

TMDL Implementation Plan for Agriculture Lawyer Creek



Idaho Soil Conservation Commission

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Table of Contents

Introduction.....	3
Goal.....	3
Objectives	3
Project Setting.....	3
Land Use	4
Land Ownership.....	5
Accomplishments.....	6
Problem.....	7
Beneficial Use Status	7
Pollutants – Load Allocation and Reductions.....	7
Water Quality Monitoring Results.....	7
Critical Areas	7
Definitions.....	7
ESA Issues	8
Nitrate Priority Area	9
AFO’s.....	10
Implementation Priority (Rationale).....	10
Treatment Units	11
Alternatives & Costs.....	11
Funding	13
Outreach.....	16
Monitoring and Evaluation	16
Field Level	16
Status Reviews	16
BMP Effectiveness.....	16
Watershed Level	17
Pollution Source and Transport	17

Introduction

Lawyer Creek is listed on the 1998 303(d) list. This implementation plan presents an adaptive management approach for implementation of Resource Management Systems (RMS) and Best Management Practices (BMP's), as described in the Agricultural Pollution Abatement Plan, to meet TMDL requirements for these listed stream segments.

Goal

The goal of this implementation plan is to develop a comprehensive and detailed plan for agriculture in order to successfully implement the Lawyer Creek TMDL and while meeting TMDL loading targets for sediment, bacteria, nutrients, pesticides and temperature. This implementation plan will assist and/or complement other watershed efforts in restoring and protecting beneficial uses for these 303(d) listed stream segments.

Objectives

The primary objective of this plan is to reduce the amount of sediment, nutrients, bacteria, and temperature in Lawyer Creek. Local groundwater concerns will be addressed through this plan utilizing the same BMP's as for surface water quality concerns.

Agricultural pollutant reductions and temperature reductions (when feasible) will be achieved through the application of BMPs and RMS developed and implemented on a site-specific basis with individual agricultural operators. Other pollutant reductions will be implemented with rural homesite owners, cities of Craigmont, Ferdinand and Kamiah; but are not included in this plan.

Another objective of this plan is the implementation of a water quality outreach program which will encourage landowner participation in the application of water quality BMPs. Emphasis will also be placed on BMP effectiveness evaluation and monitoring in terms of pollutant reduction and impacts on designated beneficial uses of the listed stream segments.

Project Setting

The Lawyer Creek Watershed, 137,357 acres in size, encompasses Lewis and Idaho Counties in North Central Idaho. Lawyer Creek, a third-order stream, is 67.6 miles long and drains an area of 210 square miles. The Lawyer Creek watershed extends west from the Clearwater River to the headwaters areas of Cottonwood Butte. Lawyer Creek provides spawning and rearing habitat for steelhead trout (Kucera et al 1983). The predominant land uses within the drainage are agricultural, rangeland, pastureland, and forest lands. Primary tributaries to Lawyer Creek include Sevenmile Creek and Willow Creek. This low-gradient stream (3%) flows in an easterly direction crossing elevations ranging from 1,320 feet to 5,730 feet. The watershed is susceptible to winter rains and rain-on-snow runoff events. Climate in the Lawyer Creek watershed is characterized by sub-humid with cool moist winters and warm dry summers. The average annual precipitation for the drainage ranges from 20 to 25 inches, with over 30 inches falling in

the Cottonwood Butte area. Average stream flows are produced of approximately 2.5 cubic feet per second (CFS). A median peak flow (2 year event) is approximately 1350 cfs, with large flows recorded at 8,000 cfs. (See Figure 1: Location Map.)

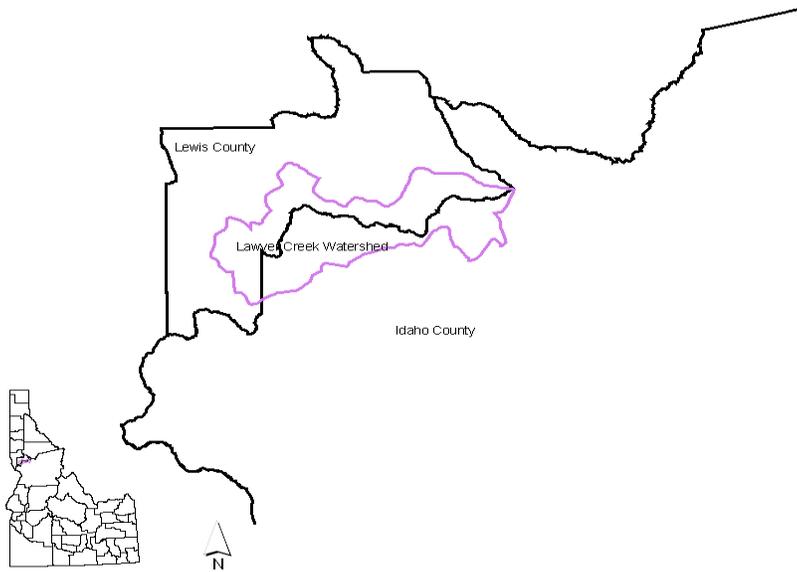


Figure 1: Location Map

Land Use

Land use is dominated by agricultural cropland in the Lawyer Creek watershed (69%). Lawyer Creek has approximately 15% rangeland, 9% forest and 6% pasture. (See Table 1 and Figure 2)

