CSM Unit 3

Lower Coeur d'Alene River

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ABBREVIATIONS AND ACRONYMS

AWQC	ambient water quality criteria
bgs	below ground surface
BLM	Bureau of Land Management
CCSeg	Canyon Creek segment
CDA	Coeur d'Alene
CDALakeSeg	Coeur d'Alene Lake segment
CDR	Coeur d'Alene River
cfs	cubic foot per second
COPC	chemical of potential concern
CSM	conceptual site model
CV	coefficient of variation
EPA	U.S. Environmental Protection Agency
EV	expected value
FIS	flood insurance study
FS	feasibility study
IDT	Idaho Department of Transportation
LCDRSeg	Lower Coeur d'Alene River segment
µg/L	microgram per liter
µmho	micromho
mg/L	milligram per liter
msl	mean sea level
North Fork	North Fork Coeur d'Alene River
PDF	probability density function
PRG	preliminary remediation goal
RI	remedial investigation
RI/FS	remedial investigation/feasibility study
SL	screening level
South Fork	South Fork Coeur d'Alene River
TMDL	total maximum daily load
URSG	URS Greiner, Inc.
USACE	U.S. Army Corps of Engineers
USBM	U.S. Bureau of Mines
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
WRCC	Western Regional Climate Center

1.0 INTRODUCTION

The Lower Coeur d'Alene River (CDR) Watershed is located within the Coeur d'Alene River basin and encompasses the low-gradient portions of the CDR beginning at Cataldo and ending at Coeur d'Alene Lake near the town of Harrison. It includes the entire floodplain, lateral lakes, and associated wetlands. The river in this watershed has a low gradient. River meanders are not very active because of natural and enhanced levees in many places, and armoring to protect roads, bridges, and railroad beds in a few places. The active bed of the lower CDR contains approximately 17.6 million cubic yards of mining-waste-contaminated alluvium as sand and silt (Bookstrom 2000), and possibly larger amounts as bank, valley, and levee deposits. Except for dredge spoils and the Union Pacific Railroad bed, which is the subject of a removal action under an agreement between the Railroad, the State of Idaho, Coeur d'Alene Tribe and the United States, there are no significant primary source areas in this watershed.

There have been several previous clean-up actions in the Lower Coeur d'Alene River, with a focus primarily on erosion control and areas with human recreational use. Several projects have been implemented at the Cataldo Mission and State Park. In 1995, the Coeur d'Alene Tribe removed about 700 cubic yards of contaminated materials from the campground at the Mission; these materials were transported to the Roosevelt Landfill in Washington for disposal (REI, 1995). In 1998, IDEQ installed cabled log bank protection and brush wattling to reduce erosion near the Cataldo Boat Ramp. In addition, hostile vegetation (Black hawthorne) bushes were planted in the vicinity of contaminated soils to reduce the risk of human exposure (IDSWB, 1998).

In 1998, a pilot project was implemented in a portion of the Cataldo Flats by the Mine Owners Association, USEPA, IDEQ and the University of Idaho Water Resources Research Institute to assess the effectiveness of various in-situ soil treatment processes. Processes included silica encapsulation, apatite mineralization, phosphate addition and apatite II application. The results were variable, but generally resulted in decreased leachability of both lead and zinc (Williams et al. 1999).

During the 1999 field season, the USACE on behalf of USEPA performed a residential soil cleanup in Cataldo determined to be necessary to protect human health (USEPA 1999). Material from this removal was disposed of at the CIA (USEPA, 2000). Drinking water was addressed at two locations in Cataldo with one home receiving an end-of-tap purification system and another being connected to the public water system. Under a time-critical removal action in 1999, USEPA worked with Idaho Fish and Game to install an asphalt barrier at the public boat launch

sites at Anderson and Thompson Lakes. Asphalt paving with rock riprap bank protection, and access controls (boulders and hostile vegetation) were added to both locations. Road-based and river-based human health advisory signage was also installed (USEPA, 1999).

In 1999, the USDA Forest Service also implemented several measures to protect human health at the Medimont boat launch and Rainy Hill campgrounds. These measures included providing an aggregate barrier in the parking lots, placement of angular rock riprap along the shoreline to prevent children's play in contaminated bank materials, placement of large boulders to prevent access to the more contaminated areas and enforcement of overnight camping restrictions. Several mining companies contributed funding towards this project (Johnson, 2000).

In 1994, a previous bank erosion control project was implemented at Medimont by IDEQ and the Soils Conservation Service (now the National Resource Conservation Service). Four types of erosion control were placed at the Medimont bend in the Coeur d'Alene River, two with hay bales, two with riprap. Subsequent monitoring indicated that the hay-bale methods were not effective in this portion of the river (Harvey, 2000).

In 1999, the Silver Valley Natural Resource Trustees installed a pilot bank erosion project to evaluate effectiveness of rock berms in reducing bank erosion cased by piping, or undercutting by boat wake. The project included minor bank regrading and shaping along 750 feet of a straight portion of the river channel near Dudley, with installation of riprap channel bank armoring and rock berms along the overbank (SVNRT, 1998).

Idaho Fish and Game installed a water control structure in Swan Lake in 1994 to regulate the water level in this surface water body. In the following years, they have provided ongoing water level control in the fall and winter to allow access for hunting and fishing. The raised water level also has effects of limiting geochemical reactions in the sediments and limiting human and wildlife access to these contaminated materials (Nigh, 1995).

As a part of the Consent Decree for the UPRR Wallace-Mullan Branch, contaminated soils and ballast materials within the UPRR ROW along the lower Coeur d'Alene River between Cataldo and Harrison (Coeur d'Alene Lake) are to be covered with an asphalt, gravel or soil barrier, depending upon location. This action also includes limited removals of contaminated materials within railroad sidings near Cataldo, Dudley, Lane, Bare Marsh, Springston, and Harrison. Seven homes adjacent to the UPRR ROW will be sampled; depending upon sample results, any residual contamination will be addressed. Fencing, large boulders and hostile vegetation will be used to prevent access to contaminated areas along the River at portions of the ROW near

Medimont, Dudley, Lane, Bull Run, and Cataldo (MFG, 1999). Implementation of this portion of the UPRR Response Action is planned for the year 2001/ 2002 (MFG, 2000).

This watershed is assigned to conceptual site model (CSM) Unit 3 (see Part 1, Section 2, Conceptual Site Model Summary). The watershed itself has been divided into six segments (Figure 1.1-1). A brief description of the entire watershed is presented below.

1.1 WATERSHED DESCRIPTION

The lower CDR and 12 associated lateral lakes extend for 31 miles between Cataldo and the mouth of the CDR near Harrison. Hydrologically, the lower CDR can be divided into two sections that correspond to different river channel hydraulics. The first section, from Cataldo to Rose Lake, is a free-flowing river while the second section, from Rose Lake to the mouth of the CDR, is characterized by the backwater conditions created by the Post Falls dam on the Spokane River.

The lower CDR is characterized by a low-gradient channel morphology with an extensive floodplain bordered by steep hillsides. The floodplain area ranges in width from 0.5 miles to as much as 3 miles at its widest point near Rose Lake. Due to the wider floodplain and lower current velocity, many suspended solids (including mine tailings) do not remain in suspension, and are deposited in the channel bed and on the floodplain in overbank flow events. The lower CDR has formed deltas at its mouth in Coeur d'Alene Lake and at the entrances to some of the lateral lakes.

The lower CDR and associated lateral lakes have been impacted by transport and deposition of tailings from upgradient mining areas. Measured concentrations of metals in surface water from the lower CDR routinely exceed acute and chronic ambient water quality criteria (AWQC).

1.2 REPORT ORGANIZATION

The remedial investigation report is divided into seven parts. This report on the Lower Coeur d'Alene River Watershed is Part 4, presenting the remedial investigation (RI) results for CSM Unit 3. The content and organization of this report are based on EPA's Guidance Document for Conducting Remedial Investigations and Feasibility Studies under CERCLA, Interim Final (USEPA 1988). This report contains the following sections:

- Section 2–Physical Setting, includes discussions on the watershed's geology, hydrogeology, and surface water hydrology.
- Section 3–Sediment Transport Processes
- Section 4–Nature and Extent of Contamination, includes a summary of chemical results and estimates of mass loading from source areas
- Section 5–Fate and Transport, includes chemical and physical transport processes for metals
- Section 6–References

Risk evaluations and potential remedial actions associated with source and depositional areas are described in the human health risk assessment, the ecological risk assessment, and the feasibility study (all under separate cover).

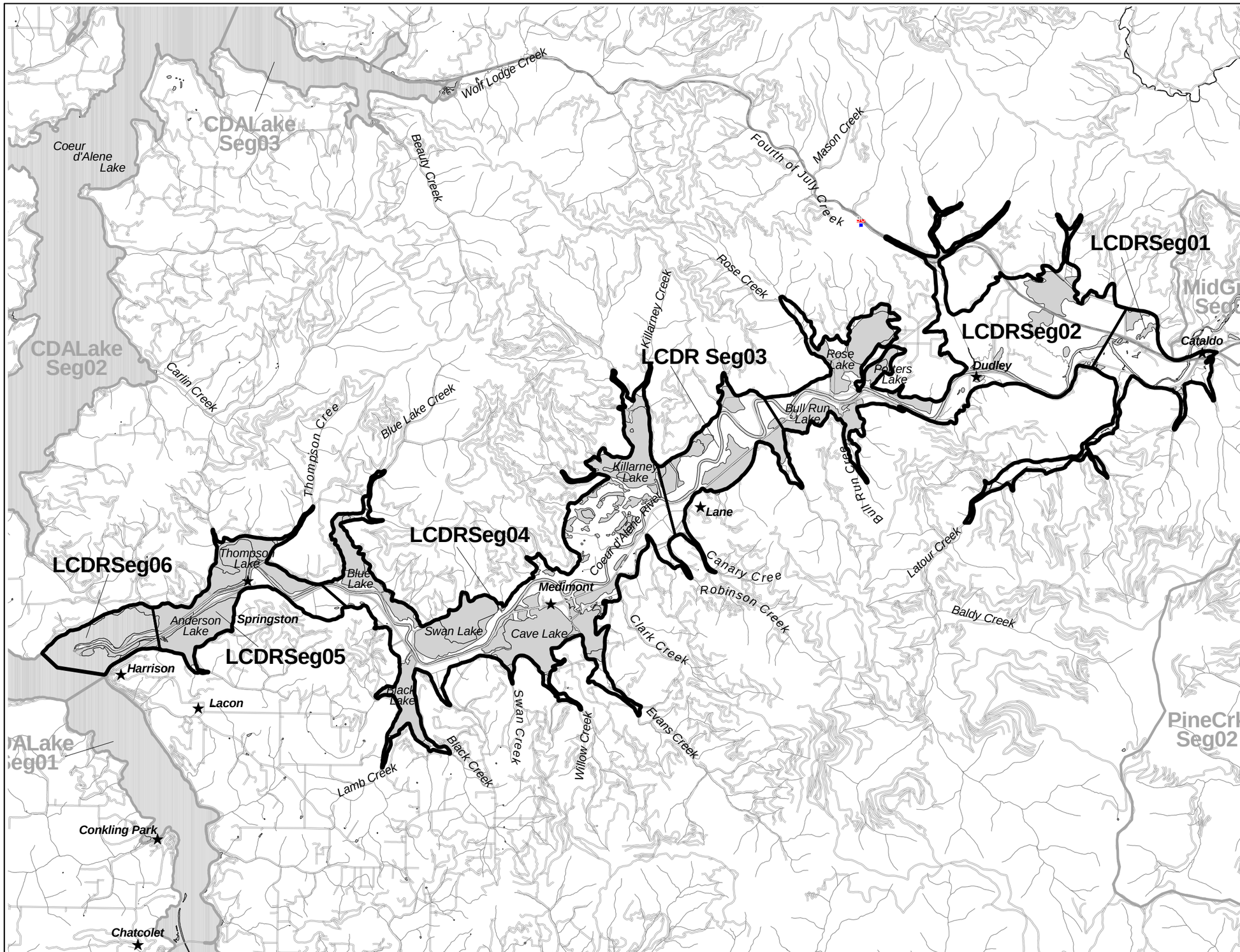
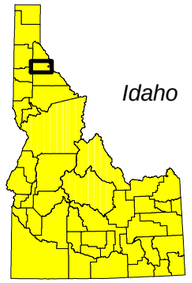


Figure 1.1-1
Lower Coeur d'Alene River Watershed

LEGEND

- Stream
- Road
- Interstate 90
- City
- Lower Coeur d'Alene River Watershed
- Lower Coeur d'Alene River Segment
- River Segment
- Lake/River



Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner Inc., CH2M HILL, and the Bureau of Land Management.

SCALE 1:72,000

0.5 0 0.5 Miles

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027-RI-C0-102Q
Coeur d'Alene Basin RI/FS
RI REPORT

EPA REGION 10

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V:USFCDA
LAYOUT: USFCDAR
6/14/2000
8/31/01

This map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983.

Date of Plot: August 31, 2001

2.0 PHYSICAL SETTING

2.1 GEOLOGY AND MINES

The geology and mining history of the Lower Coeur d'Alene River Watershed (i.e., CSM Unit 3) are presented in this section. CSM Units 1 and 2 correspond closer to a topographic watershed than CSM Unit 3. Consequently, CSM Unit 3 is discussed on the basis of the floodplain boundaries.

Conceptual Site Model (CSM) Unit 3 includes the Coeur d'Alene River from Cataldo to Coeur d'Alene Lake, a distance of 34.7 river miles. At Cataldo, the river transitions from a braided, gravel-bottomed channel (CSM Unit 2) to a meandering sand-bottomed channel (CSM Unit 3). The watershed area upstream of Coeur d'Alene Lake at Harrison is 1,475 square miles; the watershed area above Cataldo is 1,223 square miles (USGS 1998). Thus, the watershed area within CSM Unit 3 is approximately 252 square miles.

Topographically, CSM Unit 3 consists of a broad, flat river plain bordered by steep hillsides. Elevations range from about 2,100 feet above msl at mouth of the river to about 5,400 feet above msl along the Black Rock Divide (USGS, 1981a). The floodplain ranges in width from around 1,000 feet below the confluence to nearly 3 miles in the areas above Rose Lake, Idaho (USGS, 1981b).

2.1.1 Geomorphic Setting

CSM Unit 3 consists of a broad, flat, meandering river plain bordered by steep hillsides. Elevations range from about 2,150 feet mean sea level (msl) at Cataldo to about 2,100 feet msl at the mouth of the river at Coeur d'Alene Lake. The floodplain ranges in width from around 1,000 feet, below the confluence of the North Fork and South Fork at Cataldo, to approximately 3 miles in the areas above Dudley (Figure 1.1-1) (USGS 1981).

2.1.2 Bedrock Geology

CSM Unit 3 is underlain by weakly metamorphosed sedimentary rocks assigned to the Precambrian Belt Supergroup. The only exposed bedrock in CSM Unit 3 occurs in the vicinity of Killarney Lake, where younger, fine-grained basalt flows and interbedded sedimentary rocks (e.g., shale, see Piske 1990) of Miocene age unconformably overlie Belt rocks and occur as erosional remnants which rim the present day mountain front (Griggs 1973).

2.1.3 Structural Geology

Numerous northwest-trending faults dominate the structural fabric of CSM Unit 3 (Bond 1978). These faults likely control several tributaries to the CDA River, such as Evans, Robinson, and Rose Creeks (Figure 1.1-1).

2.1.4 Soils

Soils in CSM Unit 3 are unconsolidated sediments consisting of coarser fluvial and finer lacustrine deposits. Alternating layers of coarse-grained and fine-grained sediments are common. For example, between Cataldo and Rose Lake, logs from private water wells indicate coarser fluvial sands and gravels overlying bedrock. The coarser sediments are overlain by fine-grained (clayey) lacustrine sediments, which are again overlain by sands and gravels (Norbeck 1974). The thickness of the unconsolidated sediments over bedrock varies from about 160 feet thick (downstream of Cataldo Flats, also known as Mission Flats) to 200 feet thick (near Cataldo), up to 400 feet thick between Rose Lake and Killarney Lake (Norbeck 1974).

2.1.5 Ore Deposits

There have been little bedrock or alluvial ore deposits identified in CSM Unit 3. Therefore, there has been no mineral production in this watershed. The Bureau of Land Management (BLM) has identified one source, the Cataldo Deposit, in its coverage of potential source areas within this area of the basin (BLM 1999).

2.1.6 Mining History

The lower Coeur d'Alene River saw little activity in the way of the mining (Quivik 1999). Nevertheless, this area has played an important role in the history of the Coeur d'Alene mining district, first as a transportation channel for the shipment of ores and concentrates before the expansion of the rail system in this area, and later as an issue for the mining companies who were continually involved in lawsuits brought by farmers, ranchers, and other landowners in this region (Quivik 1999). As railroad transportation grew in importance, mine wastes were used in the district for construction of embankment and ballast. This is especially true between Harrison and Cataldo, which were low and required a tremendous amount of fill. The embankments along with the discharge of tailings in the river acted to alter the river's flood regime.

Observers within the Coeur d'Alene River basin reported that prior to the 1880s, the river was a clear mountain stream. By the 1890s, the river had become cloudy with the wastes of upstream

milling processes, and by 1901, landowners along the river near Cataldo reported deposition of tailings on their property after periods of high water (Quivik 1999).

One of the earliest lawsuits against the mining companies was brought forth by a group of Kootenai County farmers in 1904. Two court actions were filed against the mining companies in U.S. District Court. The farmers claimed that the dumping of tailings had filled up the riverbed to such an extent that increases in water volume, such as spring runoff, would cause the river to overflow its banks and deposit tailings on their property in the bottomlands of the river valley. In this case, and in many others that followed, the mining companies were able to successfully defend their water rights. These companies claimed their wastes were harmless and offered as justification of their dumping policies, the economic importance of mining to the State of Idaho and the Nation (Casner 1989).

One of the earliest attempts by the mining companies to quell the complaints of landowners along the river was to obtain easements along the river. By securing these easements, the mining companies purchased the perpetual right to deposit mining wastes along properties adjacent to the river. The easements released the mines from all past and future pollution damage claims. They covered damage to crops, and sickness, disease or death of domestic animals resulting from mining or milling operations. The majority of easements were purchased along the lower CDR in Kootenai County (Casner 1989).

In August of 1910, the Federal Mining & Smelting Company, Bunker Hill & Sullivan Mining & Concentrating Company, Hecla Mining Company, Hercules Mining Company, and Gold Hunter Mining Companies made an agreement to pool their resources in order to acquire easements. The pooled monies were also used to hire an agent to handle negotiations with property owners, purchase land for construction of the Pine Creek tailings dam, and other costs associated with discharge of tailings to the river. Each company's percentage contribution was based upon the volume of ore concentrated between January 1905 and June 1910, with the Federal Mining & Smelting Company paying the largest share at nearly 60 percent (Quivik 1999).

In 1913, eight additional companies began to contribute to the common funding group. These companies included the Alice Mining Company, Green Hill-Cleveland Mining Company, Interstate-Callahan Consolidated Mining Company, Marsh Mining Company, Ontario Mining Company, Snowstorm Mining Company, Stewart Mining Company, and the Tamarack & Custer Mining Company. At this time, contributions were based on a cost of $0.02 per ton of ore milled. The group continued to acquire easements along the river until at least 1919 (Quivik 1999). By 1930, the U.S. Bureau of Mines (USBM) estimated that 11,515 acres of land had been indentured by easements (Casner 1989).

In April 1914, the U.S. Army Corps of Engineers (USACE) conducted a study related to the navigability of the river. The report described the river as being impregnated on a year round basis with slimes from the concentrators operating in the basin. The report also described how flood stages served to deposit slimes on low-lying fields and meadows along the river. The Corps reported farmer's allegations that the slimes made hay poisonous to livestock. The Corps determined that the effects of mining had no detrimental effects on the navigability of the river, and therefore there existed no need to interfere with mining or take steps in improving existing conditions in the river.

In 1919, Jacob Pollack won a landmark lawsuit against the Bunker Hill, Hecla, and Gold Hunter Mining Companies. The U.S. District Court in Wallace found the mining companies negligent in their maintenance of the Pine Creek tailings dam, which was reported to have been full by 1914. Pollack was awarded a $3,500 judgment. When the Bunker Hill Mining Company appealed, the Ninth Circuit Court of Appeals in San Francisco made the following statement regarding Bunker Hill's defense on the ground of miner's preferential water rights:

> *We find no merit in the contention and no authority to sustain it. It asserts for the miner in Idaho constitutional rights unknown to American constitutional law-the right not only to preference in the use of a stream, but the right to inflict unlimited injury upon property of those who have acquired vested rights as manufacturers or agriculturist* (as cited in Casner 1989).

In the 1920s, the mining companies did little to regulate the movement of tailings down the Coeur d'Alene River. By this time, most of the mills in the basin were using flotation for concentration of their ores. A 1932 Bureau of Mines report made the following statement regarding the effects of flotation on the movement of tailings in the river system.

> *Flotation has, however, resulted in an increased production of fine size tailings so that from the viewpoint of contamination of waters, the lead content of the tailings has been reduced, but on the other hand the amount of very fine material which is difficult to remove from the water has been increased* (USBM as cited in Quivik 1999).

Lewis A. Grant, of Day Mines, Inc., made the following report of the condition of the river at about this time:

> *In 1930, W.L. Zeigler and E.C. O'Keefe, engineers representing the mining companies, accompanied by state chemists, made tests of the lower river and lake*

> *waters to determine the extent to which the tailings were carried into the lake. These engineers found that, up to that time, a very small amount of tailings had been carried as far as the lake, and that the river channel below Rose Lake, some 20 miles from Coeur d'Alene Lake, had not filled to any appreciable amount. Test of the lake water at various points showed only traces of lead in suspension and none in solution* (Grant 1952).

This report contradicts information presented by M. M. Ellis in his 1932 report (published in 1940) on the waters of the Coeur d'Alene River. Ellis reports:

> *According to various steamboat captains operating boats on the Coeur d'Alene Lake and St. Joseph, St. Maries and Coeur d'Alene Rivers, the Coeur d'Alene River was formerly navigable to a point above Mission Flat. These steamboat men repeatedly assured the writer that 15 to 20 years ago steamboats carrying passengers and tug boats moving log rafts regularly ascended the Coeur d'Alene River to the Old Mission and that the channel carried from 40 to 50 feet of water in this part of the river. The writer's own soundings during the month of July 1932, showed only 12 to 15 feet of water in the main channel in this region, both the channel and the main stream being obstructed hear and there by large bars of mine wastes and tailings* (Ellis 1940).

Ellis' report was associated with a pollution investigation done at the request of the Coeur d'Alene River and Lake Commission. The commission was created in 1931 through an emergency act that was passed by the Idaho State Legislature. The emergency status given to the commission allowed immediate use of state funds. The commission was immediately appropriated a sum of $3,000 to conduct a pollution investigation and publish a report to be delivered to the next legislature in 1933. The U.S. Department of Agriculture, Public Health Service, and Bureau of Mines were asked for technical assistance in conducting the investigation.

Ellis worked through the Department of Interior, Bureau of Fisheries. His report was one of the more controversial reports submitted to the commission that year (Casner 1989). Ellis reported that at the time of his investigation in 1932, the entire area of Mission Flat, which covers an area of several square miles, was largely covered with tailings and slimes. He further reported that in July 1932, no live fish were found in the river from its mouth near Harrison to the confluence of the North and South Forks. Bass and perch were found in the lateral lakes area (Ellis 1940).

Ellis' report concluded, "There is but one solution for this pollution problem as far as fisheries are concerned, namely the exclusion of all mine waste from the Coeur d'Alene River." Knowing that this would be an impossibility, Ellis recommended that the mines discharge their wastes into a series of settling ponds, as was the practice being used in British Columbia, where dumping of mine wastes into streams was illegal (Casner 1989).

In July 1932, the mining companies responded by starting operations of a suction dredge system constructed below the Cataldo Mission. The dredge pumped water and fine tailings scoured from the river bottom to a dump area adjacent to the river. Water draining from the dump flowed through an area of swamps for about two miles before returning to the river system. W. L. Zeigler, of the Hecla mining company and designer of the dredge, claimed that water returning to the river was perfectly clear.

The dredge removed 750,000 tons of tailings and debris during the 1932 season, excavating the river channel for a length of approximately 1,000 feet. By the beginning of the 1933 season, the channel had again completely filled with tailings. In 1933, the dredge is reported to have removed 1,250,000 tons of tailings and other debris. In December 1933, the basin experienced its worst flood on record. This flood served to refill the excavated dredge area. The dredge operators were pleased with the stability of the tailings dump. Flood waters were reported to rise high enough to inundate the ground on which the tailings dump was located, but due to the width of the river bottom at that point, no perceptible current was generated and there was no erosion of the growing tailings dump. Zeigler concluded that the location of the Cataldo dredge was the first place below all of the mills where tailings could be safely impounded (Quivik 1999).

In 1933, the Coeur d'Alene River and Lake Commission presented its "Report and Recommendations" to the Idaho State Legislature. The report stated that the suction dredge in use would "result in a partial removal of mine slimes." The report also recommended that the mining companies use some other method than the river channel to transport mine slimes to settling beds. The report recommended that a pipeline or flume system be constructed along the entire length of the Silver Valley to carry slimes to Mission Flats. The Idaho Legislature accepted the report, but made no additional attempts to remedy the problem. The mining companies continued to rely on the dredge at Cataldo to justify dumping of mining slimes into the river (Casner 1989).

In 1951, an article in the Idaho Statesman reported that the tailings impounded by the Cataldo dredge covered an area of 2,000 acres at a depth of 25 to 30 feet. The operation of the Cataldo dredge continued until 1968 when federal regulations mandated that the mining companies discharge their wastes to settling ponds (Casner 1989).

The State of Idaho estimates that approximately 34.5 million tons of mixed alluvium and tailings were dredged from the river between 1933 and 1967 (SVNRT 1998). In the mid-1960s, the Idaho Department of Transportation (IDT) purchased approximately 1 million tons (3 percent) of the dredge spoils for use in constructing the roadbed of I-90 (Casner 1991; SVNRT 1998). Design drawings available from the IDT indicate that these materials were used mostly in building the access ramps near the Cataldo Mission. The location of dredge spoils, as determined by the USGS in 1999 (Bookstrom et al. 1999) is shown in Figure 2.1-1.

2.2 HYDROGEOLOGY

2.2.1 Conceptual Hydrogeologic Model

The conceptual hydrogeologic model for CSM Unit 3 is an alluvial valley with alluvial aquifers underlain by bedrock aquifers. Although water supply wells are completed in both alluvium and bedrock, yields for the alluvial aquifers are presumably greater than for the bedrock aquifers. Although specific data are lacking, groundwater elevations most likely fluctuate seasonally and are highest during spring periods of increased snowmelt and precipitation. Recharge is primarily from tributary inflow, precipitation, snow melt, and the river. Backwater conditions are expected to influence seasonal water level variations.

Bedrock in lower CSM Unit 3 consists of basalts and interbedded sediments of Miocene age overlying metasedimentary rocks of the Precambrian Belt Supergroup. Erosional remnants of basalt flows rim the present day mountain front and can be found within the lower CDR valley up to the Killarney Lake area (Griggs, 1973). Numerous northwest-trending faults cut Belt rocks in CSM Unit 3; these faults control the trend of several tributaries to the lower CDR (Griggs 1973). Based on an evaluation of data from bedrock wells, Piske (1990) concluded that the dominant bedrock aquifer lithologies were Miocene basalts and shales. Inconsistent trends in measured water quality parameters (e.g., temperature and electrical conductivity) suggested multiple aquifers in these lithologies with no indications of a laterally extensive bedrock aquifer system.

The alluvial aquifer system in CSM Unit 3 consists of unconsolidated sediments comprising coarser fluvial and finer lacustrine deposits. During the Pleistocene, glacial Coeur d'Alene Lake attained an estimated pool elevation of 2,400 feet above msl (Richmond et al., 1965), flooding the North Fork valley nearly to Prichard and the South Fork valley to Kellogg. Fine-grained lacustrine sediments associated with this ancient lake extend upstream as far as the lower South Fork valley (MFG, 1992). Logs from private wells located between Cataldo and Rose Lake

demonstrate that alluvial sands and gravels overlying bedrock are in turn overlain by predominantly clayey lacustrine sediments, which are again overlain by sands and gravels of variable thickness (Norbeck, 1974). Because the finer sediments may act as an aquitard, it is probable that a shallow unconfined aquifer and a deeper confined aquifer exist in the valley.

Norbeck (1974) estimated the thickness of alluvium over bedrock at four transects in CSM Unit 3 (LCDRSeg01 and LCDRSeg02) using electrical resistivity and seismic refraction methods. Near Cataldo, the alluvial fill is nearly 200 ft thick. In the northern part of the Mission Flats area the fill is greater than 250 ft. Downstream from Mission Flats, the fill is about 160 ft thick. Downstream between Rose Lake and Killarney Lake the fill is about 400 ft thick.

The active floodplain and river channel in CSM Unit 3 are mostly covered with metal-enriched alluvial sediments of varying thickness derived from mixing of tailings and other mining-related wastes with uncontaminated sediment. Metal-enriched channel deposits range in thickness from 7 ft near Harrison to about 12 ft near Cataldo (URS Greiner 1998). Overbank deposits of metal-enriched sand extend over the tops of natural levees, generally fining and thinning from the levee tops toward lateral flood basins (Bookstrom et al., 1999). Additionally, metal-enriched sediments were dredged from the river near Mission Flats, resulting in extensive dredge spoil piles on the north side of the river. The dredge spoils may be up to 40 feet thick (Chamberlain and Williams, 1998).

2.2.2 Aquifer Parameters

Available groundwater references for CSM Unit 3 are limited; Figure 2.2-1 shows the location of three studies used in this section. Only two studies report aquifer data. Spruill (1993) performed slug tests on three shallow monitoring wells (8.5 to 33 ft total depth) installed in bank wedge and floodplain deposits near the river in the Killarney Lake area. Estimates of hydraulic conductivity (k) for these wells ranged from 0.001 to 0.006 ft/day. The sediments were described as clays and silts, which approximately corresponds to the derived k values.

Piske (1990) performed slug tests on two shallow monitoring wells (29 to 53 ft total depths) in the river delta near Harrison. Estimates of hydraulic conductivity (k) for these wells were about 3 ft/day. Piske also estimated hydraulic conductivity using the Hazen equation (Freeze and Cherry, 1979), which gave a result of about 1 ft/day. The sediments were described as silty sands, which approximately corresponds to the derived k values.

2.2.3 Flow Directions and Rates

A widespread study of groundwater flow directions in the entirety of CSM Unit 3 has not been conducted. Nonetheless, the groundwater flow pattern in CSM Unit 3 probably has two components: locally groundwater flows toward the river, while overall flow direction is parallel to the river flow. Estimates of local flow directions and rates are reported in studies at the delta (CDALakeSeg02) (Piske, 1990), near Killarney Lake (LCDRSeg03) (Spruill, 1993) and at Mission Flats (LCDRSeg02) (Chamberlain and Williams, 1998).

Piske (1990) concluded that flow in the delta area was parallel to the river; however, the monitoring wells constructed for his study were all adjacent to the river on the delta levee and parallel to the river, which limits information about subsurface conditions away from the river. The average annual horizontal gradient was determined to be 0.00002 downriver, approximately two orders of magnitude greater than the gradient of the river. The groundwater gradient in general increased with spring runoff and decreased during summer months. These measurements were derived from two monitoring wells located about one-half mile apart and parallel to the river, which, again, limits obtaining information away from the river.

Spruill (1993) concluded that overall flow in the Killarney Lake area was toward the river at a gradient of about 0.0015. This gradient appears to be derived from two wells located about 1500 ft apart and aligned roughly perpendicular to the river. In two closely spaced wells adjacent to the river, Spruill observed a much steeper gradient towards the river. Although the distance between the wells is not given, they appear to be less than 200 ft as plotted on a location map. With a measured head difference as much as 4.5 ft for the wells and an assumed separation of 200 ft, the gradient close to the river is about 0.02.

Chamberlain and Williams (1998) concluded flow in the Mission Flats area was toward the river, based on an extensive two-dimensional network of piezometers in the Mission Flats dredge spoils. Chamberlain and Williams described the dredge spoils as constituting a perched groundwater system, recharging from precipitation in late winter and spring and draining radially outward. The spoils are bounded on the south by the river and during low river levels in late summer and fall groundwater drains from the near bank zone. Although the dredge spoils contain predominantly sandy sediments, contoured water elevations are steep near the river, indicating the spoils and underlying materials have low hydraulic conductivity. Although gradients were not given, scaling of contoured water levels presented on maps indicates riverward gradients of about 0.006 to 0.012 in January and 0.005 to 0.01 in July. The steeper winter groundwater gradient corresponds to lower winter water levels in the river.

2.2.4 Surface Water/Groundwater Interaction

The shallow alluvial aquifer system in CSM Unit 3 is likely to be hydraulically connected to the river. Based on water table contours associated with water supply wells, Norbeck (1974) concluded that the main stem of the Coeur d'Alene River was a gaining reach in that a component of the groundwater gradient is toward the river. Norbeck concluded that most of the groundwater flow toward the river is groundwater from tributary valleys. Spruill (1993) noted that because the river is often under backwater conditions from Coeur d'Alene Lake, evaluation of river gains and losses is extremely difficult.

Locally, steep groundwater gradients and variable groundwater and surface water levels (Spruill, 1993; Chamberlain and Williams, 1998) suggest that surface water/groundwater interactions may be particularly significant in bank and levee areas adjacent to the river. This theory is supported by the presence of seeps that have been observed to discharge from the banks of the river near Cataldo Flats.

2.2.5 Groundwater Quality and Chemistry

Near-surface deposits of metal-enriched sediments in the river channel, banks and levees, wetlands, lateral lakes and other floodplain areas have the potential to interact with groundwater. The river channel deposits are considered to be in the hyporheic zone and are not considered here. Other deposits of metal-enriched sediments can be subject to both fluctuating groundwater levels and infiltration from precipitation. In shallow-water areas of lateral lakes and marshes, sediments may be exposed to alternating reducing and oxidizing conditions because of seasonal water level changes. Much or all of the summer littoral zone may be exposed, subjecting at least the shallowest surficial sediments to oxidizing conditions (Bookstrom et al., 1999).

Groundwater quality and chemistry data are limited for CSM Unit 3. Studies that have addressed groundwater quality and/or chemistry include Norbeck (1974), Piske (1990), Spruill (1993), and Chamberlain and Williams (1998).

Norbeck (1974) sampled 20 wells and ponds in CSM Unit 3. Few of these wells appear to be screened in the shallow alluvial aquifer. One in the Cataldo area, however, was noted as having an elevated concentration of zinc (1.8 milligrams per liter [mg/L]), possibly related to tailings deposited in the area. Results for cadmium and lead were nondetects, but detection limits were high (0.02 mg/L Cd; 0.1 mg/L Pb). Electrical conductivity and pH were recorded as 249 micromho (µmho) and 6.19, respectively. The samples are not indicated as having been filtered, but were field-acidified.

Piske (1990) sampled two monitoring wells located in the north levee of the river below Harrison four separate times. The monitoring wells are screened well below near surface metal-enriched sediments and show nondetects for most metals other than zinc. Dissolved zinc concentrations ranged from <0.02 to 0.37 mg/L (Table 2.2-1). Temperature, electrical conductivity and pH were measured in the two monitoring wells 6 times over a period of six months (March through September) (Table 2.2-2). Electrical conductivity varied both between wells and sampling events, ranging from 240 to 900 µmhos; pH varied little, from 6.0 to 6.5. Piske also sampled four hand auger holes twice. The shallow hand auger holes show high concentrations of arsenic, cadmium, iron, lead, and zinc (Table 2.2-3). These samples were laboratory-filtered and field-acidified. Additional samples were collected during installation of the two monitoring wells. Pore water was collected from split spoon sediment samples in the laboratory using vacuum and filtration. These data show higher metals concentrations in the top 10 ft of each borehole, corresponding to the zone containing metal-enriched sediments (Table 2.2-4).

Spruill (1993) sampled four monitoring wells located on the north side of the river upstream of Killarney Lake (Table 2.2-5). The well showing the highest concentrations of metals (MW-4) is screened in metals-enriched sediments, as indicated by analysis of the borehole sediments. The results for this boring indicate reducing conditions and neutral pH (7.3). The most likely mechanism for release of metals to groundwater is indicated as dissolution of iron and manganese oxyhydroxides and consequent co-dissolution of sorbed trace metals. Well MW-2B also shows elevated metals concentrations. However, this well is screened at 27 ft bgs and 30-33 ft bgs, presumably below the zone metal-enriched sediments. Adjacent well MW-2A is screened from 18 to 20 ft and exhibits significantly lower metals concentrations. Spruill (1993) noted that similar conditions exist in this well (reducing conditions, near neutral pH), with the exception that sediments from the borehole did not indicate the presence of tailings. He concluded that "large dissolved concentrations of trace elements are possible where iron and manganese oxyhydroxides can dissolve, even when background concentrations in the sediments are small." However, sediment chemistry was not presented for the borehole, and this conclusion is considered tentative.

Chamberlain and Williams (1998) collected groundwater samples twice from 15 piezometers located in the Mission Flats dredge spoils (Table 2.2-6). Samples collected in September were field filtered and acidified; not all August samples were filtered and acidified. The piezometers exhibiting the highest concentrations of metals are near what appears to be the center of the dredge spoils area. Chamberlain and Williams concluded that the deepest and/or most contaminated spoils might occur in this area.

2.2.6 Groundwater Use

Surface water in creeks and groundwater in the shallow unconfined alluvial aquifer in CSM Unit 3 are potential water sources for domestic use, irrigation, stock water, and wildlife purposes. Water rights records from the Idaho Department of Water Resources indicate that there are at least 96 permitted surface water withdrawals in this area. Seven withdrawals are directly from the Coeur d'Alene River, 22 are from the Lateral Lakes (including Killarney, Porter, Black, Medicine, Cave, Anderson, and Mission Slough), and 67 are from upland tributaries and springs (IDWR 1996). Groundwater resources in alluvial aquifers of the CSM Unit 3 are also used for drinking water, livestock, and other uses (IDWR 1996). Rasmussen (1993) reviewed well logs from 50 domestic and livestock wells in the CSM Unit 3 area. Eight were determined to be installed in floodplain areas near Dudley, Killarney Lake, and Thompson Lake. Groundwater was encountered at depths of less than 20 ft in each of these wells.

