

Pend Oreille Lake Nearshore Nutrient TMDL Implementation Plan

A Nutrient Management Plan *for* Pend Oreille Lake Bonner County, Idaho

December 2004

Prepared in cooperation with:

Idaho Department of Environmental Quality
Tri-State Water Quality Council
Idaho Soil Conservation Commission
Idaho Department of Lands
Idaho Transportation Department
Bonner Soil and Water Conservation District
Bonner County

Table of Contents

| | |
|--|----|
| ACKNOWLEDGEMENTS | 1 |
| 1.0 EXECUTIVE SUMMARY | 2 |
| 2.0 INTRODUCTION | 5 |
| 2.1 OVERVIEW OF PEND OREILLE LAKE WATERSHED..... | 5 |
| 2.2 OVERVIEW OF NEARSHORE TMDL..... | 7 |
| 2.3 PURPOSE AND OBJECTIVES OF IMPLEMENTATION PLAN | 11 |
| 3.0 IDENTIFICATION OF RESPONSIBLE PARTICIPANTS..... | 11 |
| 3.1 IDAHO DEPARTMENT OF LANDS | 12 |
| 3.2 IDAHO DEPARTMENT OF TRANSPORTATION..... | 12 |
| 3.2 IDAHO SOIL CONSERVATION COMMISSION | 12 |
| 3.4 LEAD AGENCY COORDINATION (IDEQ) | 13 |
| 4.0 EXISTING PROJECTS..... | 13 |
| 5.0 PROPOSED MANAGEMENT ACTIONS..... | 14 |
| 5.1 LIST OF PROPOSED PROJECTS | 14 |
| 5.2 TIMELINE FOR IMPLEMENTATION | 26 |
| 6.0 MONITORING AND EVALUATION | 26 |
| 6.1 WATER QUALITY MONITORING PLAN | 27 |
| 6.1.1 MONITORING GOALS AND OBJECTIVES | 27 |
| 6.1.2 MONITORING PLAN COMPONENTS | 28 |
| 6.1.3 MONITORING PARAMETERS | 30 |
| 6.2 IMPLEMENTATION MONITORING | 30 |
| 6.3 DATA MANAGEMENT..... | 30 |
| 6.4 EXCEEDANCE OF TMDL TARGETS..... | 31 |
| 6.4.1 INSTANTANEOUS EXCEEDANCE..... | 31 |
| 6.4.2 SHORT-TERM EXCEEDANCE | 31 |
| 6.5 REVISIONS TO TMDL AND IMPLEMENTATION PLAN..... | 31 |
| 7.0 ANTICIPATED COSTS AND POTENTIAL FUNDING SOURCES..... | 31 |
| 8.0 MAINTENANCE OF EFFORT OVER TIME..... | 32 |
| 8.1 RESPONSIBLE PARTIES COMMITMENT | 32 |

| | |
|---------------------------------------|----|
| 9.0 PUBLIC INVOLVEMENT | 33 |
| 9.1 PUBLIC INVOLVEMENT STRATEGY | 33 |

Tables

| | |
|---|----|
| Table 1. Summary of Response Letters | 13 |
| Table 2. Education Projects | 16 |
| Table 3. Coordination/Implementation Projects | 19 |
| Table 4. Water Quality Targets for Pend Oreille Lake | 27 |
| Table 5. Monitoring Plan Components: Basic Monitoring Plan and Add-ons..... | 29 |

Figures

| | |
|---|----|
| Figure 1. Clark Fork-Pend Oreille Watershed Boundary..... | 7 |
| Figure 2. Pend Oreille Lake Map..... | 10 |

Appendices

| | |
|--|-----|
| APPENDIX A LIST OF ACRONYMS..... | A-1 |
| APPENDIX B GLOSSARY OF TERMS..... | B-1 |
| APPENDIX C EXECUTIVE SUMMARY, PEND OREILLE LAKE TMDL..... | C-1 |
| APPENDIX D BMP RESOURCE LIST..... | D-1 |
| APPENDIX E IDAHO DEPARTMENT OF LANDS PLAN..... | E-1 |
| APPENDIX F IDAHO TRANSPORTATION DEPARTMENT PLAN..... | F-1 |
| APPENDIX G IDAHO SOIL CONSERVATION COMMISSION PLAN..... | G-1 |
| APPENDIX H NONPOINT TECHNICAL/FINANCIAL ASSISTANCE SOURCES..... | H-1 |
| APPENDIX I PUBLIC WORKSHOP COMMENTS AND RESPONSES..... | I-1 |
| APPENDIX J FINAL PUBLIC COMMENTS ON PLAN AND RESPONSES..... | J-1 |
| APPENDIX K REFERENCE LIST..... | K-1 |

ACKNOWLEDGEMENTS

This document is a result of a collaborative effort between federal, state, county, public and private entities who worked together to develop a comprehensive management plan for protection of the nearshore areas of Pend Oreille Lake. The Pend Oreille Lake planning team includes:

| | | |
|---------------|---|----------------|
| Ruth Watkins | Tri-State Water Quality Council 307 No. Second Avenue, Sandpoint, ID 83864 | (208) 265-9092 |
| Mike Hartz | Idaho Transportation Department 600 W. Prairie Ave, Coeur d'Alene, ID 83814 | (208) 772-1200 |
| Tim Closson | Kootenai-Ponderay Sewer District P. O. Box 562, Kootenai, ID 83840 | (208) 263-0229 |
| Mike Doherty | U.S. Army Corps of Engineers 3815 Schreiber Way, Coeur d'Alene, ID 83814 | (208) 765-7237 |
| Bob Hansen | Water Systems Management. Inc. 67 Wild Horse Trail, Sandpoint, ID 83864 | (208) 265-4270 |
| Jeff Stewart | U. S. Dept. of Agriculture, Natural Resources Conservation Service 1500 Hwy 2, Room 306, Sandpoint, ID 83864 | (208) 263-5310 |
| David Mosier | Idaho Department of Environmental Quality 2110 Ironwood Pkwy, Coeur d'Alene, ID 83814 | (208) 769-1422 |
| David Stasney | DVS Environmental Inc. 311 S. 14 th Street, Coeur d'Alene, ID 83814 | (208) 964-1490 |
| Clare Marley | Bonner County Planning Department 127 So. First Ave, Sandpoint, ID 83864 | (208) 265-1458 |
| Bill Love | Idaho Department of Lands 2552 Hwy 2, Sandpoint, ID 83864 | (208) 263-5104 |
| Jamie Davis | Idaho Soil Conservation Commission / Idaho Association of Soil Conservation Districts 1500 Hwy 2, Room 306, Sandpoint, ID 83864 | (208) 263-5310 |

1.0 EXECUTIVE SUMMARY

The Clark Fork-Pend Oreille Basin lies in western Montana, northern Idaho, and northeastern Washington. The Clark Fork River begins near Butte and drains an extensive area of western Montana before entering Idaho's Pend Oreille Lake. The lake is the source of the Pend Oreille River in northeastern Washington, which ultimately drains to the Columbia River.

In 1994, the State of Idaho designated Pend Oreille Lake as "threatened" due to the increasing amount of nutrients (nitrogen and phosphorus) and resulting algae growth in the lake. Because of this designation, the Idaho Department of Environmental Quality (IDEQ) prepared a problem assessment on the lake in 1999. The assessment concluded that the lake's nearshore waters would likely degrade over the long-term and that a plan should be developed to assure protection of the lake's water quality. The assessment recommended development of a Total Maximum Daily Load (TMDL) to control phosphorus (the nutrient of concern) in order to protect and maintain water quality standards in the nearshore waters of the lake.

During 2001-2002, a technical team of agencies and stakeholders developed the nearshore TMDL. The focus of the TMDL is on the lake's nearshore zone—the band of water along the shoreline where light can penetrate to the bottom and that averages around 50 feet in depth. The dominant factor affecting water quality in this shallow nearshore zone is loading from human activities in the areas immediately surrounding and draining into the lake. The TMDL sets a threshold for total phosphorus (9 ug/l average throughout the nearshore waters and 12 ug/l as an instantaneous "action level") and identifies the total allowable load (4,588 pounds of total phosphorus per season, June through September) that the lake can assimilate while continuing to meet water quality standards. The TMDL was approved by the U.S. Environmental Protection Agency (EPA) in October 2002, and then work began on development of an implementation plan to prescribe specific management actions to reduce nutrient loading from the lake's nearshore drainage area.

A TMDL provides the scientific foundation for protection of a waterbody by setting thresholds, or targets, for the pollutant(s) of concern. An implementation plan puts a TMDL into practice by identifying and implementing specific pollution control measures designed to achieve the targets outlined in the TMDL. As required by IDEQ, an implementation plan also describes when pollution control actions will take place, designates responsible parties, estimates costs and potential funding opportunities, and sets up a plan for monitoring, evaluation, maintenance of effort over time, and public involvement.

Recognizing that an implementation planning effort is more likely to be successful when a collaborative community approach is taken, IDEQ enlisted the assistance of the Tri-State Water Quality Council (TSWQC), a diverse stakeholder group, to help develop the Pend Oreille Lake nearshore TMDL implementation plan. Working with the IDEQ, the TSWQC organized and facilitated the efforts of the Pend Oreille Lake Planning Team. Members of the planning team included representatives from IDEQ, TSWQC, Idaho Soil Conservation Commission, Natural Resources Conservation Service, Idaho Transportation Department, Idaho Department of Lands, Bonner County Planning Department, Kootenai-Ponderay Sewer District, U. S. Army Corps of Engineers and interested citizens.

From fall 2002 through spring 2004, the planning team researched nutrient pollution problems, compiled existing pollution control programs, and developed management actions and potential opportunities for improving the water quality of Pend Oreille Lake and its watershed. The team met with agencies responsible for, or participating in, key existing water pollution control programs, including IDEQ, Bonner County Planning Department, Bonner County Public Works Department, Idaho Transportation Department, Idaho Department of Lands, U. S. Forest Service, Panhandle Health District, City of Sandpoint, Bonner Soil & Water Conservation District, Selkirk Cooperative Weed Management Area and U. S. Coast Guard Auxiliary. The team also held a public workshop in October 2003 to gather ideas from the public about actions that could be taken to protect the lake's nearshore water quality from nutrient pollution. From this variety of sources, the team then assembled management actions that could serve to protect lake water quality by enhancing or expanding upon existing programs, with a focus on activities that take place in the immediate nearshore drainage area. The resulting list of actions is the focal point of the implementation plan.

