BENEFICIAL USE ATTAINABILITY ASSESSMENTS OF STREAMS IN THE LAKE COEUR D'ALENE BASIN Idaho

Idaho Department
of Health and Welfare

Division of
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Prepared By
Mike Hartz

North Idaho Regional Office
2110 Ironwood Parkway
Coeur d'Alene, Idaho 83814

Idaho Department of Health and Welfare
Division of Environmental Quality
1410 North Hilton Street
Boise, Idaho 83720-9000

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Acknowledgements

The beneficial use attainability assessments and use support status classifications identified in this report were made possible through the efforts of many people. The members of the Technical Advisory Committee deserve thanks for their genuine willingness to participate during all aspects of this process. The desire of the TAC to see this project completed comprehensively and accurately was an enormous asset. Members of the TAC include the following: Chip Corsi (IDFG); Dave Cross (USFS); Doug Fitting (IDL); Gary Kappassar (USFS); Jess Marrat (CDA Tribe); Mike Stevenson (BLM); and Philip Cernera (CDA Tribe). Thanks also go out to the members of the field crews for their efficient and competent work, they include: Sandra Lockhart; Dana Murphy; Carl Jackson; and Gary Echols. This report was finalized with the help of key comments provided by Bill Clark, Don Zaroban, and Jack Skille. This project could not have been completed without the many contributions from Geoff Harvey (IDEQ), Project Analyst of the Coeur d'Alene Basin Project.

Abstract

Protection and restoration of water bodies within the Lake Coeur d'Alene basin in northern Idaho, are two primary goals of the Coeur d'Alene Basin Restoration Project. The Project provides a mechanism for the coordination of various programs and activities designed to achieve these goals. The Coeur d'Alene Basin Restoration Project Framework is a "roadmap" for environmental protection and restoration of the basin. A task outlined in the framework, is the identification of attainable uses of stream segments in the basin. This task is the primary objective of this study.

Recovery of beneficial uses of water bodies impacted by past land use activities is best assessed by in-stream water quality monitoring with results compared to specific water quality criteria. The beneficial uses of any given water body determine a set of water quality criteria necessary to support those beneficial uses. For this reason, beneficial use attainability assessments were conducted on a wide range of stream segments in the basin.

Other objectives of the Coeur d'Alene Basin use attainability analysis are to: refine existing chemical water quality criteria and determine physical habitat and biological criteria necessary to support specific beneficial uses; and assess the status of beneficial uses of waters in the basin. Essentially, beneficial support status as determined by the current study provides a qualitative indication of the current support level of uses deemed attainable for a given waterbody; refined water quality criteria quantitatively identify the desired future condition necessary to achieve full support of beneficial uses. Future monitoring of beneficial use recovery will utilize quanitiative water quality criteria to gauge restoration success.

In meeting the study objectives, this study reviewed beneficial use designations currently incorporated in the Idaho Water Quality Standards. A total of 21 streams have use designations in the Lake Coeur d'Alene basin, of which 11 were verified. This study identifies the need to revise the remaining use designations to accurately reflect the actual attainable and existing uses. An additional 155 streams in the basin were assigned beneficial use classifications based on a structured scientific approach set forth in Idaho's standard use attainability protocol.

This study documents the attainable and existing beneficial uses for a wide range of water bodies in the Lake Coeur d'Alene basin based on background information provided by cooperating agencies and field verification results from the IDEQ 1992 field surveys. In addition, the status of beneficial uses (full support, partial support or non-support) in the basin is assessed.

The information generated in the study provides the impetus for anticipated revisions and inclusions of use designations in the Idaho Water Quality Standards, which are necessary for protection and restoration of water quality in the basin.

The study results also provide background information necessary for subsequent monitoring of remediation project effectiveness on water quality impaired segments in the basin.

Introduction

Background

The Lake Coeur d'Alene basin has an area of approximately 3,840 square miles. The basin is located in Benewah, Bonner, Kootenai and Shoshone counties of northern Idaho. The principle sub-watersheds of the basin are the Coeur d'Alene and St. Joe River systems. The Coeur d'Alene River watershed is comprised of the Lower Coeur d'Alene, North Fork, Little North Fork, and South Fork. The St. Joe watershed is comprised of the lower St. Joe, St. Maries River, upper St. Joe and North Fork (Figure 1). Additional minor tributaries of Lake Coeur d'Alene are several streams draining the east and west shores of the lake. The Spokane River is the single surface outlet of Lake Coeur d'Alene. Lake water is discharged to the Rathdrum-Spokane Aquifer.

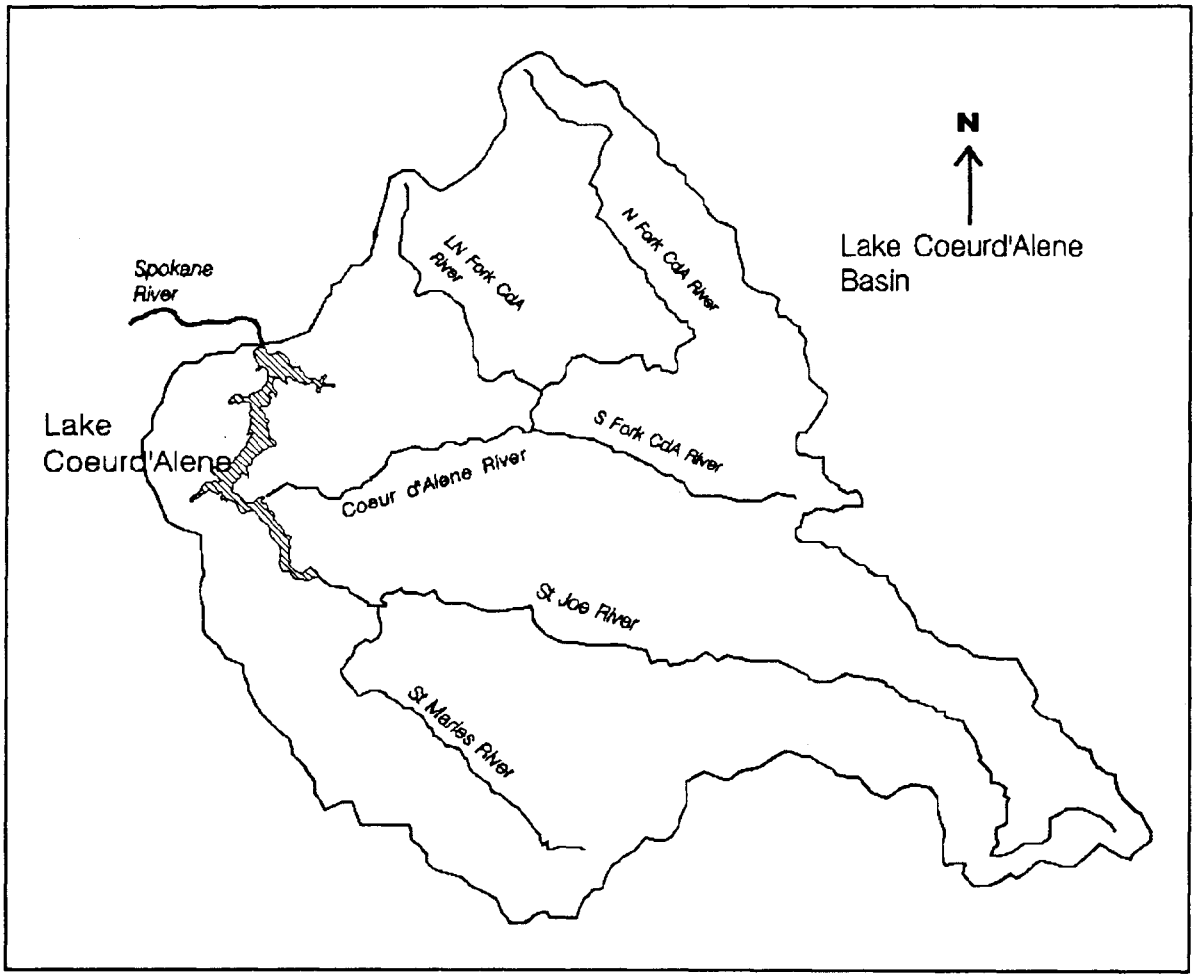

Figure 1 - Major river systems in the Lake Coeur d'Alene Basin.

The Lake Coeur d'Alene watershed includes a wide range of water quality conditions (IDHW-DEQ 1991a). Many of the first, second and third order streams of the basin are located in the forested mountains of the Bitterroot, Coeur d'Alene and St. Joe Ranges. Many of these have very good water quality. Stream reaches particularly in the South Fork Coeur d'Alene drainage, where metals mining has proceeded for over one hundred years, contain high concentrations of heavy metals and sediment. The North Fork of the Coeur d'Alene River above the confluence with the South Fork have water quality affected by excess sediment (IDHW-DEQ 1993). Streams draining the Palouse farmlands of the west shore and those of the St Maries River carry large loads of sediment and experience thermal limitations. Development in some areas has resulted in impoundment and channelization of streams.

A brief discussion of the terminology used throughout this report is necessary. Use attainability assessment as defined in EPA water quality standards regulations (40 CFR 131.3(g)), is an structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological and economic factors. A use attainability assessment is used to determine which beneficial uses can potentially be supported by a water body. Use attainability assessments are used to determine attainable uses[1], which may include existing uses[2]. Any use found to be attainable by a water body should subsequently be designated[3] in the water quality standards. The Idaho water quality standards (IDHW-DEQ 1991b) in section (IDAPA 16.01.02050,02), mandate the protection of waters of the state for "appropriate beneficial uses", which by definition, include all existing uses of a water body, and all uses which are attainable in the future (attainable uses). In addition to use attainability assessment, this study involves beneficial use assessment. Beneficial use assessment is an evaluation of factors used to describe the health of the use. This study was designed to assess attainable uses for all stream segments in the basin and to assess the support status[4] of existing beneficial uses.

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[1]*Attainable uses* are those uses which could potentially be attained on a waterbody if un-natural conditions or pollution were corrected.

[2]*Existing uses* are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards, EPA regulations 40 CFR 130.10(g).

[3]*Designated uses* are those uses specified in water quality standards by the state Legislature for water bodies or segments whether or not they are being attained, EPA regulations 40 CFR 130.10(g).

[4]*Support status* is the level of attainment of a use and is described as either full support, partial support or non-support.

Current water quality standards (IDHW-DEQ 1991b) identify designated beneficial uses for 22 stream reaches in the Lake Coeur d'Alene Basin and Spokane River (Appendix 1). The appropriateness of the use designations have not been reviewed in detail since 1978. The Idaho DEQ nonpoint source water quality data base identifies other stream segments and lakes in the watershed. Stream segments in the Idaho nonpoint data base were numbered in "Pacific North West Rivers Study" (Allen *et al.* 1986). Prior to the current use attainability assessment, the attainable uses had not been assessed for the stream segments and lakes listed in the Idaho nonpoint data base. However, beneficial uses were assessed for the eight stream segments in the basin which were listed as Stream Segments of Concern (SSOC) through the State of Idaho antidegradation program (IDHW-DEQ 1991a).

Water quality protection of waters in the basin and restoration of stream reaches with impaired water quality are two primary goals of the Coeur d'Alene Basin Restoration Project (IDEQ and EPA 1993). Detailed beneficial use attainability information is necessary to meet these project goals. Restoration of impaired waters will require specific water quality goals (criteria) to be met in order to gauge success. The current use attainability analysis will determine which water quality criteria apply to each stream by defining the attainable beneficial uses for each stream. In other words, a beneficial use assigned to a waterbody identifies a specific set of water quality criteria necessary to fully support the use.

Physical habitat structure, chemical and biological criteria will be developed in this study by pairing segments with supported beneficial uses to segments with impaired beneficial uses. A set of water quality goals or criteria are determined by the beneficial uses attainable (i.e. cold water biota) on any particular stream reach or lake as described in the Idaho Water Quality Standards (IDHW-DEQ 1991b). The public may desire even higher levels of stream or lake water quality protection. Protection of existing water quality can also be more specifically designed if the attainable beneficial uses of a stream or lake have been determined. Thus beneficial use attainability assessments on segments throughout the basin is required and, an updating of the designations made previously will be necessary. This information will permit the proper designation of water quality criteria and management practices to protect and recover the basin waters.

Issues

The designated beneficial uses protected in the Idaho water quality standards (IDHW-DEQ 1991b) for Coeur d'Alene Basin segments were developed largely on the basis of best professional judgement. These designations address 22 stream reaches including the Spokane River (Appendix 1). Additional stream segments and lakes are identified in more recent and comprehensive data bases but uses are not identified. Recently protocols for the determination of attainable beneficial uses have been adapted for application in Idaho (Maret and Jensen 1991) and (U.S. EPA 1983).

Protection and restoration of the water quality of the streams and lakes of the basin through the activities of the Coeur d'Alene Basin Restoration Project should be based on the effectiveness of implementation projects. The effectiveness of implementation projects can be assessed by in-stream water quality monitoring and comparison of the resulting data to specific water quality criteria determined to support specific beneficial uses. The beneficial uses attainable by a specific stream reach or lake determines the water quality criteria to which monitoring data will be compared. For these reasons beneficial use attainability assessment is a basic foundation upon which the monitoring of program and project effectiveness in the protection or restoration of water quality is built.

Beneficial Uses

The State of Idaho Water Quality Standards define beneficial uses for water bodies and specify water quality criteria necessary to protect beneficial uses. The following beneficial uses are included in the Idaho Water Quality Standards: agricultural water supply; domestic water supply; cold water biota; warm water biota; salmonid spawning; primary contact recreation; secondary contact recreation; industrial water supply; wildlife habitats; and aesthetics. Physical, chemical and/or biological criteria are associated with certain beneficial uses listed above (IDHW-DEQ 1991b). Criteria are considered minimum standards necessary to protect beneficial uses.

This assessment identifies those beneficial uses that are appropriate for water bodies in the basin. Appropriate beneficial uses are defined in the water quality standards, and include all existing and attainable uses of a water body. The Idaho Water Quality Standards (IDHW-DEQ 1991b) mandate the protection of waters of the State for appropriate beneficial uses as defined above, in section IDAPA 16.01.02050,02. Beneficial uses that currently exist on a water body, or uses that could potentially exist (attainable uses) on a water body, are considered "appropriate" beneficial uses to be protected.

Presence or absence of existing uses (actual use) determines the attainability of the following beneficial uses: agricultural water supply; domestic water supply; industrial water supply; wildlife habitats and aesthetics. An existing use is a use that actually exists in or on the water body any time on or after November 28, 1975 and may not be downgraded (40 CFR 131.3(e)). Existing beneficial uses are described as actual uses, which are included in the definition of "appropriate beneficial use" in section IDAPA 16.01.02003,01 of the Idaho Water Quality Standards. Simply stated, when the above mentioned uses are existing on a water body, those uses are deemed attainable.

In general, wildlife habitats and aesthetics are beneficial uses deemed attainable on all waters of the State.

The appropriate recreational uses and aquatic life uses are assigned to Coeur d'Alene Basin PNRS stream segments based on the results of the use attainability decision pathways. Presence or absence of existing uses is a key concept incorporated in

beneficial use attainability decision pathways. The criteria used in use attainability decision pathways for recreational uses and aquatic life uses are discussed in the results and discussion section.

Project Duration

The project began in mid-May 1992. Background data on all the stream segments under study were compiled. Field crews began work in mid-June 1992 and were trained within one to two weeks. The remaining field work in the Coeur d'Alene Basin was completed by the end of August 1992. Data compilation was completed by October 1992 and the final use attainability database was developed by December 1992. Attainable uses on stream segments were determined in February 1993 using data entered in the database.

Specific water quality criteria for water quality impaired streams in the Coeur d'Alene Basin will be reported in a Coeur d'Alene Basin use attainability report amendment.

Objectives

The objectives of this study are to:

1) determine the attainable uses of stream segments and lakes of the Lake Coeur d'Alene Basin;

2) determine the support status of the beneficial uses of the Coeur d'Alene Basin stream segments; and

3) determine water quality criteria necessary to fully support potential uses on impaired streams.

Materials and Methods

Methodology

The methods, procedures and decision pathways for determining attainable uses followed Water Quality Monitoring Protocol #7 (Maret and Jensen 1991). The methods described in Protocol #7 were adapted in part, for use in northern Idaho. These decision pathways are a series of questions about stream characteristics necessary for attainable use determinations (objective 1). A field procedure was developed that would allow collection of the data needed to make attainable use determinations. Field data used in the decision pathways will be discussed in the results and discussion section. Some important field data include stream width and depth as a indicator of stream size. Stream size is a key determinant of recreational potential. In addition, stream water temperature and invertebrate assemblage is used as an indicator of aquatic life uses.

Objective 2 of this study is to determine the support status of existing beneficial uses of stream segments in this study. Beneficial use support status for each segment is classified as: supported: partial support: or non-support. Support status of beneficial uses was determined by a Technical Advisory Committee (TAC) comprised of cooperating agencies (IDEQ, USFS, BLM, IDFG, IDL, and Coeur d'alene Tribe).

Previously, beneficial use support status classifications for stream segments in the idaho nonpoint source database were largely determined by best professional judgment. The process employed in the current use attainability assessment utilizes a database which includes background and field data that make support status determination of beneficial uses less subjective. In general, support status of beneficial uses of each stream was determined through comparisons with appropriate reference streams. However, this was not accomplished through the structured analyses of invertebrate and fish data found in RBP procedures, due to a lack of consistent basin wide biological data and limited funds and time allocated to this project. Instead, stream habitat and watershed stability parameters were used as indicators of beneficial use (i.e. Cold water biota) status. In addition, support status determination for each segment was based on a consensus among the water quality professionals that comprise the inter-agency TAC.

Study Design

A total of 176 Coeur d'Alene Basin stream segments were assessed during the study. The highest priority was given to the 22 stream segments identified in the water quality standards (IDHW-DEQ 1991b)[5]. After completion of these priority stream segments, the study area was extended to the additional stream segments for which use designations

[5] In some cases the stream reaches identified in the standards have been sub-divided into more than one stream segment in the data base numbering system.

have not been developed.

The field data, and existing background data are compiled in a data base (Appendix 3). Attainable use designations are determined for all segments using information in the database with guidance from Protocol #7 (Maret and Jensen 1991).

Field Procedure

Three to five sites per segment were assessed. Assessment site location was based on stream segment length, stream access and channel gradient. The lower sites were located far enough above the stream segment mouth to avoid areas of excessive natural deposition and/or scour. The upper sites were located below high gradient (>10%) headwater reaches. Generally, assessment sites were located in "B" and "C" channel types (Rosgen 1985) unless these channel types were not present. The assessment site lengths were 20 times the bankfull width.

Habitat types and habitat dimensions were determined for each assessment site in accordance with (Burton 1991) and (Hankin and Reeves 1988). Physical measurements of mean width, mean and maximum depth, habitat type length and depth at pool tailouts were recorded. Other ocular observations such as grazing activity, presence of salmonid fish species, presence of salmonid spawning gravel (Cochnauer and Elms 1886) and channelization were noted. These stream survey data provided information used in decision pathways and habitat assessments.

Habitat quality of the stream segment was assessed and rated as excellent, good, fair or poor at each assessment site. Three groups of habitat parameters (primary, secondary and tertiary) were used to determine fisheries health (Plafkin *et al.* 1989) and (Clark and Maret 1992). Primary parameters were scored from 0-20, secondary parameters were scored from 0-15 and tertiary parameters were scored from 0-10. Appendix 2 lists and describes the parameters used in habitat assessments.

Macroinvertebrates were sampled at each assessment site using a "D" frame kick net or a surber sampler with a 0.5 mm mesh, using sampling techniques in accordance with (Clark and Maret 1992). A minimum of 20 macroinvertebrates were randomly picked and identified to order. The macroinvertebrate sample was spread across a sorting tray with a randomly numbered grid pattern on the bottom. The random pick grid design was used to avoid picking only the larger specimens. The minimum specimen count was set at 20 to save time during macroinvertebrate surveys while providing a sufficient number of specimens to document presence or absence of cold water biota. This macroinvertebrate survey design was not intended to provide quantitative information, but rather qualitative information.

Riffle armor stability index (RASI) was incorporated into the use attainability database for use as a beneficial use monitoring tool. According to Kappesser, RASI has three

applications as an instream monitoring tool: it provides a quantitative determination of existing channel stability; it is a cumulative effects monitoring tool; and it can detect changes in channel stability over time. RASI information was supplied to IDEQ by the USFS (Kappesser 1993 personal communication) for some streams in the Coeur d'Alene Basin. IDEQ measured RASI for additional streams in the Coeur d'Alene Basin in accordance with (Kappesser 1992).

