

## IMPLEMENTATION SCHEDULE

The Implementation Schedule that follows describes recovery task priorities, task numbers, task descriptions, duration of tasks, potential or participating responsible parties, total cost estimate, and estimates for the next five years, if available, as well as comments. These tasks, when accomplished, will lead to recovery of bull trout in the coterminous United States.

Parties with authority, responsibility, or expressed interest to implement a specific recovery task are identified in the Implementation Schedule. Listing a responsible party does not imply that prior approval has been given or require that party to participate or expend any funds. However, willing participants will benefit by demonstrating that their budget submission or funding request is for a recovery task identified in an approved recovery plan and is, therefore, part of a coordinated recovery effort to recover bull trout. In addition, section 7 (a)(1) of the Endangered Species Act directs all Federal agencies to use their authorities to further the purposes of the Act by implementing programs for the conservation of threatened or endangered species.

Following are definitions to column headings and keys to abbreviations and acronyms used in the Implementation Schedule:

Priority No.: All priority 1 tasks are listed first, followed by priority 2 and priority 3 tasks.

Priority 1: All actions that must be taken to prevent extinction or to prevent the species from declining irreversibly in the foreseeable future.

Priority 2: All actions that must be taken to prevent a significant decline in species population or habitat quality or to prevent some other significant negative impact short of extinction.

Priority 3: All other actions necessary to provide for full recovery (or reclassification) of the species.

Task Number and Task Description: Recovery tasks as numbered in the recovery outline. Refer to the action narrative for task descriptions.

Task Duration: Expected number of years to complete the corresponding task. Study designs can incorporate multiple tasks, which, when combined, may reduce the time needed for completion.

Responsible or Participating Party: Federal, State, Tribal, County, local, or Canadian government agencies, nongovernmental organizations, or universities with responsibility or capability to fund, authorize, or carry out the corresponding recovery task. The following is a list of acronyms used to identify these parties throughout the implementation schedule:

Canadian Government:

BCMWLAP British Columbia Ministry of Water, Land, and Air Protection

Federal Agencies:

BLM	Bureau of Land Management
BOR	U.S. Bureau of Reclamation
BPA	Bonneville Power Administration
COE	U.S. Army Corps of Engineers
FERC	Federal Energy Regulatory Commission
NMFS	National Marine Fisheries Service
NPS	National Park Service
NRCS	National Resources Conservation Service
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency

USFS U.S. Forest Service  
 USFWS U.S. Fish and Wildlife Service

State Agencies:

IBODS Idaho Bureau of Disaster Services  
 IDEQ Idaho Department of Environmental Quality  
 IDFG Idaho Department of Fish and Game  
 IDL Idaho Department of Lands  
 IDPR Idaho Department of Parks and Recreation  
 IDWR Idaho Department of Water Resources  
 ITD Idaho Transportation Department  
 IWRB Idaho Water Resources Board  
 MDEQ Montana Department of Environmental Quality  
 MDHES Montana Department of Health and Environmental Sciences  
 MDNRC Montana Department of Natural Resources and Conservation  
 MDOJ Montana Department of Justice, Natural Resource Damages  
 MDOT Montana Department of Transportation  
 MDSL Montana Department of State Lands  
 MFWP Montana Fish, Wildlife and Parks  
 WADNR Washington Department of Natural Resources  
 WADOE Washington Department of Ecology  
 WDFW Washington Department of Fish and Wildlife

Others:

ARCO Atlantic Richfield Corporation  
 BNSFR Burlington Northern and Santa Fe Railway  
 CSKT Confederated Salish and Kootenai Tribes  
 FAID Flathead Agency Irrigation District  
 FBC Flathead Basin Commission  
 FLBS Flathead Lake Biological Station

IDWAG	Idaho Watershed Advisory Group
KT	Kalispel Tribe
LPOWAG	Lake Pend Oreille Watershed Advisory Group
MBTRT	Montana Bull Trout Restoration Team
MBTSG	Montana Bull Trout Scientific Group
MPC	Montana Power Company
PBTTAT	Panhandle Bull Trout Technical Advisory Team
PacifiC	PacifiCorp
PCTC	Plum Creek Timber Company
PPLMT	Pennsylvania Power and Light of Montana (formerly MPC)
TU	Trout Unlimited
UCFRBSC	Upper Clark Fork River Basin Steering Committee
WAGs	Idaho Watershed Advisory Groups

**Boldface type** indicates the agency or agencies that have the lead role for task implementation and coordination, though not necessarily sole responsibility.

Cost Estimates: Cost estimates are rough approximations and are only provided for general guidance. Total costs are estimated for the duration of the task, are itemized annually for the next five years, and includes estimates of expenditures by local, Tribal, State, and Federal governments and by private business and individuals.

An asterisk (\*) in the total cost column indicates that these tasks are part of normal agency responsibilities under existing authorities.

Double asterisk (\*\*) in the total cost column indicates that estimated costs for these tasks are not determinable at this time. Input is requested to help develop reasonable cost estimates for these tasks.

Triple asterisk (\*\*\*) indicates costs are combined with or embedded within other related tasks.

Implementation Schedule for the bull trout recovery plan: Upper Clark Fork Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
1	1. 1. 1	Reduce general sediment sources	25	USFS, BLM, Counties, USEPA, MDNRC, MDOT, NRCS, PCTC, USDOT	*						Ongoing <sup>2</sup>
1	1. 1. 3	Clean up mine waste	25	MDEQ, BLM, USEPA, MDNRC, PCTC, USFS	*						Ongoing administrative costs
1	1. 1. 4	Implement Atlantic Richfield Corporation mitigation	25	MDEQ, USEPA, MDNRC, MDOJ (NRD), MFWP	*						Ongoing
1	1. 1. 7	Assess and mitigate nonpoint thermal pollution	25	EPA, BLM, MDEQ, MDNRC, MFWP, NRCS, USFS	*						CWA required costs
1	1. 1. 9	Implement water quality regulations	25	MDEQ, Counties, USEPA, USFS, USFWS	*						CWA required costs

<sup>2</sup> Ongoing tasks are currently being implemented, as part of normal agency responsibilities that may benefit bull trout. Because these actions are not specifically being done to address bull trout conservation, they are not included in the cost estimates. Some of these efforts may be occurring at reduced levels and/or in only a small portion of the watershed.

