 2021

Johnson Creek Fish Passage Improvement Design and Construction

- All aspects of this project will be documented in the Appendix A Annual Work Summary; due December 1, 2020
- Before and after photo points taken from each bank at the upstream end of the project looking downstream, the downstream end of the project looking upstream, and at the midpoint of the project; due December 1, 2021

Lower Clark Fork River Minimum Flow and Water Temperature Monitoring

- Temperature monitoring data for the two sites; due November 1, 2020
- Annual Work Summary; due December 1, 2020
- Annual Project Update; final due December 1, 2020
- Annual Project Update; final due December 1, 2021
- Annual Project Update; final due December 1, 2022
- Annual Project Update; final due December 1, 2023
- Project Completion Report; Five-Year Report, (all data); final due December 1, 2024

Trestle Creek Habitat Enhancement Project Phase I

- Technical memoranda describing project progress at appropriate intervals
- Final stamped design drawings; due date to be determined
- Annual Work Summary; due December 1, 2020

Fish Resource Monitoring, Enhancement, and Management Plan

- Annual Project Update; 2019 tributary monitoring data; final due November 1, 2020
- Comprehensive Project Report; Lower Clark Fork River salmonid abundance estimates (2014-2018); final due November 1, 2020
- Annual Project Update; 2019 Bull Trout redd count data; final due November 1, 2020
- Comprehensive Project Report; report summarizing 2009 – 2018 tributary monitoring data; final due November 1, 2020
- Annual Work Summary; due December 1, 2020
- Annual Project Update: 2020 tributary monitoring data; final due November 1, 2021

- Annual Project Update; 2020 Bull Trout redd count data; final due November 1, 2021

Appendix A 2020 Budget

Project	Carryover[1]	2020
Tributary Habitat Acquisition and Enhancement Fund (including GDP inflation rate)		**$583,079**
Unexpended funds w/interest		**$2,403,747**
Transfer to Fish Resource Monitoring, Enhancement, and Management Fund		**-$45,657**
Total Available		**$2,941,169**
Habitat Restoration Scoping Allocation	$0	$15,000
Habitat Restoration and Acquired Property Maintenance and Monitoring Allocation	$0	$15,000
Priority Native Salmonid Habitat Acquisition and Conservation Allocation	$0	$60,000
Idaho Field Station Construction (cost share with Appendix F5)	$38,663	$395,000
Habitat Prioritization Evaluation for the Upper Pack River and McCormick Creek	$25,986	$8,900
Pack River Watershed Management Plan Addendum	$0	$0
Johnson Creek Fish Passage Improvement Design and Construction	$72,928	$0
Lower Clark Fork River Minimum Flow and Water Temperature Monitoring	$0	$12,000
Trestle Creek Habitat Enhancement Project Phase I	$0	$47,000
Total	$137,577	$552,900
	MC Approved Budget	**$690,477**
	Unobligated Funds	$2,250,692

[1] This column denotes estimated carryover of unexpended, approved funds as of January 1.

Project	Carryover[1]	2020
Fish Resource Monitoring, Enhancement, and Management Fund (including GDP inflation rate)		**$50,343**
Unexpended funds w/interest		**$0**
Transfer from Tributary Habitat Acquisition and Enhancement Fund[2]		**$45,657**
Total Available		**$96,000**
Fish Resource Monitoring, Enhancement, and Management Plan	$0	$96,000
Total	$0	$96,000
	MC Approved Budget	**$96,000**
	Unobligated Funds	$0

[1] This column denotes estimated carryover of unexpended, approved funds as of January 1.

[2] In 2019 the MC approved that the allocation for the Fishery Resource Monitoring, Enhancement and Management Plan be permanently increased to $96,000. The funding for this plan will continue to be transferred from the Tributary Habitat Acquisition and Enhancement Program under Appendix A. These transferred funds will revert back to the Tributary Habitat Acquisition and Enhancement Fund if not spent in a given year.

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY – APPENDIX B

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Montana Tributary Habitat Acquisition and Recreational Fishery Enhancement Program

Implementation Staff Lead
Jason Blakney, Montana Fish, Wildlife and Parks (MFWP), (406) 382-3033, jblakney@mt.gov

Background
The purpose of this program is to offset the impacts of the power peaking operation of the Cabinet Gorge and Noxon Rapids Projects to native salmonids and recreational fisheries in Montana. This program is a multiple component effort that includes the restoration and enhancement of Clark Fork River tributary watersheds, support of recreational fishery monitoring and management, and evaluation and implementation of recreational fishery enhancement projects. This program is comprised of two primary components: Tributary Habitat Acquisition and Enhancement; and, Fish Resource Monitoring, Enhancement, and Management (including Sub-impoundment Fisheries).

2020 Project Plans
Tributary Habitat Acquisition and Enhancement

1. Habitat Restoration Monitoring and Native Salmonid Abundance Monitoring Plan
2. Vermilion River Sims Reach Restoration Survey and Design
3. Stream Gage Monitoring
4. Cabinet Ranger District Automated Snow Recording Site Operation and Maintenance 2020-2021
5. Crow Creek Bull Trout Investigation
6. Graves Creek Pilot Habitat Enhancement Project
7. Upper Prospect Creek LWD Project (***New***)
8. Lower Clark Fork Watershed Group Project Coordination
9. Habitat Restoration Monitoring, Maintenance, and Contingency Allocation
10. Habitat Restoration, Property Acquisition, and Conservation Easement Contingency Allocation
11. Phase II Crow Creek Stream and Riparian Restoration Project
12. East Fork Bull River Morphology, Connectivity, and Habitat Enhancement Project (***New***)

Recreational Fishery Enhancement

13. Cabinet Gorge and Noxon Reservoir Fisheries Monitoring Plan
14. Eurasian Watermilfoil Literature Review and Noxon Reservoir Existing Data Analysis
15. Pilot Project: Modification of Eurasian Watermilfoil Beds on Noxon Reservoir for Fishery Benefits (***New***)
16. Mountain Lake Fisheries Monitoring Project
17. Thompson Falls Field Station Phase II
18. Lower Bull River Day Use Boat Access Site Construction

19. Noxon Reservoir Boat Ramp Improvements
20. Managing Aquatic Invasive Plants on Noxon and Cabinet Gorge Reservoirs
21. Thompson River Property Acquisition (***New***)

Work Products

Habitat Restoration Monitoring and Native Salmonid Abundance Monitoring Plan

- Annual Project Update; 2019 activities; final due October 1, 2020
- Annual Work Summary; due December 1, 2020
- Annual Project Update; 2020 activities; final due October 1, 2021

Vermilion River Sims Reach Restoration Survey and Design

- Quarterly reports; due to Appendix B APL March 30, June 30, September 30, and November 15, 2020
- Annual Work Summary; from APL to Avista; due December 1, 2020
- Project Completion Report, including survey results and design recommendations; due June 1, 2020
- Annual fixed point photo-documentation

Stream Gage Monitoring

- Excel spreadsheet containing temperature and discharge data in 30-minute intervals for each calendar year in each stream (and channel) will be provided to Avista by February 1 of each subsequent year (2019–2022)
- Annual Water Year Data Report – Vermilion River; due January 1 of 2019–2022
- Annual Water Year Data Report – Trout Creek; due January 1 of 2019–2022
- Annual Water Year Data Report – East Fork Bull River; due January 1 of 2019–2022
- Annual Water Year Data Report – Bull River; due January 1 of 2019–2022
- Annual Water Year Data Report – Rock Creek; due January 1 of 2019–2021
- 2019 Annual Water Year Data Report – Rock Creek; due 2020 (carryover from 2019)
- Annual Water Year Data Report – Graves Creek; due January 1 of 2019–2021
- Mid-year report; due to Appendix B APL August 7, 2020
- Annual Work Summary; from APL to Avista; due December 1, 2020

Cabinet Ranger District Automated Snow Recording Site Operation and Maintenance 2020-2021

- Annual Work Summary; from APL to Avista; due December 1, 2020
- Data is available in real-time via the internet: (https://www.nohrsc.noaa.gov/interactive/html/graph.html?ey=2019&em=12&ed=19&units=0&station=CHIM8)

Crow Creek Bull Trout Investigation

- Annual Work Summary; from APL to Avista; due December 1, 2020
- Project Completion Report; final due November 30, 2020

Graves Creek Pilot Habitat Enhancement Project

- Quarterly reports; due to Appendix B APL March 30, June 30, September 30, and November 15, 2020
- Annual Work Summary; from APL to Avista; due December 1, 2020
- Review of substrate changes in a technical memo following two years of spring runoff; due December 15, 2021
- Annual fixed point photo-documentation

Upper Prospect Creek LWD Project

- Quarterly reports; due to Appendix B APL March 30, June 30, September 30, and November 15, 2020
- Annual Work Summary; from APL to Avista; due November 15, 2020
- Review of fisheries and/or physical habitat monitoring efforts two-years post run-off (2022) in technical memo or in Appendix B Native Salmonid Tributary Habitat Restoration Monitoring Update

Lower Clark Fork Watershed Group Project Coordination

- Comprehensive Report; Updated Lower Clark Fork Stream Restoration Summary (1995-2020) - full draft for review; December 31, 2020
- Comprehensive Report; Updated Lower Clark Fork Stream Restoration Summary (1995-2020) – final; March 31, 2021
- Quarterly reports; due to Appendix B APL March 30, June 30, and September 30, 2020
- Annual Work Summary; due to Appendix B APL November 15, 2020

Habitat Restoration Monitoring, Maintenance, and Contingency Allocation

- Annual Work Summary; from APL to Avista; due December 1, 2020
- Project Completion Report for Mainstem Bull River Reforestation on Forest Service Lands and NEPA Process (including photo-documentation); final due November 1, 2020.

Habitat Restoration, Property Acquisition, and Conservation Easement Contingency Allocation

- Annual Work Summary; from APL to Avista; due December 1, 2020
- Designs for specific projects would be reported in the form of a Technical Memorandum

Phase II Crow Creek Stream and Riparian Restoration Project

- Finalized design-build contract with RDG; June 2019 (***Completed in 2019***)
- As-built monitoring report; Final due March 2020
- Annual Work Summary; from APL to Avista; due December 1, 2020

East Fork Bull River Morphology, Connectivity, and Habitat Enhancement Project

- Beaver management plan (likely memorandum); due July 31, 2020
- Revegetation site plan (likely memorandum); due September 30, 2020
- Flow management assessment and recommendations (likely memorandum); due November 1, 2020
- Annual Work Summary; due to Program Leader November 16, 2020

Cabinet Gorge and Noxon Reservoir Fisheries Monitoring Plan

- Comprehensive Report: 2016-2018. Including Data From 1999-2018; final due March 31, 2020
- Annual Project Update; 2019 activities; final due November 31, 2020
- Annual Project Update; 2020 activities; final due October 31, 2021
- Annual Work Summary; from APL to Avista; due December 1, 2020

Eurasian Watermilfoil Literature Review and Noxon Reservoir Existing Data Analysis

- Quarterly Reports; due to Appendix B APL by March 30, June 30, September 30, and November 15, 2020
- Annual Work Summary; from APL to Avista; due December 1, 2020
- Project Completion Report: Review: Eurasian Watermilfoil as Fish Habitat; final due July 1, 2020

Pilot Project: Modification of Eurasian Watermilfoil Beds on Noxon Reservoir for Fishery Benefits

- Annual Work Summary; final due December 1, 2020
- Comprehensive Project Report (2020-2022 data); final due May 1, 2023

Mountain Lake Fisheries Monitoring Project

- Annual Work Summary; from APL to Avista; due December 1, 2020
- Comprehensive Project Report; final due to Avista; due March 1, 2021