Water temperature was measured at each assessment site to provide additional information used in the aquatic life use decision pathway.

Materials

The equipment used in this use attainability assessment included the items in Table 1.

Table 1 - Equipment used in the Coeur d'Alene Basin use attainability assessments.

Item	Use (measurement)
staff rod	stream width and depth, etc.
hip chain	habitat type length, etc.
thermometer	water temperature
spherical densiometer	stream shade
macroinvertebrate net (0.5mm)	macroinvertebrate collection
sorting tray	macroinvertebrate sorting
forceps	macroinvertebrate picking
magnifying glass	macroinvertebrate ID (if needed)
macroinvertebrate key	macroinvertebrate ID assistance
habitat typing form	recording physical data
habitat assessment forms	habitat scoring

Quality Assurance

Quality assurance of the field data was maintained through several mechanisms. The principles and methods set forth in protocol #7 (Maret and Jensen 1991) were closely followed. Joint training and procedure calibration of the field crews was performed by the Project Manager and Specialist. The quality of the field crews work was assessed through periodic audits carried out by the Project Manager and Specialist. Habitat measurements, macroinvertebrate identification, and habitat assessments were duplicated during each audit. A target of 15% of the stream segments were audited to assess the quality of the information the crews developed. Audits were conducted most intensively early in the field season to assure quality from the beginning, but were scattered throughout the data gathering phase. Regular assessments of the field methods were made throughout the field data collection phase.

The quality of the use attainability field data was also checked by comparison with U.S. Forest Service stream survey information collected for the Idaho Panhandle Forest (IPNF) in accordance with the Fisheries and Habitat Evaluation Handbook. Data were supplied by the IPNF Supervisors Office (Loren Everest 1992 personal communication). Stream survey information collected by the forest service was available for approximately 30 stream segments. Beneficial use information and data transferred to the data base was quality control checked (10% of total) to assure proper information transfer. All data analysis methods were regularly assessed to assure data quality. The TAC provided another aspect of QA/QC through involvement with the study design and data analysis. A summary of the quality assurance results can be found in Appendix 5.

Results and Discussion

Water Quality Monitoring Protocol #7 (Maret and Jensen 1991) identified a system to determine the attainability of beneficial uses on water bodies in Idaho. The criteria used in use attainability classification include both quantitative measures and qualitative guidelines. This section will in part, describe the use attainability classification process, as it relates to field monitoring in the Coeur d'Alene Basin. Protocol #7 provides a detailed description of the beneficial use attainability assessment process.

Use attainability results for the PNRS stream segments in the Coeur d'Alene Basin were entered in the use attainability database (Appendix 3). The fields used in the use attainability database are listed in Table 2. The database includes fields used for use attainability classification as well as beneficial use support status determination.

Attainable uses were also assessed for the lateral lakes located in the Coeur d'Alene and St. Joe River watersheds. These water bodies are listed in appendix 7. Designated uses of Coeur d'Alene Lake and Fernan Lake are listed in appendix 7.

Recreational Uses

The recreational uses protected in the Idaho Water Quality Standards include primary contact recreation and secondary contact recreation. Figure 2 shows the recreational use decision pathway and table 3 lists corresponding questions associated with the decision options. The following decision options are integrated in the recreational use decision pathway: water-based recreational value; normal summer low flows; average stream width and depth; aesthetics; dominant substrate; existing use; natural or human caused pollution; economic and social impact; and final use classification. These decision options are discussed in detail in Appendix 2.

The "Pacific Northwest Rivers Study" (PNRS) assigned water-based recreational value classes to PNRS stream segments (Allen *et al.* 1986). The recreation use attainability decision pathway was designed to use the PNRS findings to initially assess attainable recreational uses. For the purposes of the Coeur d'Alene Basin use attainability assessments, the water based recreational value of each PNRS segment was assumed "unknown". The unknown selection leads to question /b in the decision tree, regarding normal summer low flows. Expected summer low flows were estimated for PNRS segments at each assessment site. Field crews were trained to identify flow conditions representing less than 1 cfs. The quality of these observations were assured since surveys were performed during low flow conditions and field personnel were trained hydrologic technicians. Question /c regarding average width and average depth, was addressed if average summer low flows (May 1 through Sept. 30) were greater than 1 cfs, otherwise no recreational use was deemed attainable.

Table 2 - Parameters included in the use attainability database.

Field Name	Description
PNRS SEG. NO.	Pacific Northwest River Study segment number
STREAM NAME	
LOWER BOUNDARY	
UPPER BOUNDARY	
LENGTH	segment length
SURVEY DATE	date of DEQ survey
NO. OF SITES	number of assessment sites or 100% habitat survey
MEAN WIDTH	mean width of assessed stream
MEAN DEPTH	mean depth of assessed stream
W:D RATIO	width/depth ratio
TOTAL LENGTH	total length of assessed stream
MEAN RPD	mean residual pool depth reported from primarily B3 channel types
MEAN RPV	mean residual pool volume reported form primarily B3 channel types
POOL:RIF RATIO	pool/riffle ratio 1:(riffle length/pool length in primarily B3 channel types)
HABITAT SCORE	total score from habitat assessment matrix
AESTHETICS SCORE	total score from aesthetics quality matrix
SUMMER HIGH TEMPS	indicates a single measurement during summer peak or other intensive background data
MACRO QUALITY	macroinvertebrate quality rated as High (cold water) or Low (warm water)
FISH QUALITY	rated as High, Intermediate (cold water) or Low (warm water)
SS_USE	existing salmonid spawning use (P,A)
SS_HAB	presence/absence of spawning gravel
CHAN	presence/absence of channelization (C=constricted)
RASI MEAN	mean Riffle Armor Stability Index (primarily B3 channel types)
RASI RANGE	Riffle Armor Stability Index range
DWS_USE	domestic water supply existing use (P,A)
AWS_USE	agricultural water supply existing use (P,A)

The attainability of recreational uses (ie. primary contact recreation and secondary contact recreation) are largely dependent on stream size (width and depth or flow). In general, streams measuring greater than 25 feet in width and 1 foot in depth are capable of supporting primary contact recreation. Streams measuring less than 25 feet in width and 1 foot in depth but maintain an average summer low flow (May 1 to Sept. 30) greater than 1 cfs, are capable of supporting secondary contact recreation. Streams with an average summer low flow (May 1 through Sept. 30) less than 1 cfs do not support recreational uses. Stream width and depth measurements for various habitat types along each assessment site provided data used in decision trees. Width and depth measurements or other stream survey information indicating stream size, were factored into the recreational use decision pathway at question /c. Width and depth averages for each PNRS stream segment in the basin were calculated and entered in the use attainability database and used for final use classifications of the streams.

Attainable recreational uses are also dependent on the aesthetics of the water body. The aesthetic quality at each assessment site was rated with the aesthetics quality assessment matrix found in (Maret and Jensen 1991). The aesthetic matrix is shown in Appendix 2. Aesthetic quality ratings were entered in the use attainability database and used for final use classification.

A detailed discussion of the remaining recreational use attainability decision options is summarized in Appendix 2.

Aquatic Life Uses

The aquatic life uses protected in the Idaho Water Quality Standards include cold water biota, salmonid spawning and warm water biota. The decision pathway for assessing the attainability of aquatic life uses is depicted in figure 3. Table 4 lists the questions that correspond to the aquatic life use decision options. The decision options include: cold water habitat; salmonid spawning; habitat and species value class; species significance; habitat quality; existing use; natural or human-caused pollution; widespread economic and social impact; and final use classification. A detailed discussion of these decision options taken from (Maret and Jensen 1991) can be found in appendix 2. The following provides a brief discussion of the assessment mechanism for determining the attainability of aquatic life uses.

The aquatic life use decision pathway differentiates between cold water biota and warm water biota based on the following factors: water temperatures; significant occurrence of indicator organisms (existing uses); and/or historical uses of the water body. Two mechanisms were used to obtain this information: 1) background information from cooperating agencies; and/or 2) field data collected by use attainability field crews.

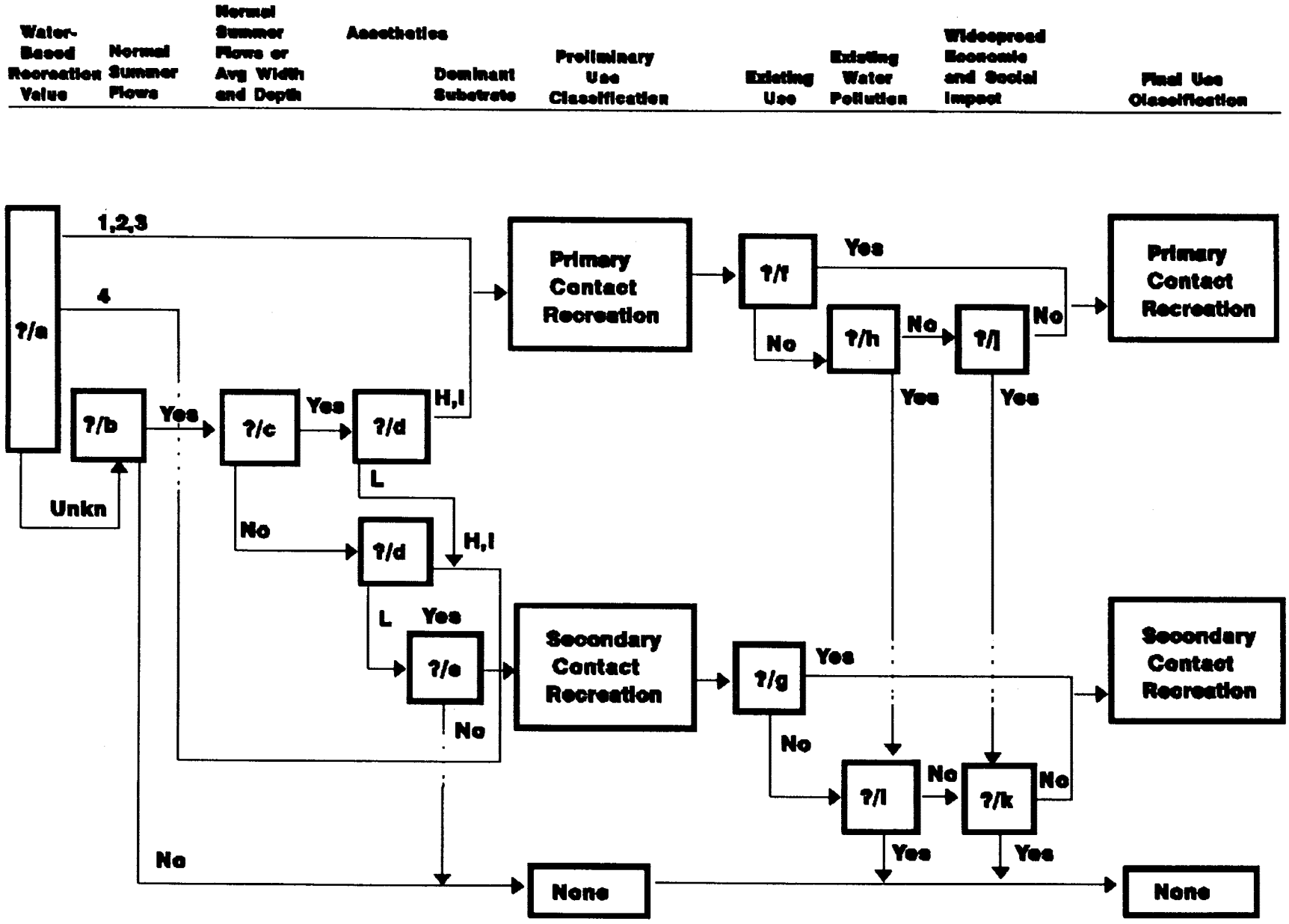

Figure 2 - Recreational Use Decision Pathway (Maret and Jensen 1991).

Table 3 - Questions for recreational use decision tree.

/a	What is the water-based recreation value class as defined in the "Pacific Northwest Rivers Study"? (If primary contact recreation is a existing use, the 1,2,3 decision option should be selected regardless of the defined recreation value class.)
/b	Are normal summer flows ≥ 1 cfs? (If secondary contact recreation is an existing use, the "yes" decision option should be selected regardless of the normal summer flow.)
/c	Are normal summer flows ≥ 5 cfs or is the average stream width ≥ 25 feet and average depth ≥ 1 foot?
/d	Is the aesthetic quality rating of the stream segment high, intermediate, or low?
/e	Is the dominate substrate of the stream segment ≥ sand? (If secondary contact recreation is an existing use, the "yes" decision option should be selected regardless of the dominant substrate.)
/f	Is primary contact recreation an existing use?
/g	Is secondary contact recreation an existing use?
/h	Does natural or human-caused pollution, which would cause more environmental damage to correct than leave in place, prelude primary contact recreation as a use?
/i	Does natural or human-caused pollution, which would cause more environmental damage to correct than leave in place, preclude secondary contact recreation as a use?
/j	Are controls more stringent than those required by Sections 301(b) and 306 of the CWA necessary to support a primary contact recreation use and would these controls result in substantial and widespread economic and social impact?
/k	Are controls more stringent than those required by Sections 301(b) and 306 of the CWA necessary to support a secondary contact recreation use and would these controls result in substantial and widespread economic and social impact?

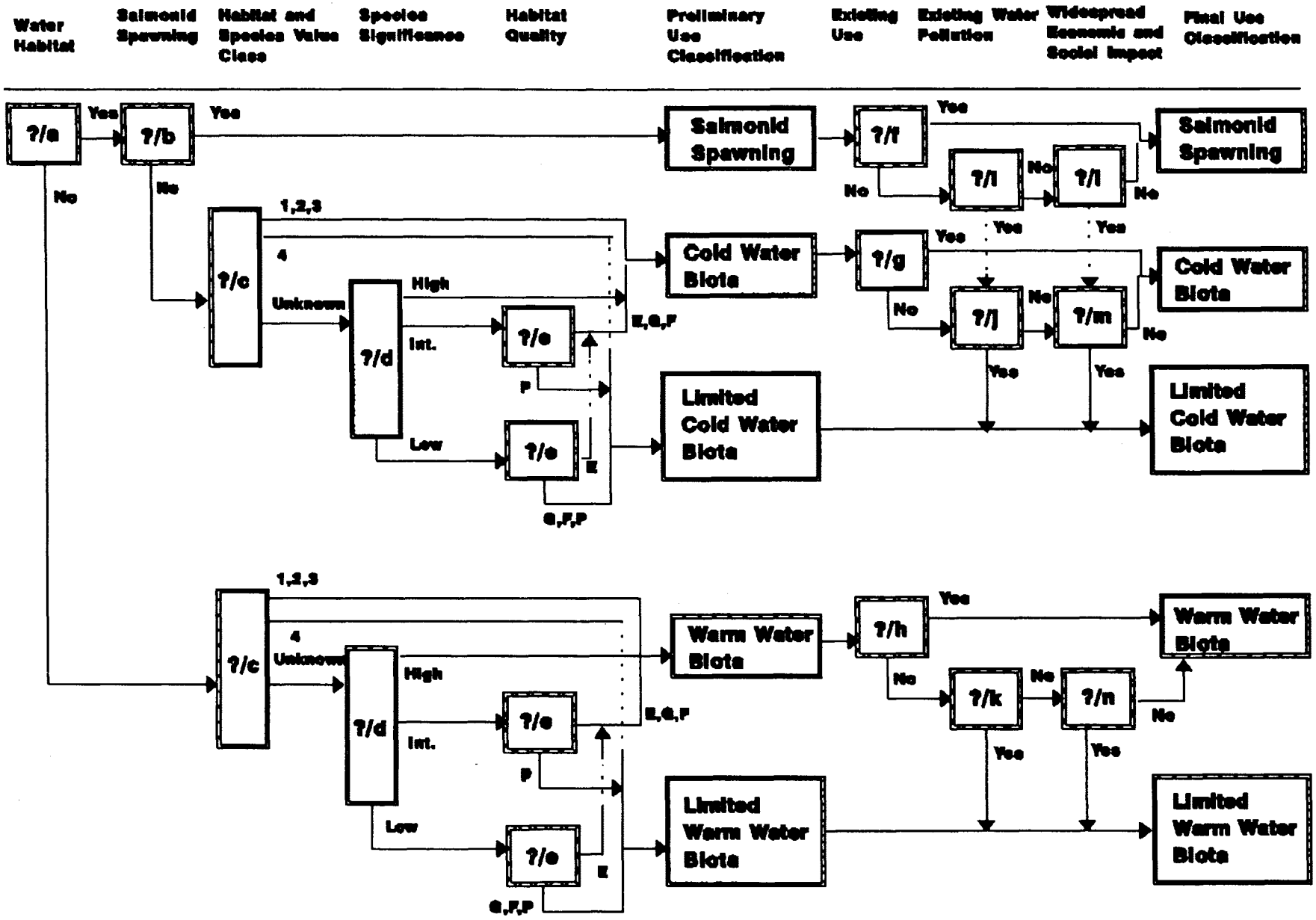

Figure 3 - Aquatic Life Uses Decision Pathway (Maret and Jensen 1991).

Table 4 - Questions for aquatic life uses decision tree.

/a	Do water temperatures seldom exceed 20° C or is there a significant occurrence of cold water species? (If salmonid spawning or cold water biota is an existing use, the "yes" decision option should be selected regardless of the existing cold water habitat.)
/b	Is the existing habitat (excluding human-caused pollution) capable of supporting salmonid spawning or is salmonid spawning an existing use?
/c	What is the habitat and species value class as defined in the Pacific Northwest Rivers Study? (If, as appropriate, cold or warn water biota is an existing use, the 1,2,3 decision option should be selected regardless of the defined habitat and species value class.)
/d	What is the significance (High, Intermediate or Low) of the species present?
/e	What is the rating (Excellent, Good, Fair, or Poor) of the existing aquatic habitat?
/f	Is salmonid spawning an existing use?
/g	Is cold water biota an existing use?
/h	Is warm water biota an existing use?
/i	Does natural or human-caused pollution, which would cause more environmental damage to correct than leave in place, preclude salmonid spawning as a use?
/j	Does natural or human-caused pollution, which would cause more environmental damage to correct than leave in place, preclude cold water biota as a use?
/k	Does natural or human-caused pollution, which would cause more environmental damage to correct than leave in place, preclude warn water biota as a use?
/l	Are controls more stringent than those required by the Sections 301(b) and 306 of the CWA necessary to support a salmonid spawning use and would these controls result in substantial and widespread economic and social impact?
/m	Are controls more stringent than those required by Sections 301(b) and 306 of the CWA necessary to support a cold water biota use and would these controls result in substantial and widespread economic and social impact?
/n	Are controls more stringent than those required by Sections 301(b) and 306 of the CWA necessary to support a warn water biota use and would these controls result in substantial and widespread economical and social impact?

Background Existing Use Information

The determination of cold water habitat and salmonid spawning habitat is critical in the decision pathway (figure 3). The Idaho Department of Fish and Game (IDFG) provided IDEQ with information on existing uses and historical uses of cold water biota and salmonid spawning for most of the PNRS stream segments in the Coeur d'Alene Basin (Horner 1992 personal communication). The Coeur d'Alene Tribe provided fisheries information for some of the PNRS stream segments located within the reservation boundary (Lillengreen, Johnson and Scholz 1992). Presence "P" or absence "A" of cold water biota and salmonid spawning uses (based on background data) was recorded in the use attainability database (appendix 3) along with the initials of the cooperating agencies.

DEQ collected additional existing use (fisheries) information through snorkeling and electrofishing on a small group of impaired stream segments in the South Fork of the Coeur d'Alene River. Electrofishing was performed in cooperation with IDFG personnel. These data document the presence or absence of cold water biota and salmonid spawning for those segments. These data are included in the use attainability database.

The "yes" decision option was selected in question /a, if background information documents presence of cold water biota and the "yes" decision option was selected in question /b, if salmonid spawning was a documented existing or historical use. Salmonid spawning was the final use classification for those segments with documented existing uses of cold water biota and salmonid spawning. Salmonid spawning is assigned the highest level of protection of any aquatic life use in the Idaho Water Quality Standards. Therefore, water quality criteria necessary to support salmonid spawning, also includes those criteria necessary to support cold water biota.