2.3 SURFACE WATER HYDROLOGY

Surface water hydrology of the Lower CDR Watershed is described in this section. The Lower CDR Watershed has an areal extent of approximately 252 square miles with approximately 34.7 miles of mapped channel. The total drainage area upstream of the mouth is approximately 1,475 square miles. Tributaries to the lower CDR include Latour Creek, Fourth of July Creek, Bull Run Creek, Canary Creek, Robinson Creek, Clark Creek, Swan Creek, Black Creek, Blue Lake Creek, and Thompson Creek. Numerous lateral lakes are positioned adjacent to the lower CDR. Depending on the river elevation, water may flow either from the lakes to the river, or from the river to the lakes. The hydrology of the lower CDR is complex as the water surface elevation is controlled by backwater effects from Coeur d'Alene Lake. Because of the low gradient of the lower CDR, approximately 0.019 percent (Bender 1991), the backwater effect propagates a great distance upstream. In addition, many of the lateral lakes have a surface water connection to the river. These lakes and wetlands provide significant storm water storage that attenuates floodwater flows.

2.3.1 Available Information

The available hydrologic information for the lower CDR Watershed includes U.S. Geological Survey (USGS) stream flow data from January 1, 1991, to September 30, 1999, for USGS Station12413810, Coeur d'Alene River at Rose Lake, and USGS station 12413860, Coeur d'Alene River near Harrison (USGS 2000a). The USGS gages in the lower CDR are located in the backwater created by Coeur d'Alene Lake, and therefore, do not have a valid stage discharge

relationship. Continuous discharge records were developed with a USGS numerical stream flow model named FourPt (Delong et al 1997). The model uses channel geometry and water-stage data at upstream and downstream stations within the stream reach being modeled. The model was calibrated with individual stream-flow measurements over a wide range of stream flow conditions (USGS 2000b). Figure 4.1-11 was developed to identify areas of turbid water during the 1997 flood event.

Precipitation data from the Western Regional Climate Center (WRCC) station at Coeur d'Alene were collected for water year 1999 (WRCC 2000). This precipitation gage is the nearest gage to the lateral lakes. The mean daily discharge hydrograph and precipitation data for water year 1999 are presented in Figure 2.3.1-1 for the Lower CDR at Rose Lake and 2.3.1-2 for the Lower CDR near Harrison. The maximum mean daily discharge for water year 1999 was 16,570 cubic feet per second (cfs) at Rose Lake, and 16,490 cfs at Harrison. Both occurred on May 26, 1999. The similarity of the two values is likely due to the significant amount of storage between the two gages and modeling assumptions.

In addition to the USGS hydrologic information, the U.S. Department of Housing and Urban Development, Federal Insurance Administration completed a flood insurance study for Kootenai County, Idaho (FIA 1984). This document reports computed peak discharges for 10-year (36,000 cfs), 50-year (60,600 cfs), 100-year (75,000 cfs) and 500-year (113,975 cfs) events at the mouth of the Lower CDR.

Following an extended period of heavy snowfall and unusually cold temperatures, a powerful Pacific Ocean storm swept into the inland Northwest in early February 1996. Strong, warm winds, several inches of rain, and ice jams in river channels caused severe floods through the Coeur d'Alene River system. Coeur d'Alene Lake rose more than 8 feet above the normal summertime level. Several areas in northern Idaho experienced the second largest flood peaks ever recorded and exceeded flows having a predicted yearly occurrence of one percent (Beckwith et al 1996). USGS field crews obtained some of the highest river stage (depth) and discharge (flow) measurements ever recorded at several gaging stations at or near the peak of the floods.

2.3.2 Hydrologic Description

The hydrology of the Lower CDR Watershed based on modeled stream discharge and precipitation data is presented in this section.

2.3.2.1 Historical Description

Modeled discharge data from 1991 to 1999 are available for the stations at Rose Lake and Harrison. This information is presented in Figures 2.3.2-1 for Rose Lake, and Figure 2.3.2-2 for Harrison.

From Figure 2.3.2-2, the maximum mean daily discharge is estimated at Harrison was 66,793 cfs, on February 9, 1996. No reliable data were available at the Rose Lake gage for this event; however, the gage at Cataldo, upstream of Rose Lake, measured a discharge of 56,000 cfs for this date. Base flow is estimated to be 250 to 300 cfs at both Rose Lake and Harrison. Average annual discharge is approximately 2,550 cfs at Rose Lake and 2,630 cfs at Harrison.

2.3.2.2 Flood Frequency

Table 2.3.2-1 presents the estimated discharges for specified flood frequency recurrence intervals for the Lower CDR. Because instantaneous peak annual discharge data is not available for the Lower CDR frequency analysis was not completed. Instead, flood frequency developed in the flood insurance study is presented. The values indicated in Table 2.3.2-1 may provide guidance for design of remedial actions. The bankful discharge, the approximately 1.5 year event, is estimated to be approximately 17,000 cfs.

2.3.2.3 Magnitude of February 1996 Floods

The February 1996 floods were the largest since the mid-January 1974 flood (largest flood on record). The magnitudes of the flood peaks at selected gaging stations in northern Idaho are shown in Table 2.3.2-2 (Beckwith et al 1996). For comparison, the table also includes the 100-year flood peak, the mean February flow, the date of historical flood peaks, and the number of years of continuous streamflow records that were used to derive the data for each of the gaging stations. Flood peaks were slightly less than the 100-year flood peaks at almost all gaging stations.

The floods forced the evacuation of many low-lying areas and caused extensive damage to public and private property. The floods also transported large quantities of trace-metal enriched sediments through the lower Coeur d'Alene River system and into Coeur d'Alene Lake (Beckwith 1996).

2.3.2.4 Water Year 1999

Total annual average precipitation at the WRCC Coeur d'Alene Station for the 105-year period of record is 25.5 inches, while for water year 1999 the total precipitation was 28.0 inches (WRCC 2000). Total annual average snowfall for the WRCC station is 47.3 inches, while for water year 1999 the total snowfall was 14.5. Although these comparisons do not address monthly variations in precipitation, they do indicate that the water budget for water year 1999 was typical with regard to total precipitation but significantly below average with regard to snowfall.

Table 2.3.2-2 summarizes the mean monthly flows for the Lower CDR, mean monthly precipitation at the WRCC Coeur d'Alene Station (rain and snow water content), and total snowfall at the WRCC station at Coeur d'Alene for water year 1999. Table 2.3.2-2 and Figure 2.3.1-1 indicate the majority of precipitation occurred from October to March, 78 percent of the total annual precipitation at the Coeur d'Alene gage. Much of this precipitation was in the form of snow and did not run off into the stream channels immediately. However, increased discharge at the lower CDR above the average annual 1999 discharge of 3,275 cfs occurred four times during the winter and spring months, December 2 to December 4, December 30 to January 2, January 15 to January 23, and February 25 to March 6, for a total of 26 days. In contrast, during the spring and summer months, discharge at the Harrison gage remained above the average annual discharge from March 20 to June 26, a total of 95 days. A similar pattern occurred at the Rose Lake gage. This type of drainage pattern is similar to historical flows in the upper watersheds where much of the annual discharge occurs during the spring and summer with limited periods in the fall and winter with above average annual discharge (Figure 2.3.1-1 and Table 2.3.2-2).

The increase in discharge during the spring and summer is attributed to increased runoff caused by snowmelt in the upstream watersheds. Maximum daily temperature and mean daily discharge for water year 1999 for the Lower CDR at Rose Lake and Harrison are presented in Figures 2.3.2-3 and 2.3.2-4, respectively. Increased temperatures over these periods melted much of the snow in the upper watersheds. Rain on snow also may have contributed to these increased discharges as indicated in Figures 2.3.1-1 and 2.3.2-2 where precipitation events also occurred during the periods of increased temperature.

Based on the existing data, it is expected that water year 1999 was typical from a total snowfall and total water budget perspective in the Lower CDR Watershed. Runoff from spring snowmelt dominates the surface water hydrology. Variations in snowfall, temperature, and rainfall from year to year will influence the peak discharges.

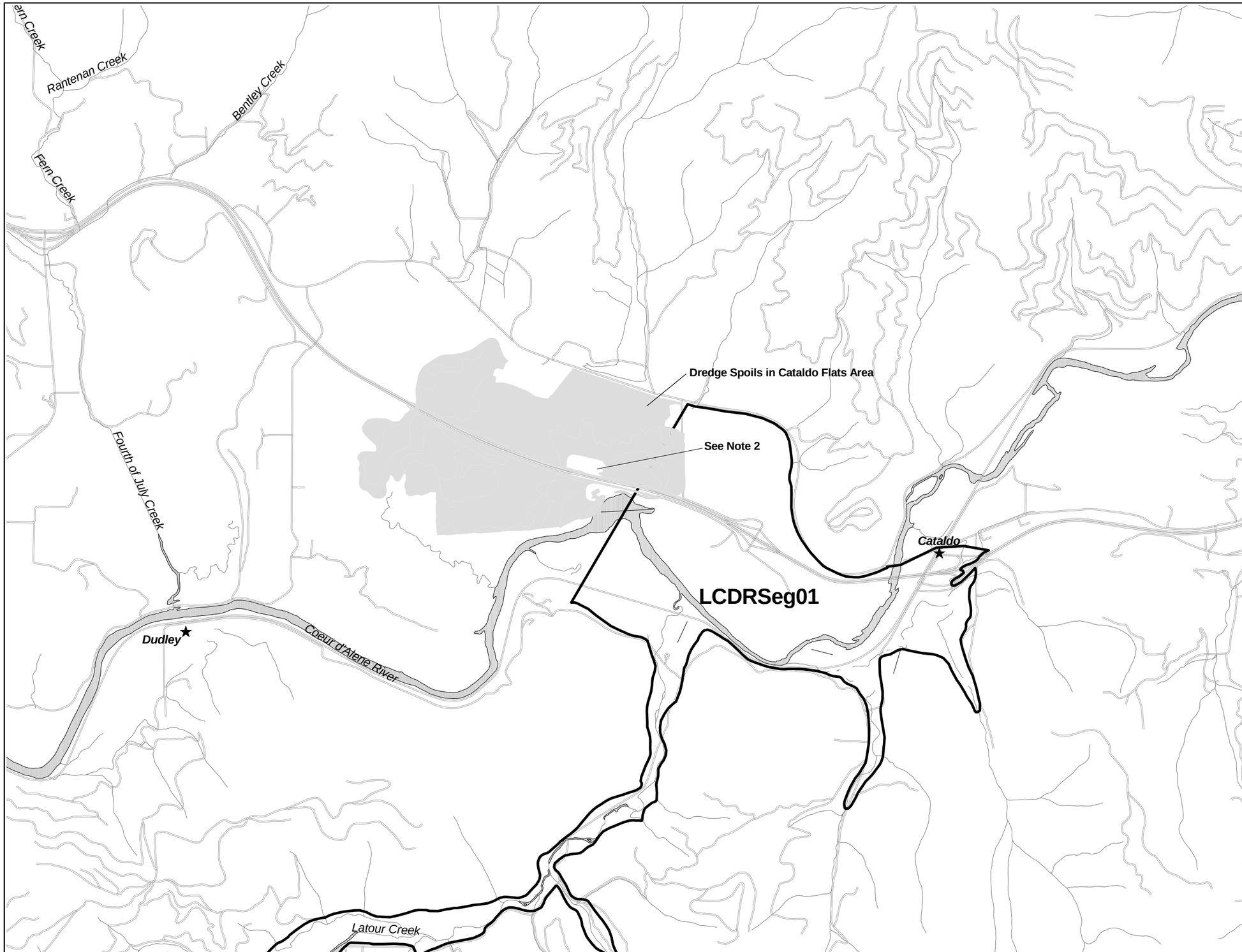

Figure 2.1-1
Location of Cataldo Flats Dredge Spoils

LEGEND

- Stream
- Road
- City
- Lower Coeur d'Alene River Segment 1
- Lake/River/Floodplain

Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner, Inc., CH2M HILL, and the Bureau of Land Management.

2) Area of dredge spoils excavated for I-90 Construction.

N

SCALE 1:24,000

0 0.5 Miles

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Coeur d' Alene Basin RI/FS
RI REPORT

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V: Dredge SpoilsE:soil
L: Dredge Spoils
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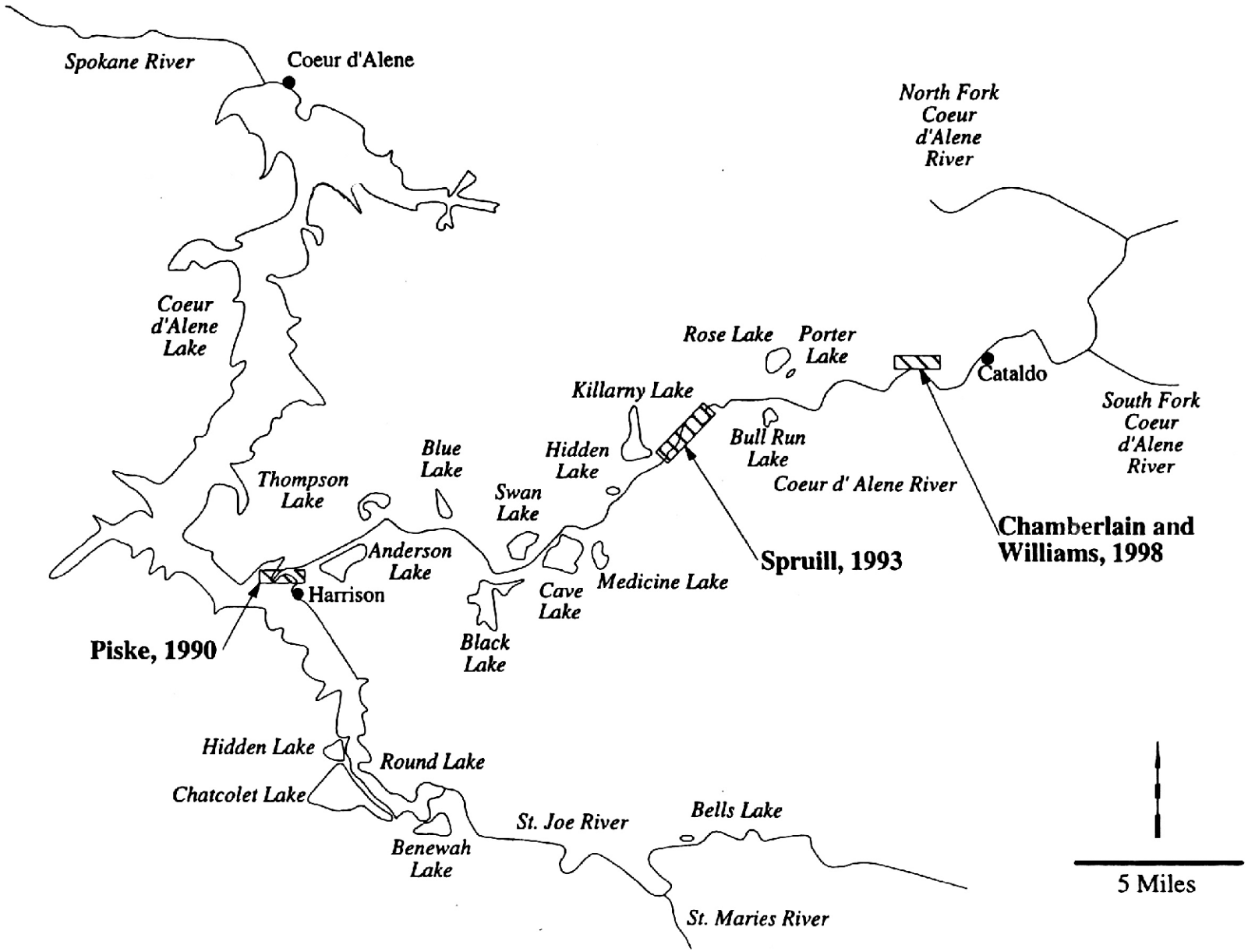
This Map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983

Date of Plot: July 23, 2001



EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc. Control:4162500.6615.05.a Generation: 1 RI-999 191900	**Figure 2.2-1** **Lower Coeur d'Alene River With Locations of Hydrogeologic Studies**

Daily Total Precipitation and Mean Daily Discharge for the Coeur d'Alene River at Rose Lake, USGS Station 12413810, Water Year 1999

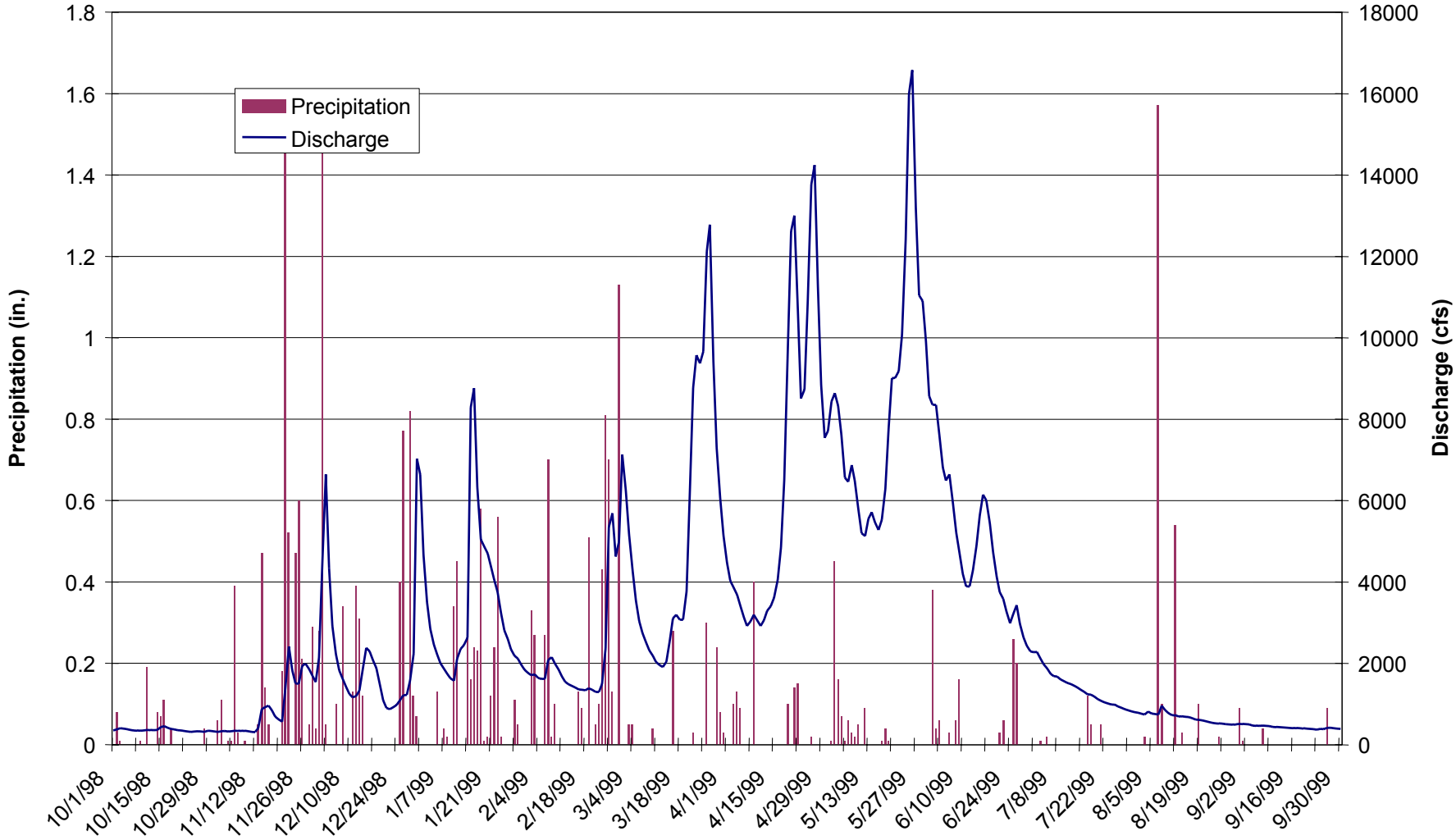


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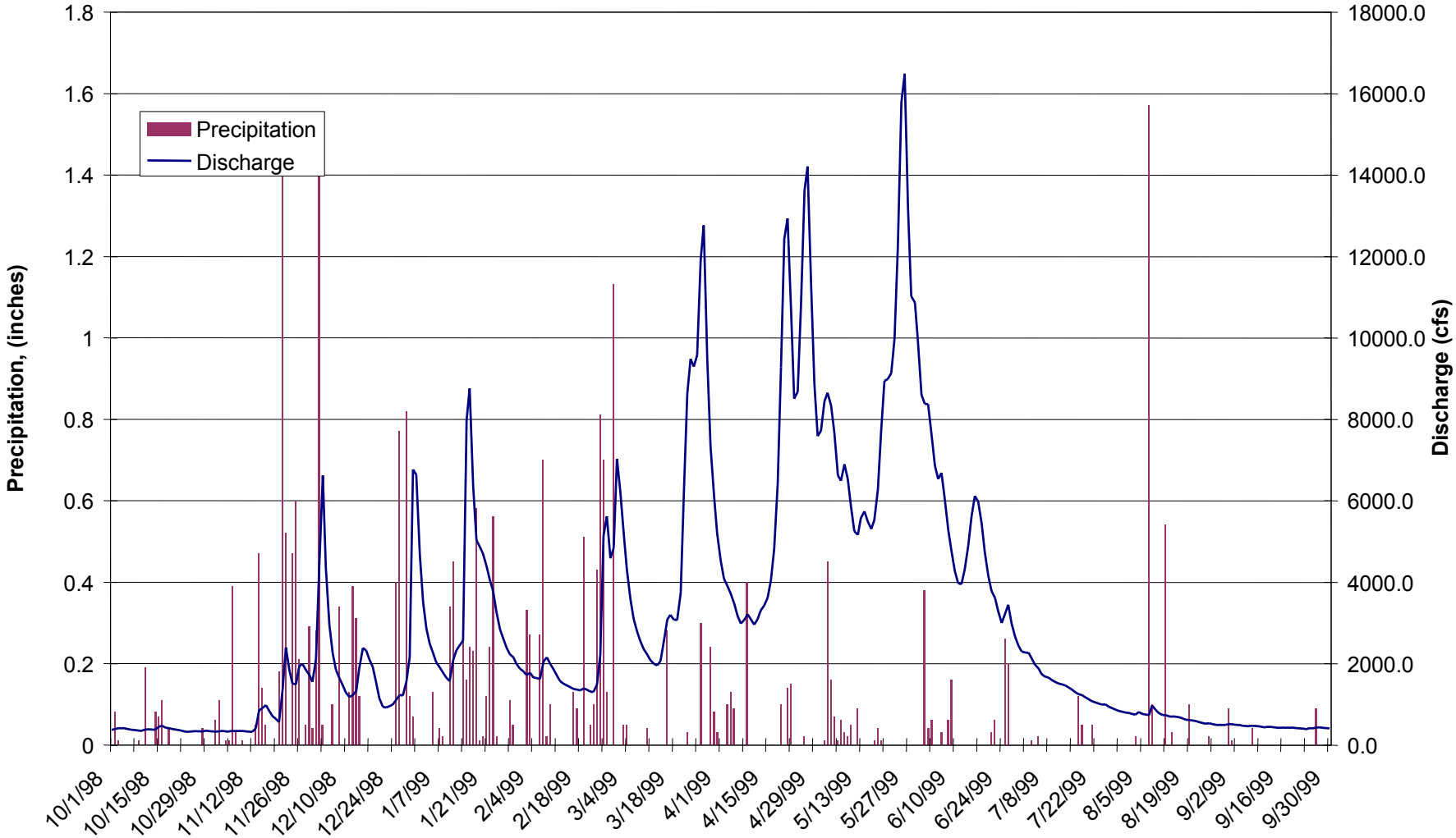
Figure 2.3.1-1

Daily Precipitation and Mean Daily Discharge for the Lower Coeur d'Alene River near Harrision, USGS Station 12413860, Water Year 1999



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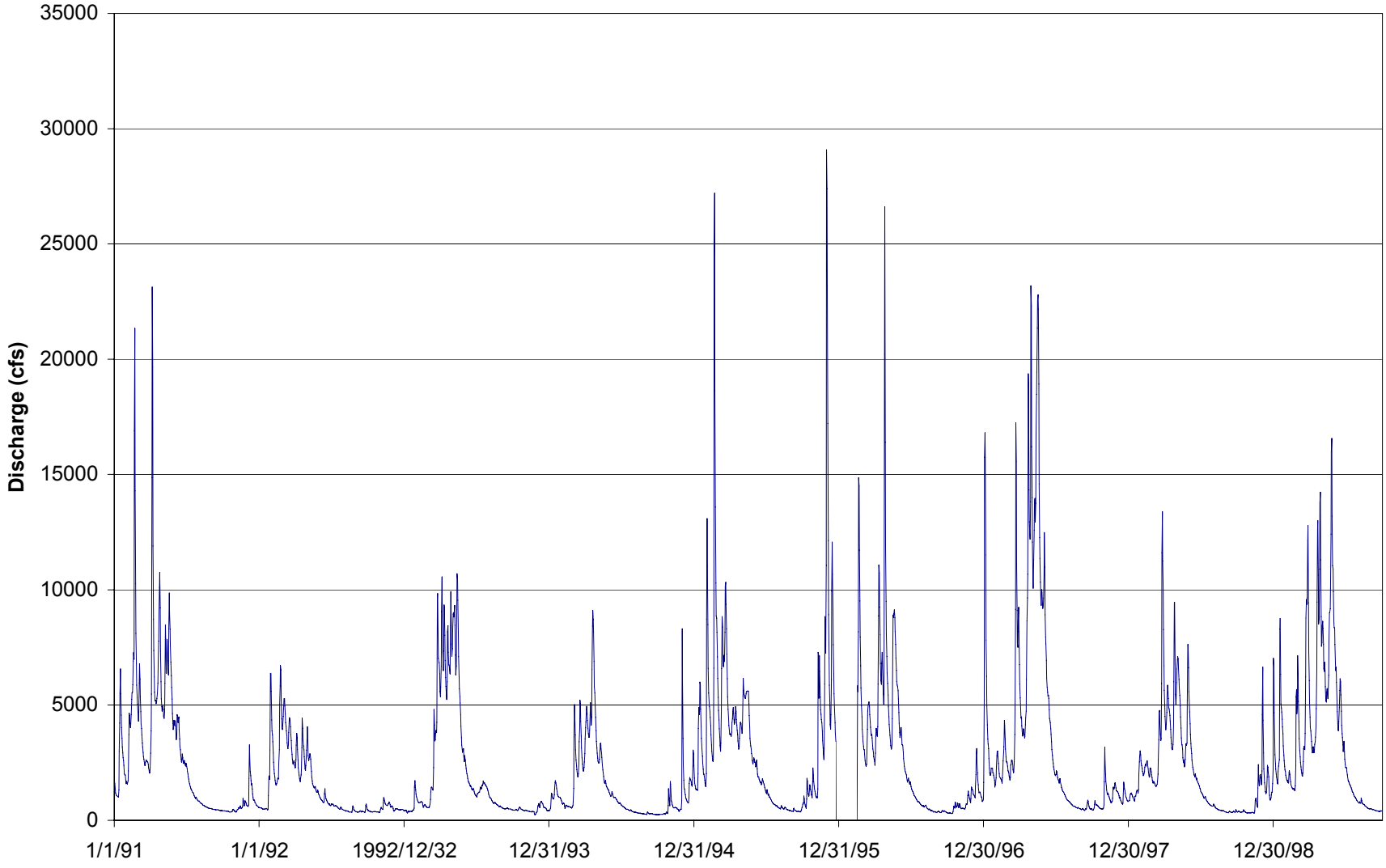
027-RI-CO-102Q
Coeur d'Alene Basin RI/FS
RI REPORT

Doc Control: 4162500.6615.05.a
Generation: 1

LCDA Series
07/13/01

Figure 2.3.1-2

Lower Coeur d'Alene River at Rose Lake, From FourPt Modeled Discharge



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RI REPORT

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LCDA Series
07/13/01

Figure 2.3.2-1

Lower Coeur d'Alene River near Harrison, From FourPt Modeled Discharge

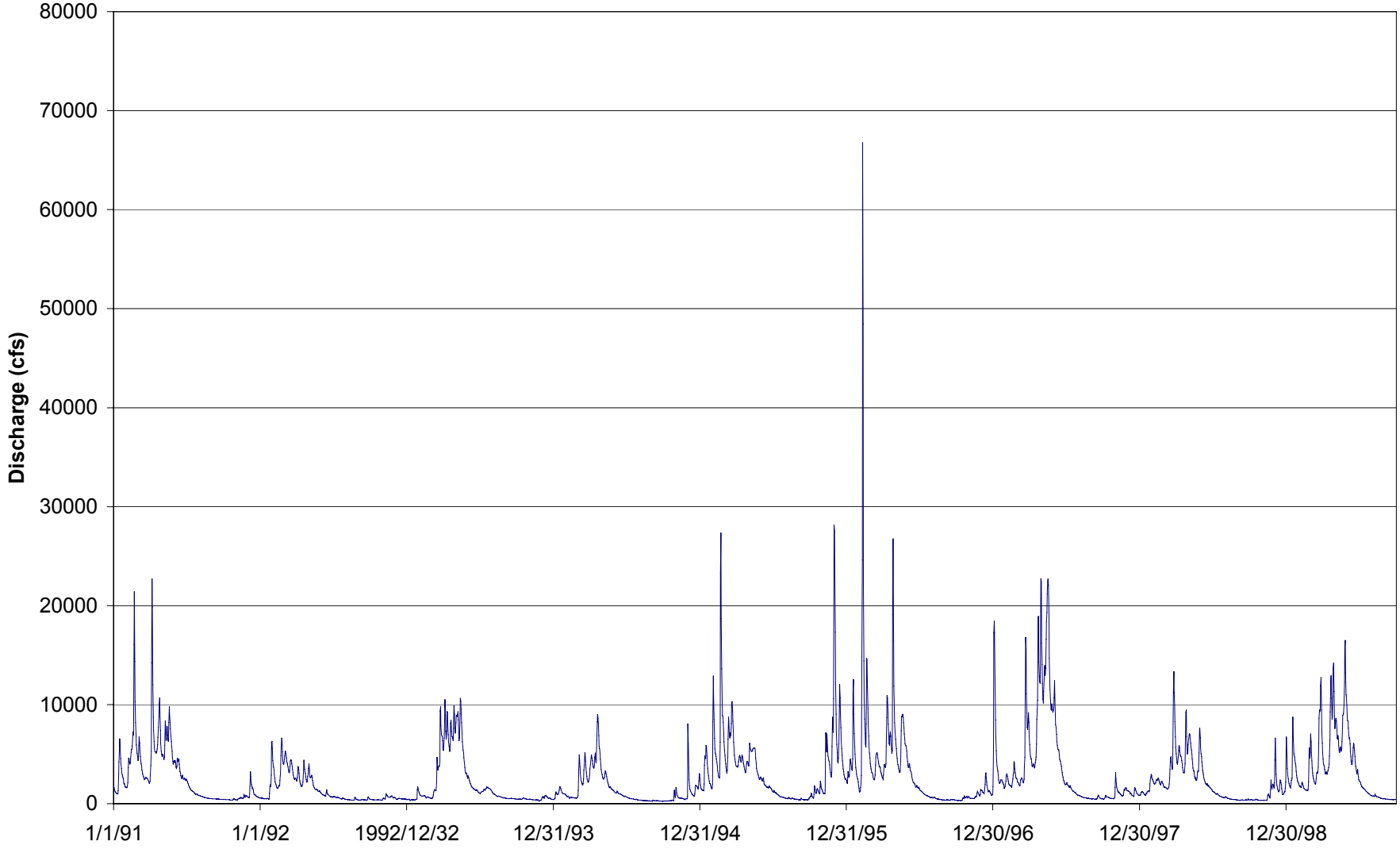

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Figure 2.3.2-2

Daily Maximum Temperature and Daily Average Discharge for the Lower Coeur d'Alene River at Rose Lake

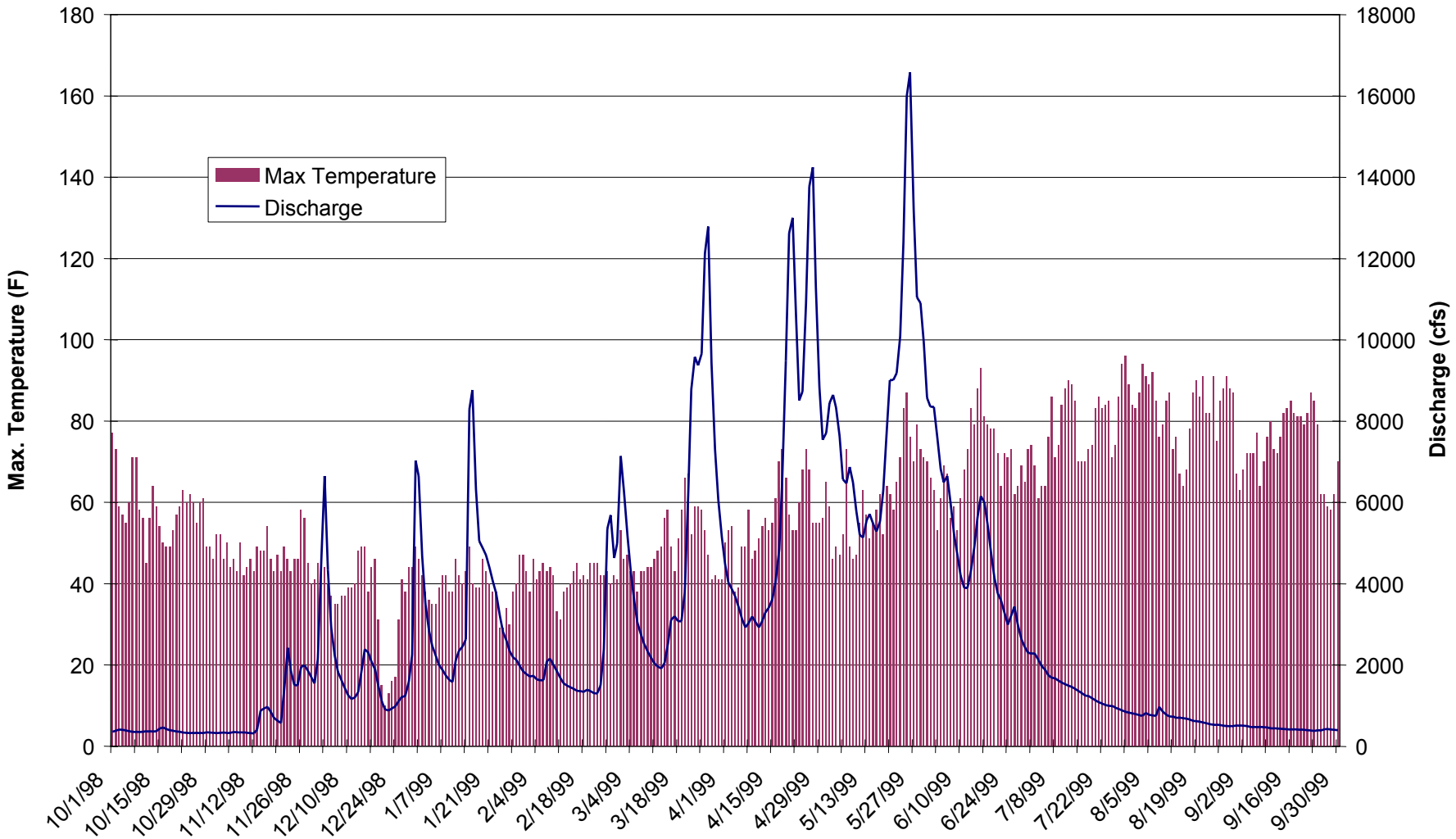

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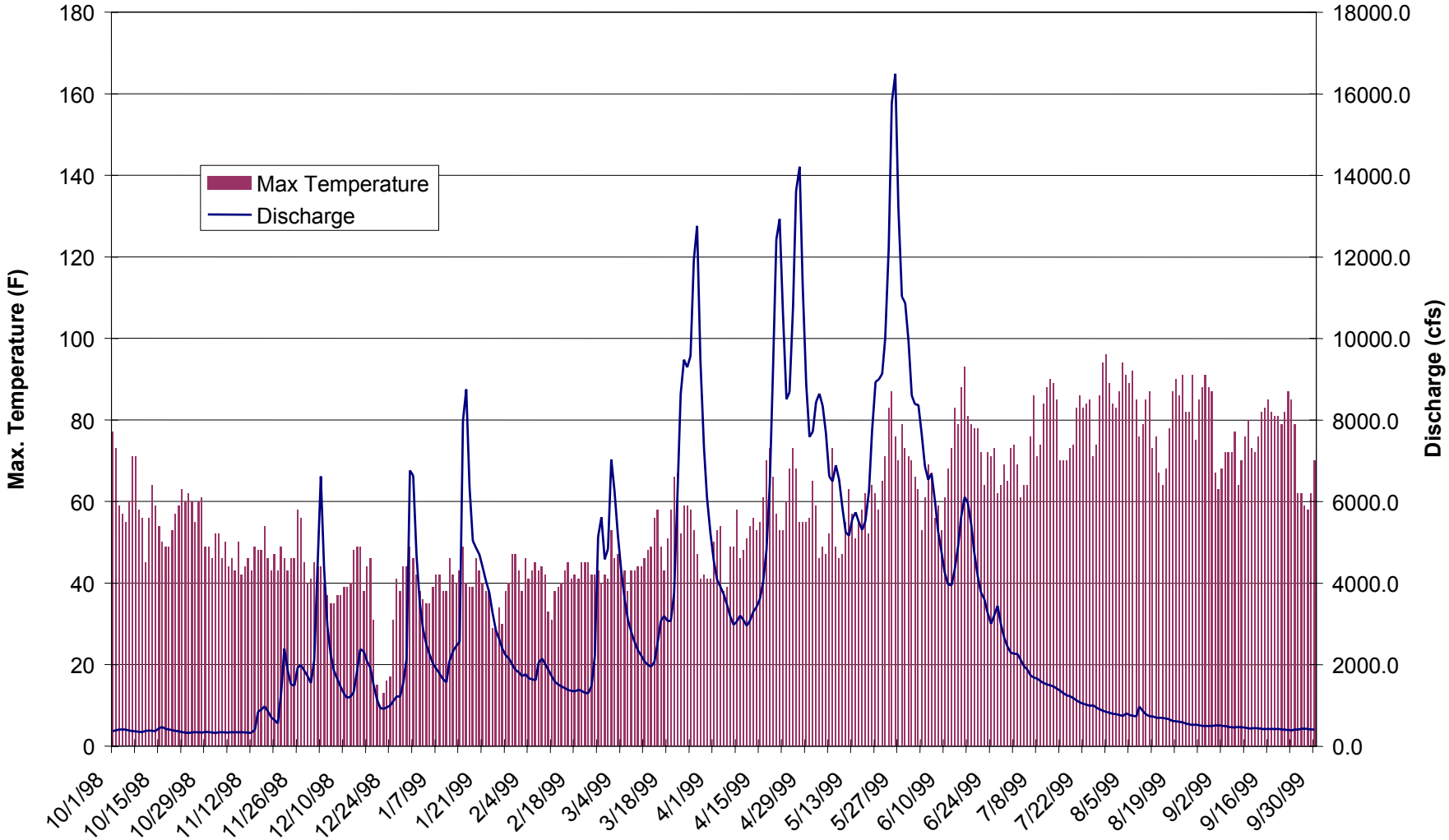
Figure 2.3.2-3

