Coeur d'Alene Lake and River
Total Maximum Daily Load Implementation Plan
2002

For:

Cougar Creek
Kidd Creek
Latour Creek
Mica Creek
Wolf Lodge Creek

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1.0 INTRODUCTION

The Coeur d'Alene Lake and River sub-basin assessment and proposed Total Maximum Daily Load (TMDL) was submitted by the Idaho Department of Environmental Quality (DEQ) to the Environmental Protection Agency (EPA) on December 23, 1999 and was approved on July 14, 2000. DEQ has set a target date of 18 months from the time a TMDL is approved by EPA to develop an implementation plan. The goals and objectives of this implementation plan focus on achieving water quality standards and full beneficial use attainment at the earliest possible date.

As stated in the State of Idaho's nonpoint source management plan:

> "The primary purpose of any implementation plan under the TMDL process is to identify and describe the specific pollution controls or management measure to be undertaken; the mechanisms by which the selected pollution control and management measures will be put into action; and, 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 established dates for meeting water quality targets."

The DEQ and designated lead agencies responsible for TMDL implementation will make every effort to address past, present, and future pollution problems in an attempt to link them to watershed characteristics and management practices designed to improve water quality.

2.0 IDENTIFICATION OF RESPONSIBLE PARTICIPANTS

In order for any implementation plan to succeed, there must be participation from State and federal agencies working within the watersheds of concern. For this reason, Idaho Code §39-3601 specifies certain entities as the designated agencies for various land use activities. These include the Idaho Department of Lands (IDL) for timber harvest and mining activities, the Soil Conservation Commission (SCC) for grazing and agricultural activities, the Idaho Transportation Department (ITD) for public road construction, the Department of Agriculture for aquaculture, and the DEQ for all other activities. Designated agencies are expected to take the lead in identifying and selecting Best Management Practices (BMPs) used to reduce nonpoint source pollution, and leading implementation for their respective activities.

The lead agencies under this TMDL implementation plan are ITD, IDL, SCC, and DEQ. Federal agencies working in cooperation with IDL include the U.S. Forest Service, and Bureau of Land Management. The East Side and Worley highway districts will work in cooperation with ITD to address water quality impacts from county roads. The DEQ recognizes that involvement from the Idaho Department of Fish and Game (IDFG) may have significant impacts on designated beneficial uses and DEQ has and will continue to make a genuine effort to include them in all aspects of TMDL implementation and planning. Public comments emphasized the need for IDFG and all designated agencies to share information. The DEQ is asking for formal comment on the draft implementation plan from IDFG. In response to comment from the Coeur d'Alene Tribe, the DEQ is also asking for formal comment from the Coeur d'Alene Tribe Fisheries program on the TMDL final draft implementation plan. The DEQ will attempt to provide forums for the exchange of scientific information throughout the implementation of the TMDL. While the DEQ is responsible for overseeing the development of this plan and monitoring its progress over time, the success of this plan

is directly dependant upon the lead agencies and their ability to implement the necessary changes outlined in this plan to restore beneficial uses.

3.0 PUBLIC INVOLVEMENT

Each watershed will have a unique set of stakeholders interested in developing the TMDL implementation plan (Figure 1). In order to facilitate public input, DEQ scheduled three public meetings in Coeur d'Alene. The first public meeting was held on August 15, 2001 to introduce the implementation planning process and seek public comment on that process. All of the comments, concerns, and suggestions received from that meeting are listed in Appendix A of this document and have been addressed in some fashion. Some suggestions have been included as specific projects in the final implementation plan. The second meeting was held on October 29, 2001 to review the draft implementation plan and seek additional public comment. The third meeting was held on February 6, 2002.

The DEQ and representatives from designated lead agencies met with interested parties from each TMDL watershed in the field when possible prior to the third public meeting. The purpose of these meetings was to better define specific projects and or concerns within each watershed and to ensure the public had ample opportunity to participate. Not all public comments resulted in goals or projects listed in the implementation plan, however, the DEQ has attempted to include as many projects as possible based on the comments received. The implementation plan is adaptive and may change over time as public comments continue to be received.

The DEQ will hold annual public meetings generally within the month of September to provide the public with an opportunity to stay involved over time. The DEQ will prepare an annual implementation plan progress report for general mailing and distribution at each annual meeting and ensure that lead agencies meet twice annually to monitor progress and establish new projects as needed.

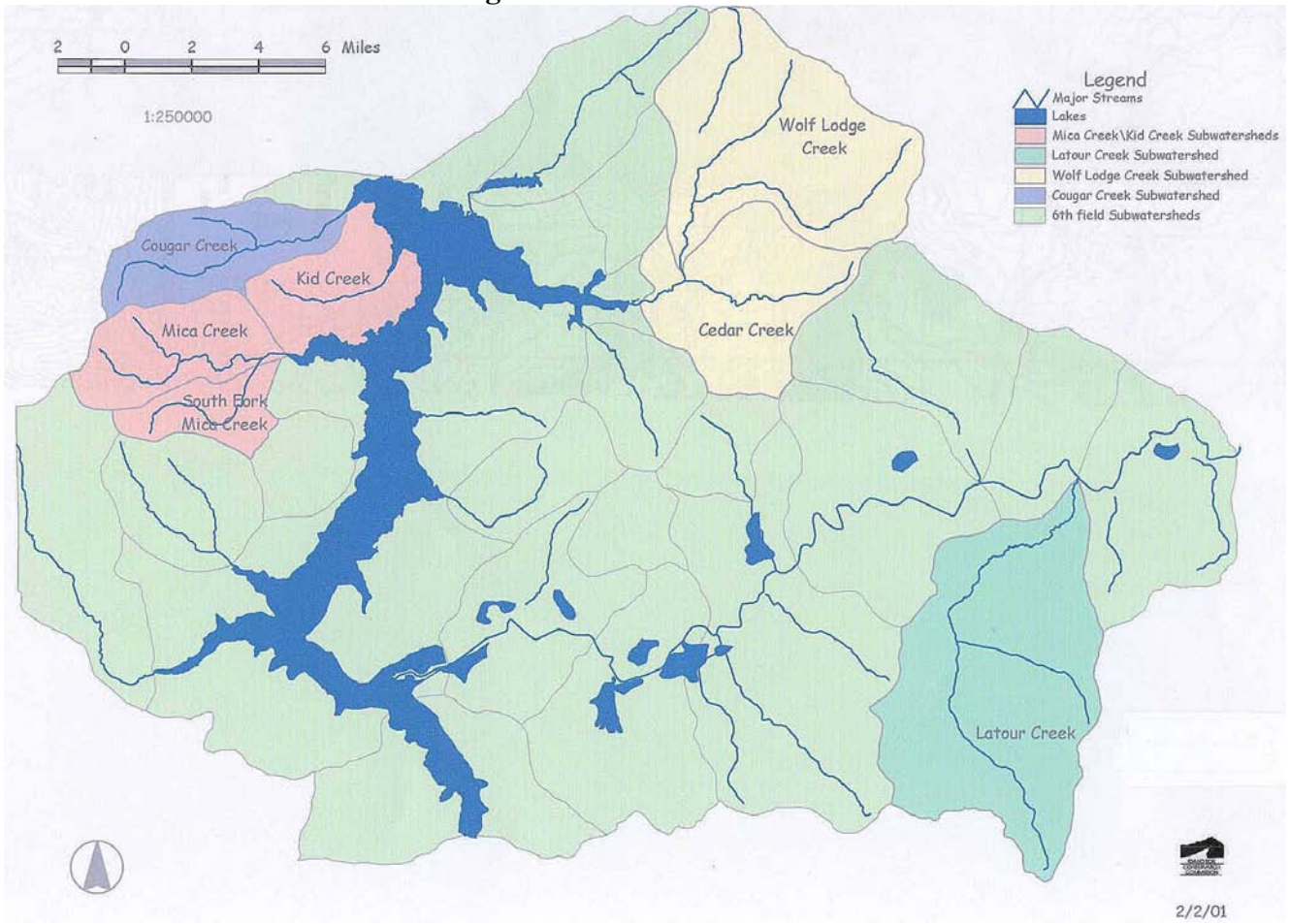
4.0 PROPOSED MANAGEMENT ACTIONS

Application of effective Best Management Practices (BMPs) is crucial to achieving the pollutant load reductions and targets of the TMDL and ultimately attainment of beneficial uses. BMPs are a practice or combination of practices determined to be the most effective, practicable means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals. BMPs can be different than stream restoration projects, although many components of restoration projects do incorporate BMPs. All lead agencies and agencies under their purview have a list of standard BMPs that are used by that agency. Any entity conducting a project within these watersheds are required to utilize the most appropriate BMPs as needed to ensure compliance with the TMDL.

Restoration, mitigation, and or preventative maintenance type work will play a large role in this implementation plan. Specific projects have been identified by each lead agency and are listed in Table 1. Public comment has resulted in the development of watershed specific projects and continues to be encouraged. Twice annually DEQ will meet with lead agencies to determine the percent completion of each listed project. This will ensure that all projects are being monitored and that all agencies are held accountable for the projects listed. It is important that the restoration efforts and or mitigation work that have already been completed within these watersheds are documented and

recognized. The DEQ requested each lead agency to prepare a list of those projects and or BMPs describing completed work within the watersheds. To date, the agencies have not responded in any type of detail so a list will be developed for the first follow up public meeting to be held in September, 2002.

Figure 1. Coeur d'Alene Lake and River Subbasin



5.0 TIMELINE FOR IMPLEMENTATION

The target date established by DEQ for development of implementation plans is 18 months after EPA approval of TMDLs. Unlike the development of the implementation plan, most implementation projects will vary in nature and will not have defined start and stop dates. Furthermore, restoration projects and BMPs developed in coordination with activities in the watershed may not be clearly defined until the project is in the planning stages or in some cases already underway. To the extent possible however, timelines for starting and stopping major activities are contained in the implementation sub-plans found in Appendix B-D. The DEQ is committed to the following timelines for TMDL implementation:

1) The DEQ will follow up with each lead agency every six months (twice annually) after the final implementation plan has been developed.
2) The DEQ will prepare an implementation progress report for the public and conduct one annual public meeting (depending upon the level of interest) to update the public and seek additional public input.

6.0 MONITORING AND EVALUATION

DEQ will conduct water quality monitoring to determine if the TMDL targets and or beneficial uses are being attained when an overall average of 75% of the projects in each watershed listed in Table 1 have been completed. It is assumed that when 75% of the projects have been completed, there will be a measurable positive response reflected in the biological community. The value of 75% was chosen because not all projects will have an immediate effect in the watersheds. The DEQ believes that monitoring before 75% of the projects have been completed would be premature and may not accurately reflect the benefits projects have on the stream.