Thompson Falls Field Station Phase II

- Annual Work Summary; from APL to Avista; due December 1, 2020

Lower Bull River Day Use Boat Access Site Construction

- Annual Work Summary (of site visitation information); from contractor to APL and Avista; due December 1, 2020
- Annual Work Summary; from APL to Avista; due December 1, 2020

Noxon Reservoir Boat Ramp Improvements

- Technical memorandum or other appropriate work product listing associated development options, including site plan(s) and cost estimates; due August 1, 2020
- Annual Work Summary; from APL to Avista; due December 1, 2020

Managing Aquatic Invasive Plants on Noxon and Cabinet Gorge Reservoirs

- Quarterly Reports; due to Appendix B Aquatic Program Leader (APL) by March 31, June 30, Sept. 30, and Nov. 15, 2020
- Annual Work Summary; from APL to Avista; due December 1, 2020
- Annual Project Update; due December 1, 2020
- Comprehensive Project Report; due December 1, 2020

Thompson River Property Acquisition

- Annual Work Summary; from APL to Avista; due December 1, 2020

Appendix B 2020 Budget

Project	Carryover[1]	2020
Tributary Habitat Acquisition and Enhancement Fund (including GDP inflation rate)		**$415,445**
Unexpended funds w/interest		**$2,346,647**
Total Available		**$2,762,091**
Habitat Restoration Monitoring and Native Salmonid Abundance Monitoring Plan	$23,200	$100,500
Vermilion River Sims Reach Restoration Survey and Design	$0	$0
Stream Gage Monitoring	$8,948	$0
Cabinet Ranger District Automated Snow Recording Site Operation and Maintenance 2020-2021	$0	$6,700
Crow Creek Bull Trout Investigation	$2,749	$0
Graves Creek Pilot Habitat Enhancement Project	$8,744	$0
Upper Prospect Creek LWD Project	$0	$6,994
Lower Clark Fork Watershed Group Project Coordination	$0	$24,899
Habitat Restoration Monitoring, Maintenance, and Contingency Allocation	$0	$20,014
Habitat Restoration, Property Acquisition, and Conservation Easement Contingency Allocation	$0	$60,000
Phase II Crow Creek Stream and Riparian Restoration Project	$6,138	$0
East Fork Bull River Morphology, Connectivity, and Habitat Enhancement Project	$0	$24,264
Total	$49,779	$243,371
MC Approved Budget		**$293,150**
Unobligated Funds		$2,468,941

[1] *This column denotes estimated carryover of unexpended, approved funds as of January 1.*

Appendix B 2020 Budget (continued)

Project	Carryover[1]	2020
Recreational Fishery Enhancement Fund (including GDP inflation rate)		**$276,960**
Unexpended funds w/interest		**$1,224,296**
Total Available		**$1,501,257**
Cabinet Gorge and Noxon Reservoir Fisheries Monitoring Plan	$17,000	$62,100
Eurasian Watermilfoil Literature Review and Noxon Reservoir Existing Data Analysis	$2,531	$0
Pilot Project: Modification of Eurasian Watermilfoil Beds on Noxon Reservoir for Fishery Benefits	$0	$40,000
Mountain Lake Fisheries Monitoring Project	$11,345	$0
Thompson Falls Field Station Phase II	$33,850	$0
Lower Bull River Day Use Boat Access Site Construction	$28,214	$0
Noxon Reservoir Boat Ramp Improvements	$55,000	$0
Managing Aquatic Invasive Plants on Noxon and Cabinet Gorge Reservoirs	$0	$40,000
Thompson River Property Acquisition	$0	$145,000
Total	$147,940	$287,100
MC Approved Budget		**$435,040**
Unobligated Funds		$1,066,217

[1] *This column denotes estimated carryover of unexpended, approved funds as of January 1.*

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY – APPENDIX C

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Fish Passage/Native Salmonid Restoration Plan

Implementation Staff Lead
Shana Bernall, Avista, (406) 847-1293, Shana.Bernall@avistacorp.com

Background
The purpose of the Fish Passage/Native Salmonid Restoration Plan is "…to mitigate the continuing effects of the project as obstructions to fish passage, and to achieve the goal of increasing the long term population viability of native salmonids in the Lake Pend Oreille-lower Clark Fork River system" (FERC Order, Article 406). This goal is to be accomplished through the aggressive implementation of the Clark Fork River Native Salmonid Restoration Plan (NSRP).

The NSRP addresses a number of issues influencing availability of native fish stocks suitable for fish passage. Genetics, pathogens, exotic fish species, fish abundance and tributary and mainstem habitat are all discussed in the NSRP. Consideration of these factors is important in determining if fish passage is the most effective tool to increase native salmonid populations. A number of projects have been identified as activities needed for implementation in 2020 to achieve the goals of the Fish Passage/Native Salmonid Restoration Plan. The locations where all program components will be implemented are within the Avista project area, located downstream of Thompson Falls Dam, Montana proceeding downstream to Lake Pend Oreille, Idaho.

2020 Project Plans
Annual Operations
1. Upstream Fish Passage Program
2. Graves Creek and East Fork Bull River Genetic Study (***New***)
3. Tributary Trapping and Downstream Juvenile Bull Trout Transport Program
4. PIT-Monitoring Station Operation and Maintenance
5. Bull Trout Emigration Study
6. East Fork Bull River Bedload Sediment Sampling 2016–2020
7. Redd Surveys in Montana Tributaries
8. Non-Native Fish Suppression Project in the East Fork Bull River
9. Evaluation of Potential Actions for Reducing Non-native Threats to Native Salmonid Populations (***New***)

Facilities
10. Fish Capture Facilities Operation, Development, and Testing
11. Graves Creek Permanent Weir Trap Enhancements

Work Products

Upstream Fish Passage Program

- Annual Work Summary; due December 15, 2020
- Comprehensive Project Report; Upstream Fish Passage Program (2001 – 2019 data); final due December 15, 2020
- Annual Project Update; Upstream Fish Passage Program (2020 data); final due December 1, 2021
- Comprehensive Project Report; Clark Fork River Westslope Cutthroat Trout Experimental Transport Program (2015 – 2018 data); final due September, 1 2020
- Annual Project Update; Abernathy Fish Technology Center Genetics Report (2019 data); final due November 1, 2020
- Annual Project Update; Abernathy Fish Technology Center Genetics Report (2020 data); final due November 1, 2021
- Annual Project Update; Idaho Fish Health Center Pathogen Report (2019 data); final due March 1, 2020
- Annual Project Update; Idaho Fish Health Center Pathogen Report (2020 data); final due March 1, 2021
- Project Completion Report; Hormone Analysis, Bozeman Fish Health Center; final due April 1, 2020
- Draft lower Clark Fork River fish capture database prepared by January 31, 2021

Graves Creek and East Fork Bull River Genetic Study

- Annual Work Summary; due December 15, 2020
- Project Completion Report; final due July 1, 2021

Tributary Trapping and Downstream Juvenile Bull Trout Transport Program

- Comprehensive Project Report; Downstream Program (2018 data; final due April 1, 2020 and includes Graves Creek permanent weir trap monitoring and evaluation plan report)
- Annual Project Update; Downstream Program (includes Graves Creek permanent weir trap monitoring and evaluation plan report; 2019 data); final due September 1, 2020
- Annual Project Update; Downstream Program (includes Graves Creek permanent weir trap monitoring and evaluation plan report; 2020 data); final due September 1, 2021
- Comprehensive Project Report; Downstream Program (includes Graves Creek permanent weir trap monitoring and evaluation plan report; 2021 data); final due November 1, 2022
- Temperature monitoring data for the four long-term sites; due November 1, 2020
- Annual Work Summary; Downstream Program; due December 31, 2020

PIT-Monitoring Station Operation and Maintenance

- Annual Work Summary; PIT Technology (2020); due December 1, 2020

Bull Trout Emigration Study

- Annual Work Summary; 2020; due December 1, 2020
- Annual Work Summary; 2021; due December 1, 2021
- Master's Thesis; due December 1, 2021

East Fork Bull River Bedload Sediment Sampling 2016-2020

- Annual Water Year Data Report – East Fork Bull River; due January 1 of 2020–2021 (note, this is the same work product required under the Appendix B stream gage replacement and maintenance Project Plan and includes sediment transport information)

Redd Surveys in Montana Tributaries

- Annual Project Update; Redd Survey (2019 data); final due April 1, 2020
- Annual Work Summary; due December 1, 2020
- Annual Project Update; Redd Survey (2020 data); final due April 1, 2021

Non-Native Fish Suppression Project in the East Fork Bull River

- Preliminary assessment of the Non-Native Fish Suppression Project in the East Fork Bull River; (2007–2018 data) due April 1, 2020
- Project Completion Report; Non-Native Fish Suppression Project in the East Fork Bull River; (2007–2018 data) final due September 30, 2020
- Annual Work Summary; due December 1, 2020

Evaluation of Potential Actions for Reducing Non-native Threats to Native Salmonid Populations

- Final memorandum; final due November 1, 2020
- Annual Work Summary; due December 1, 2020

Fish Capture Facilities Operation, Development, and Testing

- Annual Work Summary; Fish Capture Facilities (2020); due December 15, 2020
- Bid-ready design (CGFHF modifications); due June 1, 2020
- As-built drawings (CGFHF modifications); due September 1, 2021

Graves Creek Permanent Weir Trap Enhancements

- Bid-ready design (R2); anticipated in February 2020
- Revegetation site plan (LCFWG; likely memo); due July 1, 2020
- As-built drawings (R2); due November 1, 2020
- Annual Work Summary; due December 1, 2020

Appendix C 2020 Budget

Project	Carryover[1]	2020
Annual Operations Fund (including GDP inflation rate)		**$803,190**
Unexpended funds w/interest		**$920,555**
Total Available		**$1,723,745**
Upstream Fish Passage Program	$77,000	$316,652
Graves Creek and East Fork Bull River Genetic Study	$0	$59,500
Tributary Trapping and Downstream Juvenile Bull Trout Transport Program	$82,500	$467,010
PIT-Monitoring Station Operation and Maintenance	$0	$31,772
Bull Trout Emigration Study	$80,122	$0
East Fork Bull River Bedload Sediment Sampling 2016–2020	$0	$0
Redd Surveys in Montana Tributaries	$19,000	$28,000
Non-Native Fish Suppression Project in the East Fork Bull River	$24,500	$33,000
Evaluation of Potential Actions for Reducing Non-native Threats to Native Salmonid Populations	$0	$13,550
Stream Gage Monitoring (cost share; see Appendix B Project Plan)	$10,779	$0
Total	$293,901	$949,484
MC Approved Budget		**$1,243,385**
Unobligated Funds		$480,360

[1] *This column denotes estimated carryover of unexpended, approved funds as of January 1.*

Appendix C 2020 Budget (continued)

Project	Carryover[1]	2020
Facilities Fund (including GDP inflation rate)		**$583,081**
Unexpended funds w/interest		**-$8,628,226**
Total Available		**-$8,045,145**
Fish Capture Facilities Operation, Development, and Testing	$4,555,000	$20,187,500
Graves Creek Permanent Weir Trap Enhancements	$5,700	$708,192
Total	$4,560,700	$20,895,692
MC Approved Budget		**$25,456,392**
Unobligated Funds		-$33,501,537

[1] *This column denotes estimated carryover of unexpended, approved funds as of January 1.*

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY – APPENDIX D

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Bull Trout Protection and Public Education Project

Implementation Staff Lead
Sean Moran, Avista, (406) 847-1291, sean.moran@avistacorp.com

Background
The purpose of this project is to protect Bull Trout, a federally listed species (threatened), through a combination of enhanced law enforcement efforts by the states of Idaho and Montana, coupled with a public education outreach program. This will increase the numbers and population viability of Bull Trout by reducing intentional and incidental illegal harvest and increased public awareness concerning Bull Trout life history, habitat needs, identifying characteristics, and the potential for adverse impacts due to land use and other human activities.