Daily Maximum Temperature and Mean Daily Discharge, for the Lower Coeur d'Alene River near Harrison, USGS Station 12413860, Water Year 1999



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Coeur d'Alene Basin RI/FS
RI REPORT

Doc Control: 4162500.6615.05.a
Generation: 1

LCDA Series
07/13/01

Figure 2.3.2-4

Table 2.2-1
Groundwater Quality Results in mg/L for Field-Filtered Samples from the Harrison Area

Piezometer	Date	Silver	Arsenic	Cadmium	Copper	Iron	Manganese	Lead	Antimony	Zinc
MW-1-25	3/15/89	<0.01	<0.01	<0.01	0.01	88	0.44	<0.02	<0.5	<0.04
MW-1-50	3/15/89	<0.01	<0.01	<0.01	0.01	86	4.45	<0.02	<0.5	0.25
MW-2-25	3/15/89	<0.01	<0.01	<0.01	0.01	128	0.62	<0.02	<0.5	0.37
MW-1-25	3/31/89	<0.01	<0.01	<0.01	0.01	90	0.59	<0.02	<0.5	0.06
MW-1-50	3/31/89	<0.01	0.01	<0.01	0.01	91	4.18	<0.02	<0.5	0.06
MW-2-25	3/31/89	<0.01	0.01	<0.01	0.01	109	0.58	<0.02	<0.5	0.08
MW-1-25	4/14/89	<0.02	<0.5	<0.01	<0.03	91	0.64	<0.12	<1	0.03
MW-1-50	4/14/89	<0.02	<0.5	<0.01	<0.03	95	3.43	<0.12	<1	<0.02
MW-2-25	4/14/89	<0.02	<0.5	<0.01	<0.03	120	0.63	<0.12	<1	<0.02
MW-1-25	5/20/89	<0.02	<0.5	<0.01	<0.03	80	0.65	<0.12	<1	0.16
MW-1-50	5/20/89	<0.02	<0.5	<0.01	<0.03	94	3.22	<0.12	<1	<0.02
MW-2-25	5/20/89	<0.02	<0.5	<0.01	<0.03	110	0.68	<0.12	<1	0.06

Source: Piske 1990

Note:
mg/L - milligrams per liter

Table 2.2-2
Groundwater Quality Field Measurements

Piezometer	Date	Temperature (˚C)	EC (µmhos)	pH
MW-1-50	3/15/89	12.5	750	6.3
	3/31/89	11	780	6.4
	4/14/89	12	900	6.5
	5/20/89	12	800	6.4
	8/12/89	13	800	6.5
	9/30/89	11	890	6.3
MW-1-25	3/15/89	11	650	6.2
	3/31/89	11	390	6.4
	4/14/89	12	800	6.4
	5/20/89	16	800	6.2
	8/12/89	14	440	6.4
	9/30/89	11	800	6.3
MW-2-25	3/15/89	12	380	6.0
	3/31/89	11	380	6.2
	4/14/89	11.5	345	6.3
	5/20/89	16	410	6.2
	8/12/89	14	240	6.4
	9/30/89	11	300	6.1

Notes:
^{o}C - degrees Celsius
Source: Piske 1990

Table 2.2-3
Groundwater Quality Results in mg/L for Field-Filtered Samples from Hand-Auger Holes

Hand Auger Hole	Date	Silver	Arsenic	Cadmium	Copper	Iron	Manganese	Lead	Antimony	Zinc
A-1	8/13/89	<0.02	2	<0.01	<0.03	73.3	109	0.5	<1	41.1
A-2	8/13/89	<0.02	2	0.03	<0.03	308	239	0.7	<1	39.5
A-4	8/13/89	<0.02	3.6	<0.01	<0.03	150	25.6	0.4	<1	7.9
A-6	8/13/89	<0.02	1.9	0.47	<0.03	0.02	13.5	0.5	<1	82.4
A-2	5/20/89	<0.02	4.7	2.3	<0.03	37.4	883	2.0	<1	852
A-4	5/20/89	<0.02	2.1	<0.01	<0.03	170	35	<0.12	<1	20.8

Source: Piske 1990

Note:
mg/L - milligrams per liter

Table 2.2-4
Groundwater Quality Results in mg/L for Laboratory-Filtered Samples

Boring	Sample	Depth	Silver	Arsenic	Cadmium	Copper	Iron	Manganese	Lead	Antimony	Zinc
MW-1	1-1	4-4.5	<0.01	<0.01	<0.01	0.02	416	<0.01	0.06	NA	0.45
	1-2	9-9.5	<0.01	<0.01	<0.01	0.03	502	<0.01	0.07	NA	2.15
	1-3	14-14.5	<0.01	<0.01	<0.01	0.01	405	<0.01	<0.02	NA	0.71
	1-4	19-19.5	<0.01	<0.01	<0.01	0.01	42	1.6	<0.02	NA	0.23
	1-5	24-24.5	<0.01	<0.01	<0.01	0.02	5.7	0.02	<0.02	NA	<0.04
	1-6	29-29.5	<0.01	<0.01	<0.01	0.01	11.9	0.01	<0.02	NA	0.04
	1-7	34-34.5	<0.01	0.01	<0.01	0.03	2.8	<0.01	<0.02	NA	<0.04
	1-8	39-39.5	<0.01	<0.01	<0.01	0.02	4.7	<0.01	<0.02	NA	0.04
	1-9	44-44.5	<0.01	<0.01	<0.01	0.04	6.9	<0.01	<0.02	NA	0.22
	1-10	49-49.5	<0.01	0.01	<0.01	0.03	4.9	<0.01	<0.02	NA	0.22
MW-2	2-1	4-4.5	<0.01	0.06	<0.01	0.01	1.2	4.5	0.35	NA	<0.04
	2-2	9-9.5	<0.01	<0.01	<0.01	0.01	7.8	3.02	0.42	NA	0.4
	2-3	14-14.5	<0.01	<0.01	<0.01	<0.01	15.8	0.04	<0.02	NA	0.08
	2-4	19-19.5	<0.01	0.03	<0.01	<0.01	25.3	0.07	<0.02	NA	0.06
	2-5	24-24.5	<0.01	<0.01	<0.01	0.01	4.6	<0.01	<0.02	NA	0.28
	2-6	29-29.5	<0.01	0.02	<0.01	0.02	2.5	<0.01	<0.02	NA	0.07
	2-7	34-34.5	<0.01	<0.01	<0.01	0.02	3.1	<0.01	<0.02	NA	0.06

Source: Piske 1990

Note:
mg/L - milligrams per liter

Table 2.2-5
Water Quality Results from the Killarney Lake Area

Laboratory Measurements[a]

Station No.	Well No.	Date	Time	Calcium (mg/L)	Magnesium (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Iron (µg/L)	Lead (µg/L)
473105116315801	MW2A	3/20/86	1,810	43	19	3	1.0	<10	7,000	<10
473105116315002	MW2B	3/20/86	1,515	24	13	13	11	<10	56,000	30
473100116323501	MW4	3/21/86	1,410	360	330	13	62	2	76,000	300
473133116321001	MW5	3/20/86	1,205	19	14	330	3.0	<10	4,500	<10

Laboratory Measurements[a] (continued)

Station No.	Well No.	Date	Time	Manganese (µg/L)	Zinc (µg/L)	Alkalinity (mg/L as CaCO3)	Sulfide (mg/L as S)	Sulfate (mg/L as SO4)	Chloride (mg/L as Cl)
473105116315801	MW2A	3/20/86	1,810	1,200	420	8.0	0.8	180	6.5
473105116315002	MW2B	3/20/86	1,515	1,500	9,300	<1	0.6	220	3.8
473100116323501	MW4	3/21/86	1,410	94,000	69,000	62	0.8	3,000	4.7
473133116321001	MW5	3/20/86	1,205	4,700	880	173	0.6	61	1.0

Field Measurements[a]

Station No.	Well No.	Date	Time	Spec. Cond. (µS/cm)	pH	Temperature (°C)	DO (mg/L)
473105116315801	MW2A	3/20/86	1,810	514	6.2	8.0	0.9
473105116315002	MW2B	3/20/86	1,515	520	6.5	9.5	0.1
473100116323501	MW4	3/21/86	1,410	2,800	7.3	5.0	NA
473133116321001	MW5	3/20/86	1,205	496	6.9	8.5	2.8

[a]Selected parameters; other parameters reported

Source: Spruill 1993

Notes:
mg/L - milligram per liter
µg/L - microgram per liter
µS/cm - microsiemen per centimeter
°C - degrees celsius

Table 2.2-6
Lead, Zinc, and Cadmium Concentration in Cataldo Flats Piezometers

Chemical	Units	Sep-97 PZ01	Sep-97 PZ02	Sep-97 PZ03	Sep-97 PZ04	Sep-97 PZ05	Sep-97 PZ06	Sep-97 PZ07	Sep-97 PZ08	Sep-97 PZ09	Sep-97 PZ10	Sep-97 PZ11	Sep-97 PZ12	Sep-97 PZ13	Sep-97 PZ14	Sep-97 PZ15	Sep-97 PZ16	Sep-97 PZ17
Lead	mg/L	0.034	0.047	0.072	--	0.0039	<0.0029	0.03	0.066	0.21	0.13	0.39	0.0086	0.05	0.34	0.012	--	0.0043
Zinc	mg/L	130	72	2.8	--	0.0037	0.03	9.6	9.8	69	72	68	19	15	22	3.7	--	42
Cadmium	mg/L	0.43	0.17	0.0066	--	0.0023	<0.0023	0.009	0.039	0.13	0.061	0.011	0.01	0.01	0.09	0.0027	--	0.022

Chemical	Units	Aug-97 PZ01	Aug-97 PZ02	Aug-97 PZ03	Aug-97 PZ04	Aug-97 PZ05	Aug-97 PZ06	Aug-97 PZ07	Aug-97 PZ08	Aug-97 PZ09	Aug-97 PZ10	Aug-97 PZ11	Aug-97 PZ12	Aug-97 PZ13	Aug-97 PZ14	Aug-97 PZ15	Aug-97 PZ16	Aug-97 PZ17
Lead	mg/L	0.0087	0.012	--	--	--	0.006	--	--	0.17	0.19	--	--	<0.0015	0.019	0.0017	--	0.0018
Zinc	mg/L	150	69	--	--	--	0.074	--	--	79	82	--	--	14	22	3.8	--	43
Cadmium	mg/L	0.33	0.15	--	--	--	<0.0023	--	--	0.15	0.072	--	--	0.012	0.051	0.0091	--	0.04

Source: Chamberlain and Williams 1998

Note:
mg/L - milligrams per liter

Table 2.3.2-1
Estimated Recurrence Intervals, Lower CDR at Mouth

Recurrence Interval (Years)	Flood Insurance Study LCDA River at Mouth Estimated Peak Flow (cfs)
2	not available
5	not available
10	36,000
25	not available
50	60,600
100	75,000

Note:
cfs - cubic feet per second

Table 2.3.2-2
Magnitude and Frequency of the February 1996 Flood and Historical Flood Peaks at Selected Gaging Stations, Northern Idaho

Gaging Station Number and Name	Measurement Date (Time - 24 Hour)	February 1996 Flood Peak (cfs)	100-Year Flood Peak (cfs)	Years of Record Through 1996	Mean February Flow (cfs)	Date of Historical Flood Peak (cfs)
North Fork at Enaville	February 9 (1645)	56,600	58,400	57	2,016	January 16, 1974
South Fork at Pinehurst	February 9 (unknown)	11,700	--	9	515	--
Coeur d'Alene River at Cataldo	--	68,300	70,800	63	2,495	January 16, 1974
Coeur d'Alene River at Rose Lake	--	50,500	--	--	--	--
Coeur d'Alene River at Harrison	February 9 (1200)	47,700	--	--	--	–

Source: Beckwith et al 1996.

Note:
cfs - cubic feet per second

Table 2.3.2-3
Precipitation Summary and Discharge Comparison for Water Year 1999
Coeur d'Alene, Idaho
NOAA Cooperative Station 101956

Climate Indicators	Monthly Totals												Annual Total
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Total Precipitation (in.)	0.6	5.2	5.4	3.6	5.8	1.1	1.1	1.0	1.3	0.3	2.5	0.1	28.6
Total Snowfall (in.)	0	0	7.5	4.0	12.0	1.0	0	0	0	0	0	0	14.5
Average Precipitation for Period of Record (in.)	1.3	2.0	3.1	3.6	3.4	2.5	2.3	1.7	2.0	1.8	0.8	0.9	25.5
Average Snowfall for Period of Record (in.)	0.0	0.2	4.3	13.0	16.4	9.2	3.7	0.5	0.0	0.0	0.0	0.0	47.3
Estimated Mean Monthly Discharge (cfs) Lower Coeur d'Alene River at Rose Lake	363	918	2274	3333	2130	5237	6534	8410	4800	1369	660	430	3275
Estimated Mean Monthly Discharge (cfs) (Lower Coeur d'Alene River at Harrison)	376	920	2270	3336	2116	5226	6525	8400	4825	1366	660	439	3275

Note:
cfs - cubic feet per second

3.0 SEDIMENT TRANSPORT PROCESSES

Sediment derived in the main stem Coeur d'Alene River is transported through the system and into the lower CDR. Sediment deposition occurs in the lower CDR, particularly in the upstream areas. Sources of suspended and bedload sediment in the lower CDR are the erosion of riverbanks, sediment derived from the tributary channels, and mining wastes, most notably from the North and South Forks of the Coeur d'Alene River. Erosion of riverbanks is caused by boat wakes and periodic flood events. Based on USGS sediment transport and stream discharge data, approximately 51,000 tons of sediment was transported past the USGS gage station at Harrison during water year 1999.

In north Idaho the Coeur d'Alene River channel and its floodplain are mostly covered by metal-enriched sediments, partially derived from upstream mining, milling, and smelting wastes. In relation to uncontaminated sediments of the region, metal-enriched sediments are highly enriched in silver, lead, zinc, arsenic, antimony, and mercury; and enriched in copper, cadmium, manganese, and iron (Fousek 1996). Widespread distribution of metal-enriched sediments has resulted from over a century of mining in the Coeur d'Alene mining district (upstream), poor mine-waste containment practices during the first 80 years of mining, and an ongoing series of over-bank floods. Previously deposited metal-enriched sediments continue to be transported down-valley and onto the floodplain during floods. (Bookstrom et al 1999).

In this discussion, the available information and analyses are discussed.

3.1 AVAILABLE INFORMATION

One year of sediment transport gaging data is available for the lower CDR from the USGS gaging stations 12413860, lower CDR near Harrison, and 12413810, lower CDR at Rose Lake (USGS 2000a). To date, data from seven suspended load sampling events are available for the each station. Bedload transport was either nonexistent or negligible for each sampling event (USGS 2000b). The suspended load data were further divided into sand and fines fractions. The suspended load sampling events were completed over a range of stream discharges to establish a rating curve relating sediment discharge to stream discharge. In addition, sampling was completed on both the rising and falling limbs of high water events to examine the transport during these differing conditions. Instantaneous stream discharge was recorded at the time of sampling for use in rating curve development.

Mean daily discharge data from January 1, 1991 have been calculated using the USGS Computer Program FourPt (USGS 2000c). These data are presented in Section 2.3.

In addition to the sediment gaging data for the lower CDR, historical and current aerial photography are available. 1998 photographs by URS Greiner, Inc., (URSG and CH2M HILL 1999), 1991 and 1984 photographs by U.S Department of Agriculture (USDA) (USDA 1984, 1991) were reviewed.

Thomas Wesche conducted field surveys on the lower CDR as part for his expert report for the mining companies (Wesche 1999). This survey was conducted by boat from the I-90 bridge at Cataldo to the mouth at Coeur d'Alene Lake. Discrete areas of erosion were identified on aerial photographs and size measured.

3.2 ANALYSES

3.2.1 USGS Sediment Gaging Data

The USGS sediment transport data from the stations at Rose Lake and Harrison were analyzed in general accordance with the U.S. Army Corps of Engineers (USACE) guidance manual for sedimentation investigation (USACE 1989). Sediment rating curves were developed by relating measured stream discharge to measured sediment discharge. These curves were integrated with the stream discharge for water year 1999 and estimates of historical stream discharge to produce estimates of annual sediment yield for the lower CDR. These sediment transport data were further examined to delineate threshold discharges where different particle size classes become mobile.

The USGS sediment discharge station at Rose Lake is located within segment LCDRSeg02. This location is approximately 8 miles downstream of the upstream boundary of the Lower CDR Watershed. The channel slope of the Lower CDR Watershed, 0.019 percent, is significantly less than the slope of the North and South Forks which is approximately 0.5 percent in the lower reaches. As such, significant quantities of sediment are deposited in the 8 miles upstream of the Rose Lake gage. The USGS sediment discharge station at Harrison is located near the downstream end of segment LCDRSeg06. The sediment which passes the Harrison gage is transported to the Lake.

The suspended sediment data for the station at Rose Lake is presented in Figure 3.2-1 with rating curves established for the sand and fines fractions. The stream discharge presented is the

instantaneous discharge noted at the time of sampling. The correlation analysis used to establish the curves is a power function that calculates the least squares fit through the points. The grain size break between sand and fines is 63 microns.

The relationships shown on Figure 3.2-1 were integrated with the mean daily discharge calculations from USGS gage 12413810, Coeur d'Alene River at Rose Lake, to obtain mean daily suspended sediment discharge for water year 1999. Like the original data, the sand and fines fractions were calculated separately and summed to calculate the total suspended sediment discharge. Cumulative sediment discharge for water year 1999 was calculated by summing the mean daily sediment discharges. The results are presented in Figures 3.2-2 through 3.2-4. A total of approximately 29,700 tons of suspended sediment, 6,700 tons sand and 23,000 tons of fines, was transported past the gage at Rose Lake in water year 1999. Bedload sediment transport was either negligible or nonexistent during each sampling event (USGS 2000b).

The suspended sediment data for the station at Harrison is presented in Figure 3.2-5 with rating curves established for the sand and fines fractions. The stream discharge presented is the instantaneous discharge noted at the time of sampling. The correlation analysis used to establish the curves is a power function that calculates the least squares fit through the points. The grain size break between sand and fines is 63 microns.

The relationships shown on Figure 3.2-5 were integrated with the mean daily discharge calculations from USGS gage 12413860, Coeur d'Alene River at Harrison, to obtain mean daily suspended sediment discharge for water year 1999. Like the original data, the sand and fines fractions were calculated separately and summed to calculate the total suspended sediment discharge. Cumulative sediment discharge for water year 1999 year was calculated by summing the mean daily sediment discharges. The results are presented in Figures 3.2-6 through 3.2-8. With a drainage area of approximately 1,475 square miles, the total suspended sediment yield for the lower CDR at Harrison for water year 1999 was approximately 34 tons per year per square mile. Of that, approximately 7 tons were sand and 27 tons were fines. A total of approximately 51,000 tons of suspended sediment was transported past the gage at Harrison in water year 1999. Bedload sediment transport was either negligible or nonexistent during each sampling event (USGS 2000b).

As indicated by the USGS data, the majority of sediment transport occurs during high flow events. Much larger discharge events are likely in the lower CDR than were observed during water year 1999. During the larger events, additional sediment load should be expected. Peak discharges predicted by the flood insurance study, at the mouth of the lower CDR are 36,000 cfs

for a 10-year event and 75,000 cfs for a 100-year event (FIA 1984). The maximum mean daily discharge during water year 1999 at the Harrison gage was 16,490 cfs.

Review of Figures 3.2-2 through 3.2-8 suggests that the majority of sediment transport, approximately 80 percent at Rose Lake and 78 percent at Harrison, occurred during the period with approximate dates March 20 to June 11, 1999. Several distinct peaks of high sediment discharge are evident in the figures. Four other distinct periods of increased sediment discharge are indicated on the figures with approximate dates December 2 to 6, 1999, December 30, 1999, to January 3, 1999, January 15 to January 26, 1999, and February 25 to March 3, 1999. High temperatures, rainfall, and snowmelt caused large stream discharge during these periods, which is discussed in Section 2.3. These high stream discharges mobilized and transported the vast majority of the sediment yield for water year 1999. Similar high sediment transport rates would be expected on an annual basis as snowmelt in the upper watershed mobilizes and transports sediment through the system.

To estimate sediment transport in years before water year 1999, the calculated discharges from the gage were integrated with the sediment transport relationships developed for the lower CDR at Rose Lake and Harrison in 1999. The results are presented in Tables 3.2-1 and 3.2-2. As with the estimates for sediment transport for 1999, extrapolation of the rating curves to stream discharges greater than discharges that were used to develop the rating curve was employed. Nevertheless, a wide range of sediment transport quantities is indicated. In this type of analysis, the quantities of sediment transported are directly correlated to the magnitude and duration of stream discharge. Years with high peak discharge and long duration will produce more sediment than years with low discharge and short duration. Figures 3.2-9 and 3.2-10 present estimates of sediment transport (for fines and sand, respectively) through time for water years 1991 through 1999 for Rose Lake. Figures 3.2-11 and 3.2-12 present estimates of sediment transport (for fines and sand, respectively) through time for water years 1991 through 1999 for Harrison. A wide range in magnitude of sediment transport is estimated and in general most of the transport occurs between February and June during large stream discharges.

To identify potential thresholds of sediment transport based on the USGS data, calculated estimates of daily sediment discharge for sand, fines, and bedload were examined. For each daily estimate and size class, for water year 1999, the percentage of total annual sediment discharge was calculated. These values were plotted against stream discharge and percent of maximum daily discharge for water year 1999 as shown in Figure 3.2-13 for Rose Lake and Figure 3.2-14 for Harrison. As would be expected, these figures indicate sediment discharge increases with increasing stream discharge. At both sites, for sand and fines, rapid increases in sediment discharge occur at stream discharges of approximately 8,000 cfs for water year 1999. Although

this analysis is based on only a few measurements of sediment concentration, it provides guidance to discrete stream discharges where increased sediment transport may be expected.

Additionally, Figure 3.2-13 suggests that approximately 57 percent of the total annual sediment discharge at Rose Lake was fines; 43 percent was sand. Figure 3.2-14 suggests that approximately 78 percent of the total annual sediment discharge at Harrison was fines, and 22 percent was sand.

3.2.2 Channel Classification

Channel classifications may provide a level of understanding and description of a channel's behavior. Some channel classification systems require fieldwork and in-depth study while others only require topographic map and aerial photograph interpretation. The level of information provided by a classification based solely on topographic map and aerial photograph interpretation is limited but does provide a basic framework for channel processes and conditions.

Rosgen (Rosgen and Silvey 1996) proposed a classification that delineates channel types based on plan-view morphology, cross-section morphology, channel sinuosity, channel slope, and bed features to provide a broad level delineation. Aerial photograph and topographic map interpretation can be used for this type of classification, Level 1. The Rosgen methodology builds from this broad classification when combined with more detailed information. The Rosgen Level 1 classification was used for this study to identify broad reach level channel morphologies.

The Lower CDR can be classified as a type "F" channel. "F" type channels are deeply incised in valleys of low topographic relief, containing erodible materials. "F" type channels can develop high erosion rates and high sediment supply. In addition, some portions of the Lower CdA, specifically LCDRSeg03 and LCDRSeg04, may be Type "E" based on higher sinuosities. Newer channel cross sections were not surveyed to determine channel width and depth.

3.2.3 Channel Descriptions

The 1998 set of aerial photographs by URS Greiner and CH2M HILL, the 1991 set by USDA, and the 1954 set by BLM were reviewed to further describe the lower CDR. This review and interpretation focused on morphologic features indicating stream instability, channel migration, channel aggregation or degradation and other features that may contribute sediment to the system. The photographic review indicated that no major changes of river position occurred since the earliest 1954 photographs reviewed. Changes have occurred in channel width as the

riverbanks throughout the lower CDR have eroded. In some areas, the channel has widened since 1954.

In an attempt to estimate erosion rates, photographs of various locations throughout the lower CDR were identified for which multiple years of photographs were available. Channel width changes were measured and divided by the time between photographs. Due to different photograph scales and difficulty in identifying exact cross-section location, the results were averaged to estimate an annual erosion rate. An annual erosion rate of 0.8 feet per bank per year was estimated. These estimates are similar to the estimate of 0.5 feet per bank per year by the Soil Conservation Service (SCS 1994). Bank erosion does not occur in a linear manner, rather large areas of episodic bank erosion occur during discrete high flow events, or during rapid drawdown of river level. Boat wakes may be another cause of localized bank erosion.

The lower CDR was field mapped to identify and characterize eroding stream banks by Thomas Wesche in June 1999 (Wesche 1999). These existing areas of erosion are current sources of sediment to the lower CDR; however, virtually all river banks of the lower CDR could in the future begin eroding, providing additional sediment sources to the lower CDR. The observations of Wesche with regard to eroding riverbanks are summarized in the following sections.

3.2.3.1 Segment LCDRSeg01 (Station 270+00 to 540+00)

Segment LCDRSeg01 has approximately 8,760 feet (1.7 miles) of mapped channel. This section covers the lower CDR from Cataldo to the dredge site adjacent to Mission Flats. Well-developed gravel bars are deposited on the channel margins indicating deposition. Wesche identifies six areas of instability in segment LCDRSeg01 with a total erosional area of 40,340 square feet. These areas of instability provide sediment to the lower CDR.

3.2.3.2 Segment LCDRSeg02

Segment LCDRSeg02 has approximately 46,440 feet (8.8 miles) of mapped channel. Sediment sources in this segment include bank erosion and channel bed remobilization. The channel width is approximately 250 to 300 feet wide and is relatively constant through the segment.

From the Cataldo dredge site to Fourth of July Creek, the north bank has little vegetation while the south bank is well vegetated. Wesche identified eight erosional sites in this reach with a total erosional area of about 25,560 square feet.

From Fourth of July Creek to the Rose Lake Bridge, the channel is generally straight with a nearly 90-degree bend 6,500 feet downstream of Fourth of July Creek. Wesche identified five erosional sites with a total erosional area of about 15,390 square feet. One area extending approximately 1,200 to 1,700 feet downstream of Fourth of July Creek was not identified. This area is located on the north bank and consists of an exposed rock cut adjacent to the river which may be a sediment source.

From the Rose Lake Bridge to the downstream end of segment LCDRSeg02 the channel banks are well vegetated. Six sites were identified by Wesche as erosional with a total area of about 20,329 square feet. An area 1,400 to 2,600 downstream of the Rose Lake Bridge was not identified. In the photographs reviewed, this area appears to be exposed soil adjacent to the channel.

3.2.3.3 Segment LCDRSeg03

Segment LCDRSeg03 has approximately 23,550 feet, 4.5 miles, of mapped channel. Sediment sources in this segment include bank erosion and channel bed remobilization. The channel width is approximately 250 to 300 feet wide and is relatively constant through the segment.

From the upstream end of segment LDDRSeg03 to the Highway 3 bridge, the lower CDR has well vegetated banks. Wesche identified four areas currently eroding with a total erosional area of 11,250 square feet.

From the Highway 3 bridge to the outlet of Killarney Lake, the channel meanders the entire valley width in the upper portion of this reach. Little or no vegetation is apparent in the photographs reviewed in this reach. Eighteen erosional sites are identified by Wesche in this section for a total erosional area of about 36,970 square feet.

3.2.3.4 Segment LCDRSeg04

Segment LCDRSeg04 has approximately 54,000 feet, 10.3 miles, of mapped channel. Sediment sources in this segment include bank erosion and channel bed remobilization. The channel width is relatively constant at 250 to 300 feet.

From the outlet of Killarney Lake to the outlet of Robinson Creek, the channel meanders near the valley wall to the north. The banks are moderately well vegetated. Wesche identifies nineteen sites with a total erosional area of 41,489 square feet.

From the outlet of Robinson Creek to the outlet of Black Lake, Wesche identifies six erosional sites with a total area about 7,200 square feet. The channel is constrained against a railroad grade on the southern bank. Sparse vegetation occurring as clumps throughout this reach.

In the lower CDR from the outlet of Black Lake to the downstream end of segment LDCRSeg04, Wesche identified eight erosional areas with a total area of about 16,530 square feet. The channel is constrained by a railroad grade on the southern side through much of this reach.

3.2.3.5 Segment LCDRSeg05

Segment LCDRSeg05 has approximately 21,740 feet, 4.1 miles, of mapped channel. Sediment sources in this segment include bank erosion and channel bed remobilization. The channel width is relatively constant at 250 to 300 feet.

From the upstream end of segment LCDRSeg05 to the Thompson Lake outlet, Wesche identified five eroding areas with a total area of about 10,140 square feet.

From the Thompson Lake outlet to Sprinston, the channel makes a sweeping bend of approximately 120 degrees. Wesche identified six erosional areas on both banks. The total erosional area of these sites is approximately 4,500 square feet.

From Springston to the State Route 95 bridge, the channel is constrained by a railroad grade on the southern side and is essentially linear. No erosion sites were identified by Wesche in this reach.

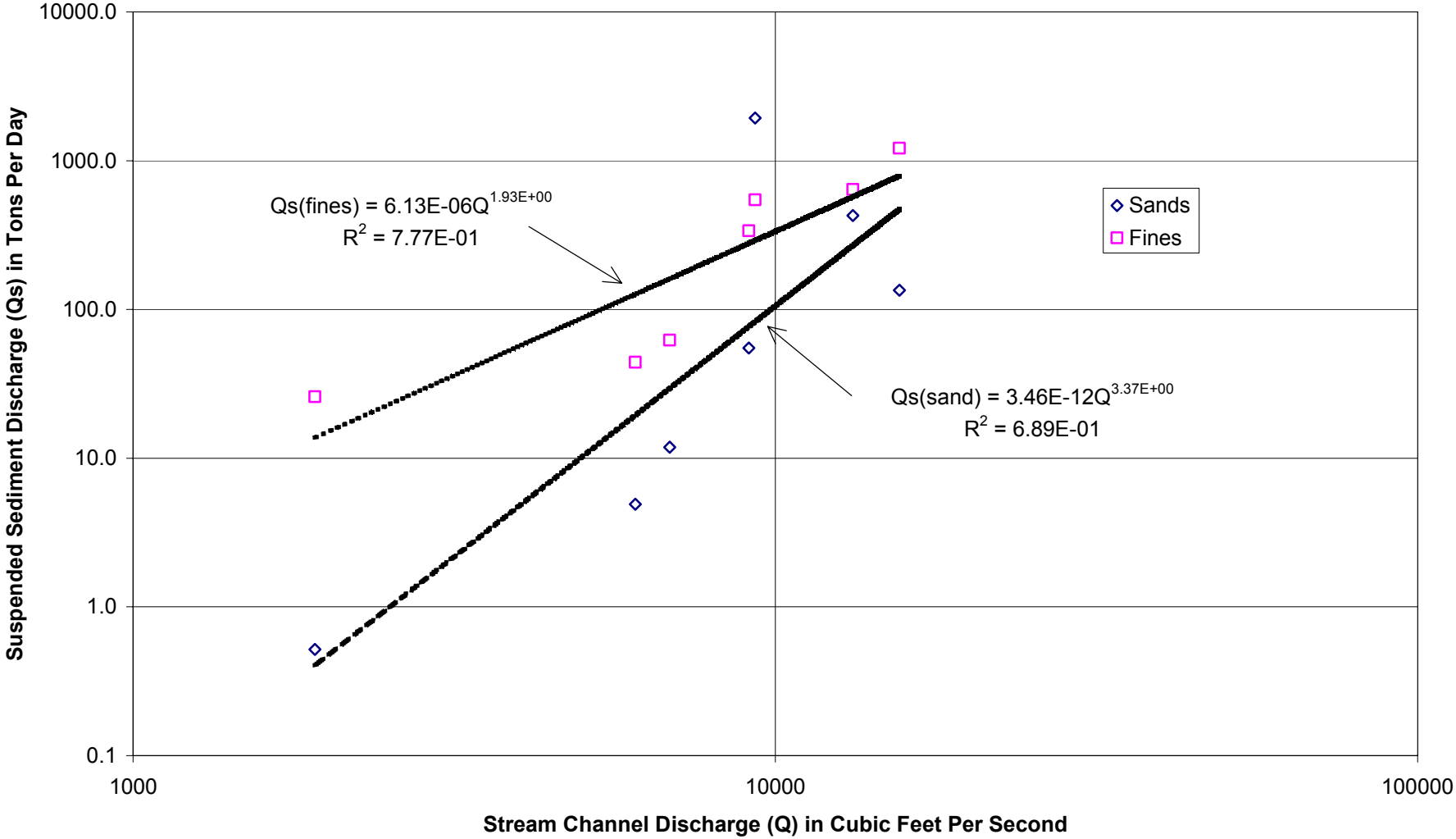
3.2.3.6 Segment LCDRSeg06

Segment LCDRSeg06 has approximately 8,760 feet, 1.7 miles, of mapped channel. In this section, the lower CDR from the mouth to the State Route 97 bridge is isolated from Coeur d'Alene Lake by low lying sediment deposits adjacent to the channel. The channel width is approximately 250 feet and is relatively constant through the segment. Wesche identified four areas of instability in segment LCDRSeg06 with a total eroding area of 10,621 square feet. These areas of instability provide sediment to the lower CDR.

3.3 SUMMARY

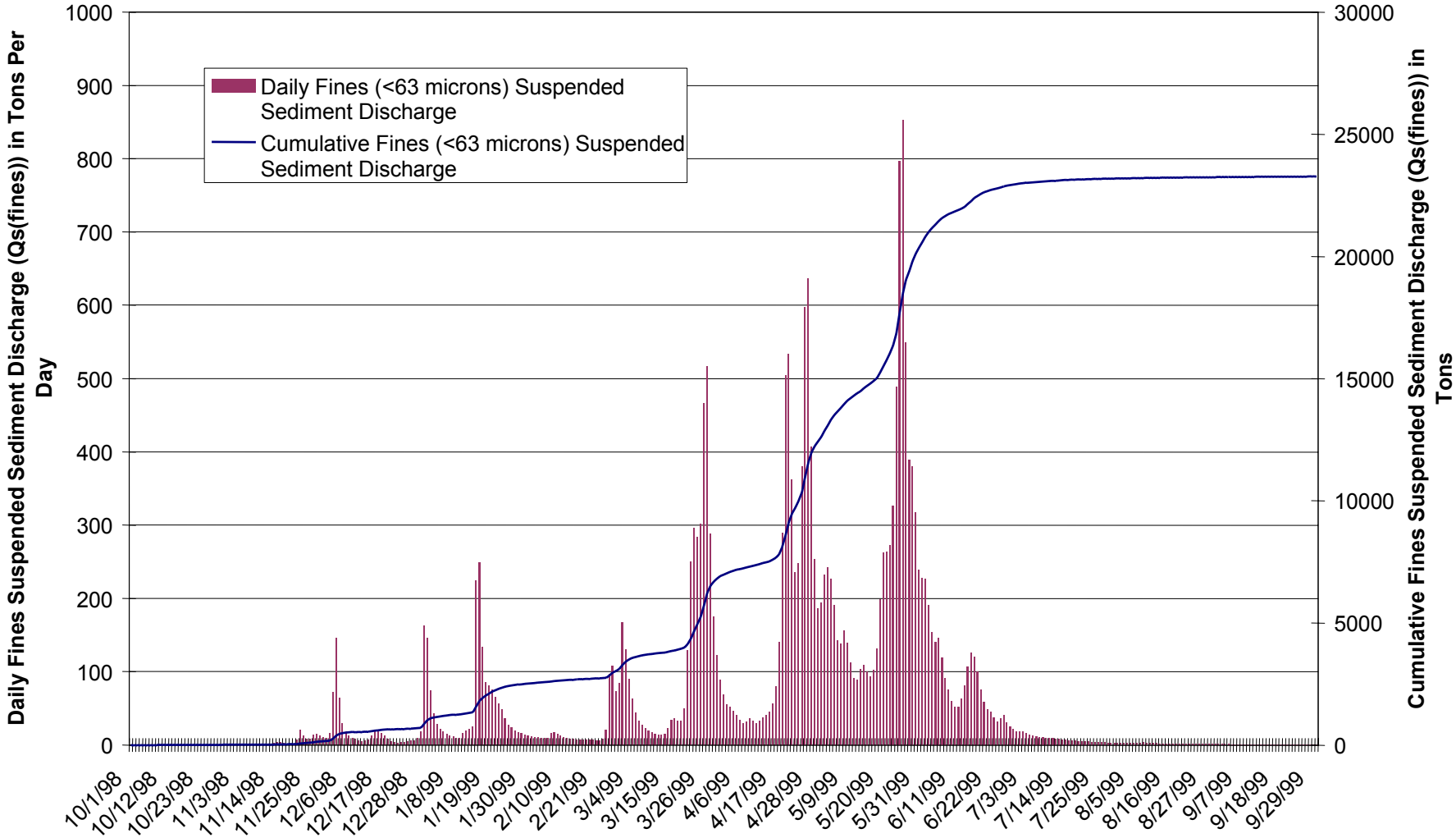
Based on the information discussed above, approximately 51,000 tons, or 34 tons per square mile, of sediment was transported past the lower CDR at Harrison and into Coeur d'Alene Lake in water year 1999. Large fluctuations in sediment transport should be expected based on stream discharge. Sediment sources to the lower CDR include the North and South Forks of the Coeur d'Alene River, bank erosion, and channel bed remobilization.

