Lower Salmon River and Hells Canyon Tributaries TMDL Implementation Plan



Lower Salmon River and Hells Canyon Tributaries Watershed Advisory Group

Version 9.10

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Chapter 1: Introduction

1.1 TMDL Summary and Other Pertinent Information

General guidance on the purpose of an implementation plan is given in the *Idaho Nonpoint Source Management Plan* (DEQ1999).

"An implementation plan identifies and describes the specific pollution controls or management measures to be undertaken, the mechanisms by which the selected pollution control and management measures will be put into action, and describes the authorities, regulations, permits, contracts, commitments, or other evidence sufficient to ensure that implementation will take place. The plan also describes when implementation will take place, identifies when various tasks or action items will begin and end, when mid-term and final objectives will be met, and establishes dates for meeting water quality targets."

Idaho Non-point Source Management Plan, page 58

The Idaho Department of Environmental Quality considers ten years to be a reasonable time frame to complete the work recommended in this implementation plan. Adaptive management through the Idaho BMP feedback loop may require additional time to implement if the desired results are not immediately achieved by the planned activities and projects.

Idaho Code 39-3612 states, implementation of an Idaho TMDL is primarily the responsibility of designated management agencies in cooperation with landowners and managers. Idaho code defines these designated agencies as the Department of Lands (IDL) for timber harvest, oil and gas exploration and development, and for mining; the Soil Conservation Commission (SCC) for grazing and agriculture; the Idaho Transportation Department (ITD) for public roads; the State Department of Agriculture (ISDA) for aquaculture; and the IDEQ for all other activities."

Idaho through its Non-point Source Management Plan recognizes the responsibility of the US Environmental Protection Agency to manage point sources of pollutants in Idaho and non point source pollutants on federal lands are managed under the authority of the federal management agency responsible for those lands.

This implementation plan is intended to document actions planned by recommended by the watershed advisory group and designated management agencies to accomplish load reductions provided in the Lower Salmon River & Hells Canyon Tributaries TMDL. The plan lists recommended best management practices for the Lower Salmon River & Hells Canyon Tributaries developed by the appropriate designated state management agency and federal management agency with the watershed advisory group. The Best Management Practices and projects recommended in this plan are thought to be the most feasible and efficient for reducing sediment, temperature, nutrients, and bacteria inputs to water quality.

This plan is dynamic, and as additional information becomes available during its implementation, revisions to the plan may be necessary. When new data or information becomes available and justifies changes to the plan, revisions will be made with the assistance of the Lower Salmon River & Hells Canyon Tributaries Watershed Advisory Group.

The Lower Salmon River Subbasin is located in west central Idaho, and includes the Salmon River from its mouth to French Creek. The subbasin encompasses approximately 794,000 acres, draining into the Snake River at river mile 188.2. Private lands comprise the majority of the subbasin, followed by the United States Forest Service (USFS), Bureau of Land Management (BLM), Idaho Department of Fish and Game (IDFG), and Idaho Department of Lands (IDL). Elevations within the subbasin range from approximately 900 feet at the mouth to over 8,000 feet. The Salmon River flows through a canyon that ranges from 2,000 to more than 5,000 feet deep. Upland areas of the subbasin may include steep and rugged mountains or plateaus with rolling and moderate slopes. Lower elevation areas are dominated with grassland habitats, while breaklands may have patterned grassland and timbered sites. The moderately sloped plateau areas may be cultivated, pasturelands, or forested areas. Higher elevation areas are forested.

1.2 Key Findings

Nine tributaries to the lower Salmon River Subbasin, and two tributaries to the Hells Canyon Subbasin, were listed as not meeting state water quality standards in Section 5 of Idaho's 2008 Integrated Report (Figures A and B). Section 303(d) of the Clean Water Act states that waters that do not meet water quality standards are required to have total maximum daily loads (TMDLs) developed to bring them into compliance with water quality standards.

1.3 Nonpoint Sources

Wildlife, agriculture, livestock grazing and timber harvest activities are considered the primary sources of sediment bacteria and nutrients. Roads, skid trails, land development, construction activities, also are considered non-point sediment sources that need to be addressed by this plan. The most commonly acceptable approach to controlling non-point sources is to limit pollutants from reaching the water through a combination of best management practices and filtering of runoff using riparian vegetation and floodplains.