Table 1: Land Use

Land use	Acres	Percent
Cropland	94,801	69%
Rangeland	20,278	15%
Forestland	12,761	9%
Pastureland	8,710	6%
Riparian	807	1%

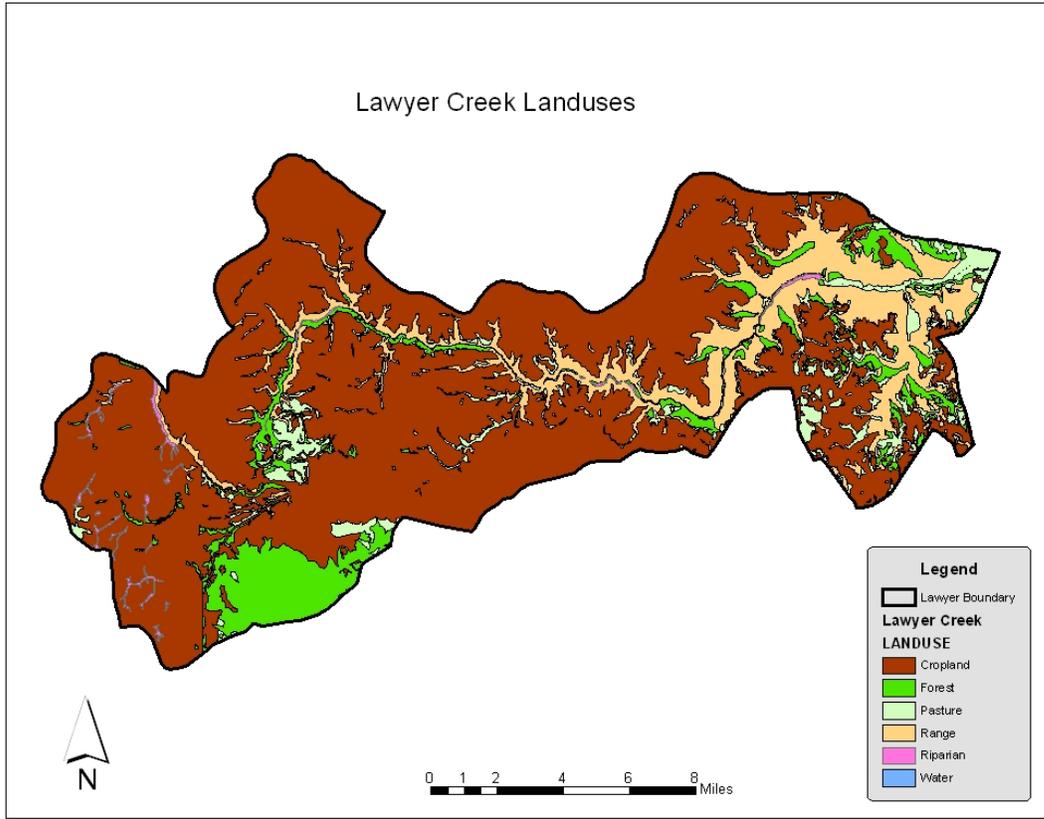


Figure 2: Land Use map

Land Ownership

Land Ownership is dominated by private landownership (98%). The Nez Perce tribe has approximately 1,400 acres of land (1%), followed by 1,100 acres in BLM ownership (1%). See Table 2 and Figure 3 for land ownership details.

Table 2: Land Ownership

Ownership	Acres
Private	134,278
Nez Perce Tribe	1,471
BLM	1,130
State of Idaho	478