Each lead agency is responsible for developing water quality monitoring plans and or reviewing the effectiveness of BMPs within these watersheds. A representative from DEQ and each lead agency will evaluate all monitoring results as they become available and will use an adaptive management process allowing for flexibility in monitoring plans and or BMPs as the need arises. These same representatives will discuss how and by whom the collected data will be analyzed and how the results will be stored and used to make and incorporate revisions to the TMDL if necessary.

7.0 MAINTENANCE OF EFFORT OVER TIME

In most cases, the problems leading to water quality limitations have accumulated over many years and will likely require significant time to remedy. For any implementation plan to work there must be maintenance of effort over time by all stakeholders including local citizens, tribes, state, federal, and county agencies. Idaho Code §39-3601 specifies the lead agencies responsible for TMDL implementation and requires an ongoing commitment from the lead agencies to devote the necessary resources to help restore beneficial uses. Maintenance of effort over time is not solely focused on physical restoration work, but will attempt to look at land use planning issues, revisions to agency standard operating procedures, conservation easements and various other methods through which long-term benefits can be obtained. It is the hope of DEQ that annual public meetings and progress reports will hold all lead agencies accountable to the projects listed in Table 1. The DEQ is committed to seeing this and all TMDL implementation plans to the point where beneficial uses are restored wherever practical and possible.

Table 1. Coeur d'Alene Lake and River TMDL Implementation plan Project List

Agency	Stream	Project Description	Location	Pollutant	% complete
IDL	Cougar Creek	Seed & mulch road fill and cut at stream crossing	Bunn road & Kindred trail	S	
IDL	Cougar Creek	Seed & mulch road fill and cut on switchback	log road U of I property	S	
IDL	Cougar Creek	Seed & mulch road cut	log road on State at Miller Ck. Road	S	
IDL	Cougar Creek	Seed & mulch road cut	log road above culvert w/fish ladder	S	
IDL	Cougar Creek	Investigate 4 culverts and mitigate as needed	IDL to provide	S	
IDL	Cougar Creek	Armor 3 drainage ditch gullies with rock/seed&mulch	IDL to provide	S	
IDL	Cougar Creek	Field investigation of 2 road problem combinations	IDL to provide	S	
IDL	Cougar Creek	Field investigation of 3 general problems	IDL to provide	S	
IDL	Cougar Creek	Seed & mulch to stabilize 2 cut & fill slope problems	IDL to provide	S	
IDL	Cougar Creek	Restrict or redirect use of off road vehicles	2 ORV erosion damage areas	S	
IDL	Cougar Creek	Re-establish canopy by planting to provide shade	11-12 miles (IDL to provide)	S,T	
IDL	Cougar Creek	Stabilize 2 miles of road with greater than 10% grade	2 miles (IDL to provide)	S	
IDL	Cougar Creek	Inventory additional road miles	Watershed	S	
IDL	Mica Creek	Investigate 3 culverts and mitigate as needed	IDL to provide	S	
IDL	Mica Creek	Seed & mulch / re-direct water flow of 3 washouts	IDL to provide	S	
IDL	Mica Creek	Seed & mulch / rock armor 2 ditch/gully problems	IDL to provide	S	
IDL	Mica Creek	Field investigation of "perched" landing	IDL to provide	S,Unknown	
IDL	Mica Creek	Field investigation of 2 general problems	IDL to provide	S	
IDL	Mica Creek	Re-establish canopy by planting to provide shade	10-11 miles (IDL to provide)	S,T	
IDL	Mica Creek	Stabilize road through surfacing/drainage/seed & mulch	2 miles (IDL to provide)	S	
IDL	Mica Creek	Inventory additional road miles	Watershed	S	
IDL	Kidd Creek	Re-establish canopy by planting to provide shade	1.5-2 miles (IDL to provide)	S,T	
IDL	Kidd Creek	Inventory additional road miles	Watershed	S	
IDL	Wolf Lodge Creek	Field investigation of yarding on steep slopes	IDL to provide	S	
IDL	Wolf Lodge Creek	Field investigation of 2 management problems	IDL to provide	S	
IDL	Wolf Lodge Creek	Seed & mulch to stabilize 1 mass failure	IDL to provide	S	
IDL	Wolf Lodge Creek	Surface/seed & mulch/ fix drainage or abandon road	20 miles (IDL to provide)	S	
IDL	Wolf Lodge Creek	Remove 53 stream crossings and upgrade 2 crossings	IDL to provide	S	
IDL	Wolf Lodge Creek	Re-establish canopy by planting to provide shade	5-7 miles (IDL to provide)	S	
IDL	Latour Creek	Investigate 4 culvert problems and mitigate as needed	IDL to provide	S	
IDL	Latour Creek	Re-establish canopy by planting to provide shade	4 miles (IDL to provide)	S,T	
IDL	Latour Creek	Inventory additional road miles	Watershed	S	

POLLUTANTS: S = SEDIMENT, T = TEMPERATURE

Table 1 Continued

Agency	Stream	Project Description	Location	Pollutant	% complete
ITD/IDL	Mica Creek	Stabilize mass failure near Highway 95	Mica Creek (IDL to provide)	S	
ITD	Mica Creek	Floodplain reclamation	Mica Creek	S	
ITD	All Streams	Memorandum of agreement with Highway Districts	All	S	
ITD	All Streams	Conduct initial field trip to list known problem areas	All	S	
ITD	All Streams	Conduct annual field trip/evaluation of problem areas	All	S	
ITD	All Streams	Produce annual list of projects in TMDL watersheds	All	S	
ITD	All Streams	Plan and implement water quality enhancement projects	All	S	
KSSWCD	Mica & Kidd Creek	Nutrient Management on 8 fields	KSSWCD, SCC and NRCS to provide	S,B	
KSSWCD	Mica & Kidd Creek	Channel vegetation 500 feet	KSSWCD, SCC and NRCS to provide	S,T	
KSSWCD	Mica & Kidd Creek	Prescribed grazing 1000 acres	KSSWCD, SCC and NRCS to provide	S,B	
KSSWCD	Mica & Kidd Creek	Pasture and Hayland Planting 50 acres	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Mica & Kidd Creek	Forest riparian buffer 5 acres	KSSWCD, SCC and NRCS to provide	S,T	
KSSWCD	Mica & Kidd Creek	Fencing - riparian use exclusion or cross 20,000 feet	KSSWCD, SCC and NRCS to provide	S,T	36%
KSSWCD	Mica & Kidd Creek	Riparian use exclusion 25 acres	KSSWCD, SCC and NRCS to provide	S,T	
KSSWCD	Mica & Kidd Creek	Heavy use area protection - livestock access 1 each	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Mica & Kidd Creek	Tank or trough - 11 each	KSSWCD, SCC and NRCS to provide	S	9%
KSSWCD	Mica & Kidd Creek	Pipeline 3050 feet	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Mica & Kidd Creek	Pond 3 each	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Mica & Kidd Creek	Pump Plant for Water Control- 2 each	KSSWCD, SCC and NRCS to provide	S,B	
KSSWCD	Mica & Kidd Creek	Animal Trails and Walkways- 3 each	KSSWCD, SCC and NRCS to provide	S,B	
KSSWCD	Mica & Kidd Creek	Spring development 4 each	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Wolf Lodge Creek	Nutrient Management on 10 fields	KSSWCD, SCC and NRCS to provide	S,B	
KSSWCD	Wolf Lodge Creek	Channel vegetation 2,500 feet	KSSWCD, SCC and NRCS to provide	S,T	
KSSWCD	Wolf Lodge Creek	Prescribed grazing 300 acres	KSSWCD, SCC and NRCS to provide	S,B	
KSSWCD	Wolf Lodge Creek	Pasture and Hayland Planting 300 acres	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Wolf Lodge Creek	Forest riparian buffer 10 acres	KSSWCD, SCC and NRCS to provide	S,T	
KSSWCD	Wolf Lodge Creek	Fencing - cross fence 2,000 feet	KSSWCD, SCC and NRCS to provide	S,B	
KSSWCD	Wolf Lodge Creek	Fencing - riparian use exclusion 10,000 feet	KSSWCD, SCC and NRCS to provide	S,T	
KSSWCD	Wolf Lodge Creek	Riparian use exclusion 60 acres	KSSWCD, SCC and NRCS to provide	S,T	
KSSWCD	Wolf Lodge Creek	Heavy use area protection - livestock access 3 each	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Wolf Lodge Creek	Tank or trough - 4 each	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Wolf Lodge Creek	Pipeline 2000 feet	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Wolf Lodge Creek	Streambank protection 400 feet	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Wolf Lodge Creek	Pond 2 each	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Wolf Lodge Creek	Sediment and erosion control structure 2 each	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Wolf Lodge Creek	Sediment basin	KSSWCD, SCC and NRCS to provide	S	

POLLUTANTS: S = SEDIMENT, T = TEMPERATURE, B = BACTERIA

Table 1 Continued

Agency	Stream	Project Description	Location	Pollutant	% complete
KSSWCD	Cougar Creek	Nutrient management 10 fields	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Cougar Creek	Channel vegetation 5,000 feet	KSSWCD, SCC and NRCS to provide	S,T	
KSSWCD	Cougar Creek	Prescribed grazing 500 acres	KSSWCD, SCC and NRCS to provide	S,B	
KSSWCD	Cougar Creek	Pasture and hayland planting 150 acres	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Cougar Creek	Forest riparian buffer 10 acres	KSSWCD, SCC and NRCS to provide	S,T	
KSSWCD	Cougar Creek	Fencing - cross fence 2,000 feet	KSSWCD, SCC and NRCS to provide	S, B	
KSSWCD	Cougar Creek	Fencing - riparian use exclusion 60 acres	KSSWCD, SCC and NRCS to provide	S,T	
KSSWCD	Cougar Creek	Heavy use area protection - livestock access 6 each	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Cougar Creek	Tank or trough	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Cougar Creek	Pipeline 2,000 feet	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Cougar Creek	Streambank protection 500 feet	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Cougar Creek	Pond 3 each	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Cougar Creek	Sediment and erosion control structure 5 each	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Cougar Creek	Sediment basin 5 each	KSSWCD, SCC and NRCS to provide	S	
KSSWCD	Latour Creek	Channel vegetation 1,000 feet	KSSWCD, SCC and NRCS to provide	S,T	
KSSWCD	Latour Creek	Forest riparian buffer 10 acres	KSSWCD, SCC and NRCS to provide	S,T	
KSSWCD	Latour Creek	Streambank protection 1,000 feet	KSSWCD, SCC and NRCS to provide	S	
EHD/DEQ	Latour Creek	Culvert replacement/removal of fish barrier	Baldy Creek where enters Latour	S	
COE/DEQ	Latour Creek	Bank stabilization projects	Below Baldy Creek	S	
DEQ	Mica Creek	Erosion control / sewer line protection	Confluence of Mica with Lake CDA	S	
DEQ	Mica Creek	ITD Highway 95 project compliance and mitigation		S	
DEQ	All streams	Sampling after 75% avg. of projects completed			
DEQ	All streams	Hold annual public meetings			
DEQ	All streams	Hold bi-annual designated agency meetings			
DEQ	All streams	Prepare annual news letter updates			
DEQ	All streams	Modify/update implementation plan as needed			

POLLUTANTS: S = SEDIMENT, T = TEMPERATURE, B = BACTERIA

8.0 DISCUSSION OF COSTS AND FUNDING

Each TMDL should attempt to estimate the overall cost associated with plan implementation. In order to estimate costs, there must be a specific list of projects within each watershed. In those watersheds where specific projects have been identified this can be done. For example, the SCC has estimated costs associated with specific projects in their implementation plan (Appendix C). As specific projects are completed, DEQ will work with lead agencies to develop an estimated cost per listed stream segment and a total cost for the entire implementation plan when possible.