1.4 Point Sources

Excluding permitted Storm Water sources, there are no known permitted point sources in the watershed. The US Environmental Protection Agency will manage all storm water sources in the watershed through the permit procedures and requirements associated with their National Pollution Discharge Elimination System program.

1.5 Statement of Reasonable Assurance

Non-point sources will be managed by applying the combination of authorities the state has included in the Idaho Non-point Source Management Plan. Section 319 of the Federal Clean Water Act requires each state to submit to the EPA a management plan for controlling pollution from non-point sources within the state. Idaho's authority for implementing the Idaho Non-point Source Management Plan has been certified by the Idaho Attorney General. The plan has been submitted to and approved by the Environmental Protection Agency as complying with Section 319 of the Clean Water Act.

1.6 Processes to Ensure Public Participation

Idaho Code 39-3613 and 39-3615 require the appointment of Basin Advisory Groups and Watershed Advisory Groups to employ all means of public involvement deemed necessary and provide the Department of Environmental Quality and designated management agencies advice on the development and implementation of total maximum daily load processes as described in Idaho Code 39-3611. The Lower Salmon River & Hells Canyon Tributaries Watershed Advisory Group was established by the Director of the Department of Environmental Quality in December 2008.

1.7 Timelines for Implementation

Non-point source management is already occurring in many of the Lower Salmon River & Hells Canyon Tributaries, and is expected to accelerate with the completion of this plan and the availability of funds. Agricultural and resource best management practices will need to be designed, demonstrated, implemented and refined. Infrastructural work on roads, associated drain systems, and other land structures potentially contributing to pollutant loadings will require identification, repair design, funding and construction. Mature riparian communities and a stable hydrologic regime and stream channel will be needed to substantially improve stream temperatures and provide pollutant buffers. The Idaho Department of Environmental Quality believes ten years may be a reasonable amount time for achievement of water quality standards; however, it is likely to take decades for some improvements throughout the watershed considering the time needed to construct projects, implement agricultural and resource best management practices, and allow riparian vegetation to grow to maturity.

1.8 Processes to Measure and Evaluate Progress

Idaho Code 39-3611 requires a review of TMDL implementation plans periodically at intervals no greater than five years. Such reviews are to be conducted using the Beneficial Use Reconnaissance Program protocol and the Water Body Assessment Guidance methodology to determine beneficial use attainability and status and whether state water quality standards are achieved in the Lower Salmon River & Hells Canyon Tributaries.

Idaho Code 39-3621 lists the designated agencies responsible to ensure best management practices are monitored for their effect on water quality. Periodically, the agencies will

provide best management practice effectiveness monitoring results to the Watershed Advisory Group and the general public.

1.9 Process to Establish Priorities

Idaho Code 39-3616 authorizes the Lower Salmon River & Hells Canyon Tributaries Watershed Advisory Group to recommend specific actions needed to control sources of pollution with in the watershed so that, within a reasonable amount of time, designated beneficial uses are fully supported and state water quality plans are achieved.

The Lower Salmon River & Hells Canyon Tributaries Watershed Advisory Group recommends voluntary, community led, cost effective, economically compatible, long term, common sense actions as highest priority. Projects addressing multiple pollutants and beneficial uses, directly or indirectly, will be given highest priority. Lowest priority actions require property or activity restrictions.

The Watershed Advisory Group met on March 3, 2010 to review potential pollutant sources within each of the nine tributaries within the lower Salmon River Subbasin, and the two tributaries within the Hells Canyon Subbasin listed in the Lower Salmon River and Hells Canyon Tributaries Assessments and TMDLs document. Each waterbody was discussed in detail and pollutant reduction recommendations were formulated based on the Group's local knowledge of the landscape, land uses and operations, and landownership. The Group's discussion and recommendations considered the pollutant of concern, the amount of pollutant load reduction needed, and whether a single pollutant or multiple pollutants are a concern. The evaluation resulted in recommended pollutant control practices specific to each waterbody and provided a means to prioritize actions to implement the TMDLs. The results of the evaluation and the Group's recommendations for priority actions are included in Chapter 3.