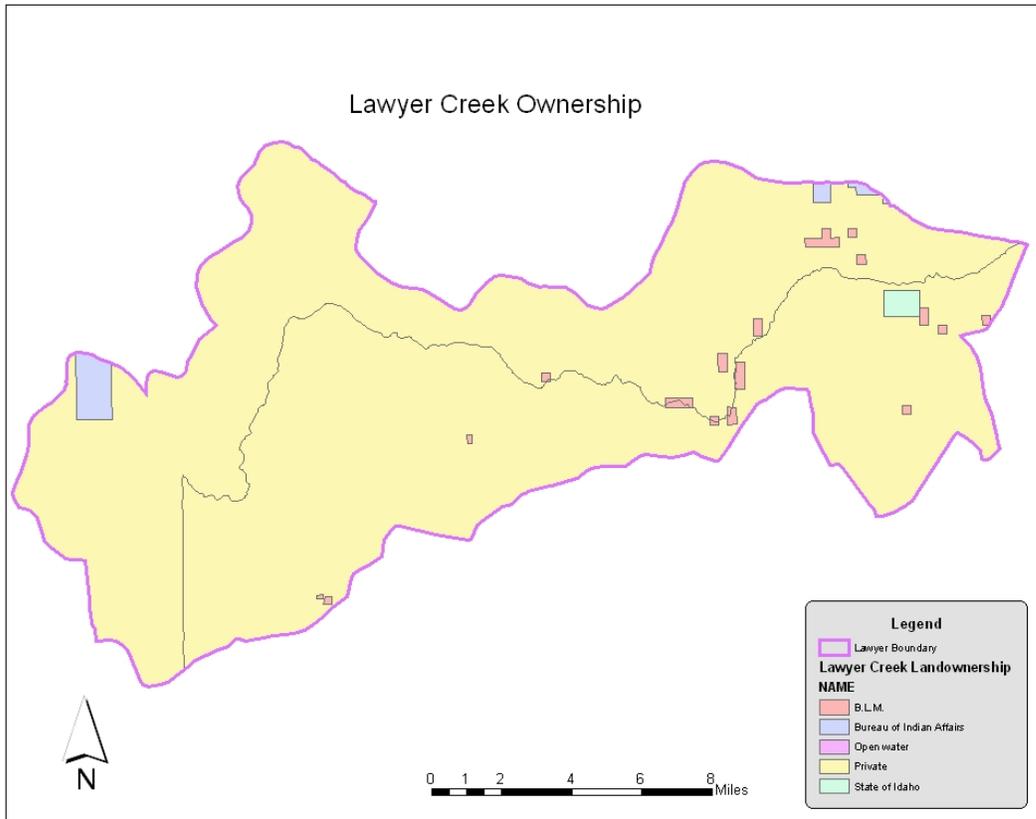


Figure 3: Land Ownership map

Accomplishments

There has been lots of interest in the Lawyer Creek drainage over the years. Many project reports have been written and grant applications submitted. However, very few of these found their way to funding. The EQIP program has been the most successful in the Lawyer watershed, along with the CRP and WHIP programs (18,274 acres total). In recent years the Lewis Soil Conservation District has secured a 319 Groundwater grant that encompasses a portion of the Lawyer Creek watershed (2,787 acres). Those direct seed and nutrient management implementations also have an effect on surface water. The Division II – 319 Animal Feeding Operation program has worked with several operations to remove cows from the creek areas (528 acres on 3 miles of creek). See Table 3 for these accomplishments.

Table 3: Lawyer Creek BMP Implementations

Program	Acres of Implementations	Sediment Reduction (Tons/year)
319 / WQPA	2,787	19,509
Division II AFO	528	3
EQIP / CRP / WHIP	18,274	91,370
Totals	21,589	110,882

Figure 4 was removed by the SWCC in January 2014 to attain compliance with Farm Bill Section 1619.

Problem

Beneficial Use Status

Cold Water Biota, Primary Contact Recreation - Not supporting (DEQ 2002 Assessment Unit Status Reports)

Pollutants – Load Allocation and Reductions

Pollutants of concern are bacteria, organic enrichment, nutrients, oil and grease, temperature, and sediment. This section will be completed after the completion of the TMDL for Lawyer Creek Watershed. The Nez Perce tribe is currently writing the TMDL.

Water Quality Monitoring Results

Monitoring results to date are primarily BURP data from DEQ assessments. The Nez Perce tribe is collecting additional water quality data and fish habitat information for Lawyer Creek.

Summer of 2006 an SVAP survey of portions of Lawyer Creek was done. The results of the portions that were surveyed are in Table 4.

Table 4: SVAP results Lawyer Creek - 2006

	Length Surveyed (Ft)	% of Total Surveyed	Recommendations
Excellent	2500	7%	NONE
Good	15600	44%	Off-site water, grazing management, plantings
Fair	7450	21%	Grazing management, off-site water, fence, plantings, upland tree management - where applicable
Poor	9680	28%	Fence, Off-site water, crossings, plantings, check and repair culverts - where applicable, grazing management

Critical Areas

Definitions

Critical acres are defined as those acres that have the potential to deliver the greatest amount of pollutant to the creek. Cropland where management practices allow gully, rill or sheet erosion on an annual basis are considered as critical acres. Feeding areas with direct access to live water are generally considered critical acres; unless management of the feeding area has limited access to stream banks thus reducing stream bank degradation and erosion. Grazing land critical acres are those acres where forage utilization levels exceed standards; or acres where direct access to

live water has resulted in degraded stream banks and increased temperatures. Forest land critical areas are those areas where timber practices allow excessive erosion to occur. (See Figure 5)

Quantifications

Cropland: ~29,710 acres of critical cropland.
Animal Feeding Areas: ~15 feeding areas.
Pasture: ~5,440 acres of critical pasture lands.
Range: ~ 16,500 acres of critical range lands.
Forest: ~ 4,100 acres of critical forest lands.
Riparian: 807 acres of the critical riparian.