A total of 82 recommended actions fall into two program areas: **education** projects and **on-the-ground implementation** projects. The planning team considers education to be one of the most effective methods for meeting the goals of the TMDL. Through education, informed watershed residents and lake users will be more conscious of how their activities affect the lake, and thus may be more willing to modify those activities to meet water quality goals that they understand. However, on-the-ground pollution control measures are also essential for achieving the goals of the TMDL, because these actions can directly prevent or reduce the amount of phosphorus loading into the lake.

Categories for the on-the-ground actions include: development/shoreline property, stormwater, transportation/roads, forestry, agriculture, Eurasian milfoil and recreation, along with program coordination and water quality monitoring and data management. The recommended actions include a spectrum of activities that ranges from protecting and maintaining natural vegetation along shorelines, developing land disturbance and grading permit requirements, investigating increased setbacks for new waterfront lots, identifying and implementing beneficial roadway projects in water quality problem areas, encouraging landowner participation in federal and state forestry and agriculture cost share programs, and pursuing creative opportunities for revenues to fund the control of Eurasian milfoil. For each recommended action, the plan identifies lead agencies, estimated costs, anticipated implementation dates, and possible funding sources.

Dates for the recommended actions are set for the first five years of the implementation plan. Monitoring of the lake will be undertaken annually to determine the effectiveness of these initial actions. Based on monitoring and evaluation results at the end of the first five-year period—and subsequent five-year periods thereafter—management actions to reduce nutrient loading from local sources will be revised or developed as needed to meet the nutrient targets in the TMDL. The implementation plan is designed with an adaptive management strategy in mind. IDEQ recognizes that the implementation plan must allow for change over time as new scientific information becomes available, the lake's watershed population increases, new laws and ordinances are enacted, new projects are identified, and existing projects are implemented.

The plan outlines a water quality monitoring program to be undertaken to evaluate if the TMDL targets are being met and to assess overall project effectiveness. Monitoring data will also be used to strengthen the overall understanding of nearshore water quality in Pend Oreille Lake.

The monitoring program includes recommended actions to be taken by resource managers in the event of exceedances of the 12 ug/l action target. This includes either an instantaneous exceedance (exceedance of the target at any one time at a location) or a short-term exceedance (exceedance of the target for two consecutive years in the same location.)

In accordance with Idaho Code, the implementation plan confirms commitment from the lead agencies to devote the necessary resources to meet the targets of the TMDL. IDEQ will meet annually with the designated lead agencies and other resource managers and stakeholder groups to review the monitoring results and to determine the progress of individual projects and the implementation plan as a whole. These annual meetings will also ensure that projects are being monitored and that all agencies are held accountable for their respective projects. Additionally, each year IDEQ will hold a public meeting to provide updates and seek local community input on the implementation plan. IDEQ will prepare an annual implementation plan progress report for distribution at each annual public meeting.

2.0 INTRODUCTION

The Pend Oreille Lake nearshore Total Maximum Daily Load (TMDL) was submitted by the Idaho Department of Environmental Quality (IDEQ) and approved by the U.S. Environmental Protection Agency (EPA) in 2002. IDEQ has set a target date of 18 months after EPA approval of a TMDL to develop and approve a TMDL implementation plan. IDEQ is keenly aware that collaborative efforts on many fronts are required in order to meet the 18-month implementation plan completion date, to meet water quality targets established in the nearshore TMDL, and to attain full beneficial uses at the earliest possible date. For this reason, the IDEQ applied for an EPA grant to fund the Tri-State Water Quality Council (TSWQC), a diverse stakeholder group, to help develop and implement the Pend Oreille Lake nearshore TMDL and associated implementation plan.

Working with the IDEQ, the TSWQC facilitated the efforts of the Pend Oreille Lake planning team. From fall 2002 through spring 2004, the group researched pollution problems and existing water quality protection programs and developed management actions and potential opportunities for improving the water quality of Pend Oreille Lake and its watershed. The result of the 18-month collaborative effort is this implementation plan.

2.1 OVERVIEW OF THE PEND OREILLE LAKE WATERSHED

The Pend Oreille Lake watershed is part of the larger Clark Fork – Pend Oreille Basin which encompasses about 25,000 square miles in western Montana, northern Idaho, and northeastern Washington (Figure 1. Clark Fork – Pend Oreille watershed boundary). Located almost entirely in Bonner County, Pend Oreille Lake is the largest and deepest natural lake in Idaho. The surface area of the lake is approximately 143 square miles (95,000 acres) with about 175 miles of shoreline (Figure 2). The Clark Fork River is the principal tributary to the lake, contributing about 92 percent of the annual inflow (Frenzel, 1991a, as cited in DEQ 2002). Other tributaries to the lake include the Pack River, Lightning Creek, and Sand Creek with numerous smaller streams entering the lake at various locations. Surface water outflow from the lake consists only of the Pend Oreille River, and groundwater contributions from the lake to the Spokane Valley-Rathdrum Prairie Aquifer have been estimated between 3.8 and 7 percent of the total aquifer recharge (IDEQ, 2002).

The lake is most often divided into two hydrologic basins comprising the deep and relatively poorly-flushed southern basin and the relatively well-flushed, shallow northern basin. The deep southern basin contains approximately 95 percent of the overall lake volume. The pelagic zone (deep – open waters) accounts for approximately 89 percent of the lake's volume while the littoral zone (shallow nearshore areas and the focus of this TMDL implementation plan) accounts for approximately 11 percent (EPA 1993, as cited in IDEQ 2002).

The lake's watershed supports a natural resource based economy with an array of land use types. Recreation constitutes an important business for the entire lake community and the Pend Oreille Lake region continues to increase in popularity as a recreational destination. With 14 species of fish, the lake has a well-deserved reputation as a fishermen's paradise (a total estimated 465,000 hours per year is spent by anglers fishing the lake) and opportunities for a variety of water-related recreational activities abound. With a population rate in Bonner County currently at 38 percent, development in the lake's watershed—and use of the lake—is increasing significantly.

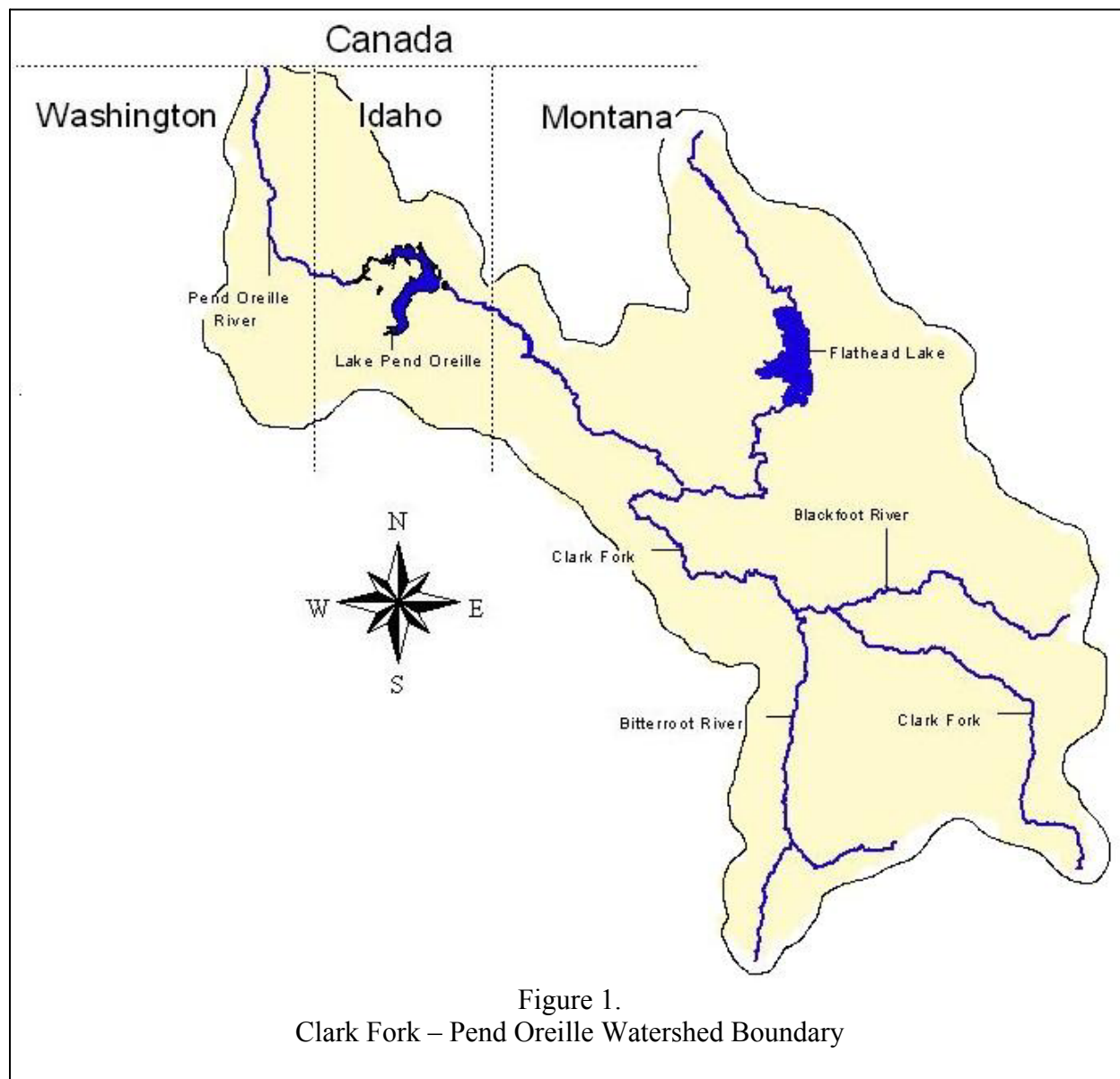
As a result, the nearshore areas around the lake, and the lake's water quality, are experiencing environmental pressures from increased human activities and residential development.

Pend Oreille Lake has been designated as a Special Resource Water under Idaho's Water Quality Standards. This designation stipulates that no new point source discharges are allowed, nor may existing sources increase discharges of pollutants to the lake, a tributary, or an upstream segment if these discharges would compromise water quality necessary to designated uses of the water body. Pend Oreille Lake is home to bull trout, a species listed under the federal Endangered Species Act, and has designated uses listed in Idaho Code including: cold-water biota, salmonid spawning, recreation, water supply, wildlife habitat, and aesthetics.