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					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
1	1. 2. 1	Eliminate entrainment in diversions	15	<b>MDNRC, MFWP, BLM, PCTC, NRCS, USFS, USFWS</b>	1,500	100	100	100	100	100	Ongoing
1	1. 2. 2	Provide fish passage around diversions	15	<b>MDNRC, MFWP, BLM, PCTC, NRCS, USFS, USFWS</b>	750	50	50	50	50	50	Ongoing
1	1. 2. 3	Eliminate culvert barriers	25	<b>USFS, BLM, Counties, MDNRC, MDOT, MFWP, PCTC, USDOT</b>	1,250	50	50	50	50	50	Ongoing
1	1. 2. 5	Improve instream flows	25	<b>MDNRC, MFWP, USFS, TU</b>	*						Ongoing
1	1. 4. 3	Operate Milltown Dam to minimize impact on native fish	25	<b>MPC, USEPA, MFWP</b>	250	10	10	10	10	10	Ongoing
1	1. 5. 2	Monitor fire effects and mitigate effects where necessary	25	<b>MDNRC, USFS</b>	*						Ongoing administrative costs

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					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
1	3. 3. 1	Evaluate site-specific conflicts with introduced sport fish	25	<b>MFWP,USFWS, USFS</b>	*						Ongoing administrative costs
1	5. 2. 1	Identify suitable unoccupied habitat	5	<b>MFWP, USFS, USFWS, MDNRC, PCTC</b>	500	100	100	100	100	100	Ongoing
1	6. 2. 4	Implement Plum Creek Habitat Conservation Plan	30	<b>USFWS, PCTC</b>	900	30	30	30	30	30	Ongoing 30-year agreement
1	6. 3. 2	Encourage floodplain protection	25	<b>Counties, MDEQ, MDNRC, MFWP</b>	250	10	10	10	10	10	Ongoing
2	1. 1. 2	Upgrade problem roads	25	<b>USFS, MDNRC, PCTC, BLM, Counties, MDOT, USDOT</b>	*						Ongoing administrative costs
2	1. 1. 6	Restore fish passage at Milltown Dam	10	<b>FERC, MDOJ, USEPA, MFWP, MPC, USFWS</b>	1,000	100	100	100	100	100	FERC relicensing issue
2	1. 1. 8	Reduce nutrient input	25	<b>MDEQ, USEPA, NRCS, PCTC, USFS</b>	*						CWA required costs

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					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	1. 2. 4	Restore connectivity over other manmade barriers	5	<b>MFWP, USFS</b>	***						See related tasks 1.2.2 and 1.2.3
2	1. 3. 1	Conduct watershed problem assessments	25	<b>MFWP, USFS, BLM, MDNRC, NRCS, PCTC,</b>	***						See related tasks 1.1.7 and 1.1.9
2	1. 3. 2	Prioritize actions on waters with restoration potential	25	<b>MFWP, USFS, USFWS</b>	125	5	5	5	5	5	Ongoing
2	1. 3. 3	Revegetate denuded riparian areas	25	<b>BLM, USFS, *MDNRC, NRCS, PCTC, MDOT, USEPA, MFWP, USDOT</b>	625	25	25	25	25	25	Ongoing
2	1. 3. 4	Improve grazing practices	25	<b>USFS, BLM, USEPA, MDNRC, MFWP, NRCS, PCTC</b>	*						Ongoing administrative costs
2	1. 3. 5	Restore stream channels	25	<b>USFS, BLM, MDNRC, MFWP, NRCS, PCTC</b>	*						Ongoing
2	1. 3. 6	Improve instream habitat	25	<b>USFS, BLM, MDNRC, MFWP, NRCS, PCTC</b>	*						Ongoing

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					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	1. 3. 8	Manage beaver to function naturally in maintaining wetlands	25	<b>MFWP, USFS, BLM, MDNRC, PCTC, NRCS</b>	125	5	5	5	5	5	Ongoing
2	1. 3. 11	Mitigate for transportation corridor encroachment on streams	25	<b>MDOT, USDOT, MFWP, USFS</b>	*						Ongoing administrative costs
2	1. 4. 1	Reduce reservoir operational impacts	10	<b>MDNRC, MFWP, USFS</b>	250	25	25	25	25	25	Ongoing
2	1. 4. 2	Provide instream flow downstream of dams	10	<b>MDNRC, MFWP, USFS</b>	250	25	25	25	25	25	Ongoing
2	1. 4. 4	Evaluate fish passage at Painted Rocks Dam	5	<b>MDNRC, MFWP</b>	50	10	10	10	10	10	
2	1. 5. 1	Mitigate for legacy effects of mining-related timber management practices	25	<b>USFS, BLM, MDNRC</b>	*						Ongoing administrative costs
2	2. 1. 2	Regulate private fish ponds	25	<b>MFWP</b>	*						Ongoing fish management costs

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					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	2. 1. 3	Encourage development of commercial sources of westslope cutthroat trout	5	<b>MFWP</b>	25	5	5	5	5	5	
2	2. 3. 1	Discourage unauthorized fish introductions	25	<b>MFWP, TU, USFS, USFWS</b>	*						Ongoing administrative costs
2	2. 3. 2	Develop bull trout education program	15	<b>MFWP, USFWS</b>	150	10	10	10	10	10	Ongoing, costs part of statewide program
2	2. 5. 1	Experimentally remove established brook trout populations	25	<b>MFWP, BLM, USFS, USFWS</b>	625	25	25	25	25	25	Ongoing
2	2. 5. 2	Suppress northern pike in Clearwater Lakes chain	25	<b>MFWP</b>	250	10	10	10	10	10	Ongoing
2	2. 5. 3	Reduce brown trout numbers in portions of mainstem rivers	25	<b>MFWP</b>	250	10	10	10	10	10	Ongoing

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					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	2. 6. 1	Evaluate bull trout–brown trout interaction	10	<b>MFWP, USFS, USFWS</b>	***						See related task 2.5.3
2	3. 1. 1	Implement adaptive management of native fish management plans	25	<b>MFWP, BLM, USEPA, FERC, MDEQ, MDNRC, MDOT, PCTC,, USDOT, USFS, USFWS</b>	*						Ongoing administrative costs
2	3. 1. 2	Aggressively protect remaining native species complexes	25	<b>MFWP, USFWS, BLM, PCTC, USFS</b>	*						Ongoing
2	3. 2. 1	Minimize unintentional mortality of bull trout	25	<b>MFWP, USFWS</b>	***						See related tasks 3.1.1. and 3.2.1
2	3. 2. 2	Evaluate enforcement of angling regulations and oversee scientific research	25	<b>MFWP, USFWS</b>	***						See related tasks 3.2.3 and 3.4.1
2	3. 2. 3	Implement angler education efforts	25	<b>MFWP, USFWS</b>	***						See related task 3.2.2

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					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	3. 4. 1	Evaluate effects of existing and proposed angling regulations on bull trout in heavily fished waters	25	<b>MFWP, USFWS</b>	***						See related tasks 3.2.2 and 3.2.3
2	4. 1. 1	Conduct genetic inventory	10	<b>MFWP, USFS, USFWS</b>	***						See related task in Chapter 1 of Recovery Plan
2	5. 2. 2	Investigate bull trout movement and distribution	25	<b>MFWP, BLM, PCTC, USFS, USFWS</b>	2,500	100	100	100	100	100	Ongoing
2	5. 2. 4	Map spawning habitat	5	<b>MFWP, USFS, USFWS</b>	100	20	20	20	20	20	Ongoing
2	5. 2. 6	Evaluate water temperature as a limiting factor	10	<b>MFWP, USEPA, MDEQ, MDNRC, USFS, USFWS</b>	250	25	25	25	25	25	Ongoing
2	5. 3. 3	Expand monitoring of forestry best management practices	25	<b>MDNRC, MDEQ, MFWP, PCTC, USFS</b>	***						See related task 1.3.4