Location

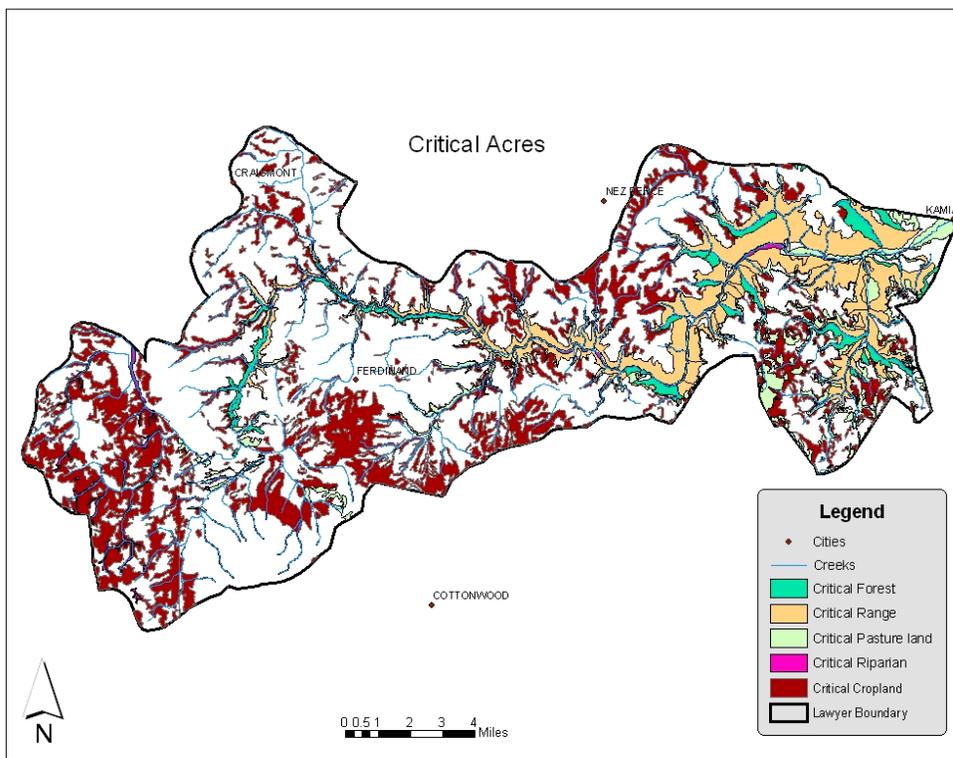


Figure 5: Critical Acres

ESA Issues

Section 7 of the Endangered Species Act of 1973, “mandates all Federal agencies to determine how to use their existing authorities to further the purpose of the Act to aid in recovering listed species and address existing and potential conservation issues”. Section 7 (a)(2) states that “agencies shall consult with either the U. S. Fish and Wildlife Service (USFWS) or NOAA Fisheries, to insure that any action they authorize, fund or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat.” The Natural Resources Conservation Service (NRCS) is required to follow the above mandate for all project implementation and TMDL implementation within this plan will also follow this process.

If it is determined that a proposed action is within close proximity to habitat used by a listed Threatened or Endangered species (T&E) or the known location of a T&E species, consultation is initiated with the appropriate regulatory agency. Consultation involves describing the project, assessing the potential project impacts, describing the mitigation effort for the project and determining the effect of the project on the species of concern. The consultation process results in the development of reasonable alternatives for implementation and helps to minimize the impacts of conservation practices to critical habitat. Generally, good communication between consulting agencies ensures the development of sound decisions being made.

Another tool available in the planning process is the Idaho Department of Fish and Game Conservation Data Center, 2002 Threatened and Endangered Species GIS database. The database contains documented locations for terrestrial species (plants and animals only!). This can help identify known locations of T&E species and identify critical habitat types that may harbor threatened or endangered species. Planners can reference habitat requirements to help landowners determine the potential benefits of their project implementation. These discussions remain confidential between the landowner and the planners. The Lawyer Creek Watershed contains numerous rare plants and species of concern. Impacts to these species will be taken into account in any TMDL project implementation.

Listed species of Concern (according to NRCS CDCEO database):

Great Gray Owl
Mountain Quail
Broad-fruit Mariposa
Palouse thistle
Plumed Clover

Nitrate Priority Area

Historically, ground water throughout the west has been viewed as an inexhaustible resource: a resource that is inexpensive, readily available and invulnerable to the detrimental effects of activities occurring on the land surface. This perception has led to the widespread indiscriminate use of this natural resource. With the ever-expanding use of the resource, Idaho's principle aquifers have been mapped. Four percent of the ground water is used for domestic drinking water. Generally, Idaho's ground water is acceptable for drinking water and other beneficial uses. However, recent incidents of ground water contamination have occurred from such activities as agricultural chemicals, household chemicals, industrial chemicals and failing septic systems, which has created an awareness of ground water vulnerability. Protection of this resource can be achieved most effectively by preventing contamination through implementing best management practices and other measures that prevent contamination.