Bull Trout are a key-target resource associated with the Lake Pend Oreille – lower Clark Fork River system. Widespread declines in numbers and distribution resulted in the 1998 listing of the species as threatened under the Endangered Species Act. During the consultation process for the relicensing of the Cabinet Gorge and Noxon Rapids projects, the State of Idaho identified illegal harvest of the highly vulnerable Bull Trout spawning run as a significant threat to the Lake Pend Oreille (LPO) population(s).

Given the immediate and ongoing threat that illegal harvest represented to the LPO Bull Trout populations, Idaho requested and the Clark Fork Relicensing Team agreed that an enhanced and focused law enforcement effort be supported and funded by Avista in 1998, and be considered as a relicensing Protection, Mitigation, and Enhancement (PM&E) measure. Avista subsequently provided Idaho Department of Fish and Game (IDFG) with funding which, along with additional funds provided by other groups, allowed for two years (1998 and 1999) of enhanced law enforcement effort focused on protecting LPO Bull Trout. It was also agreed that a plan should be developed for continuing this enforcement effort on a long-term basis, and it should include a specific public education and outreach component. Therefore, in addition to the second year of enhanced law enforcement effort that IDFG implemented in 1999, Avista also supported the development of a plan for a longer-term Bull Trout Protection and Public Education Project that was approved by the Management Committee (MC) and began implementation in the year 2000.

In 2004, IDFG, Montana Fish, Wildlife and Parks (MFWP), Panhandle Chapter Trout Unlimited (PCTU), and Avista began the revision of the 2000 Implementation Plan for the Bull Trout Protection and Public Education Project while incorporating aspects of the 2000 Cooperative Action Plan for the Bull Trout Protection and Public Education Project in the Lower Clark Fork – Pend Oreille Basin. In March of 2005, March 2010 and again in 2015, the MC approved updated Five-year Implementation Plans for the Bull Trout Protection and Public Education Project. In preparation for the next iteration of the Five-Year Implementation Plan, IDFG,

MFWP, PCTU, and Avista developed a final draft in 2019 for MC approval in the spring of 2020.

Previously grouped components of each of the three implementers of the Bull Trout Enforcement and Public Education Project (i.e., MFWP, IDFG, and PCTU) annual Project Plans have been broken-out as individual Project Plans to better account for cost-by-task associated with each and of the Program as a whole.

2020 Project Plans

1. Idaho Bull Trout Protection and Education Officer Support
2. Montana Bull Trout Education and Communication Support
3. Montana Bull Trout Education Outreach Support
4. Montana Game Warden Support
5. Bull Trout Booth Events and Education Outreach
6. Trout and About Festival Support
7. Trout Unlimited Website and Social Media Support
8. Bull Trout Education Promotional Items
9. Interpretive Signs and Kiosk Component for Trestle Creek Education Center
10. Draft Five-Year Implementation Plan (2020-2024)

Work Products

Idaho Bull Trout Protection and Education Officer Support

- Mid-year report; due to Avista; August 1, 2020
- Annual Work Summary; due to Avista; December 1, 2020

Montana Bull Trout Education and Communication Support

- Mid-year report; due to Avista; August 1, 2020
- Annual Work Summary; due to Avista; December 1, 2020

Montana Bull Trout Education Outreach Support

- Mid-year report; due to Avista; August 1, 2020
- Annual Work Summary; due to Avista; December 1, 2020

Montana Game Warden Support

- Mid-year report; due to Avista; August 1, 2020
- Annual Work Summary; due to Avista; December 1, 2020

Bull Trout Booth Events and Education Outreach

- Mid-year report; due to Avista; August 1, 2020
- Annual Work Summary; due to Avista; December 1, 2020

Trout and About Festival Support

- Mid-year report; due to Avista; August 1, 2020
- Annual Work Summary; due to Avista; December 1, 2020

Trout Unlimited Website and Social Media Support

- Mid-year report; due to Avista; August 1, 2020
- Annual Work Summary; due to Avista; December 1, 2020

Bull Trout Education Promotional Items

- Mid-year report; due to Avista; August 1, 2020
- Annual Work Summary; due to Avista; December 1, 2020

Interpretive Signs and Kiosk Component for Trestle Creek Education Center

- Contract between Avista and a local contractor to be finalized describing work to be done and agreed upon budget; due May 15, 2019 (***Completed in 2019***)
- Annual Work Summary; due to Avista; December 1, 2020

Draft Five-Year Implementation Plan (2020-2024)

- A final draft suitable for MC review; due December 1, 2019 (***Completed in 2019***)
- Final MC approved Five-Year Plan; due to Avista; March, 2020

Appendix D 2020 Budget

Project	Carryover[1]	2020
Bull Trout Protection and Public Education (includes GDP inflation rate)		**$179,784**
Unexpended funds w/interest		**$46,598**
Total Available		**$226,382**
Idaho Bull Trout Protection and Education Officer Support	$0	$98,813
Montana Bull Trout Education and Communications Support	$0	$5,749
Montana Bull Trout Education Outreach Support	$10,640	$23,066
Montana Game Warden Support	$4,928	$12,714
Bull Trout Booth Events and Education Outreach	$1,955	$5,980
Trout and About Festival Support	$7,471	$8,800
Trout Unlimited Website and Social Media Support	$1,780	$5,083
Bull Trout Education Promotional Items	$2,392	$5,060
Interpretive Signs and Kiosk Component for Trestle Creek Education Center	$0	$0
Draft Five-Year Implementation Plan (2020-2024)	$0	$0
Total	$29,166	$165,265
MC Approved Budget		**$194,431**
Unobligated Funds		$31,951

[1] *This column denotes estimated carryover of unexpended, approved funds as of January 1.*

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY – APPENDIX E

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Watershed Councils Program

Implementation Staff Lead
Sean Moran, Avista, (406) 847-1291, sean.moran@avistacorp.com

Background
The purpose of this program is to facilitate the protection and restoration of tributary stream habitat in the Lake Pend Oreille – lower Clark Fork River watershed. This will improve conditions for aquatic life, including macroinvertebrate communities and the native fish species (i.e., Bull Trout, Westslope Cutthroat Trout, and Mountain Whitefish) most affected by the construction and continued operation of the Clark Fork Projects.

Prior to 1999, two watershed councils (WCs) already existed within the lower Clark Fork River drainage, one in the Elk Creek drainage (tributary to Cabinet Gorge Reservoir) and one in the Prospect Creek drainage (tributary to Noxon Reservoir). The Elk Creek WC had already implemented a number of stream assessment, protection and enhancement measures. The degree of local stakeholder interest and success of this WC was a catalyst for developing and establishing this Watershed Council Program. The Prospect Creek WC began on-the-ground restoration in 1999, in part through funds from the Montana Tributary Habitat Acquisition and Recreational Fishery Enhancement Program (Appendix B of the Clark Fork Settlement Agreement [CFSA]).

This Watershed Council Program was initiated in 1999. In the initial year of implementation for this program, efforts focused on developing and disseminating informational materials about WCs and this program, designing a decision making process for reviewing WC related funding needs and requests and new WC formation. Since 1999, Rock Creek, Whitepine Creek, Trout Creek, Pilgrim Creek, Little Beaver Creek, and the Bull River WCs were formed. Beginning in 2000, Avista entered into an agreement with the Green Mountain Conservation District (GMCD), which allowed GMCD to directly administer these program funds in Montana.

In 2001, the Pack River WC formed in Idaho. Subsequently in 2002, Avista entered into an agreement with Bonner Soil and Water Conservation District (BSWCD), which allowed BSWCD to directly administer these program funds for the Pack River WC.

The Lower Clark Fork Watershed Group (LCFWG, an umbrella and organizational group for the Montana WCs) was officially formed early in 2004, and received its 501-3C status from the IRS in 2005. The LCFWG now facilitates all activities for the Montana WCs, helps coordinate Avista's restoration efforts with other state and/or federal activities, as well as seeking non-CFSA funding for watershed activities.

If needed, developed ranking criteria can be utilized to prioritize providing administrative funding or other support to facilitate the formation and initial development of new WC and to support existing WC.

2020 Project Plans

1. Pack River Watershed Council, Bonner Soil and Water Conservation District
2. Lower Clark Fork Watershed Council Projects

Work Products

Pack River Watershed Council, Bonner Soil and Water Conservation District

- Mid-year report; due to Avista; August 1, 2020
- Annual Newsletter (Summer 2020)
- Annual Work Summary (including financial report) due to Avista; December 1, 2020

Lower Clark Fork Watershed Council Projects

- Mid-year report; due to Avista; August 1, 2020
- Annual Work Summary; due to Avista; December 1, 2020

Appendix E 2020 Budget

Project	Carryover[1]	2020
Watershed Councils Program Fund (including GDP inflation rate)		**$14,382**
Unexpended funds w/interest		**$6,888**
Total Available		**$21,270**
Pack River Watershed Council, Bonner Soil and Water Conservation District	$0	$4,180
Lower Clark Fork Watershed Council Projects	$0	$10,175
Total	$0	$14,355
MC Approved Budget		**$14,355**
Unobligated Funds		$6,915

[1] *This column denotes estimated carryover of unexpended, approved funds as of January 1.*

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY– APPENDIX F1

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Clark Fork River Water Quality Monitoring Program

Implementation Staff Lead
Paul Kusnierz, Avista, (406) 847-1274, paul.kusnierz@avistacorp.com

Background
The purpose of this measure is to provide for the systematic, long-term monitoring of nutrients and metals in the lower Clark Fork River as part of the former Tri-State Water Quality Council (TSWQC) Monitoring Program. Excessive nutrient loading and metals contamination in the middle and upper portions of the Clark Fork River were cause for water quality concerns in the lower Clark Fork River - Lake Pend Oreille (LCFR-LPO) system. Interest in monitoring long-term trends in the quality of water entering and exiting the reservoirs, and a desire for a better understanding of how the reservoirs may be functioning as nutrient or metals "sinks" led to consensus that a systematic, long-term, and coordinated nutrient and metals monitoring program for the lower Clark Fork waters should be implemented.

During the collaborative relicensing process and development of the Settlement Agreement, it was agreed that support and use of the TSWQC program to meet the long-term water quality monitoring needs associated with the Clark Fork projects would facilitate a coordinated approach to long-term water quality monitoring of the LCFR-LPO system.

As part of the overall TSWQC program, Appendix F1 supported data collection, analysis and reporting of nutrient and metals data at three sampling locations on the lower Clark Fork River. This included: monthly sampling above Noxon Reservoir, downstream of Noxon Rapids Dam and downstream of Cabinet Gorge Dam, and additional peak flow sampling (six samples during the peak flow period each year) at the Cabinet Gorge site. This data, along with data generated at 29 other sites on the Clark Fork River, was used to assess the status of and trends in water quality (utilizing concentrations and loads) basin-wide. A monitoring program report was prepared annually that summarizes data collection and analysis for each field season (calendar year), and at every five-year interval an evaluation of the data was conducted to assess water quality trends and the effectiveness of water quality measures in the watershed.

In addition, data collected at the Cabinet Gorge site was used to estimate nutrient loading to Lake Pend Oreille from the Clark Fork (Montana) watershed. The Montana/Idaho Border Nutrient Load Agreement (2002) sets a target for total phosphorus to protect open lake water quality of Lake Pend Oreille and also sets load allocations for Montana and local Idaho sources to meet that target. For the purposes of determining that the allocation for Montana (259,500 kg/year total phosphorus) is not being exceeded, the Agreement sets forth monitoring objectives for evaluating nutrient data from the Clark Fork River at the border (i.e., the Cabinet Gorge site).