Approximately 90 percent of the flow and 80 percent of the loading of total phosphorus into Pend Oreille Lake comes from Montana's Clark Fork River. Studies have shown that the Clark Fork is the predominate influence on the water quality of lake's deep open waters, while the nearshore, shallow areas of the lake are predominately influenced by sources located within one mile of the lake's shoreline. (TSWQC 2001). To address nutrient loading to the lake's open waters from the Clark Fork, a nutrient loading target for phosphorus¹ has been set at the Montana/Idaho border. This target was officially adopted by the two states and TSWQC in 2002 and provides the basis for a coordinated interstate management approach by apportioning responsibilities between the two states for future water quality planning and implementation activities to protect the lake's open waters. It was agreed in order to complement the protection afforded by the border agreement that a TMDL program would be implemented in Idaho to reduce impacts from local nutrient sources affecting the lake's shallow nearshore areas.

The Pend Oreille Lake Nearshore TMDL focuses on waters in the lake less than 16 meters (~50 feet) in depth. The nearshore load allocation in the TMDL focuses on areas draining directly to the lake without first flowing into a major tributary. To address pollutant loads from other portions of the drainage, there are a number of other TMDLs currently existing or in development. The Pend Oreille basin in Idaho is composed of four different 4th field hydrologic cataloging units, or HUCs. They are the Lower Clark Fork River HUC, Pend Oreille Lake HUC, Priest River HUC and the Pend Oreille River HUC. Some TMDLs have been completed and approved in the Pend Oreille Lake and Priest River HUCs. In the Pend Oreille Lake sub-basin, in addition to the lake nearshore TMDL, there are sediment TMDLs for Gold Creek, Cocolalla Creek, Hoodoo Creek and the Pack River and its tributaries. Cocolalla Lake also has TMDLs for nutrients and dissolved oxygen. Additional TMDLs will be necessary for remaining and newly listed waters in the Priest River and Pend Oreille Lake HUCs. Sub-basin assessments and TMDLs are currently being developed for the Lower Clark Fork River and Pend Oreille River.

¹ The Montana/Idaho border nutrient loading target is 259,500 kg/yr total phosphorus from Montana (Clark Fork River) and 69,151 kg/yr total phosphorus from the Pend Oreille Lake watershed in Idaho. A ratio of 15:1 total nitrogen to total phosphorus was also set as a desirable lower limit to avoid the occurrence of algal blooms in the lake.



2.2 OVERVIEW OF THE NEARSHORE TMDL

Pend Oreille Lake was first placed on the State of Idaho’s 1994 Section 303(d) list in response to public comments concerning water quality. The lake was retained on Idaho’s 1996 and 1998 Section 303(d) lists. Comment letters received by EPA and IDEQ during the 1998 listing cycle specifically indicated concern over water quality and nuisance algae in the nearshore areas of the lake. A problem assessment prepared by IDEQ in 1998 determined that the open waters of the lake did not exceed water quality standards and a formal TMDL was not warranted. However, the problem assessment also concluded that the lake’s shallow nearshore waters and bays would likely degrade over the long-term and that a plan should be developed to assure protection of the lake’s nearshore water quality. IDEQ’s assessment recommended that a nutrient nearshore TMDL be developed for the nearshore areas of the lake to prevent increased nuisance algae growth and that an associated implementation plan be designed through which water quality

concerns could be addressed. The nearshore TMDL for Pend Oreille Lake was prepared by Tetra Tech Inc. in collaboration with the TSWQC, IDEQ, and EPA and was approved by EPA in 2002. The Executive Summary of the Pend Oreille Lake TMDL is included as Appendix C.

The nearshore TMDL addresses **nutrient pollution**. Nutrients occur naturally in the ecosystem, however a variety of human activities cause excessive nutrients (primarily phosphorus and nitrogen) to enter the lake. Acting as fertilizers, excessive nutrients promote the growth of too much algae (“slime” on shoreline rocks) and other aquatic weeds in the nearshore areas. If left unmanaged, excessive algae and weeds can impair the lake’s aesthetic qualities, recreational uses and domestic water supplies. Excessive algae can also deplete the amount of oxygen in the water, which can negatively affect fish and other aquatic organisms. Past monitoring has shown that the abundance of algae in the lake has been primarily dependent on the amount of the nutrient, phosphorus; therefore the TMDL focuses specifically on this nutrient.

The Pend Oreille Lake nearshore TMDL establishes a lake wide average water quality target of 9 micrograms per liter total phosphorus² with an action threshold of 12 micrograms per liter during the critical summer months of June through September when algae growth occurs. These targets provide guidelines to evaluate water quality and the attainment of water quality standards in the nearshore waters and will be used to implement the components of a water quality monitoring plan.

The primary target of **9 micrograms per liter represents an average concentration throughout the nearshore waters**, while the action threshold of **12 micrograms per liter represents an instantaneous concentration at any one location** collected during routine monitoring.

The TMDL also establishes a total load allocation for the nearshore areas of the lake of 4,588 lbs. of total phosphorus over the critical season of June through September. The load allocation is given solely to nonpoint sources because no point sources discharge to the lake’s nearshore waters. The load allocation of 4,588 lbs/summer is applicable to all sources in the nearshore drainage area of the lake (see Figure 2).

What is a TMDL?

A TMDL is a tool for maintaining water quality standards for a waterbody. A TMDL consists of (1) an evaluation of water quality data about a waterbody followed by (2) development of a numeric target, or endpoint, for the pollutant of concern that can be measured to show whether water quality standards are being met in that waterbody, and (3) a determination of the total allowable load that the waterbody can assimilate (known as “the loading capacity”) and still meet water quality standards. In the case of Pend Oreille Lake, the numeric target, or measurable endpoint, is 9 micrograms per liter total phosphorus as an average throughout the nearshore waters and 12 micrograms per liter at any one location; and the loading capacity to be distributed among local sources in the lake’s watershed is 4,588 lbs. of phosphorus during each year’s critical summer period.

² A microgram is equal to 0.000001 grams; the 9 micrograms per liter total phosphorus target therefore represents 0.000009 grams of total phosphorus in a liter (about two pints) of lake water.

The focus of the TMDL is on the lake's **nearshore zone**—the band of water along the shoreline where light can penetrate to the bottom and that averages around 50 feet in depth. These nearshore waters of the lake are mostly influenced by sources immediately surrounding the lake or discharging directly to the nearshore waters (IDEQ 2002). A band of land surrounding the lake drains directly to the lake rather than through tributary flows; this band—which includes concentrated developed land—represents the nearshore drainage area that affects the water quality conditions of the shallow waters of Pend Oreille Lake (See Figure 2). Due to the topographic variations in this band, the distance of the boundary of the nearshore drainage area around the lake is not uniform. However, when the nearshore areas around the lake are considered collectively, the drainage area corresponds to approximately a one-mile band of land immediately surrounding the lake. Therefore, nonpoint activities taking place in this approximate one-mile band are the focus of the TMDL and the implementation plan³.

Point and Nonpoint Sources of Pollution

Point source pollution occurs when pollutants are discharged from an identifiable or confined point, including pipes, ditches, channels, sewers, tunnels and containers of various types. An example of a point source is a wastewater treatment plant that treats a community's wastewater and discharges the treated water into a stream, river or lake. Point sources, such as a wastewater treatment plant or a concentrated animal feeding operation, must have a discharge permit. On Pend Oreille Lake, there are no wastewater treatment facilities discharging directly into the lake, so the nearshore TMDL is focused specifically on nonpoint sources.

Nonpoint source pollution occurs when pollutants flow over a wide land area, not from one specific location. Nonpoint pollution generally occurs when water runs over land, picks up pollutants, and then deposits those pollutants into surface waters. This polluted runoff comes from sources that cannot be defined as discrete points, such as areas of timber harvesting, surface mining, agriculture, livestock grazing and residential development. Nonpoint pollution is often thought of as "people pollution" because it is caused collectively by the activities of many people over a broad diffuse area. An array of activities can cause nonpoint pollution including the application of fertilizers, pesticides and lawn chemicals; land clearing and erosion; septic systems; and runoff from streets, dirt roads and construction sites.

³ An exception to this approximate one-mile band is the area north of the lake identified in the Agricultural Implementation Plan (Appendix G) as the "extended north shore." This area encompasses about 10,500 acres of land between Sand Creek and Pack River that drain into the lake rather than into the two tributaries and therefore are prioritized for implementation of agricultural conservation programs to protect lake nearshore water quality.