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					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	5. 3. 4	Protect groundwater inflow sources	25	<b>MDEQ, MDNRC, MFWP, NRCS, PCTC, USFS</b>	*						Ongoing administrative costs
2	5. 6. 2	Research origin of migratory bull trout at Milltown Dam	3	<b>MPC, MFWP</b>	150	50	50	50			3-year project
2	6. 1. 1	Support watershed group restoration efforts	25	<b>MFWP, USFS, USFWS, BLM, USEPA, MDEQ, MDNRC, NRCS, PCTC, TU</b>	*						See related tasks 1.3.1 and 1.3.2
2	6. 1. 2	Protect habitat	25	<b>USFS, BLM, MDNRC, MFWP, NRCS, PCTC, USFWS, TU</b>	*						Costs will be evaluated through task 6.1.1
2	6. 1. 3	Integrate watershed restoration efforts on public and private lands	25	<b>USFS, USFWS, BLM, MDNRC, MFWP, NRCS, PCTC, TU</b>	625	25	25	25	25	25	Ongoing
2	6. 1. 4	Develop strategy for implementation participation	5	<b>USFWS, MFWP</b>	125	25	25	25	25	25	

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					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	6. 2. 3	Complete Federal Energy Regulatory Commission licensing of Milltown Dam	6	<b>FERC, MPC, USFWS</b>	*						Ongoing administrative costs
2	6. 3. 1	Fully implement State habitat protection laws	25	<b>MDNRC, MFWP, PCTC</b>	*						Ongoing State administrative and regulatory costs
3	1. 1. 5	Monitor McDonald gold mine	10	<b>MDEQ, MDNRC, MFWP</b>	50	5	5	5	5	5	Ongoing
3	1. 1. 10	Minimize recreational development in bull trout spawning and rearing habitat	25	<b>Counties, MFWP, MDNRC, USFS, USFWS</b>	*						Costs associated with land use planning
3	1. 2. 6	Consider fish salvage, as needed	5	<b>MFWP, USFS, USFWS</b>	25	5	5	5	5	5	
3	1. 2. 7	Consider passage around natural barriers	10	<b>MFWP, USFWS, USFS</b>	***						See related task 1.2.4

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					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
3	1. 3. 7	Minimize potential stream channel degradation	25	<b>Counties, MDNRC, MDOT, MFWP, USDOT, USFS, USFWS</b>	*						Ongoing administrative costs
3	1. 3. 9	Reduce riparian firewood harvest	25	<b>USFS</b>	*						Ongoing administrative and planning costs
3	1. 3. 10	Reduce impacts from campsite use	25	<b>USFS, BLM, MDNRC, PCTC</b>	*						Ongoing administrative and planning costs
3	1. 3. 12	Reduce impacts to Foster Creek	5	<b>DOL (Job Corps), MFWP, USFS, USFWS</b>	50	10	10	10	10	10	
3	2. 1. 1	Review fish stocking programs	25	<b>MFWP, USFS, USFWS</b>	***						See related task 2.2.1
3	3. 2. 4	Solicit information from commercial guides	10	<b>MFWP, USFS, USFWS</b>	*						Routine administrative/ planning costs

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					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
3	5. 2. 3	Evaluate importance of contributing waters	25	<b>MFWP</b> , USFS, USFWS	250	10	10	10	10	10	
3	5. 2. 5	Coordinate monitoring of fish movement	25	<b>MFWP</b> , AVISTA, IDFG, USFWS	***						See related task 5.2.2
3	5. 3. 1	Develop and implement best management practices for managing water diversions	25	<b>MDNRC</b> , MFWP, NRCS, USFS, USFWS	*						Ongoing administrative costs
3	5. 3. 2	Implement best management practices for grazing in riparian zones	25	<b>MDNRC</b> , MFWP, PCTC, NRCS, USFS, USFWS	***						See related task 1.3.4
3	5. 4. 1	Monitor fish health in private hatcheries	25	<b>MFWP</b> , USFWS	*						Ongoing State fish health costs
3	5. 4. 2	Prevent spread of fish pathogens	25	<b>MFWP</b> , USFWS	*						See related task 2.2.1
3	5. 4. 3	Evaluate effects of whirling disease on bull trout	10	<b>MFWP</b> , USFWS	500	50	50	50	50	50	Ongoing

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					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
3	5. 6. 1	Investigate status of migratory and resident life history forms	10	<b>MFWP, USFWS, USFS</b>	***						See related task 5.2.2

Implementation Schedule for the bull trout recovery plan: Lower Clark Fork Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
1	1. 1. 1	Reduce general sediment sources	25	<b>USFS</b> , Counties, <b>CSKT</b> , <b>FERC</b> , <b>IDEQ</b> , <b>IDFG</b> , <b>IDL</b> , <b>ITD</b> , <b>IDWAG</b> , <b>MDNRC</b> , <b>MDOT</b> , <b>MFWP</b> , <b>NRCS</b> , <b>USFWS</b> , <b>USDOT</b>	*						Ongoing administrative costs
1	1. 1. 5	Implement ARCO mitigation on Flathead Indian Reservation	25	<b>CSKT</b>	*						Ongoing
1	1. 1. 8	Implement water quality regulations	25	<b>IDEQ</b> , <b>MDEQ</b> , Counties, <b>USEPA</b> , <b>USFS</b> , <b>USFWS</b>	*						CWA required costs
1	1. 2. 1	Eliminate entrainment in diversions	25	<b>CSKT</b> , <b>IDFG</b> , <b>IDWR</b> , <b>MDNRC</b> , <b>MFWP</b> , <b>FERC</b> , <b>NRCS</b> , <b>USFWS</b>	1,250	50	50	50	50	50	Ongoing
1	1. 2. 2	Provide fish passage around diversions	25	<b>CSKT</b> , <b>IDFG</b> , <b>IDWR</b> , <b>MDNRC</b> , <b>MFWP</b> , <b>AVISTA</b> , City of E. Hope, <b>NRCS</b> , <b>USFWS</b>	750	50	50	50	50	50	Ongoing
1	1. 2. 3	Eliminate culvert barriers	25	<b>USFS</b> , Counties, <b>IDFG</b> , <b>IDL</b> , <b>ITD</b> , <b>MDNRC</b> , <b>MDOT</b> , <b>USDOT</b>	250	10	10	10	10	10	Ongoing

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					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
1	1. 2. 5	Improve instream flows	25	<b>CSKT, MDNRC, MFWP, IWRB, IDFG,</b>	*						Ongoing
1	1. 4. 1	Evaluate and restore upstream fish passage at mainstem Clark Fork and Pend Oreille River dams	10	<b>AVISTA, FERC, PPLMT, COE, CSKT, IDFG, MFWP, USFWS</b>	9,500	950	950	950	950	950	Ongoing - 45 years through FERC license
1	1. 4. 2	Provide safe passage downstream through dams and reservoirs	45 <sup>3</sup>	<b>AVISTA, FERC, PPLMT, COE, CSKT, IDFG, MFWP, USFWS</b>	***						Ongoing - included in task 1.4.1 above
1	1. 4. 3	Reduce reservoir operational impacts	45	<b>AVISTA, FERC, PPLMT, COE, CSKT, IDEQ, IDFG, MDEQ, MFWP, USFWS</b>	***						Ongoing - included in task 1.4.1 above

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<sup>3</sup>The Avista Settlement Agreement for relicensing Noxon Rapids and Cabinet Gorge Dams will provide over \$1.25 million dollars per year for 45 years to restore and improve habitat and fish passage under Washington Water Power's Native Salmonid Restoration Plan (Washington Water Power Company 1998).