Therefore, the samples collected below Cabinet Gorge Dam are integral to achieving key objectives of the Clark Fork-Pend Oreille watershed management plan.

At every five-year interval, a review of data is conducted to evaluate water quality trends and the effectiveness of water quality measures in the watershed. These 'trend reports' were completed in 2004, 2008, 2012, and 2019. These evaluations resulted in an analysis of spatial trends in concentration and load, time series trends, statistical comparisons with applicable water quality targets, and an overall interpretation of the water quality health of the three-state basin. Avista staff participated on the TSWQC Monitoring Committee (since 2012 on the Clark Fork River Water Quality Monitoring Committee; CFRWQMC) and assisted in the design and scope of work of the five-year evaluations to ensure consistency with the long-term water quality monitoring needs of the Clark Fork projects.

Because of past exceedances of water quality standards, Idaho Department of Environmental Quality (DEQ) developed and adopted Total Maximum Daily Loads (TMDL) for the Lower Clark Fork River sub-basin in 2007. In order to support TMDL-related data needs as well as monitor potential impacts of future activities that could impact the water quality of the Lower Clark Fork River, Idaho DEQ and other members of the TSWQC Monitoring Committee, including Avista staff, identified metals of concern as copper, zinc, and cadmium to be included in the 2008–2012 monitoring program. These metals have not been collected since 2012.

In October 2012 TSWQC officially closed its doors. This closure was due in large part to decreasing administrative dollars as well as state and federal grants, and also affected the 2012 monitoring program with no monthly sampling occurring in September through November. Without the coordination and facilitation functions once provided by the TSWQC, it was now incumbent upon those active monitoring participants to continue the three state water quality monitoring activities.

In December 2012, the CFRWQMC consisting of Montana DEQ, Idaho DEQ, Missoula Wastewater Treatment Facility, University of Montana, and Avista met to review the previous monitoring program and to devise a more sustainable program. The Washington Department of Ecology continued to maintain their two monitoring sites on the Pend Oreille River. Plum Creek Timber Company and the U.S. Forest Service no longer contribute funds to the program. This group continues to meet annually to review the previous year's sampling efforts, review annual work products, coordinate the upcoming monitoring season, and plan future activities. Beginning in 2015, through a contractual agreement between Montana DEQ and the Clark Fork Coalition (CFC), the CFC has now taken the lead for the group's coordination, facilitation, and the production of the annual water quality reports.

In recent years, irregularities in the discharge hydrograph have occurred in the lower Clark Fork River at the Montana-Idaho border as measured at U.S. Geological Survey (USGS) Gaging Station 12391950 Clark Fork River below Cabinet Gorge Dam. The irregularities include runoff beginning earlier than historically "normal" and a stunted peak flow. These irregularities have spurred discussion among the group regarding the number and timing of sample collection during peak flow monitoring. In 2016, the group requested the contractor conduct an analysis to review historical data to address concerns and provide recommendations on how to move

forward with the peak flow monitoring. In 2017 the CFRWQMC agreed to the following changes in Avista's sampling plan: 1) water quality sampling downstream of Thompson Falls Dam (site number CFR 28) and Noxon Rapids Dam (site number CFR 29) will only occur July-September, and 2) the annual field quality control review will be discontinued. These changes were implemented in a manner to reduce costs to a level that are congruent to Avista's Appendix F1 obligation without the loss of important water quality data. The Management Committee was made aware that such changes may occur at the March 14, 2017 Management Committee meeting and was informed of these changes on May 16, 2017.

2020 Project Plans

1. Clark Fork River Water Quality Monitoring Program

Work Products

- Estimate of 2019 nutrient loads from the Clark Fork River into Lake Pend Oreille, technical memorandum; final due June 1, 2020
- Annual Project Update: 2019 monitoring report to be prepared by the Clark Fork Coalition; final due July 30, 2020
- Annual Work Summary; due December 1, 2020

Appendix F1 2020 Budget

Project	Carryover[1]	2020
Clark Fork Water Quality Monitoring Program (including GDP inflation rate)		**$21,575**
Unexpended funds w/interest		**$8,338**
2023 Funding Obligation (5-year trends analysis)		**$0**
Total Available		**$29,913**
Clark Fork River Water Quality Monitoring Program	$0	$29,550
Total	$0	$29,550
	MC Approved Budget	**$29,550**
	Unobligated Funds	$363

[1] *This column denotes estimated carryover of unexpended, approved funds as of January 1.*

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY – APPENDIX F2

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Monitoring of Noxon Reservoir Stratification and Mobilization of Sediment Nutrients/Metals

Implementation Staff Lead
Paul Kusnierz, Avista, (406) 847-1274, paul.kusnierz@avistacorp.com

Background
The purpose of this monitoring effort is to collect data concerning the potential for nutrients or metals deposited in Noxon Reservoir sediments to remobilize back into the water column during periods of reservoir stratification.

Elevated nutrient levels and metals contamination are high-priority water quality concerns within the Clark Fork River – Lake Pend Oreille (CFR-LPO) system. The available information on sediment, nutrient, and metals transport and deposition in the CFR-LPO system indicates that Noxon Reservoir acts as a beneficial sediment, nutrient, and metals "sink" of varying efficiency, limiting the degree to which they are transported downstream into Lake Pend Oreille. The Water Resources Work Group, now known as the Water Resources Technical Advisory Committee (WRTAC), identified an information need related to whether low oxygen conditions in deeper waters of the reservoir during the rare periods of reservoir stratification might allow for the remobilization of nutrients or metals previously deposited and retained in reservoir sediments. Therefore, it was decided that, in conjunction with the Tri-State Water Quality Council (TSWQC) monitoring program, a better understanding of the stratification related limnologic processes in Noxon Reservoir would further improve the overall understanding and management of water quality issues, concerns, and needs in the CFR-LPO system. Appendix F2 called for the monitoring to be conducted three times during the term of the FERC license.

As per this appendix, average daily inflows to Noxon Reservoir are monitored, via the USGS website, during the July 1 through September 30 period. If outflow from Noxon is equal to or less than 8,000 cfs for at least 4 out of 7 consecutive days during the noted time period, water column monitoring will commence. This monitoring "trigger" was first reached on August 22, 2000. Avista contracted with PBS&J, Inc. (formerly Land & Water Consulting, Inc.), the same contractor involved in the overall TSWQC monitoring program, to: a) monitor reservoir stratification, b) develop water sampling protocols, c) perform analytical quality assurance and quality controls, and d) perform data management and reporting. Reservoir water column monitoring continued throughout the month of September 2000. The reservoir did thermally stratify; however, low dissolved oxygen conditions were not detected at depth, the trigger for intensive nutrient and metals sampling.

Based upon the 2000 sampling effort, and considering the low flow situation in 2001, a similar sampling effort began on July 26, 2001, before the predetermined flow trigger was met. This

2001 sampling effort detected both thermal and oxygen stratification, and therefore nutrient and metals samples were taken, and subsequently analyzed (Noxon Rapids Reservoir, Fall 2001 Stratification Monitoring Results, September 2002, Land & Water Consulting, Inc.). Listed below are several of PBS&J's conclusions:

- The potential for widespread mobilization of nutrients or metals from reservoir sediments due to reducing conditions associated with stratification appeared to be low.
- Ongoing monthly surface water monitoring by the Tri-State Water Quality Council will continue to document upstream and downstream differences in nutrient concentrations at the Noxon HED, thus independent summer stratification monitoring by Avista for nutrient components is probably unnecessary.
- Metals mobilization from reservoir sediments did not appear to be an issue of concern in Noxon Rapids HED. Consequently, further sampling for metals does not appear justified and the Avista stratification monitoring for metals effects should be discontinued.

As per this appendix, collection of additional data, concerning the potential for nutrients or metals deposited in Noxon Reservoir sediments to remobilize back into the water column during periods of reservoir stratification, was to occur as many as three different years of stratified reservoir conditions over the term of the new license. Reservoir sampling has occurred in 2000 and 2001. In 2020, stratification sampling will occur in Noxon Reservoir if outflow from Noxon Rapids Dam is less than or equal to 8,000 cfs on 2 out of 7 consecutive days when inflow and flow forecasts indicate that the average daily outflow of equal to or less than 8,000 cfs for 4 out of 7 consecutive days will be met. The trigger must be met between July 1 and August 7.

2020 Project Plans

1. Monitoring of Noxon Reservoir Stratification and Mobilization of Sediment Nutrients/Metals

Work Products

- Annual Work Summary; due December 1, 2020
- Comprehensive Project Report (if stratification sampling occurs); due May 1, 2021

Appendix F2 2020 Budget

Project	Carryover[1]	2020
Monitoring Noxon Reservoir Stratification		**$55,107**
Unexpended funds w/interest		**$0**
Total Available		**$55,107**
Monitoring of Noxon Reservoir Stratification and Mobilization of Sediment Nutrients/Metals	$51,120	$3,987
Total	$51,120	$3,987
	MC Approved Budget	**$55,107**
	Unobligated Funds	$0

[1] *This column denotes estimated carryover of unexpended, approved funds as of January 1.*

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY – APPENDIX F3

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Aquatic Organism Tissue Analysis

Implementation Staff Lead
Paul Kusnierz, Avista, (406) 847-1274, paul.kusnierz@avistacorp.com

Background
The purpose of this measure is to provide for a commitment on the part of Avista to fund the collection and analysis of fish or other aquatic organism tissue samples from Noxon or Cabinet Gorge reservoirs for the presence of heavy metals or other substances of concern. While the Water Resources Advisory Committee (WRTAC) agreed that tissue analysis was not warranted in reservoir waters on a routine basis, they were interested in seeing metals analysis included in the former Tri-State Water Quality Council's monitoring along the lower Clark Fork River (provided for in Appendix F1). Therefore, this appendix retains a commitment from Avista to fund tissue analysis should public health or other concerns arise in the future.

In 2004, and in response to a previous WRTAC request, an annotated bibliography on Clark Fork River-Lake Pend Oreille bed sediment and fish tissue information was produced and distributed. Information from the state of Montana pertaining to acceptable toxin levels in fish tissue was also made available. Also in 2004, fish were collected during the fall Noxon Reservoir sampling conducted through Appendix B activities and the 2003/2004 experimental trap netting operations on Lake Pend Oreille conducted through Appendix F5 activities. Based upon results (non-Clark Fork Settlement Agreement funded) obtained in 2005, both Montana Fish, Wildlife, and Parks (MFWP) and Idaho Department of Health and Welfare issued fish consumption advisories to the angling public based upon fish tissue mercury and/or PCB levels.

During the fall 2010 reservoir sampling conducted through Appendix B activities, MFWP staff collected fish and crayfish tissue samples from both Noxon and Cabinet Gorge reservoirs for mercury analysis. Based upon results (non-Clark Fork Settlement Agreement funded) obtained in 2011, MFWP updated fish consumption advisories (see: fwp.mt.gov) to the angling public based upon fish and crayfish tissue mercury and/or PCB levels.

During spring 2014, MFWP and Avista staff collected Northern Pike, Walleye, Smallmouth Bass, and Yellow Perch tissue samples from Noxon Reservoir for PCB's dioxin and furan analysis, with a final report produced by MFWP in 2015.

During the spring and fall 2015 reservoir sampling, MFWP and Avista staff again collected Northern Pike, Walleye, Smallmouth Bass and Yellow Perch tissue samples from both Noxon and Cabinet Gorge reservoirs for mercury (Hg) analysis, with a final report being produced in December, 2017.

2020 Project Plans

1. Noxon and Cabinet Gorge Reservoirs Fish Mercury Study 2020 (***New***)

Work Products

- Annual Work Summary; due December 1, 2020
- Lab report on fish tissue analysis; final due May 1, 2021
- Comprehensive Project Report; final due November 1, 2021
- Incorporation of results into Montana's fish consumption guidelines; final due May 1, 2021 (A new online system should be in place sometime in 2021.)