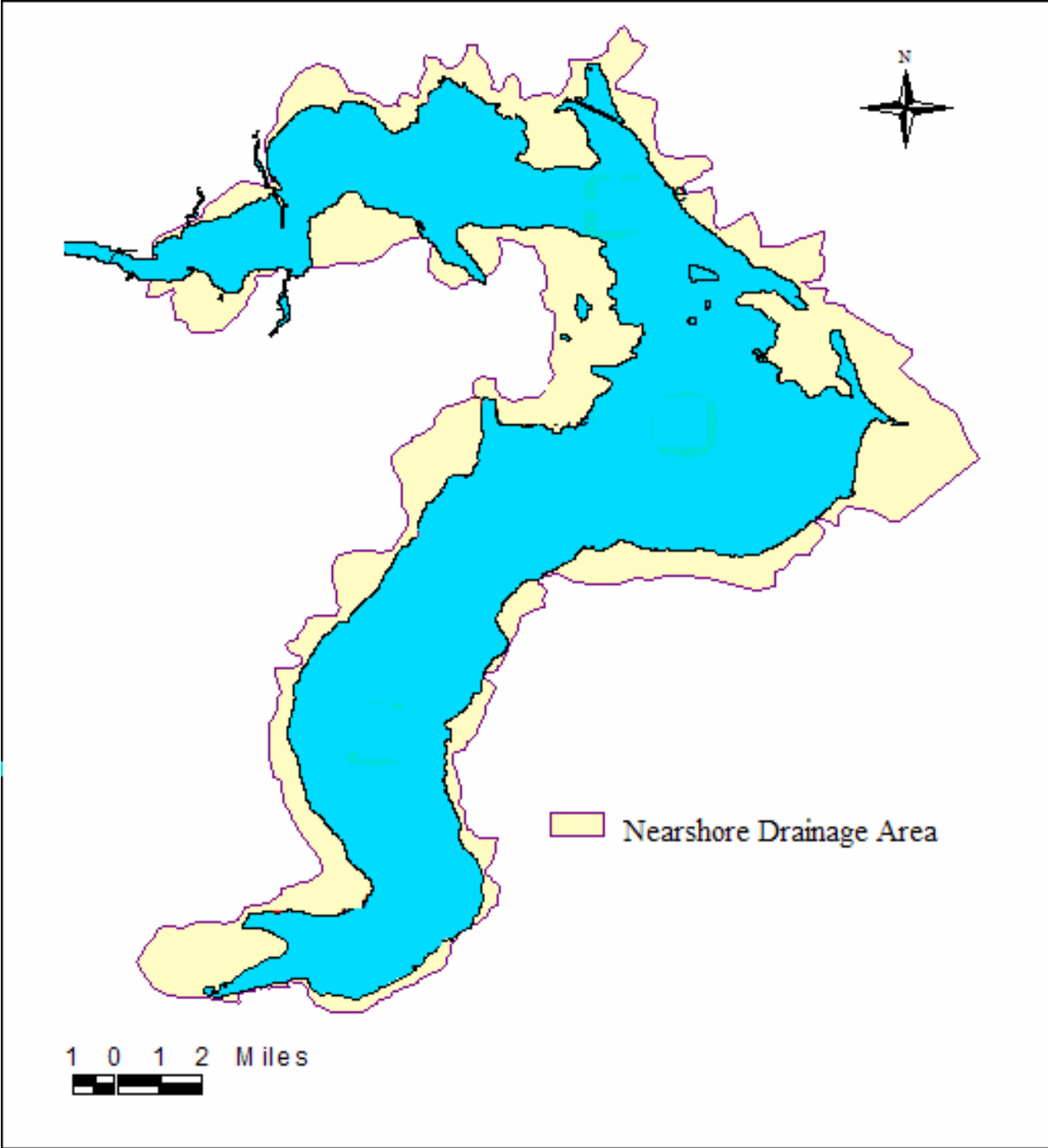


Figure 2.
Pend Oreille Lake

2.3 PURPOSE AND OBJECTIVES OF THE TMDL IMPLEMENTATION PLAN

The purpose of the nearshore TMDL implementation plan is to prescribe specific pollution controls and management actions that will protect the nearshore water quality of Pend Oreille Lake by reducing the amount of nutrients going into the lake from local sources.

Every state is required under the federal Clean Water Act to ensure that surface waters are meeting state water quality standards and to develop a remedy for waters that do not meet standards in the form of a TMDL. Once the TMDL has been established, it must be followed by an implementation plan to make certain that actions are taken in an attempt improve water quality and protect the listed body of water from further degradation. The State of Idaho's nonpoint source management plan (IDEQ, 2000) states:

“The primary purpose of any implementation plan under the TMDL process is to identify and describe the specific pollutions controls or management measures 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 IDEQ, along with designated lead agencies responsible for TMDL implementation and other entities participating in this implementation plan, 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 the nearshore water quality of Pend Oreille Lake.

3.0 IDENTIFICATION OF RESPONSIBLE PARTICIPANTS

In order for this implementation plan to succeed, there must be participation from citizens, business, industry, government, tribes and organizations within the watershed. 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 Idaho Soil Conservation Commission (SCC) for grazing and agricultural activities through local conservation districts, the Idaho Transportation Department (ITD) for public road construction, the Department of Agriculture for aquaculture, and the IDEQ for all other activities. Designated agencies are expected to take the lead in identifying and selecting proven management practices that can be used to reduce nonpoint source pollution, and facilitate implementation for their respective activities.

The lead agencies under this TMDL implementation plan are IDEQ, ITD, IDL, and SCC with involvement from the Natural Resource Conservation Services (NRCS), and the Bonner Soil and Water Conservation District (BSWCD). Federal agencies working in cooperation with IDL on forestry issues include the U.S. Forest Service, and Bureau of Land Management. The Bonner County road department will work in cooperation with ITD to address water quality impacts from county roads within the watershed. The IDEQ recognizes that involvement from the Idaho Department of Fish and Game (IDFG) as well as the Bonner County Planning Department may

have significant impacts on designated beneficial uses in the near shore areas and will make a genuine effort to include them in all aspects of TMDL implementation and planning.

3.1 IDAHO DEPARTMENT OF LANDS

The IDL is the designated agency in Idaho for administering the Idaho Forest Practices Act on state, private and federal forestlands. Rules developed under the Act provide Best Management Practices (BMPs) for forestry activities.

The purpose of the Forest Practices portion of the nearshore implementation plan is to reduce excessive pollutant delivery to Pend Oreille Lake. IDL develops site specific riparian prescriptions for forest practices occurring within 75 feet of fish bearing lakes. Pre-operational inspections are usually conducted to determine if the standard Lake BMPs are adequate

3.2 IDAHO TRANSPORTATION DEPARTMENT

The ITD is designated as a lead agency responsible TMDL implementation actions related to public roadways. ITD coordinates these efforts with local roadway jurisdictions such as highway districts, counties and municipalities. ITD's TMDL implementation plan for the Pend Oreille Lake nearshore area involves the following: 1) maintain updated roadway construction BMPs, guidelines and manuals for roadway construction; 2) provide technical assistance to local roadway jurisdictions for project development and construction activities; 3) administer roadway funding programs affecting water quality in Pend Oreille Lake; 4) implement current roadway projects and associated water quality mitigation requirements within the implementation area; and 5) identify, fund and implement roadway projects with water quality benefits and/or to correct known water quality problems within the TMDL implementation area.

3.3 IDAHO SOIL CONSERVATION COMMISSION

The SCC is the designated management agency in Idaho for managing agricultural nonpoint source pollution. Although the SCC does not have regulatory or licensing authority over water quality or pollution control, the mission of the SCC is to provide support to Idaho's Soil and Water Conservation Districts for wise use and improvement of natural resources (RPU 2003). The SCC works with BSWCD, the Idaho Association of Soil Conservation Districts (IASCD), and the NRCS in a conservation partnership to reach common goals and successfully deliver conservation programs in Bonner County.

The purpose of the agricultural portion of the nearshore implementation plan (Appendix G) is to assess agricultural activities occurring in the watershed, identify critical areas contributing to nutrients to the nearshore area, and present treatment alternatives for these areas. The north shore of the lake is the primary focus of this implementation plan as most of the agricultural activities occurring around Pend Oreille Lake are located in this area.

Agricultural areas that contribute excessive pollutants to waterways are defined as "critical areas." These areas are prioritized for treatment based on their location relative to Pend Oreille Lake or waterways in the nearshore area and the potential for pollutant transport and delivery to water. The following critical areas have been identified for this implementation plan:

- Agricultural areas on the shoreline of Pend Oreille Lake

- Agricultural operations with unstable and eroding streambanks on site
- Livestock feeding operations with direct access to riparian areas and waterways
- Over-utilized pasture and hayland adjacent to waterways

Although the Pend Oreille Lake Nearshore TMDL delineates an allocation area covering a 1-mile radius around the lake, the Agricultural Implementation Plan encompasses agricultural operations occurring between the Pack River and Sand Creek watersheds. Agricultural pollution reductions will be attained through the application of Resource Management Systems (RMS) and BMPs developed and implemented on site with individual agricultural operators. In addition, efforts will be made to educate land users in the nearshore area on the effects of agricultural activities on water quality.

3.4 LEAD AGENCY COORDINATION (IDEQ)

The IDEQ will provide forums for the exchange of scientific information between lead agencies and other interested parties throughout the implementation of this plan. The designated lead agencies are responsible under Idaho Code §39-3601 for complying with the provisions and agreements set forth within this implementation plan. While the IDEQ is responsible for overseeing the development of this plan and monitoring progress over time, the success of this plan is directly dependant upon the commitment and involvement of lead agencies and stakeholders within the watershed and their ability to implement the necessary changes outlined in this plan to restore beneficial uses.

4.0 EXISTING PROJECTS

In an effort to understand water quality efforts taking place within the Pend Oreille Lake watershed, a letter was prepared by the planning team and mailed by the IDEQ to key agencies and entities asking for water quality related information on programs or projects that have been completed or undertaken in the last five years. Table 1 provides a synopsis of the response letters received from the mailing. Copies of the letters can be obtained from the IDEQ.

Table 1. Summary of Response Letters

| Agency/Org. | Project Description | Date | Existing (E) Planned (P) Completed (C) |
|--------------------------|--|---------------|--|
| NRCS | Bayview Road Rockslide Stabilization | 2001 | C |
| NRCS/ JUB Engineering | City of Kootenai storm water management plan | 1998- 2002 | C |
| NRCS | Ponder Point bank stabilization | 1998 | C |
| NRCS | Conservation Reserve Program Approx. 700 acres | 1998- 2003 | E |
| NRCS | Carter Creek stabilization | 2004 | P |
| NRCS | 160 acres of tree planting and pre-commercial thinning | 2003- 2004 | E |
| Kalispel Tribe | Wildlife habitat land management | | E |
| US Army | Lake winter elevation kokanee | 2001- | E |

| | | | |
|-----------------------------------|--|------|---|
| Corps of Engineers | spawning study | 2007 | |
| Kootenai County | Site Disturbance Ordinance | | E |
| Kootenai Ponderay Sewer District | Land application project | 2001 | E |
| Bottle Bay Water & Sewer District | Qualified for re-licensing land for sewage application | 2002 | P |
| Naval Surface Warfare Center | Integrated Natural Resource management plan | 2002 | C |
| Naval Surface Warfare Center | Comprehensive Environmental Response Plan | 2003 | C |

5.0 PROPOSED MANAGEMENT ACTIONS

Education, on-the-ground actions, preventative maintenance and program coordination will all play a role in reducing nutrient loading to protect the nearshore waters of Pend Oreille Lake. The planning team considers education to be one of the most effective methods for meeting the goals of the lake nearshore TMDL. Through education, informed watershed residents and lake users will be more conscious of how their activities affect the lake they depend on and value, and thus may be more willing to modify those activities to meet water quality goals that they understand.

On-the-ground application of effective best management practices (BMPs) is also crucial to achieving the nutrient 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 from 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 business, industry, or citizen conducting a project within this watershed should utilize the most appropriate BMPs as needed to ensure compliance with the TMDL. A list of BMPs, along with contact information for responsible agencies, is provided in Appendix D.

Public comment usually results in the identification of watershed specific projects and is greatly encouraged. IDEQ will meet with the designated lead agencies and other stakeholders to determine the progress of individual projects and the implementation plan as a whole. This will ensure that all projects are being monitored and that all agencies are held accountable for the projects they have listed.

5.1 LIST OF PROPOSED PROJECTS

The following tables provide an initial list of proposed management actions by category developed by the planning team in cooperation with the designated lead agencies under Idaho Code §39-3601 responsible for implementation. The tables also include ideas for management actions generated at a public workshop held by the planning team in October 2003 in Sandpoint, Idaho. Table 2 lists actions for education projects; Table 3 lists actions for coordination and on-the-ground implementation projects.