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1	1. 4. 9	Avoid gas supersaturation	10	<b>AVISTA, EPA, FERC, CSKT, IDEQ, IDFG, MDEQ, MFWP, MPC, USFWS</b>	*						Ongoing - approx. \$10–20M permanent fix at Cabinet Gorge and Noxon Dams
1	3. 3. 1	Evaluate site-specific conflicts with introduced sport fish	5	<b>CSKT, IDFG, MFWP, USFWS, AVISTA</b>	1,000	200	200	200	200	200	Ongoing - 5 years through FERC license
1	5. 2. 1	Identify suitable unoccupied habitat	5	<b>CSKT, IDFG, MFWP, USFS, USFWS, AVISTA</b>	500	100	100	100	100	100	Ongoing
1	6. 1. 2	Protect habitat	25	<b>AVISTA, CSKT, FERC, IDFG, IDL, IDWR, MFWP, COE, NRCS, USFS, USFWS</b>	17,500	700	700	700	700	700	45 years through FERC license
1	6. 2. 1	Monitor compliance with Avista FERC Settlement Agreement	25	<b>AVISTA, FERC, USFWS, IDFG, IDEQ, MDEQ, MFWP, TU, USFS</b>	***						Ongoing - See related tasks

Implementation Schedule for the bull trout recovery plan: Lower Clark Fork Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
1	6. 2. 2	Evaluate existing FERC license conditions at Thompson Falls Dam	10	<b>FERC, USFWS, IDEQ, IDFG, MDEQ, MFWP, PPLMT, TU, USFS</b>	100	10	10	10	10	10	
1	6. 2. 3	Implement FERC license conditions for Kerr Dam	25	<b>CSKT, FERC, *USFWS, MDEQ, MFWP, TU, USFS</b>	***						Ongoing - See related tasks
1	6. 2. 4	Federal Columbia River Power System Biological Opinion	25	<b>USFWS, IDEQ, IDFG, MDEQ, MFWP, TU, USFS</b>	*						Ongoing administrative costs
1	6. 3. 1	Fully implement State and Tribal habitat protection laws	25	<b>CSKT, IDL, MDNRC, MFWP, IDEQ, IDWR</b>	*						Ongoing routine administrative costs
1	6. 3. 2	Encourage floodplain protection	25	<b>Counties, COE, USEPA, IDFG, IDEQ, IDL, MDEQ, MDNRC, MFWP</b>	250	10	10	10	10	10	Ongoing
2	1. 1. 2	Upgrade problem roads	25	<b>USFS, MDNRC, PCTC, Counties, MDOT, USDOT</b>	*						Ongoing administrative costs

<b>Implementation Schedule for the bull trout recovery plan: Lower Clark Fork Recovery Subunit</b>											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	1. 1. 3	Clean up mine waste	25	<b>IDEQ, MDEQ, IDWAG, USEPA, USFS, Private Parties</b>	*						Ongoing administrative costs
2	1. 1. 6	Assess and mitigate nonpoint thermal pollution	25	<b>EPA, CSKT, IDEQ, MDEQ, NRCS</b>	*						
2	1. 2. 4	Mitigate Trestle Creek flume impacts	5	<b>IDFG, IDWR</b>	50	10	10	10	10	10	
2	1. 3. 1	Conduct watershed problem assessments	10	<b>CSKT, IDEQ, IDFG, MFWP, IDL, NRCS, USFS, USFWS</b>	*						Ongoing management/ administrative costs
2	1. 3. 2	Revegetate denuded riparian areas	25	<b>AVISTA, CSKT, FERC, USFS, IDFG, IDL, MFWP, NRCS, USFWS, TU</b>	675	25	25	25	25	25	45 years through FERC license
2	1. 3. 3	Improve grazing practices	25	<b>BLM, MDNRC, NRCS, PCTC, USFS, CSKT, MFWP</b>	*						Ongoing administrative/ planning costs

Implementation Schedule for the bull trout recovery plan: Lower Clark Fork Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	1. 3. 4	Restore stream channels	25	<b>IDFG, MFWP, USFS, AVISTA, CSKT, FERC, NRCS, TU, USFWS</b>	***						See related task 1.1.3
2	1. 3. 5	Improve instream habitat	25	<b>USFS, AVISTA, BPA, FERC, IDFG, IDL, MDNRC, MFWP, NRCS</b>	***						Ongoing; see related task 1.1.3
2	1. 3. 6	Minimize potential stream channel degradation	25	<b>Counties, IBODS, MDNRC, COE, CSKT, IDFG, IDWAG, IDWR, ITD, MDEQ, MDOT, MFWP</b>	*						Ongoing/management /administrative costs
2	1. 4. 4	Research and recommend instream flows and minimum pools on the Flathead Agency Irrigation District	5	<b>CSKT, BIA, USFWS</b>	50	10	10	10	10	10	Section 7 consultation
2	1. 4. 5	Provide instream flow downstream of dams	10	<b>AVISTA, COE, FERC, IWRB, PPLMT, IDEQ, IDFG, USFWS</b>	*						45 years through FERC license

<b>Implementation Schedule for the bull trout recovery plan: Lower Clark Fork Recovery Subunit</b>											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	1. 4. 6	Research and recommend instream flow in lower Flathead River	5	<b>CSKT, FERC</b>	*						Ongoing/part of task 1.4.5
2	1. 4. 7	Maintain passage through alluvial fans in Lake Pend Oreille	25	<b>AVISTA, COE, IDFG</b>	250	10	10	10	10	10	Ongoing
2	1. 4. 8	Assess impact of Lake Pend Oreille water levels on kokanee salmon	10	<b>IDFG, BPA, COE</b>	500	50	50	50	50	50	Ongoing
2	1. 5. 1	Monitor fire effects and mitigate effects where necessary	25	<b>IDL, MDNRC, USFS</b>	*						Ongoing/ routine administrative costs
2	2. 1. 2	Regulate private fish ponds	25	<b>CSKT, IDFG,MFWP</b>	*						Ongoing/ routine administrative costs

<b>Implementation Schedule for the bull trout recovery plan: Lower Clark Fork Recovery Subunit</b>											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	2. 1. 3	Encourage development of commercial sources of westslope cutthroat trout	5	<b>CSKT, IDFG, MFWP</b>	*						Ongoing fish management costs
2	2. 2. 1	Optimize enforcement of laws and policies that prohibit unauthorized fish transplant and stocking	25	<b>CSKT, IDFG, MFWP, USFWS, USFS</b>	*						Ongoing fish management costs
2	2. 3. 1	Discourage unauthorized fish introductions	25	<b>CSKT, IDFG, MFWP, AVISTA, MDNRC, TU, USFWS</b>	*						Ongoing fish management costs
2	2. 3. 2	Develop bull trout education program	15	<b>Avista, CSKT, IDFG, MFWP, TU, USFWS</b>	150	10	10	10	10	10	Ongoing/part of statewide program
2	2. 5. 1	Experimentally remove established brook trout populations	25	<b>CSKT, IDFG, MFWP, AVISTA, FERC, USFWS</b>	625	25	25	25	25	25	Ongoing