Protocol #7 is designed to allow the investigator to determine final use classifications via desk exercises, if sufficient background existing use information is available. Desk assessments were possible for many streams in the Coeur d'Alene Basin, However all assessments were field verified. Existing use and historical use information in regards to cold water biota and salmonid spawning was not available for some PNRS stream segments. In those cases, field data collected by use attainability crews was used to select the appropriate decision options and final use classifications.

Field Data

To assist in selecting appropriate decision options, water temperature data at all assessment sites were collected. Summer high water temperatures for each stream segment, as determined by field crew monitoring, or more intensive background monitoring data, were reported as either "> 70° F." or "< 70° F.", and recorded in the use attainability database. Water temperature data for most stream segments reflects only one temperature reading taken during the summer temperature peak period.

Benthic macroinvertebrates at all assessment sites were sampled on a semi-quantitative level. Specific field methods are described in the methods section. Macroinvertebrate quality was estimated from the field forms and recorded in the use attainability data base as either "high", indicating significant occurrence of cold water indicators, or "low", indicating significant occurrence of warm water indicators.

The attainability of salmonid spawning is based on existing use information, historical use information, or existing physical habitat. Presence of spawning areas along habitat assessment sites were visually identified and recorded. Presence "P" or absence "A" of spawning gravel was entered in the use attainability database for each stream segment.

Limited Aquatic Life Uses

Limited cold water biota was a proposed use that was included in the aquatic life use attainability decision tree as a result of the 1990 Water Quality Standards triennial revisions. Questions /c (habitat and species value class), /d (species significance), and /e (habitat quality were included in the decision pathway to differentiate between limited cold water biota and cold water biota. These decision options also differentiate between limited warm water biota and warm water biota. However, the "limited" aquatic life use was never adopted in the Water Quality Standards revisions. As a result, "limited cold water biota" was not used as a final use classification. Therefor, questions /c, /d and /e did not play a role in determining final use classifications. The above mentioned questions necessitate collection of useful beneficial use assessment information and are included in this discussion.

Habitat quality at assessment sites was visually rated using the habitat assessment matrix (Plafkin *et al.* 1989). Habitat assessment criteria and assessment forms are depicted in Appendix 2. Habitat ratings were not needed for determining final use classifications because limited aquatic life uses have not been incorporated into Idaho Water Quality Standards. However, these rating were included in the use attainability database. Habitat quality ratings assisted in beneficial use support status determinations for PNRS stream segments in the Coeur d'Alene Basin.

The results of the benefical use classification process described above, and use support status determination described in the methodology section are listed in appendix 6.

Conclusions and Recommendations

The Coeur d'Alene Basin use attainability study was used to evaluate the appropriateness of the 22 beneficial use designations in the basin which are incorporated in the Idaho Water Quality Standards. In addition, this analysis was used to determine the "appropriate beneficial use" classifications for stream segments without use designations in the water quality standards. An appropriate beneficial use is based on an existing and/or attainable use of a water body. The study was designed to obtain quantitative and qualitative information, which is necessary to make attainable use determinations that are in accordance with standard protocols for conducting use attainability assessments. A data base was developed to categorize information on all stream segments under study.

As a result, this report assigned, re-assigned, and confirmed 155, 10, and 11 beneficial use classifications respectfully to 176 stream segments in the Coeur d'Alene Lake basin. Attainable use classifications were determined in accordance with "Protocols for Conducting Use Attainability Assessments for Determining Beneficial Uses to be designated on Idaho Stream Segments" (Maret and Jensen 1991). Final use classifications were based on existing beneficial uses and/or attainable beneficial uses.

The stream segments assessed in this study were those segments located in the basin that were numbered in the "Pacific Northwest Rivers Study" (PNRS). The PNRS provided a numerical system for identifying the majority of perennial streams in the Columbia River system in 1986. The highest priority was given to stream segments with current uses designated in the Water Quality Standards. The remaining PNRS stream segments were assessed over the course of the field season. In addition, the list of streams in this study was expanded to include other segments not numbered in the PNRS.

The information necessary to make use attainability decisions, includes existing and historical use information, as well as field data. In most cases, existing use information provided by resource professionals, was sufficient to determine beneficial use classifications. Field data, pertaining to use attainability decision trees, were collected on all stream segments. This enabled beneficial use classification for those segments with limited or unavailable background information. The final beneficial use classifications for all of the stream segments assessed in this study, are listed in the use attainability database in appendix 6.

This study was also designed to determine the support status of the beneficial uses present on stream segments in the basin. Support status of beneficial uses has been determined on all segments in the study. This information is included in the appendix 6.

In order to determine beneficial support status stream segments, a Technical Advisory Committee (TAC) was developed to review data which suggests beneficial use support status. The TAC was comprised of natural resource professionals from the following

cooperating agencies: USFS; IDL; BLM; Coeur d'Alene Tribe; IDFG; and IDEQ. The members of the committee rated beneficial uses of each stream segment as either: "supported"; "partially-supported"; or "non-supported". Final support status determinations were based on a consensus from the group. Members of this committee also provided comment on the use attainability field methodology, use attainability database structure and the final beneficial use classifications.

A final objective of the Coeur d'Alene Basin use attainability assessments is to determine physical habitat structure, chemical and biological criteria which can be used to gauge recovery of beneficial uses on impaired stream segments in the basin. A supplemental report will be prepared that will describe these criteria. These interim criteria will be developed by pairing stream segments with beneficial uses in "non-support" or "partial support" with those segments in full support of the beneficial uses. The desired future condition of beneficial uses will be established using a range of reference streams with fully supported uses. Intensive level surveys will be conducted in reference areas in order to develop quanitative criteria to which future monitoring data from impaired streams will be comapred. Interim chemical (toxics) criteria have been identified through previous work in the basin, however biological and physical habitat criteria which include a wide range of reference conditions have not been established. Benthic macroinvertebrate surveys were completed in September 1993 in an effort to obtain data necessary for biological criteria development in the basin. Water quality monitoring efforts currently underway by IDEQ in the South Fork Coeur d'Alene River drainage will characterize baseline water quality (metals) of impaired stream segments as well as water quality of reference conditions. Additional macroinvertebrate and fisheries surveys are anticipated to adequately address objective 3.

From the information generated in this study, the following recommendations are made:

1) incorporate the final beneficial use classifications for stream segments in this study into the Idaho Water Quality Standards as designated uses to facilitate protection and restoration of basin waters; and

2) incorporate beneficial use support status determinations in the biannual State Water Quality Status Report.

Literature Cited

Allen, S., J. Putera, and C. Jazdzeweski. 1986. Pacific Northwest Rivers Study 1986 final report, Idaho. Idaho Fish and Game. Boise, Idaho. 12pp.

Burton, T.A. 1991. Monitoring stream substrates, pool volumes, and general habitat diversity. Water Quality Monitoring Protocols NO.3. Idaho Department of Health and Welfare, Division of Environmental Quality, Water Quality Bureau, Boise, Idaho. 48pp.

Clark, W.H., and T.R. Maret. 1992. Protocols for Assessment of Biotic Integrity (Macroinvertebrates) for Wadable Idaho Streams. Water Quality Monitoring Protocols Report NO. 5. Boise, Idaho. 55pp.

Cochnauer, T., and T. Elms. 1986. Probability of use curves for selected Idaho fish species. Idaho Department of Fish and Game, Bureau of Fisheries, Project Performance Report, Project F-71-R-10, Boise, Idaho. 49pp.

Hankin, D.G. and G.H. Reeves. 1988. Estimating total fish abundance and total habitat area in small streams based on visual estimation methods. Can. Journal Fish. Aquat, Sci. 45:834-844.

IDEQ, and EPA. 1993. Coeur d'Alene Basin Framework to Control Water Pollution from Nutrients, Metals and Sediments. IDHW-DEQ and EPA, Idaho Department of Health and Welfare -Division of Environmental Quality. Coeur d'Alene, Idaho. 25pp.

IDHW-DEQ. 1991a. Panhandle Basin Status Report: An Interagency Summary for the Basin Area Meeting Implementing the Antidegradation Agreement. Idaho Department of Health and Welfare - Division of Environmental Quality. Boise, Idaho. 38pp.

IDHW-DEQ. 1991b. Idaho Water Quality Standards and Wastewater Treatment Requirements. Idaho Department of Health and Welfare - Division of Environmental Quality. Boise, Idaho. 72pp.

IDHW-DEQ. 1993. South Fork Coeur d'Alene River Water Quality Assessment. Idaho Department of Health and Welfare - Division of Environmental Quality. Coeur d'Alene, Idaho. 9pp.

IDFG. 1991. Idaho Department of Fish and Game. Fisheries Management Plan 1991-1995. Boise, Idaho. 292pp.

Kappesser, G. 1992. Riffle Armor Stability Index. Idaho Panhandle National Forests. Coeur d'Alene, Idaho. 83814. 9pp.

Lillengreen, K.L., D.C. Johnson, and A.T. Scholz. 1992. Fisheries Habitat Evaluation on Tributaries of the Coeur d'Alene Indian Reservation. 1991 Annual Report. Upper Columbia United Tribes Fisheries Center. Department of Biology. Eastern Washington University. Cheney, Washington. 32pp.

Maret, T.R. and D. Jensen. 1991. Protocols for Conducting Use Attainability Assessments for Determining Beneficial Uses to be Designated on Idaho Stream Segments. Water Quality Monitoring Protocol No. 7. Idaho Department of Health and Welfare - Division of Environmental Quality, Boise, Idaho. 33pp.

Plafkin, J.L., M.T. Barbour, K.D. Porter, S.K. Gross, and R.M. Hughes. 1989. Rapid Bioassessment Protocols for Use in Streams and Rivers - Benthic Macroinvertebrates and Fish. U.S. EPA. Office of Water. EPA/444-4-89-001. Seattle, Washington.

Rosgen, D.L. 1985. A Stream Classification System. USDA Forest Service, Gen. Tech. Rep. RM-120.

Savage, N.C. 1985. A Topical Review of Environmental Studies in the Coeur d'Alene River/Lake System. Idaho Water Research Institute, University of Idaho. Moscow, Idaho. 81pp.

U.S. EPA. 1983. Technical support manual: waterbody surveys and assessment for conducting use attainability analysis. U.S. Environmental Protection Agency. Office of Water Regulations and Standards. Washington D.C.

Appendix 1 - Beneficial Use Designations of Water Bodies Currently Listed in the Idaho Water Quality Standards.

Legend: # Protected for General Use
* Protected for Future Use
X Use Protected Above Mining Impacts

DESIGNATED USES

Map Code	Waters	Domestic Water Supply	Agricultural Water Supply	Cold Water Biota	Warm Water Biota	Salmonid Spawning	Primary Contact Recreation	Secondary Contact Recreation	Special Resource Water
q. PB-10S	COEUR D'ALENE RIVER source to S.F. Coeur d'Alene	#	#	#		#	#	#	#
s. PB-110S	PRICHARD CREEK source to mouth	X	#	#		#	#	#	
t. PB-120S	N.F. COEUR D'ALENE source to mouth	#	#	#		#	#	#	#
u. PB-130S	S.F. COEUR D 'ALENE source to Mullan	#	#	#		#	#	#	
v. PB-140S	S.F. COEUR D 'ALENE Mullan to mouth		#	*		*		#	
w. PB-121S	CANYON CREEK source to mouth	X	#	*X		X	X	#	
x. PB-142S	NINE MILE CREEK source to mouth	X	#	*X		X	X	#	
y. PB-143S	BIG CREEK source to mouth	X	#	*X		X	X	#	
z. PB-145S	GOVERNMENT GULCH source to mouth		#					#	
aa. PB-145S	PINE CREEK source to mouth	X	#	#		#	X	#	
bb. PB-147S	LAKE CREEK source to mouth	X	#	*X		X	X	#	
cc. PB-148S	SHIELDS GULCH source to mouth	X	#	*X		X	X	#	
dd. PB-149S	BEAR CREEK source to mouth	#	#	#		#	#	#	
ee. PB-20S	COEUR D'ALENE RIVER S.F. confluence to mouth (Lake)		#	#		*	#	#	
gg. PB-310S	ST. JOE RIVER source to Calder	#	#	#		#	#	#	

Legend: # Protected for General Use
* Protected for Future Use
X Use Protected Above Mining Impacts

DESIGNATED USES

Map Code	Waters	Domestic Water Supply	Agricultural Water Supply	Cold Water Biota	Warm Water Biota	Salmonid Spawning	Primary Contact Recreation	Secondary Contact Recreation	Special Resource Water
ii. PB-320S	ST.JOE RIVER Calder to St. Maries River	#	#	#		#	#	#	#
jj. PB-321S	ST. MARIES RIVER source to Fernwood	#	#	#		*	#	#	#
kk. PB-322S	ST. MARIES RIVER Fernwood to mouth		#	*			#	#	
ll. PB-3221S	SANTA CREEK source to mouth		#	*		*	#	#	
mm. PB-330S	ST.JOE RIVER St. Maries River to mouth		#	#			#	#	
nn. PB-340S	PLUMMER CREEK source to mouth		#					#	
pp. PB-40S	SPOKANE RIVER Coeur d'Alene Lake to WA-ID border	#	#	#		#	#	#	#

(Source - Idaho Water Quality Standards, section IDAPA 16.01.2110,01)

Appendix 2 - Abbreviated discussion of use attainability decision trees.

The following provides an abbreviated discussion of the recreational uses and aquatic life uses decision trees found in (Maret and Jensen 1991).

Recreation

The attainability and appropriate classification of a stream segment for recreational use is determined according to the decision tree shown in figure 2. The following provides a brief discussion of the decision options for assessing the attainability of recreational uses.

Water-Based Recreational Value

The findings of the "Pacific Northwest Rivers Study" (PNRS) are to initially evaluate the water based recreational value of the stream segment (Allen *et al.* 1986). Appendix 4 provides resource value classes for fisheries, wildlife, and recreation to be used in the assessment matrices. The PNRS assessed 1,564 stream segments for water based recreation and assigned one of five value classes to each segment to denote its recreation value:

Value Class	
1	Outstanding recreational resource
2	Substantial recreational resource
3	Moderate recreational resource
4	Limited recreational resource
U	Unclassified or unknown recreational resource

Based on the PNRS water based recreational value, one of the three decision options are selected (Allen *et al.* 1986). If the goal of the use attainability assessment is to field verify and existing use designation which may be based on the PNRS water based recreational value, the unknown decision option should be selected

Normal Summer Low Flows

If mean daily flows during the period May 1 through September 30 are normally less than 1 cfs, then a primary or secondary contact recreational use is deemed unattainable.

Normal Summer Flows or Average Width and Depth

The "yes" decision option is selected for the stream segment if mean daily flows during the period May 1 through September 30 are normally greater than 5 cfs or the average stream width is greater than 25 feet and the average stream depth is greater than 1 foot.

Aesthetics

A major factor which determines how much a stream will be used for recreation is its scenic beauty or aesthetic quality. The aesthetic quality of a stream segment is evaluated and rated according to the aesthetic quality assessment matrix shown in table 2-1. The aesthetic quality for a stream segment is rated as high (33-45), intermediate (18-32), or low (5-17) based on the sum (total score) of the completed aesthetic quality assessment matrix. The appropriate decision option is selected based on the stream segment aesthetic quality rating.

Dominant Substrate

The substrate composition of the stream segment is estimated from visual observation. If the substrate is dominated (>50%) by sand or larger material (>0.06 mm particle size), the "yes" decision option is selected. If silt or clay (<0.06 mm particle size) is a major component (>50%) of the substrate, the "no" decision option is selected.

Preliminary Use Classification

The preliminary use classification represents the beneficial use attainable on the stream segment before allowances are made for natural and irretrievable, man-induced water pollution and economic and social consequences of the use designation.

Existing Use

If the stream segment supported the beneficial use in question at any time on or after November 28, 1975 it is deemed an existing use and the "yes" decision option is selected. In accordance with the Clean Water Act, existing uses are deemed attainable uses that may not be "downgraded" for any reason (e.g., economic or social considerations, ect.).

Evaluation of the existing primary contact recreation use of a stream segment is based on the actual primary contact recreational use that has occurred on the stream segment. An existing primary contact recreational use is deemed present if the stream segment in question receives significant usage (more than 100 person-visits per year) in any of the following recreational activities:

-Swimming
-Water Skiing
-Skin Diving
-Rafting
-Canoeing
-Kayaking
-Tubing

Table 2-1 - Aesthetic quality assessment matrix (Maret and Jensen 1991).

PARAMETER	CATEGORY HIGH (7-9)	INTERMEDIATE (4-6)	LOW (1-3)
Channel Morphology Score:_____	Little or no channelization present. High stream sinuosity.	Some channelization present. Moderate stream sinuosity.	Channelization extensive. Low stream sinuosity.
Water Clarity (May 1 - Sept. 30) Score:_____	Secchi depth > 1 meter or turbidity < 25 NTU.	Secchi depth 0.5 to 1 meter or turbidity 25 to 50 NTU.	Secchi depth < 0.5 meter or turbidity > 50 NTU.
Streambank Stability Score:_____	Stable. Little evidence of erosion or bank failure. Over 80% of the streambank surfaces covered by veg. or boulders and cobble.	Moderately stable. Infrequent, small areas of erosion mostly healed over. 50-79% of the streambank covered by veg. gravel or other larger material.	Unstable. Moderate to many eroded areas. Less than 50% of the streambank surfaces covered by veg. gravel or larger material.
Riparian Conditions Score:_____	Extensive buffer zone of diverse vegetation. Relatively unimpacted by human activity.	Moderate buffer zone of diverse vegetation. Moderately impacted by human activity.	Minimal buffer zone of diverse vegetation. Extensively impacted human activity.
Surrounding Land form "Scenic Grandeur" Score:_____	Predominantly forested or alpine; or high relief area Highly scenic.	Slightly to moderately forested or moderate relief. Moderately scenic.	Intensive agriculture or urban development. Not scenic to slightly scenic.

Total Score:_____

High (35-45)
Intermediate (18-32)
Low (5-17)

Natural or Human-Caused Pollution

If naturally occurring pollutant concentrations prevent the attainment of the use in question, the "yes" decision option is selected. The "yes" decision option is also selected if human-caused conditions or sources of pollution that can not be remedied, would cause more environmental damage to correct than to leave in place, prevent the attainment of the use in question. Where "background" pollution limits beneficial use attainment, site-specific criteria should be established to protect "existing" water quality. Such stream segments should be evaluated as part of each triennial water quality standards revision to determine if "background" water quality has improved to the extent that appropriate beneficial uses can be supported.

Widespread Economic and Social Impact

The "yes" decision option is selected if supporting the use in question would require controls more stringent than those required by sections 301(b) and 306 of the Clean Water Act, and the controls would result in substantial and widespread economic and social impact.

Final Use Classification

The final use classification is the use designation assigned in the water quality standards.

Aquatic Life

Cold Water Habitat

The cold water habitat of a stream is initially assessed based on its water temperature and/or the aquatic organisms present. If water temperatures seldom exceed 20° C. or there is a significant occurrence of a cold water biota indicator organism, the "yes" decision option should be selected; the stream segment is considered cold water habitat. If water temperatures commonly exceed 20° C. and cold water indicators are absent, the "no" decision option should be selected; the stream segment is considered warm water habitat. If, by definition, salmonid spawning or cold water biota are existing use, the "yes" decision option should be selected regardless of existing habitat conditions.

Salmonid Spawning

The ability of a stream segment to support salmonid spawning is evaluated based on existing or historical salmonid populations or existing physical habitat. If the stream segment supports a viable population of salmonids with juveniles present, salmonid spawning is considered to be occurring and the "yes" decision option should be selected. If historical records document the occurrence of successful salmonid reproduction on or after November 28, 1975, the "yes" decision option should be selected. If the physical

habitat (e.g., substrate, flow, cover, ect.) of the stream segment, excluding human-caused pollution, is supportive of salmonid reproduction, the stream segment is considered supportive of salmonid spawning and the "yes" decision option should be selected. Idaho Fish and Game has developed habitat preference criteria for salmonid spawning which can be used as guidance for a particular species (Cochnauer and Elms 1986).