Objective of the Proposed Management Actions

The objective of the proposed management actions listed in this implementation plan is to reduce nearshore water quality problems in Pend Oreille Lake by reducing nutrient loading from local sources. This implementation plan does not address the open waters of the lake; however, some of the proposed management actions will likely have benefits to the open waters of the lake as well.

Table 2. Education Projects

| Agency / Organization ⁴ | Project Description | Anticipated Start-up Date | Estimated Cost | Potential Funding Sources ⁵ |
|--|--|---------------------------|----------------|--|
| LPOIC, IDEQ | Prepare/distribute map of lake that includes pump-out stations, info on milfoil, grey water and litter, boater safety, etc. (similar to Priest Lake map.) | 2005 | \$4,000 | USBoat Foundation, Avista Corp. (funds received) |
| TSWQC | Develop long-term marketing strategy and campaign for educating and engaging general public, as well as targeted groups (such as lakefront property owners, contractors, realtors, etc.) Need on-going campaign that reaches all sectors of the lake community and influences value systems about the lake (similar to Rathdrum Aquifer campaign.) Utilize University of Idaho marketing graduate student. | 2005/06 | \$10,000 | Public/private grants |
| TSWQC | Coordinate with county waterways committee on education programs and funding programs. | 2005 | \$1,500 | TSWQC |
| TSWQC, LPOIC | Research requirements of the federal Clean Vessel Act and the disposal of grey water; make information available to the boating public as part of map project. | 2004 | \$500 | TSWQC |
| PHD, TSWQC | Distribute Panhandle Health District brochures on septic tank and drain field maintenance and use targeted to lakeshore property owners. Include information on septic in other educational materials. | 2005 | \$3,000 | PHD, Public/private grants |
| BSWCD, NRCS, SCC, IASCD | Develop/distribute a brochure (and include in other educational materials) about fertilizer use and ways to reduce impacts on waterways; tie in with fertilizer impacts to milfoil growth at docks. (i.e., restrict fertilizer use along shoreline.) | 2005 | \$5,000 | BSWCD, BCWC, Public/private grants |
| Bonner County, municipalities, EPA, IDEQ | Expand education programs to improve compliance with stormwater and construction ordinances. | 2005 | \$10,000 | EPA |
| Bonner County, municipalities, PHD | Develop/implement education programs and workshops for contractors, engineers, design professionals and excavators on construction site (and off-site) BMPs. | 2005 | \$5,000 | Bonner County, TSWQC, BSWCD, grants |

⁴ First entity shown is lead agency for project; other agencies/groups to assist.

⁵ Funding sources are listed as potential sources of funds for projects; other sources, in addition to the listed grant(s) are available. The lead agency will seek public/private funds as needed.

| | | | | |
|--|---|----------|-------------------|------------------------------|
| IDEQ, BSWCD, NRCS, SCC, IASCD, Bonner County, PHD, IDL, municipalities | Develop educational materials about land disturbance activities that agencies can hand out with permits (including permits for buildings, docks, and septic systems). | 2005 | \$5,000 | Public/private grants |
| Bonner County, BSWCD, NRCS, SCC, IASCD | Develop/implement education programs on shoreline buffers and potential impacts from lawn fertilizers, pesticides/herbicides, chemicals used to control milfoil, oil, antifreeze, shoreline burning, removal of native vegetation. Work with county commissioners on shoreline protection (burning, buffers, fertilizer use, etc.). | 2005 | \$5,000 | Public/private grants |
| IDEQ, TSWQC, IDFG | Educate shoreline property owners on effects of high concentrations of waterfowl and wildlife on drinking water and water quality. | 2006 | \$1,000 | IDEQ, Public/private grants |
| TSWQC, COE, Bonner County | Develop a flyer about shoreline burning that describes the permit required to burn a fire below the high water mark and explains the potential impacts to water quality from shoreline burning; develop ways to distribute the flyer, such as attached to other shoreline activity permits. | 2005 | \$3,000 | TSWQC, Public/private grants |
| IDEQ, TSWQC, BCWC, IDPR, IDFG, USFS | Develop and distribute educational materials about potential impacts from recreational activities. | 2008 | \$6,000 | Public/private grants |
| TSWQC | Develop educational materials and a distribution program to reach jet skiers and water skiers, informing them about the 200-foot no-wake zone and potential impacts from wakes in the shallow nearshore areas. | 2007 | \$4,000 | TSWQC, Public/private grants |
| Extension Office, SCWMA, Bonner County | Hold neighborhood meetings to educate about milfoil and the need for buffers and native vegetation to reduce phosphorus loading; provide information on what plants will grow well here and where to purchase. | 2006 | \$2,000 | Public/private grants |
| BSWCD, NRCS, SCC, IASCD, Extension Office | Educate agricultural landowners about the benefits of practices related to water quality, pasture/forest & nutrient management and available cost share programs. | 2004 | \$7,350 | SCC, IASCD, NRCS, BSWCD |
| BCWD | Coordinate with SCWMA on funding for weed management programs and education (noxious weeds and aquatic milfoil.) | On-going | Varies by project | RAC, Public/private grants |
| BCWD, BCWC, SCWMA, TSWQC | Prepare educational materials for shoreline property owners and work with landowners on options for milfoil control (comparison of various in-lake techniques through publications and potential pilot projects.) | 2005 | \$10,000 | Public/private grants |
| IDPR, USFS, IDL | Distribute existing educational materials about potential impacts from motorized recreation in certain sensitive areas (off trail and off route impacts.) | 2006 | \$2,000 | IDPR |

| | | | | |
|--------------|--|-----------------------|---------|---------------------------------|
| TSWQC, LPOIC | Utilize community events (such as sail boat races, log races, county fair, treasure hunts) to raise funds for projects or marina improvements and to educate boaters. | 2005 | \$4,000 | Community events |
| IDEQ | Marinas are major point of contact for boater education; develop education materials and signage about impacts from boat washing and cleaning hulls, greywater and other disposal. | 2005 (map project) | \$4,000 | Funding received |
| TSWQC | Develop educational materials about lake protection specifically targeted to short-term visitors to the lake (i.e, what they can do to help protect the lake while they are visiting here) and develop ways to reach visitors with this information. | 2006 | \$5,000 | TSWQC, Public/private grants |

Table 3. Coordination and Implementation Projects

| Agency / Organization ⁶ | Project Description | Anticipated Start-up Date | Estimated Cost | Potential Funding Sources ⁷ |
|------------------------------------|--|---------------------------|----------------|--|
| COORDINATION | | | | |
| IDEQ | Convene a committee that will review projects and evaluate progress each year and respond as needed to possible TMDL exceedances. | 2005 | \$7,500 | IDEQ |
| IDEQ | Institute annual site visits with lead agencies to review TMDL projects. | 2005 | \$3,000 | IDEQ |
| IDEQ | Work with federal and state agencies, county and cities to maintain or improve enforcement of existing regulations. | 2005 | \$3,750 | IDEQ |
| IDEQ | Seek funding for project implementation, monitoring and education projects. | 2005 | \$3,750 | IDEQ |
| IDEQ | Coordinate with agencies regarding consistency of existing setback standards. | 2005 | \$1,500 | IDEQ |
| IDEQ | Pursue possibilities for counties to become management entity for waste water as well as solid waste. | 2005 | \$1,500 | IDEQ |
| IDEQ | Explore options for creating a vision for quality of life issues (economics, experience and services) in the lake's watershed communities. | 2005 | \$1,500 | IDEQ |
| TSWQC | Pursue grants to establish mini-grant fund for pollution prevention/reduction projects | 2005 | \$3,000 | TSWQC |
| IDEQ | Encourage coordination between IDEQ and USFS with assessments in lake sub-watersheds. | 2005 | \$1,500 | IDEQ |
| TSWQC | Convene a "council of local governments", a group that would meet regularly (quarterly or semi-annually) to discuss and coordinate various local government efforts related to implementation of the lake plan. | 2005 | \$500 | TSWQC |
| MONITORING/DATA MANAGEMENT | | | | |
| IDEQ, TSWQC | Research, secure funding for, and implement lake monitoring program (shown on Table 5 in Section 6). This would include project-related monitoring and overall TMDL compliance monitoring with data submitted to one centralized database. Coordinate with other | 2005 | \$5,000-40,000 | IDEQ, TSWQC |

⁶ First entity shown is lead agency for project; other agencies/groups to assist.

⁷ Funding sources are listed as potential sources of funds for projects; other sources, in addition to the listed grant(s) are available. The lead agency will seek public/private funds as needed.

| | | | | |
|---------------------------------------|--|-----------|---------------|--------------------------------------|
| | groups/agencies already monitoring (such as IDFG.) | | | |
| IDEQ, TSWQC | Institute citizen volunteer monitoring program as part of overall monitoring program. | 2006 | \$3,000-5,000 | IDEQ |
| IDEQ, TSWQC | Utilize results of monitoring program to identify and prioritize specific geographic areas around lake to target for further investigation of septic systems, or stormwater impacts. | 2007/2008 | \$3,000 | IDEQ |
| IDEQ, TSWQC | Utilize results of monitoring program to identify geographic areas around lake to target for implementation and to prioritize types of projects for these areas. | 2008 | \$1,500 | IDEQ, TSWQC |
| IDEQ | Require that on-the-ground TMDL implementation projects include a monitoring component to evaluate results. | 2005 | \$1,500 | IDEQ |
| IDEQ | Complete existing coverages of Geographic Information System (GIS) for lake's watershed; include monitoring information as one layer. | 2006 | \$10,000 | IDEQ |
| IDEQ | Utilize source water assessments to provide data on watersheds for GIS. | 2005 | \$1,500 | IDEQ |
| IDEQ | Work with Panhandle Health District to identify areas in lake nearshore that may have septic problems. | 2006 | \$1,500 | IDEQ |
| TSWQC | Prepare/distribute announcements for a graduate study project to investigate nutrients/nutrient loading from decayed plants in areas that have been treated to kill milfoil. | 2008 | \$500 | TSWQC |
| TSWQC, IDEQ | Investigate the feasibility of conducting an assessment of the influence of groundwater on lake nearshore water quality and the potential for undertaking this work as part of a graduate study project. | 2008 | \$1,000 | TSWQC |
| DEVELOPMENT/ShORELINE PROPERTY | | | | |
| Bonner County | Research setback standards for protection of water quality; increase county setback requirements on waterfront lots—base criteria on soils, shoreline stability, and vegetation types. | 2005 | \$1,500 | Bonner County |
| Bonner County | Investigate new regulations regarding buffers. | 2004/05 | \$1,500 | Bonner County |
| Bonner County | Investigate ways to increase enforcement of existing buffer requirements, possibly through compliance or land use inspectors. (Cost shown does not include pay for any new positions.) | 2006 | \$800 | Bonner County |
| Bonner County, IDL, COE | Investigate incentive program (tax break) for property owners who leave native vegetation along shoreline or re-plant native vegetation. | 2005 | \$1,500 | Bonner County |
| Bonner County | Investigate buffer protection as part of building location permits. | 2005 | \$800 | Bonner County |
| Bonner County, IDEQ | Promote low impact methods of bank stabilization to reduce erosion. | 2006 | \$5,000 | Bonner County, Public/private grants |