Suspended Sediment Rating Curves, Coeur d'Alene River at Rose Lake, Station 12413810, Suspended Sediment by Sand Break, Water Year 1999



EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 3.2-1**

Fines Suspended Sediment Discharge, Coeur d'Alene River at Rose Lake, Station 12413810, Daily and Cumulative Totals, Water Year 1999



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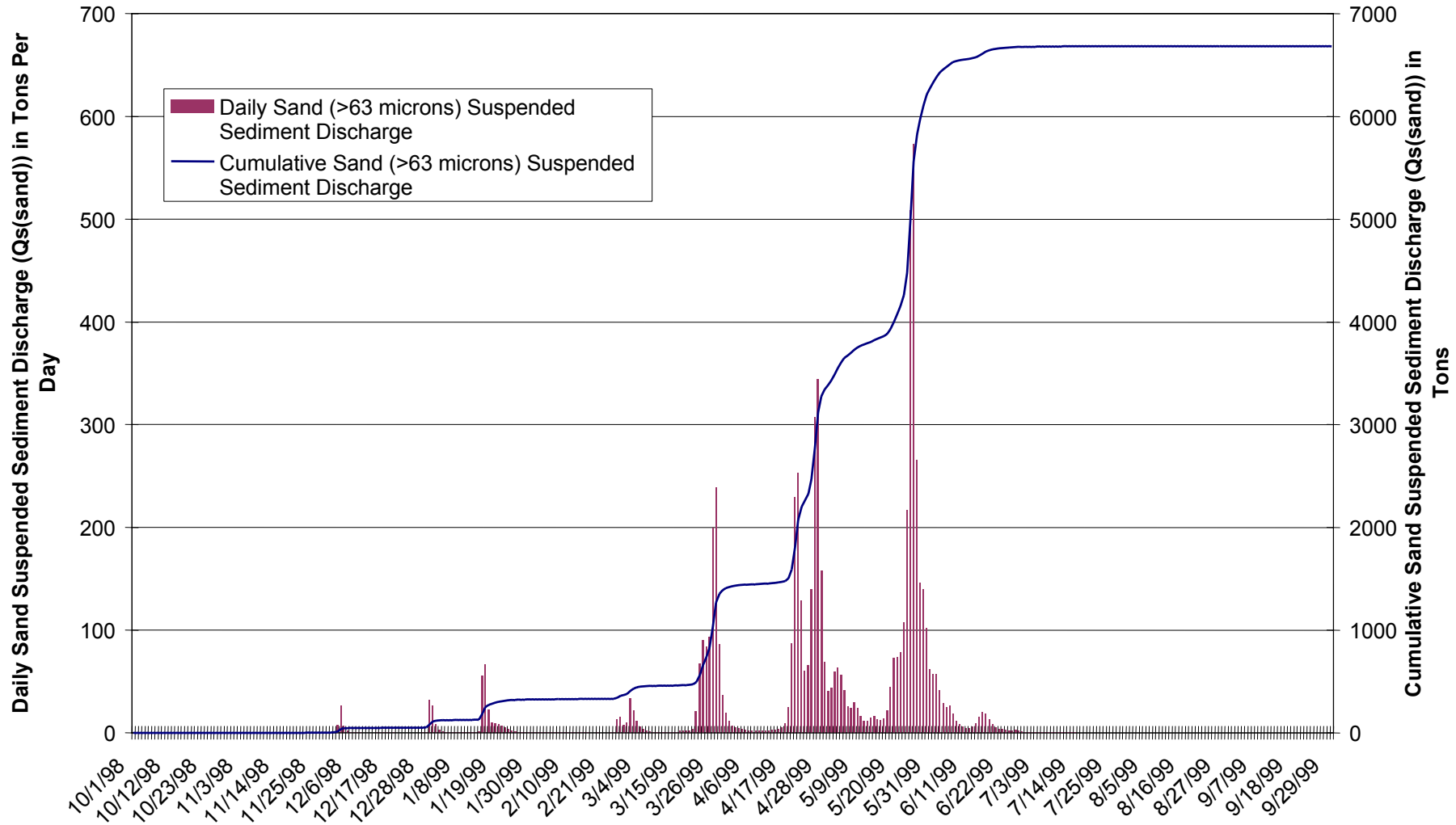
07/13/01

Figure 3.2-2

Sand Suspended Sediment Discharge, Coeur d'Alene River at Rose Lake, Station 12413810, Daily and Cumulative Totals, Water Year 1999



EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	Figure 3.2-3

Total Suspended Sediment Discharge, Coeur d'Alene River at Rose Lake, Station 12413810, Daily and Cumulative Totals, Water Year 1999

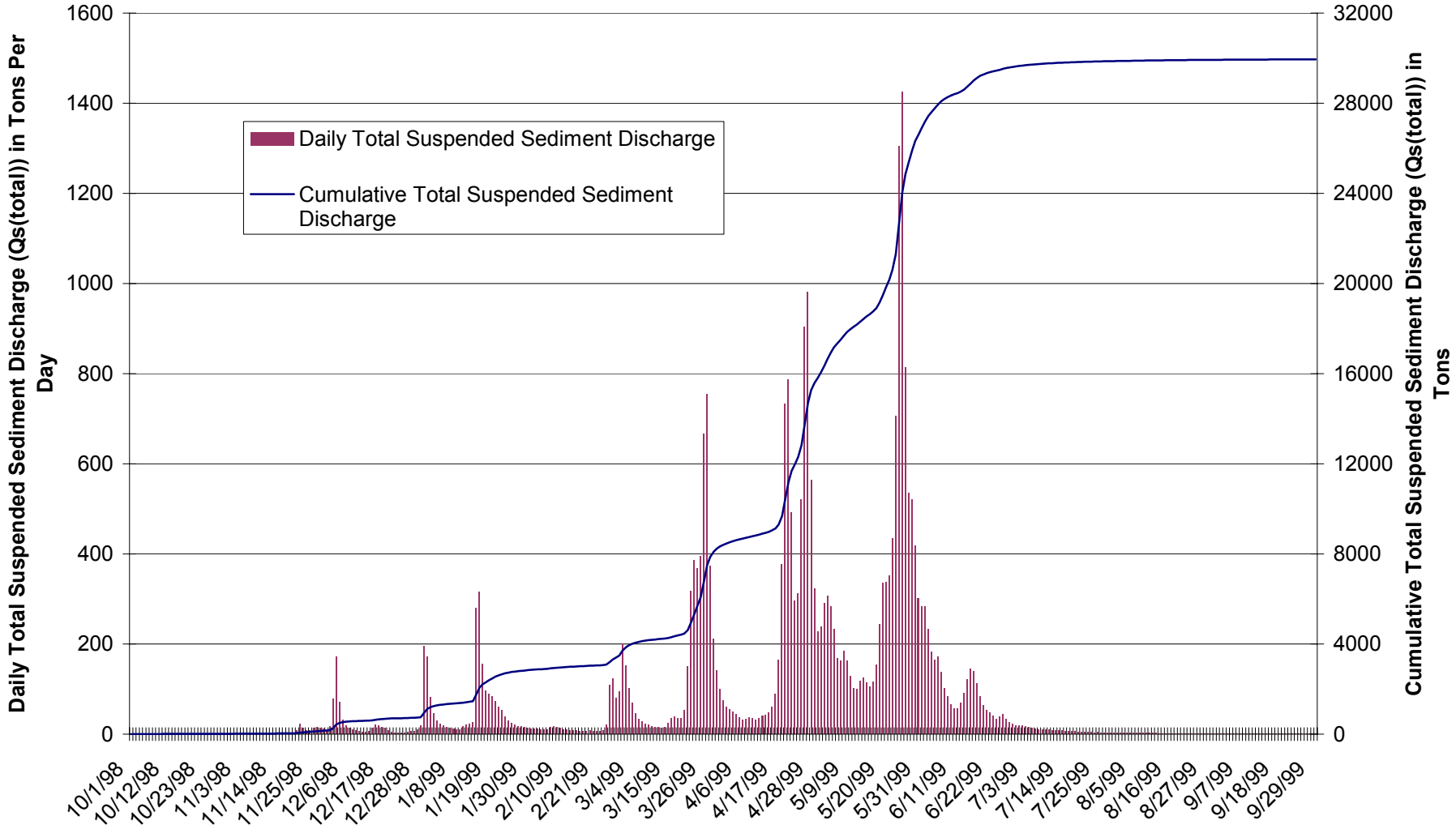


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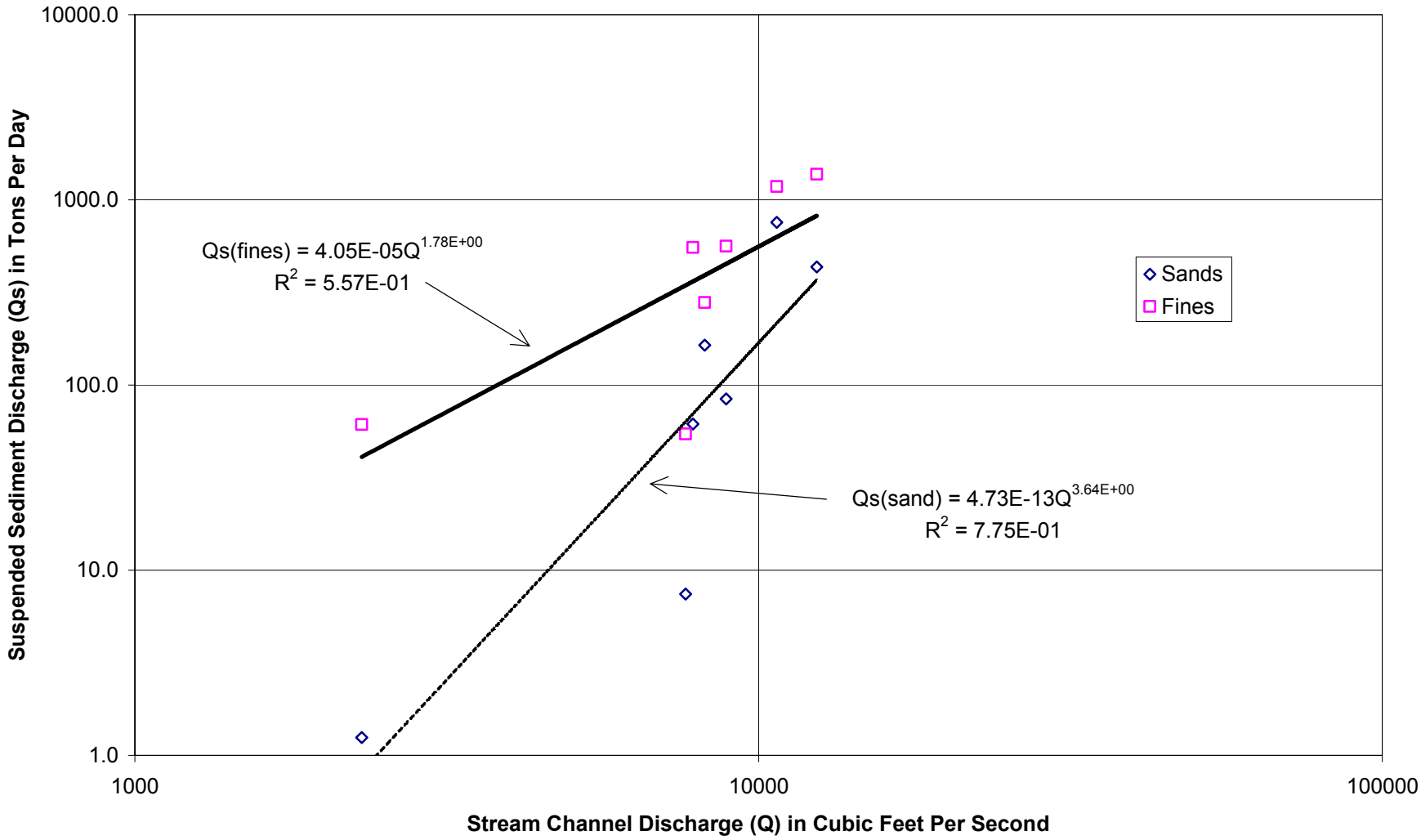
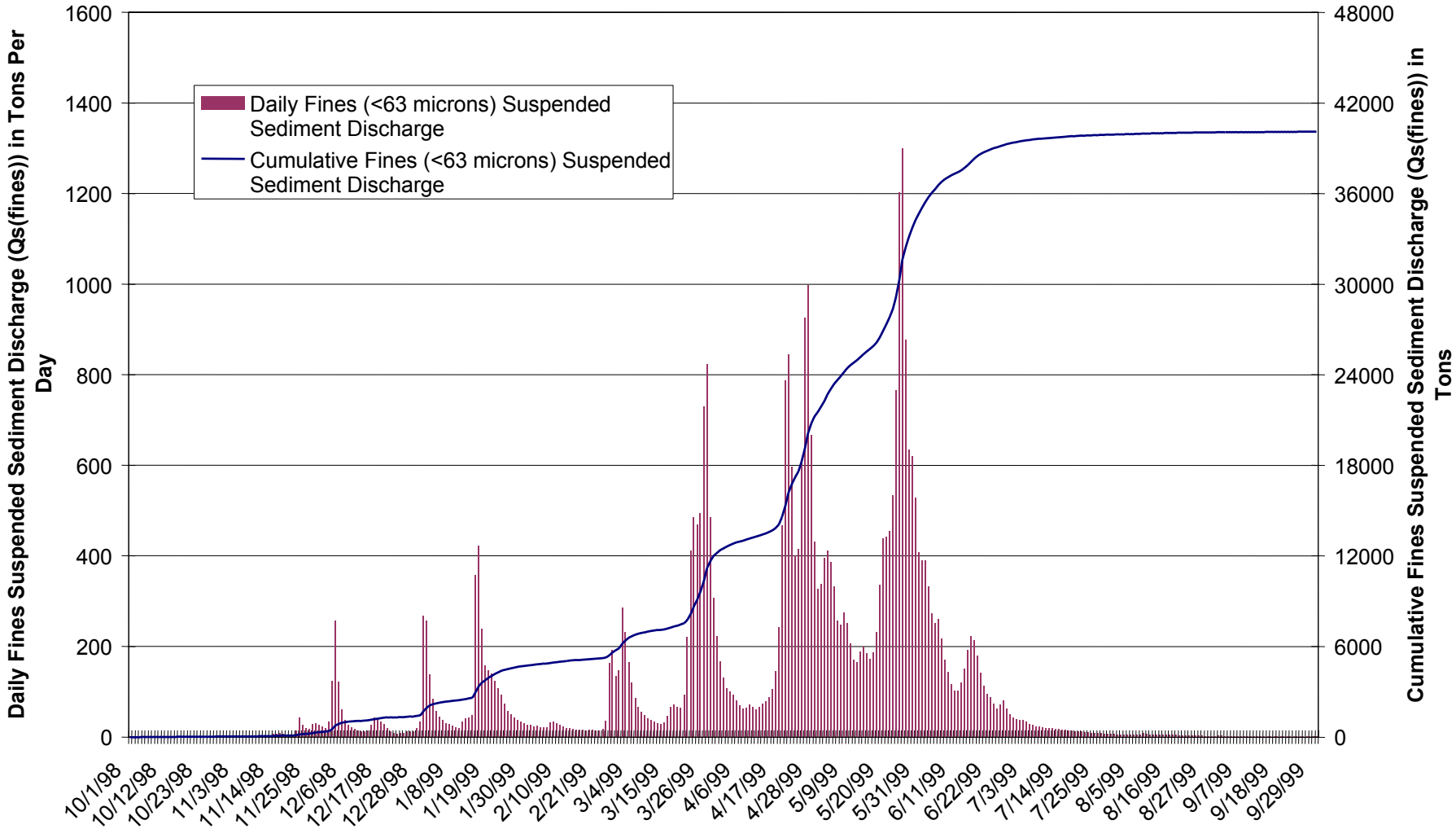
Figure 3.2-4

Suspended Sediment Rating Curves, Coeur d'Alene River at Harrison, Station 12413860, Suspended Sediment by Sand Break, Water Year 1999



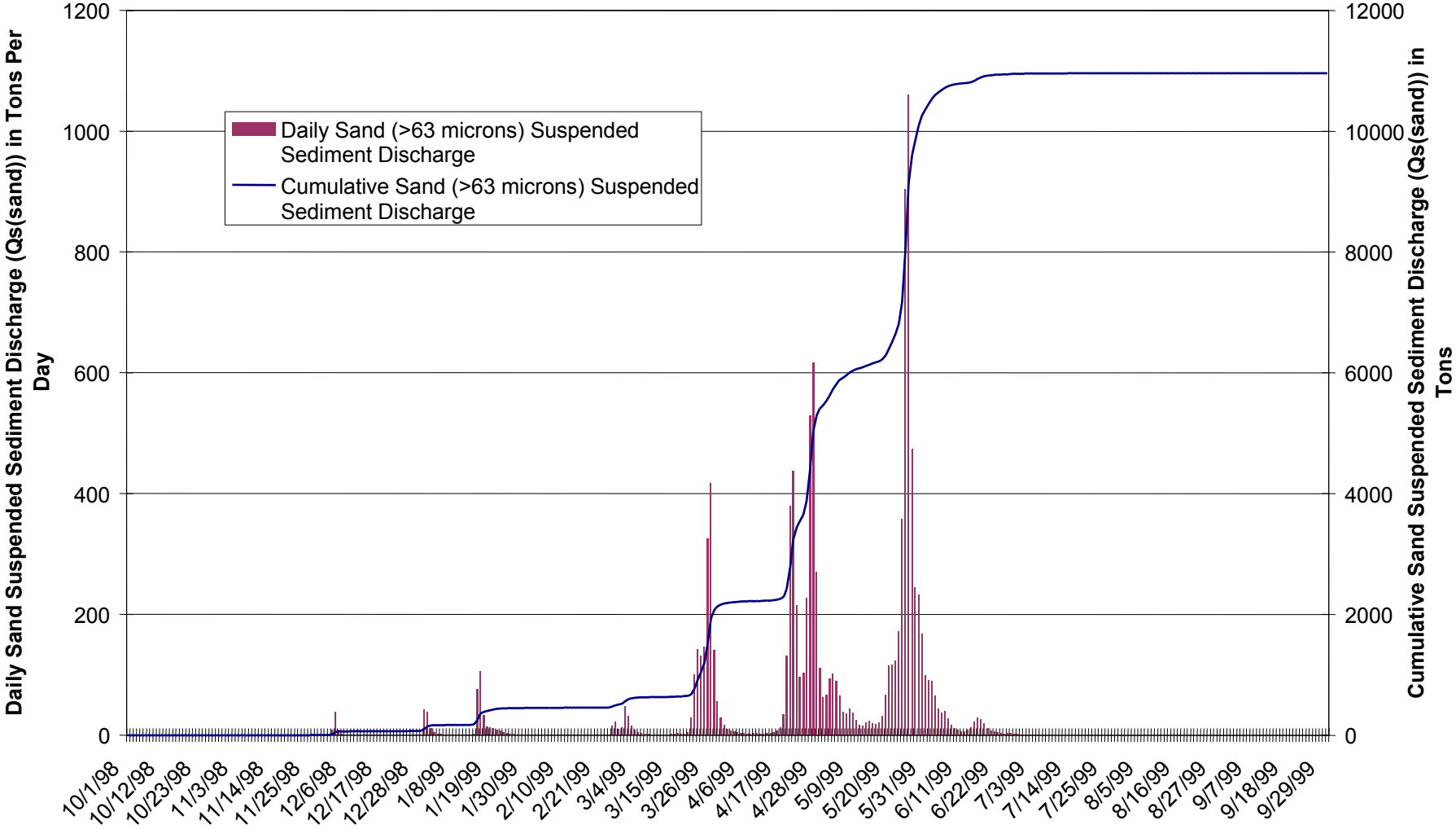
EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 3.2-5**

Fines Suspended Sediment Discharge, Coeur d'Alene River at Harrison, Station 12413860, Daily and Cumulative Totals, Water Year 1999



EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	Figure 3.2-6

Sand Suspended Sediment Discharge, Coeur d'Alene River at Harrison, Station 12413860, Daily and Cumulative Totals, Water Year 1999



EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	Figure 3.2-7

Total Suspended Sediment Discharge, Coeur d'Alene River at Harrision, Station 12413860, Daily and Cumulative Totals, Water Year 1999

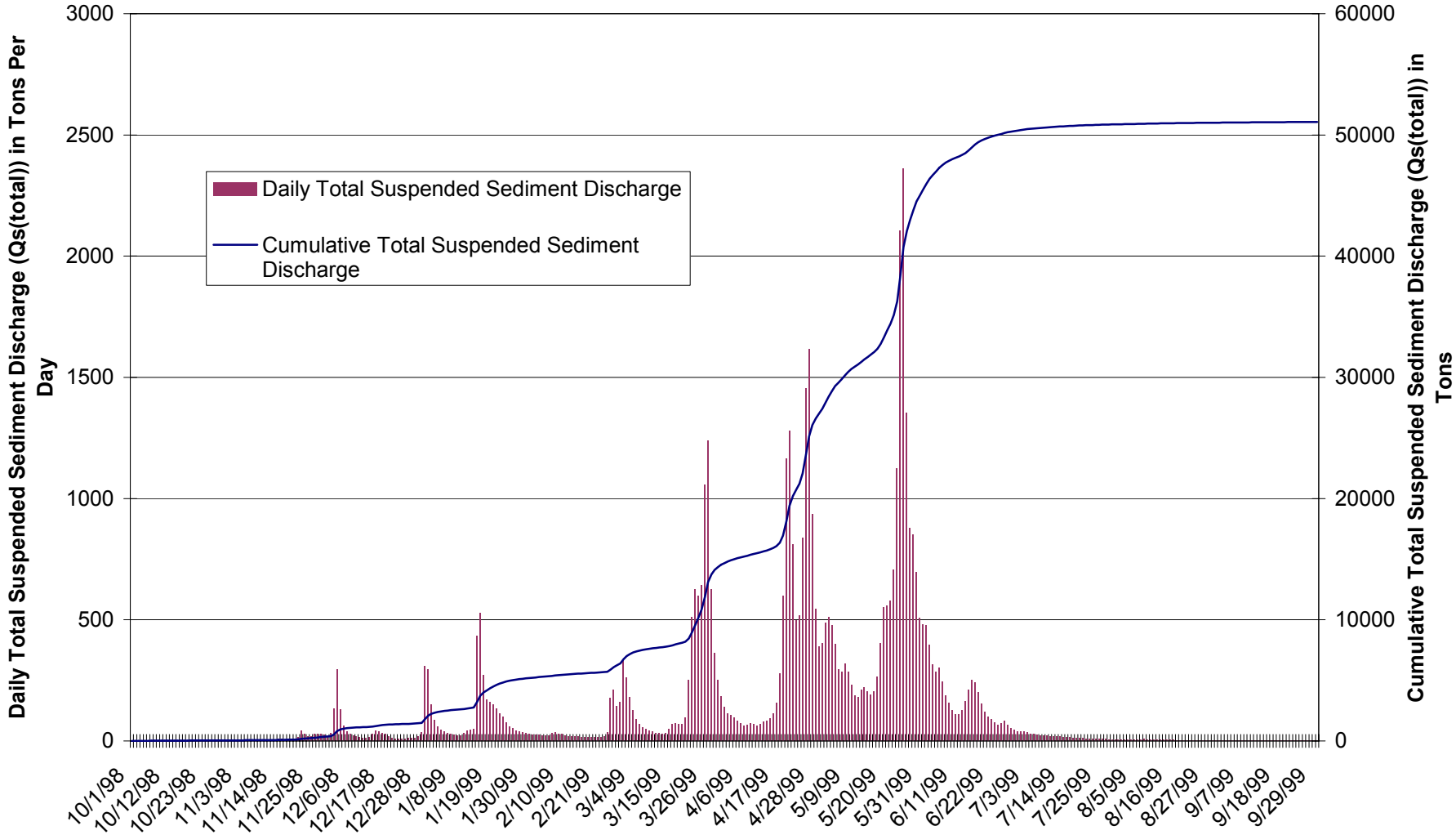


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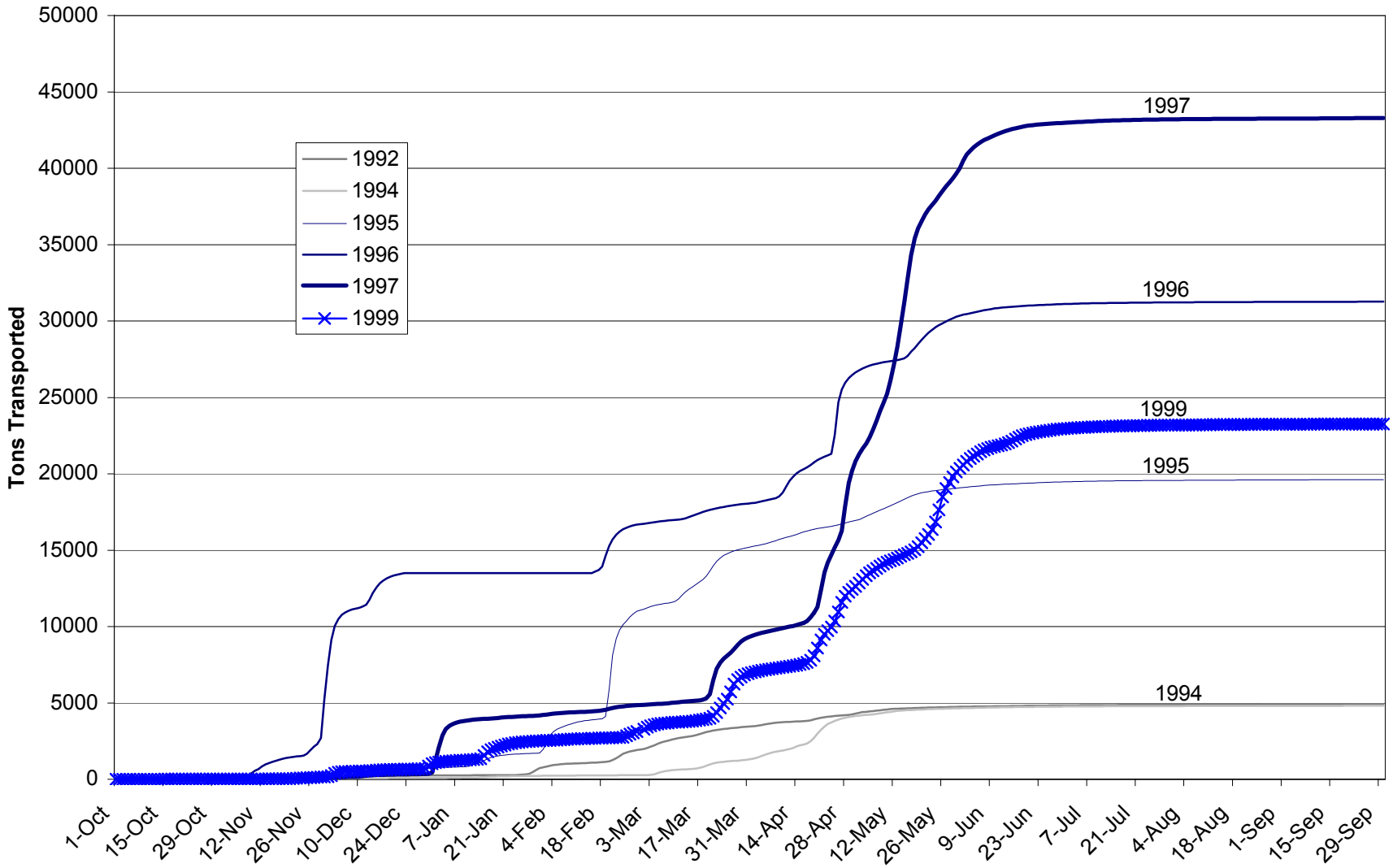
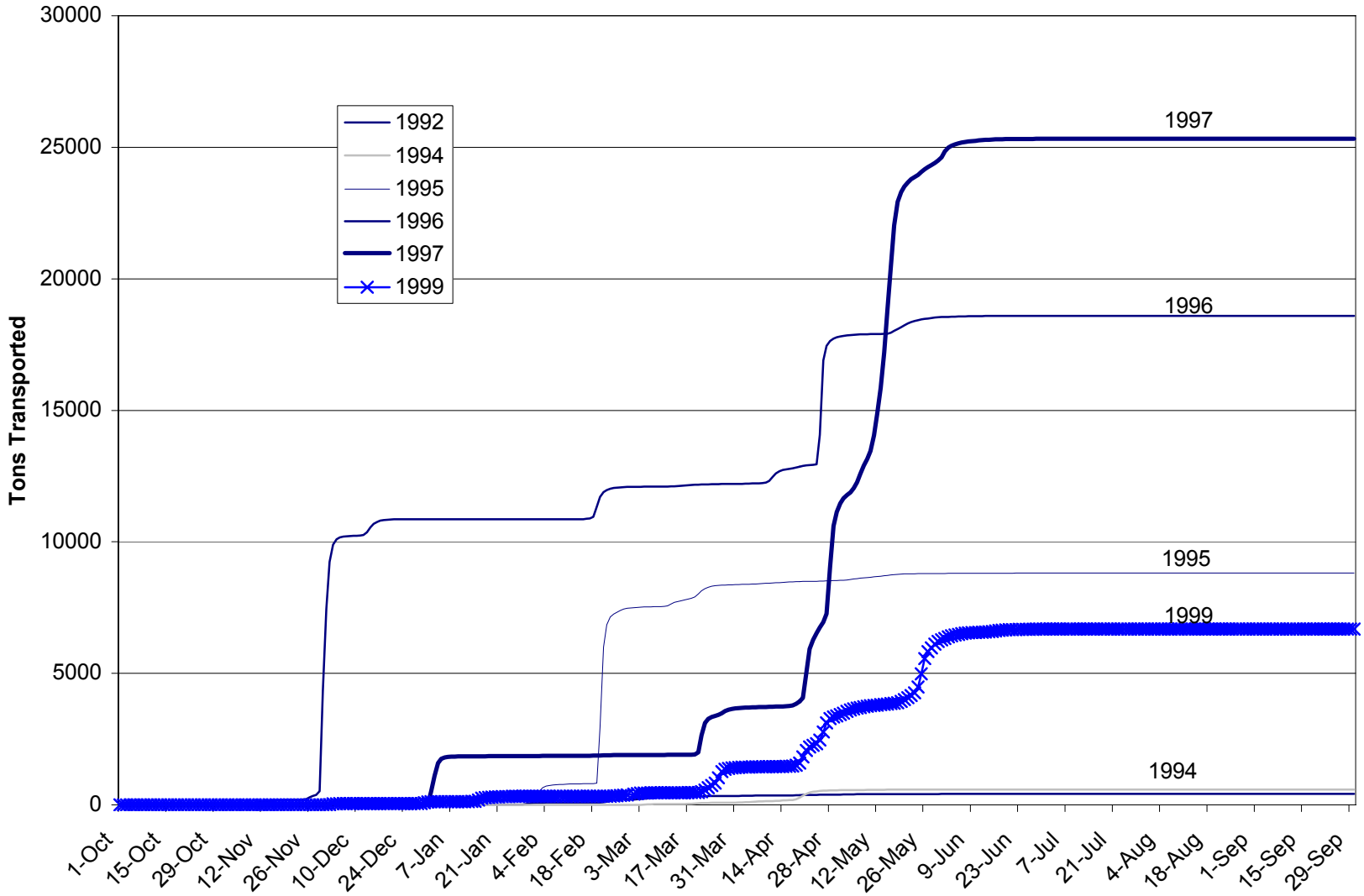
Figure 3.2-8

Estimated Cumulative Fines Sediment Transport Coeur d'Alene River at Rose Lake

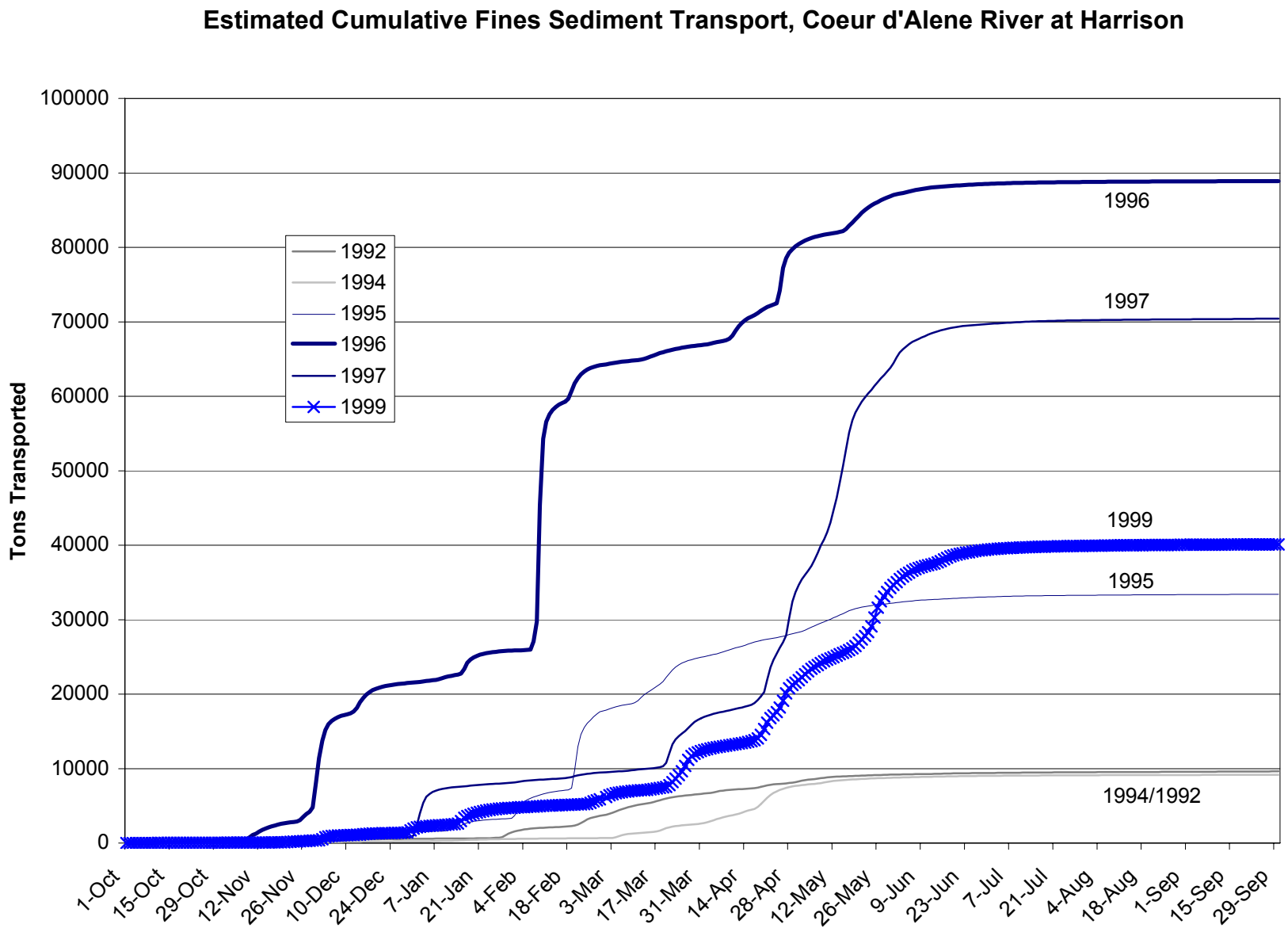


EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 3.2-9**

Estimated Cumulative Sand Sediment Transport Coeur d'Alene River at Rose Lake



EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 3.2-10**



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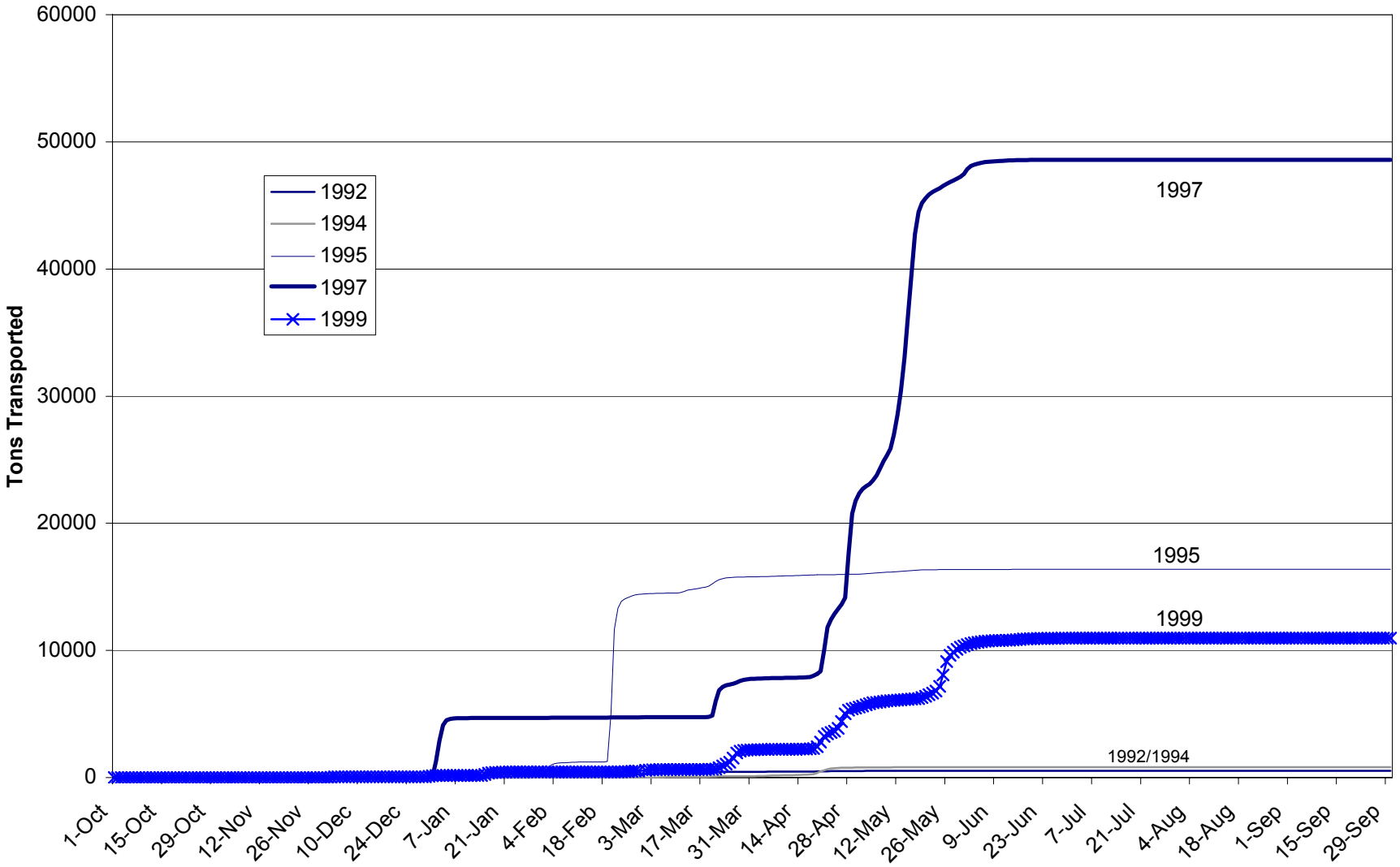
027-RI-CO-102Q
Coeur d'Alene Basin RI/FS
RI REPORT