Habitat and Species Value Class

The findings of the "Pacific Northwest Rivers Study" (PNRS) are used to initially evaluate the habitat quality and significance of fish species present (Allen *et al.* 1986). The PNRS assessed 1,564 stream segments for habitat and fish species and assigned one of five value classes to each segment to denote its value for resident fish:

Value Class	
1	Outstanding resident fish resource
2	Substantial resident fish resource
3	Moderate resident fish resource
4	Limited resident fish resource
U	Unclassified or unknown resident fish resource

The "habitat and species" value assigned by the PNRS was based on habitat quality and the relative significance of resident fish species present in the stream segment. A preliminary value class was assigned to a given stream segment for each species present. For example, if cutthroat trout in segment "X" contained intermediate quality cutthroat trout habitat, a value class of 2 was assigned to the segment. The same procedure was repeated for all resident fish species present in segment "X"; the highest value class obtained was taken as the "habitat and species" value of the segment. If appropriate, a value class of U was assigned to a stream segment. Five exceptions to this methodology are noteworthy:

1) Migration Corridors
2) Rare Species
3) Research Sites
4) Spawning Habitat
5) Potential habitat

Based on the PNRS "habitat and species" value, one of the three decision options is selected. If the goal of the use attainability assessment is to "field" verify an existing use designation which may be based on the "habitat and species" value, the unknown decision option should be selected.

Species Significance

The significance of the existing fish species inhabiting the stream segment is evaluated

and rated as high, intermediate or low. Existing fish species are considered to be any fish species that represented a viable reproducing population inhabiting the stream segment on or after Nov. 28,1975, or could represent a viably reproducing population based on existing habitat conditions if water quality were not limiting. Existing fish species are evaluated, and the highest rating obtained for an individual species is taken as the species significance rating for the steam segment. Species significance is rated as high, intermediate or low (IDFG 1991).

Habitat Quality

Habitat quality is evaluated according to the habitat assessment matrix defined in "Rapid Bioassessment Protocols for Use in Streams and Rivers" (Plafkin *et al.* 1989) and shown in table 2-2.
Qualitative habitat quality for a stream segment is rated as excellent (165-195), good (135-164), fair (105-134) or poor (0-104) based on the sum of the completed habitat assessment matrix. The appropriate decision option is selected based on the stream segment habitat rating.

Habitat parameters pertinent to the assessment of habitat quality are separated into three principal categories: primary, secondary and tertiary parameters.

Primary parameters are those that characterize the stream on a "microscale" habitat and have the greatest direct influence on the structure of the indigenous communities. Secondary and tertiary parameters measure the "macroscale" habitat. A minor change from the original habitat assessment matrix defined in (Plafkin *et al.* 1989) in an effort to make the habitat assessment matrix specific to the Coeur d'Alene Basin. The primary habitat parameter "embeddedness" was replaced with "pool/riffle ratio" . Embeddedness was not found to be a significant factor associated with degraded stream segments in the predominately precambrian belt series geology type of the Coeur d'Alene Basin. Also large organic debris (LOD) recruitment potential was added to the habitat assessment matrix, although no point values were assigned to this parameter. Further discussion of each habitat parameter can be found in (Maret and Jensen 1991).

Table 2-2 - Habitat assessment matrix used in the Coeur d'Alene Basin use attainability assessments.

Stream Name:_____ Station:_____ Date:_____ Location Description:_____
Investigators:_____

IDAHO DEPARTMENT OF HEALTH AND WELFARE
HABITAT ASSESSMENT FIELD DATA SHEET

Habitat Parameter	Optimal	Sub-optimal	Marginal	Poor
1. Bottom substrate/ instream cover	Greater than 50% mix of rubble, gravel, submerged logs, undercut banks, or other stable habitat.	30-50% mix of rubble, gravel, or other stable habitat. Adequate habitat.	10-30% mix of rubble, gravel, or other stable habitat. Habitat availability less than desirable.	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious.
	16-20 _____	11-15 _____	6-10 _____	0-5 _____
2. Pool/riffle Ratio 1:(R/P) P:R ratio _____	1:1 16-20 _____	>1:8 11-15 _____	>1:15 6-10 _____	>1:25 0-5 _____
3. ≤ 0.15 cms (5 cfs) at rep. low flow	Cold > 0.05 cms (2 cfs) Warm > 0.15 cms (5 cfs)	0.03-0.05 cms (1-2 cfs) 0.05-0.15 cms (2-5 cfs)	0.01-0.03 cms (0.5-1 cfs) 0.03-0.05 cms (1-2 cfs)	< 0.01 cms (0.5 cfs) < 0.03 cms (1 cfs)
	16-20 _____	11-15 _____	6-10 _____	0-5 _____
OR > 0.15 cms (5 cfs) velocity/depth	Slow (< 0.3 m/s), deep (> 0.5 m): slow, shallow (> 0.5 m/s), fast (> 0.3 m/s), deep; fast, shallow habitats all present.	Only 3 of the 4 habitat categories present (missing riffles or runs receive lower score than missing pools).	Only two of the 4 habitat categories present (missing riffles or runs receive lower score).	Dominated by 1 velocity depth category (usually pools).
	16-20 _____	11-15 _____	6-10 _____	0-5 _____
4. Canopy cover (shading)	A mixture of conditions where some areas of water surface fully exposed to sunlight, and other receiving various degrees of filtered light.	Covered by sparse canopy; entire water surface receiving filtered light.	Completely covered by dense canopy; water surface completely shaded OR nearly full sunlight reaching water surface. Shading limited to < 3 hours per day.	Lack of canopy, full sunlight reaching water surface.
Canopy Density _____	16-20 _____	11-15 _____	6-10 _____	0-5 _____

Habitat Parameter	Optimal	Sub-optimal	Marginal	Poor
5. Channel alteration	Little or no enlargement of islands or point bars, and/or no channelization present.	Some new increase in bar formation, mostly from coarse gravel; and/or some channelization present.	Moderate deposition of new gravel, coarse sand on old and new bars; and/or embankments on both banks.	Heavy deposits of fine material, increased bar development; and/or extensive channelization.
	12-15 _____	8-11 _____	4-7 _____	0-3 _____
6. Bottom scouring and deposition	Less than 5% of the bottom affected by scouring and/or deposition.	5-30% affected. Scour at constrictions and where grades steepen. Some deposition in pools.	30-50% affected. Deposits and/or scour at obstructions, constrictions, and bends. Filling of pools prevalent.	More than 50% of the bottom changing frequently. Pools almost absent due to deposition. Only large rocks in riffle exposed.
	12-15 _____	8-11 _____	4-7 _____	0-3 _____
7. Pool Variability	Even mix of deep/shallow, large/small pools present.	Majority of pools large and deep; very shallow.	Shallow pools much more prevalent than deep pools.	Majority of pools small and shallow or pools few absent.
	12-15 _____	8-11 _____	4-7 _____	0-3 _____
8. Pool substrate characterization and cover (pool complexity)	Comprised of most substrate materials with gravel, cobble, boulder, bedrock ledges, SWD, LWD, and undercut banks.	Lesser degree of substrate diversity. Substrate and pool cover are adequate.	Pool complexity is limited. Some boulder, bedrock, and cobble can be used for cover.	Lack of diverse substrate materials. (ie. cobble, small boulder or sand)
	12-15 _____	8-11 _____	4-7 _____	0-3 _____
9. Lower bank channel capacity	Overbank (lower) flows rare. Lower bank W/D ratio < 7. (Channel width divided by depth or height of lower bank.)	Overbank (lower) flows occasional. W/D ratio 8-15.	Overbank (lower) flows common. W/D ratio 15-25.	Peak flows not contained through channelization. W/D ratio > 25.
	12-15 _____	8-11 _____	4-7 _____	0-3 _____

Habitat Parameter	Optimal	Sub-optimal	Marginal	Poor
10. Upper bank stability during extreme	Upper bank stable. No evidence of erosion or bank failure. Side slopes generally < 30°. Little potential for future problems. 9-10 _____	Moderately stable. Infrequent, small areas of erosion mostly healed over. Side slopes up to 40° on one bank. Slight potential in extreme floods. 6-8 _____	Moderately unstable. Moderate frequency and size of erosional areas. Side slopes up to 60° on some banks. High erosion high flow. 3-5 _____	Unstable. Many eroded areas. "Raw" areas frequent along straight sections and bends. Side slopes > 60° common. 0-2 _____
11. Bank vegetation protection OR Grazing or other disruptive pressure	Over 90% of the streambank surfaces covered by vegetation. 9-10 _____ Vegetative disruption minimal or not evident. Almost all potential plant biomass at present stage of development remains. 9-10 _____	70-89% of the streambank surfaces covered by vegetation. 6-8 _____ Disruption evident but not affecting community vigor. Vegetative use is moderate, and at least one-half of the potential plant remains. 6-8 _____	50-79% of the streambank surfaces covered by vegetation. 3-5 _____ Disruption obvious; some patches of bare soil or closely cropped vegetation present. Less than one-half of the potential plant biomass remains. 3-5 _____	Less than 50% of the streambank surface covered by vegetation. 0-2 _____ Disruption of streambank vegetation is very high. Vegetation has been removed to 2 inches or less in average stubble height. 0-2 _____
12. Streamside cover dominant material tailings.	Dominant vegetation is shrub. 9-10 _____	Dominant vegetation is of tree form. 6-8 _____	Dominant vegetation is grass or forbes. 3-5 _____	Over 50% of the streambank has no vegetation and is soil, rock, bridge materials, culverts, or mine 0-2 _____
13. Riparian vegetative zone width (least buffered side).	> 18 meters. 9-10 _____	Between 12 and 18 meters. 6-8 _____	Between 6 and 12 meters. 3-5 _____	< 6 meters. 0-2 _____
14. LOD recruitment potential (circle one)	Old growth 2ft. DBH	Approaching late seral stage 1ft. DBH	Early seral < 6 inch stems	None

Excellent - 165-195 Good - 135-164 Fair - 105-134 Poor - 0-104

Score _____

Existing Use

If the stream segment supported the beneficial use in question at any time on or after Nov. 28, 1975, it is deemed an existing use and the "yes" decision option is selected. In accordance with the Clean Water Act, existing uses are deemed attainable uses that may not be "downgraded" for any reason (e.g., economic or social considerations, ect.).

Natural or Human-Caused Pollution

If naturally occurring pollutant concentrations prevent the attainment of the use in question, the "yes" decision option is selected. The "yes" decision option is also selected if human-caused conditions or sources of pollution that can not be remedied, or would cause more environmental damage to correct than to leave in place, prevent the attainment of the use in question. Where "background" pollution limits beneficial use attainment, site specific criteria should be established to protect "existing" water quality. Such stream segments should be evaluated as part of each triennial water quality standards revision to determine if "background" water quality has improved to the extent that appropriate beneficial uses can be supported.

Widespread Economic and Social Impact

The "yes" decision option is selected if supporting the use in question would require controls more stringent than those required by sections 301(b) and 306 of the Clean Water Act, and the controls would result in substantial and widespread economic and social impact.

Final Use Classification

The final use classification is the use designation assigned in the water quality standards.

Appendix 3 - Use Attainability Database.

PNRS SEG.NO.	STREAM NAME	LOWER BOUNDARY	UPPER BOUNDARY	STREAM LENGTH (miles)	SURVEY DATE	NO.of SITES	MEAN WIDTH (ft)	MEAN DEPTH (ft)	W:D RATIO	SURVEY LENGTH (ft)
1481.00	CDA R	SFK CDA R	YELLOWDOG CR	43.0	06/29/92	8.0	77.6	3.5	22.0	18045.0
1482.00	CDA R	YELLOWDOG	TEEPEE	8.0	07/02/92	3.0	48.2	3.4	14.3	5252.0
1482.01	MINNERS CR	CDA R	HEADWATERS	2.8	09/08/91	100%	15.3	0.5	30.0	14530.0
1482.02	BRETT CR	CDA R	HEADWATERS	2.5	07/02/92	1.0	8.5	1.1	7.7	352.0
1483.00	CDA R	TEEPEE	HEADWATERS	20.0	07/08/92	3.0	23.9	2.8	8.5	2522.0
1483.01	SPRUCE CR	CDA R	HEADWATERS	5.5	07/08/92	1.0	8.0	0.9	9.1	152.0
1483.02	BUCKSKIN CR	CDA R	HEADWATERS	3.0	07/08/92	1.0	13.0	0.8	16.7	293.0
1484.00	NFK CDA R	MAINSTEM	HONEYSUCKLE	29.0	07/06/92	4.0	36.1	2.4	14.8	5472.0
1485.00	NFK CDA R	HONEYSUCKLE	HEADWATERS	7.0	07/06/92	6.0	15.4	1.8	8.4	3597.0
1486.00	BUMMBLE BEE	NFK CDA R	HEADWATERS	4.2	06/29/92	3.0	8.5	0.8	10.4	953.0
1487.00	COPPER CR	NFK CDA R	HEADWATERS	5.3	07/09/92	2.0	13.1	0.9	14.4	742.0
1488.00	LAVERNE CR	NFK CDA R	HEADWATERS	4.0	07/06/92	2.0	10.3	1.0	10.0	598.0
1489.00	LIEBERG CR	NFK CDA R	HEADWATERS	5.6	07/06/92	3.0	11.2	1.1	10.6	1233.0
1490.00	SKOOKUM CR	NFK CDA R	HEADWATERS	2.7	06/26/92	4.0	8.8	1.6	5.5	653.0
1491.00	DECEPTION CR	NFK CDA R	HEADWATERS	4.0	06/26/92	3.0	7.0	1.1	6.1	1153.0
1492.00	BURNT CAB CR	NFK CDA R	HEADWATERS	6.3	04/06/92	100%	18.0	1.1	16.7	12209.0
1493.00	IRON CR	NFK CDA R	HEADWATERS	4.7	07/06/92	3.0	8.7	1.2	7.5	598.0
1494.00	COUGAR GULCH CR	CDA R	HEADWATERS	9.5	08/09/91	100%	15.2	0.8	19.0	39710.0
1495.00	STEAMBOAT CR	CDA R	HEADWATERS	5.2	07/16/91	100%	25.8	1.1	23.5	32036.0
1496.00	GRAHAM CR	CDA R	HEADWATERS	5.1	06/30/92	3.0	12.6	1.2	10.8	1455.0
1497.00	GRIZZLEY CR	CDA R	HEADWATERS	3.0	06/30/92	2.0	7.0	0.8	9.0	569.0
1498.00	BROWN CR	CDA R	HEADWATERS	3.9	07/31/91	100%	10.8	0.6	17.5	4998.0
1499.00	BEAVER CR	CDA R	HEADWATERS	4.2	07/01/92	3.0	14.8	1.2	12.8	1624.0
1500.00	PRICHARD CR	CDA R	HEADWATERS	15.0		100%	20.5	0.7	31.1	77630.0
1500	TIGER CR	PRITCHARD CR	HEADWATERS	1.0	07/01/92	DRY				
1500	COUGAR CR	PRITCHARD CR	HEADWATERS	1.0	07/01/92	DRY				
1500	WEST CR	PRITCHARD CR	HEADWATERS	1.5	07/01/92	DRY				
1500.04	OPHIR CR	PRITCHARD CR	HEADWATERS	1.0	07/01/92	1.0	3.7	0.5	7.2	158.0
1500.05	IDAHO CR	PRITCHARD CR	HEADWATERS	2.0	07/01/92	1.0	5.8	1.0	5.7	399.0
1501.00	EAGLE CR	PRITCHARD CR	HEADWATERS	9.0	07/01/92	3.0	17.2	2.2	7.7	1929.0

PNRS SEG.NO.	STREAM NAME	LOWER BOUNDARY	UPPER BOUNDARY	STREAM LENGTH (miles)	SURVEY DATE	NO.of SITES	MEAN WIDTH (ft)	MEAN DEPTH (ft)	W:D RATIO	SURVEY LENGTH (ft)
1502.00	EAGLE CR WFK	EAGLE CR	HEADWATERS	8.5	07/01/92	2.0	15.3	1.4	10.6	876.0
1503.00	LOST CR	CDA R	HEADWATERS	7.5	06/30/92	2.0	16.3	1.4	11.4	852.0
1504.00	SHOSHONE CR	CDA R	HEADWATERS	16.1	07/02/92	4.0	17.3	1.2	14.3	2662.0
1504.01	FALLS CR	SHOSHONE CR	HEADWATERS	6.8	08/30/91	100%	15.6	1.0	15.6	11062.0
1505.00	DOWNEY CR	CDA R	HEADWATERS	2.6	09/24/91	100%	13.6	0.7	18.7	8570.0
1506.00	YELLOWDOG CR	CDA R	HEADWATERS	4.0	09/14/91	100%	10.5	0.6	17.4	6354.0
1507.00	FLAT CR	CDA R	HEADWATERS	6.6	09/10/91	100%	10.0	0.8	25.5	26993.0
1508.00	TEEPEE CR	CDA R	HEADWATERS	8.2	07/07/92	3.0	20.7	1.3	16.5	1602.0
1509.00	INDEPENDENCE CR	TEEPEE CR	HEADWATERS	13.0	07/07/92	2.0	30.4	1.1	28.1	1487.0
1510.00	TRAIL CR	TEEPEE CR	HEADWATERS	9.4	09/07/91	100%	21.9	0.4	49.8	29693.0
1511.00	BIG ELK CR	TEEPEE CR	HEADWATERS	8.4	07/07/92	2.0	9.4	1.4	6.5	839.0
1512.00	JORDAN CR	CDA R	HEADWATERS	4.2	07/08/92	1.0	13.3	1.4	9.3	682.0
1515.00	SFK CDA R	CDA R	OSBURN	20.5	06/28/92	3.0	50.7	3.5	14.4	4241.0
1515	POLARIS GUL	SFK CDA R	HEADWATERS	1.5	06/26/92	DRY				
1515	SLAUGHTER HOUSE	SFK CDA R	HEADWATERS	2.5		DRY				
1516.00	SFK CDA R	OSBURN	MULLAN	13.0	06/24/92	3.0	21.4	2.1	10.2	2763.0
1516	ROCK CR	SFK CDA R	HEADWATERS	2.0		DRY				
1516	TROWBRIDGE CR	SFK CDA R	HEADWATERS	0.0		DRY				
1517.00	SFK CDA R	MULLAN	HEADWATERS	6.5	06/25/92	2.0	15.6	1.2	12.6	763.0
1518.00	BEAR CR	SFK CDA R	HEADWATERS	7.1	06/25/92	3.0	10.5	1.0	10.9	825.0
1519.00	PINE CR	SFK CDA R	EFK PINE	16.2	06/23/92	2.0	25.5	1.8	14.1	1812.0
1520.00	EFK PINE CR	PINE CR	HEADWATERS	7.1	06/23/92	2.0	17.5	1.1	15.4	1266.0
1520.01	TRAPPER CR	EFK PINE	HEADWATERS	3.0	07/16/92	1.0	13.0	0.7	18.6	520.0
1521.00	BIG CR	SFK CDAR	HEADWATERS	9.0	06/24/92	3.0	17.0	1.7	10.3	1767.0
1521	SHIELDS GUL	SFK CDAR	HEADWATERS	2.0		DRY				0.0
1521.02	MCFARREN CR	SFK CDAR	HEADWATERS	2.0	06/26/92	1.0	5.0	0.6	8.6	215.0
1521	MILO CR	SFK CDAR	HEADWATERS	3.0						0.0
1521.04	GOVERNMENT GUL	SFK CDA R	HEADWATERS	3.0	06/26/92	1.0	4.8	0.6	8.6	266.0
1521.05	MONTGOMERY GUL	SFK CDA R	HEADWATERS	4.0	06/26/92	1.0	8.6	0.9	9.2	244.0
1521.10	MOON CR	SFK CDA R	HEADWATERS	2.5	06/24/92	3.0	6.8	0.6	10.9	689.0