| | | | | |
|---|--|----------|-------------------|---|
| Bonner County, PHD, IDEQ, sewer districts | Identify subdivisions located near existing sewer systems (completed 2004); investigate methods and financing for hooking these subdivisions to sewer. | 2008 | \$6,000 | Public/private grants |
| Bonner County, PHD | Reduce impacts from septic; increase lot size in areas where septic are identified as a problem, or exceed set threshold. | 2005 | \$3,000 | Bonner County |
| Bonner County, PHD | Set up a fund to address failing septic systems. (High priority areas identified through monitoring.) | 2008 | \$6,000 | Public/private grants |
| Bonner County | Pursue possible ordinance on shoreline burning. | 2008 | \$1,500 | Bonner County |
| Bonner County | Increase enforcement of stormwater ordinance. | 2006/07 | \$30,000 | Bonner County |
| Bonner County | Pursue possible setback or protection zones for wetland areas. | 2007 | \$2,000 | Bonner County |
| Bonner County | Pursue possible land disturbance and/or grading permit requirements. | 2005 | \$1,500 | Bonner County |
| TSWQC, Cities of Hope and East Hope | Coordinate efforts with the cities of Hope and East Hope to incorporate lake protection measures into local planning efforts, especially regarding the increased potential for subdivision of land and development, in the Ellisport Bay area. | 2005 | \$2,000 | TSWQC |
| Municipalities, sewer districts | Ensure that local industrial discharge ordinances are compatible with federal requirements. | 2007 | \$5,000 | Municipalities, sewer districts |
| CFPOC | Pursue opportunities to protect sensitive or critical areas through conservation easements or fee title acquisition. | On-going | Varies by project | CFPOC, Forest Legacy, WRP, FRPP, public grants, mitigation funds, private landowner |

| STORMWATER | | | | |
|---|--|---------|----------|-------------------------------|
| City of Sandpoint | Implement new federal stormwater regulations. (New guidelines not yet available.) | Unknown | \$75,000 | EPA Stormwater Program grants |
| City of Sandpoint, other municipalities | Institute and maintain stormwater drain stenciling programs in Sandpoint and other lake communities. (Funding amount shown for Sandpoint.) | 2005 | \$500 | City of Sandpoint |
| IDEQ | Work with City of Sandpoint and other municipalities on stormwater management. | 2005 | \$1,500 | IDEQ |
| IDEQ, TSWQC | Monitor municipal stormwater discharges in areas of potential impact identified through monitoring program. | 2006 | \$4,500 | IDEQ |
| Bonner County Municipalities TSWQC | Implement a program to increase awareness of, and compliance with, federal stormwater regulations for 1-acre construction sites. | 2007 | \$5,000 | Bonner County, municipalities |

| | | | | |
|---|---|-----------------------------------|----------------------|--------------------|
| Bonner County | Develop a program to address impacts from unfiltered storm drains that empty into the lake. | 2006 | \$1,500 | Bonner County |
| TRANSPORTATION/ROADS | | | | |
| ITD | Update roadway construction BMPS and manuals and provide technical assistance. | Ongoing | N/A | TEA-21 |
| ITD | Administer roadway programs affecting water quality in lake watershed: State Highways, National Highway System; Bridges; Congestion Mitigation Air Quality; Idaho Forest Highway; Local Roads; Enhancement Program. | Ongoing | N/A | TEA-21 |
| ITD | Implement current programmed projects affecting water quality in lake watershed: Garwood to Sandpoint; Sand Creek Byway; Dover Bridge; US-2 Dover to Sandpoint; Sandpoint to Kootenai Cutoff Road. | Ongoing | N/A | TEA-21 |
| ITD | Identify project-specific pollutant reduction strategies, BMPs and contract provisions for programmed projects in TMDL watersheds. | Per program date | Project dependent | TEA-21 |
| ITD, Bonner County, Kootenai County, municipalities, local highway agencies | Identify roadway projects with water quality benefits and/or water quality problem areas. Participate in transportation planning team meetings (Bonner County Area Transportation Team and Kootenai County Area Transportation Team). Participate in local agency grant workshops. Conduct project planning meetings as needed. | Annual review | \$10,000 | TEA-21 |
| Bonner County, ITD, municipalities, local highway districts | Work on development and implementation of regulations/guidelines for reducing impacts from roads (federal, state, county, cities and private) for construction, maintenance and operations near lakes, other waterways and wetlands. | 2005/06 | \$15,000 | Bonner County |
| FORESTRY/AGRICULTURE | | | | |
| IDL | Identify and map Class 1 and Class 2 streams and incorporate into lake GIS. | Completed, 2004; update as needed | N/A | IDL |
| IDL | Determine site specific BMPs for areas where tributaries enter the lake. | On-going | \$100 per site visit | IDL |
| IDL | Increase IDL enforcement of FPA practices. | On-going | \$100 per site visit | IDL |
| IDL, Bonner County, IDEQ | Develop guidelines/BMPs for non-commercial tree removal. | 2005 | \$500 | IDL |
| IDL, Bonner County | Implement agency/county coordination to improve enforcement of FPA practices on residential use timber harvest and road building in near shore areas. | 2005 | \$1,000 | IDL, Bonner County |

| | | | | |
|--|---|---------|----------------------------|--|
| SCC, BSWCD, NRCS, IASCD, IDL, Extension Office | Encourage landowner participation in EQIP and other federal/state forestry and agriculture cost share programs. | 2004 | \$2,000 | SCC, NRCS, IASCD, BSWCD (Bonner County) |
| SCC, BSWCD, NRCS, IASCD | Encourage the development of conservation plans and implementation of BMPs to reduce impacts to surface water from agricultural activities. | 2004 | \$2,000 | SCC, NRCS, IASCD, BSWCD (Bonner County) |
| SCC, BSWCD, NRCS, IASCD | Prepare a livestock inventory for lake nearshore area and lake northshore area. | 2004-05 | \$8,400 | IASCD, SCC |
| SCC, BSWCD, NRCS, IASCD | Work with landowners to implement management practices to reduce impacts to watercourses from livestock. | 2004 | Unknown (project specific) | EQIP, WQPA, CRP, WHIP, WRP, HIP, private landowner |
| EURASIAN MILFOIL | | | | |
| Bonner County, TSWQC | Continue updates to five-year strategic plan for containment of milfoil and adapt annual milfoil control programs as needed. (Milfoil management also ties in with shoreline and riparian area management and reduction of phosphorus loading.) | 2004 | \$2,000 | Bonner County |
| TSWQC | Explore alternatives to chemical treatment of milfoil and work with Bonner County on implementation of non-chemical options for controlling milfoil. | 2005 | \$2,000 | TSWQC |
| Bonner County, TSWQC, IDL, COE, IDFG, SCWMA | Work with agencies to coordinate and integrate milfoil control measures (e.g., fabric to smother milfoil also kills beneficial aquatic plants.) | 2004 | \$2,000 | Bonner County |
| TSWQC | Investigate Idaho nonpoint source grants for milfoil control (tie in with phosphorus control and lake TMDL, and the need to reduce phosphorus in order to reduce milfoil.) | 2005 | \$1,500 | TSWQC |
| TSWQC, Bonner County | Investigate opportunities for revenues (such as from boats registered for primary usage on Pend Oreille Lake or dock moorage) to establish fund for milfoil control. | 2005 | \$1,000 | TSWQC |
| TSWQC | Investigate program for setting aside funds through DMV licensing to raise funds and awareness for controlling the spread of milfoil. | 2005 | \$ 500 | TSWQC |
| TSWQC | Investigate how lake level fluctuations may impact the level of milfoil growth (as well as the growth of other aquatic plants) in the lake's nearshore area. | 2007 | \$1,000 | TSWQC |

| | | | | |
|--|---|-----------------|-------------------------|---|
| TSWQC | Pursue an agreement with Bonner County Public Works Dept. to be notified when chemical applications are taking place and to receive copies of the county's post-treatment monitoring data to review. | 2005 | \$500 | TSWQC |
| RECREATION | | | | |
| BCWC | Install boat port-a-pot dumping stations at key locations (Currently only have one, in Sandpoint). Increase pump-out facilities around lake; investigate extending the timeframe that pump-out stations are open, especially at Bayview and Hope. | 2006 | \$10,000 (each station) | BCWC (cost share) |
| IDEQ (above ground tanks), EPA (underground tanks), Bonner County Emergency Management | Implement a nearshore fuel tank program consisting of an inventory of existing tanks and education of marina owners and other private entities. Education components would include prior planning, permits and emergency spill response. | 2006 | \$20,000 | IDEQ, EPA, private owner |
| IDEQ | Install emergency spill response kits at every marina. | 2005 | \$300 (each kit) | Private owner |
| BCWC, TSWQC, LPOIC | Investigate/install pressure wash stations in contained areas to reduce spread of milfoil (and potential for zebra mussels.) | 2006 | Varies by site | BCWC, Public/private grants |
| IDL | Research regulations for dock construction; prepare educational brochure on comparison (use/maintenance) of dock building materials and regulations for building docks. | 2005 | \$2,000 | IDL |
| USFS, IDPR, COE | Encourage camping in designated areas with facilities; develop education materials and/or regulations about low impact camping along nearshore. | 2005 | \$300 | USFS |
| USFS, IDPR, COE | Promote and protect natural vegetation at public recreation areas. | On-going (USFS) | N/A | USFS |
| BCWC | Develop and implement programs to reduce erosion at public boat ramps. | 2006 | \$2,000 | BCWC, Bonner County |
| USFS | Convert six existing plastic toilets to vault toilets at the following nearshore recreation sites: Green Monarchs (2); Evans Landing (1); Maiden Rock (1); Clark Fork River delta (1); Whiskey Rock (1). | 2005 | \$90,000 | USFS Capital Improvement Projects funding |