<b>Implementation Schedule for the bull trout recovery plan: Lower Clark Fork Recovery Subunit</b>											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	2.5.2	Suppress lake trout in Lake Pend Oreille	10	<b>IDFG, USFWS</b>	500	50	50	50	50	50	
2	2.5.3	Suppress brown trout in Bull River	10	<b>MFWP, AVISTA, FERC, USFWS</b>	100	10	10	10	10	10	
2	3.1.1	Implement adaptive management of native fish management plans	25	<b>CSKT, IDFG, MFWP, USFWS</b>	*						Ongoing fish management costs
2	3.1.2	Implement Avista Native Salmonid Restoration Plan	25	<b>AVISTA, IDFG, FERC, MFWP, USFWS</b>	2,500	100	100	100	100	100	Ongoing
2	3.2.1	Minimize unintentional mortality of bull trout	25	<b>CSKT, IDFG, MFWP</b>	*						Ongoing routine fish management costs
2	3.2.2	Evaluate enforcement of angling regulations and oversee scientific research	25	<b>CSKT, IDFG, MFWP, AVISTA, USFWS</b>	2,500	100	100	100	100	100	45 years through FERC license

<b>Implementation Schedule for the bull trout recovery plan: Lower Clark Fork Recovery Subunit</b>											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	3. 2. 3	Implement angler education efforts	25	<b>CSKT, IDFG, MFWP, AVISTA, TU, USFWS</b>	***						Partially included in task 3.2.2 above
2	3. 3. 2	Regulate mainstem reservoirs to inhibit reproduction of nonnative fish	45	<b>AVISTA, FERC, IDFG, MFWP, USFWS</b>	*						Ongoing through FERC license
2	3. 4. 1	Evaluate opportunities for regulated bull trout fisheries	25	<b>CSKT, MFWP, IDFG, USFWS</b>	***						See related task 3.2.2
2	4. 1. 1	Conduct genetic inventory	10	<b>CSKT, IDFG, MFWP, AVISTA, FERC, UM, USFWS</b>	*						See related task in Chapter 1 of Recovery Plan
2	5. 2. 3	Investigate bull trout movement and distribution	25	<b>CSKT, IDFG, MFWP, AVISTA, FERC, USFWS</b>	1,250	50	50	50	50	50	Costs part of task 1.4.1

Implementation Schedule for the bull trout recovery plan: Lower Clark Fork Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	5. 2. 5	Research origin of bull trout that migrate to Cabinet Gorge Dam	5	<b>IDFG, MFWP</b> , AVISTA, FERC, USFWS	*						See related tasks 5.2.3 and 1.4.1.
2	5. 3. 1	Evaluate efficacy of trap/transport project	10	<b>IDFG, MFWP</b> , AVISTA, FERC, USFWS	*						See related task 1.4.1
2	5. 4. 2	Prevent spread of fish pathogens	25	<b>IDFG, MFWP, USFWS</b> , CSKT	*						Ongoing fish management costs
2	5. 5. 1	Evaluate Middle Fork East River	5	<b>IDFG, IDL</b> , USFWS	250	50	50	50	50	50	
2	6. 1. 1	Support watershed group restoration efforts	25	<b>AVISTA, CSKT, IDFG, MFWP, USFS, USFWS</b> , FERC, IDEQ, IDL, IDWAG, MDNRC, NRCS,	*						Meets CWA requirements
2	6. 2. 5	Expedite Flathead Agency Irrigation District Biological Opinion	5	<b>BIA, USFWS</b> , CSKT	*						Ongoing administration costs

Implementation Schedule for the bull trout recovery plan: Lower Clark Fork Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	6. 2. 6	Implement Plum Creek Habitat Conservation Plan	30	<b>USFWS, PCTC</b>	***						See task 6.2.4 for Upper Clark Fork Subunit
3	1. 1. 4	Evaluate and, if necessary, mitigate impacts from Rock Creek Mine	25	<b>MDEQ, IDFG, MFWP, Sterling Mining Co. , USFS, USFWS</b>	*						Ongoing, administrative costs
3	1. 1. 7	Reduce nutrient input	25	<b>CSKT, IDEQ,MDEQ, USEPA, NRCS</b>	*						Ongoing operations/ administrative costs
3	1. 1. 9	Minimize recreational development in bull trout spawning and rearing habitat	25	<b>County, IDL, MDNRC, MFWP, USFS, IDFG, USFWS</b>	*						Ongoing operations/ administrative costs
3	1. 2. 6	Consider fish salvage, as needed	5	<b>Avista, MFWP, USFWS, USFS</b>	25	5	5	5	5	5	

<b>Implementation Schedule for the bull trout recovery plan: Lower Clark Fork Recovery Subunit</b>											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
3	1. 3. 7	Manage beaver to function naturally in maintaining wetlands	25	<b>CSKT, IDFG, MFWP, USFS</b>	125	5	5	5	5	5	Ongoing
3	2. 1. 1	Review fish stocking programs	25	<b>CSKT, IDFG, MFWP, USFS, USFWS</b>	*						Ongoing fish management costs
3	2. 4. 1	Assess superimposition of kokanee salmon and brown trout redds on bull trout redds	5	<b>IDFG, MFWP, CSKT</b>	50	10	10	10	10	10	
3	2. 4. 2	Evaluate northern pike and smallmouth bass in lower Flathead River	10	<b>CSKT, MFWP, USFWS</b>	*						Ongoing fishery management program cost
3	3. 2. 4	Solicit information from commercial guides	10	<b>IDFG, MFWP, USFS, USFWS</b>	*						Routine administrative planning costs

<b>Implementation Schedule for the bull trout recovery plan: Lower Clark Fork Recovery Subunit</b>											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
3	5. 2. 2	Evaluate habitat suitability ( <i>i.e.</i> , thermal conditions) in reservoirs	15	<b>AVISTA, FERC, MFWP, USFWS</b>	***						See related task 1.4.1
3	5. 2. 4	Coordinate monitoring of fish movement	25	<b>AVISTA, CSKT, IDFG, MFWP, USFWS</b>	***						See costs associated with task 1.4.1
3	5. 2. 6	Evaluate feasibility of maintaining fluvial/resident populations	15	<b>AVISTA, CSKT, IDFG, MFWP, FERC, USFWS</b>	***						See costs associated with task 1.4.1
3	5. 2. 7	Map spawning habitat	25	<b>CSKT, IDFG, MFWP</b>	***						Costs part of tasks 1.4.1 and 5.2.3
3	5. 4. 1	Monitor fish health in private hatcheries	25	<b>IDFG, MFWP, USFWS</b>	*						Ongoing fish management costs

Implementation Schedule for the bull trout recovery plan: Flathead Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
1	1. 1. 1	Reduce general sediment sources	25	USFS, BCMWLAP, BPA, Counties, CSKT, DOT, USEPA, FBC, GNP, MDEQ, MDNRC, MDOT, MFWP, NRCS, PCTC, USFWS	*	100	100	100	100	100	Ongoing administrative/ planning costs
1	1. 1. 2	Address forest road maintenance and hotspots	25	USFS, Counties, MDNRC, PCTC	***						Ongoing administrative costs; see task 6.2.7
1	1. 1. 8	Implement water quality regulations	25	MDEQ, Counties, USEPA, USFS, USFWS	*						Ongoing/ administrative planning costs
1	1. 2. 3	Eliminate culvert barriers	10	USFS, BCMWLAP, Counties, CSKT, DOT, GNP, MDOT, MDNRC, MFWP, PCTC, USFWS	100	10	10	10	10	10	Ongoing
1	2. 3. 1	Discourage unauthorized fish introductions	25	CSKT, MFWP, BCMWLAP, GNP, MDNRC, PCTC, USFS, USFWS	*						Ongoing fish management costs