Doc Control: 4162500.6615.05.a
Generation: 1

LCDA Series
07/13/01

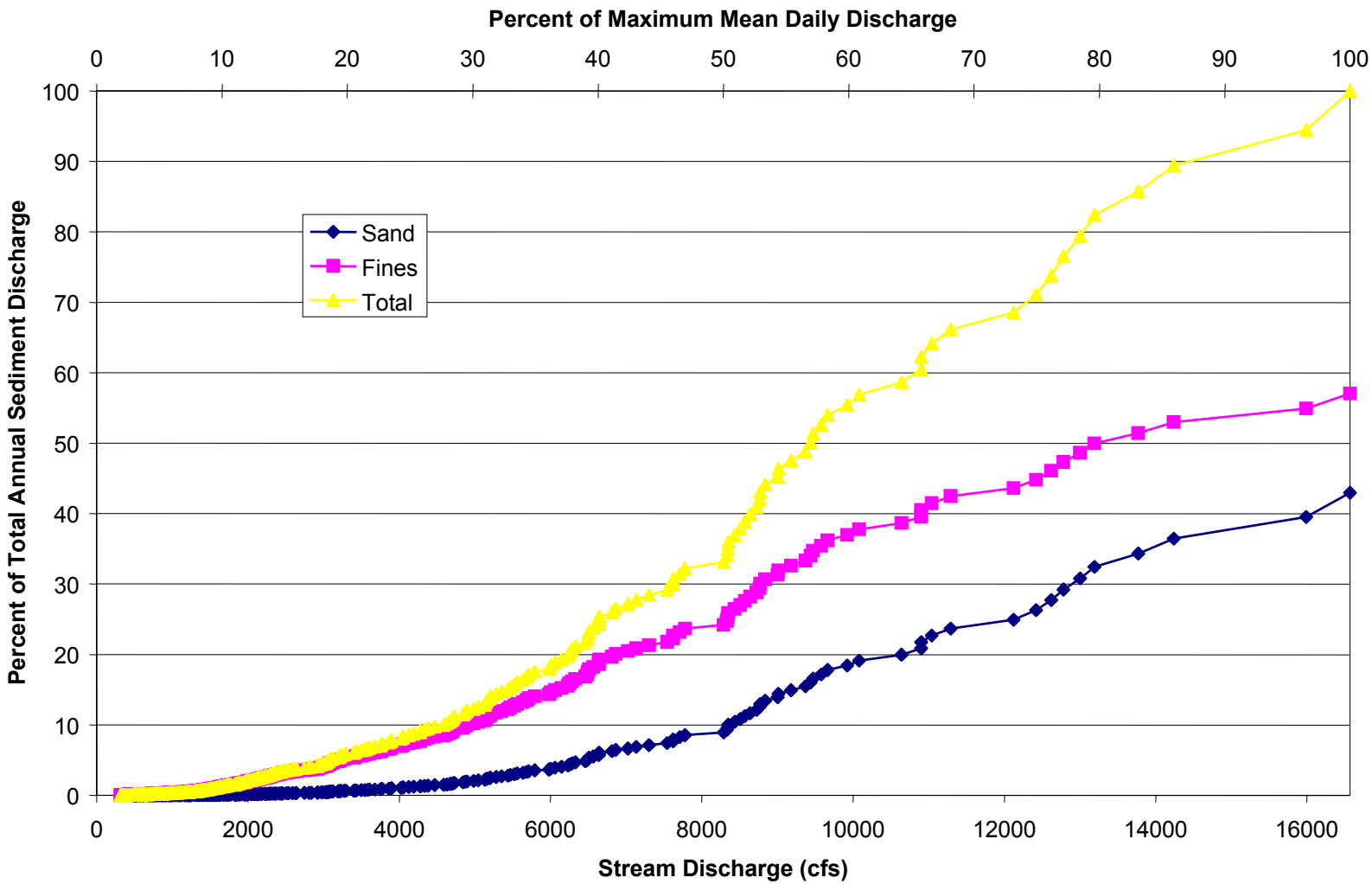
Figure 3.2-11

Estimated Cumulative Sand Sediment Transport, Coeur d'Alene River at Harrision



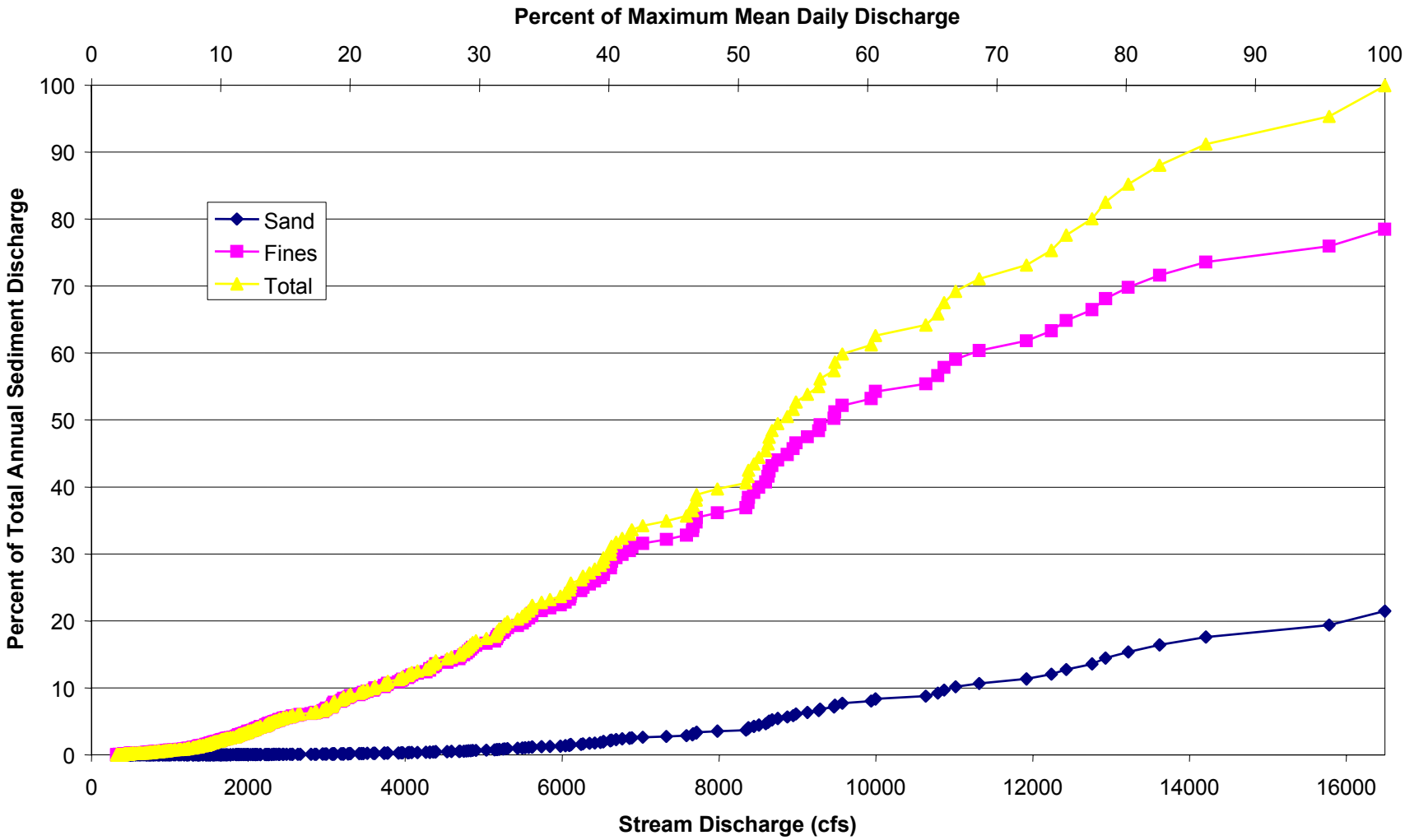
EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 3.2-12**

Coeur d'Alene River at Rose Lake, Percent of Total Annual Sediment Discharge Versus Stream Discharge, Water Year 1999



EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	Figure 3.2-13

Coeur d'Alene River at Harrison, Percent of Total Annual Sediment Discharge Versus Stream Discharge, Water Year 1999



EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	Figure 3.2-14

Table 3.2-1
Historical Estimates of Sediment Transport, Lower CDR at Rose Lake Based on Modeled Discharge Estimates and Sediment Transport Data From Water Year 1999

Year	Sands (tons)	Fines (tons)	Total (tons)
1992	414	4,925	5,338
1993	2,913	13,316	16,229
1994	580	4,816	5,397
1995	8,809	19,617	28,426
1996	18,594	31,269	49,863
1997	25,326	43,294	70,617
1998	1,764	10,068	11,832
1999	6,685	23,265	29,951
Average Annual Sediment Transport			27,207

Table 3.2-2
Historical Estimates of Sediment Transport, Lower CDR at Harrison Based on Modeled Discharge Estimates and Sediment Transport Data From Water Year 1999

Year	Sands (tons)	Fines (tons)	Total (tons)
1992	537	9,635	10,172
1993	4,493	23,479	27,972
1994	815	9,174	9,989
1995	16,375	33,425	49,800
1996	272,565	88,911	361,476
1997	48,601	70,425	119,026
1998	2,681	18,509	21,190
1999	10,959	40,116	51,075
Average Annual Sediment Transport			81,338

4.0 NATURE AND EXTENT OF CONTAMINATION

The nature and extent of contamination and mass loading in the six segments of the Lower Coeur d'Alene River watershed are discussed in this section. Section 4.1 describes chemical concentrations found in environmental media, including horizontal and vertical extent. For each watershed segment, the discussion includes remedial investigation data chemical analysis results and a comparison of chemical results to selected screening levels. In Section 4.2, preliminary estimates of mass loading are presented.

4.1 NATURE AND EXTENT

The nature and extent of the 10 metals of potential concern identified in Part 1, Section 5.1 (antimony, arsenic, cadmium, copper, iron, lead, manganese, mercury, silver, and zinc) in surface soil, subsurface soil, sediment and surface water are discussed in this section. Groundwater data were not available for this study. Locations with metals detected in any matrix at concentrations 1 times (1x), 10 times (10x) and 100 times (100x) the screening level were identified and presented in the following data summary tables. The magnitudes of exceedance (10x and 100x) were arbitrarily selected to delineate areas of contamination.

Historical and recent investigations at areas within the study area are listed and summarized in Part 1, Section 4.0. Data source references are included as Attachment 1. Chemical data collected in the Lower Coeur d'Alene River and used in this evaluation are included as Attachment 2. Data summary tables include sampling location, data source reference, collection date, depth, and reported concentration. Screening level exceedances are highlighted. Sampling locations are shown on Figures 4.1-1 through 4.1-10.

The nature and extent of contamination were evaluated by screening chemical results against applicable risk-based screening criteria and available background concentrations. Screening levels are used in this analysis to identify source areas and media (e.g., soil, sediment and surface water) of concern that will be evaluated in the feasibility study (FS).

Statistical summaries for each metal in surface soil, subsurface soil, sediment and surface water are included as Attachment 3 and discussed in the subsections below. Surface water data were not available for segments LCDRSeg01 and LCDRSeg03. Only sediment data were available for segment LCDRSeg06. The summaries include the number of samples analyzed; the number of detections; the minimum and maximum detected concentrations; the average and coefficient of

variation; and the screening level (SL) to which the detected concentration is compared. Proposed screening levels were compiled from available federal numeric criteria (e.g., National Ambient Water Quality Criteria), regional preliminary remediation goals (PRGs) (e.g., U.S. EPA Region IX PRGs), regional baseline or background studies for soil, sediment, and surface water, and other guidance documents (e.g., National Oceanographic and Atmospheric Administration freshwater sediment screening values). The screening level selection process is discussed in detail in Part 1, Section 5.1.

The following sections present segment-specific sampling efforts and results according to matrix type. Given the extensive geographic range of the CDA Basin, sampling efforts were focused on areas of potential concern; therefore, more samples were collected from known mining-impacted areas than from other areas within the watershed. This detailed analysis is concluded with a characterization of the 1997 highflow flood event and its effects on sediment transport in the lower CDR.

4.1.1 Segment LCDRSeg01

4.1.1.1 Surface Soil

Forty-seven surface soil samples from segment LCDRSeg01 were collected and analyzed for total metals. Cadmium, lead, and zinc were detected in one to many sampling locations in this segment at concentrations that exceeded 10x the screening levels. The lead concentration at one location exceeded 100x the screening level.

4.1.1.2 Subsurface Soil

Twenty subsurface soil samples were collected and analyzed for lead. Eighteen of these samples were found to have concentrations exceeding 10x the screening level, and seven sample concentrations exceeded 100x the screening level.

4.1.1.3 Sediment

Eighty-six sediment samples were collected and analyzed for total metals. Antimony, arsenic, cadmium, lead, manganese, mercury and zinc were detected in many sampling locations at concentrations that exceeded 10x the screening levels. Cadmium and lead concentrations exceeded 100x the screening levels in one and eleven locations, respectively.

4.1.2 Segment LCDRSeg02

4.1.2.1 Surface Soil

One hundred and thirty-two surface soil samples from segment LCDRSeg02 were collected and analyzed for total metals. Arsenic, copper, lead, manganese, and zinc were detected in one to many samples at concentrations that exceeded 10x the screening levels. Lead and zinc concentrations at several locations exceeded 100x the screening levels.

4.1.2.2 Subsurface Soil

Fourteen subsurface soil samples were collected and analyzed for lead. Thirteen of these samples were found to have concentrations exceeding 10x the screening level. Six of these also exceeded 100x the screening level.

4.1.2.3 Sediment

Six hundred and eleven sediment samples were collected and analyzed for total metals. Antimony, arsenic, cadmium, copper, lead, manganese, mercury, silver and zinc were detected in several to many samples at concentrations that exceeded 10x the screening levels. Arsenic, cadmium, lead, mercury, and zinc were also detected at concentrations that exceeded 100x the screening levels in one to many samples.

4.1.2.4 Surface Water

Forty-three surface water samples for total metals and seventy-nine surface water samples for dissolved metals were collected and analyzed in segment LCDRSeg02. Results for total metals show concentrations of lead and zinc that exceeded 10x the screening levels. Results for dissolved metals show concentrations of cadmium, lead, and zinc that exceeded 10x the screening levels.

4.1.3 Segment LCDRSeg03

4.1.3.1 Surface Soil

Forty-three surface soil samples from segment LCDRSeg03 were collected and analyzed for total metals. Arsenic, lead, manganese, and zinc were detected in a few to many sampling locations at

concentrations exceeding 10x the screening levels. Lead and zinc concentrations in several samples exceeded 100x the screening levels.

4.1.3.2 Subsurface Soil

Fourteen subsurface soil samples were collected and analyzed for lead. Twelve of these samples were found to have concentrations exceeding 10x the screening level. Two samples had concentrations exceeding 100x the screening level.

4.1.3.3 Sediment

Two hundred and thirty-four sediment samples were collected and analyzed for total metals. Antimony, arsenic, cadmium, copper, lead, manganese, mercury, silver, and zinc were detected in one to many samples at concentrations exceeding 10x the screening levels. Cadmium, lead, and zinc were also detected at several sampling locations at concentrations greater than 100x the screening levels.

4.1.4 Segment LCDRSeg04

4.1.4.1 Surface Soil

Sixty-two surface soil samples from segment LCDRSeg04 were collected and analyzed for total metals. Arsenic, lead and zinc were detected in several to many samples at concentrations that exceeded 10x the screening levels. Lead was detected in four samples at concentrations that exceeded 100x the screening levels.

4.1.4.2 Subsurface Soil

Six subsurface soil samples were collected and analyzed for lead. All six of these samples were found to have concentrations exceeding 10x the screening level. Three of these samples exceeded 100x the screening levels.

4.1.4.3 Sediment

Eight hundred and fifty-three sediment samples were collected and analyzed for total metals. Antimony, arsenic, cadmium, copper, lead, manganese, mercury, silver, and zinc were detected in numerous samples at concentrations exceeding 10x the screening levels. Cadmium, lead, and zinc were also detected at concentrations exceeding 100x the screening levels.

4.1.4.4 Surface Water

Five surface water samples for total metals and three surface water samples for dissolved metals were collected and analyzed in segment LCDRSeg04. Concentrations of cadmium, copper, and zinc for total metals exceeded 10x the screening levels. Cadmium was detected in one sample at a concentration for dissolved metals that exceeded 10x the screening level.

4.1.5 Segment LCDRSeg05

4.1.5.1 Surface Soil

Forty-six surface soil samples from segment LCDRSeg05 were collected and analyzed for total metals. Arsenic, lead, and zinc were detected in many samples at concentrations that exceeded 10x the screening levels. Concentrations of lead in seven samples exceeded 100x the screening levels.

4.1.5.2 Subsurface Soil

Thirty subsurface soil samples were collected and analyzed for lead. Twenty-five of these samples were found to have concentrations exceeding 10x the screening level. Nine samples had concentrations exceeding 100x the screening level.

4.1.5.3 Sediment

Four hundred and thirty-three sediment samples were collected and analyzed for total metals. Antimony, arsenic, cadmium, copper, lead, manganese, mercury, silver and zinc were detected in many samples at concentrations exceeding 10x the screening levels. Cadmium, lead, and zinc were also detected at concentrations exceeding 100x the screening levels in many samples.

4.1.5.4 Surface Water

Forty-three surface water samples for total metals and one hundred and two surface water samples for dissolved metals were collected and analyzed in segment LCDRSeg05. Results for total metals show concentrations of copper, iron, lead, and zinc in excess of 10x the screening levels. Results for dissolved metals show concentrations of cadmium, lead, and zinc in excess of 10x the screening levels.

4.1.6 Segment LCDRSeg06

4.1.6.1 Surface Soil

Three surface soil samples were collected and analyzed for lead. All three samples were found to have concentrations exceeding 10x the screening level.

4.1.6.2 Subsurface Soil

Six subsurface soil samples were collected and analyzed for lead. Six of these samples were found to have concentrations exceeding 10x the screening level. Two samples had concentrations exceeding 100x the screening level.

4.1.6.3 Sediment

Ninety-two sediment samples were collected and analyzed for total metals. Antimony, arsenic, cadmium, copper, lead, manganese, mercury, silver, and zinc were detected in many samples at concentrations that exceeded 10x the screening levels. Cadmium, lead, and zinc were also detected at concentrations exceeding 100x the screening levels.

4.1.7 Recent High-Flow Flood Events

Two events usually cause flooding in the lower basin. Floods are due to either rain falling on snowpack during the fall or winter, or a rapid spring snowmelt during the months of April or May. Two recent high-flow flood events illustrate these types of floods. In early February of 1996, heavy precipitation occurred in the upper basin causing a rapid rise in river flows 68,300 cfs as measured at the USGS gage at Cataldo (Beckwith et al. 1996). The peak discharge approximated a flood event with a recurrence interval of approximately 75 years (see Table 2.3.2-1); however, this flood passed rapidly through the basin, the entire event lasting only a couple of days (USGS, 2001).

The following spring, high rainfall and snowmelt resulted in another high-flow flood event in the Coeur d'Alene Basin. The peak flows for this event measured 25,000 cfs, representing a flood event with a recurrence interval of less than 10 years. Although the peak flow was less than that of the previous year's flood event, the duration of the high discharge was much longer, with near-flood stage flows occurring for nearly one month (USGS 2001).

The magnitude of the 1997 flood event in the lower CDR and floodplains was documented on video by a helicopter survey (Coeur d'Alene Tribe, 1997). The flight began at Interstate 90, east of Kingston, and followed the river downstream to the delta with Coeur d'Alene Lake. The geographic extent of video coverage is presented in Figure 4.1-11. The figure illustrates the approximate boundary of the floodplain for this event. It also depicts areas of high and low turbidity as seen in the video footage. Roads, railroad tracks, and even the mainstem of the river were difficult to identify beneath the turbid waters. Many of the homes and other facilities situated in the floodplain were submerged. Although many site-specific details were difficult to distinguish, the magnitude and extent of sediment-laden floodwaters was evident.

Since mining began in 1886, thirteen major floods have inundated the floodplain of the Coeur d'Alene River valley and 26 smaller floods have covered much of the valley floor. Also, annual spring floods cover much of the reach of the valley floor (Bookstrom, et al, 2001). These high-flow flood events transport and deposit large volumes of potentially contaminated soil, sediment, and water throughout the floodplain.

4.2 SURFACE WATER MASS LOADING

In Part 1 of this report (Setting and Methodology, Section 5.3.1), the concept of mass loading and its use in the remedial investigation were presented. Section 4.2 of the Canyon Creek Nature and Extent further discussed the use of the plotting discrete sampling events versus the probabilistic analysis of the mass loading data in Fate and Transport.

This section presents the discrete mass loading measurements made during several low- and high-flow sampling events. The locations sampled during each event are plotted on a map of the watershed (Figures 4.2-1 through 4.2-8). Each sampling location shows the cumulative mass loading of lead or zinc and the difference in mass load from the next upstream location. The difference in mass load is indicated on the maps by the term "delta." The events were selected to show variations in mass loading throughout the stream system relative to source areas. The events selected are not intended to represent all the available mass loading data. The remainder of this section presents the indicator metal correlation and selected maps with a discussion of discrete sampling events on a watershed basis.

4.2.1 Indicator Metal Correlation

In Section 4.2 of the Canyon Creek Watershed Nature and Extent, the correlation of chemical concentrations for 8 chemicals of potential concern (COPCs) are evaluated for total lead and

dissolved zinc. These two metals appear to be reasonable indicators of the other chemicals of potential concern. The following mass loading discussion is limited to total lead and dissolved zinc.

4.2.2 Main Stem Watershed Mass Loading

Of the available sampling data, four sampling events were selected and mapped. Table 4.2-1 summarizes the sampling events, sampling locations and calculated mass loads for total lead and dissolved zinc. The sampling events used were November 1997 (Figures 4.2-1 and 4.2-5), November 1998 (Figures 4.2-2 and 4.2-6), May 1998 (Figures 4.2-3 and 4.2-7) and May 1999 (Figures 4.2-4 and 4.2-8). Data from these sampling events are summarized in Table 4.2-1.

The following sections discuss observations made from plotting the low- and high-flow mass loading data.

4.2.2.1 Total Lead Mass Loading

Loading observations are as follows:

As shown in Table 4.2-1 and on Figures 4.2-1 and 4.2-2 (the November 1997 and November 1998 low-flow sampling events), the total lead mass load varies between LC55 and LC60. Total lead loading, measured at LC60, entering the lake during the low-flow sampling events varied from 137 to 160 pounds per day.

The high-flow event of May 1998 (Figure 4.2-3), shows that LC50 had a total lead load of 1,545 pounds per day. The differences in mass load at LC55 and LC60 were 1,076 and -1768 pounds per day, respectively. The USGS synoptic sampling event (Figure 4.2-4) indicates that the total lead loading at sampling location LC55 and LC60 were 9,303 and 20,014 pounds per day, respectively. The differences were –495 pounds per day and 710 pounds per day, respectively.

4.2.2.2 Dissolved Zinc Mass Loading

Loading observations are as follows:

As shown in Table 4.2-1 and on Figures 4.2-1 and 4.2-2 (the November 1997 and November 1998 low-flow sampling events), the dissolved zinc mass load at sampling locations LC55 and LC 60 was variable. Dissolved zinc loading, measured at LC60, entering the lake during the low-flow sampling events varied from 3,345 to 3,551 pounds per day.

The high-flow event of May 1998 (Figure 4.2-3), shows that LC55 and LC60 had dissolved zinc loads of 7,206 and 9,492 pounds per day, respectively. The differences at LC55 and LC 60 were 1,152 and 2,287 pounds per day, respectively. The USGS synoptic sampling event (Figure 4.2-4)

indicates that zinc loading at sampling locations LC55 and LC60 were 6,546 and 6,004 pounds per day, respectively. The differences were 779 and -542 pounds per day, respectively.

4.2.2.3 Groundwater Mass Loading

The mass loading of metals in groundwater throughout this watershed is expected to be variable. A widespread study of groundwater flow directions in this watershed has not been conducted. Existing information indicates that groundwater flow has two components: local groundwater flows toward the river, while overall flow direction is parallel to river flow. Additional study may be needed to evaluate groundwater flow near the channel axis and the variations in observed mass loading.

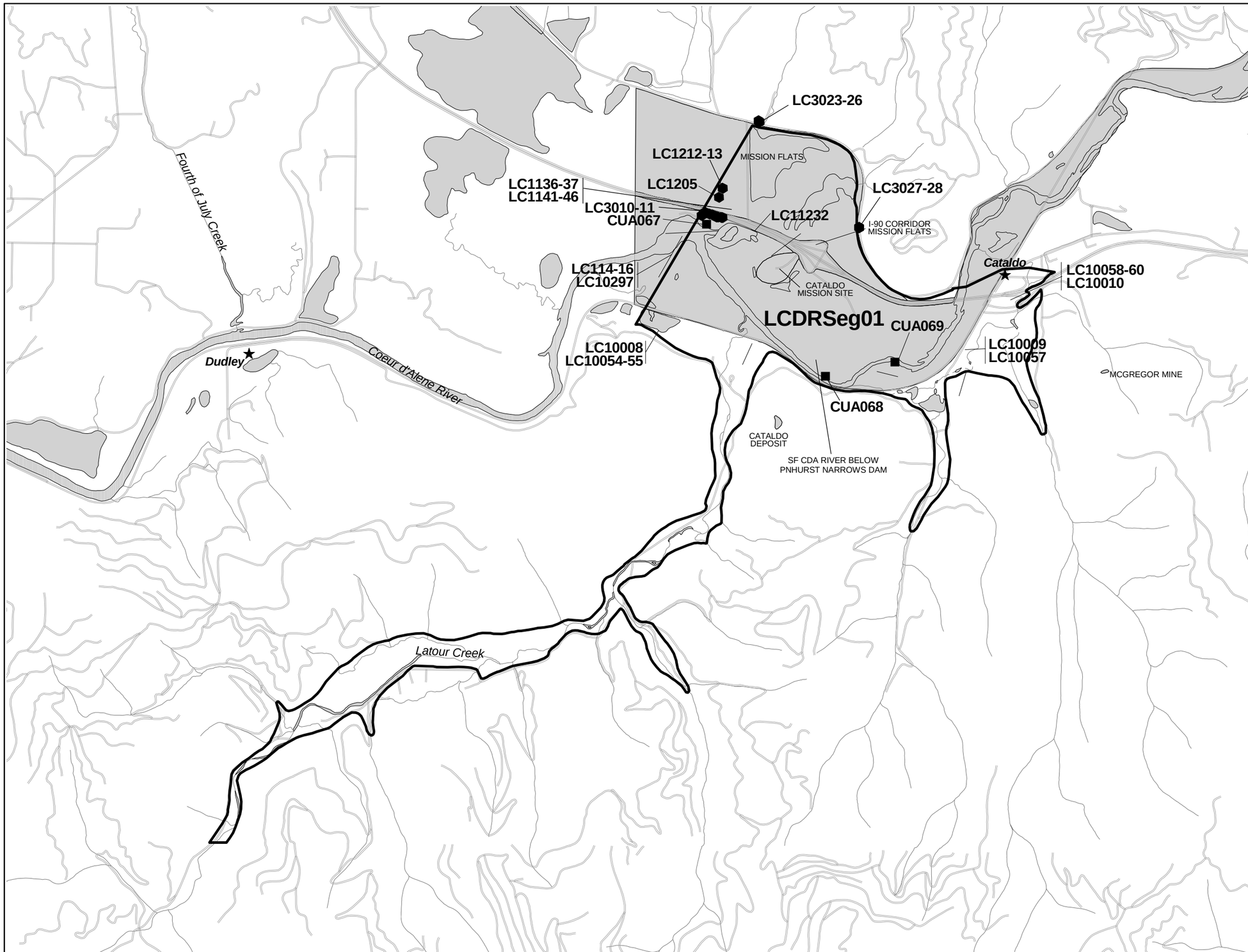


Figure 4.1-1
Lower Coeur d'Alene River Segment
LCDRSeg01
Source Areas and Soil/Sediment Sampling Locations

LEGEND

- Floodplain Sampling Location
- River Sampling Location
- Ground Sampling Location
- Common Use Area Sampling Location
- Stream
- Road
- City
- Lower Coeur d'Alene River Segment 1
- Source Area and Name
- Lake/River/Floodplain

Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner, Inc., CH2M HILL, and the Bureau of Land Management.

2) Sampling locations obtained from URS Greiner, Inc. Technical Data Management database as of 3/29/00.

N

SCALE 1:24,000

0 0.5 Miles

027-RI-CO-102Q
Coeur d' Alene Basin RI/FS
RI REPORT

EPA REGION 10

Doc Control 4162500.6615.05.a
Generation 1
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E:soil
L: LCDRSeg01 soil
07/19/01

This Map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983

Date of Plot: July 19, 2001

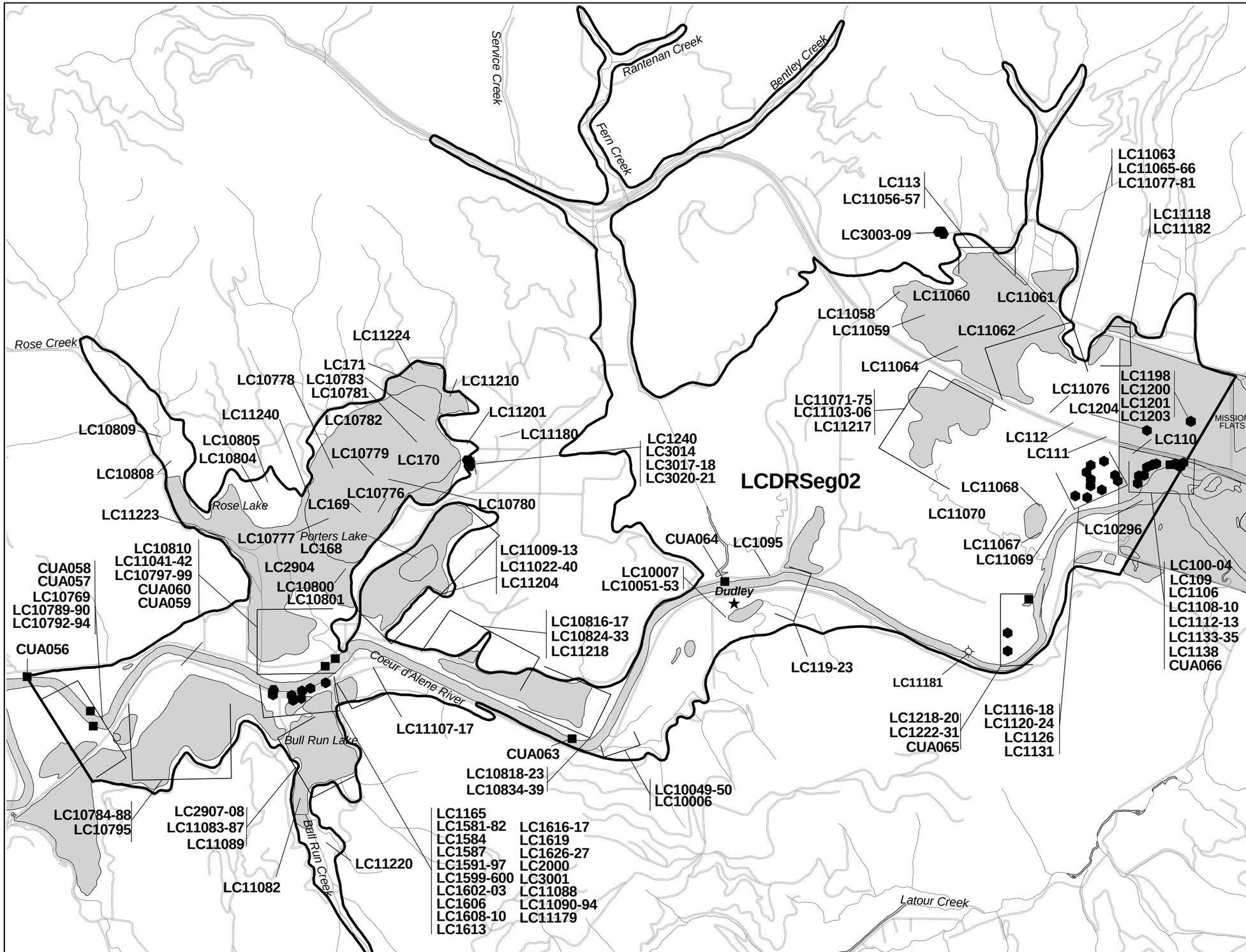

Figure 4.1-2
Lower Coeur d'Alene River Segment
LCDRSeg02
Source Areas and Soil/Sediment Sampling Locations

LEGEND

- Ground Sampling Location
- River Sampling Location
- Lake Sampling Location
- Floodplain Sampling Location
- Common Use Area Sampling Location
- Stream
- Road
- City
- Lower Coeur d'Alene River Segment 2
- Source Area and Name
- Lake/River/Floodplain

Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner, Inc., CH2M HILL, and the Bureau of Land Management.

2) Sampling locations obtained from URS Greiner, Inc. Technical Data Management database as of 3/29/00.

SCALE 1:36,000

0 0.5 Miles

N

027-RI-CO-102Q
Coeur d' Alene Basin RI/FS
RI REPORT

EPA REGION 10

Doc Control 4162500.6615.05.a
Generation 1
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V: LCDRSeg02 soil
E:soil
L: LCDRSeg02 soil
07/19/01

This Map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983

Date of Plot: July 19, 2001

Figure 4.1-3
Lower Coeur d'Alene River Segment
LCDRSeg02
Surface Water Sampling Locations

LEGEND

- River Sampling Location
- Lake Sampling Location
- Stream
- Road
- City
- Lower Coeur d'Alene River Segment 2
- Lake/River/Floodplain

Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner, Inc., CH2M HILL, and the Bureau of Land Management.

2) Sampling locations obtained from URS Greiner, Inc. Technical Data Management database as of 3/29/00.

N

SCALE 1:36,000

0 0.5 Miles

027-RI-CO-102Q
Coeur d' Alene Basin RI/FS
RI REPORT

EPA REGION 10

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7/19/2001

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Date of Plot: July 19, 2001

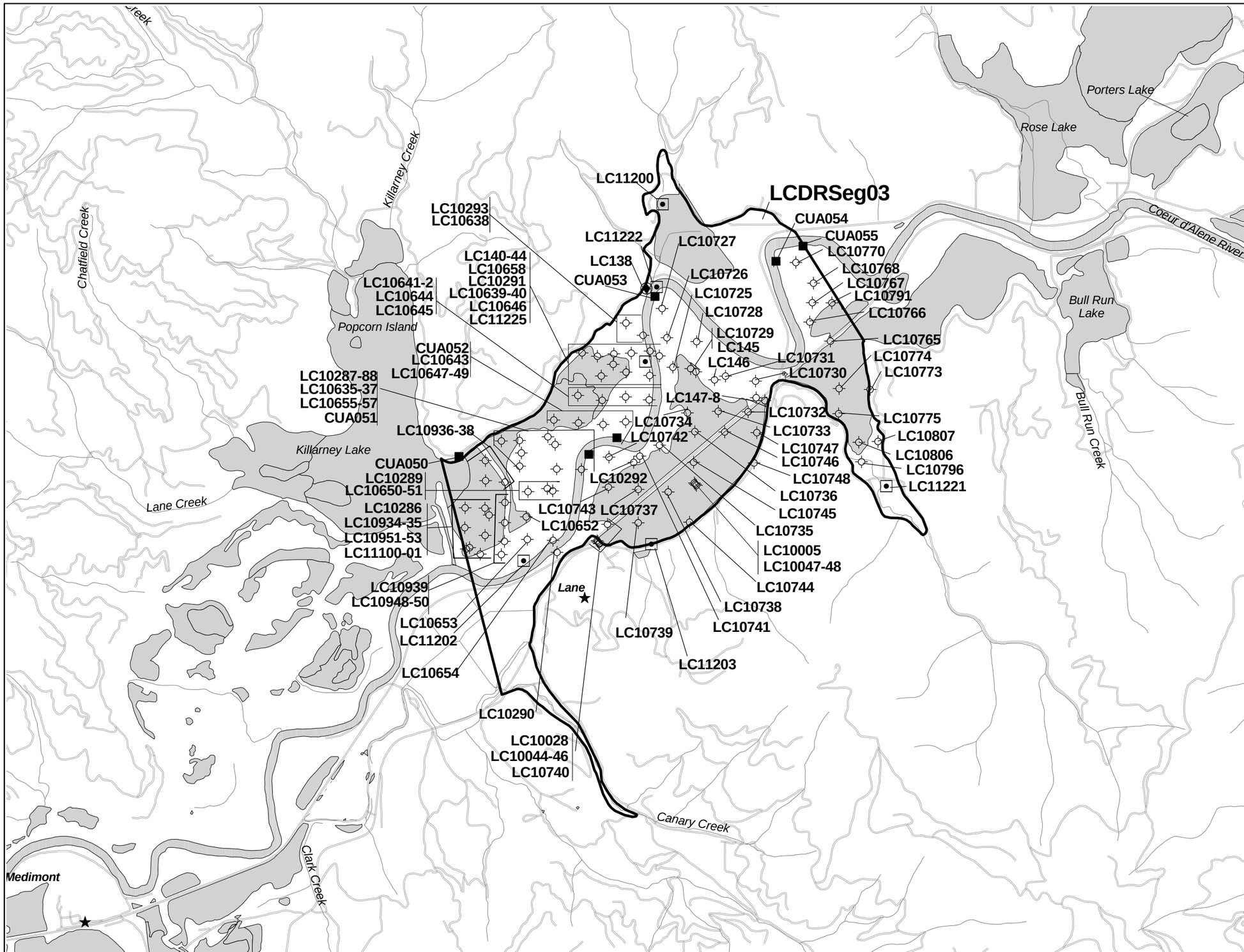

Figure 4.1-4
Lower Coeur d'Alene River Segment
LCDRSeg03
Soil/Sediment Sampling Locations

LEGEND

- River Sampling Location
- Floodplain Sampling Location
- Lake Sampling Location
- Common Use Area Sampling Location
- Stream
- Road
- City
- Lower Coeur d'Alene River Segment 3
- Lake/River/Floodplain

Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner, Inc., CH2M HILL, and the Bureau of Land Management.

2) Sampling locations obtained from URS Greiner, Inc. Technical Data Management database as of 3/29/00.