Funding for TMDL implementation projects may come from a variety of sources. Funding should first come from within the designated agencies and or agencies under their purview. The DEQ will assist lead agencies whenever possible in obtaining sources of funding and ensure collaboration between agencies for funding of related projects. There are 39 potential sources of funding for TMDL implementation projects listed in the State of Idaho Nonpoint Source Management Plan (Appendix E). Several of these funding sources require public participation and the DEQ will be available to assist any parties that wish to seek funding for water quality projects within these watersheds.

Appendix A

RESPONSE TO COMMENTS
COEUR D'ALANE RIVER AND LAKE
TMDL IMPLEMENTATION PLAN

March 20, 2002

The public comment period for this Total Maximum Daily Load (TMDL) implementation plan began with the first public meeting held in Coeur d'Alene August 15, 2001. A draft implementation plan was developed and mailed to stakeholders prior to the second public meeting held in Coeur d'Alene on October 29, 2001. Three additional public meetings were held on Saturdays to offer better opportunity for public involvement, which included Wolf Lodge Creek (11/15/01); Latour Creek (12/8/01); and Kidd, Mica, and Cougar Creeks (1/5/02). The last of three public meetings was held in Coeur d'Alene February 6, 2002. In the response to comments below the agency providing response is bolded in brackets.

Comments received from August 15, 2001 meeting:

LATOUR CREEK:

1. Comment: Rock armor on private lands and throughout the Creek where needed.

*Response **(DEQ)***: Rock armor is typically used as a last resort and needs to be carefully considered both in terms of the rock size and placement. What appear to be simple fixes in one area can create other problems down stream if not engineered properly. There may be cases where rock armor is the only solution to prevent serious erosion and these will be considered on a case by case basis. It is important that landowners and agencies work together so that any work being completed does not interfere with other projects.

2. Comment: Dredging the creek to remove existing sediment.

*Response **(DEQ)***: The implementation plan must look at fixing the problem and not just temporarily removing the result of a problem (in this case excessive cobble bedload). Dredging the creek where needed is not entirely out of the question, however, it is in the best interest of the environment to better understand the entire system as we implement different projects within the watershed prior to engaging in such drastic measures.

3. Comment: Over logging – should be done properly/responsibly

*Response **(IDL)***: No information has been provided to support the comment that the drainage has been over logged. The comment does not define what constitutes over logging. The IDL Cumulative Watershed Effects Process (CWE) applied in the drainage indicates no hydrologic adverse conditions exist. The recent addition of one full time forest practice advisor in the drainage should help ensure logging is done properly and responsibly, i.e., follows the Forest Practices Act (FPA).

4. Comment: Logging roads and dust from logging trucks

*Response **(IDL)***: Sediment generated from logging roads via surface erosion, mass failures, or dust from log hauling has the potential to impact streams by adding additional sediment. To reduce road sediment and meet TMDL targets IDL and affected landowners will be surveying roads to identify additional site-specific practices that may be applied to reduce sediment loading during the 2002 field season.

5. Comment: Replanting forest roads

*Response **(IDL)***: The vast majority of the watershed is in non-federal ownership. Non-federal landowners have rarely "decommissioned" roads by using practices federal land managers might apply. In this drainage, roads have typically been abandoned and stabilized by pulling culverts, adding cross drainage, selectively pulling unstable fills, blocking vehicle access, and revegetation to reduce and eliminate sediment.

6. Comment: Replanting logged areas

*Response **(IDL)***: IDL stocking surveys indicate all state lands are fully stocked and meet FPA standards.

7. Comment: Pave the road as is.

*Response **(ITD)***: The Idaho Transportation Department will investigate and consider all TMDL related comments and concerns brought up by the general public and the local highway districts involved. Each case and situation will be evaluated on its own merits and a reasonable decision reached on what actions can and/or cannot be done at any particular site. Decisions will be reported in subsequent, ongoing TMDL progress updates and will be open to further examination and discussion by all parties involved.

WOLF LODGE CREEK:

1. Comment: The county portion of Marie Creek Road is the same elevation as the stream so it is easily flooded.

*Response **(ITD)***: The Idaho Transportation Department will investigate and consider all TMDL related comments and concerns brought up by the general public and the local highway districts involved. Each case and situation will be evaluated on its own merits and a reasonable decision reached on what actions can and/or cannot be done at any particular site. Decisions will be reported in subsequent, ongoing TMDL progress updates and will be open to further examination and discussion by all parties involved.

2. Comment: Marie Creek has had a significant loss of beaver ponds.

*Response**(DEQ)***: Beaver ponds have both positive and negative effects on stream morphology depending on your viewpoint. Beaver ponds act as natural sediment traps and help create large pools providing many forms of habitat for different species of wildlife. Conversely, beaver

ponds can create localized flooding as well as logjams and associated bursts during high flow events that can have huge impacts down stream. The fact that there appears to be a reduction in beaver ponds is likely due to many factors. The DEQ will ask the Idaho Department of Fish and Game for any information they have concerning this comment and provide a more detailed response at the first follow up implementation meeting to be held some time in September 2002 (to be announced at a later date).

3. Comment: In-stream sediment retention basins have not been maintained sufficiently for them to continue to function properly.

*Response **(DEQ)***: The DEQ will look at the functionality of the sediment basins with the Idaho Department of Fish and Game who were involved in the creation of these basins. If it is found that work on the basins will provide benefits to the overall health of the stream while reducing sediment contributions, the DEQ will work with Fish and Game to obtain funding for this work.

4. Comment: Legacy sediment. Historical state and federal logging practices have resulted in a large amount of sediment already in the stream. It may take decades for this slug of sediment to be pushed out of the system.

*Response **(IDL)***: Historical logging practices and the resulting impacts are vastly different from today's practices as described in the FPA. CWE and other assessment methodologies employed by federal agencies attempt to qualify or quantify those historic impacts. The TMDL implementation plan will strive to reduce additional loading and mitigate for past impacts through the development and implementation of site-specific best management practices.

5. Comment: There are a number of places where the stream banks are unstable or uncovered.

*Response **(DEQ)***: Areas of exposed stream bank need to be clearly identified and inventoried so that potential funding may be sought out for restoration type projects as appropriate. The DEQ is relying on landowners within each watershed to help identify these areas. If there are specific areas that are of concern please provide this information at the first follow up implementation meeting to be held some time in September 2002 (to be announced at a later date).

6. Comment: Lack of required standards by the county in regards to residential development, particularly as it relates to private drives and setbacks.

*Response **(DEQ)***: The DEQ has not spoken to the county concerning this issue specifically and feels it is imperative that all participants of this implementation plan are involved in order to bring this issue before the county planning department and have it properly addressed. Again, specific areas of concern need to be identified and inventoried so that resolutions can be sought. Please provide this information at the first follow up implementation meeting to be held some time in September 2002 (to be announced at a later date).

MICA, COUGAR, AND KIDD CREEKS:

1. Comment: Mica Bay is filling in with sediment causing problems with recreational uses of the lake.

*Response **(DEQ)***: The filling in of Mica Bay with sediment is a natural process, however, there have been and continue to be human induced impacts that appear to be excelling the natural process. The TMDL implementation plan deals solely with Mica Creek and does not address Mica Bay. However, the DEQ understands that Mica Bay is in some fashion directly affected by activities in the Mica Creek drainage and will ensure that restoration activities as part of this implementation plan take into consideration the potential impacts to Mica Bay. The DEQ has mentioned at several public meetings that the filling in of Mica Bay and any potential mitigation work must be dealt with through other avenues like the Coeur d'Alene Lake Management Plan currently under revision and not this TMDL implementation plan.

2. Comment: Weeds are also becoming a problem in Mica Bay interfering with boating and Swimming. Nutrients are being carried into the Bay by sediments.

*Response **(DEQ)***: Excess weed growth can be caused by many different factors including water temperature, duration of direct sunlight, amount of available nutrients, and the type and thickness of bottom sediments to name a few. It is imperative that a distinction is made between native species and invasive non-native species like Eurasian Milfoil. The Kootenai County noxious weed control department is the agency that deals directly with these types of issues and the DEQ will notify them of these concerns. More information will be available at the first follow up implementation meeting to be held some time in September 2002 (to be announced at a later date). If the TMDL implementation plan is successful at reducing sediment loads in Mica Creek, the portion of the nutrient load in Mica Bay contributed by excess sediment will also be reduced.

3. Comment: Homeowners over-fertilizing their yards and there is no riparian buffer zone left between the lake and lawns.

*Response **(DEQ)***: Homeowner over-fertilization is generally educational in nature. The DEQ, Coeur d'Alene Tribe, and Environmental Protection Agency developed the Lake Coeur d'Alene Basin homeowners guide to address these and many other issues facing Lake Coeur d'Alene. Copies are available at the DEQ regional office and can be mailed if requested. The lack of riparian buffer zone between the lake and lawns is both educational and recreational. It is very difficult to maintain the delicate balance between human wants and water management needs. Good stewardship is not controlled by DEQ, but, we have been and continue to foster good stewardship whenever possible and are always open to suggestions as to how better educate the public on these matters.

4. Comment: Timber removal from upper watershed accelerates runoff and moves more sediment into Mica Bay.

*Response **(IDL)***: No information has been provided to support the comment that timber removal in the upper watershed has accelerated sediment movement into Mica Bay. The IDL CWE process applied in the drainage indicates no hydrologic adverse condition exists and sediment delivery ratings are low.

5. Comment: (a) New and existing subdivisions lack erosion control measures, (b) new roads contribute sediment to the watershed.

Response (a) ***(DEQ)***: New subdivisions are required to have storm water control measures in place prior to development. If there are specific areas of concern with either new or existing subdivisions please bring detailed information to the attention of DEQ at the first follow up implementation meeting to be held some time in September 2002 (to be announced at a later date).

Response (b) ***(ITD)***: The Idaho Transportation Department will investigate and consider all TMDL related comments and concerns brought up by the general public and the local highway districts involved. Each case and situation will be evaluated on its own merits and a reasonable decision reached on what actions can and/or cannot be done at any particular site. Decisions will be reported in subsequent, ongoing TMDL progress updates and will be open to further examination and discussion by all parties involved.