Implementation Schedule for the bull trout recovery plan: Flathead Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
1	2. 5. 2	Suppress brown trout in Mill Creek	10	<b>MFWP, USFWS</b>	100	10	10	10	10	10	Ongoing
1	3. 1. 1	Implement adaptive management of native fishes in Flathead Lake and Flathead River	10	<b>CSKT, MFWP</b>	2,500	100	100	100	100	100	Ongoing, new 10-year plan
1	3. 1. 2	Develop and implement Swan Lake management strategy	5	<b>MFWP</b>	50	10	10	10	10	10	
1	3. 1. 3	Aggressively protect remaining native species complexes	25	<b>CSKT, GNP, MFWP, USFWS</b>	*						Ongoing fish management plans
1	3. 3. 1	Evaluate site-specific conflicts with introduced sport fish	10	<b>CSKT, GNP, MFWP, USFWS</b>	1,000	100	100	100	10	100	Ongoing
1	4. 1. 1	Conduct genetic inventory	10	<b>MFWP, BCMWLAP, CSKT, GNP, MDNRC, PCTC, USFS, USFWS</b>	***						See related task in Chapter 1 of Recovery Plan

Implementation Schedule for the bull trout recovery plan: Flathead Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
1	5. 1. 1	Develop standardized monitoring procedures	25	CSKT, MFWP, USFWS, GNP, USFS	1,250	50	50	50	50	50	Ongoing
1	5. 2. 1	Identify suitable unoccupied habitat	5	CSKT, GNP, MFWP, USFS, USFWS, MDNRC	***						Related to task 5.1.1
1	6. 1. 2	Protect habitat	25	USFWS, BCMWLAP, CSKT, GNP, MDNRC, MFWP, NRCS, PCTC, USFS	*						Ongoing
1	6. 2. 1	Monitor compliance with Kerr Dam FERC Order and Biological Opinion	35	CSKT, FERC, USFWS BIA, PPLMT,	*						Ongoing routine administrative costs
1	6. 2. 2	Minimize impacts of Bigford Dam through Federal Energy Regulatory Commission relicensing process	5	FERC, Pacific, USFWS, MDEQ, MFWP	50	10	10	10	10	10	

Implementation Schedule for the bull trout recovery plan: Flathead Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
1	6. 2. 3	Monitor compliance with Federal Columbia River Power System Biological Opinion for Hungry Horse Dam	25	USFWS, BPA, BOR, FERC,	*						Ongoing administrative costs
1	6. 3. 2	Encourage floodplain protection	25	Counties, CSKT, USEPA, FBC, MFWP, MDEQ, MDNRC, USFWS	*						Ongoing, agency management and planning costs
2	1. 1. 3	Improve maintenance along transportation corridors	25	BNSFR, MDOT, USDOT, Counties, USFS	*						Ongoing/ maintenance costs
2	1. 1. 4	Modify problem reaches of trail system	25	GNP, USFS	*						Ongoing/ maintenance costs
2	1. 1. 5	Monitor existing and future coal mine development in British Columbia	25	BCMWLAP, USEPA, FBC, MDEQ	*						Ongoing monitoring costs

Implementation Schedule for the bull trout recovery plan: Flathead Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	1. 1. 7	Assess nutrient input and increase water quality monitoring and remediation	25	<b>MDEQ, USEPA, FBC, FLBS</b>	*						CWA required
2	1. 2. 1	Eliminate entrainment in diversions	25	<b>CSKT, MDNRC, MFWP, GNP, NRCS, PCTC, USFS, USFWS</b>	250	10	10	10	10	10	Ongoing
2	1. 2. 2	Provide fish passage around diversions	25	<b>CSKT, MDNRC, MFWP, GNP, NRCS, PCTC, USFS, USFWS</b>	250	10	10	10	10	10	Ongoing
2	1. 2. 4	Improve instream flows	25	<b>CSKT, MDNRC, MFWP</b>	250	10	10	10	10	10	Ongoing
2	1. 3. 1	Conduct watershed problem assessments	10	<b>CSKT, MFWP, USFS, GNP, MDNRC, NRCS, PCTC, USFWS</b>	*						Ongoing management costs
2	1. 3. 2	Revegetate denuded riparian areas	25	<b>USFS, BCMWLAP, CSKT, GNP, MDNRC, MFWP, NRCS, PCTC, USFWS</b>	250	10	10	10	10	10	Ongoing

Implementation Schedule for the bull trout recovery plan: Flathead Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	1. 4. 1	Reduce reservoir operational impacts	10	<b>BOR, BPA, CSKT, USEPA, FBC, FERC, FLBS, GNP, MFWP, PPLMT, USFS, USFWS</b>	200	20	20	20	20	20	Ongoing
2	1. 4. 2	Provide instream flow downstream of dams	10	<b>BOR, BPA, CSKT, MFWP, USFWS</b>	500	50	50	50	50	50	Ongoing
2	1. 4. 3	Evaluate selective withdrawal at Hungry Horse Dam	10	<b>BOR, MFWP, CSKT, BPA, USFWS</b>	***						Priority task 1.4.2
2	1. 4. 5	Evaluate impact of dam operations on bull trout predators	10	<b>MFWP, BPA, BOR, CSKT</b>	250	25	25	25	25	25	Ongoing
2	2. 1. 1	Upgrade fish hatchery practices	10	<b>MFWP, USFWS, CSKT</b>	*						Ongoing fish management costs
2	2. 1. 2	Regulate private fish ponds	25	<b>MFWP</b>	*						Ongoing fish management costs

Implementation Schedule for the bull trout recovery plan: Flathead Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	2. 1. 3	Encourage development of commercial sources of westslope cutthroat trout	5	<b>MFWP</b>	*						Ongoing fish management costs
2	2. 2. 1	Optimize enforcement of laws and policies that prohibit unauthorized fish transplant and stocking	25	<b>CSKT, MFWP, USFWS, USFS</b>	*						Ongoing fish management costs
2	2. 3. 2	Develop bull trout education program	25	<b>CSKT, MFWP, USFWS</b>	250	10	10	10	10	10	Part of statewide program
2	2. 4. 1	Develop protocols for suppressing nonnative fish	10	<b>CSKT, MFWP, USFWS, USFS</b>	***						See task 2.4.1 for Upper Clark Fork Recovery Subunit
2	2. 4. 2	Discourage illegally introduced sport fish populations	25	<b>CSKT, MFWP</b>	*						Ongoing fish management costs

Implementation Schedule for the bull trout recovery plan: Flathead Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	2. 5. 1	Experimentally remove established brook trout populations	25	CSKT, MFWP, GNP, MDNRC, PCTC, USFS, USFWS	625	25	25	25	25	25	
2	2. 6. 1	Reduce/minimize impacts of northern pike	25	CSKT, MFWP	625	25	25	25	25	25	
2	2. 6. 2	Consider installing barriers to hinder spread of nonnative fish	10	CSKT, GNP, MFWP, USFS, USFWS	250	25	25	25	25	25	Ongoing
2	3. 2. 1	Minimize unintentional bull trout mortality	25	CSKT, MFWP, BCMWLAP, GNP	*						Ongoing fish management costs
2	3. 2. 2	Evaluate enforcement of angling regulations and oversee scientific research	25	CSKT, GNP, MFWP, BCMWLAP, USFWS	***						See task 3.2.2 of Upper Clark Fork Recovery Subunit
2	3. 2. 3	Implement angler education efforts	25	CSKT, GNP, MFWP, USFWS	***						See related task 3.2.2