Appendix F3 2020 Budget

Project	Carryover[1]	2020
Aquatic Organism Tissue Analysis[2]		**$15,000**
Unexpended funds w/interest		**$0**
Total Available		**$15,000**
Noxon and Cabinet Gorge Reservoirs Fish Mercury Study 2020	$0	$10,000
Total	$0	$10,000

MC Approved Budget	**$10,000**
Unobligated Funds	$5,000

[1] This column denotes estimated carryover of unexpended, approved funds as of January 1.

[2] Avista will pay the actual costs in an amount not to exceed $15,000 during any five-year period, as defined in the CFSA.

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY – APPENDIX F4

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Water Quality Protection and Monitoring Plan for Maintenance, Construction, and Emergency Activities

Implementation Staff Lead
Eric Oldenburg, Avista, (406) 847-1290, eric.oldenburg@avistacorp.com

Background
In the past, greater than normal reservoir drawdown and/or restricted discharge at the Cabinet Gorge Project have occasionally been required during emergency situations (e.g., drowning or a vehicle in the river) or for maintenance purposes (e.g., tailrace and dam inspections). In discussing the types of activities that have required unusual project operations in the past or that might require them in the future, the WRTAC agreed that a standardized set of policies and procedures for dealing with these activities would help to ensure that impacts to water quality or aquatic resources are minimized or avoided.

The purpose of this measure was to provide for the development and implementation of a Water Quality Protection and Monitoring Plan for Maintenance, Construction, and Emergency Activities (Plan). The goal of the Plan is to minimize or eliminate negative effects associated with project related maintenance, construction, and emergency activities on Clark Fork River water quality and associated resources. The intent was to have clearly defined policies and plans for notification of, and consultation with, resource agencies prior to undertaking planned maintenance or construction activities that require a change from normal project discharge or reservoir levels (i.e., other than as provided for in the General Operating Limits for Noxon Rapids, and Cabinet Gorge, Project Operations Package PM&E, Settlement Agreement Appendix T). The Plan was also to include standardized agency notification guidelines, as well as water quality and resource protection and monitoring actions that will be implemented in the event of unforeseen and sudden changes to project operations due to emergency or other unforeseen circumstances.

After nearly 16 months of work by Avista staff and involved WRTAC members, the Management Committee (MC) approved the final Plan in September of 2001. As part of Avista's required annual reporting process, the MC approved Plan was submitted to FERC on April 15, 2002, which also began Plan implementation.

In 2010, Avista believed it was time to revise the original 2002 Plan and the MC concurred at their March 2010 meeting. At their September 2010 meeting, the WRTAC decided to have the original WRTAC entities (USFS, Kalispel Tribe, IDFG, MFWP, Idaho DEQ, and Montana DEQ) that worked on producing the first plan review the 2010 final draft Plan. The MC approved the revised 2010 Plan via consent mail on December 3, 2010. The FERC approved the 2010 Plan by Order dated June 23, 2011.

Implementation of the Water Quality Protection and Monitoring Plan for Maintenance, Construction, and Emergency Activities is limited to a small number of tasks and all costs are borne by Avista. Thus, all required elements are listed below and a formal Project Plan is not necessary.

2020 Project Plans

- Avista Hydro Generation and Production and Environmental Affairs staff will meet for their annual internal coordination meeting to review and discuss planned maintenance and/or construction activities that may affect Cabinet Gorge minimum flow and/or reservoir elevation general operating limits.
- Pursuant to USFS 4(e) Condition 6 in Avista's FERC license, Avista will identify those activities which may affect recreational use or access and provide notification no less than 60 days prior to construction activities, 30 days prior to maintenance activities, and as soon as possible for emergency activities. Proper implementation of the Water Quality Protection and Monitoring Plan ensures this condition will be met.
- In the event that standard operating procedures for the Clark Fork Project (minimum flow and/or reservoir elevations) are interrupted, implement the MC approved, Water Quality Protection and Monitoring Plan for Maintenance, Construction, and Emergency Activities at the Cabinet Gorge and Noxon Rapids HEDs, including its protocol for agency notification, monitoring, and Best Management Practices.
- Annually update the designated contacts for the Plan, as needed.

Work Products

- There are no reports or work products associated with the Water Quality Protection and Monitoring Plan for Maintenance, Construction, and Emergency Activities.

Appendix F4 2020 Budget

- Should the Plan need to be implemented in 2020, the total actual costs associated with monitoring and Best Management Practices implementation will be borne by Avista.

Project	Carryover[1]	2020
Water Quality Protection and Monitoring Plan for Maintenance, Construction and Emergency Activities		**$0**
Unexpended funds w/interest		**$0**
Total Available		**$0**
Costs associated with monitoring and best management practices implementation will be borne by Avista with no effect on funding of this program.	$0	$0
Total	$0	$0
	MC Approved Budget	**$0**
	Unobligated Funds	$0

[1] *This column denotes estimated carryover of unexpended, approved funds as of January 1.*

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY – APPENDIX F5

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Dissolved Gas Supersaturation Control, Mitigation, and Monitoring

Implementation Staff Leads
Paul Kusnierz, Avista, (406) 847-1274, paul.kusnierz@avistacorp.com *and*
Ken Bouwens, Idaho Department of Fish and Game, (208) 770-3766, ken.bouwens@idfg.idaho.gov

Background
The purpose of this measure is to provide for the study, control, mitigation, and monitoring of gas supersaturation and the associated impacts to biological resources in the lower Clark Fork River-Lake Pend Oreille (LCFR-LPO) system related to spill at the Clark Fork Projects. In 1999, this measure committed Avista to multiple actions and activities for achieving this purpose, including: 1) selective use of specific spillways at both Noxon Rapids and Cabinet Gorge dams, 2) a comprehensive total dissolved gas (TDG) monitoring program, 3) intensive study of the effects of gas supersaturation to fish inhabiting the LCFR-LPO system, 4) a comprehensive feasibility analysis of structural alterations or other engineering alternatives for reducing excessive TDG levels due to spill at Cabinet Gorge Dam, and 5) development and implementation of a Gas Supersaturation and Control Program that addresses the issue of excessive TDG levels downstream of the Cabinet Gorge Dam.

Through 2002, Avista worked with IDFG, Idaho DEQ, Montana DEQ, Idaho Rivers United, the Kalispel Tribe and the USFWS on all aspects of this Program, including physical and biological TDG monitoring efforts and interpretation of results, engineering alternatives and subsequent engineering options, and continued efforts on the finalization of the Gas Supersaturation and Control Program (GSCP). As per the requirements of this Program, in December of 2002 Avista submitted a proposed GSCP to Idaho DEQ for their "… review, modification, and approval." As per other FERC requirements, the proposed GSCP was also submitted to the USFWS and FERC. Per an agreement dated February 10, 2004, Idaho DEQ approved the GSCP, as did the USFWS by letter dated February 25, 2004. Avista began implementation of the GSCP in 2004, even though FERC did not issue the order approving the GSCP until January 1, 2005.

The GSCP included the continued annual TDG monitoring and results reporting at the three permanent TDG monitoring locations, the phased construction of two water conveyance tunnels, and an associated annual mitigation program. The original river bypass tunnels used at the Cabinet Gorge site were planned to be reconstructed into the water conveyance tunnels, thus decreasing the level of spill.

At an August 2007 Workshop at ENSR's labs with the experts from the Project Design Team, the Gas Supersaturation Subcommittee (GSSC) determined by consensus that performance indicators demonstrated that the construction and operation of the bypass tunnel would not meet

the TDG performance levels in the Clark Fork River below Cabinet Gorge Dam anticipated in the GSCP. Design development results indicated there was a 'fatal flaw' in the 'final control and default strategies' and the tunnels should not be reconstructed. The September 2008 final Design Development Report for the Cabinet Gorge Bypass Tunnels Project documented these final results. The Management Committee agreed with the GSSC conclusion that the GSCP needed to be revised and directed the GSSC to amend the GSCP, such that alternatives were selected that incrementally reduced, offset, or otherwise mitigated TDG due to spill at Cabinet Gorge Dam. At their September 2009 meeting, the Management Committee approved the Final 2009 Addendum to the GSCP, with subsequent FERC approval by Order dated February 19, 2010.

The GSCP Addendum abandoned the original concept of reopening the two diversion tunnels and instead requires Avista to evaluate and, if feasible over the next few years, construct a variety of smaller-capacity options to abate TDG. Feasibility studies on the top five abatement alternatives were completed in 2011, and based upon those studies Avista initiated work on the top two alternatives, power generation on the existing bypass tunnels and spillway modifications. An engineering study for the power generation on the existing bypass tunnel was completed in 2013.

The spillway modification project involves modifying gate bays on the spillway by adding precast-concrete roughness elements (baffle blocks) on the spillway ogee downstream of the gate, configured for maximum effectiveness at a fixed gate opening of approximately 6,000 cfs. A five foot long flip bucket extension to the existing crest was also added. In 2013, a field prototype for the spillway 2 modifications was tested and confirmed a positive performance in reducing TDG downstream of the dam. Cavitation repairs were completed on spillway 2 in 2014. Modeling and engineering of refinements to the spillway 2 design were conducted in 2014.

Construction of modifications on spillways 4 and 5 was initiated in 2015 and completed in spring 2016. The performance of spillways 4 and 5 was tested and confirmed a positive performance in 4 reducing TDG downstream of the dam, but the results for 5 were inconclusive. The river depth is substantially shallower below spillway 5 than 1 through 4 and as a result there may be less of a reduction in TDG when there is minimal spill such as what occurred in 2016. Construction of modifications on spillways 1 and 3 was initiated in July 2017 and completed in October 2017. Performance testing of spillways 1 and 3 was completed in July 2018.

2020 Project Plans

Operations

1. There is no project plan for operations; however, Avista will continue to utilize spillway operations at Noxon Rapids and Cabinet Gorge dams as outlined in the GSCP, amended in 2009 to include operation of the Ice and Trash spillways, amended in 2013 to include operation of the modified spillway 2 during spill, amended in 2016 to include use of spillways 4 and 5, and amended in 2018 to include use of spillways 1 and 3. The results of the ongoing TDG monitoring program will be utilized to evaluate the effectiveness of the selective spillway usage for reducing TDG levels, and identify any potential changes in spillway usage.