ABBREVIATIONS, LEAD AGENCIES AND ORGANIZATIONS

| | | | |
|-------|--|-------|---|
| BCWC | Bonner County Waterways Committee | IDPR | Idaho Department of Parks and Recreation |
| BCWD | Bonner County Weed Department | ITD | Idaho Transportation Department |
| BSWCD | Bonner Soil & Water Conservation District | LPOIC | Pend Oreille Lake Idaho Club |
| CFPOC | Clark Fork-Pend Oreille Conservancy | NRCS | U.S. Dept of Agriculture Natural Resources Conservation Service |
| COE | U. S. Army Corps of Engineers | PHD | Panhandle Health District |
| EPA | U. S. Environmental Protection Agency | SCC | Idaho Soil Conservation Commission |
| IASCD | Idaho Association of Soil Conservation Districts | SCWMA | Selkirk Cooperative Weed Management Area |
| IDEQ | Idaho Department of Environmental Quality | TSWQC | Tri-State Water Quality Council |
| IDFG | Idaho Department of Fish & Game | USFS | U. S. Forest Service |
| IDL | Idaho Department of Lands | | |

POTENTIAL FUNDING SOURCES *All funding sources are listed as possible sources of funds for projects; no commitment for funding has been received from any of the identified sources.*

Bonner County

Bonner County Waterways Committee
Idaho 319, Nonpoint Source Program grants (Clean Water Act § 319)
CVA, Clean Vessel Act grant program (U.S. Fish & Wildlife Service)
CRP, Conservation Reserve Program
EPA, U. S. Environmental Protection Agency
EQIP, Environmental Quality Incentives Program
FLEP, Forest Land Enhancement Program
Forest Legacy Program, Idaho Dept. of Lands
Forest Stewardship Program, Idaho Dept. of Lands
FRPP, Farm and Ranch Lands Protection Program
GRP, Grassland Reserve Program
HIP, Habitat Improvement Program
IDEQ, Idaho Department of Environmental Quality
IDL, Idaho Department of Lands
IDPR, Idaho Department of Parks and Recreation grants

Mitigation funds (including Avista Corp., Bonneville Power Administration, and Idaho Transportation Dept.)
Municipalities
Oil Pollution Act, 1990 (U. S. Environmental Protection Agency)
Private foundation grants
Private landowner
PSGP, Private Stewardship Grants Program
RAC, Panhandle Resource Advisory Committee
RCRDP, Resource Conservation and Rangeland Development Program
TEA-21, Transportation Equity Act for the 21st Century
TSWQC, Tri-State Water Quality Council
USFS, U. S. Forest Service
WHIP, Wildlife Habitat Incentives Program
WQPA, Water Quality Cost Share Program for Agriculture
WRP, Wetlands Reserve Program

5.2 TIMELINE FOR IMPLEMENTATION

Start-up dates for initial projects and management actions for the first five years of the implementation plan (2004-2009) are shown in Tables 2 and 3. Monitoring of the lake, as described in Section 6, will be undertaken annually to determine the effectiveness of these initial actions. IDEQ will meet annually with the designated lead agencies and other stakeholder groups to review monitoring results and to determine the progress of individual projects and the implementation plan as a whole. These annual meetings will also ensure that projects are being monitored and that all agencies are held accountable for the projects they have listed. Each year, IDEQ will also hold a public meeting to provide updates and seek local community input on the implementation plan. As described in Section 9.1, IDEQ will prepare an annual implementation plan progress report for distribution at each annual public meeting.

Based on monitoring and evaluation results at the end of the first five-year period—and subsequent five-year periods thereafter—management actions to reduce nutrient loading from local sources will be revised or developed, as deemed necessary and appropriate to meet the nutrient targets in the TMDL. (See Revisions to the TMDL and Implementation Plan, Section 6.5 and Maintenance of Effort over Time, Section 8.)

6.0 MONITORING AND EVALUATION

The TMDL established numeric water quality criteria for the nearshore areas of the lake based on limited available data. EPA has encouraged the development of TMDLs using available data with the expectation that a commitment to additional monitoring will be included as part of the implementation plan. This approach enables stakeholders to move forward with resource protection based on existing data while additional monitoring data are collected to provide a basis for reviewing the success of the TMDL.

Based on recommendations of the TMDL, previous water quality studies of Pend Oreille Lake, and input from the planning team, the initial water quality monitoring plan should include:

1. Annual seasonal monitoring (June through September) at nearshore sites previously established through other studies or otherwise selected by the planning team (based on surrounding land use activities etc.) including total phosphorus, total nitrogen, chlorophyll *a*, temperature, and periphyton (attached algae).
2. Annual surveys of the extent or number of nearshore sites experiencing nuisance algae growth and or violations of established water quality targets by any means possible (water quality data, aerial photography, home owner reports/complaints, aquatic weed surveys etc.).
3. Establish a citizen volunteer monitoring program, if there is sufficient interest, to assist in water quality monitoring.

6.1 WATER QUALITY MONITORING PLAN

This monitoring plan is designed primarily for the nearshore waters of Pend Oreille Lake to specifically address nutrients and algae. However, monitoring of the deep open waters and additional monitoring suggestions are also included in an effort to support existing water quality programs within the watershed.

6.1.1 MONITORING GOALS AND OBJECTIVES

In accordance with the TMDL, the chief objectives of this monitoring plan are to 1) obtain the necessary information to ensure that the water quality target loading and concentration targets, and the action threshold values for total phosphorus are being attained, 2) investigate possible relationships between total phosphorus, algal growth, and visible aesthetic impairment, 3) obtain a continuous record of water quality data to assess whether or not the established target levels and threshold values are protective of beneficial uses, 4) provide a scientific basis for modifications to the TMDL or implementation plan if necessary, 5) confirm assumptions made in the TMDL about nearshore loading sources, and 6) evaluate project effectiveness and loading reductions resulting from nearshore nutrient control efforts.

In order to meet the monitoring goals and objectives set forth in the TMDL, two monitoring components are included in this plan which include 1) a “basic” monitoring plan intended to meet the minimum requirements for compliance monitoring in the nearshore areas, and 2) a series of “add-ons” to the basic program that will provide additional data for analyses and support of existing monitoring programs in the watershed, specifically the TSWQC’s Clark Fork – Pend Oreille water quality monitoring program, and the border nutrient agreement between the States of Idaho and Montana.

The TMDL established a target level of 9 micro grams per liter (9ug/L) total phosphorus in the nearshore areas of the lake with an action threshold of 12 micrograms per liter (12 ug/L) total phosphorus during critical conditions, which are the summer months of June through September. A total phosphorus load target for the entire nearshore of Pend Oreille Lake was set at 4,588 lb/season (season = June through September) based on the total phosphorus water quality target and an approximate one mile radius around the lake shore. Additional water quality targets have been established for Pend Oreille Lake through other programs and an overview of the existing targets for Pend Oreille Lake is provided in Table 4.

Table 4. Water Quality Targets for Pend Oreille Lake

| | Total Phosphorus Water column | Total Phosphorus Load | Trophic status |
|-------------|----------------------------------|---|----------------|
| TMDL target | 9 ug/L nearshore | 4,588 lb/season* or 2,081 kg/season* | |

| | | | |
|---------------------------|----------------------|---|---|
| TMDL action threshold | 12 ug/L nearshore | | |
| Border nutrient agreement | 7.3 ug/L open waters | 69,151 kg/year Idaho Sources 259,500 kg/year Montana Sources | Maintain pelagic water quality Measured by Carlson index** |

*Season = June through September

** Carlson index = Total phosphorus, Secchi depth, chlorophyll-a

6.1.2 MONITORING PLAN COMPONENTS

The basic monitoring plan and add-ons are outlined in Table 5. The basic monitoring plan is designed to monitor only those sites used to establish the total phosphorus targets in the TMDL. Add-on #1 allows for quantification of atmospheric deposition of total phosphorus to Pend Oreille Lake. This would be a one time calculation based on available data, however, data could also be collected and/or compiled from existing sources on a yearly basis and calculations could be estimated based on the available data. Add-on #2 allows for the addition of three sampling sites over and above the basic program. Add-on #3 allows for the addition of four sampling sites over and above add-on #2, including a representative site at the mouth of the Pack River. Add-on #4 allows for the addition of yearly surveys / GPS mapping of nearshore nuisance algae growth to be conducted in August. The yearly surveys would be used to assess and prioritize which additional sampling sites should be added to the basic monitoring plan in support of the objective to identify visible aesthetic impairment. Add-on #5 allows for one replicate nutrient sample and one soluble reactive phosphorus (SRP) sample to be collected at each of the six locations in the basic monitoring plan. This is suggested to increase the confidence level of nutrient sample values given the inherent variability in surface water quality and field conditions over a large area and to monitor SRP levels. If it is found that replicate nutrient sampling is needed at all monitoring sites, including SRP, this can be added depending on the level of funding available. Add-on #6 allows for the addition of three open water sampling sites to help better understand the relationship between nearshore water quality and that of the deep open waters and to support other water quality programs already established in the watershed. Add-on #7 allows for infrared analysis to target problem nearshore areas and identify high priority sites, including areas with high population densities, significant algae growth and failing septic systems. Such analysis is expensive and could only be carried out if sufficient funding became available. Add-on #8 allows for the addition of metals sampling at the three open water sites to provide baseline information on the current levels of copper, lead, zinc, cadmium and arsenic in Pend Oreille Lake's open waters.