Implementation Schedule for the bull trout recovery plan: Flathead Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	3. 2. 4	Solicit information from commercial guides	10	<b>MFWP</b>	*						Routine management costs
2	3. 4. 1	Evaluate opportunities for regulated bull trout fisheries	25	<b>CSKT, MFWP, USFWS</b>	*						Ongoing fish management/ regulations costs
2	5. 4. 2	Prevent spread of fish pathogens	25	<b>MFWP, USFWS, CSKT, GNP</b>	*						Ongoing fish management and health costs
2	5. 5. 1	Increase monitoring of adfluvial bull trout populations in smaller lakes	10	<b>CSKT, GNP, MFWP, USFWS</b>	1,000	100	100	100	100	100	See task 3.1.3
2	5. 6. 2	Assess hybridization threat with brook trout in the Swan River drainage	5	<b>MFWP, PCTC, UM, USFS, USFWS</b>	50	10	10	10	10	10	

Implementation Schedule for the bull trout recovery plan: Flathead Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	6. 1. 1	Support watershed group restoration efforts	25	<b>CSKT, MFWP, USFS, USFWS, BOR, BPA, Counties, DOT USEPA, FBC, FERC, FLBS, GNP, MDNRC, MDEQ, MDOT, NRCS, PCTC, PPLMT</b>	*						Ongoing administrative costs, CWA costs
2	6. 1. 3	Support habitat protection and monitoring in British Columbia	25	<b>BCMWLAP, MFWP, USFWS, BPA, USFS</b>	*						Ongoing
2	6. 2. 4	Implement Plum Creek HCP	30	<b>PCTC, USFWS</b>	***						Ongoing; see related tasks for Upper and Lower Clark Fork Recovery Subunits
2	6. 3. 1	Fully implement State and Tribal habitat protection laws	25	<b>CSKT, MDNRC, MDEQ, MFWP, PCTC, USFS</b>	*						Ongoing/ administrative and monitoring costs

Implementation Schedule for the bull trout recovery plan: Flathead Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
3	1. 1. 6	Minimize recreational development in bull trout spawning and rearing habitat	25	Counties, CSKT, MFWP, MDNRC, NPS, USFS, USFWS	*						Routine land management planning costs
3	1. 3. 3	Improve grazing practices	25	USFS, CSKT, GNP, MDNRC, MFWP, NRCS, PCTC, USFWS	*						Ongoing administrative costs
3	1. 3. 4	Restore stream channels	25	USFS, BCMWLAP, CSKT, GNP, MDNRC, MFWP, NRCS, PCTC, USFWS	*						Ongoing
3	1. 3. 5	Improve instream habitat	25	USFS, BCMWLAP, CSKT, GNP, MDNRC, MFWP, NRCS, PCTC, USFWS	*						Ongoing
3	1. 3. 6	Minimize potential stream channel degradation	25	Counties, MDNRC, COE, CSKT, MDEQ, MDOT, MFWP	*						Administrative costs associated with land use planning
3	1. 4. 4	Avoid gas supersaturation from Hungry Horse Dam	25	BOR, BPA, CSKT, USEPA, MFWP, MDEQ, USFWS	250	10	10	10	10	10	Ongoing

Implementation Schedule for the bull trout recovery plan: Flathead Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
3	1. 5. 1	Monitor fire effects and mitigate effects where necessary	25	<b>CSKT, MDNRC, USFS, GNP</b>	*						Ongoing administrative and planning costs
3	3. 2. 5	Coordinate with British Columbia fisheries monitoring and management authorities	25	<b>BCMWLAP, CSKT, MFWP, USFWS</b>	125	5	5	5	5	5	Ongoing
3	5. 2. 2	Map spawning habitat	25	<b>CSKT, MFWP, USFWS</b>	***						See costs associated with tasks 5.1.1 and 5.5.1
3	5. 4. 1	Monitor fish health in private hatcheries	25	<b>MFWP, CSKT, USFWS</b>	*						Ongoing/ fish health costs
3	5. 5. 2	Evaluate bull trout population and habitat in Tally Lake watershed to determine potential core area status.	5	<b>MFWP, USFS, USFWS</b>	25	5	5	5	5	5	

Implementation Schedule for the bull trout recovery plan: Flathead Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
3	5. 6. 1	Investigate status of migratory and resident life history forms of bull trout	10	CSKT, MFWP, BCMWLAP, CSKT, GNP, USFS, USFWS	***						See costs associated with tasks 5.1.1 and 5.5.1

<b>Implementation Schedule for the bull trout recovery plan: Priest Recovery Subunit</b>											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
1	1. 1. 1	Reduce general sediment sources	25	<b>IDL, USFS, County, BPA, COE, IDEQ, ITD, IDWAG, NRCS, USFWS</b>	*						Ongoing/ administrative planning costs
1	1. 1. 2	Address forest road maintenance and hotspots	25	<b>IDL, USFS, KT, USFWS, WDFW</b>	*						Ongoing/ administrative forest planning costs
1	1. 1. 6	Implement water quality regulations	25	<b>IDEQ, MDEQ, Counties, USEPA, USFS, USFWS</b>	*						Ongoing cost; CWA required
1	1. 2. 1	Eliminate culvert barriers	25	<b>IDL, USFS, County, ITD, IDFG, USFWS</b>	625	25	25	25	25	25	Ongoing
1	1. 3. 1	Conduct watershed problem assessments	10	<b>IDFG, KT, WDFW, IDL, IDEQ, NRCS, USFS, USFWS</b>	*						Ongoing management costs
1	2. 3. 1	Discourage unauthorized fish introductions	25	<b>IDFG, WDFW, USFS, USFWS</b>	*						Ongoing fish management costs

<b>Implementation Schedule for the bull trout recovery plan: Priest Recovery Subunit</b>											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
1	2. 4. 2	Evaluate site-specific conflicts with introduced sport fish	10	<b>IDFG, USFWS, WDFW</b>	500	50	50	50	50	50	Ongoing
1	2. 5. 2	Evaluate the potential for a barrier in the Thorofare to control the migration of nonnative fish	5	<b>IDFG, USFWS</b>	250	50	50	50	50	50	Ongoing
1	3. 1. 1	Implement adaptive management to address lake trout in Lake Pend Oreille and Priest Lake	10	<b>IDFG, WDFW</b>	250	25	25	25	25	25	
1	3. 1. 2	Aggressive protection of remaining native species complexes	25	<b>IDFG, WDFW, USFWS</b>	*						Ongoing fish management costs
1	3. 2. 2	Evaluate enforcement of angling regulations and oversee scientific research	25	<b>IDFG, USFWS, WDFW</b>	500	20	20	20	20	20	Ongoing