N

SCALE 1:36,000

0 0.5 Miles

027-RI-CO-102Q
Coeur d' Alene Basin RI/FS
RI REPORT

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7/19/01

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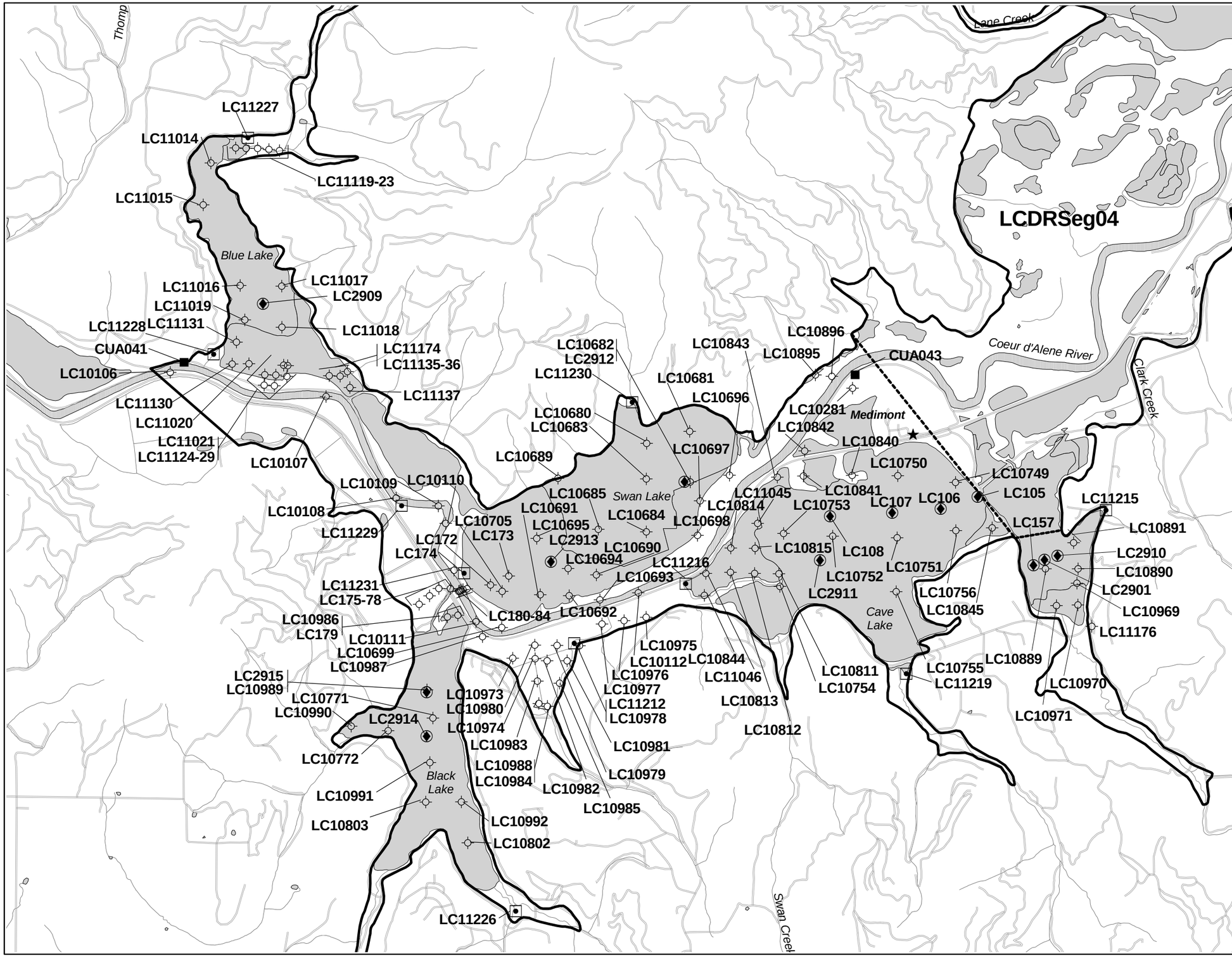

Figure 4.1-5
Lower Coeur d'Alene River Segment
LCDRSeg04 West Half
Soil/Sediment Sampling Locations

LEGEND

- River Sampling Location
- Lake Sampling Location
- Tailings Sampling Location
- Floodplain Sampling Location
- Stream
- Road
- City
- Lower Coeur d'Alene River Segment 4
- Lake/River/Floodplain
- Matchline for East and West Areas

Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner, Inc., CH2M HILL, and the Bureau of Land Management.

2) Sampling locations obtained from URS Greiner, Inc. Technical Data Management database as of 3/29/00.

SCALE 1:36,000

0 0.5 Miles

N

027-RI-CO-102Q
Coeur d' Alene Basin RI/FS
RI REPORT

EPA REGION 10

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7/19/01

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Date of Plot: July 19, 2001

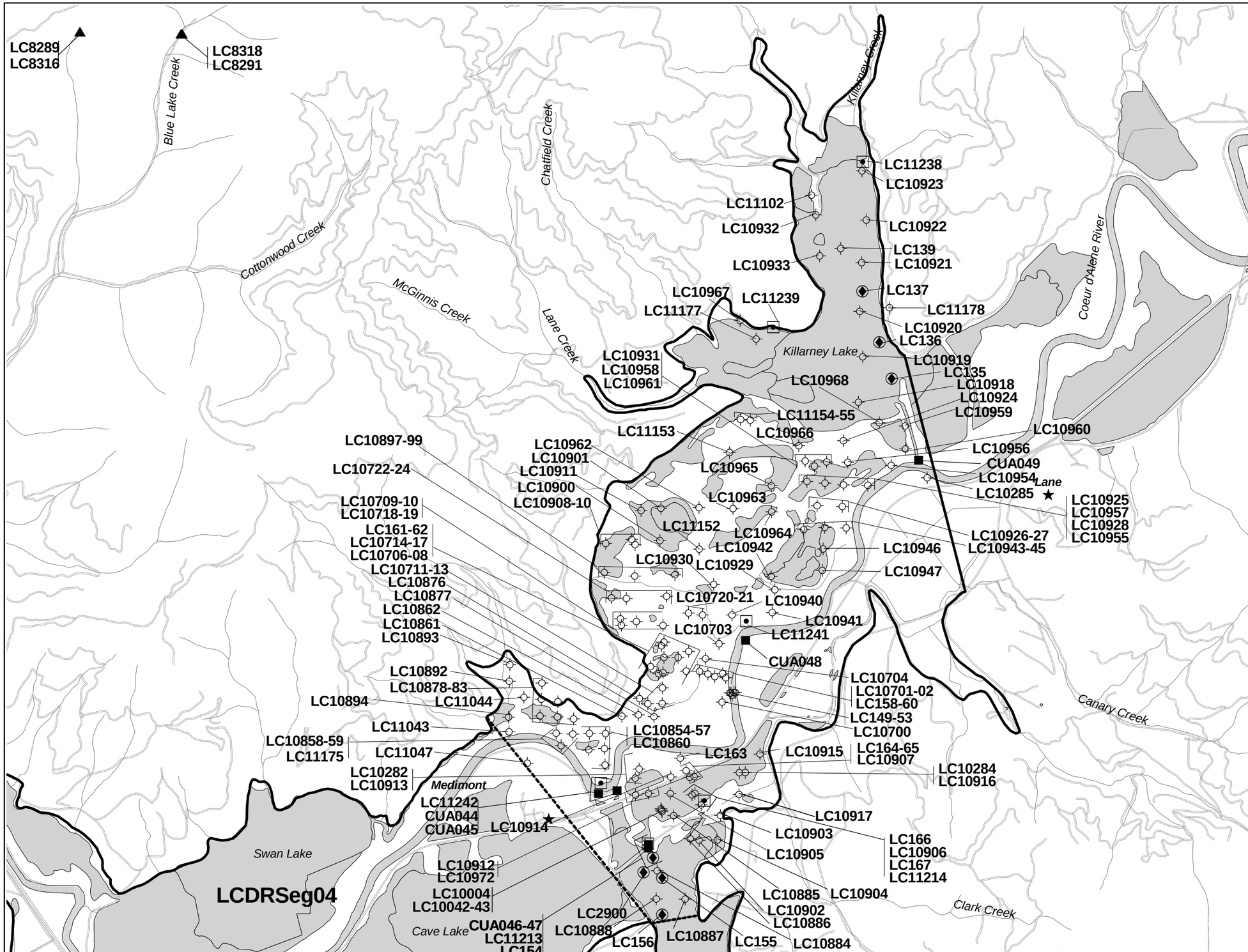

Figure 4.1-6
Lower Coeur d'Alene River Segment
LCDRSeg04 East Half
Soil/Sediment Sampling Locations

LEGEND

- River Sampling Location
- Lake Sampling Location
- Tailings Sampling Location
- Floodplain Sampling Location
- Stream
- Road
- City
- Lower Coeur d'Alene River Segment 4
- Lake/River/Floodplain
- Matchline for East and West Areas

Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner, Inc., CH2M HILL, and the Bureau of Land Management.

2) Sampling locations obtained from URS Greiner, Inc. Technical Data Management database as of 3/29/00.

SCALE 1:36,000

0 0.5 Miles

N

027-RI-CO-102Q
Coeur d' Alene Basin RI/FS
RI REPORT

EPA REGION 10

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E:east
L: LCDRSeg04 east soil
7/19/01

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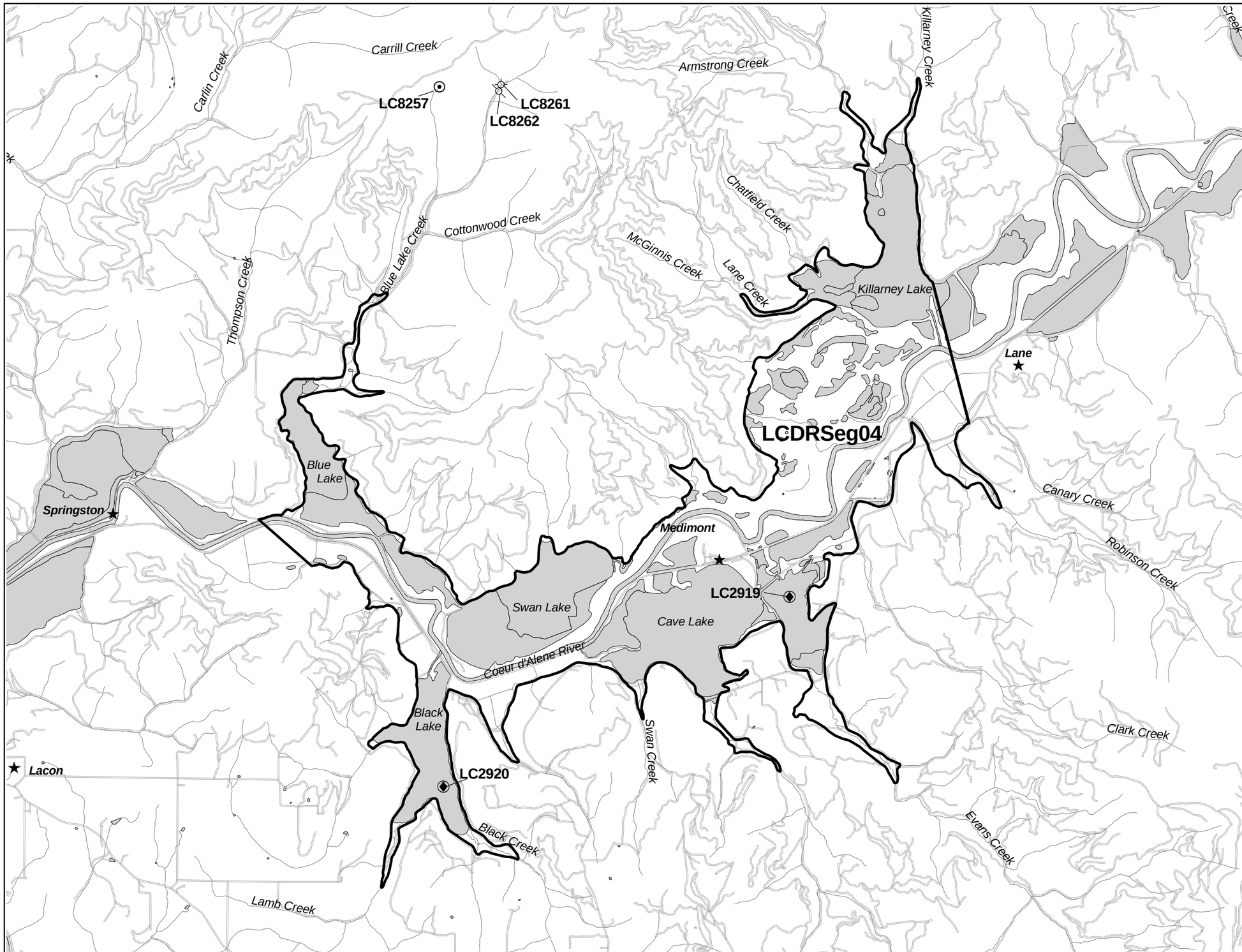

Figure 4.1-7
Lower Coeur d'Alene River Segment
LCDRSeg04
Surface Water Sampling Locations

LEGEND

- Adit Sampling Location
- Lake Sampling Location
- River Sampling Location
- Seep Sampling Location
- Stream
- Road
- City
- Lower Coeur d'Alene River Segment 4
- Lake/River/Floodplain

Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner, Inc., CH2M HILL, and the Bureau of Land Management.

2) Sampling locations obtained from URS Greiner, Inc. Technical Data Management database as of 3/29/00.

SCALE 1:60,000

0 0.5 1 Miles

N

027-RI-CO-102Q
Coeur d' Alene Basin RI/FS
RI REPORT

EPA REGION 10

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L: LCDRSeg04 SW
7/19/01

This Map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983

Date of Plot: July 19, 2001

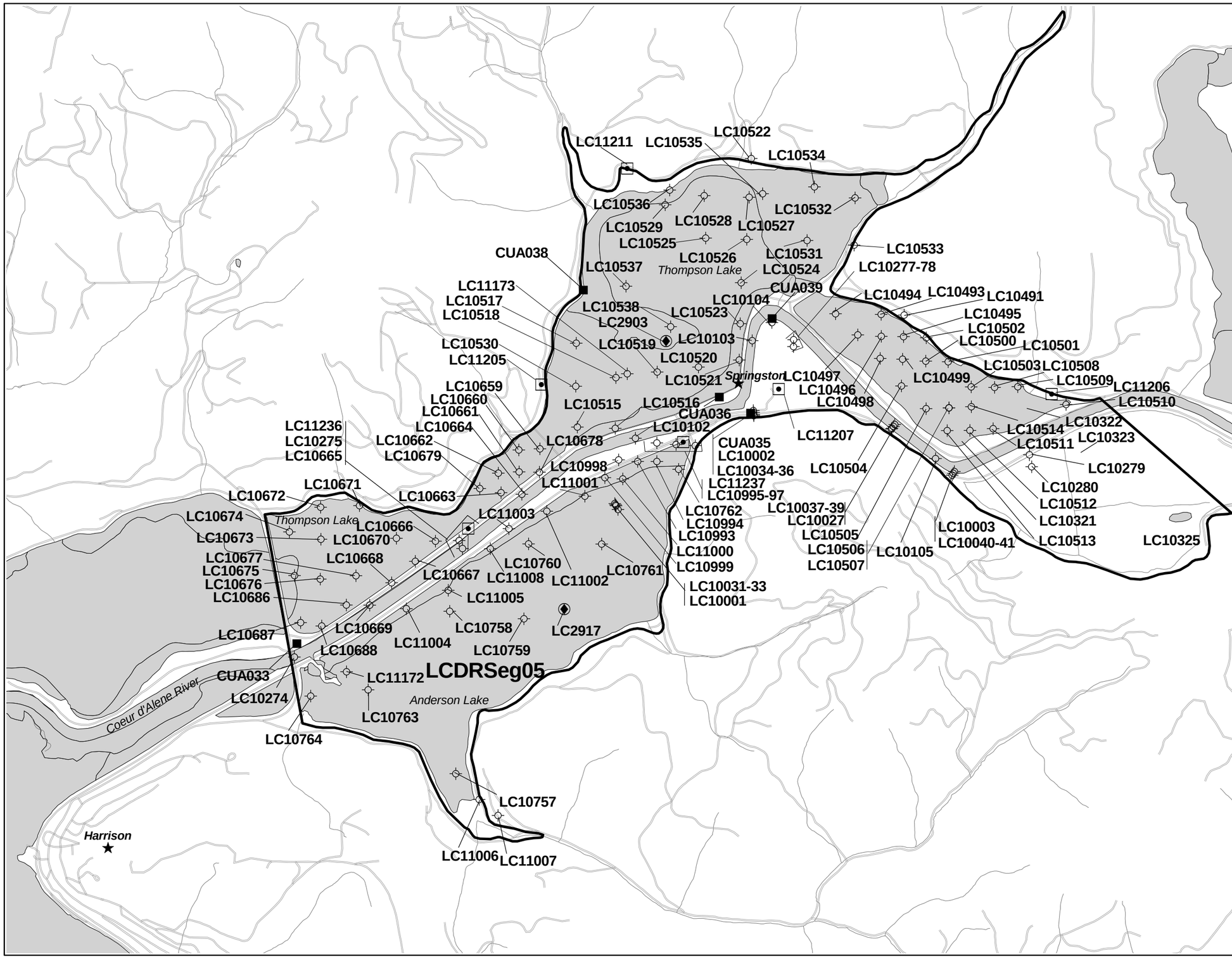

Figure 4.1-8
Lower Coeur d'Alene River Segment
LCDRSeg05
Soil/Sediment Sampling Locations

LEGEND

- River Sampling Location
- Lake Sampling Location
- Floodplain Sampling Location
- Stream
- Road
- City
- Lower Coeur d'Alene River Segment 5
- Lake/River/Floodplain

Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner, Inc., CH2M HILL, and the Bureau of Land Management.

2) Sampling locations obtained from URS Greiner, Inc. Technical Data Management database as of 3/29/00.

N

SCALE 1:24,000

0 0.5 Miles

027-RI-CO-102Q
Coeur d' Alene Basin RI/FS
RI REPORT

EPA REGION 10

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7/19/01

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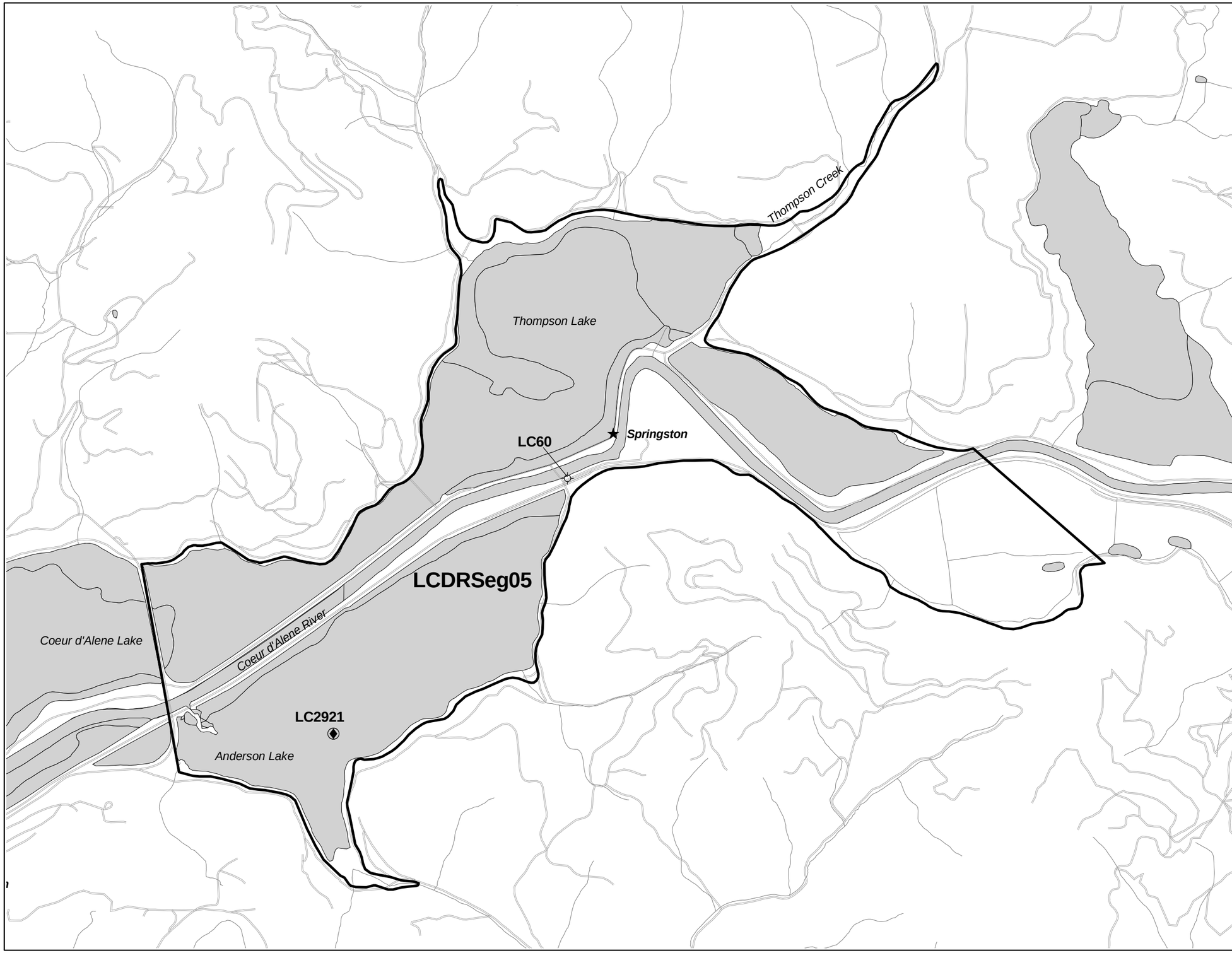

Figure 4.1-9
Lower Coeur d'Alene River Segment
LCDRSeg05
Surface Water Sampling Locations

LEGEND

- River Sampling Location
- Lake Sampling Location
- Stream
- Road
- City
- Lower Coeur d'Alene River Segment 5
- Lake/River/Floodplain

Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner, Inc., CH2M HILL, and the Bureau of Land Management.

2) Sampling locations obtained from URS Greiner, Inc. Technical Data Management database as of 3/29/00.

N

SCALE 1:24,000

0 0.5 Miles

027-RI-CO-102Q
Coeur d' Alene Basin RI/FS
RI REPORT

EPA REGION 10

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E:SW
L: LCDRSeg05 SW
7/19/01

This Map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983

Date of Plot: July 21, 2001

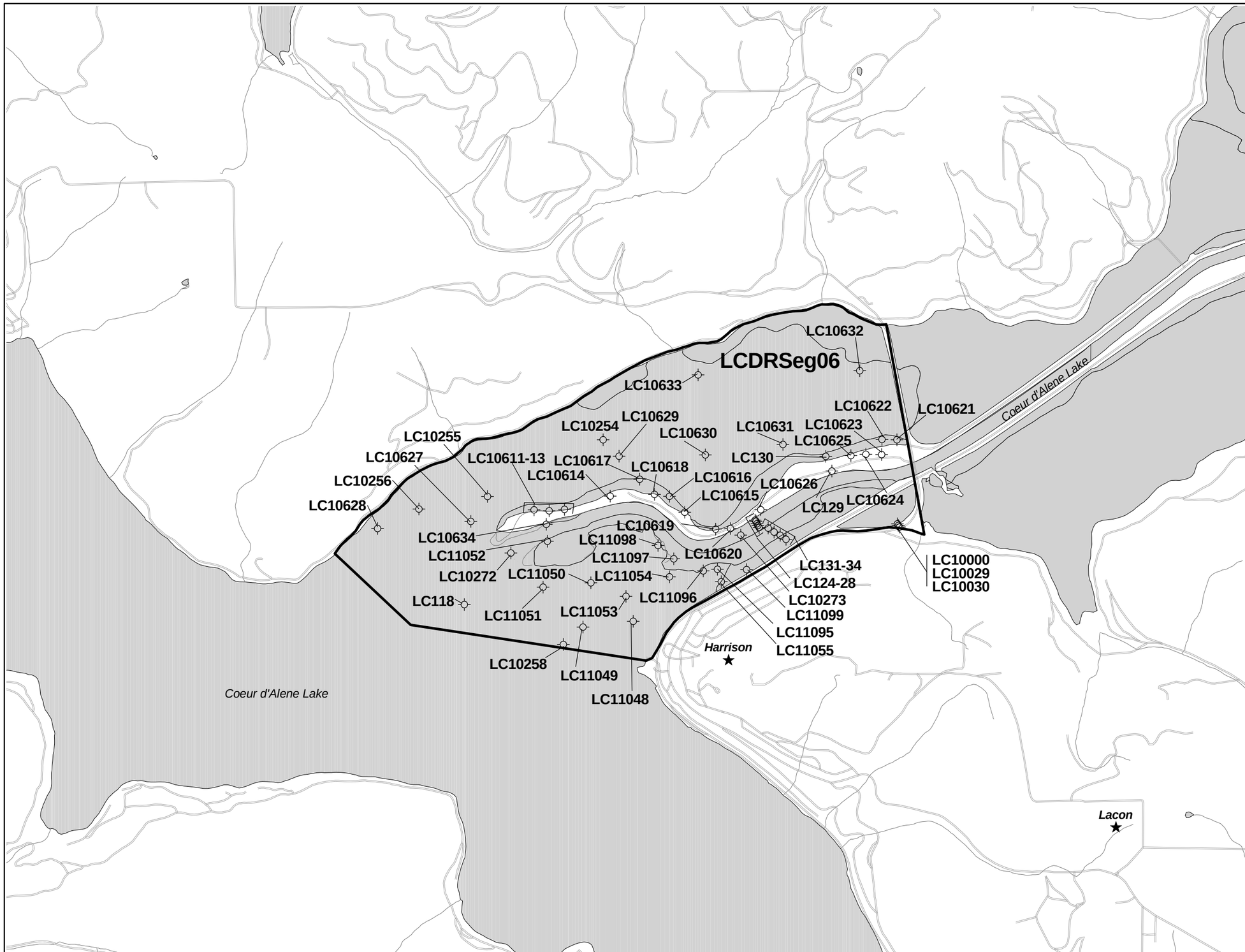

Figure 4.1-10
Lower Coeur d'Alene River Segment
LCDRSeg06
Soil/Sediment Sampling Locations

LEGEND

- River Sampling Location
- Stream
- Road
- City
- Lower Coeur d'Alene River Segment 6
- Lake/River/Floodplain

Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner, Inc., CH2M HILL, and the Bureau of Land Management.

2) Sampling locations obtained from URS Greiner, Inc. Technical Data Management database as of 3/29/00.

N

SCALE 1:12,000

0 — 0.5 Miles

027-RI-CO-102Q
Coeur d' Alene Basin RI/FS
RI REPORT

EPA REGION 10

Doc Control 4162500.6615.05.a
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7/19/01

This Map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983

Date of Plot: JUly 19, 2001

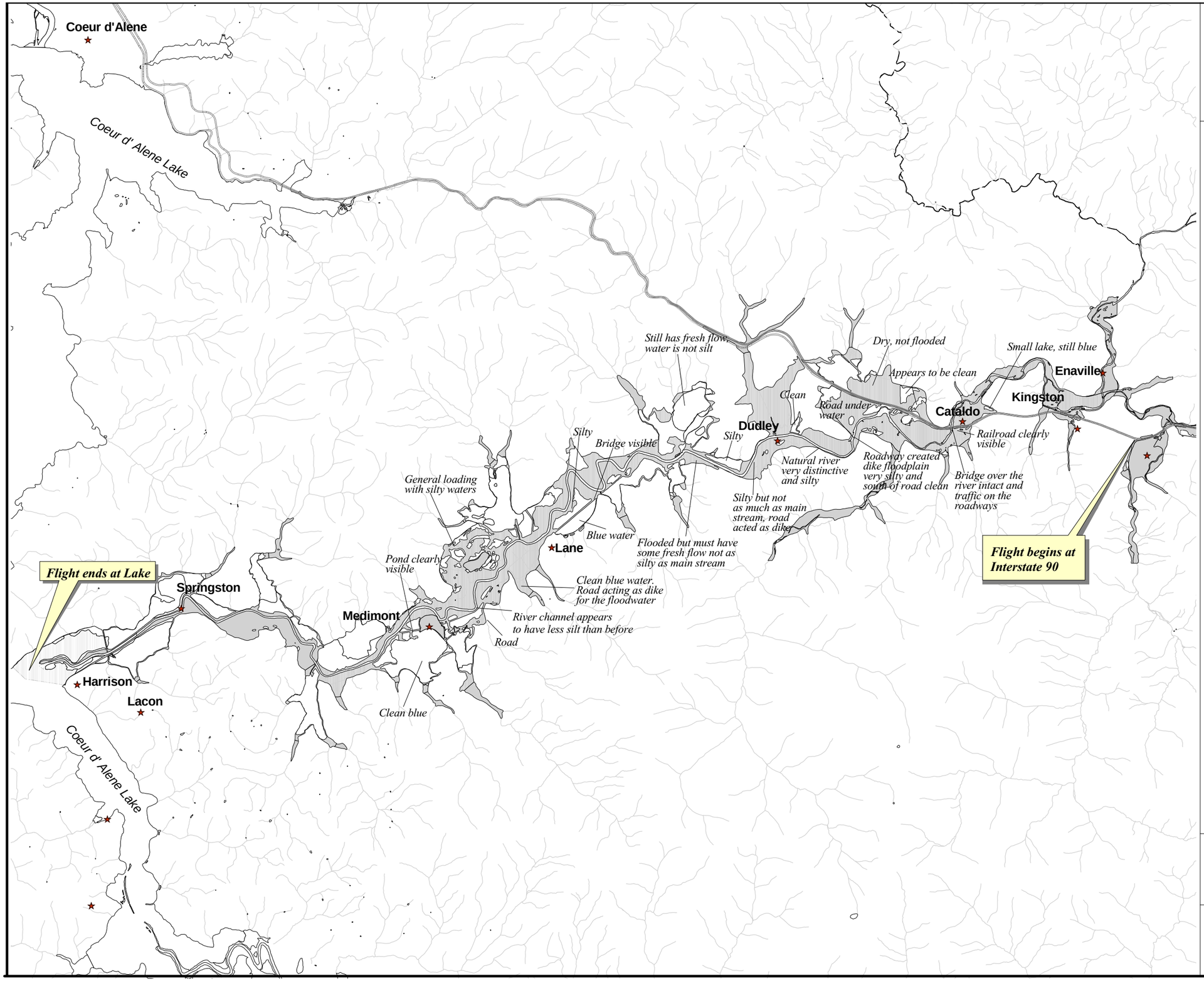
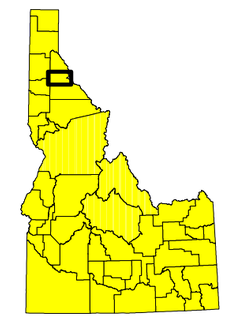


Figure 4.1-11
1997 Helicopter Flyover of High-Flow Flood Event in Coeur d' Alene River and Lateral Lakes

LEGEND

- Cities
- Lakes/Rivers
- Floodplain
- Streams
- Interstate 90



Location Map

NOTES

1) Base map coverages obtained from the Bureau of Land Managment URS Greiner, and CH2M Hill.

SCALE: 1: 170,000

0 3 Miles

N

027-RI-CO-102Q
Coeur d' Alene Basin RI/FS
RI Report

EPA REGION 10

Doc. Control: 4162500.6615.05.a
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Layout: Map with notes
08/08/01

This map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983

Date of Plot: August 8, 2001

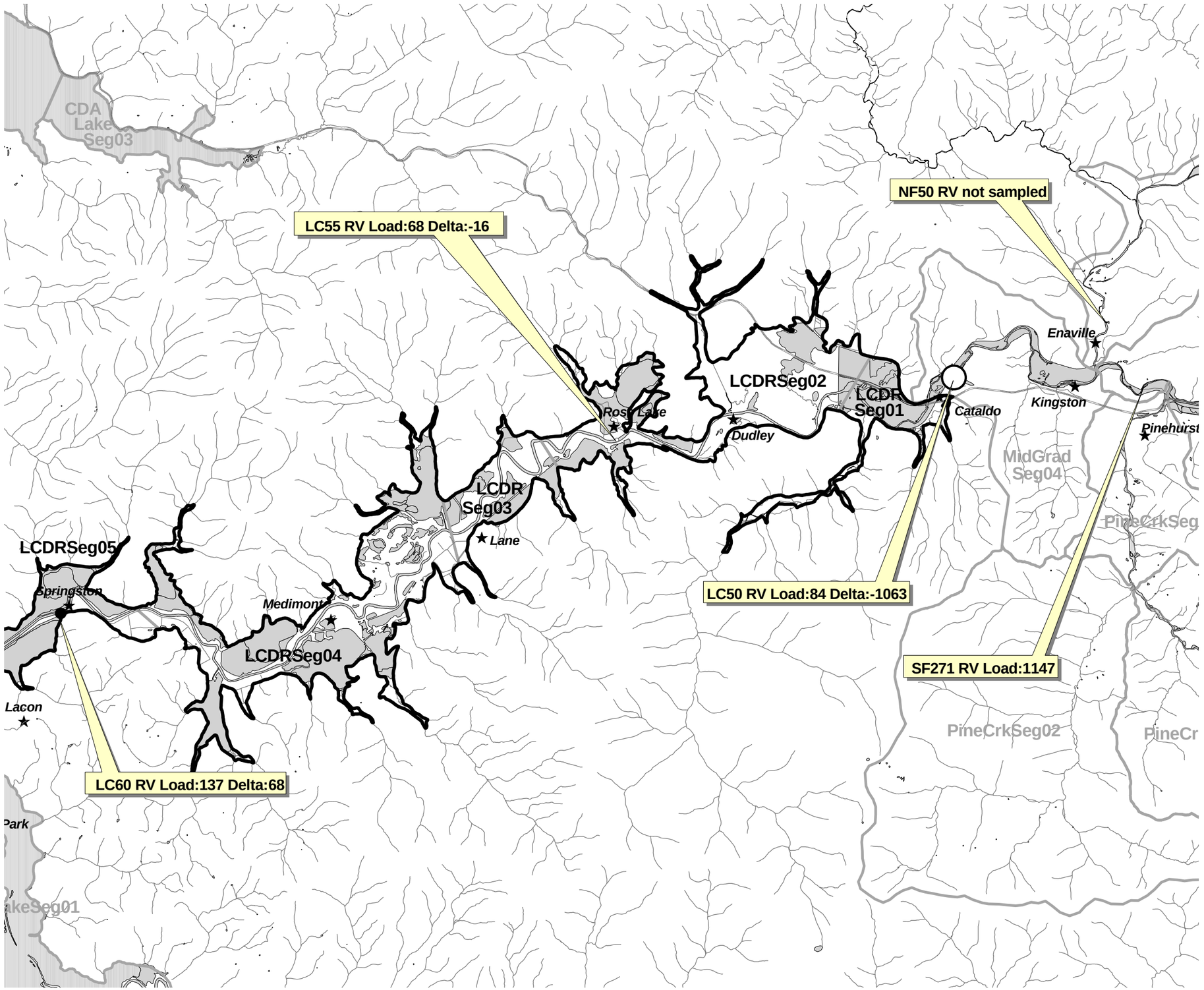


Figure 4.2-1
Lower Coeur d' Alene River Watershed
Total Lead Mass Loading
Sampling Results Nov. 1997

LEGEND

Sampling Location — Values are lbs/day

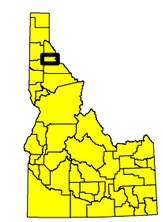
LC55 RV Load: 68 Delta: -16

Location Type:

RV: River/Stream Sampling Location

(-) Neg. (+) Pos. — Delta of Mass Load Compared to Preceeding Upstream Sampling Location

- Delta Range: 0 - 0.9
- Delta Range: 1 - 20
- Delta Range: 20 - 40
- Delta Range: 40 - 100
- Delta Range: 100 - 150
- Delta Range: > 150
- Stream
- Interstate 90
- City
- River/Lake
- Lower Coeur d'Alene River Watershed
- River Segment
- Source Area



Location Map

NOTES

1) Base map coverages obtained from the Coeur d' Alene Tribe, URS Greiner Inc., CH2M HILL, and the Burueau of Land Management.

SCALE 1: 136,000

0 — 3 Miles

027-RI-C0-102Q
Coeur d' Alene RI/FS
RI Report

EPA REGION 10

Document Control 4162500.6615.05a
Generation 1
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L: SF-nov97-lead
7/21/2001

This map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983.

Date of Plot: July 21, 2001

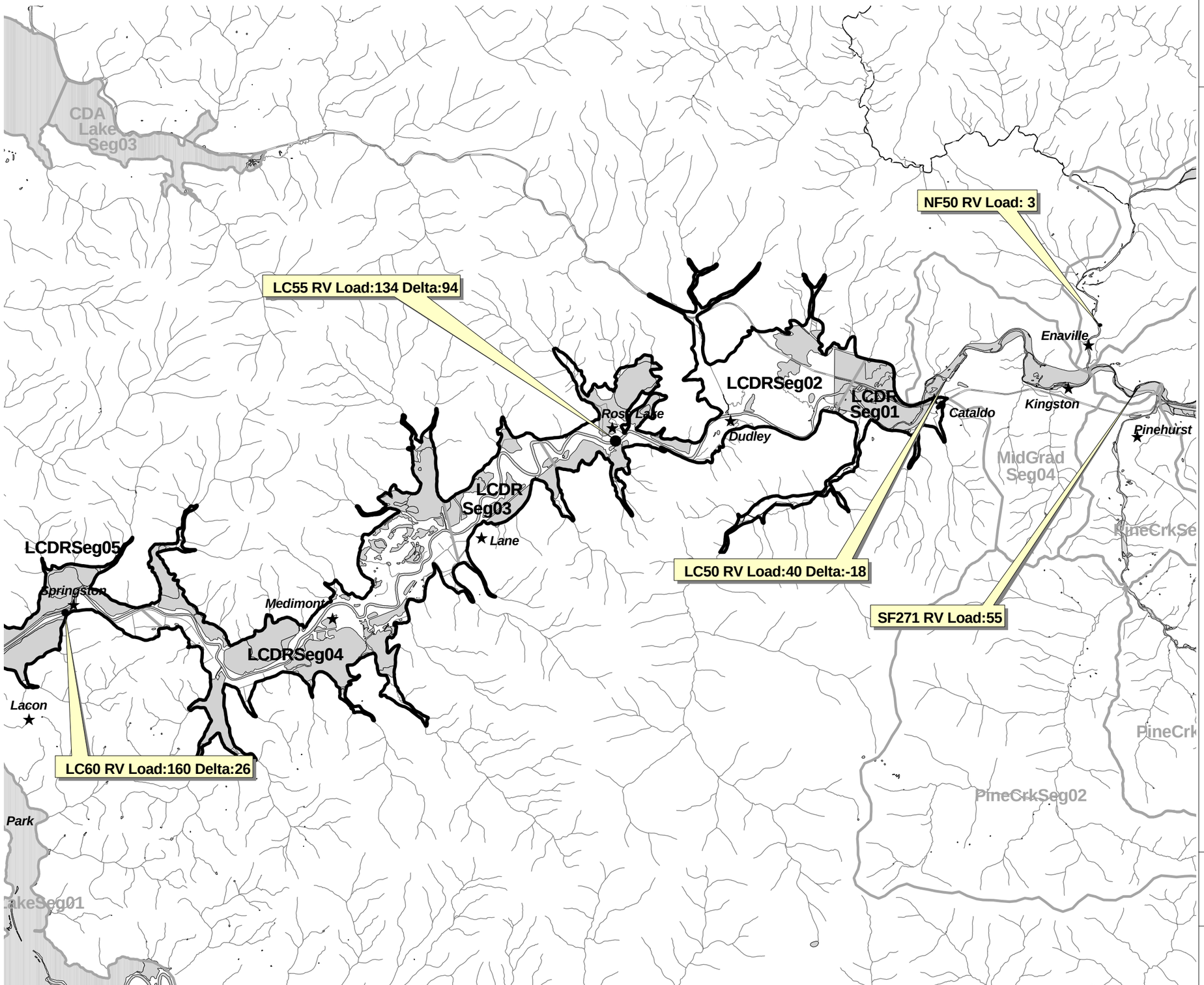


Figure 4.2-2
Lower Coeur d' Alene River Watershed
Total Lead Mass Loading
Sampling Results Nov. 1998

LEGEND

Sampling Location — Values are lbs/day

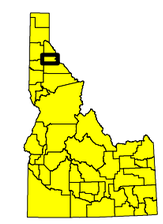
LC 55 RV Load: 134 Delta: 94

Location Type:

RV: River/Stream Sampling Location

(-) Neg. (+) Pos. — Delta of Mass Load Compared to Preceeding Upstream Sampling Location

- Delta Range: 0 - 0.9
- Delta Range: 1 - 20
- Delta Range: 20 - 40
- Delta Range: 40 - 100
- Delta Range: 100 - 150
- Delta Range: > 150
- Stream
- Interstate 90
- City
- River/Lake
- Lower Coeur d'Alene River Watershed
- River Segment
- Source Area



Location Map

NOTES

1) Base map coverages obtained from the Coeur d' Alene Tribe, URS Greiner Inc., CH2M HILL, and the Burueau of Land Management.