Chapter 2: Implementation

Idaho Code 39-3611 and 39-3612 provides guidance on the development and implementation of TMDLs in Idaho. The guidance contained in code relies on participation and assistance of watershed advisory groups and designated management agencies. The following designated management agencies will assist the Lower Salmon River & Hells Canyon Tributaries Watershed Advisory Group and the Department of Environmental Quality in the analysis and identification pollution control strategies for point and non point sources in the watershed.

- Idaho Department of Lands can assist with the identification and documentation of strategies and measures addressing forestry, minerals and mining.
- The Soil Conservation Commission can assist with the identification and documentation of strategies and measures addressing grazing, and agriculture.
- Idaho Transportation Department and Local Highway Districts can assist with the identification and documentation of strategies and measures addressing public roads and right-of-ways.
- Federal agencies and local governments can assist with the identification and documentation of strategies and measures addressing management practices and activities occurring on lands within their jurisdiction.

Table 1 lists Best Management Practices being completed or proposed for pollutant control strategies for known pollutant sources within the watershed. The Watershed Advisory Group will continue to solicit and encourage additional water quality restoration and protection projects if unknown or unexpected problems should be discovered or encountered in the future.

2.1 Agriculture and Grazing

Continuous direct seeding, contour tillage, strip-cropping reduces, grassed waterways, sediment basins, gully plugs, vegetated buffers, and sediment traps are considered the agricultural best management practices most applicable in the watershed. The Idaho Soil Conservation Commission can assist in implementation of BMPs for agriculture.

2.2 State, County, and Local Roads

The Idaho Transportation Department, local governments and highway districts can assist in implementation of best management practices to address problem areas such as eroding road cuts and fill banks and water conveyance problems contributing to non-point source pollution. Unstable, eroding road cut and fill banks will be shaped and stabilized by planting woody and herbaceous vegetation. Additional methods to stabilize the slope and reduce erosion include installation of erosion control blankets, armoring, and slope reduction.

2.3 Forestry

The Idaho Department of Lands will ensure the implementation of best management practices required by the Idaho Forest Practices Act. The Department of Lands best management practices address timber harvest, forest road construction and maintenance, forest tree stocking and reforestation, and use of chemicals/management and prescribed fire.

Table 1. Pollutant Control Strategies

			Estimated BMP			Task Particinants	Outputs		Funding	Funding
Implementation Task	Category	Pollutants	Effectiveness	Status	Schedule	(Lead Agency)	(Units)	Cost	Source	Status
Access Road	Livestock	Bacteria Nutrients Sediment Temperature		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ft)	Unknown	2011 CWA 319	Unfunded
Animal Trails and Walkways	Livestock	Bacteria Nutrients Sediment Temperature		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ft)	Unknown	2011 CWA 319	Unfunded
Brush Management	Livestock	Sediment		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Fence	Livestock	Bacteria Nutrients Sediment Temperature	100%	Proposed	Proposed 2012	Idaho County Soil Conservation District	(ft)	Unknown	2011 CWA 319	Unfunded
Forage Harvest Management	Livestock	Sediment		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Forest Stand Improvement	Silviculture	Sediment		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Grade Stabilization Structure	In-Channel	Sediment		Proposed	Proposed 2012	Idaho County Soil Conservation District	(no)	Unknown	2011 CWA 319	Unfunded
Heavy Use Area Protection	Livestock	Bacteria Nutrients		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Use Exclusion	Livestock	Bacteria Nutrients Sediment Temperature	100%	Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Waste Treatment Lagoon	Livestock	Bacteria Nutrients		Proposed	Proposed 2012	Idaho County Soil Conservation District	(no)	Unknown	2011 CWA 319	Unfunded