PNRS SEG.NO.	STREAM NAME	LOWER BOUNDARY	UPPER BOUNDARY	STREAM LENGTH (miles)	SURVEY DATE	NO.of SITES	MEAN WIDTH (ft)	MEAN DEPTH (ft)	W:D RATIO	SURVEY LENGTH (ft)
1522.00	NUCKOLS CR	SFK CDA R	HEADWATERS	1.5		DRY				0.0
1522.01	TWO MILE CR	SFK CDA R	HEADWATERS	3.0	06/24/92	2.0	6.0	0.6	10.5	511.0
1522	LAKE CR	SFK CDA R	HEADWATERS	2.5	06/26/92	3.0	8.0	0.8	10.0	300.0
1523.00	PLACER CR	SFK CDA R	HEADWATERS	6.5	06/25/92	3.0	9.1	1.4	6.4	1368.5
1524.00	NINE MILE CR	SFK CDA R	HEADWATERS	6.0	06/25/92	3.0	9.6	0.9	10.2	1110.0
1525.00	CANYON CR	SFK CDA R	HEADWATERS	12.2	06/25/92	3.0	14.5	1.5	9.6	1560.0
1526.00	LSFK CDA R	SFK CDA R	HEADWATERS	4.0	07/16/92	2.0	9.7	0.9	10.7	642.0
1529.00	CDA R	CDA L	SFK CDA R	29.0						
1530.00	THOMPSON CR	CDA R	HEADWATERS	3.9		DRY				
1531.00	WILLOW CR	CDA R	HEADWATERS	5.0	08/04/92	1.0	6.9	1.0	6.8	211.0
1532.00	EVANS CR	CDA R	HEADWATERS	5.9	08/04/92	1.0	9.0	1.0	9.3	476.0
1533.00	FORTIER CR	KILARNEY L	HEADWATERS	3.7		DRY				
1534.00	4TH OF JULY CR	CDA R	HEADWATERS	6.3	08/04/92	1.0	10.0	1.0	10.3	439.0
1535.00	LATOUR CR	CDA R	HEADWATERS	16.6	07/09/92	3.0	24.7	1.4	18.2	2693.0
1535	BALDY CR	LATOUR CR	HEADWATERS	4.6	07/09/92	DRY				
1535	LARCH CR	LATOUR CR	HEADWATERS	1.5	07/09/92	DRY				
1536.00	SKEEL GUL CR	CDA R	HEADWATERS	2.7	07/09/92	1.0	7.3	0.8	9.2	139.0
1536	HUNT GULCH	CDA R	HEADWATERS	2.0	07/09/92	DRY	3.0	0.2	15.0	0.0
1537.00	FRENCH GULCH	CDA R	HEADWATERS	5.1	07/09/92	DRY				0.0
1538.00	CARLIN CR	CDA L	HEADWATERS	5.1	08/03/92	1.0	9.1	0.8	10.8	352.0
1539.00	TURNER CR	CDA L	HEADWATERS	3.9	08/03/92	DRY	3.0	0.3	10.0	0.0
1540.00	BEAUTY CR	CDA L	HEADWATERS	4.6	08/03/92	DRY	3.0	0.1	30.0	0.0
1541.00	WOLF LODGE CR	CDA L	HEADWATERS	11.3	08/03/92	2.0	14.0	1.0	13.7	1533.0
1541.10	MARIE CR	WOLF LDG CR	HEADWATERS	7.5	08/03/92	2.0	13.7	0.8	16.3	422.0
1542.00	CEDAR CR	WOLF LDG CR	HEADWATERS	5.5		DRY				
1543.00	FERNAN CR	CDA L	FERNAN L	1.2		DRY				
1544.00	FERNAN CR	FERNAN L	HEADWATERS	7.2	08/03/92	DRY				
1545.00	COUGAR CR	CDA L	HEADWATERS	9.1	08/03/92	4.0	7.8	1.2	6.6	1180.0
1546.00	KID CR	CDA L	HEADWATERS	2.9	08/03/92	2.0	6.0	1.5	4.0	480.0
1547.00	MICA CR	CDA L	HEADWATERS	6.4	08/03/92	3.0	8.3	1.0	8.3	1220.0

PNRS SEG.NO.	STREAM NAME	LOWER BOUNDARY	UPPER BOUNDARY	STREAM LENGTH (miles)	SURVEY DATE	NO.of SITES	MEAN WIDTH (ft)	MEAN DEPTH (ft)	W:D RATIO	SURVEY LENGTH (ft)
1548.00	FIGHTING CR	CDA L	HEADWATERS	5.1	08/03/92	3.0	12.0	1.0	12.0	600.0
1548.10	CAVE CR	CDA L	HEADWATERS	1.5	08/05/92	DRY				
1549.00	LAKE CR	CDA L	HEADWATERS	13.9	08/05/92	2.0	10.1	1.2	8.7	934.0
1549.10	16 TO 1 CR	CDA L	HEADWATERS	1.5	08/05/92	DRY				
1549.20	MOWRY CR	CDA L	HEADWATERS	1.5	08/05/92	DRY				
1574.00	ST JOE R	MOUTH(IR)	ROCHET CR	22.1	08/13/92	3.0				
1574.01	STREET CR	ST JOE R	HEADWATERS	4.5	08/13/92					
1574.30	ST JOE R	CDA L	IR BOUND	7.0	08/13/92	3.0				
1575.00	ST JOE R	ROCHET CR	NFK ST JOE R	36.8	08/13/92	5.0				
1575	READS GUL	ST JOE R	HEADWATERS	5.5	08/13/92	DRY				
1575	TANK CR	ST JOE R	HEADWATERS	1.5	08/13/92	DRY				
1575	HARVEY CR	ST JOE R	HEADWATERS	3.0	08/13/92	DRY				
1575	BLACKJACK CR	ST JOE R	HEADWATERS	1.5	08/13/92	DRY				
1575.1	ROCHET CR	ST JOE R	HEADWATERS	3.5	08/13/92	DRY				
1576.00	ST JOE R	NFK ST JOE R	SPRU TRE CMPG	37.5	07/29/92	9.0	71.2	3.8	18.7	20655.0
1576.01	ST JOE R	SPRU TRE CMPG	HEADWATERS	28.0	08/12/92	100%	32.6	2.2	14.6	149742.0
1577.00	PLUMMER CR	CHATCOLET L	HEADWATERS	10.0	08/05/92	1.0	11.4	1.4	8.2	618.0
1578.00	BENEWAH CR	CHATCOLET L	HEADWATERS	15.3	08/05/92	3.0	10.0	0.9	11.8	1832.0
1579.00	ST MARIES R	ST JOE R	MASHBURN	22.4	07/13/92	4.0	75.2	1.5	50.1	3787.0
1580.00	ST MARIES R	MASHBURN	CLARKIA	12.7	08/07/92	5.0	60.5	2.0	29.3	7749.0
1582.00	THORN CR	ST MARIES R	HEADWATERS	8.9	07/13/92	3.0	11.3	0.8	14.2	1079.0
1583.00	ALDER CR	ST MARIES R	HEADWATERS	12.1	08/05/92	2.0	9.1	0.7	12.2	370.0
1584.00	JOHN CR	ST MARIES R	HEADWATERS	9.2	08/19/92	3.0	8.1	0.7	11.5	805.0
1585.00	SANTA CR	ST MARIES R	HEADWATERS	15.0	07/22/92	3.0	20.3	3.6	5.7	1883.0
1586.00	BEAVER CR	ST MARIES R	HEADWATERS	6.2	07/22/92	DRY				0.0
1587.00	CHARLIE CR	SANTA CR	HEADWATERS	8.2	07/22/92	3.0	13.4	1.0	13.2	1232.0
1588.00	RENFRO CR	ST MARIES R	HEADWATERS	5.6	07/23/92	1.0	10.4	1.0	10.3	324.0
1589.00	TYSON CR	ST MARIES R	HEADWATERS	5.6	07/22/92	1.0	7.4	0.8	9.6	224.0
1590.00	CRYSTAL CR	ST MARIES R	HEADWATERS	6.8	07/23/92	1.0	7.5	1.1	6.8	57.0
1591.00	CARPENTER CR	ST MARIES R	HEADWATERS	11.4	07/22/92	3.0	11.9	1.0	11.6	585.0

PNRS SEG.NO.	STREAM NAME	LOWER BOUNDARY	UPPER BOUNDARY	STREAM LENGTH (miles)	SURVEY DATE	NO.of SITES	MEAN WIDTH (ft)	MEAN DEPTH (ft)	W:D RATIO	SURVEY LENGTH (ft)
1592.00	OLSEN CR	ST MARIES R	HEADWATERS	5.0	07/23/92	1.0	10.7	0.8	12.8	561.0
1593.00	EMERALD CR	ST MARIES R	HEADWATERS	11.8	07/21/92	7.0	12.0	1.1	10.5	4576.0
1594.00	MFK ST MAR R	ST MAR R	HEADWATERS	9.2	07/23/92	2.0	22.6	1.6	14.5	1437.0
1595.00	MERRY CR	MFK ST MAR R	HEADWATERS	7.2	07/23/92	2.0	13.8	1.3	10.6	736.0
1596.00	GOLD CENTER CR	MFK ST MAR R	HEADWATERS	6.1	07/23/92	1.0	16.0	1.1	14.3	726.0
1596	FLEWSIE CR	GOLD CENTER	HEADWATERS	3.0						
1596.02	GRAMPS CR	GOLD CENTER	HEADWATERS	2.5	07/23/92	1.0	11.3	0.8	15.0	288.0
1597.00	WFK ST MAR R	MFK ST MAR R	HEADWATERS	5.5	07/23/92	1.0	16.8	1.5	11.1	701.0
1597.01	CAT SPUR CR	WFK ST MAR R	HEADWATERS	4.7	07/23/92	1.0	10.5	1.4	7.3	355.0
1598.00	BOND CR	ST JOE R	HEADWATERS	7.8	07/14/92	1.0	12.0	1.0	12.2	424.0
1599.00	TROUT CR	ST JOE R	HEADWATERS	8.6	07/14/92	1.0	24.9	1.7	14.5	740.0
1600.00	HUGUS CR	ST JOE R	HEADWATERS	8.6	07/14/92	1.0	12.2	1.2	10.3	320.0
1601.00	MICA CR	ST JOE R	HEADWATERS	13.3	07/14/92	1.0	28.0	2.0	14.0	738.0
1602.00	BIG CR	ST JOE R	HEADWATERS	13.4	07/14/92	1.0	21.6	2.5	8.7	2375.0
1603.00	BLK PRINCE CR	ST JOE R	HEADWATERS	6.0	07/16/92	1.0	15.2	1.1	13.5	541.0
1604.00	MARBLE CR	ST JOE R	HOBO CR	14.1	07/15/92	4.0	42.6	2.6	16.1	6298.0
1604.01	DEVEGGIO CR	MARBLE CR	HEADWATERS	6.6	07/15/92	1.0	19.5	1.6	12.2	539.0
1604.02	EAGLE CR	MARBLE CR	HEADWATERS	4.5	07/15/92	1.0	6.8	1.3	5.2	61.0
1604.03	NORTON CR	MARBLE CR	HEADWATERS	5.5	07/15/92	1.0	10.7	1.1	9.9	298.0
1604.04	TOLES CR	MARBLE CR	HEADWATERS	5.0	07/15/92	1.0	4.1	0.8	5.5	123.0
1604.05	BEAR CR	MARBLE CR	HEADWATERS	2.0	07/15/92					0.0
1604.06	LTL BEAR CR	MARBLE CR	HEADWATERS	2.0	07/15/92					0.0
1604.10	BUSSEL CR	MARBLE CR	HEADWATERS	2.5	07/15/92	1.0	6.7	0.9	7.8	140.0
1605.00	MARBLE CR	HOBO CR	HEADWATERS	9.7	07/15/92					
1605.01	HOBO CR	MARBLE CR	HEADWATERS	4.5	08/04/92	1.0	14.1	1.1	12.3	813.0
1606.00	SLATE CR	ST JOE R	HEADWATERS	10.0	07/16/92	1.0	40.9	1.8	22.5	1171.0
1607.00	FLEMMING CR	ST JOE R	HEADWATERS	4.0	08/20/91	100%	8.0	0.7	11.9	8837.0
1608.00	FISHHOOK CR	ST JOE R	HEADWATERS	10.4	07/26/92	1.0	15.2	1.7	8.8	1294.0
1609.00	NFK ST JOE R	ST JOE R	HEADWATERS	16.5	08/19/92	6.0	23.4	3.3	7.0	5469.0
1609.01	BULLION CR	NFK ST JOE R	HEADWATERS	4.0	07/15/92	2.0	12.6	1.3	9.5	1084.0

PNRS SEG.NO.	STREAM NAME	LOWER BOUNDARY	UPPER BOUNDARY	STREAM LENGTH (miles)	SURVEY DATE	NO.of SITES	MEAN WIDTH (ft)	MEAN DEPTH (ft)	W:D RATIO	SURVEY LENGTH (ft)
1610.00	LOOP CR	NFK ST JOE R	HEADWATERS	10.5	08/19/92	6.0	20.8	1.8	11.4	5993.0
1611.00	SIWASH CR	ST JOE R	HEADWATERS	4.5	08/21/91	100%	9.0	1.0	9.5	1687.0
1612.00	SKOOKUM CR	ST JOE R	HEADWATERS	5.0	07/23/91	100%	15.0	1.2	12.6	16009.0
1613.00	SISTERS CR	ST JOE R	HEADWATERS	11.7	07/30/92	1.0	18.0	1.2	15.4	763.0
1614.00	BIRD CR	ST JOE R	HEADWATERS	3.3	08/07/91	100%	12.4	1.9	6.5	20905.0
1615.00	PROSPECTOR CR	ST JOE R	HEADWATERS	3.9	07/30/92	2.0	9.9	1.3	7.6	1101.0
1616.00	NUGGET CR	ST JOE R	HEADWATERS	5.0	07/29/92	1.0	15.8	0.9	17.0	388.0
1617.00	EAGLE CR	ST JOE R	HEADWATERS	4.8	08/05/91	100%	13.2	1.2	11.0	20822.0
1618.00	QUARTZ CR	ST JOE R	HEADWATERS	7.0	09/20/91	100%	12.1	1.8	6.6	13874.0
1619.00	BLUFF CR	ST JOE R	HEADWATERS	1.9	09/24/91	100%	18.9	1.9	10.2	3012.0
1620.00	BRUIN CR	ST JOE R	HEADWATERS	4.8	07/28/92	1.0	10.0	1.0	10.3	380.0
1621.00	MOSQUITO CR	ST JOE R	HEADWATERS	5.9	07/18/91	100%	12.3	1.0	12.1	19482.0
1622.00	GOLD CR	ST JOE R	HEADWATERS	8.9	10/03/91	100%	14.7	1.5	10.1	22539.0
1623.00	SIMMONS CR	ST JOE R	HEADWATERS	12.6	07/28/92	2.0	31.7	1.2	27.1	1832.0
1624.00	FLY CR	ST JOE R	HEADWATERS	5.0	07/15/91	100%	9.7	1.9	5.0	27269.0
1625.00	BEAVER CR	ST JOE R	HEADWATERS	6.0	07/28/92	2.0	14.3	1.1	12.9	967.0
1626.00	COPPER CR	ST JOE R	HEADWATERS	4.5	07/28/92	1.0	11.9	1.5	7.8	185.0
1627.00	RED IVES CR	ST JOE R	HEADWATERS	5.0	10/20/91	100%	12.4	1.4	8.7	10930.0
1627.01	TIMBER CR	ST JOE R	HEADWATERS	3.9	07/21/92	100%	10.6	1.5	6.9	3859.0
1627	BACON CR	ST JOE R	HEADWATERS	3.9	08/03/92	100%	11.8	1.7	6.9	7369.0
1627.03	BEAN CR	ST JOE R	HEADWATERS	2.5	08/11/92	100%	11.8	1.8	6.6	13235.0
1627.04	HELLER CR	ST JOE R	HEADWATERS	3.8	06/10/92	100%	19.5	1.4	14.1	8283.0
1627.05	SHERLOCK CR	ST JOE R	HEADWATERS	4.5	06/24/92	100%	16.3	1.5	10.8	5455.0

PNRS SEG.NO.	MEAN RPD (ft)	MEAN RPV (ft^3)	POOL:RIF RATIO 1:X	HABITAT SCORE X of 196		AESTHETICS SCORE X of 45		SUMMER HIGH TEMPS (°F)
1481.00	4.6	48186.3	3.5	92	POOR	35	HIGH	BELOW 70
1482.00	4.3	4423.6	8.8	91	POOR	42	HIGH	BELOW 70
1482.01	1.3	228.0	7.0	146	GOOD	43	HIGH	BELOW 70
1482.02	1.5	143.9	4.0	143	GOOD	41	HIGH	BELOW 70
1483.00	6.8	5569.4	1.9	115	FAIR	37	HIGH	BELOW 70
1483.01	1.3	250.3	0.4	160	GOOD	41	HIGH	BELOW 70
1483.02	0.8	207.6	0.6	163	GOOD	40	HIGH	BELOW 70
1484.00	2.1	17826.6	0.6	118	FAIR	29	INTERMED	BELOW 70
1485.00	2.6	5789.4	1.6	128	FAIR	32	INTERMED	BELOW 70
1486.00	1.2	143.5	5.7	152	GOOD	38	HIGH	BELOW 70
1487.00	1.2	433.2	3.8	103	POOR	27	INTERMED	BELOW 70
1488.00	0.9	300.8	1.2	158	GOOD	33	INTERMED	BELOW 70
1489.00	1.2	567.1	1.5	149	GOOD	33	INTERMED	BELOW 70
1490.00	1.5	280.6	2.2	156	GOOD	39	HIGH	BELOW 70
1491.00	2.1	233.2	1.9	114	FAIR	33	INTERMED	BELOW 70
1492.00	1.7	201.0	23.0	154	GOOD	42	HIGH	BELOW 70
1493.00	1.3	158.7	3.0	138	GOOD	36	HIGH	BELOW 70
1494.00	1.5	734.0	2.0	148	GOOD	35	HIGH	BELOW 70
1495.00	2.5	1272.9	6.0	103	POOR	30	INTERMED	BELOW 70
1496.00	1.5	296.8	5.3	140	GOOD	41	HIGH	BELOW 70
1497.00	1.3	250.4	1.6	119	FAIR	39	HIGH	BELOW 70
1498.00	1.8	242.0	5.0	144	GOOD	38	HIGH	BELOW 70
1499.00	1.0	572.0	1.7	132	FAIR	27	INTERMED	BELOW 70
1500.00	1.2	3815.0	1.4	64	POOR	34	INTERMED	BELOW 70
1500								
1500								
1500								
1500.04	0.8	19.2	9.0	69	POOR	29	INTERMED	BELOW 70
1500.05	1.1	33.5	15.2	109	FAIR	33	INTERMED	BELOW 70
1501.00	2.5	410.2	4.1	120	FAIR	28	INTERMED	BELOW 70

PNRS SEG.NO.	MEAN RPD (ft)	MEAN RPV (ft^3)	POOL:RIF RATIO 1:X	HABITAT SCORE X of 196		AESTHETICS SCORE X of 45		SUMMER HIGH TEMPS (°F)
1502.00	1.1	599.8	1.2	166	EXCEL	39	HIGH	BELOW 70
1503.00	1.1	1063.1	1.8	120	FAIR	31	INTERMED	BELOW 70
1504.00	0.8	800.6	8.1	125	FAIR	35	HIGH	BELOW 70
1504.01	1.9	364.0	5.0	157	GOOD	39	HIGH	BELOW 70
1505.00	1.5	584.0	3.0	124	FAIR	22	INTERMED	BELOW 70
1506.00	1.4	201.0	11.0	101	POOR	27	INTERMED	BELOW 70
1507.00	1.9	527.0	4.0	162	GOOD	42	HIGH	BELOW 70
1508.00	1.9	388.1	5.1	122	FAIR	42	HIGH	BELOW 70
1509.00	1.5	5882.7	1.5	133	FAIR	32	INTERMED	BELOW 70
1510.00	1.1	4297.8	0.2	115	FAIR	29	INTERMED	BELOW 70
1511.00	1.5	403.7	1.1	148	GOOD	41	HIGH	BELOW 70
1512.00	1.3	100.1	50.1	97	POOR	38	HIGH	BELOW 70
1515.00	4.1	14728.0	5.8	91	POOR	20	INTERMED	BELOW 70
1515								
1515								
1516.00	0.9	120.1	12.5	98	POOR	30	INTERMED	BELOW 70
1516								
1516								
1517.00	1.0	218.2	11.0	119	FAIR	43	HIGH	BELOW 70
1518.00	1.2	174.7	2.0	146	GOOD	40	HIGH	BELOW 70
1519.00	1.4	1306.7	2.5	102	POOR	30	INTERMED	BELOW 70
1520.00	0.8	144.0	18.6	65	POOR	24	INTERMED	BELOW 70
1520.01				114	FAIR	31	INTERMED	BELOW 70
1521.00	1.1	850.0	3.2	137	GOOD	32	INTERMED	BELOW 70
1521								
1521.02	0.6	25.2	28.3	113	FAIR	33	INTERMED	BELOW 70
1521								
1521.04	0.6	16.8	36.1	35	POOR	13	LOW	BELOW 70
1521.05	0.9	166.5	3.0	155	GOOD	34	INTERMED	BELOW 70
1521.10	0.7	79.1	13.3	132	FAIR	32	INTERMED	BELOW 70

