

IMPLEMENTATION SCHEDULE

The Implementation Schedule that follows lists 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; and comments. The tasks, when accomplished, will lead to recovery of bull trout in the Little Lost River Recovery Unit. Cost estimates are not provided for tasks that are normal agency responsibility under existing authorities.

Parties with authority, responsibility, or expressed interest to implement a specific recovery task are identified in the Implementation Schedule. The appearance of a responsible party in the table 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 Endangered Species Act by implementing programs for conservation of threatened or endangered species.

The following are definitions to column headings in the Implementation Schedule:

Priority Number: 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 effect 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 are numbered as 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 task completion.

Responsible or Participating Party: The following organizations are those with responsibility or capability to fund, authorize, or carry out the corresponding recovery task:

Federal agencies:

BLM	Bureau of Land Management
NRCS	Natural Resources Conservation Service
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service

State agencies:

IDEQ	Idaho Department of Environmental Quality
IDFG	Idaho Fish and Game
IDWR	Idaho Department of Water Resources

Bolded 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 estimates 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 private business and individuals.

An asterisk (*) in the total cost column indicates ongoing tasks that are currently being implemented as part of normal agency responsibilities under existing authorities. Because these tasks are not being done specifically or solely for bull trout conservation, they are not included in the cost estimates. Some of these efforts may be occurring at reduced funding levels and/or in only a small portion of the watershed.

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.

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Implementation schedule for the bull trout recovery plan: Little Lost River Recovery Unit											
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	Develop and implement a management strategy to reduce sediment levels on National Forest and private lands in the Badger Creek watershed	Perpetual	landowners, IDEQ, NRCS, USFWS, USFS	10	10					Ongoing ¹ , cost estimate for strategy development.
1	1.1.3	Develop and implement a management strategy to reduce sediment levels in bull trout spawning and rearing habitat in the Wet Creek watershed	Perpetual	IDEQ, USFS	*						Ongoing
1	1.2.1	Provide upstream fish passage at the Badger Creek water diversion	Perpetual	diversion operator, NRCS, USFS	15	15					Cost estimate for construction to provide passage in perpetuity.
1	1.2.2	Assess feasibility of providing minimum stream flows between the Badger Creek diversion and the Little Lost River	1	diversion operator, IDFG, IDWR, NRCS, USFWS	10	10					Cost estimate for feasibility study.

¹Ongoing 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 funding levels and/or in only a small portion of the watershed.

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Implementation schedule for the bull trout recovery plan: Little Lost River Recovery Unit											
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	1.2.3	Evaluate feasibility of reconnecting Williams Creek to the Little Lost River by providing adequate stream flows	1	diversion operator, BLM, IDFG, IDWR, NRCS, USFWS	10	10					Cost estimate for feasibility study.
1	1.2.4	Analyze culvert survey data collected by the Forest Service and develop plan to address culverts found to inhibit fish passage	1	USFS	20	20					
1	1.2.5	Conduct survey of culverts on Bureau of Land Management and private lands and develop plan to address culverts found to inhibit fish passage	3	BLM, IDFG	120	40	40	40			Cost estimate for survey and feasibility study.
1	1.2.10	Inventory diversions in the lower Little Lost River, evaluate entrainment and feasibility of eliminating or reducing entrainment, and implement appropriate actions	1	BLM, IDFG, IDWR, NRCS, USFWS	100	50	50				Cost estimate for inventory and feasibility study.
1	1.2.11	Evaluate bull trout loss at the flood-control structure near Howe and implement tasks to reduce negative effects	3	BLM, IDFG, NRCS, USFWS	150	50	50	50			Cost estimate for evaluation and feasibility study.

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					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	1.2.13	Evaluate barrier formed by debris, and perhaps a head-cut, on Bunting Canyon Creek and implement tasks to expand bull trout distribution upstream of the barrier	1	IDFG, USFS	20	20					Cost estimate for evaluation to develop restoration approach.
1	1.3.1	Evaluate effects of livestock grazing on bull trout egg incubation and on spawning and rearing habitat and adjust grazing strategy as appropriate	Perpetual	IDFG, USFWS, USFS	*						
1	1.3.3	Evaluate the effects of channelization on the middle portion of the Little Lost River (<i>i.e.</i> , the reach between the confluences of Iron and Summit Creeks) and develop and implement a strategy to restore a natural stream channel	Perpetual	BLM, IDFG, USFWS	50	50					Cost estimate for feasibility study.
1	1.3.4	Evaluate habitat conditions in the lower portion of the Little Lost River (<i>i.e.</i> , the reach from the confluence of Summit Creek to the Little Lost River Sinks) and develop and implement a strategy to restore habitat conditions	Perpetual	IDFG, NRCS, USFWS	50	50					Cost estimate for feasibility study.
1	2.4.1	Evaluate feasibility of reducing or eliminating brook trout in Big Creek and implement appropriate actions	3	BLM, IDFG, USFWS, USFS	90	30	30	30			Cost estimate for feasibility study.