SCALE 1: 136,000

0 1 2 3 Miles

N

027-RI-C0-102Q
Coeur d' Alene RI/FS
RI Report

EPA REGION 10

Document Control 4162500.05.a
Generation 1
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7/21/2001

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Date of Plot: July 21, 2001

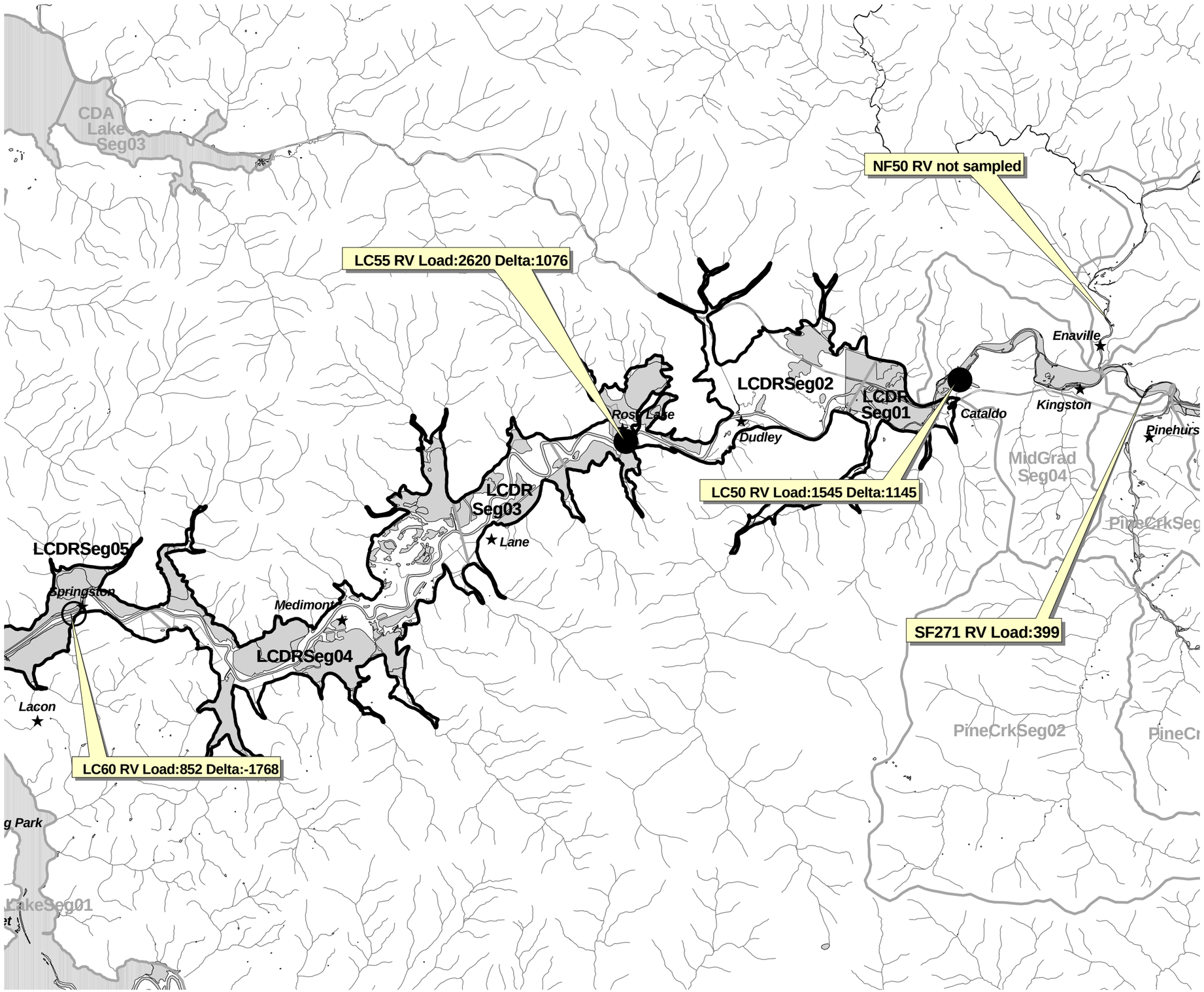


Figure 4.2-3
Lower Coeur d' Alene River Watershed
Total Lead Mass Loading
Sampling Results May 1998

LEGEND

Sampling Location — Values are lbs/day

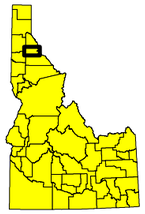
LC50 RV Load: 1545 Delta: 1145

Location Type:

RV: River/Stream Sampling Location

(-) Neg. (+) Pos. — Delta of Mass Load Compared to Preceeding Upstream Sampling Location

- Delta Range: 0 - 0.9
- Delta Range: 1 - 20
- Delta Range: 20 - 40
- Delta Range: 40 - 100
- Delta Range: 100 - 150
- Delta Range: > 150
- Stream
- Interstate 90
- City
- River/Lake
- Lower Coeur d'Alene River Watershed
- River Segment
- Source Area



Location Map

NOTES

1) Base map coverages obtained from the Coeur d' Alene Tribe, URS Greiner Inc., CH2M HILL, and the Burueau of Land Management.

SCALE 1: 136,000

0 1 2 3 Miles

N

027-RI-C0-102Q
Coeur d' Alene RI/FS
RI Report

EPA REGION 10

Document Control 4162500.6615.05.a
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7/21/2001

This map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983.

Date of Plot: July 21, 2001

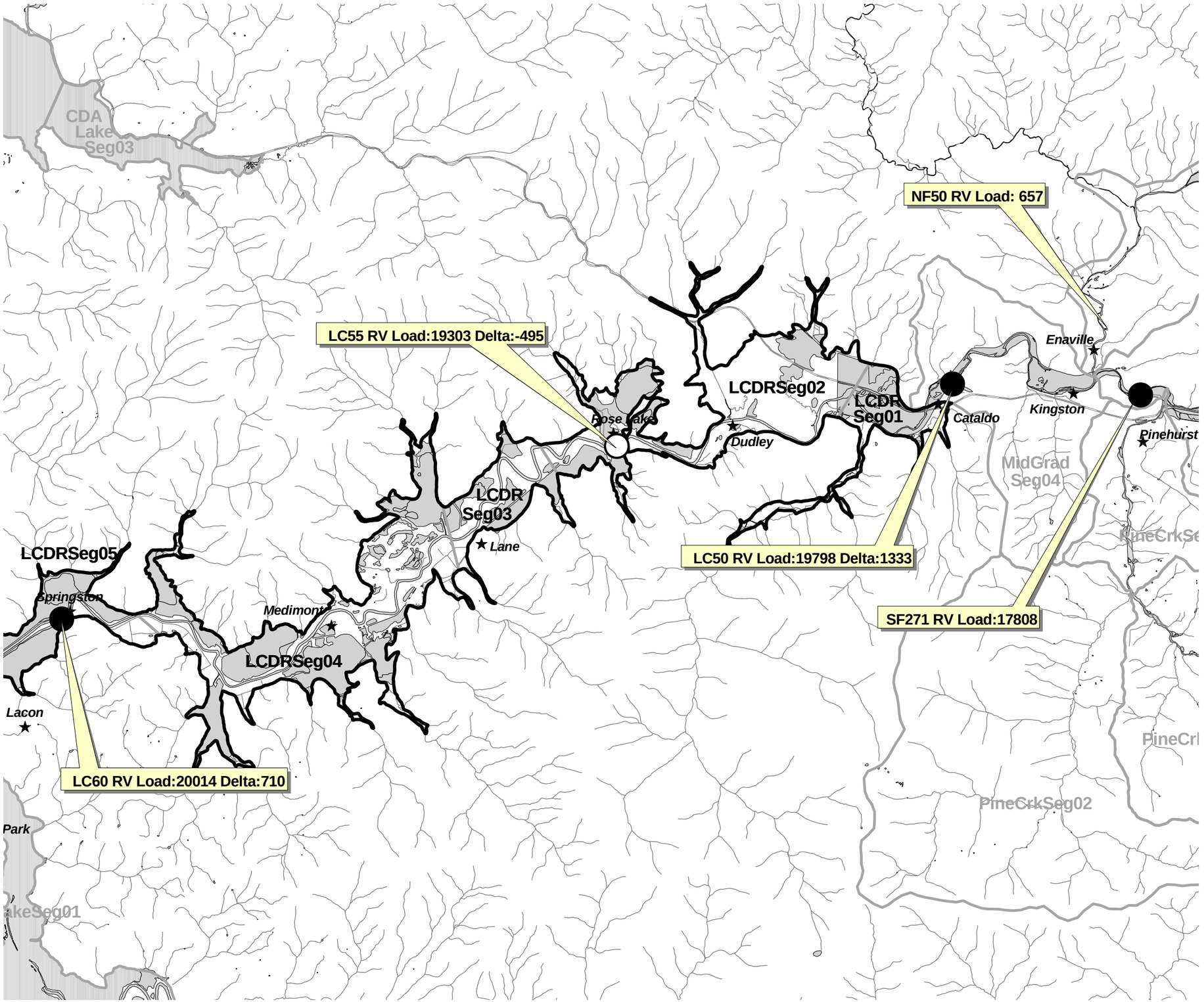


Figure 4.2-4
Lower Coeur d' Alene River Watershed
Total Lead Mass Loading
Sampling Results May 1999

LEGEND

Sampling Location — Values are lbs/day

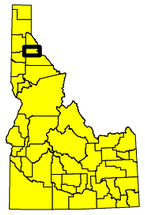
LC60 RV Load: 20014 Delta: 710

Location Type:

RV: River/Stream Sampling Location

(-) Neg. (+) Pos. — Delta of Mass Load Compared to Preceeding Upstream Sampling Location

- Delta Range: 0 - 0.9
- Delta Range: 1 - 20
- Delta Range: 20 - 40
- Delta Range: 40 - 100
- Delta Range: 100 - 150
- Delta Range: > 150
- Stream
- Interstate 90
- City
- River/Lake
- Lower Coeur d'Alene River Watershed
- River Segment
- Source Area



Location Map

NOTES

1) Base map coverages obtained from the Coeur d' Alene Tribe, URS Greiner Inc., CH2M HILL, and the Burueau of Land Management.

SCALE 1: 136,000

0 1 2 3 Miles

N

027-RI-C0-102Q
Coeur d' Alene RI/FS
RI Report

EPA REGION 10

Document Control 4162500.6615.05.a
Generation 1
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V: may99-lead
L: may99-lead
7/21/2001

This map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983.

Date of Plot: July 21, 2001

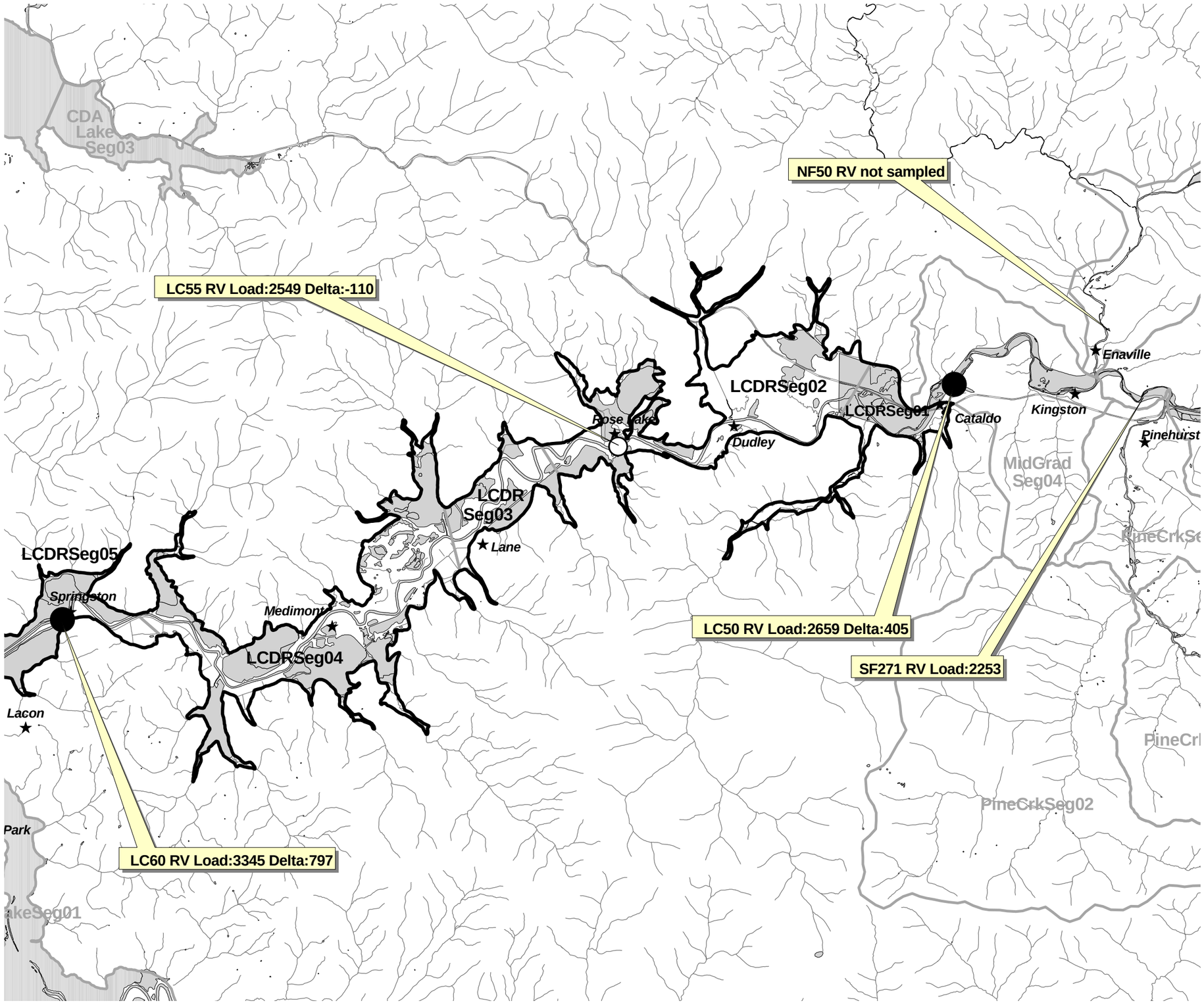


Figure 4.2-5
Lower Coeur d' Alene River Watershed
Dissolved Zinc Mass Loading
Sampling Results Nov. 1997

LEGEND

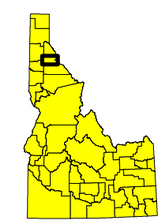
Sampling Location — Values are lbs/day

LC60 RV Load: 3626 Delta: 1077

Location Type:
RV: River/Stream Sampling Location

(-) Neg. (+) Pos. — Delta of Mass Load Compared to Preceeding Upstream Sampling Location

- Delta Range: 0 - 0.9
- Delta Range: 1 - 20
- Delta Range: 20 - 40
- Delta Range: 40 - 100
- Delta Range: 100 - 150
- Delta Range: > 150
- Stream
- Interstate 90
- City
- River/Lake
- Lower Coeur d'Alene River Watershed
- River Segment
- Source Area



Location Map

NOTES

1) Base map coverages obtained from the Coeur d' Alene Tribe, URS Greiner Inc., CH2M HILL, and the Burueau of Land Management.

SCALE 1: 160,000

0 — 3 Miles

N

027-RI-C0-102Q
Coeur d' Alene RI/FS
RI Report

EPA REGION 10

Document Control 4162500.6615.05a
Generation 1
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V: nov97-zinc
L: nov97-zinc
7/21/2001

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Date of Plot: July 21, 2001

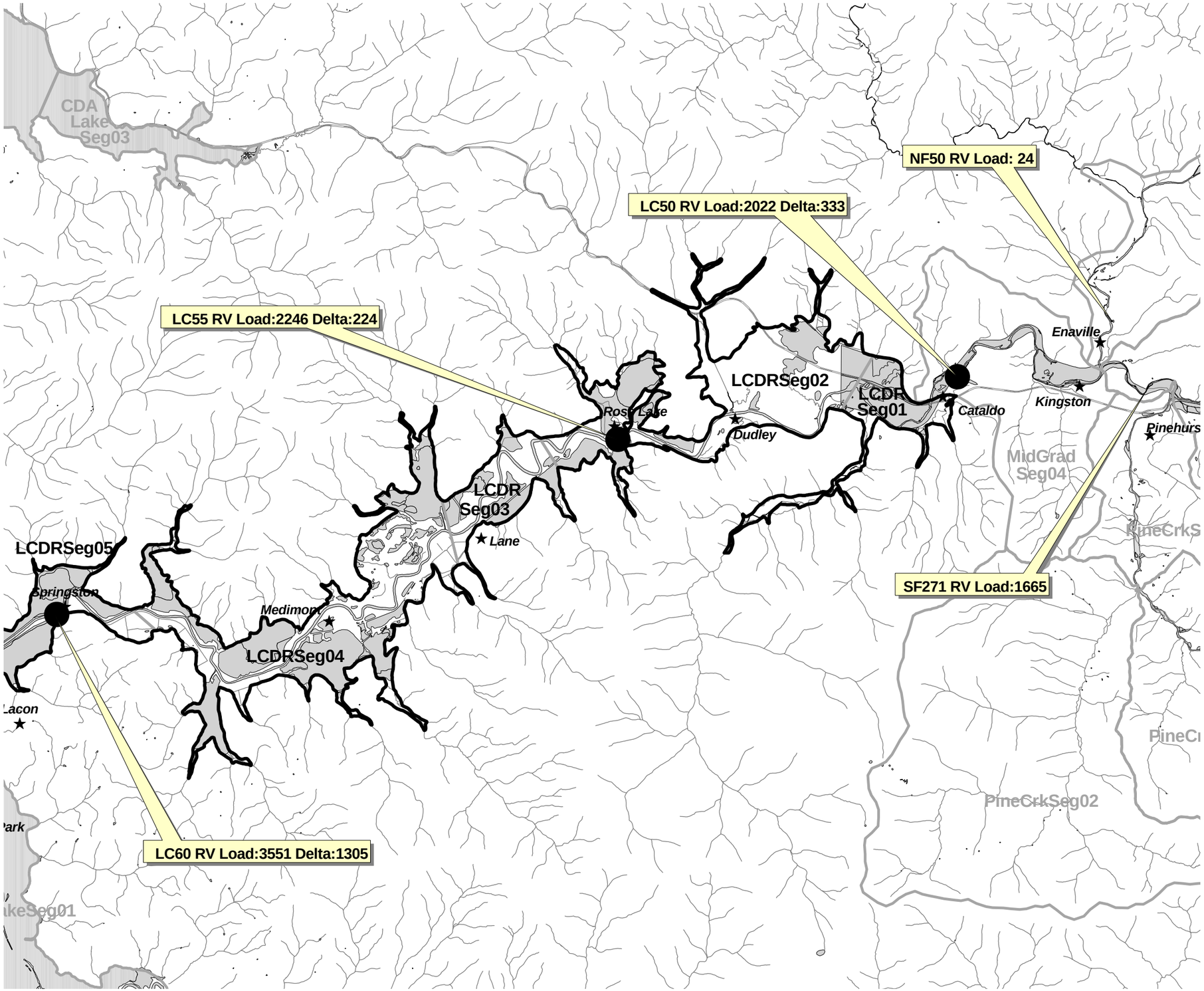


Figure 4.2-6
Lower Coeur d' Alene River Watershed
Dissolved Zinc Mass Loading
Sampling Results Nov. 1998

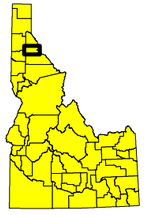
LEGEND

Sampling Location — SF 368 RV Load: 1133 Delta: 195 — Values are lbs/day

Location Type:
RV: River/Stream Sampling Location

(-) Neg. (+) Pos. — Delta of Mass Load Compared to Preceeding Upstream Sampling Location

- Delta Range: 0 - 0.9
- Delta Range: 1 - 20
- Delta Range: 20 - 40
- Delta Range: 40 - 100
- Delta Range: 100 - 150
- Delta Range: > 150
- Stream
- Interstate 90
- City
- River/Lake
- Lower Coeur d'Alene River Watershed
- River Segment
- Source Area



Location Map

NOTES

1) Base map coverages obtained from the Coeur d' Alene Tribe, URS Greiner Inc., CH2M HILL, and the Burueau of Land Management.

SCALE 1: 136,000

0 1 2 3 Miles

N

027-RI-C0-102Q
Coeur d' Alene RI/FS
RI Report

EPA REGION 10

Document Control 4162500.6615.05a
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L: nov98-zinc
7/21/2001

This map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983.

Date of Plot: July 21, 2001

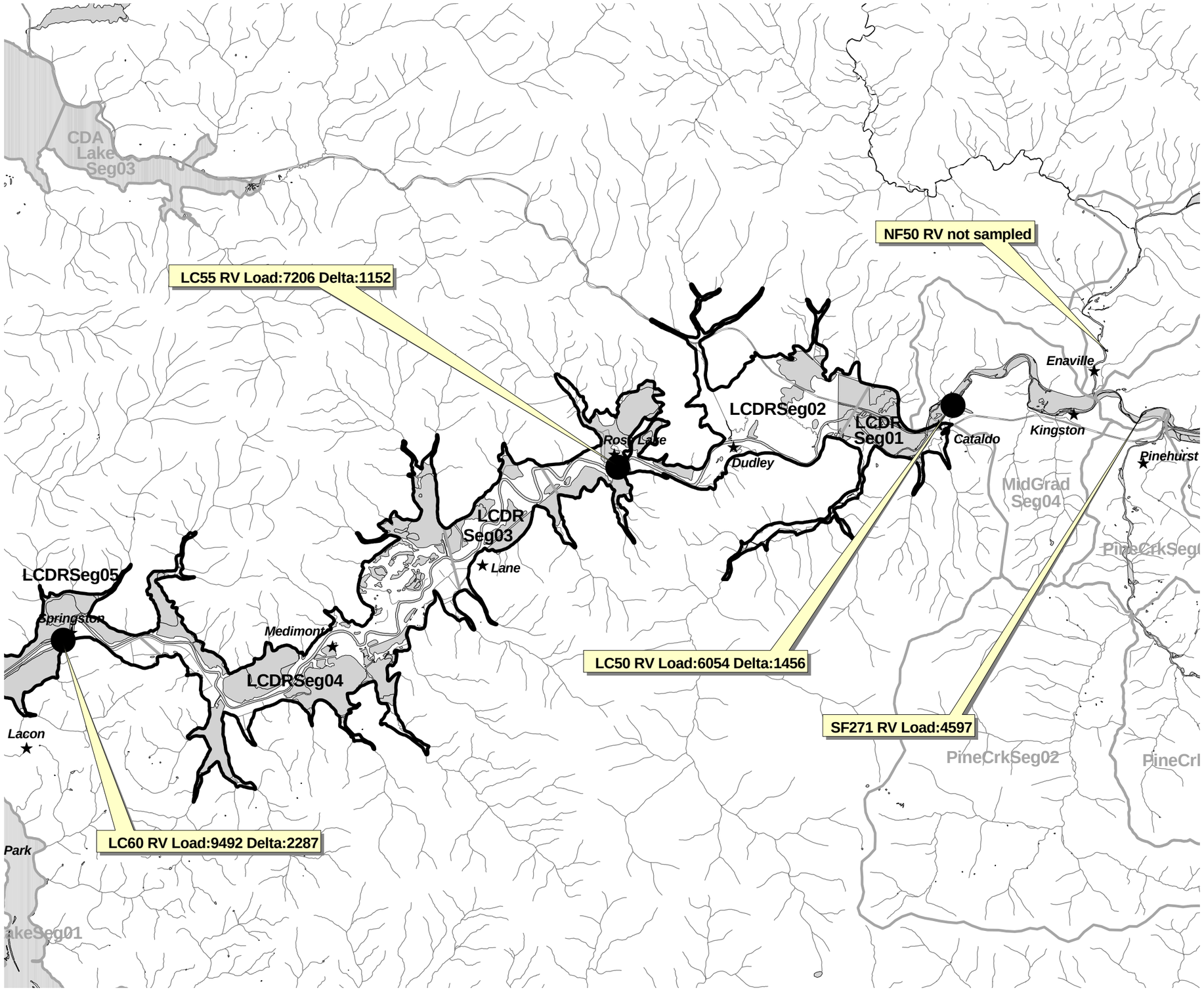


Figure 4.2-7
Lower Coeur d' Alene River Watershed
Dissolved Zinc Mass Loading
Sampling Results May 1998

LEGEND

Sampling Location — Values are lbs/day

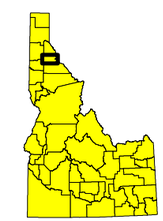
LC55 RV Load: 7206 Delta: 1152

Location Type:

RV: River/Stream Sampling Location

(-) Neg. (+) Pos. — Delta of Mass Load Compared to Preceeding Upstream Sampling Location

- Delta Range: 0 - 0.9
- Delta Range: 1 - 20
- Delta Range: 20 - 40
- Delta Range: 40 - 100
- Delta Range: 100 - 150
- Delta Range: > 150
- Stream
- Interstate 90
- City
- River/Lake
- Lower Coeur d'Alene River Watershed
- River Segment
- Source Area



Location Map

NOTES

1) Base map coverages obtained from the Coeur d' Alene Tribe, URS Greiner Inc., CH2M HILL, and the Burueau of Land Management.

SCALE 1: 136,000

0 1 2 3 Miles

N

027-RI-C0-102Q
Coeur d' Alene RI/FS
RI Report

EPA REGION 10

Document Control 4162500.6615.05.a
Generation 1
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incremental_watershed_sf-lc.apr
V: may98-zinc
L: may98-zinc
7/21/01

This map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983.

Date of Plot: July 21, 2001

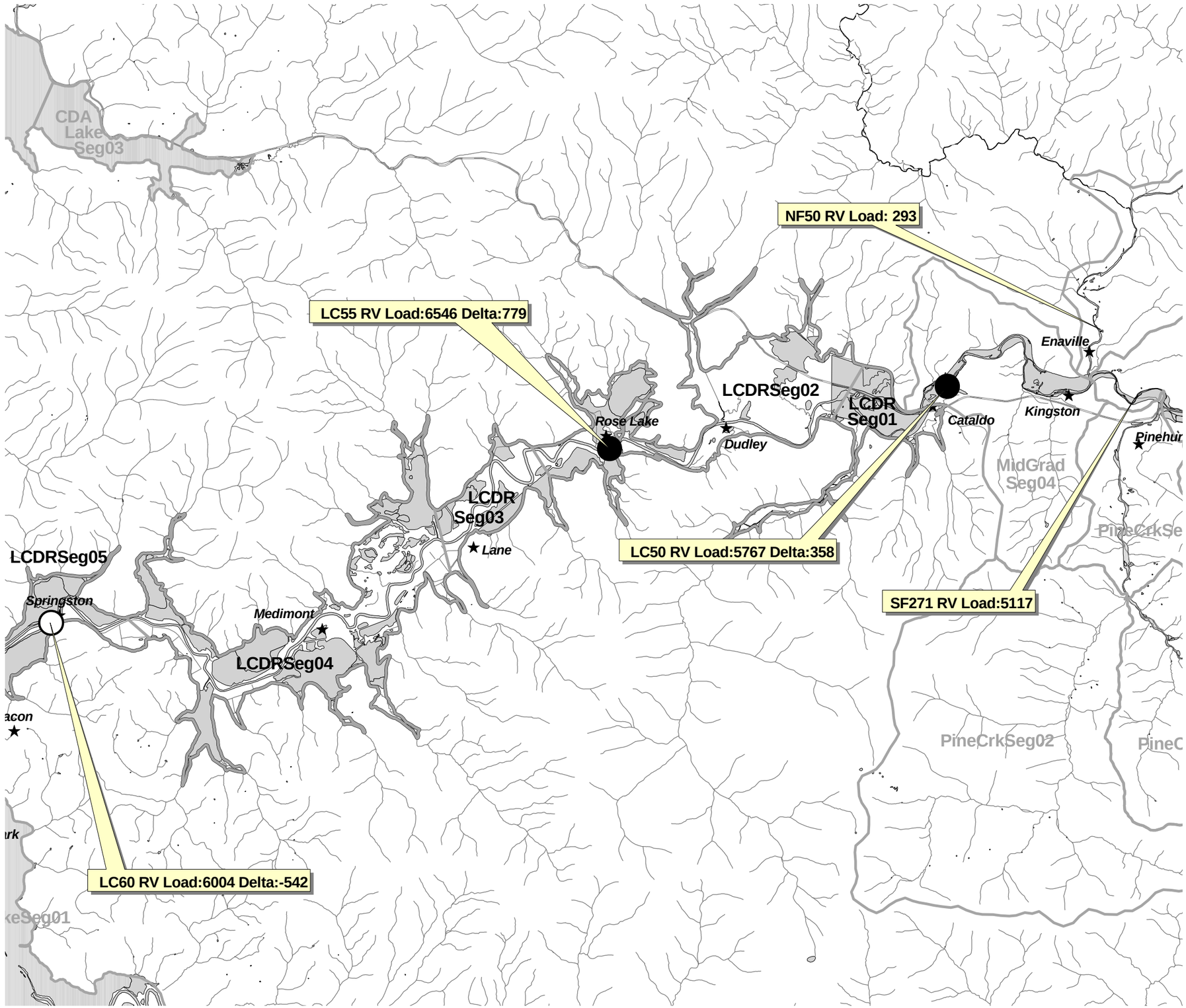


Figure 4.2-8
Lower Coeur d' Alene River Watershed
Dissolved Zinc Mass Loading
Sampling Results May 1999

LEGEND

Sampling Location

Values are lbs/day

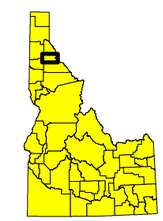
LC55 RV Load: 6546 Delta: 779

Location Type:

RV: River/Stream Sampling Location

(-) Neg. (+) Pos. Delta of Mass Load Compared to Preceeding Upstream Sampling Location

- Delta Range: 0 - 0.9
- Delta Range: 1 - 20
- Delta Range: 20 - 40
- Delta Range: 40 - 100
- Delta Range: 100 - 150
- Delta Range: > 150
- Stream
- Interstate 90
- City
- River/Lake
- Lower Coeur d'Alene River Watershed
- River Segment
- Source Area



Location Map

NOTES

1) Base map coverages obtained from the Coeur d' Alene Tribe, URS Greiner Inc., CH2M HILL, and the Burueau of Land Management.

SCALE 1: 136,000

0 1 2 3 Miles

N

027-RI-C0-102Q
Coeur d' Alene RI/FS
RI Report

EPA REGION 10

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Generation 1
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incremental_watershed_sf-lc.apr
V: SF-may98-lead
L: may99 dZn
7/21/01

This map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983.

Date of Plot: July 21, 2001

Table 4.2-1
Instantaneous Mass Loading, Lower Coeur d'Alene River

Location	Segment	Sample Type	Sample No.	Sample Date	Flow (CFS)	Flow Delta	Total Lead			Dissolved Zinc		
							Conc. (mg/l)	Load (lbs/day)	Delta[a] (lbs/day)	Conc. (mg/l)	Load (lbs/day)	Delta[a] (lbs/day)
NF50[b]	2	RV	-	Not sampled	-	-		-	-	-	-	-
SF271*	2	RV	186259	25-Nov-97	349	-	611	1,147	-	1,200	2,253	-
LC50	2	RV	186246	24-Nov-97	1,420	-	11	84	-1,063	348	2,659	405
LC55	3	RV	186258	24-Nov-97	1,410	-10	9	68	-16	336	2,549	-110
LC60	3	RV	186252	24-Nov-97	1,410	0	18	137	68	441	3,345	797
NF50	2	RV	-	Not sampled	-	-	-	-	-	-	-	-
SF271	2	RV	202250	29-May-98	1,350	-	55	399	-	633	4,597	-
LC50	2	RV	202232	28-May-98	7,760	-	37	1,545	1,145	145	6,054	1,456
LC55	3	RV	202243	28-May-98	7,610	-150	64	2,620	1,076	176	7,206	1,152
LC60	3	RV	202239	28-May-98	7,540	-70	21	852	-1,768	234	9,492	2,287
NF50	2	RV	186824	17-Nov-98	595	-	1	3	-	8	24	-
SF271	2	RV	186996	17-Nov-98	162	-	63	55	-	1,910	1,665	-
LC50	2	RV	187012	18-Nov-98	819	62	9	40	-18	459	2,022	333
LC55	3	RV	187127	16-Nov-98	994	175	25	134	94	420	2,246	224
LC60	3	RV	187035	16-Nov-98	1,100	106	27	160	26	600	3,551	1,305
USGS 1999 Synoptic Sampling Event**												
SF233	2	RV	186909	24-May-99	1,160	-	480	2,996	-	319	1,991	-
SF239	2	RV	186928	26-May-99	1,570	410	539	4,553	1,557	204	1,723	-268
SF249	2	RV	186937	26-May-99	1,848	278	500	4,971	418	223	2,217	494
SF253	2	RV	186942	24-May-99	1,509	-339	477	3,872	-1,099	251	2,038	-179
SF259	2	RV	186943	24-May-99	1,725	216	854	7,926	4,053	263	2,441	403
SF268	2	RV	186965	25-May-99	2,460	735	336	4,447	-3,479	184	2,435	-6
SF655	2	RV	186968	25-May-99	2,650	190	724	10,322	5,875	187	2,666	231
SF270	2	RV	186979	25-May-99	2,610	-40	900	12,638	2,316	253	3,553	887
SF271	2	RV	187007	25-May-99	4,190	1,580	774	17,448	4,810	227	5,117	1,565
NF13	2	RV	186809	24-May-99	4,750	-	1	26		1	16	-

Table 4.2-1 (Continued)
Instantaneous Mass Loading, Lower Coeur d'Alene River

Location	Segment	Sample Type	Sample No.	Sample Date	Flow CFS	Flow Delta	Total Lead			Dissolved Zinc		
							Conc. (mg/l)	Load (lbs/day)	Delta[a] (lbs/day)	Conc. (mg/l)	Load (lbs/day)	Delta[a] (lbs/day)
NF50	2	RV	186832	25-May-99	11,100	-	11	657	-	5	293	-
LC50	2	RV	187022	25-May-99	16,000	710	233	20,057	1,952	67	5,767	358
LC55	3	RV	187032	26-May-99	15,600	-400	231	19,387	-669	78	6,546	779
LC60	3	RV	187040	27-May-99	12,400	-3,200	296	19,747	359	90	6,004	-542

[a]The Delta value reported at a sample location is the difference between mass load at that location and the next upstream sample location. For LC50, the Delta value is the difference between the mass load at LC50 and the sum of the mass loads at SF271 and NF50, except as
[b]NF50 not sampled. Mass load delta at LC50 estimated assuming mass load at NF50 is negligible. Mass load at NF50 typically ranges from

Notes:

- : No Data or Delta Not Calculated

* : Total lead concentration appears biased high relative to historic flows verses concentrations

**: Upstream sampling results included for comparison

RV: River Sample
CFS: Cubic feet per Second
µg/l: Micrograms per liter
lbs/day: pounds per day
Note: The May 1999 sampling was conducted by USGS.

5.0 FATE AND TRANSPORT

The fate and transport of metals in surface water, groundwater, and sediment in the lower CDR Watershed are discussed in this section. A conceptual model of fate and transport, important fate and transport mechanisms, and a summary of the probabilistic model developed to evaluate fate and transport, were presented in the fate and transport section in the Canyon Creek report and are not repeated here. This section draws upon that general information.

Initial findings on metals concentrations and mass loading for each segment, as presented above in Section 4, Nature and Extent, are briefly summarized in Section 5.1. Results of the probabilistic modeling are presented in Section 5.2. Sediment transport is summarized in Section 5.3. A summary of fate and transport of metals in lower CDR Watershed is presented in Section 5.4.

5.1 INTRODUCTION

The lower CDR contains significant quantities of cadmium, lead, zinc, and other metals contributed from the South Fork. The dissolved cadmium and zinc and total lead loadings measured by the USGS during May 1999 are listed in Table 5.1-1. Potential sources of these metals in the watershed were identified for each segment in Section 4.1 and preliminary mass loading estimates were discussed in Section 4.2.

The lower CDR and associated lateral lakes have been impacted by transport and deposition of tailings from upgradient mining areas. Measured concentrations of metals in surface water from the lower CDR routinely exceed acute and chronic AWQC. Concentrations of metals in sediments from the lower CDR and lacustrine and palustrine habitats of the lateral lakes routinely exceed the ecological thresholds for the protection of benthic invertebrate communities.

5.2 MODEL RESULTS

Results from the probabilistic model are discussed for cadmium, lead, and zinc in this section. Modeling results for estimates of discharge are discussed in Section 5.2.1. Modeling results for estimates of chemical concentrations and mass loading of cadmium, lead, and zinc are discussed in Section 5.2.2. Model results are summarized in Table 5.2-1. All modeling results are included in Appendix C.