During a ground water study of the Camas Prairie in 1998, entitled "A Reconnaissance of Nitrite/Nitrate in Camas Prairie Ground Water," land use was recorded for each well site and those wells within 100 feet of cultivated farmland had elevated levels of nitrate concentrations. The Camas Prairie Nitrate Priority Area is ranked fifth in the state of Idaho due to the degradation of the groundwater resources in that area. The Camas Prairie Nitrate Priority Area extends through the Lawyer Creek Watershed (Figure 6).

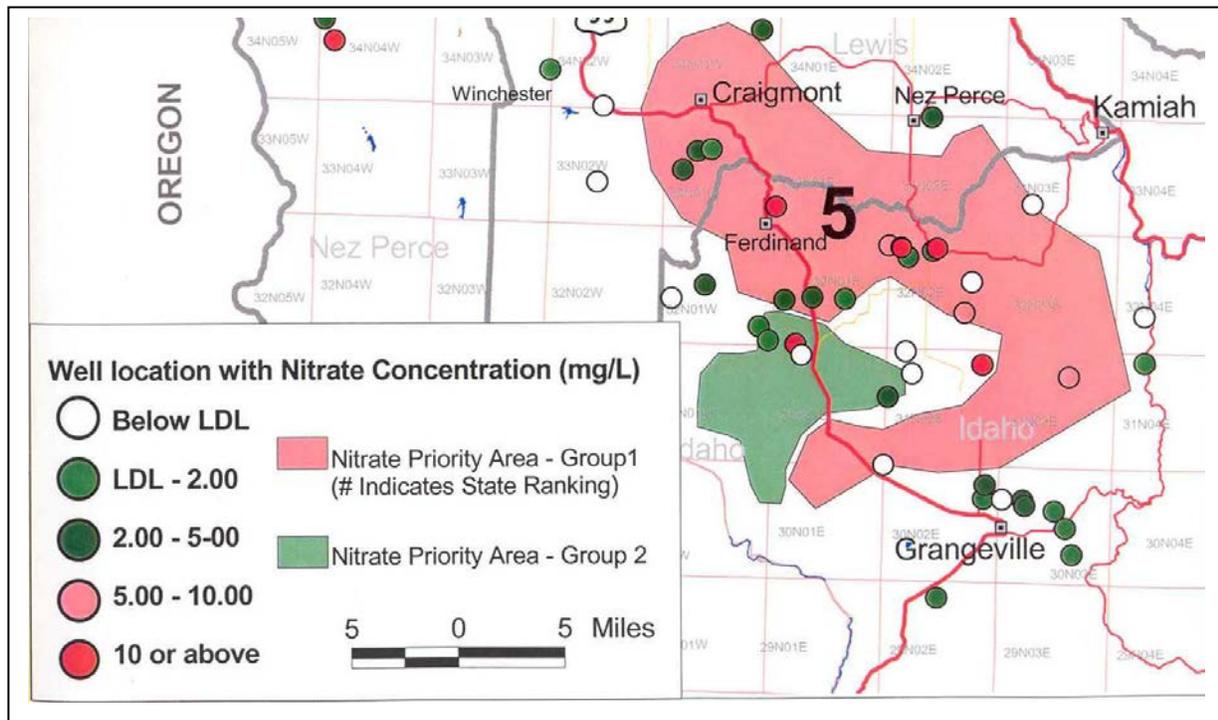


Figure 6 – Camas Prairie Groundwater Nitrate Priority Areas

AFO's

Some areas have large numbers of animals confined to relatively small areas with direct access to the creek. Currently none of these areas are officially designated as “confined animal feeding operations” (CAFOs) (Rowan 2002). There are however, a number of animal feeding operations in the watershed that will need to be addressed. Feeding areas with direct access to live water are generally considered critical acres; unless management of the feeding area has limited access to stream banks thus reducing stream bank degradation and erosion. Grazing land critical acres are those acres where forage utilization levels exceed standards; or acres where direct access to live water has resulted in degraded stream banks.