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					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	2.5.1	Assess feasibility of eradicating brook trout from the Wet Creek, Squaw Creek, and Mill Creek drainages	3	BLM, IDFG , USFWS, USFS	180	60	60	60			Cost estimate for feasibility study.
1	2.6.1	Assess feasibility of temporarily installing fish barriers above the upper limit of brook trout distribution in Wet, Squaw, and Mill Creeks	3	IDFG, USFWS, USFS	30	10	10	10			Coordinate with task 2.5.1.
1	2.6.2	Monitor the lower portions of Badger and Williams Creeks for brook trout if barriers to fish passage with the Little Lost River are corrected	Coincident with permitted grazing.	BLM, IDFG	110	5	5	5	5	5	Contingent on tasks 1.2.1 and 1.2.3. Assumed 25 years of implementation.
1	4.2.1	Prevent the establishment of barriers that may inhibit the movement of bull trout within the Little Lost River Recovery Unit (e.g., structural barriers or unsuitable habitat conditions) and investigate additional opportunities to improve passage	25	BLM , IDFG , NRCS , USFWS, USFS	110	5	5	5	5	5	Ongoing, cost estimates to investigate additional opportunities to improve passage.
1	5.5.2	Investigate habitat conditions in Wet Creek during winter	3	BLM, IDFG, USFS	60	20	20	20			Repeat as include range of winter conditions.

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					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	6.1.1	As appropriate, protect and restore private lands to benefit bull trout by using cooperative processes such as easements, land exchanges, Conservation Reserve Programs, and cost sharing	Perpetual	BLM, IDFG, landowners, NRCS, USFWS, USFS	*						Ongoing
2	1.1.2	Reduce sediment from roads and trails in the Iron Creek and Timber Creek watersheds	5	USFS	50	10	10	10	10	10	
2	1.2.6	Evaluate fish passage at specific culverts on Timber Creek (U.S. Forest Service Road #105) and Redrock Creek (Forest Service Road #460) and modify or replace culverts, as necessary, to provide or improve fish passage	2	USFS	20	10	10				Cost estimate for evaluation. Implementation cost dependent on specific action taken.
2	1.2.7	Evaluate fish passage at specific culverts on Jackson Creek and Hawley Creek (U.S. Forest Service Road #104 on both streams) and modify or replace culverts, as necessary, to provide or improve fish passage	2	USFS	20	10	10				Cost estimate for evaluation. Implementation cost dependent on specific action taken.
2	1.2.8	Evaluate fish passage at two culverts on the upper Little Lost River (U.S. Forest Service Road #101) and modify or replace the culverts, as necessary, to provide or improve fish passage	2	USFS	20	10	10				Cost estimate for evaluation. Implementation cost dependent on specific action taken.

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					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	1.2.9	Remove artificial barrier on lower Camp Creek	2	USFS	20	10	10				Cost estimate for evaluation. Implementation cost dependent on specific action taken.
2	1.3.2	Relocate Mill Creek trailhead away from Mill Creek and rehabilitate the existing trailhead site	1	USFS	20	20					
2	2.6.3	Monitor the lower portions of Warm, Iron, Timber, and Smithie Fork Creeks and the upper Little Lost River for brook trout	Perpetual	IDFG, USFS	*						Ongoing
2	3.2.1	Evaluate effects of fishing (e.g., illegal harvest, hooking mortality) on bull trout and implement appropriate actions (e.g., providing information to anglers, enforcing regulations, revising regulations) to reduce any negative effects	Perpetual	IDFG, USFWS	*						Ongoing
3	1.2.12	Evaluate potential of Moonshine Creek to support bull trout and provide passage if habitat is suitable for bull trout	1	USFS	10	10					Cost estimate for evaluation study.

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					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
3	2.2.1	Investigate the existence of brown trout in ponds on private land and work with landowners to prevent introductions in streams	1	IDFG	10	10					
3	4.1.1	Collect samples for genetic analysis to contribute to establishing a program to understand the genetic baseline and monitor genetic changes throughout the range of bull trout	25	BLM, IDFG, USFS	25	1	1	1	1	1	Ongoing, conducted in conjunction with existing monitoring activities.
3	4.1.2	Describe and monitor genetic and phenotypic characteristics of bull trout and incorporate information into management strategies	25	BLM, IDFG, USFWS, USFS	***						Ongoing, coordinate with task 4.1.1.
3	5.5.1	Collect and analyze information on size, age, and maturation of bull trout to evaluate estimates of adult-size fish	25	BLM, IDFG, USFWS, USFS	25	1	1	1	1	1	Conducted in conjunction with existing monitoring activities