6. Comment: concern that agricultural users don't protect the creek like timber users have to.

Response ***(SCC)***: Although agricultural users don't have the same written regulation as timber users, the NRCS, SCC and SWCD are constantly looking for landowners to participate in voluntary programs that protect agricultural land and water quality. The Water Quality Program For Agriculture (WQPA) and other NRCS programs assists landowners with technical and financial assistance to implement BMPs that will protect water quality such as fencing, livestock, exclusion, streambank protection, no-till planting and grazing management. Our approach of assisting landowners on a voluntary basis has been very successful in the past and we believe it will be on Mica Creek also.

7. Comment: Large amounts of sediment come off Godde's logging roads and rock quarry entrance road.

Response ***(IDL)***: Sediment generated from logging roads via surface erosion or mass failures have the potential to impact streams by adding additional sediment. To reduce road sediment and meet TMDL targets during the course of the 2002 field season, IDL and a Godde's representative, if willing, will be surveying roads on his property to identify additional site-specific practices that may be applied to reduce sediment loading.

8. Comment: Livestock in and along Mica Creek.

Response ***(SCC)***: Livestock have been grazing the meadows along Mica Creek since the early 1940's. Recently, the Kootenai-Shoshone SWCD has been implementing a Water Quality Program for Agriculture (WQPA) project in the Mica watershed. The SWCD has developed conservation plans with the two landowners along the creek with cattle operations. During the summer of 2001, 7,200 feet of fence was installed to keep the livestock out of Mica Creek. Additional fencing is expected in the near future.

9. Comment: Cougar Creek re-alignment by ITD during the Mica grade construction caused the creek bed to fill with sediment. The stream was re-aligned to form two 90 degree angles where it nears the base of the highway fill. This has caused sediment to fall out at these corners and filled the channel. The stream cut a new channel as a result of this.

*Response **(ITD)***: The Idaho Transportation Department will investigate and consider all TMDL related comments and concerns brought up by the general public and the local highway districts involved. Each case and situation will be evaluated on its own merits and a reasonable decision reached on what actions can and/or cannot be done at any particular site. Decisions will be reported in subsequent, ongoing TMDL progress updates and will be open to further examination and discussion by all parties involved.

10. Comment: The no wake rule in Cougar Bay has allowed weeds to fill the bay. Prior to this, boats would keep the bay clear of weeds.

*Response **(DEQ)***: The TMDL implementation plan does not deal specifically with Cougar Bay. However, it is important to be able to document, if possible, that the growth of aquatic plants in Cougar Bay is a direct result of the no wake rule. Kootenai County Parks and Waterways established the no wake rule to prevent stirring up of excess sediment and to comply with the ordinance requiring no wake zones 200 feet from shorelines or 100 feet from docks. The Kootenai County noxious weed control department may be interested in these concerns and the public is encouraged to contact them.

11. Comment: Cougar Creek meadow receives the sediment load from thousands of homes up the watershed. This increased sediment load causes the channel to change course in addition to the re-alignment created by ITD (comment 9). These homeowners are unaware of the cumulative impact they are having on the stream.

*Response **(DEQ)***: It is not clear from the comment how homes are delivering sediment to the stream. If educating homeowners along the stream can reduce sediment, this can be incorporated into the implementation plan. It is imperative that the public is involved in any attempt to develop educational material and the DEQ requests that any one interested please bring specific ideas to the first follow up implementation meeting to be held some time in September 2002 (to be announced at a later date).

<u>Comments received from October 29, 2001 public meeting:</u>

1. Comment: I would like to see sediment ponds at all possible locations along highway 95.

*Response **(DEQ)***: The TMDL, and associated implementation plan, must address the causes of pollution to the stream. The primary purpose of building sediment ponds in Mica Creek would be to reduce the amount of sediment being transported to Mica Bay, not to reduce sediment entering Mica Creek which is the focus of this implementation plan. While sediment ponds *may* prove beneficial at trapping sediments, they will not address the larger issue of how to reduce overall sediment input to Mica Creek. Sediment ponds have environmental concerns associated with them as well, some of which include dredging to keep the ponds functional, impacts to the stream from hydrologic modifications and other site-specific environmental issues. Separate from this implementation plan, the DEQ is willing to look at sedimentation of Mica bay and requests any public input to address this issue. It is possible that the Idaho Transportation Department *may* investigate placing sediment ponds in Mica Creek as part of restoration work in conjunction with new highway construction as well and the DEQ is keeping all options open at this time.

2. Comment: Has the break in the sediment pond been fixed? Will it be mentioned?

*Response **(ITD)***: The Idaho Transportation Department has bypassed the sediment pond with a rock-lined channel, which is intended to reduce the amount of sediment being delivered to the stream and prevent any additional problems associated with the sediment pond.

3. Comment: Was a bacteria sample ever taken on Kidd or Cougar Creeks?

*Response **(DEQ)***: The EPA did not list bacteria as a pollutant of concern in either Kidd or Cougar Creek and therefore sampling was not required. However, DEQ did collect four (4) bacteria samples in Cougar Creek as part of the Beneficial Use Reconnaissance Program (BURP), all of which were below state water quality standards for primary and secondary contact recreation. No records were found of bacteria samples collected in Kidd Creek. It is assumed that bacteria samples were not collected in Kidd Creek due to extreme low flow and the inability to achieve a representative sample.

4. Comment: Why are new residential areas on hillsides not being addressed such as Rocky Mountains development in Wolf Lodge?

*Response **(DEQ)***: New residential developments are addressed through the permitting process established by the county in which they are proposed. Depending on the size of the development, DEQ may review plans and specifications as well as storm water concerns associated with new development. It is imperative that county planning and zoning offices keep DEQ informed of new developments and recognize TMDL watersheds. The DEQ has asked for involvement from the Kootenai County Planning and Zoning office and a representative from their office has attended some of the public meetings. It is the hope of DEQ that Kootenai County will be actively participating in this TMDL implementation plan.

5. Comment: How will fencing off cattle from creeks solve all the problems?

*Response **(DEQ)***: Fencing off cattle from creeks is only one part of the implementation plan and will not solve all the problems. Because there are cost share programs to help interested landowners, fencing off cattle from streams is one obvious benefit that has a direct impact on the overall health of a stream. Any and all solutions to help restore beneficial uses of a stream will be considered as part of this TMDL implementation plan.

6. Comment: What about the highway districts? Whose standards will they meet? What is their responsibility?

*Response **(DEQ)***: The highway districts are required to meet state water quality standards like any other agency. The highway districts are under the purview of the Idaho Transportation Department (ITD) for purposes of this TMDL implementation plan and have been involved. One of the goals of the implementation plan is to establish a memorandum of agreement between the highway districts and ITD so they can share knowledge, identify and correct problems or potential problems collectively.

11/17/01 Wolf Lodge Creek Field Trip (15 people in attendance):

1. Comment: Get an estimate of how much bedload is being taken out of the streambed for gravel operations and monitor the time it takes to fill in pools.

*Response **(DEQ)***: The DEQ is working with local residents on this approach.

2. Comment: The existing stream does not have a proper functioning flood plain.

*Response **(DEQ)***: Wolf Lodge Creek has been channeled to protect homes and property along its path. The fact that the historical flood plain no longer serves its purpose is one of many factors contributing to the existing stream condition. The TMDL implementation plan must look at what can realistically be accomplished and or expected in Wolf Lodge Creek and restoring the historical flood plain is not an option.

3. Comment: Fish & Game need to be involved (introduction of predators – pike & salmon)

*Response **(DEQ)***: The DEQ has asked the Idaho Department of Fish and Game (IDFG) to be involved in this TMDL implementation plan and all future TMDL implementation plans in the Idaho panhandle.

4. Comment: Implementation plans need to address all issues not just sediment.

*Response **(DEQ)***: The implementation plan is developed strictly for the TMDL written, however, the DEQ has expressed throughout this process that all potential work will be considered while in the TMDL drainage's.

5. Comment: The Rider Ranch needs an updated soil conservation plan.

*Response **(DEQ)***: A representative from the Soil Conservation Commission has been in contact with the Rider Ranch and they have discussed developing an agricultural conservation plan, although no plan exists at this time.

6. Comment: Cutthroat trout are disappearing in Lake CDA and Dissolved Oxygen levels are dropping.

*Response **(DEQ)***: The DEQ cannot speak to the apparent declining trend of cutthroat trout in Lake Coeur d'Alene and have asked IDFG for involvement to help answer these types of questions. The DEQ has solid scientific data collected over the last 5 years showing just the opposite, a slightly positive dissolved oxygen trend in northern Lake Coeur d'Alene. These issues are much larger than the focus of the implementation plans and cannot be fully addressed in this forum.

7. Comment: Recognize all the other work being done in the watershed.

*Response **(DEQ)***: The DEQ has asked all lead agencies for a list of work that has been completed in the watersheds to be included in the implementation plan.

8. Comment: Monitor at appropriate times of the year for fish densities.

*Response **(DEQ)***: The DEQ conducts beneficial use reconnaissance at the same standardized time frames so that the bias for all streams is equal. The established window for monitoring all stream parameters is based on a number of factors including IDFG permits, safety, available access, and available resources.

12/8/01 Latour Creek (6 people in attendance):

1. Comment: The stream needs large woody debris to provide fish habitat, currently there is little to none.

*Response **(DEQ)***: The DEQ is in agreement with this comment. Adding large woody debris to a stream can have major implications and all potential impacts must be carefully considered. The DEQ looks forward to working on this issue with all interested parties.

2. Comment: The stream needs to be channeled in some lower sections and dredged in some sections to prevent flooding and help protect stream banks from accelerated erosion.

*Response **(DEQ)***: channeling and dredging Latour Creek may not be the only option to help prevent flooding and accelerated bank erosion. A good understanding of the hydrology, geology, fluid mechanics, and potential impacts to aquatic life and habitat (both positive and negative) in Latour Creek must be considered before taking action.

3. Comment: The stream has always gone dry below the wood bridge, even 40 years ago.

*Response **(DEQ)***: The DEQ considers this useful information to be used in planning restoration efforts.

4. Comment: 20 years ago you could catch a limit of fish in 15 minutes – today you can't catch a limit.

*Response **(DEQ)***: The fact that fish populations have been depleted in Latour Creek to this point is a clear indication that something has changed over the last 20 years. Declining fish populations are likely due to several factors and not just one. The TMDL and associated implementation plan is the first step in evaluating the effectiveness of proposed sediment reductions. As mentioned earlier, while in the watersheds of concern, the DEQ and lead agencies must focus on the TMDL pollutant(s), however, efforts must be made to look at the system in its entirety so as to restore beneficial uses. To this end the DEQ is holding annual public meetings to solicit comment and suggestions as well as an additional meeting with lead agencies at least once per year to discuss issues such as this and work towards resolution.