Table 5. Monitoring Plan Components: Basic Monitoring Plan and Add-ons

| Monitoring Sites | TP | TN | Chl-a* | Secchi depth | Temp. Cond. DO | # of samples | Frequency (June-Sep.) | Periphyton** | |
|--|--------|-------------|--------|--------------|----------------|----------------|-----------------------|-----------------------|---------------|
| Basic Monitoring Program | | | | | | | | | |
| Oden | X | X | X | X | X | 1 | Monthly | X - September | |
| Sunnyside | X | X | X | X | X | 1 | Monthly | X - September | |
| Garfield | X | X | X | X | X | 1 | Monthly | X - September | |
| Talache | X | X | X | X | X | 1 | Monthly | X - September | |
| Bayview | X | X | X | X | X | 1 | Monthly | X - September | |
| Lakeview | X | X | X | X | X | 1 | Monthly | X - September | |
| Add-on #1 | | | | | | | | | |
| Quantify atmospheric deposition via data collection and/or compilation | | | | | | | One-time | | |
| Add-on #2 | | | | | | | | | |
| Trestle | X | X | X | X | X | 1 | Monthly | X – September | |
| Ellisport | X | X | X | X | X | 1 | Monthly | X – September | |
| Camp | X | X | X | X | X | 1 | Monthly | X – September | |
| Add-on #3 | | | | | | | | | |
| Granite | X | X | X | X | X | 1 | Monthly | X – September | |
| Bottle | X | X | X | X | X | 1 | Monthly | X – September | |
| Kootenai | X | X | X | X | X | 1 | Monthly | X – September | |
| Pack River | X | X | X | X | X | 1 | Monthly | X – September | |
| Add-on #4 | | | | | | | | | |
| Survey & GPS mapping of nearshore area nuisance algae growth | | | | | | | Yearly-Aug | | |
| Add-on #5 | | | | | | | | | |
| Monitoring Sites | T P | S R P | T N | Chl-a* | Secchi depth | Temp. Cond. DO | # of samples | Frequency (June-Sep.) | Periphyton** |
| Oden | X | 1 | X | X | X | X | 2 | Monthly | X – September |
| Sunnyside | X | 1 | X | X | X | X | 2 | Monthly | X – September |
| Garfield | X | 1 | X | X | X | X | 2 | Monthly | X – September |
| Talache | X | 1 | X | X | X | X | 2 | Monthly | X – September |
| Bayview | X | 1 | X | X | X | X | 2 | Monthly | X – September |
| Lakeview | X | 1 | X | X | X | X | 2 | Monthly | X – September |
| Add-on #6 | | | | | | | | | |
| Open water Hope | X | | X | X | X | X | 1 | Monthly | |
| Open water Granite | X | | X | X | X | X | 1 | Monthly | |
| Open water Bayview | X | | X | X | X | X | 1 | Monthly | |

| | | |
|---|---|--------------------------------------|
| Add-on #7 | | |
| Employ infrared analysis to identify failing septic systems and problem areas in the nearshore related to septic. | | |
| Add-on #8 | | |
| Site | Frequency | Metals |
| Open water Hope | 1 time per year, or every other year, during June-Sept | Copper, lead, zinc, cadmium, arsenic |
| Open water Granite | 1 time per year, or every other year, during June-Sept | Copper, lead, zinc, cadmium, arsenic |
| Open water Bayview | 1 time per year, or every other year, during June-Sept | Copper, lead, zinc, cadmium, arsenic |

6.1.3 MONITORING PARAMETERS

Water samples will be analyzed for total phosphorus, total nitrogen, chlorophyll-a, and additional parameters as outlined in the basic monitoring plan and subsequent add-ons. Recent data collected in Pend Oreille Lake in 2001 and 2002 by the Idaho Department of Fish and Game indicate that soluble reactive phosphorus is always below detection limits. For this reason, and the fact that it is not a target for the TMDL, only one sample at each location during a season is included in this plan (add-on # 5). Algae monitoring will include chlorophyll-a and ash free dry weight analyses, and field parameters will include secchi depth readings, temperature, conductivity, and dissolved oxygen. Quality assurance and monitoring plan details will be presented in a separate document.

6.2 IMPLEMENTATION MONITORING

Each lead agency is responsible for developing water quality monitoring plans and or reviewing the effectiveness of project related BMPs within this watershed. A representative from IDEQ and each lead agency will meet annually to evaluate all water quality monitoring results and other action items listed in section 5.1 using an adaptive management process. This process will allow for flexibility in accepted monitoring plans, BMPs, and or changes to the implementation plan as the need arises. These same representatives will discuss the efficiency and effectiveness of existing data collection and storage methods and provide suggestions for possible improvements as well as incorporating any needed changes or revisions to the TMDL if necessary.

6.3 DATA MANAGEMENT

It is the suggestion of the planning team that a Pend Oreille Lake Watershed database be created and made available to all stakeholders within the watershed via World Wide Web access. The database would initially include water quality data gathered as part of this implementation plan, but may be expanded to incorporate other types of data generated within the watershed if funding is available.

6.4 EXCEEDANCE OF TMDL TARGETS

The Pend Oreille Lake TMDL provides a suggested plan of action to be followed in the event of an instantaneous exceedance or short-term exceedance. **The TMDL defines an instantaneous exceedance as any one-time exceedance of the TMDL action threshold (12 micrograms per liter total phosphorus) and a short-term exceedance as two consecutive years of exceeding the TMDL action threshold in the same location.**

6.4.1 INSTANTANEOUS EXCEEDANCE (a one-time exceedance of 12 ug/l total phosphorus at any location, June through September)

If nearshore water quality data indicate an instantaneous exceedance of the TMDL action threshold, the following actions will be carried out by the IDEQ and designated lead agencies:

1. Review of the data to ensure confidence.
2. Review of factors such as, but not limited to, annual runoff/water yield, average air temperature and number of sunlight days.
3. Identification of possible causes.
4. Determination of error factor.
5. Written summary of findings and recommendations.

6.4.2 SHORT-TERM EXCEEDANCE (two consecutive years of exceeding 12 ug/l total phosphorus at the same location.)

If nearshore water quality data indicate a short-term exceedance of the TMDL action threshold, the following actions will be carried out by the IDEQ and designated lead agencies:

1. Review of data to ensure scientific evidence of a change in trend.
2. Review of causes and sources.
3. Review and revise TMDL implementation plan and management strategy.
4. Written report of findings and recommendations.

6.5 REVISIONS TO THE TMDL AND IMPLEMENTATION PLAN

TMDL implementation plans are designed with an adaptive management strategy in mind. IDEQ recognizes that the implementation plan must allow for change over time as new scientific information becomes available, the population increases, new laws and ordinances are enacted, new projects are identified, and existing projects are implemented. IDEQ will hold annual meetings with lead agencies and stakeholders groups, as previously discussed in Section 6.2, in order to monitor the progress of TMDL implementation and determine if any changes in either the implementation plan or the TMDL are needed.

7.0 ANTICIPATED COSTS AND POTENTIAL FUNDING SOURCES

Estimated costs for implementing projects to carry out the Pend Oreille Lake TMDL plan are shown in Tables 2 and 3. As illustrated on the tables, funding for these projects will likely come from a variety of sources. Attempts to obtain funding should first come from within the designated agencies and or agencies under their purview. The IDEQ will assist lead agencies, whenever possible, in obtaining funding for implementation projects. In the case where funding sources require public participation, the IDEQ will be available to assist any parties that wish to seek funding for water quality projects within the Pend Oreille Lake watershed.

Potential funding sources for TMDL implementation projects are listed in the State of Idaho Nonpoint Source Management Plan (see Appendix H). The list includes both technical and financial assistance programs; some of the suggested sources may not apply to the Pend Oreille Lake TMDL. However, the list serves to illustrate that there are a variety of funding sources available for watershed planning and implementation, nonpoint source pollution management, fish and wildlife habitat enhancement, stream restoration and education projects.

In addition to public sources of financial and technical assistance (federal and state government programs), private sources of funding are also available. Private sources of funding include private foundations, which most often fund nonprofit organizations with tax-exempt status. Forming partnerships that include government entities, nonprofit organizations, private businesses and landowners can often be the most effective approach to maximizing funding opportunities and gaining financial support for projects.

8.0 MAINTENANCE OF EFFORT OVER TIME

In most cases, the problems leading to water quality degradation have accumulated over many years and will likely require significant time to remedy. In order to ensure the success of any implementation plan, there must be maintenance of effort over time by all stakeholders in the watershed. Idaho Code §39-3601 requires an ongoing commitment from the lead agencies to devote the necessary resources to help restore beneficial uses. Maintenance of effort over time can not solely be focused on physical restoration work; it must also attempt to look at education, land use planning issues along the shoreline and surrounding areas of the lake, revisions to federal, state, and county agency standard operating procedures, and developing conservation easements and/or other methods through which long-term benefits can be obtained. It is the hope of IDEQ that annual public meetings and project progress reports will help to hold all lead agencies and stakeholders accountable to their respective commitments.

8.1 RESPONSIBLE PARTIES COMMITMENT

The roles and responsibilities of management agencies in implementing TMDLs and other nonpoint source water quality provisions of the Clean Water Act are outlined in a Memorandum of Understanding (MOU) appended to Idaho's Nonpoint Source Management Plan. (DEQ, 1999) The MOU, titled *Implementing the Nonpoint Source*

Water Quality Program in the State of Idaho, was signed by the EPA, IDEQ, IDL, Idaho Department of Water Resources (IDWR), SCC, University of Idaho Cooperative Extension Service, NRCS, USFS, and U. S. Department of Interior Bureau of Land Management.

A separate MOU between IDEQ and the state's seven Public Health Districts clarifies authorities, roles and responsibilities for sewage disposal and solid waste management. Another MOU between IDEQ, EPA, and the Idaho Department of Agriculture (IDA) recognizes IDA's role in managing dairy waste systems. IDEQ is currently engaged in an on-going dialog with ITD to address nonpoint source issues associated with the transportation system.

The SCC is undertaking an update of the *Agricultural Pollution Abatement Plan* and a supporting MOU to assure consistency with TMDL implementation across the state. Discussions are also underway with the Bureau of Land Management and USFS to update the silviculture portion of the nonpoint source management plan MOU.

9.0 PUBLIC INVOLVEMENT

The Pend Oreille Lake watershed is made up of diverse stakeholders with varying interests regarding water quality and its affect on beneficial uses. In order to facilitate community input, the planning team held a public workshop in October 2003 in Sandpoint, Idaho. The purpose of the workshop was to solicit ideas from the public for management actions to include in this implementation plan. Participants included members of the public and local organizations along with representatives from various agencies and elected officials. Results from that workshop are listed in Appendix I and have been incorporated into the management actions set forth in Section 5.

A 30-day public comment period on the completed draft plan began on June 29, 2004 when the planning team held a public meeting in Sandpoint. The meeting agenda included an overview of the lake nearshore TMDL and the main provisions in the implementation plan, along with brief presentations by the designated lead agencies involved in the plan. Those in attendance (approximately 50 people) were given copies of the draft plan, along with forms for sending in comments. During summer 2004, TSWQC staff also gave presentations to local governments and community organizations to solicit feedback on the plan. In September 2004, the planning team reviewed all comments and incorporated many of them into the plan. A summary of community comments, and the planning team's responses, is provided in Appendix J.

9.1 PUBLIC INVOLVEMENT STRATEGY

The IDEQ will attempt to hold annual public meetings to provide the public with an opportunity to stay involved over time. The IDEQ will also prepare an annual implementation plan progress report for distribution at each annual meeting.

The planning team recommends a common sense public involvement strategy consisting of standard advertising methods (radio, papers, magazines, etc.) and occasional public meetings to make the choice available to stakeholders as to whether or not they wish to be involved, and to what extent. A primary focus of the strategy will be to allow opportunities for stakeholders to become involved and also to generate ways for the public to remain involved and sustain interest in implementation of this plan over time.