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Implementation Task	Category	Pollutants	Estimated BMP Effectiveness	Status	Schedule	Task Participants (Lead Agency)	Outputs (Units)	Cost	Funding Source	Funding Status
Use Exclusion	Livestock	Bacteria Nutrients Sediment Temperature	100%	Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Waste Treatment Lagoon	Livestock	Bacteria Nutrients		Proposed	Proposed 2012	Idaho County Soil Conservation District	(no)	Unknown	2011 CWA 319	Unfunded
Watering Facility	Livestock	Temperature Bacteria Nutrients Sediment		Proposed	Proposed 2012	Idaho County Soil Conservation District	(no)	Unknown	2011 CWA 319	Unfunded
Water Well	Livestock	Temperature Bacteria Nutrients Sediment		Proposed	Proposed 2012	Idaho County Soil Conservation District	(no)	Unknown	2011 CWA 319	Unfunded
Wildlife Watering Facility	Livestock	Sediment Temperature		Proposed	Proposed 2012	Idaho County Soil Conservation District	(no)	Unknown	2011 CWA 319	Unfunded
Nutrient Management	Agriculture	Nutrients		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Pasture & Hayland Planting	Riparian	Sediment Temperature		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Pest Management	Livestock	Sediment		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Pipeline	Livestock	Bacteria Nutrients		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ft)	Unknown	2011 CWA 319	Unfunded
Pond	Livestock	Bacteria Nutrients		Proposed	Proposed 2012	Idaho County Soil Conservation District	(no)	Unknown	2011 CWA 319	Unfunded

Implementation Task	Cotogony	Pollutonto	Estimated BMP	Status	Sahadula	Task Participants (Losd Ageney)	Outputs (Units)	Cost	Funding	Funding
Implementation Task	Category	Ponutants	Effectiveness	Status	Schedule	(Lead Agency)	(Units)	Cost	Source	Status
Prescribed Grazing	Livestock	Sediment		Proposed	Proposed 2012	Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Pumping Plant	Livestock	Sediment Temperature		Proposed	Proposed 2012	Idaho County Soil Conservation District	(no)	Unknown	2011 CWA 319	Unfunded
Range Planting	Livestock	Sediment		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Residue and Tillage Management NoTill/Strip Till/Direct Seed	Agriculture	Sediment Nutrients		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Residue and Tillage Management Mulch Till	Agriculture	Sediment		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Riparian Forest Buffer	Riparian	Temperature		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Riparian Herbaceous Cover	Riparian	Temperature Sediment		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Roof Runoff Structure	Livestock	Bacteria Nutrients		Proposed	Proposed 2012	Idaho County Soil Conservation District	(no)	Unknown	2011 CWA 319	Unfunded
Silvopasture Establishment	Livestock	Sediment		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Spring Development	Livestock	Sediment Temperature Bacteria Nutrients		Proposed	Proposed 2012	Idaho County Soil Conservation District	(no)	Unknown	2011 CWA 319	Unfunded
Stream Crossing	Livestock	Sediment Temperature Bacteria Nutrients		Proposed	Proposed 2012	Idaho County Soil Conservation District	(no)	Unknown	2011 CWA 319	Unfunded

Table 1. Pollutant Control Strategies

Implementation Task	Cotogory	Pollutonte	Estimated BMP	Status	Schodulo	Task Participants (Load Agangy)	Outputs	Cost	Funding	Funding
Implementation Task	Category	Sadimant	Effectiveness	Status	Scheudie	(Leau Agency)	(Units)	Cost	Source	Status
Spring Development	Livestock	Temperature Bacteria Nutrients		Proposed	Proposed 2012	Idaho County Soil Conservation District	(no)	Unknown	2011 CWA 319	Unfunded
Stream Crossing	Livestock	Sediment Temperature Bacteria Nutrients		Proposed	Proposed 2012	Idaho County Soil Conservation District	(no)	Unknown	2011 CWA 319	Unfunded
Structure for Water Control	Livestock	Sediment Temperature Bacteria Nutrients		Proposed	Proposed 2012	Idaho County Soil Conservation District	(no)	Unknown	2011 CWA 319	Unfunded
Tree/Shrub Establishment	Riparian	Sediment Temperature Bacteria Nutrients		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ac)	Unknown	2011 CWA 319	Unfunded
Underground Outlet	Agriculture	Sediment		Proposed	Proposed 2012	Idaho County Soil Conservation District	(ft)	Unknown	2011 CWA 319	Unfunded
Septic System	Domestic	Bacteria Nutirents		Proposed	Proposed 2012	NCIDH, Idaho County Soil Conservation District	(ea)	Unknown	2011 CWA 319	Unfunded

Chapter 3: Proposed Priority Areas for Improvement

The Watershed Advisory Group has prioritized projects and work that provide integrated solutions, local economic compatibility and community involvement. High priority projects address multiple pollutants and beneficial uses, and projects that reduce nutrient, sediment, bacteria, and temperature loads from private property implemented with the cooperation of land owners on a voluntary basis. Watershed priority has been established to direct available resources when available and are presented below. Opportunities for restoration work or installation of best management practices in watersheds will present themselves periodically and will also be pursued regardless of priorities and scheduling.