Implementation Priority (Rationale)

The Lewis County and Idaho County District Boards will prioritize treatment units and alternatives based on district priorities

Treatment Units

Table 5: Treatment Units

Treatment Unit	Acres	Problems
Cropland (<15% slopes)	65,091	Surface and groundwater quality; sheet and rill erosion; excess nutrients
Cropland (>15% slopes)	29,710	Surface and groundwater quality; ephemeral and classic gully erosion; sheet and rill erosion; excess nutrients
Riparian areas	807	Excess nutrients; organics; stream bank degradation; plant productivity; noxious and invasive plants
Pasture	8,710	Plant productivity; noxious and invasive plants; stream bank degradation; excess nutrients; organics; surface and groundwater quality
Range	20,278	Plant productivity; noxious and invasive plants; stream bank degradation; excess nutrients; organics; surface and groundwater quality; sheet and rill erosion
Forest	12,761	Surface and groundwater quality; plant adaptability; plant condition; noxious and invasive plants; wildfire hazard; pest, insect and parasites

Alternatives & Costs

Table 6: Alternatives and Costs

BMP Practice	Amount	Units	Cost	Total Cost
Cropland < 15% slopes				
Direct Seed	19,550	Acres	\$30.00	\$586,500.00
Minimum Till	9,750	Acres	\$0.00	\$0.00
Mulch Till	9,750	Acres	\$0.00	\$0.00
Crop Rotation	39,000	Acres	\$0.00	\$0.00
Nutrient Management - Soil tests	800	Each	\$55.00	\$44,000.00
Nutrient Management - Split Fertilizer Applications	10,000	Acres	\$5.00	\$50,000.00
Sediment Basins	15	Each	\$4,000.00	\$60,000.00
Water Control Structures	15	Each	\$5,000.00	\$75,000.00
Terraces	10,000	Feet	\$1.90	\$19,000.00
Filter Strips	15	Acres	\$80.00	\$1,200.00
Grass Waterways	15	Acres	\$1,500.00	\$22,500.00
Hay land Seeding	2,000	Acres	\$80.00	\$160,000.00

BMP Practice	Amount	Units	Cost	Total Cost
Cropland > 15% slopes				
Direct Seed	9,000	Acre	\$30.00	\$270,000.00
Minimum Till	4,500	Acre	\$0.00	\$0.00
Mulch Till	4,500	Acre	\$0.00	\$0.00
Crop Rotation	18,000	Acre	\$0.00	\$0.00
Nutrient Management - Soil tests	120	Each	\$55.00	\$6,600.00
Nutrient Management - Split Fertilizer Applications	5,000	Acre	\$5.00	\$25,000.00
Water Control Structures	5	Each	\$5,000.00	\$25,000.00
Filter Strips	10	Acre	\$80.00	\$800.00
Grass Waterways	10	Acre	\$1,500.00	\$15,000.00

BMP Practice	Amount	Units	Cost	Total Cost
Pasture / Hay land				
Off-Channel Water Facilities	7	Each	\$800.00	\$5,600.00
Spring Developments	7	Each	\$1,000.00	\$7,000.00
Fence	10,000	Feet	\$2.50	\$25,000.00
Roof-Runoff Structures	3	Each	\$3,000.00	\$9,000.00
Culvert Crossings	3	Each	\$3,000.00	\$9,000.00
Hardened Access Points	3	Each	\$3,000.00	\$9,000.00
Diversions	5,000	Feet	\$2.50	\$12,500.00
Streamside Vegetation Restoration	5,000	Feet	\$30.00	\$150,000.00
Pasture Management / Rotation	4,000	Acre	\$0.00	\$0.00
Buffer Strips	10	Acre	\$1,500.00	\$15,000.00
Forage Harvest Management	4,000	Acre	\$0.00	\$0.00
Hay land / Pasture Seeding	4,000	Acre	\$80.00	\$320,000.00
Riparian Pasture	25	Acre	\$25.00	\$625.00

BMP Practice	Amount	Units	Cost	Total Cost
Range				
Spring Developments	5	Each	\$1,000.00	\$5,000.00
Off-channel water facilities	5	Each	\$800.00	\$4,000.00
Fence	10,000	Feet	\$2.50	\$25,000.00
Riparian Pasture	15	Acre	\$25.00	\$375.00
Hardened Access Points	5	Each	\$3,000.00	\$15,000.00
Streamside Vegetation Restoration	2,500	Feet	\$30.00	\$75,000.00
Buffer Strips	7	Acre	\$1,500.00	\$10,500.00

BMP Practice	Amount	Units	Cost	Total Cost
Riparian				
Riparian Pasture	200	Acre	\$25.00	\$5,000.00
Streamside Vegetation Plantings	5,000	Feet	\$30.00	\$150,000.00
Buffer Strips	5	Acre	\$1,500.00	\$7,500.00
Tree and Shrub Plantings	5,000	Feet	\$15.00	\$75,000.00
Fence	5,000	Feet	\$2.50	\$12,500.00
Off-Channel Water Facilities	5	Each	\$800.00	\$4,000.00
Spring Developments	5	Each	\$1,000.00	\$5,000.00
Roof-Runoff Structures	2	Each	\$3,000.00	\$6,000.00
Waste Management Structures	2	Each	\$5,000.00	\$10,000.00
Culvert Crossings	5	Each	\$3,000.00	\$15,000.00
Diversions	1,000	Feet	\$2.50	\$2,500.00