5. Comment: Latour Creek road is the 2nd highest in traffic volume according to the East Side Highway District (ESHD).

*Response **(DEQ)***: The DEQ has confirmed this statement with the ESHD. The proposed memorandum of agreement between ITD and ESHD will help identify problems along this highly traveled road.

6. Comment: There is a lack of deep pools in Latour Creek. There will likely need to be a maintenance program to keep the stream from filing in over time.

*Response **(DEQ)***: The lack of deep pools in Latour Creek can be linked to excessive bed load and hence the need for a sediment TMDL. The TMDL and implementation plan are designed to address and correct the causes of excess sediment and not simply band aid visible impacts. To this end, the implementation plan will attempt to aid the stream in obtaining a more natural state given the current conditions. This will undoubtedly require maintenance over time by all interested parties.

7. Comment: There were not as many problems when citizens could take gravel out of the stream on their own.

*Response **(DEQ)***: It is not clear what "problems" mean. In terms of flooding, dredging or channeling Latour Creek may be effective for a short time. However, without a coordinated effort in the drainage, fixing an apparent problem in one area will likely create problems elsewhere. As stated earlier, it is very difficult to maintain the delicate balance between human wants and water management needs.

8. Comment: Any work done needs to be done during low flow periods.

*Response **(DEQ)***: The DEQ agrees with this comment and always attempts to minimize environmental impacts when possible.

9. Comment: Overall the stream needs flood control combined with fish habitat and bank stability.

*Response **(DEQ)***: The DEQ agrees with this comment and feels it is possible to achieve these goals over time with commitment from everyone involved.

10. Comment: The culvert connecting Baldy Creek with Latour Creek is a fish barrier and needs to be replaced.

*Response **(DEQ)***: The DEQ is currently working with the SCC to designate funding through a grant for this project. More information will be available at the first follow up implementation meeting to be held some time in September 2002 (to be announced at a later date).

11. Comment: Bank stabilization is needed to protect an old dump area on the banks of Latour Creek from further erosion.

*Response **(DEQ)***: If warranted and funding allows, the DEQ would like to see this project included in the culvert replacement on Baldy Creek. More information will be available at the first follow up implementation meeting to be held some time in September 2002 (to be announced at a later date).

1/5/02 Kidd, Mica, and Cougar Creeks (12 people in attendance):

1. Comment: Putnam Road culvert to bridge continuously fills with sediment and the source needs to be evaluated rather than dredging as needed.

*Response **(DEQ)***: The DEQ agrees that the source needs to be evaluated and hopes that field investigations by ITD and the Highway Districts will accomplish this. Progress on this matter will be monitored.

2. Comment: ITD bridge is being weakened by the Worley Highway District watering trucks using it (no name creek).

Response ***(DEQ)***: This comment was addressed at the public meeting held on February 6, 2002. According to the Worley Highway District representative in attendance, the bridge is scheduled for replacement some time within the next few years and planning will begin this year.

3. Comment: Corps of engineers (COE) need to be involved in TMDL implementation planning especially concerning roads.

*Response **(DEQ)***: The COE is not a designated lead agency and will typically only be involved in TMDL implementation when permits for work within a stream are needed. The comment is duly noted and the DEQ has been working with the COE and ITD on the existing Highway 95 project.

4. Comment: The Soil Conservation Commission had cost sharing monies for three sediment ponds on Kidd Creek from Winger road to Lake Coeur d'Alene but land owners did not want to do it.

*Response **(DEQ)***: In order for any implementation plan to work there must be cooperation and agreement from landowners. The DEQ will continue to work with the SCC and landowners to try and address their concerns while dealing with the concerns facing the individual watersheds.

5. Comment: Kidd Creek experiences flooding and the main sewer line near the inlet to the lake may be compromised by erosion.

*Response **(DEQ)***: The DEQ has been made aware of this and will be working with the appropriate parties to seek possible remedies to this situation.

6. Comment: If the Corps of Engineers did not include a stop work date on this project why?

Response ***(DEQ)***: The DEQ spoke with a representative from the ACOE who stated that there were some stop work dates for projects in and near the stream and wetlands established in the permit, however, these did not include work to be done in the upland areas. If more detailed information is needed on the U.S. Highway 95 Bellgrove to Mica permit, citizens are encouraged to speak with a ACOE representative.

7. Comment: The county boat ramp at the end of Mica Creek is being affected by sediment build up. IDL issues this permit.

Response ***(DEQ)***: The TMDL implementation plan for Mica Creek will look at all potential mitigation remedies in Mica Creek, but, will not specifically address Mica Bay as part of this implementation plan. The DEQ is open to other avenues of pursuing this matter and welcomes all public input.

Appendix B

FOREST PRACTICES IMPLEMENTATION PLAN

Coeur d'Alene Lake and River TMDL Tributaries

I. Introduction

This Forest Practices Implementation Plan outlines an approach to meeting the requirements for pollution reduction set forth in the Coeur d'Alene Lake and River tributaries total maximum daily load (TMDL). This plan covers the following stream segments:

- Cougar Creek
- Kidd Creek
- Latour Creek
- Mica Creek
- Wolf Lodge Creek

According to the TMDL, forest land comprises the majority of the total acreage within the TMDL planning area. Industrial private, non-industrial private, US Forest Service, Coeur d'Alene Tribe, State endowment and other public lands are present in this planning area.

Creek Name	Acres	% Forest Land
Wolf Lodge Creek	37,974	95.6
Cougar Creek	8,043	75.5
Kidd Creek	1,965	52.6
Mica Creek	12,335	82.6
Latour Creek	33,101	99.2

The Coeur d'Alene TMDL document prepared by the Idaho Department of Environmental Quality (DEQ) lists non-irrigated crop lands, grazing lands, land development and construction activities, and road and skid trail construction associated with forest land harvest activity as the primary nonpoint source of pollutants. This portion of the TMDL implementation plan addresses nonpoint source pollution from road and skid trail construction and other forest practices activities associated with timber harvest in order to reduce sediment loads. In addition, the Cumulative Watersheds Effects Process for Idaho (CWE), which was conducted in all these drainages, has preliminarily identified adverse temperature conditions. This plan will address those temperature conditions.

Forest landowners also believe channel modification due to land development and introduction of non-native fish species, activities not related to forest practices, are significant factors affecting beneficial use status. The TMDL neither recognizes nor address practices to mitigate these factors. Without mitigation of these factors achieving the goal of full restoration of beneficial uses may not be possible.

Forest roads have long been recognized as a potential main source of sediment from forest harvesting activities. Forest road sedimentation problems are most acute during major storm events and on new road construction, especially when roads are located close to streams when appropriate BMP's have not been properly applied. As with other soil disturbances, sedimentation generally declines at vegetation establishment on roadside and implementation of erosion control measures.

To mitigate for any potential impacts from forest practices, State, federal and other technical specialists have conducted varying degrees of subwatershed assessments in these drainages. The assessments include the CWE process noted earlier on State and private lands, and U.S. Forest Service watershed assessment models on federal lands. These assessments are the basis for prescribing additional practices in the watersheds to insure allocated sediment loads are reduced and water quality standards are met and maintained. Generally, these practices include elements that address site specific road drainage and stabilization measures, fish passage through stream crossings, and streamside canopy cover and large woody debris recruitment.

II. Public Involvement

In accordance with Idaho's Nonpoint Source Management Plan, the Department of Lands is the designated lead agency for Forest Practices activities on all forest lands in the state of Idaho, including federal lands. As the lead agency, the Department of Lands is responsible to solicit input from affected landowners and technical specialists to help develop practices that will fully restore the beneficial uses.

In accordance with FPA cumulative watershed effects rules, for each subwatershed, the Department of Lands will form a forest practice working group consisting of industrial and non-industrial forest landowners, state and federal land managers. This group will be charged with evaluating all of the analysis data generated from the TMDL and the resulting preliminary management practices. The group will finalize watershed specific best management practices and implementation guidelines. The Department of Lands will facilitate these groups and report progress and recommendations to the appropriate Watershed Advisory Group (WAG) or Basin Advisory Group (BAG) as recommended by DEQ.

III. Implementation Time Line

TIME SCHEDULE

WORK TO BE DONE	DATE	RESPONSIBLE PARTY
FINALIZE FOREST PRACTICES IMPLEMENTATION PLAN	February 2002	IDL –FPA Coordinator
FORM WORK GROUPS	April 2002	IDL- Forest Practice Advisor
CWE REVIEWED - SSBMPs FINALIZED	September 2002	Work Group
APPROVAL	October 2002	DEQ
COMMENCE SSBMP IMPLEMENTATION AND DOCUMENTATION	November 2002	Landowners and FPA CWE Coordinator
FOLLOW-UP MONITORING	2004	CWE Coordinator Landowners, DEQ

IV. Forestry Implementation Plan Funding

Under the FPA, the party responsible for conducting the forest practice must meet applicable rules and BMPs. IDL has responsibility to administer and enforce the FPA. The cost of complying with the FPA is born by the operator, landowner, or third party, depending on any contractual agreements that may be in existence. At present, private forest landowners are annually assessed $.05 per acre for all forestlands and $.12 per thousand board feet harvested to help fund IDL administration of the FPA. State endowment lands fund FPA administration out of dedicated funds appropriated for timber sale administration. These dedicated funds provide about 30% of the monies needed by IDL to administer the FPA, the rest comes from the state general fund. IDL also has the authority to expend funds out of a rehabilitation account, but this is limited to only those costs associated with the repair of unsatisfactory practices identified in the Notice of Violation process.

Some site-specific practices that may arise out of the work group process may be considered voluntary and thus the operator or landowner may not be required to bear the full cost of implementation. In addition, current and prospective funding levels may not be adequate for IDL to oversee additional practices in the drainages. To fully implement additional practices, additional sources of funding must be secured for operator implementation and IDL administration. Options for increased funding include additional landowner assessments, income tax credits, increasing federally funded forestry cost share practices, or grants.

V. Goals and Objectives

The goal of the Forest Practices Implementation Plan is to restore the identified beneficial uses to full support status. In all five of the above listed segments, sediment is the

pollutant that is causing the nonattainment of beneficial uses. In addition, CWE has identified an adverse condition for stream temperature in some reaches.

The Coeur d'Alene TMDL calls for specific reduction of these pollutants. The short term objective, over the next 6 months, of the Forest Practices Implementation Plan will be to finalize the management practices contained in this plan needed to reduce the amount of sediment entering the streams from forest practices activity.

Potential sources of sediment from forest lands include forest roads, skid trails, landings and stream crossings. In addition, there are a number of legacy issues that occur within this subbasin related to historic forest practices that may have impacted the function and health of the riparian zones and the stability of stream channels. The long-term goals of this plan will be to implement identified mitigation to restore these riparian zones and stream channels to a full functioning condition.