Pollutant loads for each of the tributaries that were assigned a load allocation were listed with their associated pollutant and pollutant load (Table 2). The table was sorted to list each pollutant in ascending order. The table shows which tributary that has the greatest amount of reduction needed for each pollutant and which tributary has the greatest combined pollutant reduction needed. As listed, the Salmon River tributaries within the Rock Creek watershed, Billy Creek, and Cottonwood Creek show the greatest need for reductions for all pollutants. The Snake River tributaries, Wolf and Divide, are included in this group but only for one pollutant temperature. Implementation recommendations made by the Watershed Advisory Group are listed below.

Billy Creek: the TMDL data shows elevated levels of bacteria and positive human DNA. There is one landowner we need to work with and the potential cause of the bacteria is livestock or septage. The WAG recommends the Conservation District work with the land owner to encourage installation of livestock management practices and complete any needed septic repairs.

Deep Creek: the TMDL data shows elevated levels of bacteria and sediment. Based on the known land use in the area, the WAG recommends implementation should look for opportunities to install livestock and grazing management practices.

Johns Creek: the TMDL data shows high concentrations of bacteria with a moderate amount of sediment. The potential source is likely livestock and agriculture. The WAG recommends implementation of livestock and agricultural best management practices through the Conservation District.

Cottonwood Creek: the TMDL data shows elevated levels of bacteria that are most likely related to livestock grazing. The WAG recommends implementation of livestock management plans by the landowners along side the creek through the Conservation District.

Rock Creek: the TMDL data shows bacteria, sediment and temperature problems. The WAG recommends implementation of livestock and agricultural best management practices through the Conservation District. Rock Creek currently has the most opportunity for watershed restoration because most of the landowners in the watershed are willing to volunteer to install BMPs.

TMDL Pollutant Type	TMDL Watershed Priority	Bacteria Reduction in CFUs	Sediment Reduction in Tons	Temperature Increase in Shade
Bacteria				
	Billy Creek	1961	0.22	0
	Deep Creek	678	0.14	0
	Johns Creek	597	81.00	29
	Cottonwood Creek	376	0.00	0
	Rock Creek	342	0.00	32
	Grave Creek	79	229.00	0
	Rice Creek	75	0.00	12
	Allison Creek	36	0.00	0
	Divide Creek	22	0.00	27
	Telcher Creek	0	0.00	26
	Wolf Creek	0	0.00	32
Sediment				
	Rock Creek	342	229.00	32
	Johns Creek	597	81.00	29
	Billy Creek	1961	22.00	0
	Deep Creek	678	0.14	0
	Wolf Creek	0	0.00	32
	Telcher Creek	0	0.00	26
	Rice Creek	75	0.00	12
	Grave Creek	79	0.00	0
	Divide Creek	22	0.00	27
	Cottonwood Creek	376	0.00	0
	Allison Creek	36	0.00	0
Temperature				
	Rock Creek	342	229.00	32
	Wolf Creek	0	0.00	32
	Johns Creek	597	81.00	29
	Divide Creek	22	0.00	27
	Telcher Creek	0	0.00	26
	Rice Creek	75	0.00	12
	Billy Creek	1961	0.22	0
	Deep Creek	678	0.14	0
	Cottonwood Creek	376	0.00	0
	Grave Creek	79	0.00	0
	Allison Creek	36	0.00	0

 Table 2. Watershed Pollutant Load Reduction Priority

Graves Creek: the TMDL data shows a small bacteria load reduction. There are two livestock feeding operations in the watershed up on the south ridge. The Conservation District has recently installed BMPs at these facilities. The WAG recommends these landowners be encouraged to continue to use appropriate livestock management practices.

Allison Creek: the TMDL data shows a domestic e-coli bacteria load that needs to be reduced. There is only one land owner and two houses along Allison Creek. The rest of the watershed is National Forest managed by the Nez Perce National Forest. The WAG recommends the land owner with houses in the watershed is encouraged to replace the septic system.