BMP Practice	Amount	Units	Cost	Total Cost
Forest				
Prescribed Burning	1,000	Acre	\$150.00	\$150,000.00
Critical Area Planting	1,000	Acre	\$500.00	\$500,000.00
Fence	2,000	Feet	\$2.50	\$5,000.00
Riparian Forest Buffer	170	Each	\$5.00	\$850.00
Firebreak	1,000	Acre	\$250.00	\$250,000.00
Structure for Water Control	5	Each	\$3,000.00	\$15,000.00
Tree and Shrub Establishment	170	Each	\$5.00	\$850.00
Forest Harvest Trails and Landings	5	Each	\$3,000.00	\$15,000.00
Forest Stand Improvement	1,000	Acre	\$700.00	\$700,000.00

Funding

Financial and technical assistance for installation of BMP's is needed to ensure success of this implementation plan. There are many potential sources for funding that will be actively pursued by the Idaho SWCD to implement water quality improvements on private agricultural and grazing lands. These sources include (but are not limited to):

CWA 319 projects refer to section 319 of the Clean Water Act. These are Environmental Protection Agency funds that are allocated to the Nez Perce Tribe and to Idaho State. The Idaho Department of Environmental Quality has primacy to administer the Clean Water Act §319 Non-point Source Management Program for areas outside the Nez Perce Reservation. Funds focus on projects to improve water quality and are usually related to the TMDL process. Source: Idaho Department of Environmental Quality. The Nez Perce tribe has CWA 319 funds available for projects on Tribal lands on a competitive basis.

The RCRDP program is the Resource Conservation and Rangeland Development Program administered by the Idaho Soil Conservation Commission. This is a grant/loan program for implementation of agricultural and rangeland best management practices or loans to purchase equipment to increase conservation. Source: Idaho Soil Conservation Commission.

PL-566: The small watershed program administered by the USDA Natural Resources Conservation Service (source).

Agricultural Management Assistance (AMA): AMA provides cost-share assistance to agricultural producers for constructing or improving water management structures or irrigation structures; planting trees for windbreaks or to improve water quality; and mitigating risk through production diversification or resource conservation practices, including soil erosion control, integrated pest management, or transition to organic farming.

<http://www.nrcs.usda.gov/programs/ama/>

Conservation Reserve Program (CRP): CRP is a land retirement program for blocks of land or strips of land that protect the soil and water resources, such as buffers and grassed waterways.

<http://www.nrcs.usda.gov/programs/crp/>

Conservation Technical Assistance (CTA): CTA provides free technical assistance to help farmers and ranchers identify and solve natural resource problems on their farms and ranches. This might come as advice and counsel, through the design and implementation of a practice or treatment, or as part of an active conservation plan. This is provided through your local Conservation District and NRCS.

<http://www.nrcs.usda.gov/programs/cta/>

Environmental Quality Incentives Program (EQIP): EQIP offers cost-share and incentive payments and technical help to assist eligible participants in installing or implementing structural and management practices on eligible agricultural land.

<http://www.nrcs.usda.gov/programs/eqip/>

Wetlands Reserve Program (WRP): WRP is a voluntary program offering landowners the opportunity to protect, restore, and enhance wetlands on their property. Easements and restoration payments are offered as part of the program.

<http://www.nrcs.usda.gov/programs/wrp/>

Wildlife Habitat Incentives Program (WHIP): WHIP is a voluntary program for people who want to develop and improve wildlife habitat primarily on private land. Cost-share payments for construction or re-establishment of wetlands may be included.

<http://www.nrcs.usda.gov/programs/whip/>

SRF State Revolving Loan Funds are administered through the Idaho Soil Conservation commission. <http://www.scc.state.id.us/programs.htm>

Grassland Reserve Program (GRP) is a voluntary program offering landowners the opportunity to protect, restore, and enhance grasslands on their property. Administered by the NRCS.

<http://www.nrcs.usda.gov/programs/GRP/>

CSP Conservation Security Program is a voluntary program that rewards the Nation's premier farm and ranch land conservationists who meet the highest standards of conservation environmental management. More details can be found at <http://www.nrcs.usda.gov>

FLEP Forest Land Enhancement Program is a new incentives program authorized in the 2002 Farm Bill to encourage the long-term sustainability of non-industrial private forestlands by

providing financial assistance to forest owners for the implementation of a wide variety of non-commercial forest stewardship practices administered by the NRCS.

<http://www.forestadvice.com/news/flep.htm>

GLCI Grazing Land Conservation Initiative mission is to provide high quality technical assistance on privately owned grazing lands on a voluntary basis and to increase the awareness of the importance of grazing land resources. <http://www.glci.org/>

Existing watershed projects are those that have been coordinated through the Focus Program. These projects are sponsored by the Nez Perce Tribe Watershed Division or soil and water conservation districts and funded with Bonneville Power Administration funds in conjunction with other funding sources. Source: Clearwater Focus Program files

Stewardship projects The U.S. Army Corps of Engineers conducts these projects to improve wildlife habitat. Source: US Army Corps of Engineers.