<b>Implementation Schedule for the bull trout recovery plan: Priest Recovery Subunit</b>											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
1	3. 2. 3	Implement angler education efforts	25	<b>IDFG, WDFW, KT, USFWS</b>	***						Ongoing costs; part of task 3.2.2
1	5. 2. 1	Identify suitable unoccupied habitat	5	<b>IDFG, KT, USFS, USFWS, WDFW</b>	250	50	50	50	50	50	Ongoing
1	6. 1. 1	Support watershed group restoration efforts	25	<b>IDFG, KT, USFS, USFWS, WDFW, BPA, COE, IDEQ, IDL, IDWAG, NRCS</b>	*						Ongoing administrative costs/CWA required
1	6. 1. 2	Protect habitat	25	<b>IDL, USFS, County, IDEQ, IDFG, IDWAG, KT, NRCS, USFWS, WDFW</b>	*						Ongoing administrative costs
1	6. 1. 3	Support habitat protection and monitoring in the Priest Lake State Forest	25	<b>IDL, IDFG, IDWAG, USFWS</b>	250	10	10	10	10	10	

Implementation Schedule for the bull trout recovery plan: Priest Recovery Subunit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
1	6. 3. 2	Encourage floodplain protection	25	County, COE, USEPA, IDFG, IDEQ, IDL	*						Ongoing/ land use planning and administrative costs
2	1. 1. 3	Improve maintenance along transportation corridors	25	ITD, USDOT, County, IDL, USFS	*						Ongoing maintenance costs
2	1. 1. 5	Assess and reduce nutrient input from forestry practices and lakeshore development	25	EPA, IDEQ, WADOE, KT, USFS, USFWS,	*						Ongoing, CWA required
2	1. 2. 2	Improve instream flows	25	IWRB, IDL, USFS	*						Ongoing
2	1. 3. 2	Revegetate denuded riparian areas	25	IDL, USFS, KT, NRCS	250	10	10	10	10	10	Ongoing
2	1. 3. 4	Restore stream channels	25	IDL, USFS, IDFG, KT, NRCS, USFWS	250	10	10	10	10	10	Ongoing
2	1. 4. 1	Minimize impacts of dam operations on bull trout in Priest Lake	5	Avista, IDFG, IDWR, COE, USFWS	125	25	25	25	25	25	

<b>Implementation Schedule for the bull trout recovery plan: Priest Recovery Subunit</b>											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	1. 4. 3	Provide upstream passage over barriers	10	<b>Avista, COE, IDFG, IDL, IDWR, USFWS</b>	1,000	100	100	100	100	100	
2	2. 2. 1	Optimize enforcement of laws and policies that prohibit unauthorized fish transplant and stocking	25	<b>IDFG, USFWS, USFS</b>	*						Ongoing fish management costs
2	2. 3. 2	Develop bull trout education program	25	<b>IDFG, USFWS</b>	*	10	10	10	10	10	Ongoing
2	2. 4. 1	Develop protocols for suppressing nonnative fish	10	<b>IDFG, USFWS, USFS</b>	***						Ongoing; see task 2.4.1 of Upper Clark Fork Recovery Subunit
2	2. 5. 1	Experimentally remove established brook trout populations	25	<b>IDFG, USFS, USFWS</b>	625	25	25	25	25	25	Ongoing
2	3. 2. 1	Minimize unintentional bull trout mortality	25	<b>IDFG, WDFW, USFS, USFWS,</b>	*						Ongoing fish management costs

<b>Implementation Schedule for the bull trout recovery plan: Priest Recovery Subunit</b>											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	3. 3. 1	Discourage illegally introduced sport fish populations	25	<b>IDFG, WDFW</b>	*						Ongoing fish management costs
2	3. 4. 1	Encourage brook trout harvest	25	<b>IDFG,WDFW</b>	*						Ongoing fish management costs
2	4. 1. 1	Conduct genetic inventory	10	<b>IDFG, KT, USFS, USFWS, WDFW</b>	250	25	25	25	25	25	Ongoing
2	4. 3. 1	Implement actions to develop a refugia for Priest Lakes.	5	<b>USFWS, IDFG</b>	500	100	100	100	100	100	
2	5. 1. 1	Develop standardized monitoring procedures	25	<b>IDFG, KT, WDFW, USFS, USFWS</b>	625	25	25	25	25	25	Ongoing
2	5. 1. 2	Increase monitoring of adfluvial bull trout populations in Priest lakes	25	<b>IDFG, KT, USFS, USFWS</b>	250	10	10	10	10	10	Ongoing
2	5. 2. 3	Evaluate core area classification status	5	<b>IDFG, USFWS</b>	***						See task 5.2.2

<b>Implementation Schedule for the bull trout recovery plan: Priest Recovery Subunit</b>											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
2	5. 6. 2	Assess hybridization threat with brook trout in the Upper Priest River watershed	3	<b>IDFG, KT, USFWS</b>	75	25	25	25	25	25	Ongoing
2	6. 1. 4	Develop Priest Lakes partnerships	5	<b>IDFG, KT, WDFW, USFWS</b>	250	50	50	50	50	50	
2	6. 2. 1	Monitor compliance with the Biological Opinion for the Federal Columbia River Power System	25	<b>USFWS, COE</b>	*						Ongoing administrative costs
2	6. 3. 1	Fully implement State habitat protection laws	25	<b>IDEQ, IDL, WADNR, IDFG, IDWAG, IDWR</b>	*						Ongoing administrative planning costs
3	1. 1. 4	Minimize recreational development in bull trout spawning and rearing habitat	25	<b>County, IDL, USFS, IDFG, USFWS, WDFW</b>	*						Administrative costs; regulatory oversight

<b>Implementation Schedule for the bull trout recovery plan: Priest Recovery Subunit</b>											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
3	1. 3. 3	Improve grazing practices	25	<b>IDL, USFS, NRCS, USFWS</b>	*						Ongoing routine planning/ administrative costs
3	1. 3. 5	Improve instream habitat	25	<b>IDL, USFS, IDFG, KT, NRCS, USFWS</b>	*						Ongoing
3	1. 3. 6	Minimize potential stream channel degradation	25	<b>County, IBODS, COE, IDEQ</b>	*						Costs part of land use planning process
3	1. 4. 2	Minimize impacts of Albeni Falls Dam on bull trout in the Priest River	5	<b>COE, USFWS</b>	250	50	50	50	50	50	
3	1. 5. 1	Monitor fire effects and mitigate effects where necessary	25	<b>IDL, USFS, USFWS</b>	*						Ongoing administrative regulatory costs

<b>Implementation Schedule for the bull trout recovery plan: Priest Recovery Subunit</b>											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)					Comments	
					Total cost	Year 1	Year 2	Year 3	Year 4		Year 5
3	2. 1. 1	Review fish stocking programs	25	<b>IDFG, USFWS</b>	*						Ongoing fish management costs
3	2. 1. 2	Regulate private fish ponds	25	<b>IDFG</b>	*						Ongoing fish management costs
3	2. 1. 3	Encourage development of commercial sources of westslope cutthroat trout	25	<b>IDFG</b>	*						Ongoing fish management costs
3	3. 2. 4	Solicit information from commercial guides	10	<b>IDFG</b>	*						Ongoing fish management costs
3	5. 1. 3	Increase lake water quality monitoring	15	<b>IDEQ, USEPA</b>	15	10	10	10	10	10	15-year program
3	5. 2. 2	Map spawning habitat	5	<b>IDFG, KT, USFS, USFWS, WDFW</b>	25	5	5	5	5	5	Ongoing
3	5. 6. 1	Investigate fluvial and resident bull trout status	10	<b>IDFG, KT, USFS, USFWS, WDFW</b>	100	10	10	10	10	10	