Divide Creek: the TMDL data shows a temperature problem. Since there is little development and scarce activities in the watershed, the WAG recommends passive restoration to allow the watershed to recover naturally creating the needed canopy cover and shade to reach the natural background temperature conditions.

Wolf Creek: the TMDL data shows a temperature problem. Since there is little development and scarce activities in the watershed, the WAG recommends passive restoration to allow the watershed to recover naturally creating the needed canopy cover and shade to reach the natural background temperature conditions.

The Idaho County Soil Conservation District has proposed a Clean Water Act Section 319 Grant project to implement best management practices for this TMDL. Other funding sources will be considered as opportunities arise. State and Federal agencies will follow the TMDL requirements for load reductions as appropriate during agency management of the lands, activities, and pollutant sources for which they are responsible for. These agencies and the Watershed Advisory Group will coordinate with and support the Soil Conservation District's efforts.

Chapter 4: Evaluation

Idaho Code 39-3611 requires the Department of Environmental Quality to review and evaluate each Idaho TMDL, supporting subbasin assessment, implementation plan and all available data periodically at intervals no greater than five years. Such reviews are to be conducted using the Beneficial Use Reconnaissance Program protocol and the Water Body Assessment Guidance methodology to determine beneficial use attainability and status and whether state water quality standards are being achieved.

Idaho Code 39-3621 lists designated agencies, in cooperation with the appropriate land management agency to ensure best management practices are monitored for their effect on water quality. The monitoring results should presented to the Department of Environmental Quality on a schedule agreed to between the designated agency and the Department.

5.1 Department of Environmental Quality, Water Quality Monitoring

The Lower Salmon River & Hells Canyon Tributaries will be monitored by the Department of Environmental Quality to determine beneficial use support status and compliance with State water quality standards on a five year cycle in accordance with Idaho Code 39-3611. Water quality data will be gathered by the Department and analyzed with biological and habitat data using the Idaho waterbody assessment guidance to assist in the determination of beneficial use support status. Table 2 lists the monitoring stations, streams, and locations of the monitoring stations. Potential parameters to be measured and samples to be collected include: Total Suspended Sediment, Total Phosphorus, Nitrogen, E. Coli Bacteria, Flow, Temperature, Canopy Cover, Biological Samples.

5.4 Designated Management Agencies, Water Quality Monitoring

Idaho Code 39-3621 lists state Designated Management Agencies, in cooperation with the appropriate land management agency to ensure best management practices are monitored for their effect on water quality.

The Department of Environmental Quality will rely on the designated management agencies to implement pollution control measures or best management practices for pollutant sources they identify as priority. The designated management agency can report the effectiveness of the measures or practices implemented and estimate load reductions applicable to the TMDL.

Pollutant controls or best management practices determined to be ineffective in achieving the desired load reductions are subject to the Feedback Loop process or adaptive management to ensure load reductions are achieved. The feedback loop provides for water quality improvements and maintenance through best management practice installation, evaluation and modification. Implementing the feedback loop to modify best management practices until water quality standards are met results in compliance with the water quality standards.

TMDL implementation plans for the Designated Management Agencies active in the watershed are included or referenced in appendices. Plans should include the appropriate best management practices recommended to achieve the load reductions desired and provisions for monitoring and evaluating data to ensure application of the feedback loop if needed.

Station	Stream Name	Location
Snake R1	Wolf Creek	At the Mouth of Wolf Creek
Snake R2	Divide Creek	At the Mouth of Divide Creek
Salmon R1	Billy Creek	At the Mouth of Billy Creek
Salmon R2	Cottonwood Creek	At the Mouth of Cottonwood Creek
Salmon R3	Allison Creek	At the Mouth of Allison Creek
Salmon R4	Rice Creek	At the Mouth of Rice Creek
Salmon R5	Rock Creek	At the Mouth of Rock Creek
Salmon R6	Graves Creek	Just upstream of the Confluence w/Rock Creek
Salmon R7	John's Creek	Upstream of Culvert on Lake Road
Salmon R8	Deep Creek	Below Culvert at Crossing on Deep Creek Road
Salmon R9	Deer Creek	Larabee Meadows

Table 3. Monitoring Station Locations.