TDG Monitoring

1. Total Dissolved Gas Monitoring

TDG Mitigation and Monitoring Program

2. Project Scoping Allocation (***New***)
3. Analysis of Gas Bubble Disease Monitoring Data
4. Lake Pend Oreille Experimental Walleye Angler Incentive Program
5. Lake Pend Oreille/Clark Fork River Walleye Population Assessment
6. Lake Pend Oreille Lake Trout Angler Incentive Program
7. Lake Pend Oreille Lake Trout Netting Program
8. Demography of Adfluvial Bull Trout in Lake Pend Oreille
9. Lake Pend Oreille Bull Trout Survival Study
10. Lake Pend Oreille Nearshore Index Netting
11. Box Canyon Reservoir Northern Pike Suppression
12. Lake Pend Oreille Tributary Creel
13. Trophic and Phytoplankton Monitoring in Lake Pend Oreille Idaho
14. Temperature Monitoring Data Compilation
15. Walleye Geochemistry Study
16. Priest River Coldwater Bypass Limnology Assessment (***New***)
17. Idaho Protection and Education Officer Support (***New***)

GSCP Alternative:

18. Gas Supersaturation Control Program Total Dissolved Gas Abatement

Work Products

Operations

- Annual Work Summary; due December 1, 2020

Total Dissolved Gas Monitoring

- Temperature monitoring data for the two sites; due November 1, 2020
- Annual Work Summary; due December 1, 2020
- Annual Project Update; final due March 1, 2021

Project Scoping Allocation

- Annual Work Summary; due December 1, 2020

Analysis of Gas Bubble Disease Monitoring Data

- Annual Project Update – 2019; final due March 1, 2020
- Annual Work Summary; due December 1, 2020
- Annual Project Update – 2020; final due April 1, 2021

Lake Pend Oreille Experimental Walleye Angler Incentive Program

- Annual Project Update – 2019; final due November 1, 2020
- Annual Work Summary; due December 1, 2020
- Annual Project Update – 2020; final due November 1, 2021

Lake Pend Oreille/Clark Fork River Walleye Population Assessment

- Annual Project Update – 2019; final due November 1, 2020
- Annual Work Summary; due December 1, 2020
- Annual Project Update – 2020; final due November 1, 2021

Lake Pend Oreille Lake Trout Angler Incentive Program
- Annual Project Update – 2019; final due November 1, 2020
- Annual Work Summary; due December 1, 2020
- Annual Project Update – 2020; final due November 1, 2021

Lake Pend Oreille Lake Trout Netting Program
- Annual Project Update – 2019; final due November 1, 2020
- Annual Work Summary; due December 1, 2020
- Annual Project Update – 2020; final due November 1, 2021

Demography of Adfluvial Bull Trout in Lake Pend Oreille
- Project Completion Report outlining the findings for Objectives 1-3; final due August 1, 2020
- Publication of model and results in peer reviewed literature; submission due December 1, 2020
- Annual Work Summary; due December 1, 2020

Lake Pend Oreille Bull Trout Survival Study
- Temperature monitoring data for the two sites; due November 1, 2020
- Project Completion Report (with data through 2019); final due November 1, 2020
- Annual Work Summary; due December 1, 2020

Lake Pend Oreille Nearshore Index Netting
- Project Completion Report; final due December 1, 2020
- Annual Work Summary; due December 1, 2020

Box Canyon Reservoir Northern Pike Suppression
- Annual Project Update; final due November 30, 2020
- Annual Work Summary; due November 30, 2020
- Comprehensive Project Report 2012–2021; final due November 30, 2021

Lake Pend Oreille Tributary Creel
- Project Completion Report; final due November 1, 2020
- Annual Work Summary; due December 1, 2020

Trophic and Phytoplankton Monitoring in Lake Pend Oreille Idaho
- Annual Work Summary; due December 1, 2020

Temperature Monitoring Data Compilation
- Updated database; final due April 1, 2020
- Annual Work Summary; due December 1, 2020

Walleye Geochemistry Study
- Annual Work Summary; due December 1, 2020
- Project Completion Report or manuscript for publication; final due December 1, 2020

Priest River Coldwater Bypass Limnology Assessment
- Temperature monitoring data for the site; due November 1, 2020
- Limnology assessment report written by consultant; final due November 1, 2020
- Annual Work Summary; due December 1, 2020

Idaho Protection and Education Officer Support
- Mid-year report; due to Avista; August 1, 2020
- Annual Work Summary; due to Avista; December 1, 2020

Gas Supersaturation Control Program Total Dissolved Gas Abatement
- Annual Work Summary; due December 1, 2020

Appendix F5 2020 Budget

Project	Carryover	2020
Total Dissolved Gas Monitoring		**$0**
Unexpended funds w/interest		**$0**
Total Available		**$0**
Total Dissolved Gas Monitoring	$43,984	$31,400
Total	$43,984	$31,400
	MC Approved Budget	**$75,384**
	Unobligated Funds	$0

Project	Carryover[1]	2020
Mitigation (including GDP inflation rate)		**$870,659**
Unexpended funds w/interest		**$2,388,073**
Total Available		**$3,258,733**
Project Scoping Allocation	$0	$10,000
Analysis of Gas Bubble Disease Monitoring Data	$2,000	$16,900
Lake Pend Oreille Experimental Walleye Angler Incentive Program	$0	$76,750
Lake Pend Oreille/Clark Fork River Walleye Population Assessment	$4,989	$81,000
Lake Pend Oreille Lake Trout Angler Incentive Program	$0	$128,400
Lake Pend Oreille Lake Trout Netting Program	$0	$360,018
Demography of Adfluvial Bull Trout in Lake Pend Oreille	$1,357	$0
Lake Pend Oreille Bull Trout Survival Study	$0	$26,500
Lake Pend Oreille Nearshore Index Netting	$19,366	$0
Box Canyon Reservoir Northern Pike Suppression	$18,710	$48,024
Lake Pend Oreille Tributary Creel	$16,997	$0
Trophic and Phytoplankton Monitoring in Lake Pend Oreille Idaho	$0	$6,860
Temperature Monitoring Data Compilation	$9,669	$6,300
Walleye Geochemistry Study	$180,591	$0
Priest River Coldwater Bypass Limnology Assessment	$0	$150,000
Idaho Protection and Education Officer Support	$0	$44,939
Idaho Field Station Construction (cost share; Appendix A Project Plan)	$0	$375,000
Total	$253,679	$1,330,691
	MC Approved Budget	**$1,584,370**
	Unobligated Funds	$1,674,363

[1] *This column denotes estimated carryover of unexpended, approved project funds as of January 1.*

Appendix F5 2020 Budget (continued)

Project	Carryover	2020
GSCP Alternatives		**$0**
Unexpended funds w/interest		**$0**
Total Available		**$0**
Gas Supersaturation Control Program Total Dissolved Gas Abatement	$0	$88,000
Total	$0	$88,000
MC Approved Budget		**$88,000**
Unobligated Funds		$0

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY – APPENDIX G

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Implementation of Land Use Management Plan (LUMP)

Implementation Staff Lead
Nate Hall, Avista, (406) 847-1281, nate.hall@avistacorp.com
Arthur Potts, Avista, (406) 847-1283, arthur.potts@avistacorp.com

Background
The purpose of this measure is to provide for the long-term protection and maintenance of sensitive and important resources on Avista owned project lands, including the existing rural and semi-remote character of the shoreline, through implementation of the Land Use Management Plan (LUMP). Avista project lands will be managed to protect these qualities while still allowing for reasonable public access and other compatible uses.

Year 2020 work efforts are a continuation of past efforts and remain focused on implementing the three distinct components of the LUMP:

2020 Project Plans
1. Administration of the Land Use Management Plan (LUMP)
2. Monitoring Associated with the Land Use Management Plan (LUMP)
3. Enforcement Associated with the Land Use Management Plan (LUMP**)**

Work Products
Administration
- Unless a specific document is created for a task, all work associated with this Project Plan will be documented in the 2020 Terrestrial Resources Annual Work Summary. Due Date: December 1, 2020.
- Develop annual pesticide and herbicide report to be included in the 2020 Annual Work Summary. Due Date: December 1, 2020.
- Quarterly reports from the Sanders County Aquatic Invasive Plants Task Force (AIPTF) will be provided, including a specific breakdown of the coordinator's activities. Due Dates: March 31; June 30; September 30; December 1.

Monitoring
- All work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.

Enforcement

- All work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.
- Quarterly reports from Montana Fish, Wildlife and Parks will be provided per the memorandum of understanding (MOU) agreement. Due Dates: March 31; June 30; September 30; December 1, 2020.
- Annual report from Idaho Fish and Game will be provided per the MOU agreement. Due Date: December 1, 2020.

Appendix G 2020 Budget

Item	Estimate Carryover[1]	2020 Budget Request
Land Use Management Plan (Estimate)[2]		**$177,500**
Unexpended funds w/interest		**$0**
Total Available		**$177,500**
Administration of the Land Use Management Plan (LUMP)	$0	$102,500
Monitoring Associated with the Land Use Management Plan (LUMP)	$0	$10,000
Enforcement Associated with the Land Use Management Plan (LUMP)	$0	$65,000
Total	$0	$177,500
MC Approved Budget		**$177,500**
Unobligated Funds		$0

[1]This column denotes estimated carryover of unexpended, approved funds as of January 1.

[2] Estimated costs are projections made now however; Avista will pay the actual costs as approved by the Management Committee. The amount needed to implement this PM&E may vary greatly by year depending upon legal/survey needs to address issues related to the management of Avista owned Project lands.

As approved by the Management Committee on 3/23/2020

2020 ANNUAL IMPLEMENTATION PLAN – APPENDIX H

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title: Implementation of the Recreation Resource Management Plan (RRMP)

Implementation Staff Lead:
Nate Hall, Avista, (406) 847-1281, nate.hall@avistacorp.com
Arthur Potts, Avista, (406) 847-1283, arthur.potts@avistacorp.com

Background: The purpose of this measure is to provide for appropriate and adequate recreational opportunities and facilities associated with the Clark Fork Project through implementation of the Recreation Resource Management Plan (RRMP). Seven goals to be met through its implementation include:

1. Manage existing recreation resource needs.
2. Manage future recreation resource needs.
3. Provide adequate and safe public access.
4. Preserve recreation resources.
5. Coordinate recreation planning and needs.
6. Provide cost-effective and desirable recreation opportunities.
7. Provide compatible recreation opportunities.

Year 2020 work efforts are a continuation past efforts and remain focused on implementing the five distinct components of the RRMP:

2020 Project Plans

1. RRMP Administration and Resource Integration
2. RRMP Recreation Facility Development
3. RRMP Monitoring
4. Operation and Maintenance of Recreation Facilities
5. Interpretation and Education Program

Work Products

Administration

- Unless a specific document is created for a task, all work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.

Facility Development

- Unless a specific document is created for a task, all work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.

Monitoring

- Unless a specific document is created for a task, all work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.

- Report summarizing data from the 20 automated traffic counters to measure use at various developed and dispersed recreation sites and trails. *January 2021*
- Summary maps showing dispersed recreation areas along the projects and permitted dock locations (showing dock densities per 0.5 mile segments of shoreline). *January 2021*

Operation and Maintenance

- Unless a specific document is created for a task, all work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.

Interpretation and Education

- Unless a specific document is created for a task, all work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.

Appendix H 2020 Budget

Item	Estimated Carryover[1]	2020 Budget Request
Recreation Resource Management Plan (Estimate)[2]		**$229,500**
Unexpended funds w/interest		**$0**
Total Available		**$229,500**
RRMP Administration and Resource Integration	$0	$0
RRMP Monitoring	$0	$10,000
Operation and Maintenance of recreation facilities		
Avista Sites	$0	$165,000
USFS Sites[3]	$0	$32,000
MFWP - Flat Iron FAS and Thompson Falls State Park	$0	$17,000
Interpretation & Education	$0	$5,500
Total	$0	$229,500
MC Approved Budget		**$229,500**
Unobligated Funds		$0

Facilities Fund (including GDP inflation rate)		**$222,370**
Unexpended funds w/interest		**$186,664**
Total Available		**$409,034**
RRMP Recreation Facility Development[4]		$409,034
Total	$0	$409,034
MC Approved Budget		**$409,034**
Unobligated Funds		-$0

[1]This column denotes estimated carryover of unexpended, approved funds as of January 1.
[2] Estimated costs are projections made now however; Avista will pay the actual costs as approved by the Management Committee.

[3] Annual contribution is adjusted by percentage of change of the Gross Domestic Product-Implicit Price Deflator.
[4] More projects are listed than will be completed in 2019. This provides for flexibility as projects are delayed due to permitting or other constraints. Projects have also been ranked as primary and secondary in terms of priority. The Recreation Resource Subgroup will evaluate project status on an ongoing basis to adapt implementation as needed

As approved by the Management Committee on 3/23/2020

2020 ANNUAL IMPLEMENTATION PLAN - APPENDIX I

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Implementation of the Aesthetics Management Plan

Implementation Staff Lead
Nate Hall, Avista, (406) 847-1281, nate.hall@avistacorp.com
Arthur Potts, Avista, (406) 847-1283, arthur.potts@avistacorp.com

Project History
This is a continuing project that has been approved annually by the Management Committee.