Land acquisitions and conservation easements are estimated as part of the Nez Perce Tribes Wildlife program proposal before the Bonneville Power Administration and other potential acquisitions. Source: Nez Perce Tribe Wildlife Department and conservation districts.

Craig/Wyden Bill Provides compensation to counties in lieu of lost tax revenue from diminished timber harvest. Source: National Forest staff

NOAA Restoration Center Community-Based Restoration Funding source for habitat restoration for listed species. Source: NOAA

Research/supplementation Idaho Department of Fish and Game, Nez Perce Tribe, and U.S. Fish and Wildlife Service work. Source: Bonneville Power Administration.

New Restoration monitoring Implementation and effectiveness monitoring for new projects started during the budget period. Source: Nez Perce Tribe and conservation districts.

New RME Estimated for actions to address data gaps and research needs. Source: Idaho Department of Fish and Game and Nez Perce Tribe.

The Dworshak Nez Perce Tribe Wildlife Mitigation Fund established in part to mitigate the losses of wildlife habitat from flooding caused by Dworshak Dam. The program is administered through the Nez Perce Tribe Wildlife Department. The Department also receives funding for project work from the Bureau of Indian Affairs. Source: Nez Perce Tribe Wildlife Department.

NPT Wildlife Category reflects the Bureau of Indian Affairs budget component of the Nez Perce Tribe Wildlife Department annual budget. Source: Nez Perce Tribe Wildlife Department.

Idaho Department of Fish and Wildlife and Potlatch Corporation Estimated total annual expenditures for restoration and monitoring. Source: Idaho Department of Fish and Wildlife and Potlatch Corporation.

Many of these programs could be used in combination with each other to implement BMP's.

Outreach

An intensive outreach program will be conducted through the Lewis Soil Conservation District (LSCD) and Idaho Soil and Water Conservation District (ISWCD) and its partners, the Idaho Association of Soil Conservation Districts (IASCD), Idaho Soil Conservation commission (ISCC), and the Natural Resource Conservation Service (NRCS). The purpose of these outreach programs is to inform agricultural landowners and operators how water-quality BMP's can benefit their farm or ranch.

Newspaper articles, district newsletters, direct mailings, project tours, demonstration projects, landowner meetings, a sixth grade field day and personal contacts will be conducted as part of this outreach effort. Other outreach objectives include:

- Provision of information about the TMDL process
- Accelerated technology transfer
- Dissemination of water-quality monitoring results
- Increased landowner support for water-quality BMP's
- Distribution of TMDL implementation progress reports
- Greater awareness of agriculture's involvement in the protection and enhancement of natural resources
- Increased public awareness of agriculture's commitment to meeting the TMDL challenge.

Monitoring and Evaluation

Field Level

Status Reviews

At the field level the ISCC and NRCS will complete annual status reviews in cost-share programs such as EQIP, CRP, WQPA, 319, and RCRDP. Annual status reviews are field checks of progress towards meeting the individuals contract goals and objectives as well as a visual assessment of installed BMP's.

BMP Effectiveness

Along with status reviews the ISCC will complete in-field BMP effectiveness evaluations throughout the implementation phase on installed BMP's. The BMP effectiveness guide posted on the ISCC website will guide these efforts (Resource Planning Unlimited, 2003).

Tools for BMP effectiveness evaluations such as on-site observations, client interviews, soil quality test kit measurements, field measurements on structures, soil samples and water quality samples will be used to help assess BMP effectiveness.

Watershed Level

Pollution Source and Transport

BURP monitoring

IDAPA 58.01.02.053 establishes a procedure to determine whether a water body fully supports designated and existing beneficial uses. The procedure detailed in the *1996 Water Body Assessment Guidance* (WBAG) (DEQ 1996) and revised in 2000 (Grafe et al. 2000) relies on physical, chemical, and biological parameters to identify water quality limited segments that require TMDL development.

The General Surface Water Quality Criteria (IDAPA 58.01.02.200) for Idaho set forth general guidance for surface water quality. The Surface Water Quality Criteria for Aquatic Life Use Designations (IDAPA 58.01.02.250) set forth specific numeric criteria to be met for particular beneficial uses. It also sets forth “narrative” standards that require a logical accumulation of evidence to determine whether a water body is supporting its beneficial uses. The WBAG sets forth a methodology whereby a water body is first assessed using the numeric criteria for a particular beneficial use, then identifies indices and methods for “narrative” assessment of pollutants for which numeric criteria do not apply or are not available (DEQ 1996a; Grafe et al. 2000). Sediment is the primary pollutant addressed by narrative means in the WBAG.

Idaho determines if its narrative sediment criteria are being met by collecting BURP data to verify if viable communities of aquatic organisms are present and if evidence of beneficial use exists in the stream. The BURP is a consistent scientific process used statewide for collecting this data. The evaluation of the BURP data using WBAG results in indices used to compare water quality with the standards to determine beneficial use support status.