PNRS SEG.NO.	MEAN RPD (ft)	MEAN RPV (ft^3)	POOL:RIF RATIO 1:X	HABITAT SCORE X of 196		AESTHETICS SCORE X of 45		SUMMER HIGH TEMPS (°F)
1522.00								
1522.01	0.7	51.3	5.4	136	GOOD	33	INTERMED	BELOW 70
1522				84	POOR	25	INTERMED	BELOW 70
1523.00	1.1	120.3	2.1	164	GOOD	39	HIGH	BELOW 70
1524.00	0.8	58.5	23.6	105	FAIR	31	INTERMED	BELOW 70
1525.00	1.1	157.7	8.6	101	POOR	27	INTERMED	BELOW 70
1526.00	0.8	53.8	11.2	117	FAIR	34	INTERMED	BELOW 70
1529.00								
1530.00								
1531.00	1.6	332.8	0.2	130	FAIR	25	INTERMED	BELOW 70
1532.00	1.3	203.6	2.1	128	FAIR	21	INTERMED	BELOW 70
1533.00								
1534.00	1.0	617.3	0.1	117	FAIR	19	INTERMED	BELOW 70
1535.00	1.1	1913.9	1.4	107	FAIR	27	INTERMED	BELOW 70
1535								
1535								
1536.00	1.4	492.8	0.8	160	GOOD	37	HIGH	BELOW 70
1536								
1537.00								
1538.00	1.9	1064.8	0.3	76	POOR	23	INTERMED	BELOW 70
1539.00								
1540.00								
1541.00	1.6	1537.5	0.9	125	FAIR	27	INTERMED	BELOW 70
1541.10	1.3	948.6	2.0	123	FAIR	27	INTERMED	BELOW 70
1542.00								
1543.00								
1544.00								
1545.00				94	POOR	34	INTERMED	BELOW 70
1546.00				87	POOR	36	HIGH	BELOW 70
1547.00				96	POOR	38	HIGH	BELOW 70

PNRS SEG.NO.	MEAN RPD (ft)	MEAN RPV (ft^3)	POOL:RIF RATIO 1:X	HABITAT SCORE X of 196		AESTHETICS SCORE X of 45		SUMMER HIGH TEMPS (°F)
1548.00				81	POOR	38	HIGH	BELOW 70
1548.10								
1549.00	1.3	365.7	1.0	91	POOR	33	INTERMED	ABOVE 70
1549.10								
1549.20								
1574.00				103	POOR	39	HIGH	
1574.01								
1574.30				103	POOR	39	HIGH	
1575.00				80	POOR	35	HIGH	
1575								
1575								
1575								
1575								
1575.1								
1576.00	7.8	163537.4	3.9	110	FAIR	35	HIGH	BELOW 70
1576.01	2.7	4462.0	15.6	143	GOOD	43	HIGH	BELOW 70
1577.00	2.4	1896.0	0.4	99	POOR	38	HIGH	BELOW 70
1578.00	1.3	867.0	0.4	111	FAIR	29	INTERMED	BELOW 70
1579.00	1.7	4637.6	11.2	83	POOR	34	INTERMED	ABOVE 70
1580.00	3.0	15897.6	1.2	123	FAIR	33	INTERMED	BELOW 70
1582.00	1.1	706.3	0.8	128	FAIR	30	INTERMED	BELOW 70
1583.00	1.2	666.1	0.2	134	FAIR	30	INTERMED	BELOW 70
1584.00	0.9	350.8	0.3	136	GOOD	34	INTERMED	BELOW 70
1585.00	8.9	10737.9	30.7	82	POOR	34	INTERMED	ABOVE 70
1586.00								
1587.00	2.2	492.0	4.0	127	FAIR	36	HIGH	BELOW 70
1588.00	1.0	304.6	0.5	125	FAIR	26	INTERMED	BELOW 70
1589.00	1.3	770.4	0.3	109	FAIR	33	INTERMED	BELOW 70
1590.00	1.4	78.4	4.7	145	GOOD	45	HIGH	BELOW 70
1591.00	0.9	589.4	0.2	148	GOOD	35	HIGH	BELOW 70

PNRS SEG.NO.	MEAN RPD (ft)	MEAN RPV (ft^3)	POOL:RIF RATIO 1:X	HABITAT SCORE X of 196	AESTHETICS SCORE X of 45	SUMMER HIGH TEMPS (°F)
1592.00				122 FAIR	36 HIGH	BELOW 70
1593.00	1.2	425.3	3.3	115 FAIR	37 HIGH	BELOW 70
1594.00	1.8	2168.3	1.8	118 FAIR	30 INTERMED	BELOW 70
1595.00	1.8	212.3	1.0	157 GOOD	35 HIGH	BELOW 70
1596.00	1.3	239.2	28.0	99 POOR	38 HIGH	BELOW 70
1596						
1596.02				110 FAIR	45 HIGH	BELOW 70
1597.00	1.8	820.8	1.2	79 POOR	31 INTERMED	BELOW 70
1597.01	1.7	298.1	2.2	134 FAIR	42 HIGH	BELOW 70
1598.00	1.3	461.1	0.3	96 POOR	39 HIGH	BELOW 70
1599.00	2.4	5941.8	0.8	156 GOOD	36 HIGH	BELOW 70
1600.00	2.4	1338.1	1.4	142 GOOD	34 INTERMED	BELOW 70
1601.00	2.6	359.2	9.8	129 FAIR	38 HIGH	BELOW 70
1602.00	3.0	2091.2	2.9	107 FAIR	25 INTERMED	BELOW 70
1603.00	0.8	175.5	1.2	177 EXCEL	39 HIGH	BELOW 70
1604.00	2.6	9757.4	4.1	126 FAIR	38 HIGH	BELOW 70
1604.01						BELOW 70
1604.02	1.3	124.4	0.2			BELOW 70
1604.03	1.0	167.3	0.9	183 EXCEL	45 HIGH	BELOW 70
1604.04	0.7	44.5	1.1	141 GOOD	41 HIGH	BELOW 70
1604.05						
1604.06						
1604.10	0.9	220.2	0.5	150 GOOD	36 HIGH	BELOW 70
1605.00						
1605.01	1.0	41.0	18.9	134 FAIR	44 HIGH	BELOW 70
1606.00	2.0	5189.7	1.5	151 GOOD	32 INTERMED	BELOW 70
1607.00	1.2	72.0	4.0	123 FAIR	44 HIGH	BELOW 70
1608.00	2.4	691.2	16.2	121 FAIR	37 HIGH	BELOW 70
1609.00	2.2	3371.9	9.4	95 POOR	42 HIGH	BELOW 70
1609.01	1.3	63.4	33.6	114 FAIR	41 HIGH	BELOW 70

PNRS SEG.NO.	MEAN RPD (ft)	MEAN RPV (ft^3)	POOL:RIF RATIO 1:X	HABITAT SCORE X of 196	AESTHETICS SCORE X of 45	SUMMER HIGH TEMPS (°F)
1610.00	2.6	990.8	7.4	132 FAIR	42 HIGH	BELOW 70
1611.00	1.0	29.0	4.0	164 GOOD	37 HIGH	BELOW 70
1612.00	1.9	921.9	1.6	185 EXCEL	37 HIGH	BELOW 70
1613.00	1.2	585.3	1.6	162 GOOD	43 HIGH	BELOW 70
1614.00	1.7	280.0	3.0	92 POOR	33 INTERMED	BELOW 70
1615.00	1.5	27.7	54.2	106 FAIR	39 HIGH	BELOW 70
1616.00	1.7	492.2	3.5	171 EXCEL	41 HIGH	BELOW 70
1617.00	1.8	203.0	5.0	134 FAIR	29 INTERMED	BELOW 70
1618.00	2.0	359.0	6.0	121 FAIR	31 INTERMED	BELOW 70
1619.00	1.7	324.0	4.0	134 FAIR	34 INTERMED	BELOW 70
1620.00				117 FAIR	32 INTERMED	BELOW 70
1621.00	1.6	833.0	4.0	176 EXCEL	37 HIGH	BELOW 70
1622.00	1.7	282.0	8.0	125 FAIR	29 INTERMED	BELOW 70
1623.00	1.5	1296.0	35.0	110 FAIR	29 INTERMED	BELOW 70
1624.00	1.6	129.7	11.0	130 FAIR	46 HIGH	BELOW 70
1625.00	1.0	508.4	0.5	172 EXCEL	40 HIGH	BELOW 70
1626.00	1.1	387.0	1.3	178 EXCEL	37 HIGH	BELOW 70
1627.00	1.3	102.0	7.0	114 FAIR	30 INTERMED	BELOW 70
1627.01	1.6	174.0	5.0			
1627	1.9	424.0	0.9			
1627.03	1.8	274.0	0.5			
1627.04	1.4	176.0	29.0	147 GOOD	35 HIGH	BELOW 70
1627.05	1.3	94.0	27.0	160 GOOD	40 HIGH	BELOW 70

PNRS SEG.NO.	MACRO QUALITY	FISH QUALITY		SS_USE (P,A)		SS_HAB (P,A)	CHAN (P,A,C)	RASI MEAN		RASI RANGE	DWS_USE (P,A)	AWS_USE (P,A)
1481.00	H	H	IDFG			P	C	93	USFS	90-94		X
1482.00	H	H	IDFG			P	A					X
1482.01	H					P	A					
1482.02	H	H	IDFG	P	IDFG	P	C					
1483.00	H	H	IDFG	P	IDFG	P	A					X
1483.01	H					P	C					
1483.02	H					P	A					
1484.00	H	H	IDFG			P	C	83	USFS	81-88		X
1485.00	H	H	IDFG	P	IDFG	P	C	94	USFS	92-96		X
1486.00	H	H	IDFG	P	IDFG	P	C	98	IDEQ	97-99		
1487.00	H	H	IDFG	P	IDFG	P	P	95	IDEQ	93-97		
1488.00	H	H	IDFG	P	IDFG	P	C	92	IDEQ	91-93		
1489.00	H	H	IDFG	P	IDFG	P	P	97	IDEQ	96-99		
1490.00	H					P	C					
1491.00	H	H	IDFG	P	IDFG	P	C	95	IDEQ	94-95		
1492.00	H					P	C	97	IDEQ	97-98		
1493.00	H					P	A	96	IDEQ	92-98		X
1494.00	H	H	IDFG	P	IDFG	P	A					
1495.00	H	H	IDFG	P	IDFG	P	P					
1496.00	H	H	IDFG	P	IDFG	P	A					
1497.00	H	H	IDFG	P	IDFG	P	C					
1498.00	H	H	IDFG	P	IDFG	P	P					
1499.00	H					P	A					X
1500.00	H	H	IDFG	P	IDFG	P	C	92	USFS	85-96		X
1500							A					
1500							A					
1500							A					
1500.04	H					P	A					
1500.05	H					P	A					
1501.00	H	H	IDFG	P	IDFG	P	C	83	USFS	80-85		X

PNRS SEG.NO.	MACRO QUALITY	FISH QUALITY		SS_USE (P,A)		SS_HAB (P,A)	CHAN (P,A,C)	RASI MEAN		RASI RANGE	DWS_USE (P,A)		AWS_USE (P,A)
1502.00	H	H	IDFG	P	IDFG	P	C	86	USFS	80-93			
1503.00	H	H	IDFG	P	IDFG	P	C						
1504.00	H	H	IDFG	P	IDFG	P	C						
1504.01	H	H	IDFG	P	IDFG	P	A						
1505.00	H	H	IDFG	P	IDFG	P	C						
1506.00	H	H	IDFG	P	IDFG	P	P						
1507.00	H	H	IDFG	P	IDFG	P	A						
1508.00	H	H	IDFG	P	IDFG	P	A	56	USFS	53-61			X
1509.00	H	H	IDFG	P	IDFG	P	A						
1510.00	H	H	IDFG	P	IDFG	P	A	91	USFS	88-95			X
1511.00	H	H	IDFG	P	IDFG	P	C	87	USFS	86-89			
1512.00	H	H	IDFG	P	IDFG	P	A	80	USFS	69-90			
1515.00	H	H	IDFG			L	P	88	USFS	88-89			
1515							A						
1515							A				P	IDWR	
1516.00	H	H	IDFG			L	P	96	IDEQ				
1516							C						
1516							A						
1517.00	H	H	IDFG	P	IDFG	P	A						X
1518.00	H	H	IDFG	P	IDFG	P	A	98	IDEQ	97-99			X
1519.00	H	H	IDFG	P	IDFG	P	P	98	IDEQ	96-100	P	IDEQ	
1520.00	H	H	IDFG	P	IDFG	P	C	96	IDEQ	96-97	P	IDWR	
1520.01	H	H	IDFG	P	IDFG	P	A	95	IDEQ	92-97			
1521.00	H	H	IDFG	P	IDFG	P	C				P	IDWR	
1521							A				P	IDWR	
1521.02	H					P	A				P	IDEQ	
1521							P				P	IDWR	
1521.04	L					P	P						
1521.05	H					P	C	97	IDEQ	96-98			X
1521.10	H					P	C	90	IDEQ	87-96			

PNRS SEG.NO.	MACRO QUALITY	FISH QUALITY		SS_USE (P,A)		SS_HAB (P,A)	CHAN (P,A,C)	RASI MEAN		RASI RANGE	DWS_USE (P,A)		AWS_USE (P,A)
1522.00							C				P	IDWR	
1522.01	H					P	A	75	USFS	60-86	P	IDWR	X
1522	H ab. mine					L	P	88	USFS	78-100	P	IDWR	
1523.00	H					P	C	90	USFS	88-94	P	IDEQ	
1524.00	H					P	P	84	IDEQ	77-92	P	IDWR	
1525.00	H ab. mines					P	P	94	IDEQ	93-96	P	IDWR	
1526.00	H					P	A						
1529.00		H	IDFG			A	A						X
1530.00		H	IDFG	P	IDFG	P	C						X
1531.00	H	H	IDFG	P	IDFG	P	C						X
1532.00	H	H	CDAT	P	IDFG	P	C				P	IDWR	X
1533.00		H	IDFG	P	IDFG		A						
1534.00	H	H	IDFG	P	IDFG	L	P						X
1535.00	H	H	IDFG	P	IDFG	P	A						X
1535							A						
1535							A						
1536.00	H	H	IDFG	P	IDFG	P	C						X
1536		H	IDFG	P	IDFG		C						X
1537.00		H	IDFG	P	IDFG		P						X
1538.00	H					P	A						X
1539.00							C						
1540.00		H	IDFG	P	IDFG	P	P						
1541.00	H	H	IDFG	P	IDFG	L	P						X
1541.10	H	H	IDFG	P	IDFG	P	A						
1542.00		H	IDFG	P	IDFG		P						
1543.00		H	IDFG			A	P						
1544.00		H	IDFG	P	IDFG	P	C						X
1545.00	H	H	IDFG	P	IDFG	L	P						X
1546.00	H	H	IDFG	P	IDFG	L	C						X
1547.00	H	H	IDFG	P	IDFG	A	C						X

PNRS SEG.NO.	MACRO QUALITY	FISH QUALITY		SS_USE (P,A)		SS_HAB (P,A)	CHAN (P,A,C)	RASI MEAN		RASI RANGE	DWS_USE (P,A)		AWS_USE (P,A)
1548.00	H	H	IDFG	P	IDFG	L	C						X
1548.10							A						X
1549.00	H	H	CDAT	P	IDFG	L	A						X
1549.10							A						X
1549.20							C						X
1574.00		H	IDFG			A	A				P	IDWR	X
1574.01		H	IDFG				A						
1574.30		H	IDFG			A	A						X
1575.00		H	IDFG			P	C						X
1575		I	IDFG				A				P	IDWR	
1575							A						
1575							A						
1575							A						
1575.1		H	IDFG				A				P	IDWR	
1576.00	H	H	IDFG	P	IDFG	P	C						
1576.01	H	H	IDFG	P	IDFG	P	A	54	USFS	49-58			
1577.00	H	H	IDFG	P	IDFG	L	C						X
1578.00	H	H	CDAT	P	IDFG	L	C				P	IDWR	X
1579.00	H	H	IDFG				A						X
1580.00	H	H	IDFG			P	A						X
1582.00	H	H	IDFG	P	IDFG		C				P	IDWR	X
1583.00	H	H	CDAT	P	IDFG	P	A				P	IDWR	X
1584.00	H	H	IDFG	P	IDFG	P	A						X
1585.00	H	H	IDFG	P	IDFG	P	A				P	IDWR	X
1586.00		H	IDFG	P	IDFG		A						
1587.00	H	H	IDFG	P	IDFG	P	A				P	IDWR	X
1588.00	H	H	IDFG	P	IDFG	P	A				P	IDWR	
1589.00	H					P	C						
1590.00	H	H	IDFG			L	A						
1591.00	H	H	IDFG	P	IDFG	L	C						X

PNRS SEG.NO.	MACRO QUALITY	FISH QUALITY		SS_USE (P,A)		SS_HAB (P,A)	CHAN (P,A,C)	RASI MEAN		RASI RANGE	DWS_USE (P,A)		AWS_USE (P,A)
1592.00	H	H	IDFG	P	IDFG	L	A				P	IDWR	
1593.00	H					L	C						X
1594.00	H					P	C						X
1595.00	H	H	IDFG	P	IDFG	P	C						X
1596.00	H					P	A						X
1596							A						
1596.02	H					P	A						X
1597.00	H	H	IDFG	P	IDFG	P	C						X
1597.01	H	H	IDFG	P	IDFG	P	C						X
1598.00	H	H	IDFG	P	IDFG	P	A						
1599.00	H	H	IDFG			P	A						
1600.00	H	H	IDFG			L	A						
1601.00	H	H	IDFG	P	IDFG	P	A						
1602.00	H	H	IDFG	P	IDFG	P	C						
1603.00	H					P	A				P	IDWR	
1604.00	H	H	IDFG			L	C						
1604.01	H	H	IDFG	P	IDFG	L	A						
1604.02	H	H	IDFG	P	IDFG	L	C						
1604.03	H	H	IDFG	P	IDFG	P	A						
1604.04	H					P	A						
1604.05							A						
1604.06							A						
1604.10	H					P	A						
1605.00						P	A						
1605.01	H					P	A						
1606.00	H					P	A						
1607.00	H					P	A	52	USFS	42-61			
1608.00	H	H	IDFG	P	IDFG	P	C						
1609.00	H					P	C						
1609.01	H					P	C						

PNRS SEG.NO.	MACRO QUALITY	FISH QUALITY		SS_USE (P,A)		SS_HAB (P,A)	CHAN (P,A,C)	RASI MEAN		RASI RANGE	DWS_USE (P,A)		AWS_USE (P,A)
1610.00	H					P	A						
1611.00	H					P	A	67	USFS	60-75			
1612.00	H					P	A	68	USFS	58-74			
1613.00	H	H	IDFG	P	IDFG	P	A						
1614.00	H					P	C	89	USFS	86-91			
1615.00	H	H	IDFG	P	IDFG	P	A						
1616.00	H	H	IDFG	P	IDFG	P	A						
1617.00	H	H	IDFG	P	IDFG	P	C	64	USFS	56-72			
1618.00	H					P	C						
1619.00	H	H	IDFG	P	IDFG	P	C	88	USFS	82-95			
1620.00	H					P	A						
1621.00	H	H	IDFG	P	IDFG	P	A	47	USFS	37-57			
1622.00	H	H	IDFG	P	IDFG	P	C	86	USFS	81-90			
1623.00	H	H	IDFG	P	IDFG	P	A						
1624.00	H	H	IDFG	P	IDFG	P	A	41	USFS	33-56			
1625.00	H	H	IDFG	P	IDFG	P	A						
1626.00	H	H	IDFG	P	IDFG	P	A						
1627.00	H	H	IDFG	P	IDFG	P	A				P	IDWR	
1627.01		H	IDFG	P	IDFG	P	A	52	USFS	44-60			
1627						P	A						
1627.03		H	IDFG	P	IDFG	P	A	36	USFS	28-43			
1627.04	H					P	A	72	USFS	58-84			
1627.05	H					P	A	88	USFS	83-94			

Appendix 4 - A list of Resource Value Classes for Coeur d'Alene Basin Stream Segments from the Pacific Northwest Rivers Study.