VI. Proposed Management Actions and Linkages to Beneficial Uses

Under the 1972 Clean Water Act, Congress authorized states to control nonpoint sources of pollution through the implementation of Best Management Practices (BMPs). A BMP is defined as a measure determined to be the most effective and practical means of preventing or reducing pollution inputs from point or nonpoint sources in order to achieve water quality goals. Idaho's forestry BMPs are included in the Idaho Forest Practices Act, title 38, chapter 13 Idaho Code, passed by the legislature in 1974. The Act and associated administrative rules have been updated on several occasions since that time. The FPA is designed to assure the continuous growing and harvesting of forest tree species and to protect and maintain the forest soil, air, water resources, wildlife and aquatic habitat. FPA rules address timber harvesting practices, forest road construction and maintenance, forest tree residual stocking and reforestation, use of chemicals, and the management of slash and the use of prescribed fire.

The Idaho Water Quality Standards and Waste Water Treatment Requirements, title 39, chapter 1 Idaho Code reference the Forest Practices rules as the approved BMPs for silvicultural activities. The Idaho Department of Lands is the designated state agency responsible for administering and enforcing the FPA on all forest lands in the state. On federal lands, the FPA must be met or exceeded. Generally, additional regulatory and administrative review requirements under NFMA and NEPA result in practices that exceed FPA minimum standards.

Provisions are also included within the FPA to address water quality impacts across the drainages. In 1991, the FPA was amended to include provisions for minimizing watershed impacts resulting from cumulative effects of multiple forest practices. The Idaho Cumulative Watershed Effects (CWE) process includes assessing erosion hazards, canopy closure, stream temperature, hydrology, sediment delivery, channel stability, beneficial uses and nutrients. The CWE process provides a broad scale watershed assessment that determines if water quality problems exist and what should be done to mitigate those problems. This is done on a cooperative approach with affected landowners through development of site specific forestry BMPs.

In 1999, Department of Lands field crews conducted CWE assessments in the five subwatersheds in this plan. Information gained from those field studies combined with parallel work conducted by the US Forest Service and the Bureau of Land Management have been consolidated into a mitigation plan for the drainages with respect to forest practices activities.

VII. Sediment Load Allocation and Reduction

The forest practices sediment load and reduction allocations were defined in the TMDL for all five watersheds. The following table summarizes the data from the TMDL as follows:

	Load Allocation (t/yr)	Load Reduction (t/yr)
Wolf Lodge Creek	763	207
Cougar Creek	307	44
Kidd Creek	75	18
Mica Creek	469	66
Latour Creek	690	113

VIII. Proposed Management Actions

The proposed management actions to reduce sediment take a holistic approach that includes education, technical assistance, diligent administration of current FPA standards, implementation of new standards developed for this plan, and implementation monitoring.

IDL has added one full time Forest Practices Advisor position in the Coeur d'Alene Lake basin to meet the workload. This position is based out of Cataldo, other full time Advisor positions are based in Coeur d'Alene and St. Maries. Logger Education to Advance Professionalism training and several forest landowner workshops, coordinated by the University of Idaho-Cooperative Extension, are planned for the coming years on an annual basis. Other planned program components include a commitment to encourage pre-harvest inspections with landowners and operators, final post-harvest inspections to insure full FPA compliance, and upgrading the forest practices database, including links to GIS.

Preliminary site-specific BMPs, based on CWE draft reports, are included in this plan by drainage. These BMPs are in addition to the BMPs contained in the FPA rules. Further refinements will be made to the preliminary list pending field review with affected forest landowners. That process is expected to be completed and the site-specific practices finalized by November 2002.

IX. Compliance Actions

Prior to the harvest of timber a logging operator must notify the Department of Lands of planned timber harvest by filing a Certificate of Compliance and Notification of Forest Practices. This notification form lists the contractor responsible for slash management and the operator responsible for Forest Practices compliance, the landowner and the log purchasers. Fire hazards and basic forest environmental information on streams, soils and slopes are included in the form.

IDL has the authority to enter logging operations, to inspect for compliance with the Fire Hazard Reduction Laws and the FPA. Any time department personnel inspects a logging operation, a report of inspection will be completed that lists satisfactory practices and unsatisfactory rule violations. While most FPA rules are mandatory, application of BMPs resulting from the CWE process is encouraged but not mandatory.

When the department has determined that the operator has violated any provision of the FPA, it shall be considered a violation. If the violation is minor, the operator may only receive an unsatisfactory inspection report. If the unsatisfactory items are corrected in a timely manner, no Notice of Violation will be issued. A Notice of Violation will be issued for all major infractions or if serious resource damage has occurred or will occur when an operator has multiple minor infractions which are collectively significant or when an operator fails to correct previously noted unsatisfactory conditions.

The Notice of Violation will specify the reason for the violation, any damage or unsatisfactory condition and required repair or mitigation. If the operator corrects the violation, no further action is taken. If an operator fails to correct the Notice of Violation, the department can complete the repair and take civil action to recover repair and legal costs. Provisions also exist to deny an operator the ability to obtain new notifications if an operation is a current violation or the operator can be required to post a bond if it is determined the operator is a repeat or habitual offender of the FPA.

As the department does not have the resources to inspect all logging operations in the area, department personnel work cooperatively with the University of Idaho, industry, environmental groups and other agencies to assist in training private forest landowners and logging operators on appropriate forest management and water quality protection practices. In addition, the Associated Logging Contractors have embarked on an accreditation program for loggers in the State of Idaho. Most purchasers of forest products in this area require that only accredited loggers can sell logs to local mills.

Accreditation is obtained through rigorous initial training and continuing education. Performance standards are verified by follow-up field inspections for compliance with the Forest Practices Act standards.

X. Implementation Effectiveness Monitoring Plan

IDL and other landowners employ rigorous BMP implementation monitoring programs. Funding limitations preclude IDL from conducting rigorous BMP effectiveness monitoring. However, many studies have been conducted that quantitatively demonstrate BMP effectiveness and past FPA audits have demonstrated that if BMPs are properly applied, they are effective at reducing impacts to beneficial uses.

Forest practices in this drainage will be inspected for compliance with the FPA and any other recommended practices. If any unsatisfactory conditions are identified, they will be corrected using IDL standard enforcement procedures as described in the preceding section. If any voluntary BMPs are not met, the landowner operator will not be eligible for any cost-share funds. In addition, provisions exist in the FPA to require operating bonds of repeat or habitual violators of the FPA and IDL has the authority to deny a notification for operators with a current Notice of Violation. The IDL offices in Cataldo and Coeur d'Alene will be the offices of record for all inspection reports in these drainages.

The Idaho Cumulative Watershed Effects process will be reapplied in 2004 to help monitor progress in meeting beneficial use of attainment goals. In addition to the regular FPA inspection program and follow-up CWE assessment conducted by IDL, the Forest Practices Water Quality Management Plan calls for state-wide audits of the application effectiveness of Forest Practices rules.

In addition, the department conducts internal audits on an annual basis. In the past, these audits have demonstrated a very high rate of compliance with standard FPA rules. And the audit process is a key component of the feedback loop mechanism used by the Forest Practices Act Advisory Committee and Idaho State Board of Land Commissioners to evaluate the effectiveness of Idaho forestry BMPs. Selected sales will be audited within these drainages on an annual basis using the established audited protocols.

Appendix C

SOIL CONSERVATION COMMISSION IMPLEMENTATION PLAN

Coeur d'Alene Lake and River TMDL Tributaries

Agricultural Implementation Sub-Plan

(Non-Metals)

1. Introduction, Goals and Objectives

This Agricultural Implementation Sub-Plan outlines an approach to meeting the requirements for pollution reduction as set forth in the Coeur d'Alene Lake and River Tributaries Total Maximum Daily Load (CDA TMDL). This plan covers the following stream segments:

Cougar Creek
Kidd Creek
Latour Creek
Mica Creek
Wolf Lodge Creek

The goal of the Agricultural Implementation Sub-Plan is to restore the identified beneficial uses to full support status. In all five of the above listed segments, sediment is the pollutant that is causing the non-attainment of the beneficial uses. In addition, bacteria is a pollutant in the Mica Creek segment. The CDA TMDL calls for specific reductions for these pollutants.

The objective of the Agricultural Implementation Sub-Plan will be to reduce the amount of sediment and bacteria entering the creeks from agricultural sources. Potential sources of sediment from agricultural lands are sheet and rill erosion, gully erosion, and streambank erosion. Potential sources of bacteria from agricultural lands are livestock grazing, and concentrated livestock feeding areas. Pollutant reductions will be achieved through application of Best Management Practices (BMPs). BMPs will be planned as part of a complete Resource Management System (RMS).

The CDA TMDL identified streambank erosion as the primary source of sediment from agricultural lands for all five stream segments. BMPs for reduction of this sediment loading include; streambank protection, channel vegetation, riparian forest buffers, off-channel livestock water supply, planned grazing systems, livestock use exclusion, fencing, pasture and hayland planting, animal trails and walkways. These BMPs will also be effective in reducing bacteria levels in Mica Creek. Ponds, sediment basins, and gully plugs are effective at reducing sediment delivered to the creek from sheet and rill, and gully erosion. BMPs for concentrated feeding areas may include diversions, filter strips and waste management systems.

A limited amount of monitoring was conducted to determine that these pollution sources are, and remain, in excess of the TMDL. Additional inventory and monitoring will be needed to more precisely determine the locations of the pollution sources. Continued monitoring will also be

required to determine the effectiveness of the applied BMPs. Monitoring efforts should be coordinated with pollution control efforts on forest and residential land.

2. Background

In December of 1999, The Idaho Department of Environmental Quality (DEQ) completed the Non-metals TMDL for the Water Quality Limited Waterbodies of the Coeur d'Alene Lake and River Tributaries (HUC 17010303). These Water Quality Limited Segments include:

Wolf Lodge Creek #3541 (headwaters to CDA Lake)
Cougar Creek #3545 (North Fork Cougar Creek to CDA Lake)
Kidd Creek #3546 (headwaters to CDA Lake)
Mica Creek #3547 (headwaters to CDA Lake)
Latour Creek #3535 (headwaters to CDA River).

See Figure 1 for Subwatershed Map.

The CDA TMDL was submitted to the Environmental Protection Agency (EPA), and approved in July of 2000. The TMDL was mainly directed at sediment, but Mica Creek required a bacteria TMDL also.

The CDA TMDL watersheds are vastly made up of forest lands. Table 1 illustrates Land Use by acreage and percent (TMDL data):

TABLE 1: Land Use

	Wolf Lodge Cr.	Cougar Creek	Kidd Creek	Mica Creek	Latour Creek
Forest Use (Fed./Tribal/State/ Private)	37,974 Ac. 95.6%	8,043 Ac. 75.5%	1,965 Ac. 52.6%	12,335 Ac. 82.6%	33,101 Ac. 99.2%
Agricultural And Residential Subdivision Use (Private)	1,746 Ac. 4.4%	2,609 Ac. 24.5%	1,772 Ac. 47.4%	2,606 Ac. 17.4%	257 Ac. 0.8%

All of the above watersheds have a significant amount of residential subdivision use. This land use continues to grow as people move into the rural Coeur d'Alene area, while the percent of true agriculture continues to decline. Thus, this implementation plan is directed at traditional agricultural use only. The plan will be referred to as a sub-plan, and the intent will be for incorporation with a larger forest use plan, when available.