Background
The purpose of this measure is to provide for the protection and enhancement of aesthetic resources associated with Avista's Clark Fork Projects and to mitigate for project related impacts to those resources through the implementation of the Aesthetics Management Plan (AMP). Aesthetic guidelines and considerations of the AMP are implemented by permit standards and land use classifications of the Land Use Management Plan, site design and monitoring in the Recreation Resource Management Plan, and shoreline stabilization guidelines of the Shoreline Stabilization Guidelines Program. Ongoing coordination with other interest groups and agencies will occur as described for in the AMP.

2020 Project Plans
1. Monitor recreation, land management, erosion, and facility construction programs to ensure AMP guidelines are considered.
2. Continue to investigate measures to restore views and remove vegetation as needed, also addressing any identified issue from the 2018 re-inventory of 41 key viewpoints. Sites will be revisited again in 2023 to take photos to compare to past inventories.

Work Products
- Unless a specific document is created for a task, all work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.

Cultural/Historic Resource Review
If a work specific proposal is developed, Avista will coordinate Cultural Resources Management Group review prior to implementing the project. The work product for this review will be confidential due to the sensitive nature of the content.

Benefit to the Resource
Protect the rural and rustic character of the Clark Fork Project shoreline.

As approved by the Management Committee on 3/23/2020

Appendix I 2020 Budget

Item	Estimated Carryover[1]	2020 Budget Request
Aesthetics Management Plan (Estimate)[2]		**$7,000**
Unexpended funds w/interest		**$0**
Total Available		**$7,000**
Vegetation management at various viewpoints	$0	$7,000
Total	$0	$7,000
MC Approved Budget		**$7,000**
Unobligated Funds		$0

[1]This column denotes estimated carryover of unexpended, approved funds as of January 1.
[2] Estimated costs are projections made now; however, Avista will pay the actual costs as approved by the Management Committee.

2020 ANNUAL IMPLEMENTATION PLAN APPENDIX J

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title: Implementation of the Wildlife, Botanical and Wetland Management Plan

Implementation Staff Lead:
Nate Hall, Avista, (406) 847-1281, nate.hall@avistacorp.com

Project History
This is a continuing project that has been approved annually by the Management Committee.

Background
The purpose of this resource protection, mitigation, and enhancement measure is to provide for the organization and presentation of the various wildlife, botanical and wetland management activities and site-specific plans within a single, comprehensive management plan document. The goal is to have a dynamic reference document that the in-field staff, technical advisory committees, and Management Committee (MC) can utilize and refer to for guidance in implementing the required PM&Es and overall wildlife, botanical, and wetland resource management program for the Clark Fork Project. When the management plan was developed, it did not fully account for the detailed annual reports that are developed for each of the PM&E's. As a result the update to the plan has changed direction in primarily being a summary of accomplishments related to habitat protection. These updates will be made available to the various committees and Management Committee as they are completed. Also with the removal of Appendix N1-N3, it was approved by the Management Committee in 2016 that observations of bald eagles, peregrine falcons and common loons would be included in the annual summary associated with this PM&E.

2020 Project Plans
- Utilize the Wildlife, Botanical and Wetland Management Plan to help guide implementation of Wildlife, Botanical, and Wetland Protection, Mitigation, and Enhancement programs.
- Continue to update the habitat protection spreadsheet as acquisitions are completed.
- As approved by the Management Committee at their March 15, 2016 meeting, observations regarding bald eagles, peregrine falcons, and common loons will be reported here annually.

Work Products
- Update and provide copies of Habitat Protection Spreadsheet at annual fall Management Committee meeting. Includes discussion of future management of any parcel owned by Avista for more than 10 years, and if continues in Avista ownership after that, each parcel will be revisited every five years after that.
- Unless a specific document is created for a task, all work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.

Cultural/Historic Resource Review

If a work specific proposal is developed, Avista will coordinate Cultural Resources Management Group review prior to implementing the project. The work product for this review will be confidential due to the sensitive nature of the content.

Resource Benefit

Provide the Management Committee an ongoing list of properties protected through the implementation of the CFSA so they can make informed decisions as to ongoing management and final disposition of these properties.

Appendix J 2020 Budget

Item	Estimated Carryover[1]	2020 Budget Request
Wildlife, Botanical and Wetland Management Plan (Estimate)[2]		**$5,000**
Unexpended funds w/interest		**$0**
Total Available		**$5,000**
Update Habitat Protection Spreadsheet and provide updates on Bald Eagles, Peregrine Falcon, and Common Loon nesting activity.	$0	$5,000
Total	$0	$5,000
	MC Approved Budget	**$5,000**
	Unobligated Funds	$0

[1] *This column denotes estimated carryover of unexpended, approved funds as of January 1.*

[2] *Estimated costs are projections made now; however, Avista will pay the actual costs as approved by the Management Committee.*

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY– APPENDIX K

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Wildlife Habitat Acquisition, Enhancement and Management Program

Implementation Staff Lead
Nate Hall, Avista, (406) 847-1281, nate.hall@avistacorp.com

Project History
This is a continuing project that has been approved annually by the Management Committee.

Background
The purpose of this program is to mitigate for the potential effects to wildlife resources and habitat due to the continued operation of the Clark Fork Project. The program will focus on the types of habitat most significantly affected, such as wetland and riparian habitat.

Goal
Provide a continuing source of financial resources that will be used to acquire, protect, enhance, and/or manage important wildlife habitat in the vicinity of the projects.

2020 Project Plans
1. Operation and Maintenance of Acquired Property and Contingency Fund
2. Habitat Acquisition and Conservation and Contingency Fund

Work Products
Operation and Maintenance of Acquired Property and Contingency Fund
- All work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.

Habitat Acquisition and Conservation and Contingency Fund
- All work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.

Cultural/Historic Resource Review
If a work specific proposal is developed, Avista will coordinate Cultural Resources Management Group review prior to implementing the project. The work product for this review will be confidential due to the sensitive nature of the content.

Benefit to the Resource
Provide protection to those habitats most significantly affected by the continued operation of the Clark Fork Project, such as wetland and riparian habitat.

Appendix K 2020 Budget

Item	Estimated Carryover[1]	2020 Budget Request
Wildlife Habitat Acquisition and Enhancement Plan (including GDP inflation rate)		**$289,674**
Unexpended funds w/interest[2]		**$489,624**
Total Available		**$779,298**
Operation and Maintenance of Acquired Property and Contingency Fund	$0	$70,000
Habitat Acquisition and Conservation and Contingency Fund	$0	$60,000
Total	$0	$130,000
MC Approved Budget		**$130,000**
Unobligated Funds		$649,298

[1]This column denotes estimated carryover of unexpended, approved funds as of January 1.

[2]Includes $100,000 from Trestle Creek timber revenue.

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY– APPENDIX L

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Black Cottonwood Habitat Protection and Enhancement

Implementation Staff Lead
Nate Hall, Avista, (406) 847-1281, nate.hall@avistacorp.com

Project History
This work is a continuation of work previously approved by the Management Committee.

Background
The purpose of this measure is to provide for the protection of black cottonwood trees and stands on Avista owned project lands through the development of site-specific management and enhancement plans for three specific cottonwood sites identified by the Wildlife, Botanical, and Wetlands Work Group (WBWWG). Additionally, existing stands and trees will be protected through the implementation of land use classifications in the Land Use Management Plan (LUMP).

Site-specific management plans were developed in 2000. Efforts in 2020 will focus on the continued protection of black cottonwood stands and trees through the implementation of land use classifications in the LUMP. The site-specific enhancement efforts at Hereford Slough (completed in early 2003 and treated again in 2007) will continue to be monitored to determine response, and implement additional management efforts as needed.

An 80 x 80 foot woven wire exclosure was built in the spring of 2015 at the Hereford Slough cottonwood site. Even though the spring and summer of 2015 through 2017 were unseasonably hot and dry, cottonwood generation was good within the exclosure. Regeneration occurred from exposed roots, cutoff stumps and seed germination. Efforts in 2020 will include continued monitoring of the enclosure and conduct any needed maintenance to the fence that is needed.

2020 Project Plans
- Continue to protect black cottonwood stands along the Clark Fork Project through the implementation of the Land Use Management Plan.
- Continue to monitor and maintain the exclosure at Hereford Slough.
- Based on success of the Hereford Slough exclosure, construct additional exclosure within this stand (continuation of 2018 efforts).

Work Products
- All work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.

Cultural/Historic Resource Review

Ground and vegetation disturbance will take place in an area previously surveyed for the original enclosure construction in 2015. Therefore no additional cultural resource surveys will be required.

Benefit to the Resource

Benefits are protecting and managing existing black cottonwood stands. These stands provide high wildlife value, but are relatively limited in distribution along the Clark Fork Project.

Appendix L 2020 Budget

Item	Estimated Carryover[1]	2020 Budget Request
Black Cottonwood Habitat & Enhancement Fund		**$7,065**
Unexpended funds w/interest		**$88,942**
Total Available		**$96,007**
Monitor Hereford and Noxon Slough stands and construct a new exclosures at Hereford Slough site	$15,000	$0
Total	$15,000	$0
	MC Approved Budget	**$15,000**
	Unobligated Funds	$81,008

[1]*This column denotes estimated carryover of unexpended, approved funds as of January 1.*

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY– APPENDIX M

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Wetland Protection and Enhancement Program

Implementation Staff Lead
Nate Hall, Avista, (406) 847-1281, nate.hall@avistacorp.com

Project History
This is a continuation of work previously approved by the Management Committee (MC).

Background
The purpose of this measure is to provide for the protection of wetlands occurring on Avista owned project lands, and for the evaluation and potential enhancement of selected wetland areas. The overall goal is to ensure no net loss of wetlands, or of wetland function and values in certain high-priority wetland areas while also evaluating opportunities for enhancements.

2020 Project Plans.

- Continue to investigate the potential for a wetland enhancement project on the 2016 Twin Creek acquisition.
- Monitor enhancements previously completed at Hereford Slough, McKay Creek, Finley Flats, and Blacktail Bay/Islands.

Work Products

- All work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.
- If it appears either project is feasible, a specific proposal will be developed for MC review.

Cultural/Historic Resource Review
No ground or vegetation disturbance is planned for 2020, therefore no cultural resource surveys will be required.

Benefit to the Resource
Benefits are preserving or enhancing of certain high value wetland habitat, including their function and values.

Appendix M 2020 Budget

Item	Estimated Carryover[1]	2020 Budget Request
Wetlands on Avista Property		**$0**
Unexpended funds w/interest		**$135,750**
Total Available		**$135,750**
Investigation and proposal development (if appropriate) of wetland enhancement project on Twin Creek property	$10,000	$0
Total	$10,000	$0
MC Approved Budget		**$10,000**
Unobligated Funds		$125,750

[1]*This column denotes estimated carryover of unexpended, approved funds as of January 1.*

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY– APPENDIX P

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Forest Habitat Protection and Enhancement

Implementation Staff Lead
Nate Hall, Avista, (406) 847-1283, nate.hall@avistacorp.com
Arthur Potts, Avista, (406) 847-1283, arthur.potts@avistacorp.com

Project History
This is a continuation of work previously approved by the Management Committee.

Background
The purpose of this measure is to provide for the protection and enhancement of specific forest habitat parcels of Avista project land along the reservoirs. The Wildlife, Botanical, and Wetland Work Group identified these parcels as having significant wildlife habitat value.