Segment Number	Stream Name	Lower Bound	Upper Bound	Res. Fish	Wildlife	Cultural	Natural Features	Rec.
1481	CDA R	SFK CDA R	Yellow Dog	1	2	2	U	2
1482.0	CDA R	Yellow Dog	Teepee	1	2	3	1	3
1482.1	Miners Cr.	CDA R	Headwaters	U	3	U	U	U
1482.2	Brett Cr.	CDA R	Headwaters	U	3	U	U	U
1483	CDA R	Teepee Cr	Headwaters	1	1	3	3	2
1484	NFK CDA R	CDA R	Laverne Cr	1	2	2	U	3
1485	NFK CDA R	Laverne Cr	Headwaters	2	2	2	U	3
1486	Bumblebee Cr	NFK CDA R	Headwaters	2	2	3	U	U
1487	Copper Cr	NFK CDA R	Headwaters	2	2	4	U	U
1488	Laverne Cr	NFK CDA R	Headwaters	2	2	3	U	U
1489	Lieberg Cr	NFK CDA R	Headwaters	2	2	2	U	U
1490	Skookum Cr	NFK CDA R	Headwaters	2	2	2	U	U
1491	Deception Cr	NFK CDA R	Headwaters	U	3	3	1	U
1492	Burnt Cabin Cr	NFK CDA R	Headwaters	2	3	3	U	U
1493	Iron Cr	NFK CDA R	Headwaters	U	3	3	U	U
1494	Cougar Gulch Cr	CDA R	Headwaters	1	3	4	U	U
1495	Steamboat Cr	CDA R	Headwaters	2	3	2	U	3
1496	Graham Cr	CDA R	Headwaters	2	2	U	U	U
1497	Grizzly Cr	CDA R	Headwaters	2	2	U	U	U
1498	Brown Cr	CDA R	Headwaters	2	2	U	U	U
1499	Beaver Cr	CDA R	Headwaters	2	4	2	U	U
1500	Prichard Cr	CDA R	Headwaters	3	1	2	U	4
1501	Eagle Cr	Prichard Cr	Headwaters	3	1	U	U	U

Segment Number	Stream Name	Lower Bound	Upper Bound	Res. Fish	Wildlife	Cultural	Natural Features	Rec.
1502	WFK Eagle Cr	Eagle Cr	Headwaters	2	1	U	1	3
1503	Lost Cr	CDA R	Headwaters	2	1	3	U	3
1504	Shoshone Cr	CDA R	Headwaters	1	1	2	1	3
1504.1	Falls Cr	Shoshone Cr	Headwaters	U	1	U	U	U
1505	Downey Cr	CDA R	Headwaters	U	2	4	U	U
1506	Yellow Dog Cr	CDA R	Headwaters	U	2	3	U	U
1507	Flat Cr	CDA R	Headwaters	U	2	3	U	U
1508	Teepee Cr	CDA R	Headwaters	1	2	1	U	3
1509	Independence Cr	Teepee Cr	Headwaters	1	2	U	U	3
1510	Trail Cr	Teepee Cr	Headwaters	U	2	3	U	U
1511	Big Elk Cr	Teepee Cr	Headwaters	U	2	3	U	U
1512	Jordan Cr	CDA R	Headwaters	1	1	3	U	U
1515	SFK CDA R	CDA R	Osburn	3	2	3	U	4
1516	SFK CDA R	Osburn	Mullan	3	2	U	U	U
1517	SFK CDA R	Mullan	Headwaters	2	3	U	3	U
1518	Bear Cr	SFK CDA R	Headwaters	2	3	U	U	U
1519	Pine Cr	SFK CDA R	Headwaters	3	2	U	2	U
1520	EFK Pines Cr	SFK CDA R	Headwaters	3	2	U	U	U
1521	Big Cr	SFK CDA R	Headwaters	U	2	3	U	U
1522	Knuckles Cr	SFK CDA R	Headwaters	U	3	U	U	U
1523	Placer Cr	SFK CDA R	Headwaters	3	2	1	U	U
1524	Ninemile Cr	SFK CDA R	Headwaters	4	3	3	U	U
1525	Canyon Cr	SFK CDA R	Headwaters	4	3	2	U	U

Segment Number	Stream Name	Lower Bound	Upper Bound	Res. Fish	Wildlife	Cultural	Natural Features	Rec.
1526	LSFK CDA R	SFK CDA R	Headwaters	2	2	U	U	U
1529	CDA R	CDA L	SFK CDA R	1	1	1	2	1
1530	Thompson Cr	CDA R	Headwaters	3	3	U	U	U
1531	Willow Cr	CDA R	Headwaters	2	3	4	U	U
1532	Evans Cr	CDA R	Headwaters	2	3	2	U	U
1533	Fortier Cr	Kilarney L	Headwaters	3	3	2	U	U
1534	4Th of July Cr	CDA R	Headwaters	1	2	2	U	U
1535	Latour Cr	CDA R	Headwaters	2	2	U	U	3
1536	Skeel Gulch Cr	CDA R	Headwaters	2	3	U	U	U
1537	French Gulch Cr	CDA R	Headwaters	2	3	U	1	U
1538	Carlin Cr	CDA L	Headwaters	U	3	3	U	U
1539	Turner Cr	CDA L	Headwaters	U	3	U	U	U
1540	Beauty Cr	CDA L	Headwaters	U	1	2	U	U
1541	Wolf Lodge Cr	CDA L	Headwaters	1	1	3	U	U
1542	Cedar Cr	Wolf Lodge	Headwaters	1	2	3	U	3
1543	Fernan Cr	CDA L	Fernan L	1	3	U	U	U
1544	Fernan Cr	Fernan L	Headwaters	2	3	3	U	U
1545	Cougar Cr	CDA L	Headwaters	2	2	U	U	U
1546	Kid Cr	CDA L	Headwaters	2	3	U	U	U
1547	Mica Cr	CDA L	Headwaters	2	3	U	U	U
1548	Rockford Cr	CDA L	Headwaters	2	3	U	U	U
1549	Lake Cr	CDA L	Headwaters	2	3	U	U	U
1574	St Joe R	Mouth	Rochet Cr	U	U	U	2	U

Segment Number	Stream Name	Lower Bound	Upper Bound	Res. Fish	Wildlife	Cultural	Natural Features	Rec.
1575	St Joe R	Rochet Cr	NFK St Joe R	U	3	U	1	U
1576	St Joe R	NFK St Joe R	Headwaters	U	2	U	U	U
1577	Plummer Cr	Chatcolet L	Headwaters	U	3	U	1	1
1578	Benewah Cr	Chatcolet L	Headwaters	1	3	3	1	3
1579	St Maries R	St Joe R	Mashburn	U	2	4	1	U
1580	St Maries R	Mashburn	Clarkia	U	3	U	U	U
1581	St Maries R	Clarkia	Headwaters	U	3	U	U	U
1582	Thorn Cr	St Maries R	Headwaters	U	3	U	U	U
1583	Alder Cr	St Maries R	Headwaters	U	3	U	U	U
1584	John Cr	St Maries R	Headwaters	U	3	U	U	U
1585	Santa Cr	St Maries R	Headwaters	U	3	U	U	U
1586	Beaver Cr	St Maries R	Headwaters	U	3	U	U	U
1587	Charlie Cr	Santa Cr	Headwaters	U	3	U	U	U
1588	Renfro Cr	St Maries R	Headwaters	U	3	U	U	U
1589	Tyson Cr	St Maries R	Headwaters	U	3	U	U	U
1590	Crystal Cr	St Maries R	Headwaters	U	3	4	U	U
1591	Carpenter Cr	St Maries R	Headwaters	U	3	3	U	U
1592	Olsen Cr	St Maries R	Headwaters	U	3	U	U	U
1593	Emerald Cr	St Maries R	Headwaters	U	3	U	1	U
1594	MFK St Maries R	St Maries R	Headwaters	U	2	2	2	4
1595	Merry Cr	MFK St Mar R	Headwaters	U	3	3	U	U
1596	Gold Center Cr	MFK St Mar R	Headwaters	U	3	3	U	U
1597	WFK St Maries R	MFK St Mar R	Headwaters	U	3	4	U	4

Segment Number	Stream Name	Lower Bound	Upper Bound	Res. Fish	Wildlife	Cultural	Natural Features	Rec.
1597.1	Catspur Cr	St Maries R	Headwaters	2	3	U	U	U
1598	Bond Cr	St Joe R	Headwaters	2	3	2	U	U
1599	Trout Cr	St Joe R	Headwaters	1	2	U	U	U
1600	Hugus Cr	St Joe R	Headwaters	U	3	U	U	U
1601	Mica Cr	St Joe R	Headwaters	1	3	3	U	U
1602	Big Cr	St Joe R	Headwaters	1	2	U	U	3
1603	Black Prince Cr	St Joe R	Headwaters	U	3	U	U	U
1604	Marble Cr	St Joe R	Hobo Cr	1	2	1	2	3
1604.1	Deveggio Cr	Marble Cr	Headwaters	1	3	U	U	3
1604.2	Eagle Cr	Marble Cr	Headwaters	1	3	U	U	U
1604.3	Norton Cr	Marble Cr	Headwaters	1	3	U	U	U
1605	Marble Cr	Hobo Cr	Headwaters	1	3	1	1	3
1605.1	Homestead Cr	Marble Cr	Headwaters	1	3	U	U	U
1606	Slate Cr	St Joe R	Headwaters	1	2	3	2	3
1607	Fleming Cr	St Joe R	Headwaters	U	3	U	U	U
1608	Fishhook Cr	St Joe R	Headwaters	2	3	3	1	U
1609	NFK St Joe R	St Joe R	Headwaters	1	2	1	U	3
1610	Loop Cr	NFK St Joe R	Headwaters	1	3	1	U	3
1611	Siwash Cr	St Joe R	Headwaters	1	3	4	U	U
1612	Skookum Cr	St Joe R	Headwaters	1	2	3	U	U
1613	Sisters Cr	St Joe R	Headwaters	1	3	U	U	U
1614	Bird Cr	St Joe R	Headwaters	1	3	3	U	U
1615	Prospector Cr	St Joe R	Headwaters	1	2	4	2	U

Segment Number	Stream Name	Lower Bound	Upper Bound	Res. Fish	Wildlife	Cultural	Natural Features	Rec.
1616	Nugget Cr	St Joe R	Headwaters	1	3	4	U	U
1617	Eagle Cr	St Joe R	Headwaters	1	3	3	2	U
1618	Quartz Cr	St Joe R	Headwaters	1	3	4	U	U
1619	Bluff Cr	St Joe R	Headwaters	1	3	3	U	U
1620	Bruin Cr	St Joe R	Headwaters	1	3	4	U	U
1621	Mosquito Cr	St Joe R	Headwaters	1	3	4	U	U
1622	Gold Cr	St Joe R	Headwaters	1	3	3	U	U
1623	Simmons Cr	St Joe R	Headwaters	1	3	3	U	U
1624	Fly Cr	St Joe R	Headwaters	1	3	U	U	U
1625	Beaver Cr	St Joe R	Headwaters	1	2	U	U	U
1626	Copper Cr	St Joe R	Headwaters	1	2	U	U	U
1627	Red Ives Cr	St Joe R	Headwaters	1	2	U	U	U
1628	Timber Cr	St Joe R	Headwaters	1	2	U	U	U
1629	Bean Cr	St Joe R	Headwaters	1	2	U	U	U

Appendix 5 - Summary of Quality Assurance Information for the Coeur d'Alene Basin Use Attainability Study.

Quality Assurance Analysis of Stream Width and Depth (1992 IDEQ Data with Comparisons to USFS Complete Stream Surveys).

	AVERAGE STREAM WIDTH (FT)					AVERAGE STREAM DEPTH (FT)				
STR.	DEQ	USFS	MEAN	RNG	REL.RNG (%)	DEQ	USFS	MEAN	RNG	REL.RNG (%)
1	10.29	15.28	12.783	4.994	39.070	0.957	0.510	0.734	0.447	60.954
2	15.64	18	16.818	2.364	14.054	1.182	1.080	1.131	0.102	9.003
3	20.31	15.16	17.736	5.153	29.051	1.488	0.800	1.144	0.688	60.109
4	19.92	25.84	22.880	5.920	25.874	1.876	1.100	1.488	0.776	52.151
5	9.25	10.84	10.045	1.590	15.829	0.831	0.620	0.726	0.211	29.113
6	29.27	20.54	24.903	8.727	35.042	1.793	0.660	1.227	1.133	92.391
7	23.00	15.57	19.285	7.430	38.527	1.300	1.000	1.150	0.300	26.087
8	14.57	13.63	14.101	0.941	6.676	1.336	0.730	1.033	0.606	58.645
9	13.17	10.54	11.857	2.634	22.214	1.109	0.610	0.859	0.499	58.032
10	12.06	19.9	15.981	7.838	49.042	1.288	0.780	1.034	0.508	49.093
11	21.06	21.92	21.488	0.864	4.023	1.261	0.440	0.851	0.821	96.538
12	23.59	32.6	28.095	9.009	32.066	1.534	2.230	1.882	0.696	36.976
13	8.89	7.98	8.434	0.909	10.776	0.978	0.670	0.824	0.308	37.357
14	14.63	14.97	14.800	0.340	2.300	1.041	1.190	1.115	0.149	13.382
15	13.50	12.41	12.955	1.090	8.414	1.333	1.920	1.627	0.587	36.066
16	14.23	13.17	13.699	1.059	7.727	1.123	1.200	1.161	0.077	6.642
17	13.33	12.11	12.722	1.223	9.616	1.589	1.840	1.714	0.251	14.647
18	14.79	18.92	16.857	4.126	24.476	1.632	1.860	1.746	0.228	13.037
19	11.88	12.31	12.093	0.435	3.597	1.042	1.020	1.031	0.022	2.102
20	22.65	14.67	18.661	7.982	42.774	1.430	1.460	1.445	0.030	2.046
21	9.90	9.68	9.790	0.220	2.247	1.010	1.920	1.465	0.910	62.116
22	13.25	12.35	12.800	0.900	7.031	1.375	1.420	1.398	0.045	3.220
23	14.25	19.5	16.875	5.250	31.111	0.817	1.380	1.098	0.563	51.290
24	12.88	16.31	14.596	3.428	23.483	0.876	1.510	1.193	0.634	53.093
		Average Relative Range =			20.209		Average Relative Range =			38.504

List of Stream Segments used in Joint Training Exercises.

Stream	Assessment Date	Investigators
BURNT CABIN CR.	06-20-92	MH,GH,SL,DM,CJ,GE
NFK CD'A RIVER	06-20-92	MH,GH,SL,DM,CJ,GE
PINE CR.	06-22-92	MH,CJ,GE
BEAR CR.	06-23-92	GH,SL,DM
SFK CDA RIVER	06-24-92	MH,SL,DM
SFK CDA RIVER	06-25-92	MH,CJ,GE
BIG CR.	06-24-92	GH,CJ,GE
MOON CR.	06-24-92	GH,CJ,GE
TWO MILE CR.	06-24-92	MH,SL,DM
LSFK CDA RIVER	06-25-92	MH,CJ,GE
PLACER CR.	06-25-92	MH,CJ,GE
CANYON CR.	06-25-92	GH,SL,DM
NINEMILE CR.	06-25-92	GH,SL,DM
GOVERNMENT GUL	06-26-92	MH,SL,DM
MONTGOMERY	06-26-92	MH,SL,DM
McFARREN GUL	06-26-92	MH,SL,DM
HOBO CR.	08-04-92	MH,SL,DM
MARBLE CR.	08-04-92	MH,SL,DM
PLUMMER CR	08-05-92	MH,SL,DM

MH,GH - Project Auditors

Appendix 6 - Summary of Attainable Beneficial Uses and Use Support Status for Stream Segments in the Coeur d'Alene Basin.

PNRS SEG.NO.	STREAM NAME	LOWER BOUNDARY	UPPER BOUNDARY	LENGTH (miles)	Attainable Uses and Use Support Status						
					DWS	AWS	PCR	SCR	CWB	WWB	SS
1481.00	CDA R	SFK CDA R	YELLOWDOG CR	43.0	X-S	X-S	X-S	X-S	X-PS		X-PS
1482.00	CDA R	YELLOWDOG	TEEPEE	8.0	X-S	X-S	X-S	X-S	X-PS		X-PS
1482.01	MINNERS CR	CDA R	HEADWATERS	2.8				X-S	X-PS		X-PS
1482.02	BRETT CR	CDA R	HEADWATERS	2.5				X-S	X-S		X-S
1483.00	CDA R	TEEPEE	HEADWATERS	20.0	X-S	X-S		X-S	X-PS		X-PS
1483.01	SPRUCE CR	CDA R	HEADWATERS	5.5				X-S	X-S		X-S
1483.02	BUCKSKIN CR	CDA R	HEADWATERS	3.0				X-S	X-S		X-S
1484.00	NFK CDA R	MAINSTEM	HONEYSUCKLE	29.0		X-S	X-S	X-S	X-PS		X-PS
1485.00	NFK CDA R	HONEYSUCKLE	HEADWATERS	7.0		X-S		X-S	X-PS		X-PS
1486.00	BUMMBLE BEE	NFK CDA R	HEADWATERS	4.2				X-S	X-PS		X-PS
1487.00	COPPER CR	NFK CDA R	HEADWATERS	5.3				X-S	X-PS		X-PS
1488.00	LAVERNE CR	NFK CDA R	HEADWATERS	4.0				X-S	X-PS		X-PS
1489.00	LIEBERG CR	NFK CDA R	HEADWATERS	5.6				X-S	X-PS		X-PS
1490.00	SKOOKUM CR	NFK CDA R	HEADWATERS	2.7				X-S	X-PS		X-PS
1491.00	DECEPTION CR	NFK CDA R	HEADWATERS	4.0				X-S	X-PS		X-PS
1492.00	BURNT CAB CR	NFK CDA R	HEADWATERS	6.3		X-S		X-S	X-PS		X-PS
1493.00	IRON CR	NFK CDA R	HEADWATERS	4.7		X-S		X-S	X-PS		X-PS
1494.00	COUGAR GULCH CR	CDA R	HEADWATERS	9.5				X-S	X-S		X-S
1495.00	STEAMBOAT CR	CDA R	HEADWATERS	5.2			X-S	X-S	X-PS		X-PS
1496.00	GRAHAM CR	CDA R	HEADWATERS	5.1				X-S	X-S		X-S
1497.00	GRIZZLEY CR	CDA R	HEADWATERS	3.0				X-S	X-PS		X-PS
1498.00	BROWN CR	CDA R	HEADWATERS	3.9				X-S	X-S		X-S
1499.00	BEAVER CR	CDA R	HEADWATERS	4.2		X-S		X-S	X-PS		X-PS
1500.00	PRICHARD CR	CDA R	HEADWATERS	15.0		X-S	X-S	X-S	X-PS		X-PS
1500.01	TIGER CR*	PRITCHARD CR	HEADWATERS	1.0							
1500.02	COUGAR CR*	PRITCHARD CR	HEADWATERS	1.0							
1500.03	WEST CR*	PRITCHARD CR	HEADWATERS	1.5							
1500.04	OPHIR CR	PRITCHARD CR	HEADWATERS	1.0				X-S	X-PS		X-PS
1500.05	IDAHO CR	PRITCHARD CR	HEADWATERS	2.0				X-S	X-PS		X-PS