To date, there has been no Watershed Advisory Group (WAG) involved in the CDA TMDL development. Due to the lack of locally-led participation in this process, coupled with non-point source pollution being non-regulatory, the overall success of this agricultural implementation plan cannot be predicted at present.

3. Beneficial Uses

Table 2 summarizes the current DEQ beneficial use assessment and status of the TMDL tributaries within the CDA Lake and River watershed:

TABLE 2: Beneficial Use Status

Beneficial Uses	Wolf Lodge Creek	Cougar Creek	Kidd Creek	Mica Creek	Latour Creek
Cold Water Biota	**Not Full Support**	**Not Full Support**	**Not Full Support**	**Not Full Support**	**Not Full Support**
Salmonid Spawning	**Not Full Support**	******	******	******	******
Domestic Water Supply	Full Support	******	******	******	******
Primary Contact Recreation	Full Support	******	******	******	Full Support
Secondary Contact Recreation	Full Support	Full Support	Full Support	**Not Full Support**	Full Support

****** Not a designated beneficial use

4. Pollutants - Load Allocation and Reduction

4.1.1 Sediment

The agricultural/ residential subdivision sediment load and reduction allocations were defined in the CDA TMDL for all five tributaries. Table 3 summaries the actual allocation data from the TMDL as follows:

TABLE 3: Agricultural/ Residential Subdivision Sediment Allocations

	Sediment Load Allocation (T./Yr.)	Sediment Load Reduction (T./Yr.)	Sediment Load Reduction (%)
Wolf Lodge Creek	147	40	21.4
Cougar Creek	100	14.7	12.8
Kidd Creek	67	16.3	19.6
Mica Creek	99	13.9	12.3
Latour Creek	77	13	14.4

The TMDL sediment load allocation of 77 T./Yr. for Latour Creek is significantly high compared to land use, and the other four creeks listed (see Table 1 for agriculture land use acres).

The agricultural/residential land use in Latour Creek was identified to be 257 acres, or 0.8% of the entire watershed. (Whether 0.8% of the entire watershed is significant to the TMDL, in itself remains questionable). This load deviation from the TMDL sediment model was predicted by DEQ, based on data sharing from Wolf Lodge Creek. A bank erosion inventory was completed in 2001, and no impacts were seen from agricultural activities.

4.1.2 Bacteria

The CDA TMDL defined a bacteria load allocation and reduction for Mica Creek and the North Fork of Mica Creek. Bacteria exceeded the state recreation use standard of 126 E-coli per 100 ml water during July and August of 1999. Table 4 summarizes the actual allocation data from the TMDL as follows:

TABLE 4: Mica Creek Bacteria Allocations

	Bacteria Load Allocation (E-coli/day)	Bacteria Load Reduction (E-coli/day)	Bacteria Load Reduction (%)
Mica Creek	9.87 Billion	44.2 Billion	81.8
North Fork of Mica Creek	6.66 Billion	7.64 Billion	53.3

The TMDL cites grazing animals along the creek as the most likely source of the bacteria exceedence. However, the monitoring was not able to adequately determine the location of bacteria sources. Additional monitoring will be needed. Private septic systems were also listed as a potential source of bacteria.

4.1.3 Endangered Species Act

Species protected under the Federal Endangered Species Act must be considered when undertaking water quality improvement activities within these watersheds. The US Fish and Wildlife Service should be contacted for possible consultation for any activity, which might have an effect on a listed species.

4.2 Agricultural Point Sources

No agricultural point source pollution was cited in the CDA TMDL.

4.3 Agricultural Non-point Sources

Areas of agricultural lands that contribute excessive pollutants to the water bodies are defined as“Critical Areas” for BMP implementation.

Critical areas for sediment loading in all five watersheds are:

1) Streambanks that have become unstable and erosive due to the impacts of livestock grazing and farming activities.

2) Cropland with sheet and rill erosion rates higher than the soil loss tolerance value for that soil.
3) Cropland with excessive ephemeral or classic gully erosion.

TABLE 5: Critical Sediment Areas by Subwatershed

	Streambank Erosion	Cropland Erosion	
		Sheet Rill [1]	Gully [1]
Mica Creek/ Kidd Creek	7,300 Feet [2]	440 Acres	875 Acres
Wolf Lodge Creek	10,400 Feet [2]	175 Acres	350 Acres
Cougar Creek	1,000 Feet[3]	260 Acres	520 Acres
Latour Creek	4,600 Feet[3]	0 Acres	0 Acres

[1] Cropland acres based on field staff estimates.
[2] Based on actual bank erosion survey conducted in the summer of 2000.
[3] Bank erosion survey conducted in summer of 2001.

Critical areas for bacteria loading in Mica Creek are:
1) Agricultural lands where livestock graze (500 Acres).
2) Agricultural lands where livestock have access to the creek (10,000 Feet).
3) Concentrated livestock feeding areas that do not have surface runoff controls (1 possible).

Critical area maps have been developed for each watershed, which show the general location of potential sources of sediment and/or bacteria. These areas will be the focus of BMP implementation and the maps are available upon request.

4.4 Proposed Treatment

The proposed treatment for sediment and bacteria reduction will be to implement appropriate Resource Management Systems (RMS) on critical areas within the affected watersheds. A RMS is a combination of BMPs and is defined by the Natural Resource Conservation Service (NRCS) Field Office Technical Guide. When an RMS is implemented, both onsite and offsite impacts from sediment and bacteria should be reduced to acceptable levels. Follow-up monitoring will determine the effectiveness of the RMS and show the need for any modifications or additional improvements that may be needed.

In general, the RMS will be designed to reduce the impact of livestock grazing on riparian areas. The key components needed to reach TMDL reductions include fencing the riparian area from livestock, riparian buffers, and streambank protection. This will allow riparian vegetation to stabilize streambanks and reduce bank erosion rates.

Tables 6-9 list the proposed additional BMPs and an estimate of the extent of each BMP needed to address resource concerns within the watershed. There are many BMPs already in place within the watershed, and those are not included in this list.

TABLE 6: Mica Creek and Kidd Creek Proposed BMPs

NRCS Practice	**Amount**
Nutrient Management	8 fields
Channel Vegetation	500 feet
Prescribed Grazing	1000 acres
Pasture and Hayland Planting	50 acres
Forest Riparian Buffer	5 acres
Fencing – Riparian Use Exclusion or Cross Fence	20,000 feet
Riparian Use Exclusion	25 acres
Heavy Use Area Protection - Livestock Access	1 each
Tank or Trough	11 each
Pipeline	3050 feet
Pond	3 each
Spring Development	4 each
Pump Plant for Water Control	2 each
Animal Trails and Water Walkways	3 each

TABLE 7: Wolf Lodge Creek Proposed BMPs

NRCS Practice	Amount
Nutrient Management	10 fields
Channel Vegetation	2,500 feet
Prescribed Grazing	300 acres
Pasture and Hayland Planting	150 acres
Forest Riparian Buffer	10 acres
Fencing - Cross Fence	2000 feet
Fencing - Riparian Use Exclusion	10,000 feet
Riparian Use Exclusion	60 acres
Heavy Use Area Protection - Livestock Access	3 each
Tank or Trough	4 each
Pipeline	2000 feet
Streambank Protection	400 feet
Pond	2 each
Sediment and Erosion Control Structure	2 each
Sediment Basin	2 each

TABLE 8: Cougar Creek Proposed BMPs

NRCS Practice	Amount
Nutrient Management	10 fields
Channel Vegetation	5,000 feet
Prescribed Grazing	500 acres
Pasture and Hayland Planting	150 acres
Forest Riparian Buffer	10 acres
Fencing - Cross Fence	2000 feet
Fencing - Riparian Use Exclusion	10,000 feet
Riparian Use Exclusion	60 acres
Heavy Use Area Protection - Livestock Access	6 each
Tank or Trough	6 each
Pipeline	2000 feet
Streambank Protection	500 feet
Pond	3 each
Sediment and Erosion Control Structure	5 each
Sediment Basin	5 each

TABLE 9: Latour Creek Proposed BMPs

NRCS Practice	Amount
Channel Vegetation	1,000 feet
Forest Riparian Buffer	10 acres
Streambank Protection	1000 feet

4.5 Implementation Priority

The Kootenai-Shoshone SWCD has established subwatershed priority for TMDL implementation in the following order; Mica/Kidd Creeks, Wolf Lodge Creek, Cougar Creek, and Latour Creek. Due to limited staffing for technical assistance, it is not feasible or efficient to begin implementation efforts for all five watersheds simultaneously. Therefore, the conservation district will focus on implementation of Mica and Kidd Creeks first.

4.6 BMP Cost Estimates

The cost of implementing the proposed BMPs has been estimated using average costs from the NRCS Field Office Technical Guide. The cost per acre is based on the total cost for the proposed BMPs and the total agricultural acres as reported in the CDA TMDL. The costs for each watershed are shown in Table 10.

TABLE 10: Total BMP Costs

Watershed	Total BMP Costs	Per Acre Cost
Mica Creek and Kidd Creek	$170,000	$39.00
Wolf Lodge Creek	$131,000	$75.00
Cougar Creek	$189,000	$72.00
Latour Creek	$35,000	$136.00

Potential funding sources include: WQPA (Water Quality Program for Agriculture), EQIP (Environmental Quality Incentives Program), 319 Program, Continuous CRP (Conservation Reserve Program), RCRDP (Resource Conservation and Rangeland Development Program).

4.7 Water Quality Monitoring

Monitoring will be an integral component of the overall implementation plan. Monitoring protocols should be designed to measure the effectiveness of the applied BMPs in reducing the amount of pollutants from agricultural sources found in the water bodies. Monitoring should also measure the status of the identified beneficial uses. The DEQ in coordination with the Idaho Soil Conservation Commission (SCC) and the Kootenai-Shoshone Soil and Water Conservation District (K-S SWCD) will lead monitoring activities.

There is also an immediate need for additional monitoring. It would be very helpful to have data that would more closely define the location of bacteria pollution sources within the Mica Creek watershed. It is recommended to continue the monitoring of the original two sites, plus additional sites at the upper agricultural boundaries and a site at the bottom of the Mica Flats drainage.

4.8 Information and Education

The Conservation Partnership (K-S SWCD, SCC and NRCS) will use their combined resources to provide information to agricultural landowners within these watersheds. There are a variety of opportunities available to reach landowners including newspaper articles, direct mailings, public meetings and personal contacts. Information and education efforts will be designed to:

1) Provide information on the TMDL process
2) Provide information on pollutant allocations and required reductions
3) Offer technical assistance in the development of Resource Management Systems
4) Offer technical assistance in Best Management Practice implementation.