2020 Project Plans
1. Continue to manage those areas that have been classified as Conservation 1, and as such are afforded the maximum protection provided through the Land Use Management Plan.
2. Honey Flats is being managed to minimize impacts to the site (e.g., no motorized vehicles, no timber harvest, and minimize human use of site). The Confederated Salish and Kootenai Tribe and CRMG have expressed an interest in having this site managed for traditional plants and uses. Continue to work with the Confederated Salish and Kootenai Tribe to define management options.
3. Continue to monitor and enforce the road closure to Stevens Creek Point (closure was instituted in 2001).
4. Continue to prohibit motorized use of Finley Flats Point.
5. Continue to utilize the Montana Fish Wildlife and Parks Block Management Program to provide hunter access to the Tuscor, South Fork Bull River, and Wood Duck properties.
6. Continue weekly patrols of the forested lands surrounding the State Shop property, and continue to reduce the amount of disturbance and litter in this area.
7. Initiate timber stand improvement efforts in stands that have disease (beetle kill, root rot, mistletoe, etc.), high fire danger or other problems. This work will be evaluated on a case by case basis and specific proposals will be presented to the TRTAC and MC as they are developed.

Work Products
- All work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.

Cultural/Historic Resource Review

If a specific proposal is developed in 2020, it will be evaluated by CRMG to determine cultural resource survey needs.

Benefit to the Resource

Benefits include the protection, and where appropriate, enhancement of timber stands on specific Avista owned project lands.

Appendix P 2020 Budget

Item	Estimated Carryover[1]	2020 Budget Request
Forest Habitat for Selected Avista Lands Annual Fund (Periodic)[2]		**$5,000**
Unexpended funds w/interest		**$0**
Total Available		**$5,000**
Monitoring and ongoing management activities	$0	$5,000
Total	$0	$5,000
MC Approved Budget		**$5,000**
Unobligated Funds		$0

Timber Revenue[3]		**$0**
Unexpended funds		**$226,818**
Total Available		**$226,818**
Total	$0	$0
MC Approved Budget		**$0**
Unobligated Funds		$226,818

[1]This column denotes estimated carryover of unexpended, approved funds as of January 1.

[2] Periodic costs are one-time costs. Avista will pay the actual costs as approved by the Management Committee.

[3] Any costs associated with implementing these projects will be covered by the revenue of the sale.

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY– APPENDIX Q

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Reservoir Island Protection

Implementation Staff Lead
Nate Hall, Avista, (406) 847-1281, nate.hall@avistacorp.com
Arthur Potts, Avista, (406) 847-1283, arthur.potts@avistacorp.com

Project History
This is a continuation of work previously approved by the Management Committee.

Background
The purpose of this measure is to provide for the protection of islands owned by Avista in the project reservoirs. The goal is to maintain the unique and high quality wildlife habitat functions and values of these islands.

2020 Project Plans
- Continue to ensure restrictions developed for the protection of these areas utilizing the land use classifications described in the Land Use Management Plan.

Work Products
- All work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.

Cultural/Historic Resource Review
No cultural resource surveys will be needed for this PM&E.

Benefit to the Resource
Protect and maintain the unique and high quality wildlife habitat functions and values of these islands.

As approved by the Management Committee on 3/23/2020

Appendix Q 2020 Budget

Costs covered through implementation of Appendix G.

Item	Estimated Carryover[1]	2020 Budget Request
Reservoir Island Protection (Periodic)[2]		**$0**
Unexpended funds w/interest		**$0**
Total Available		**$0**
Costs for this measure are covered in the implementation of the Land Use Management Plan (Appendix G)	$0	$0
Total	$0	$0
MC Approved Budget		**$0**
Unobligated Funds		$0

[1]*This column denotes estimated carryover of unexpended, approved funds as of January 1.*

[2] *Periodic costs are one-time costs, Avista will pay the actual costs as approved by the Management Committee.*

As approved by the Management Committee on 3/23/2020

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY – APPENDIX R

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Clark Fork Heritage Resource Program

Implementation Staff Lead
Lisa Vollertsen, Avista, (406) 847-1288, lisa.vollertsen@avistacorp.com

Background
The Clark Fork Heritage Resource Program was an interim program developed in collaboration with the Cultural Resources Management Group (CRMG) during the Clark Fork relicensing process. The program emphasized specific cooperative stewardship strategies for the management of cultural and historic resources, to be implemented by the CRMG following the development of the Clark Fork Heritage Resource Management Plan (HRMP). In 2000, the CRMG developed the HRMP in accordance with the Clark Fork Heritage Resource Program, Clark Fork Settlement Agreement (CFSA), and Programmatic Agreement, to guide the management and mitigation of effects to historic and/or cultural resources associated with the Clark Fork Project. The HRMP was developed to ensure coordination of the protection, mitigation, and enhancement (PM&E) measures associated with the Clark Fork Project with representatives from Coeur d'Alene, Kootenai, Confederated Salish and Kootenai, and Kalispel Tribes, Idaho and Montana State Historic Preservation offices, U.S. Forest Service, and Avista, which collectively make up the CRMG.

2020 Project Plans
1. Clark Fork Heritage Resource Management Program

Work Products
- Annual Work Summary*; final due December 1, 2020
  **Due to potential confidentiality issues associated with cultural resources, some or all of the information collected may not be available to the Management Committee and/or the general public.*

Appendix R 2020 Budget

Project	Carryover[1]	2020
Clark Fork Heritage Resource Program (Estimate)[2]		**$55,000**
Unexpended funds w/interest		**$0**
Total Available		**$55,000**
Clark Fork Heritage Resource Program	$0	$55,000
Total	$0	$55,000
MC Approved Budget		**$55,000**
Unobligated Funds		$0

[1] *This column denotes estimated carryover of unexpended, approved funds as of January 1.*

[2] *Estimated costs are projections made now; however, Avista will pay the actual costs as approved by the Management Committee.*

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY– APPENDIX S

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Erosion Fund and Shoreline Stabilization Guidelines Program

Implementation Staff Lead
Nate Hall, Avista, (406) 847-1281, nate.hall@avistacorp.com
Arthur Potts, Avista, (406) 847-1283, arthur.potts@avistacorp.com

Project History
This is a continuation of work previously approved by the Management Committee.

Background
The purpose of this measure is to provide funds to ameliorate adverse impacts to resources of interest caused by the continued operation of the Clark Fork Projects. Resources of interest include important cultural or natural resources, and private or public property not covered by applicable easement. The PM&E measure also calls for the distribution of the Erosion Control Guidelines Manual, developed in 2000, to interested individuals.

A geotechnical firm will be retained for review of proposals Avista receives from adjacent landowners for erosion control projects.

2020 Project Plans
- Address erosion concerns identified by the CRMG.
- Continue to evaluate and provide technical assistance for an erosion control project being undertaken by an adjacent landowner on Noxon Reservoir (Vermilion Point Area). This is a continuation of a 2017 project. The ability to complete this project will depend upon the adjacent landowner's availability.
- Utilize a geotechnical contractor to assist with evaluating erosion control proposals received by Avista.

Work Products
- Due to the confidential nature of cultural sites, CRMG directed work will not be reported on as part of the public reporting process.
- Work with the adjacent landowner on Noxon Reservoir to complete the project, although completion of this project will be based on the landowner's availability to do the work. November 1, 2020.
- All work associated with this Project Plan will be documented in the 2020 Annual Work Summary. Due Date: December 1, 2020.

Cultural/Historic Resource Review
Work proposed under this fund will be addressed by the Cultural Resource Management Group for each project as they are identified.

Benefit to the Resource

Benefits are provided by addressing impacts to resources of interest caused by erosion attributed to the continued operation of the Clark Fork Project. Resources of interest include important cultural or natural resources, and private or public property not covered by applicable easement.

Appendix S 2020 Budget

Item	Estimated Carryover[1]	2020 Budget Request
Erosion Fund and Shoreline Stabilization Annual Fund (Fund with Cap)[2]		**$0**
Unexpended funds w/interest		**$200,000**
Total Available		**$200,000**
Address erosion concerns identified by CRMG	$0	$50,000
Geotechnical support and working with adjacent landowner on Noxon Reservoir	$8,000	$0
Total	$8,000	$50,000
MC Approved Budget		**$58,000**
Unobligated Funds		$142,000

[1] *This column denotes estimated carryover of unexpended, approved funds as of January 1.*

[2] *Funds are dollars made available annually (up to $40,000 per year until reaching a cap of $200,000).*

2020 ANNUAL IMPLEMENTATION PLAN SUMMARY – APPENDIX T

Clark Fork Project, FERC No. 2058
Cabinet Gorge and Noxon Rapids Hydroelectric Developments

Title
Project Operations Package

Implementation Staff Lead
Eric Oldenburg, Avista, (406) 847-1290, eric.oldenburg@avistacorp.com

Background
The Project Operations Package outlines the General Operating Limits (minimum flow below the Cabinet Gorge Dam and water level fluctuation limits in both project reservoirs) that were agreed to in the Clark Fork Settlement Agreement (CFSA). Within these limits, Avista utilizes peaking operations at Noxon Rapids and Cabinet Gorge dams. Mitigation for any negative effects of peaking operations within the General Operating Limits is carried out within other Protection, Mitigation, and Enhancement (PM&E) programs (e.g., the Montana and Idaho tributary enhancement programs, the Bull Trout Protection and Public Education Project, and the Watershed Council Program). Therefore, historically, the Project Operations Package has only encompassed maintenance of the General Operating Limits and the requirement to coordinate project operations with the operators of the Albeni Falls Project.

Prior to the CFSA, the minimum discharge requirement through Cabinet Gorge Dam was 3,000 cubic feet per second (cfs). Through the CFSA, this minimum discharge requirement was increased to 5,000 cfs. However, the CFSA also defined a 10-year period of study to evaluate any effects of the change in minimum flow. This evaluation was completed in 2011 and concluded that the increased minimum discharge requirement provided no measurable benefit to fish populations in the lower Clark Fork River when compared to the previous minimum flow of 3,000 cfs (Ryan and Jakubowski 2012). Thus in 2017, as part of the first amendment to the CFSA, the Management Committee (MC) agreed to reinstate the 3,000 cfs minimum flow requirement for Cabinet Gorge Dam from November 1 through September 14 and the minimum flow will remain at 5,000 cfs from September 15 to October 31. An order issued by FERC on December 18, 2017 approved the new minimum flows which are now effective. Along with this agreement, Avista made an additional funding commitment to address any remaining uncertainty over any question of potential effects of the reduced minimum flow. The funding commitment was a one-time addition of $1,000,000 (not subject to escalation) to the CFSA Appendix T fund, which Avista holds in trust. Use of these dollars is restricted to capital projects and may not be used for operations or maintenance of existing or new sites or facilities. Further, any use of these funds shall be approved by the MC pursuant to the Annual Implementation Plan process.

2020 Project Plans
1. Project Operations and Coordination
2. Cabinet Gorge Fish Hatchery Spring Water Collection System Upgrade

Work Products

Project Operations and Coordination

- Annual Work Summary; due December 1, 2020

Cabinet Gorge Fish Hatchery Spring Water Collection System Upgrade

- Bid-ready design; due May 1, 2020
- As-built drawings; due December 1, 2020
- Annual Work Summary; due December 31, 2020

Appendix T 2020 Budget

Project	Carryover[1]	2020
Project Operations Package[2]		**$0**
Unexpended funds		**$884,767**
Total Available		**$884,767**
Project Operations and Coordination	$0	$0
Cabinet Gorge Fish Hatchery Spring Water Collection System Upgrade	$139,000	$226,260
Total	$139,000	$226,260
MC Approved Budget		**$365,260**
Unobligated Funds		$519,507

[1] This column denotes estimated carryover of unexpended, approved funds as January 1.

[2] A one-time $1 million allocation made available beginning in 2018 and not subject to interest.