PNRS SEG.NO.	STREAM NAME	LOWER BOUNDARY	UPPER BOUNDARY	LENGTH (miles)	Attainable Uses and Use Support Status					
				DWS	AWS	PCR	SCR	CWB	WWB	SS
1501.00	EAGLE CR	PRITCHARD CR	HEADWATERS	9.0		X-S		X-S	X-PS		X-PS
1502.00	EAGLE CR WFK	EAGLE CR	HEADWATERS	8.5				X-S	X-S		X-S
1503.00	LOST CR	CDA R	HEADWATERS	7.5				X-S	X-PS		X-PS
1504.00	SHOSHONE CR	CDA R	HEADWATERS	16.1				X-S	X-PS		X-PS
1504.01	FALLS CR	SHOSHONE CR	HEADWATERS	6.8				X-S	X-S		X-S
1505.00	DOWNEY CR	CDA R	HEADWATERS	2.6				X-S	X-PS		X-PS
1506.00	YELLOWDOG CR	CDA R	HEADWATERS	4.0				X-S	X-PS		X-PS
1507.00	FLAT CR	CDA R	HEADWATERS	6.6				X-S	X-S		X-S
1508.00	TEEPEE CR	CDA R	HEADWATERS	8.2		X-S		X-S	X-PS		X-PS
1509.00	INDEPENDENCE CR_1	TEEPEE CR	HEADWATERS	13.0				X-S	X-S		X-S
1510.00	TRAIL CR	TEEPEE CR	HEADWATERS	9.4		X-S		X-S	X-PS		X-PS
1511.00	BIG ELK CR	TEEPEE CR	HEADWATERS	8.4				X-S	X-PS		X-PS
1512.00	JORDAN CR_2	CDA R	HEADWATERS	4.2				X-S	X-S		X-S
1515.00	SFK CDA R	CDA R	OSBURN	20.5			X-S	X-S	X-PS		X-PS
1515.01	POLARIS GUL*	SFK CDA R	HEADWATERS	1.5							
1515.02	SLAUGHTER HOUSE*	SFK CDA R	HEADWATERS	2.5	X-S						
1516.00	SFK CDA R	OSBURN	MULLAN	13.0			X-S	X-S	X-PS		X-PS
1516.01	ROCK CR*	SFK CDA R	HEADWATERS	2.0							
1516.02	TROWBRIDGE CR*	SFK CDA R	HEADWATERS	0.0							
1517.00	SFK CDA R	MULLAN	HEADWATERS	6.5		X-S		X-S	X-S		X-S
1518.00	BEAR CR	SFK CDA R	HEADWATERS	7.1		X-S		X-S	X-PS		X-PS
1519.00	PINE CR	SFK CDA R	EFK PINE	16.2	X-S		X-S	X-S	X-PS		X-PS
1520.00	EFK PINE CR	PINE CR	HEADWATERS	7.1	X-S			X-S	X-PS		X-PS
1520.01	TRAPPER CR	EFK PINE	HEADWATERS	3.0				X-S	X-S		X-S
1521.00	BIG CR	SFK CDAR	HEADWATERS	9.0	X-S			X-S	X-S		X-S
1521.01	SHIELDS GUL*	SFK CDAR	HEADWATERS	2.0	X-S						
1521.02	MCFARREN CR	SFK CDAR	HEADWATERS	2.0	X-S			X-S	X-PS		X-PS
1521.03	MILO CR*	SFK CDAR	HEADWATERS	3.0	X-PS						
1521.04	GOVERNMENT GUL	SFK CDA R	HEADWATERS	3.0				X-S	X-NS		X-NS

PNRS SEG.NO.	STREAM NAME	LOWER BOUNDARY	UPPER BOUNDARY	LENGTH (miles)	Attainable Uses and Use Support Status					
				DWS	AWS	PCR	SCR	CWB	WWB	SS
1521.05	MONTGOMERY GUL	SFK CDA R	HEADWATERS	4.0		X-S		X-S	X-PS		X-PS
1521.10	MOON CR	SFK CDA R	HEADWATERS	2.5				X-S	X-PS		X-PS
1522.00	NUCKOLS CR	SFK CDA R	HEADWATERS	1.5	X-S						
1522.01	TWO MILE CR	SFK CDA R	HEADWATERS	3.0	X-S	X-S		X-S	X-S		X-S
1522.02	LAKE CR	SFK CDA R	HEADWATERS	2.5	X-S			X-S	X-PS		X-PS
1523.00	PLACER CR	SFK CDA R	HEADWATERS	6.5	X-S			X-S	X-PS		X-PS
1524.00	NINE MILE CR	SFK CDA R	HEADWATERS	6.0	X			X-S	X-PS		X-PS
1525.00	CANYON CR	SFK CDA R	HEADWATERS	12.2	X-S			X-S	X-PS		X-PS
1526.00	LSFK CDA R	SFK CDA R	HEADWATERS	4.0				X-S	X-S		X-S
1529.00	CDA R	CDA L	SFK CDA R	29.0		X-S	X-S	X-S	X-PS		X-PS
1530.00	THOMPSON CR	CDA R	HEADWATERS	3.9		X-S		X-S	X-PS		X-PS
1531.00	WILLOW CR_3	CDA R	HEADWATERS	5.0		X-S		X-S	X-PS		X-PS
1532.00	EVANS CR_4	CDA R	HEADWATERS	5.9	X-S	X-S		X-S	X-PS		X-PS
1533.00	FORTIER CR_5	KILARNEY L	HEADWATERS	3.7					X-PS		X-PS
1534.00	4TH OF JULY CR	CDA R	HEADWATERS	6.3		X-S		X-S	X-PS		X-PS
1535.00	LATOUR CR*	CDA R	HEADWATERS	16.6		X-S		X-S	X-PS		X-PS
1535.01	BALDY CR*	LATOUR CR	HEADWATERS	4.6							
1535.02	LARCH CR	LATOUR CR	HEADWATERS	1.5							
1536.00	SKEEL GUL CR	CDA R	HEADWATERS	2.7		X-S		X-S	X-S		X-S
1536.01	HUNT GULCH	CDA R	HEADWATERS	2.0		X-S		X-S	X-PS		X-PS
1537.00	FRENCH GULCH	CDA R	HEADWATERS	5.1		X-S		X-S	X-PS		X-PS
1538.00	CARLIN CR	CDA L	HEADWATERS	5.1		X-S		X-S	X-PS		X-PS
1539.00	TURNER CR	CDA L	HEADWATERS	3.9					X-PS		X-PS
1540.00	BEAUTY CR	CDA L	HEADWATERS	4.6					X-PS		X-PS
1541.00	WOLF LODGE CR	CDA L	HEADWATERS	11.3	X-S	X-S		X-S	X-PS		X-PS
1541.10	MARIE CR	WOLF LODGE CR	HEADWATERS	7.5				X-S	X-PS		X-PS
1542.00	CEDAR CR	WOLF LODGE CR	HEADWATERS	5.5				X-S	X-PS		X-PS
1543.00	FERNAN CR	CDA L	FERNAN L	1.2				X-S	X-PS	X-PS	
1544.00	FERNAN CR	FERNAN L	HEADWATERS	7.2		X-S		X-S	X-PS		X-PS

PNRS SEG.NO.	STREAM NAME	LOWER BOUNDARY	UPPER BOUNDARY	LENGTH (miles)	Attainable Uses and Use Support Status						
					DWS	AWS	PCR	SCR	CWB	WWB	SS
1545.00	COUGAR CR	CDA L	HEADWATERS	9.1		X-S		X-S	X-PS		X-PS
1546.00	KID CR	CDA L	HEADWATERS	2.9		X-S		X-S	X-PS		X-PS
1547.00	MICA CR	CDA L	HEADWATERS	6.4		X-S		X-S	X-PS		X-PS
1548.00	FIGHTING CR	CDA L	HEADWATERS	5.1		X-S		X-S	X-PS		X-PS
1548.10	CAVE CR*	CDA L	HEADWATERS	1.5		X-S					
1549.00	LAKE CR	CDA L	HEADWATERS	13.9		X-S		X-S	X-PS		X-PS
1549.10	16 TO 1 CR*	CDA L	HEADWATERS	1.5		X-S					
1549.20	MOWRY CR*	CDA L	HEADWATERS	1.5		X-S					
1552.00	SPOKANE R	WASH STATE LINE	POST FALLS BR	29.0	X-S	X-S	X-S	X-S	X-PS	X-S	X-PS
1553.00	SPOKANE R	POST FALLS	HEUTER (TOWN)	6.6	X-S	X-S	X-S	X-S	X-PS	X-S	
1554.00	SPOKANE R	HEUTER (TOWN)	CDA LAKE	3.7	X-S	X-S	X-S	X-S	X-PS	X-S	X-PS
1574.00	ST JOE R	MOUTH(IR)	ROCHET CR	22.1	X-S	X-S	X-S	X-S	X-PS	X-S	
1574.01	STREET CR	ST JOE R	HEADWATERS	4.5					X-PS		X-PS
1574.30	ST JOE R	CDA L	IR BOUND	7.0	X-S	X-S	X-S	X-S	X-PS	X-S	
1575.00	ST JOE R	ROCHET CR	NFK ST JOE R	36.8	X-S	X-S	X-S	X-S	X-PS		X-PS
1575.01	READS GUL	ST JOE R	HEADWATERS	5.5	X-S				X-PS		X-PS
1575.02	TANK CR*	ST JOE R	HEADWATERS	1.5							
1575.03	HARVEY CR*	ST JOE R	HEADWATERS	3.0							
1575.04	BLACKJACK CR*	ST JOE R	HEADWATERS	1.5							
1575.05	ROCHAT CR	ST JOE R	HEADWATERS	3.5	X-S				X-PS		X-PS
1576.00	ST JOE R_6	NFK ST JOE R	SPRU TRE CMPG	37.5	X-S	X-S	X-S	X-S	X-S		X-S
1576.01	ST JOE R	SPRU TRE CMPG	HEADWATERS	28.0	X-S	X-S	X-S	X-S	X-S		X-S
1577.00	PLUMMER CR	CHATCOLET L	HEADWATERS	10.0		X-S		X-S	X-PS		X-PS
1578.00	BENEWAH CR	CHATCOLET L	HEADWATERS	15.3	X-S	X-S		X-S	X-PS		X-PS
1579.00	ST MARIES R	ST JOE R	MASHBURN	22.4		X-S	X-S	X-S	X-PS		
1580.00	ST MARIES R	MASHBURN	CLARKIA	12.7	X-S	X-S	X-S	X-S	X-PS		X-PS
1582.00	THORN CR	ST MARIES R	HEADWATERS	8.9	X-S	X-S		X-S	X-S		X-S
1583.00	ALDER CR	ST MARIES R	HEADWATERS	12.1	X-S	X-S		X-S	X-S		X-S
1584.00	JOHN CR	ST MARIES R	HEADWATERS	9.2		X-S		X-S	X-S		X-S

PNRS SEG.NO.	STREAM NAME	LOWER BOUNDARY	UPPER BOUNDARY	LENGTH (miles)	Attainable Uses and Use Support Status						
					DWS	AWS	PCR	SCR	CWB	WWB	SS
1585.00	SANTA CR	ST MARIES R	HEADWATERS	15.0	X-S	X-S		X-S	X-PS		X-PS
1586.00	BEAVER CR	ST MARIES R	HEADWATERS	6.2				X-S	X-S		X-S
1587.00	CHARLIE CR	SANTA CR	HEADWATERS	8.2	X-S	X-S		X-S	X-S		X-S
1588.00	RENFRO CR	ST MARIES R	HEADWATERS	5.6	X-S			X-S	X-PS		X-PS
1589.00	TYSON CR	ST MARIES R	HEADWATERS	5.6				X-S	X-PS		X-PS
1590.00	CRYSTAL CR	ST MARIES R	HEADWATERS	6.8				X-S	X-S		X-S
1591.00	CARPENTER CR	ST MARIES R	HEADWATERS	11.4		X-S		X-S	X-PS		X-PS
1592.00	OLSEN CR	ST MARIES R	HEADWATERS	5.0	X-S			X-S	X-PS		X-PS
1593.00	EMERALD CR	ST MARIES R	HEADWATERS	11.8		X-S		X-S	X-PS		X-PS
1594.00	MFK ST MAR R	ST MAR R	HEADWATERS	9.2	X-S	X-S	X-S	X-S	X-PS		X-PS
1595.00	MERRY CR	MFK ST MAR R	HEADWATERS	7.2		X-S		X-S	X-PS		X-PS
1596.00	GOLD CENTER CR	MFK ST MAR R	HEADWATERS	6.1		X-S		X-S	X-PS		X-PS
1596.01	FLEWSIE CR*	GOLD CENTER	HEADWATERS	3.0							
1596.02	GRAMPS CR	GOLD CENTER	HEADWATERS	2.5		X-S		X-S	X-PS		X-PS
1597.00	WFK ST MAR R	MFK ST MAR R	HEADWATERS	5.5		X-S		X-S	X-PS		X-PS
1597.01	CAT SPUR CR	WFK ST MAR R	HEADWATERS	4.7		X-S		X-S	X-PS		X-PS
1598.00	BOND CR	ST JOE R	HEADWATERS	7.8				X-S	X-PS		X-PS
1599.00	TROUT CR	ST JOE R	HEADWATERS	8.6				X-S	X-PS		X-PS
1600.00	HUGUS CR	ST JOE R	HEADWATERS	8.6				X-S	X-S		X-S
1601.00	MICA CR	ST JOE R	HEADWATERS	13.3				X-S	X-PS		X-PS
1602.00	BIG CR	ST JOE R	HEADWATERS	13.4				X-S	X-S		X-S
1603.00	BLACK PRINCE CR	ST JOE R	HEADWATERS	6.0	X-S			X-S	X-S		X-S
1604.00	MARBLE CR	ST JOE R	HOBO CR	14.1			X-S	X-S	X-PS		X-PS
1604.01	DEVEGGIO CR	MARBLE CR	HEADWATERS	6.6				X-S	X-S		X-S
1604.02	EAGLE CR	MARBLE CR	HEADWATERS	4.5				X-S	X-PS		X-PS
1604.03	NORTON CR	MARBLE CR	HEADWATERS	5.5				X-S	X-S		X-S
1604.04	TOLES CR	MARBLE CR	HEADWATERS	5.0				X-S	X-S		X-S
1604.05	BEAR CR	MARBLE CR	HEADWATERS	2.0							
1604.06	LITTLE BEAR CR*	MARBLE CR	HEADWATERS	2.0							

PNRS SEG.NO.	STREAM NAME	LOWER BOUNDARY	UPPER BOUNDARY	LENGTH (miles)	Attainable Uses and Use Support Status						
					DWS	AWS	PCR	SCR	CWB	WWB	SS
1604.10	BUSSEL CR	MARBLE CR	HEADWATERS	2.5				X-S	X-S		X-S
1605.00	MARBLE CR*	HOBO CR	HEADWATERS	9.7							
1605.01	HOBO CR	MARBLE CR	HEADWATERS	4.5				X-S	X-PS		X-PS
1606.00	SLATE CR	ST JOE R	HEADWATERS	10.0			X-S	X-S	X-PS		X-PS
1607.00	FLEMMING CR	ST JOE R	HEADWATERS	4.0				X-S	X-PS		X-PS
1608.00	FISHHOOK CR	ST JOE R	HEADWATERS	10.4				X-S	X-PS		X-PS
1609.00	NFK ST JOE R	ST JOE R	HEADWATERS	16.5				X-S	X-PS		X-PS
1609.01	BULLION CR	NFK ST JOE R	HEADWATERS	4.0				X-S	X-PS		X-PS
1610.00	LOOP CR	NFK ST JOE R	HEADWATERS	10.5				X-S	X-S		X-S
1611.00	SIWASH CR	ST JOE R	HEADWATERS	4.5				X-S	X-S		X-S
1612.00	SKOOKUM CR	ST JOE R	HEADWATERS	5.0				X-S	X-S		X-S
1613.00	SISTERS CR	ST JOE R	HEADWATERS	11.7				X-S	X-S		X-S
1614.00	BIRD CR	ST JOE R	HEADWATERS	3.3				X-S	X-PS		X-PS
1615.00	PROSPECTOR CR	ST JOE R	HEADWATERS	3.9				X-S	X-PS		X-PS
1616.00	NUGGET CR	ST JOE R	HEADWATERS	5.0				X-S	X-S		X-S
1617.00	EAGLE CR	ST JOE R	HEADWATERS	4.8				X-S	X-PS		X-PS
1618.00	QUARTZ CR	ST JOE R	HEADWATERS	7.0				X-S	X-PS		X-PS
1619.00	BLUFF CR	ST JOE R	HEADWATERS	1.9				X-S	X-PS		X-PS
1620.00	BRUIN CR	ST JOE R	HEADWATERS	4.8				X-S	X-PS		X-PS
1621.00	MOSQUITO CR	ST JOE R	HEADWATERS	5.9				X-S	X-S		X-S
1622.00	GOLD CR	ST JOE R	HEADWATERS	8.9				X-S	X-PS		X-PS
1623.00	SIMMONS CR	ST JOE R	HEADWATERS	12.6				X-S	X-S		X-S
1624.00	FLY CR	ST JOE R	HEADWATERS	5.0				X-S	X-S		X-S
1625.00	BEAVER CR	ST JOE R	HEADWATERS	6.0				X-S	X-S		X-S
1626.00	COPPER CR	ST JOE R	HEADWATERS	4.5				X-S	X-S		X-S
1627.00	RED IVES CR	ST JOE R	HEADWATERS	5.0	X-S	X-S		X-S	X-S		X-S
1627.01	TIMBER CR	ST JOE R	HEADWATERS	3.9				X-S	X-S		X-S
1627.02	BACON CR	ST JOE R	HEADWATERS	3.9				X-S	X-S		X-S
1627.03	BEAN CR	ST JOE R	HEADWATERS	2.5				X-S	X-S		X-S

PNRS SEG.NO.	STREAM NAME	LOWER BOUNDARY	UPPER BOUNDARY	LENGTH (miles)	Attainable Uses and Use Support Status					
				DWS	AWS	PCR	SCR	CWB	WWB	SS
1627.04	HELLER CR	ST JOE R	HEADWATERS	3.8			X-S	X-S		X-S
1627.05	SHERLOCK CR	ST JOE R	HEADWATERS	4.5			X-S	X-S		X-S

Legend:

Code	Description
DWS -	Domestic Water Supply
AWS -	Agricultural Water Supply
SCR -	Secondary Contact Recreation
PCR -	Primary Contact Recreation
CWB -	Cold Water Biota
WWB -	Warm Water Biota
SS -	Salmonid Spawning
X -	Attainable Use
S -	Supported
PS -	Partially Supported
NS -	Non-supported

* - Attainable uses have not been assessed (unless indicated) for stream segment due to either of the following: lack of access; inability to locate stream; and, uncharacteristic lack of flow (assessments corresponded with abnormal dry conditions experienced in the 1992 water year).

List of Footnotes:

1. Data indicates beneficial uses may be affected by watershed conditions associated with natural fire activity in the drainage.
2. Data indicates beneficial uses may be affected by watershed conditions associated with natural fire activity in the drainage.
3. Data indicates (source - CD'A Tribe) beneficial uses are in full support in upper reaches of drainage.
4. Data indicates (source - CD'A Tribe) beneficial uses are in full support in upper reaches of drainage.
5. Data indicates (source - CD'A Tribe) beneficial uses are in full support in upper reaches of drainage.
6. Watershed monitoring results suggest stream habitat and stability factors associated with the current level of use support may experience adverse change in river reach.

Note: Beneficial use classifications are based on results of decision options identified in use attainability Protocol #7 for use in Idaho. Water supplies are classified as attainable based on documentation of existing use. Existing use of agricultural and domestic water supplies are based on either of the following: observations of animal grazing activity; water right permit records; and/or public water system records. Unclassified uses for stream segments in the current list are not precluded from classification as information changes or protocols change.

Appendix 7 - Attainable uses of Lakes in the Coeur d'Alene Basin.

PNRS SEG. #	NAME	COUNTY	LOCATION (S. T. R.)	SIZE (acres)	ATTAINABLE USES						
					DWS	AWS	PCR	SCR	CWB	WWB	SS
	ROSE LAKE	Kootenai	33,49N,1W	300	X	X	X	X	X	X	
	BULL RUN LAKE	Kootenai	9,48N,1W	100	X	X	X	X	X	X	
	KILLARNEY LAKE	Kootenai	10,48N,2W	500	X	X	X	X	X	X	
	SWAN LAKE	Kootenai	30,48N,2W		X	X	X	X	X	X	
	CAVE LAKE	Kootenai	32,48N,2W	700	X	X	X	X	X	X	
	MEDICINE LAKE	Kootenai	34,48N,2W	340	X	X	X	X	X	X	
	BLUE LAKE	Kootenai	23,48N,3W	200	X	X	X	X	X	X	
1529.50	BLACK LAKE	Kootenai	1,47N,2W	400.0	X	X	X	X	X	X	
	THOMPSON LAKE	Kootenai	21,48N,3W	200	X	X	X	X	X	X	
	ANDERSON LAKE	Kootenai	32,48N,3W	720	X	X	X	X	X	X	
1554.10	LAKE COEUR D'ALENE[1]	Koot., Ben.		318720.0	#	#	#	#	#	X	#
	ROUND LAKE	Benewah	4,46N,3W	400	X	X	X	X	X	X	
	TURTLE LAKE	Benewah	17,46N,1W	75	X	X	X	X	X	X	
	BELLS LAKE	Benewah	13,46N,2W	10	X	X	X	X	X	X	
	SWAN LAKE	Benewah	14,46N,2W		X	X	X	X	X	X	
	HIDDEN LAKE	Benewah	31,47N,3W		X	X	X	X	X	X	
1576.20	CHATCOLET LAKE	Benewah	6,46N,3W	600	X	X	X	X	X	X	
	BENEWAH LAKE	Benewah	10,46N,3W	400	X	X	X	X	X	X	
1543.10	FERNAN LAKE	Kootenai	17,50N,3W	450.0	#	#	#	#	#	X	

X - Attainable Use Classification
- Use Designation in Idaho Water Quality Standards
1 - Lake Coeur d'Alene is Designated Special Resource Water