In addition to reaching the individual landowners in each watershed, there will also be an effort made to inform the general public about the efforts of landowners to improve water quality in local creeks.

Appendix D

DRAFT TMDL IMPLEMENTATION PLAN
IDAHO TRANSPORTATION DEPARTMENT-DISTRICT ONE
STATE HIGHWAYS AND LOCAL PUBLIC ROADS
LATOUR, WOLF LODGE, COUGAR, KIDD AND MICA CREEKS
REVISED: 01/17/02

OVERVIEW

The mission of the Idaho Transportation Department (ITD) is to provide a high quality, cost effective transportation system that is safe, reliable, and responsive to the economic and efficient movement of people and products. ITD's principle operations are dominated by the need to maintain and improve the state highway system. ITD also provides local transportation agencies with planning support and contract administration services for federally funded activities associated with local roads.

Inherent to ITD's mission and operations is the protection of the natural and human environment and compliance with all associated federal, state and local rules and regulations. In North Idaho, environmental protection can be particularly challenging for ITD due to the mountainous topography, relative wet weather patterns, and the proliferation of lakes, streams and wetlands in our region.

The effects of state and local roadway infrastructure on environmental quality is principally dictated by past roadway corridor development. For the most part, highway corridors are well established and will continue to influence environmental baseline conditions, particularly with respect to stream morphology and hydrology in lower steam reaches. Maintenance activities and roadway improvement projects on existing routes, however, do pose some risk of additional adverse impact to these highly altered systems, primarily from short-term construction related sediment discharges. ITD's response to this risk has been and will continue to be reasonable and comprehensive effort to control erosion and manage sediment within construction limits.

In some cases, adverse environmental impacts resulting from previous construction of transportation systems near water bodies may be correctable through beneficial stream channel and floodway alterations and/or reclamation actions. These may include but are not limited to the use of biological and physical stabilization techniques, as well as realignment and subsequent removal of original roadway fill material. Such opportunities are currently not formally identified but a few may exist on the state highway system and many more are likely within local roadway corridors.

This TMDL Implementation Plan identifies various commitments made by ITD and local transportation agencies to prevent, and in some cases reduce sediment discharges to Latour Creek, Wolf Lodge Creek, Cougar Creek, Kidd Creek, and Mica Creek. ITD's TMDL commitments are rooted in existing ITD policies for erosion and sediment control, an acknowledgment of new and improved erosion control products and practices, and a proactive effort to inventory and correct existing problem areas.

COSTS AND FUNDING

The cost of ITD's TMDL Implementation Plan will be borne from existing transportation funding programs. ITD generally does not anticipate more than just minimal additional expense because of this plan; however, effective erosion control will not be limited by project funding. Project costs in terms of erosion and sediment control practices and/or water quality improvement projects will be commensurate with the need to abate or correct particular water quality concerns in these TMDL watersheds as they become apparent.

Priority projects to improve water quality, as identified by ITD and local agencies during annual field inspections, may qualify for enhancement funds provided by TEA-21 or other federal funding sources. ITD and local agencies will seek such funding on an ongoing basis.

ITD TMDL MANAGEMENT MEASURES, PARTICIPATION AND TIMELINE

MANAGEMENT MEASURES	ITD D1	ITD HQ	Las	Contractor	FHWA	DEQ	FREQ.
1. ITD-D1 SEDIMENT CONTROL BMPS, PROCEDURES, AND REVIEWS							
a. revise ITD-BMP Catalog and provide training	X	X	X				06/02
b. emphasize the following: use of BFMs (think erosion first); protection of buffer zones; effective use of perimeter controls; spec erosion protection for runoff channels; rock armor erodable areas in and near concentrated flows; frequent use of check dams and sediment traps; use fast establishing cover crops; use retaining walls to avoid wetlands and streams where feasible; etc.	X	X	X				every project
c. ITD preliminary design reviews	X	X	X				every project
d. ITD final design reviews	X	X	X			request	every project
e. environmental clearances (EISs, EAs, Cat Ex.)	X	X	X		X		every project
f. plans, specification and estimates (PSE) Reviews	X	X	X			request	every project
g. pre-construction conferences	X		X	X		request	every project
h. environmental inspections	X	X	X	X	X	request	every project
i. 404 compliance	X		X	X			every project
j. NPDES compliance	X		X	X			every project
k. TMDL compliance review	X		X			X	Annually
2. SMART CONTRACTS							
a. stricter winter shutdown specifications and scheduling on large earthwork jobs	X		X	X			As needed
b. construction staging plans	X		X	X			every project
3. ITD/LOCAL AGENCY WATER QUALITY IMPROVEMENT							
a. Mica Creek floodplain reclamation	X						2003
b. ITD/Highway District MOA	X		X				09/02
c. develop list of known problem areas	X		X				09/02
d. annual evaluation of known or suspected problem areas	X		X				09/02
e. list of future projects in TMDL watersheds	X		X				ongoing
f. planning and Implementation of water quality enhancement projects	X		X				ongoing

MAINTENANCE OF EFFORT OVER TIME

ITD is bound to implement effective sediment and erosion control practices by requirements set forth in ITD policies and standards (ITD-Admin. Policies A-04-07 and A-04-05 (Environmental Monitoring), ITD-DOH Memo No. E2 (Erosion and Sedimentation Control), and ITD's Design Manual. In addition, point and nonpoint source discharges from many state and local projects

are subject to existing environmental requirements such as Clean Water Act Sections 402 (EPA-NPDES) and 404 (Army Corps of Engineers-Dredge and Fill), Idaho non-point source regulations, and local stormwater and floodplain ordinances. Finally, yet importantly, National Environmental Policy Act (NEPA) requirements apply to all ITD and local agency projects that seek federal aid funding, as administered by the Federal Highway Administration (FHWA). All of these requirements taken together reinforce ITD's ongoing commitment to the highest standards of environmental protection. To this end, the breadth of these requirements points to the fact that ITD is one of the most regulated entities in Idaho.

This TMDL Implementation plan also places a new emphasis on coordination and partnering between ITD and local transportation agencies with respect to water quality protection and the planning of improvement projects in TMDL watersheds. ITD and local agencies will commit to conducting annual inspections of local roads in TMDL watersheds by examining potential water quality problem areas. Local agencies will provide ITD with a list of known or suspected problem areas. This list will facilitate the planning, funding and implementation of priority restoration projects. Further, local agencies will be responsible for providing ITD with a list of all future projects in these watersheds. These commitments will be institutionalized in an agreement between ITD and local agencies.

MONITORING AND EVALUATION

With respect to sediment load allocations, ITD's TMDL monitoring and evaluation effort will continue to be driven, in large part, by existing ITD administrative policies and procedures for erosion and sediment control (i.e., Admin. Policy A-04-07, Environmental Monitoring). These policies set forth intra-agency coordination procedures for ITD's Project Development, Construction, and Maintenance staff involved with erosion and sediment control planning, implementation and BMP effectiveness monitoring. The most notable element of these policies is the assignment of an Environmental Inspector on all construction activities. ITD's environmental inspections will continue to improve with the current trend of increased collaboration among Environmental Planners, Design Engineers, Construction Engineers, Inspectors and reviewing agencies. Frequent BMP inspections by these multidisciplinary teams, as well as instream turbidity monitoring, will continue to facilitate proper BMP maintenance and will provide critical feedback needed to ensure compliance with non-point source pollution regulations. Resource and regulatory agencies and the public will continue to be allowed access to plans and construction sites upon request. In addition, coordination activities between ITD and local agencies will be evaluated by the successful completion of annual field reviews and the development of lists identifying existing roadway/water quality problems as well as future roadway and water quality improvement projects in TMDL watersheds.

PUBLIC INVOLVEMENT

As a public agency, all of ITD's operations involve the public. Most, if not all, of ITD's moderate to large scale projects include public involvement plans and well-advertised public meetings and/or hearings. In addition, federally funded projects, which comprise the majority of ITD's projects, are subject to formal public involvement requirements set forth by the Federal Highway Administration. ITD continues to welcome and seek comment and review of its projects and erosion control policies and practices by the public and public agencies. The ITD District 1 office is located at 600 West Prairie Avenue and is always open weekdays between 7:AM and 4:PM. Engineering and Environmental staff can be reached by telephone at (208) 772-1200.

Appendix E

Nonpoint Funding Sources

1. § 104(b)(3)…Tribal and State Wetland Protection Grant, EPA
2. § 303 (d)… Water Quality Planning and Management, IDEQ/EPA
3. § 314 Clean Lakes Grants, EPA/IDEQ
4. § 319 (h)… Nonpoint Source Grants, EPA/IDEQ
5. Aquatic Ecosystem Restoration, Corps Of Engineers (CoE)
6. Challenge Cost-share Program, Beauro of Land Management (BLM)
7. Conservation Operations Program (CO-01), Natural Resource Conservation Service (NRCS)
8. Conservation Technical Assistance (CTA), NRCS
9. Cooperative Studies Program, USGS
10. Ducks Unlimited Marsh Projects, Ducks Unlimited
11. Environmental Quality Incentives Program (EQIP), NRCS
12. Environmental Restoration, CoE
13. Farm Services Agency Direct Loan Program, Farm Services Agency
14. Flood Plain Management Services, CoE
15. Flood Risk Reduction, Federal Emergency Management Agency (FEMA)
16. Forest Incentives Program (FIP), NRCS
17. Forest Service Challenge Cost-share Program, USFS
18. Forest Service Soil and Water Improvement Program, USFS
19. Ground Water Program, IDEQ
20. Hydrologic Unit Areas (HUA's), NRCS
21. Idaho Riparian Tax Credit (RTC) (Idaho Code §63-3024B), Interagency State Tax Commission
22. Idaho Water Resources Board Financial Programs, IDWR
23. National Conservation Buffer Initiative, NRCS
24. Planning Assistance, CoE
25. Range Improvement Fund - 8100, BLM
26. Small Watersheds (PL-566), NRCS
27. Partners for Wildlife (Partners), US Fish and Wildlife Service
28. Pheasants Forever
29. Resource Conservation and Development (RC&D), NRCS
30. Resource Conservation and Rangeland Development Program (RCRDP), Soil Conservation Commission (SCC)
31. Source Water Assessment Program (SWAP), IDEQ
32. State Agricultural Water Quality Program (SAWQP), (1980-1999); Water Quality Cost-share Program for Agriculture, SCC/Idaho State Department of Agriculture
33. State Revolving Fund (SRF), IDEQ
34. Stewardship Incentives Program (SIP), IDL
35. Storm Water Program, IDEQ
36. Swampbuster, NRCS
37. Wellhead Protection Program, IDEQ
38. Wetlands Reserve Program (WRP), NRCS
39. Wildlife Habitat Incentive Program (WHIP), NRCS