Data were evaluated for three separate sampling locations. Only sampling locations with 10 or more individual data points for each parameter of interest were evaluated. In the lower CDR, the three sampling locations, in order from upstream to downstream are LC50, LC55, and LC60. The three sampling locations are shown on Figure 5.2-1. The first, and most upgradient sampling location evaluated, LC50, is near the town of Cataldo. Though LC50 is in segment MigradSeg04, it is close to the boundary of this segment and can be used to delineate the contribution from this segment. Proceeding further downstream, the next sampling location, LC55, is situated on the lower CDR directly north of Bull Run Lake. The last sampling location evaluated on the lower CDR, LC60, is located between the towns of Springston and Harrison, approximately one-half mile downstream from Springston.

As mentioned, sampling location LC 50 lies within the segment MidgradSeg04. The next down river sampling location, LC55, is in segment LCDRSeg02. Finally, LC60 resides within segment LCDRSeg05. For purposes of this report, no segment-by-segment discussion will occur as only three sampling locations were identified for evaluation. The discussion will proceed on a reach-by-reach and sampling location-basis only.

River stretches bracketed by sampling locations are designated reaches. For example, the portion of the lower CDR lying between sampling locations LC50 and LC55 is called a reach. Accordingly, there are two reaches encompassed by the three sampling locations.

5.2.1 Estimated Discharge

An example of the lognormal distribution of discharge data at sampling location LC60 between Springston and Harrison is shown in Figure 5.2-2. Data from sampling location LC60 are used throughout this discussion for consistency of presentation and, additionally, because it is the station evaluated that is nearest the mouth of the lower CDR, and a relatively large data set was available.

In Figure 5.2-2, the discharge in cubic feet per second (cfs) is plotted on a log scale versus the normal standard variate. The normal standard variate is equivalent to the standard deviation for a normalized variable. When the log of a parameter (e.g., discharge) is plotted versus the standard normal variate, a straight line will result if the data are lognormally distributed. The cumulative distribution function gives the probability that the observed discharge at any given time will not be exceeded by the estimated discharge at that cumulative probability. The cumulative distribution function is plotted versus the normal standard variate in Figure 5.2-3. To determine the probability of occurrence of a specific discharge, first select the discharge of interest on Figure 5.2-2, then find its corresponding normal standard variate. Using that value for the

normal standard variate, look up its corresponding probability in Figure 5.2-3. For example, for a discharge of 1,000 cfs, the normal standard variate is approximately -0.5 (Figure 5.2-2). Referring to Figure 5.2-3, this value corresponds to a probability of 0.31; therefore, 31 percent of the time, discharges at this location will be 1,000 cfs or less.

As shown in Figure 5.2-2, there is a good fit of the lognormal regression line (solid line in Figure 5.2-2) to the data. This goodness of fit, as evidenced by a high coefficient of determination ($r^2 = 0.97$), supports the assumption that discharges are lognormally distributed. The dotted line represents the true (ideal) lognormal distribution having the same mean (2890) and coefficient of variation (1.32) as the actual data. The expected value, or average discharge rate, for the lower CDR at sampling location LC60 is 2,810 cfs. Expected values for discharge at all three sampling locations are summarized in Table 5.2-1.

The probability distribution function (PDF) shown in Figure 5.2-2 is a predictive tool that can be used to estimate the expected discharge and provide a quantitative estimate of the probability that the observed discharge will not exceed a given value. Conversely, one can find the estimated discharge rate having a specified probability of exceedence or non-exceedence by the observed discharge.

Estimated gains or losses in discharge (EV) and the CVs for reaches on the lower CDR are listed in Table 5.2-2. As indicated, both reaches are gaining.

5.2.2 Estimated Zinc, Lead, and Cadmium Concentrations and Mass Loading

Dissolved cadmium and zinc, and total lead concentrations and loads were evaluated using the probabilistic model at the three sampling locations (two reaches) that contained a minimum of ten data points.

To illustrate the lognormal distribution of dissolved zinc, total lead, and dissolved cadmium concentrations and dissolved zinc, total lead, and dissolved cadmium loading at sampling location LC60 on the lower CDR, Figures 5.2-4 through 5.2-9 are provided. The high r-squared values (r^2) for the dissolved concentrations and total loads when plotted lognormally attest to the fact that the data follow a lognormal distribution. For dissolved concentrations, the r-squared values for zinc and cadmium were 0.99 and 0.95, respectively. The r-squared value for the total lead concentration was 0.77. The corresponding values for dissolved zinc, total lead, and dissolved cadmium loads were 0.99, 0.93, and 0.99, respectively.

To assist in interpreting and placing the results in context, screening levels, EVs, and total maximum daily loads (TMDLs) are shown on the figures where applicable. The TMDLs are given at the 10th, 50th, and 90th percentiles when the scale permitted. Often, it was necessary to multiply the TMDL by a scalar to fit it on the graph. The TMDLs used were those presented in the Technical Support Document of August 2000 (USEPA 2000) for the Coeur d'Alene River at Harrison. Strictly speaking, TMDLs for non-point sources are for dissolved loads. However, the TMDL for the dissolved lead load was compared to the total lead load. Often, most of the lead will be in the particulate, as opposed to dissolved, form. Because a high percentage of zinc and cadmium loads are in the dissolved form, zinc and cadmium were compared to their respective dissolved TMDL loading capacities.

The screening level for dissolved cadmium in surface waters is 0.38 µg/l. All cadmium concentrations at LC60 were greater than the screening level (Figure 5.2-4). The estimated dissolved cadmium concentration of approximately 1.9 µg/l also exceeded the screening level.

The vast majority of the measured and plotted total lead concentrations fell between the screening level (15 µg/l) and 10 times the screening level (Figure 5.2-5). The estimated expected lead concentration (approximately 52 µg/l) exceeds the screening level by more than three-fold.

All dissolved zinc concentrations plotted on Figure 5.2-6 are greater than the screening level (42 µg/l) for dissolved zinc in surface waters. The estimated dissolved zinc concentration (344 µg/l) exceeded 8 times the screening level.

All measured and plotted dissolved cadmium loads, except one, at LC60 fell between the 10th percentile TMDL (1.07 pounds/day) and 10 times the 90th percentile TMDL (137 pounds/day) (Figure 5.2-7). The estimated expected value (29 pounds/day) also lies within this same range.

The estimated total lead load at LC60 is approximately 1,510 pounds/day. The estimated expected value exceeds 10 times the 90th percentile TMDL (200 pounds/day) value on the lower CDR (Figure 5.2-8). Some of the measured lead loads at LC60 are larger than 100 times the 90th percentile TMDL.

As indicated in Figure 5.2-9, all measured and plotted values of dissolved zinc loading at LC60 exceeded the 50th percentile TMDL (294 pounds/day) for the total zinc load at this location. Many of the measured values exceeded the 90th percentile TMDL (1,200 pounds/day) as did the estimated value (4,190 pounds/day).

Figures similar to Figures 5.2-4 to 5.2-9 were developed for each of the three sampling locations. The results of these and additional analyses are presented in Appendix C. Data in Appendix C were used to compute estimated expected values and coefficients of variation for dissolved and total zinc, lead, and cadmium concentrations and loads in the two reaches of the lower CDR. The resulting computations are presented in Tables 5.2-3 to 5.2-8. The calculations were performed in the same manner as described in the discharge section (Section 5.5.1).

5.2.3 Modeling Results for Segment MidgradSeg04 to Segment LCDRSeg02

This reach encompasses the lower CDR and a downgradient portion of the Main Stem. The upgradient sampling location, LC50, is above Cataldo near the downgradient boundary of MidGradSeg04. The downgradient sampling location in this reach, LC55, is near Rose Lake in LCDRSeg02. This reach includes floodplains, lateral lakes, and associated wetlands. The active bed of the Coeur d'Alene River contains approximately 17.6 million cubic yards of mining waste-contaminated alluvium as sand and silt, and possibly larger amounts as bank, valley, and levee deposits. Except for dredge spoils and the Union Pacific Railroad bed, which is the subject of a removal action agreement between the Railroad, the Coeur d'Alene Tribe, the State of Idaho, and the EPA, there are no significant primary sources areas in this reach and, indeed, in the lower CDR. Contaminated soils and sediments occur throughout the reach with the levels and depths of contamination generally being higher near the river and in the lateral lakes where discharges from the river enter during flood events. Because sampling did not match segment boundaries, it is impossible to determine metal loading at the segment level.

Estimated values of the dissolved zinc loads increase in this reach commensurately with increased discharge (Tables 5.2-2 and 5.2-3). Consistent with increased discharges, the dissolved concentrations of zinc decreased. Estimated values of dissolved zinc concentrations at the downgradient station in this reach (LC55) exceed screening levels for dissolved zinc in surface waters by approximately eight-fold (Appendix C). The estimated value of the dissolved zinc load (approximately 4,260 pounds/day) at the downgradient location is greater than the 90th percentile TMDL for the Coeur d'Alene River at Harrison (1,200 pounds/day) (USEPA 2000).

Consistent with patterns observed in other watersheds, increased discharges resulted in increased total lead concentrations and load. Increased discharge suspends more particulates to which lead is adsorbed and results in increased total lead concentrations. Similarly to zinc, estimated values of dissolved cadmium concentrations decreased, and dissolved loads increased in this reach.

Estimated values of total lead and dissolved cadmium concentrations at LC55 exceed screening levels. The 90th percentile TMDLs established for Harrison for lead and cadmium are,

respectively, 20.0 pounds/day and 13.7 pounds/day. These 90th percentile values were exceeded at LC55 by the estimated total lead load (approximately 1,750 pounds/day) and by the estimated dissolved cadmium load (approximately 28 pounds/day).

Probabilistic modeling at LC55 indicated that approximately 76 percent of the zinc concentration and essentially 100 percent of the cadmium concentration would be in the dissolved phase compared to only 10 percent of the lead. Based on evaluation of data at LC55, estimated values of the increased metal loadings between Cataldo and Rose Lake for zinc, lead, and cadmium are, approximately, 1,040 pounds/day, 1,042 pounds/day, and 1.2 pounds/day, respectively. Potential contributors to the dissolved and total metal concentrations and loads primarily are alluvial sediments from mining activities. As mentioned previously, there are no large primary sources between Cataldo and Rose Lake.

5.2.4 Modeling Results for Segment LCDRSeg02 to Segment LCDRSeg05

This reach is bracketed by sampling locations LC55 and LC60 and extends from Rose Lake (LC55) to between Springston and Harrison (LC60). As with the previous reach, there are no known major primary sources in this reach. Contamination entering the river from this reach comes from the alluvial material deposited in the streambed and bank and in the lateral lakes and adjacent floodplains.

There are studies indicating that the groundwater is contaminated in CSM Unit 3, of which this reach is a part (see Section 2.2.5, Groundwater Quality and Chemistry). Some of these studies also indicate, however, that the water-bearing formations are composed of relatively fine sediments, which retard the flow of groundwater.

Estimated values of the dissolved zinc loads decrease in this reach as the discharge decreases (Tables 5.2-2 and 5.2-3). The dissolved zinc load decreased with decreased estimated values of discharge. Estimated values of dissolved zinc concentrations at the downgradient sampling location in this reach (LC60) exceed screening levels for dissolved zinc in surface waters by almost an order of magnitude (Appendix C). The estimated value of the dissolved zinc load (approximately 4,190 pounds/day) at the downgradient location is greater than the 90th percentile TMDL value for Harrison (1,200 pounds/day).

Estimated values of total lead loads decreased as the discharge decreased. Estimated values of dissolved cadmium concentrations and loads increase in this reach.

Values of total lead and dissolved cadmium concentrations exceed screening levels at LC60. The 90th percentile TMDLs for lead and cadmium are, respectively, 20.0 pounds/day and 13.7 pounds/day. These 90th percentile values were exceeded at LC60 by the estimated total lead load (approximately 1,510 pounds/day) and by the estimated dissolved cadmium load (approximately 29 pounds/day).

Probabilistic modeling at LC60 indicated that essentially 100 percent of the zinc and cadmium concentrations would be in the dissolved phase compared to only 15 percent of the lead. Based on evaluation of data at LC60, estimated values of the total loadings between Rose Lake and above Harrison (LC60) for zinc, lead, and cadmium are, a loss of approximately 70 pounds/day, a loss of approximately 240 pounds/day, and a gain of approximately 0.9 pounds/day, respectively. Potential contributors to the dissolved and total metal concentrations and loads primarily are alluvial sediments. Potential losses to the lateral lakes, riverbanks, and floodplains can occur, particularly during high-flow events.

5.2.5 Concentrations Versus Discharge

The following discussion is based on evaluation of data at LC60 above Harrison (Appendix C). There is a decrease in dissolved zinc concentrations with increased discharge (log-log plot of concentrations versus discharge) which is significant at $\alpha < 0.0001$ (α is the probability the correlation is due to chance). To avoid cumbersome phrasing and repetition, discussions of regressions that follow tacitly assume that log-log plots are being described. As one would expect, given that the majority of the zinc is in the dissolved phase, there is also a decrease in total zinc concentrations with increased discharge rates ($\alpha = 0.0001$). Regression plots of dissolved lead concentrations versus discharge increased with increasing discharge ($\alpha < 0.0001$). Total lead concentrations also increased with increasing discharge ($\alpha = 0.003$). Similarly to zinc, estimated values of dissolved ($\alpha = 0.0001$) and total ($\alpha = 0.03$) cadmium concentrations also exhibited decreased concentrations with increased discharge above Harrison.

The regressions permit estimation of dissolved zinc, lead, and cadmium concentrations at various discharge rates. Similar regressions were developed at the other sampling locations. At all three sampling locations, there was a decrease in dissolved and total zinc and cadmium concentrations with increasing discharge rates (Appendix C). Estimated dissolved lead concentrations increased with increasing discharge at two of the three sampling locations. Total lead concentrations increased with increasing discharge at every location.

5.3 SEDIMENT FATE AND TRANSPORT

Sediment fate and transport processes were presented in Section 3.0. Results of the sediment transport evaluation presented in Section 3.0 are summarized in this section.

Sediment derived in the main stem Coeur d'Alene River is transported through the system and into the lower CDR. Sediment deposition occurs in the lower CDR, particularly in the upstream areas. Sediment sources in the lower CDR are erosion of riverbanks and sediment derived from the tributary channels, and mining waste, most notably the North and South Forks of the Coeur d'Alene River. With a drainage area of approximately 1,475 square miles, the total suspended sediment yield for the lower CDR at Harrison for water year 1999 was approximately 34 tons per year per square mile. Of that, approximately 7 tons was sand and 27 tons was fines. A total of approximately 51,000 tons of suspended sediment was transported past the gage at Harrison in water year 1999. Bedload sediment transport is either negligible or nonexistent.

Suspended sediment and bedload samples were not analyzed for total metals; therefore mass loading was estimated from total and dissolved surface water data as described in Section 5.2. Though suspended and bedload sediment samples were not collected and analyzed for metals, suspended and bedload sediment concentrations may be represented by metals concentrations reported for sediment samples collected in the lower CDR. As presented in Section 4.1, Nature and Extent, metals concentrations in sediment samples exceeded screening levels for all ten metals of potential concern.

5.3.1 Watershed Description

The lower CDR channel is deeply incised in valleys of low topographic relief, containing erodible materials. This type of channel can develop high erosion rates and high sediment supply. Detailed channel descriptions are presented in Section 3.2.

The 1998 set of aerial photographs by URSG and CH2M HILL, the 1991 set by USDA, and the 1954 set by BLM were reviewed to further describe the lower CDR. This review identified stream instability, channel migration, channel aggregation or degradation and other features that may contribute sediment to the system.

The photographic review indicated that no major changes of river position have occurred since the earliest photographs reviewed from 1954. Changes have occurred in channel width as the riverbanks throughout the lower CDR have eroded. In some areas the channel has widened since 1954.

In an attempt to estimate erosion rates, photographs of various locations throughout the lower CDR were identified for which multiple years of photographs were available. An annual erosion rate of 0.8 feet per bank per year was estimated. These estimates are similar to the estimate of 0.5 feet per bank per year by the Soil Conservation Service (SCS 1994). Bank erosion does not occur in a linear manner; rather, episodic bank erosion occurs during discrete high-flow events, or during rapid drawdown of river level.

Existing areas of erosion are identified and discussed in Section 3.2. These existing areas of erosion are current sources of sediment to the lower CDR; however, virtually all river banks of the lower CDR could in the future begin eroding, providing additional sediment sources to the lower CDR and Coeur d'Alene Lake.

5.3.2 Summary of Sediment Transport

Based on the information discussed above, approximately 50,150 tons, or 34 tons per square mile, of sediment was transported past the lower CDR at Harrison and into Coeur d'Alene Lake in water year 1999. Large fluctuations in sediment transport should be expected based on stream discharge. Sediment sources to the lower CDR include the North and South Forks of the Coeur d'Alene River, bank erosion, and channel bed remobilization. Though suspended and bedload sediment samples were not collected and analyzed for metals, suspended and bedload sediment concentrations may be represented by metals concentrations reported for sediment samples collected in the lower CDR. As presented in Section 4.1, Nature and Extent, metals concentrations in sediment samples exceeded screening levels for all ten metals of potential concern.

5.4 SUMMARY OF FATE AND TRANSPORT

The probabilistic model was used to quantify and summarize the available data and to estimate pre-remediation metals concentrations in surface water and mass loading to the main stem. Sediment transport was evaluated using USGS suspended and bedload sediment discharge data and measured sediment data. Results are summarized in this section.

Surface water discharge, metals concentrations (total and dissolved), and mass loading data were analyzed using lognormal PDFs at two separate sampling locations in the main stem. Only results for cadmium, lead, and zinc were analyzed. Regressions were developed for total and dissolved concentrations versus discharge to quantify and identify trends in concentrations and

mass loading with changing discharge rates. The percentages of dissolved and particulate forms of metals were computed from the estimated expected values predicted by the model.

Results of the probabilistic modeling indicate:

- Screening levels for dissolved zinc and cadmium and total lead concentrations were exceeded for each metal at all sampling locations. Zinc concentrations exceeded screening levels by approximately an order of magnitude.

- The 90th percentile TMDLs were also exceeded for each metal at each of the sampling locations.

- Total and dissolved zinc and cadmium concentrations decreased with increasing discharge while dissolved and total lead concentrations increased with increasing discharge.

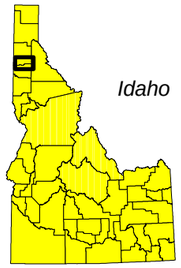
- Potential major source areas identified in this segment include the South Fork Coeur d'Alene River, the main stem floodplain sediments, and erosion of river banks.

To illustrate the observed trends of estimated expected values throughout the watershed, estimated expected values for cadmium, lead, and zinc concentrations and mass loading are shown in Figures 5.4-1 through 5.4-6. To illustrate the relationship between discharge, concentration, and mass loading, estimated expected values for these variables at each sampling location are plotted together for cadmium, lead, and zinc in Figures 5.4-7 through 5.4-9, respectively.

Figure 5.2-1
Lower Coeur d'Alene River Watershed
Sampling Locations Evaluated in Probabilistic Modeling

LEGEND

- Sampling Location
- Stream
- Interstate 90
- Road
- City
- Lower Coeur d'Alene River Watershed
- River Segment
- Lake/River
- Source Area



Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner Inc., CH2M HILL, and the Bureau of Land Management.

SCALE 1:108,000

0.5 0 0.5 Miles

N

027-RI-C0-102Q
Coeur d'Alene Basin RI/FS
RI REPORT

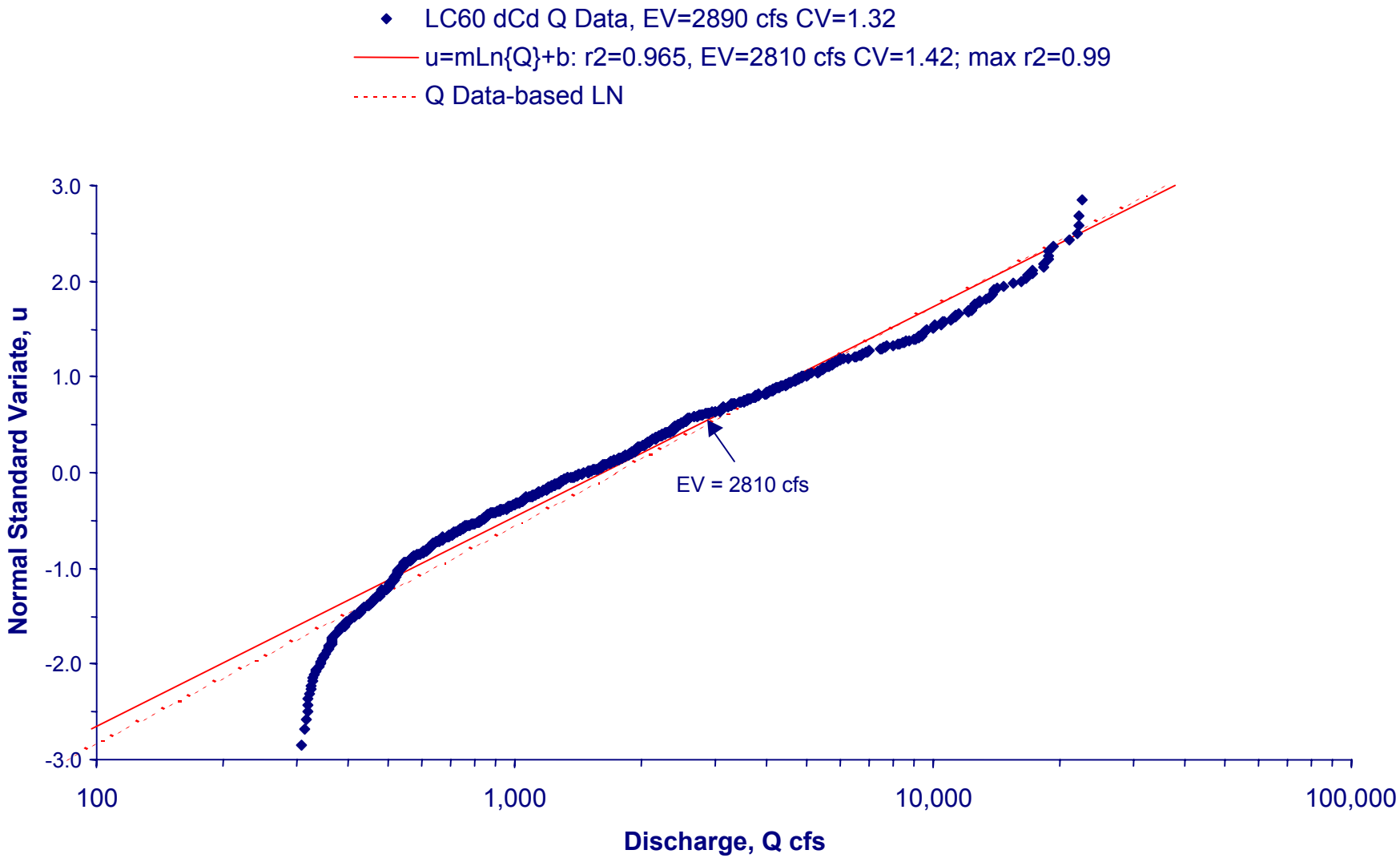
EPA REGION 10

Document Control 4162500.6615.05a
Generation 1
n:\Projects\watersheds\lcdr\
llcdr_ev7-26.apr
V:Locate
E:Locate
L: Locate
7/22/2001

This map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983.

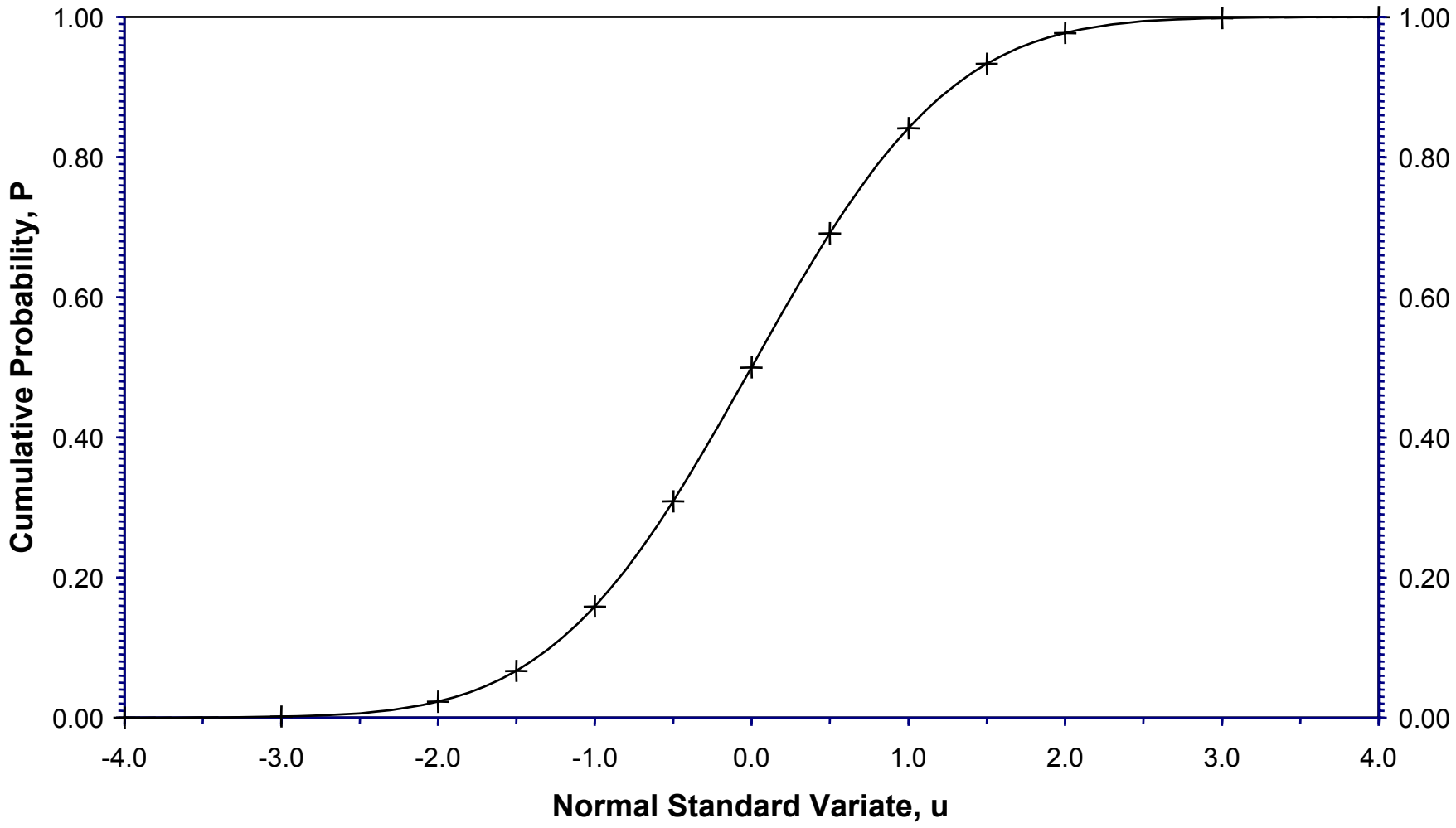
Date of Plot: July 23 2001

Probabilistic Modeling Results for Discharge at LC60



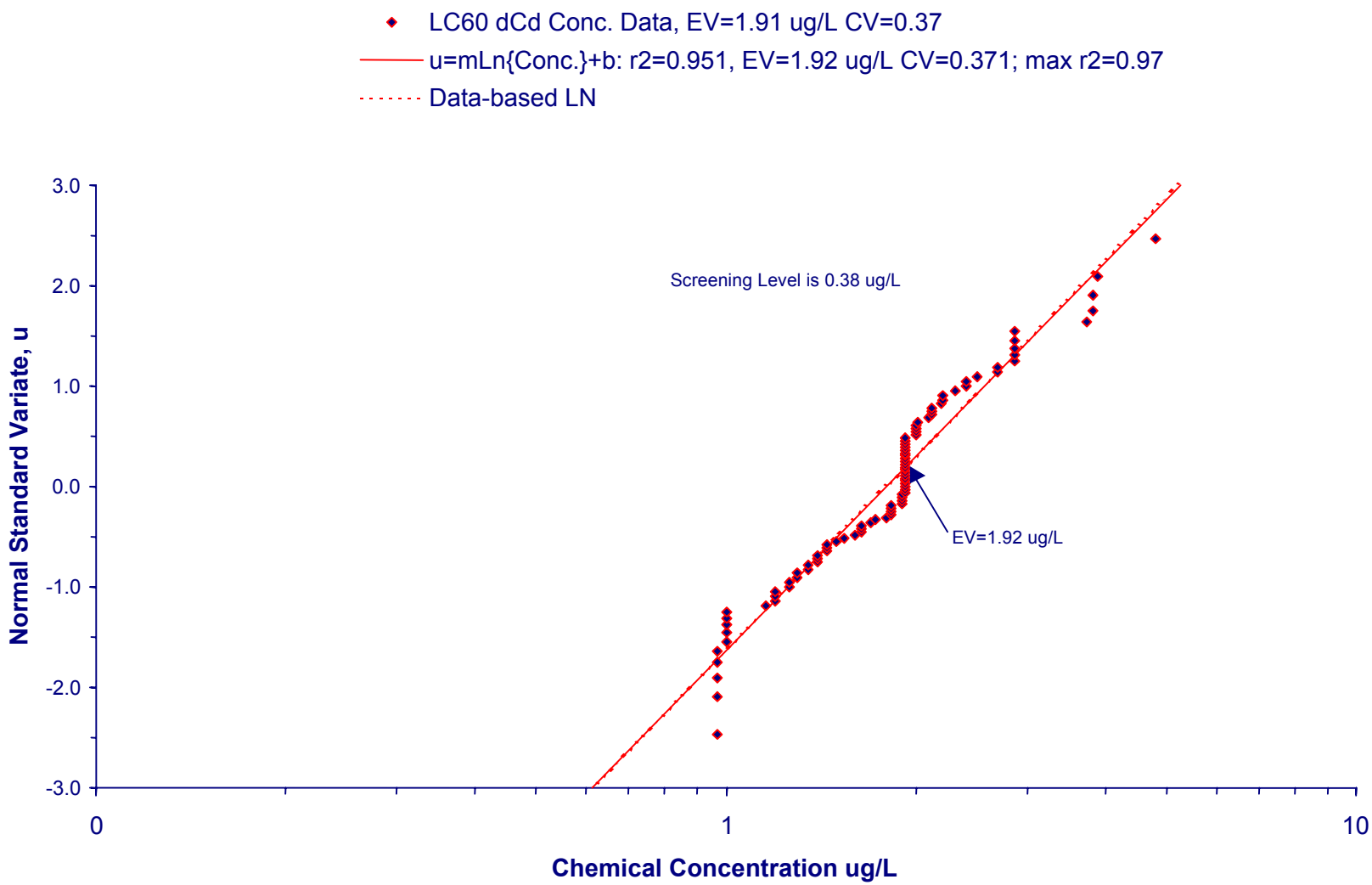
EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 5.2-2**

Cumulative Probability Values Corresponding to Normal Standard Variate Values



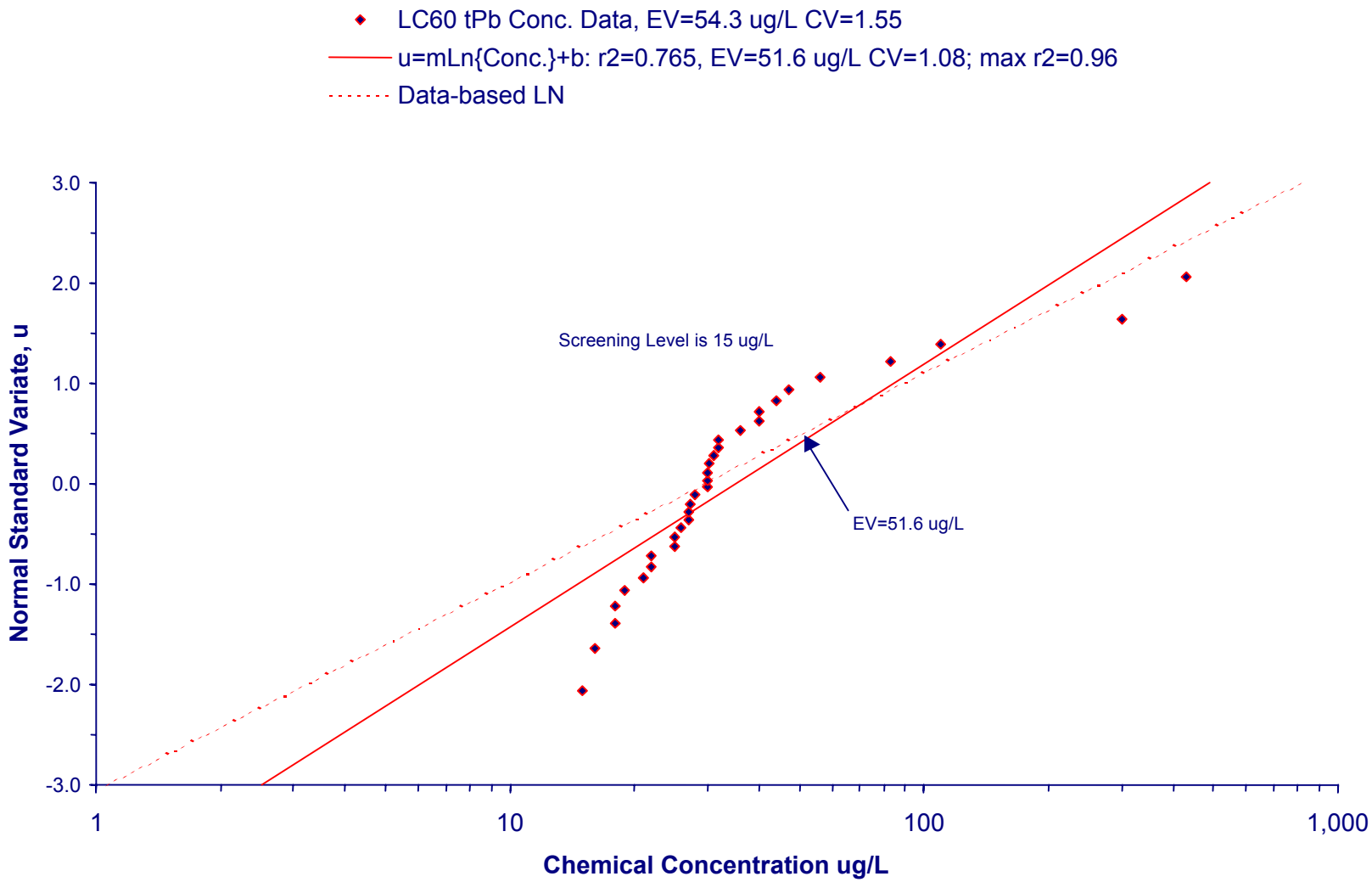
EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 5.2-3**

Probabilistic Modeling Results for Dissolved Cadmium Concentrations at LC60



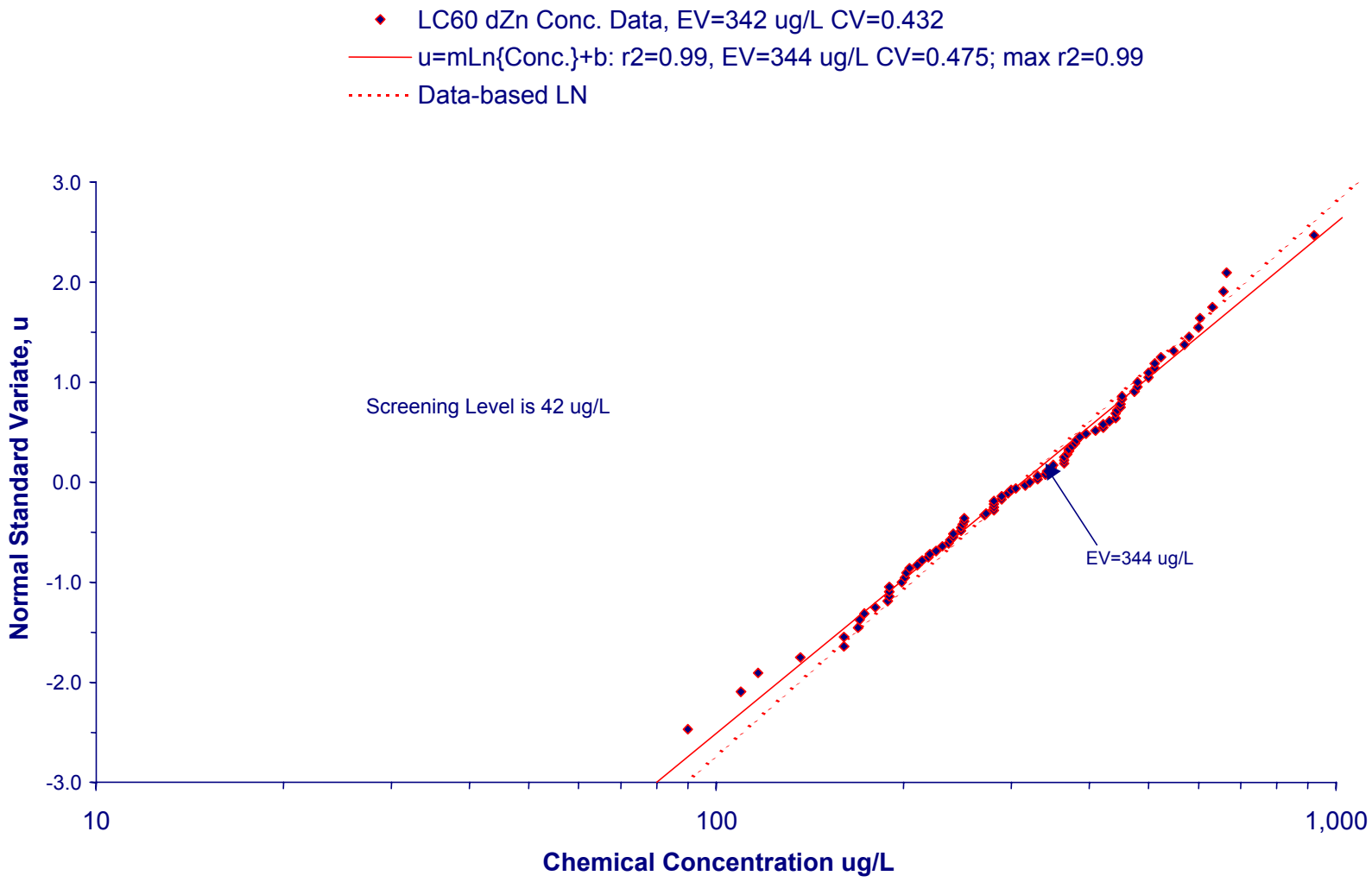
EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 5.2-4**

Probabilistic Modeling Results for Total Lead Concentrations at LC60



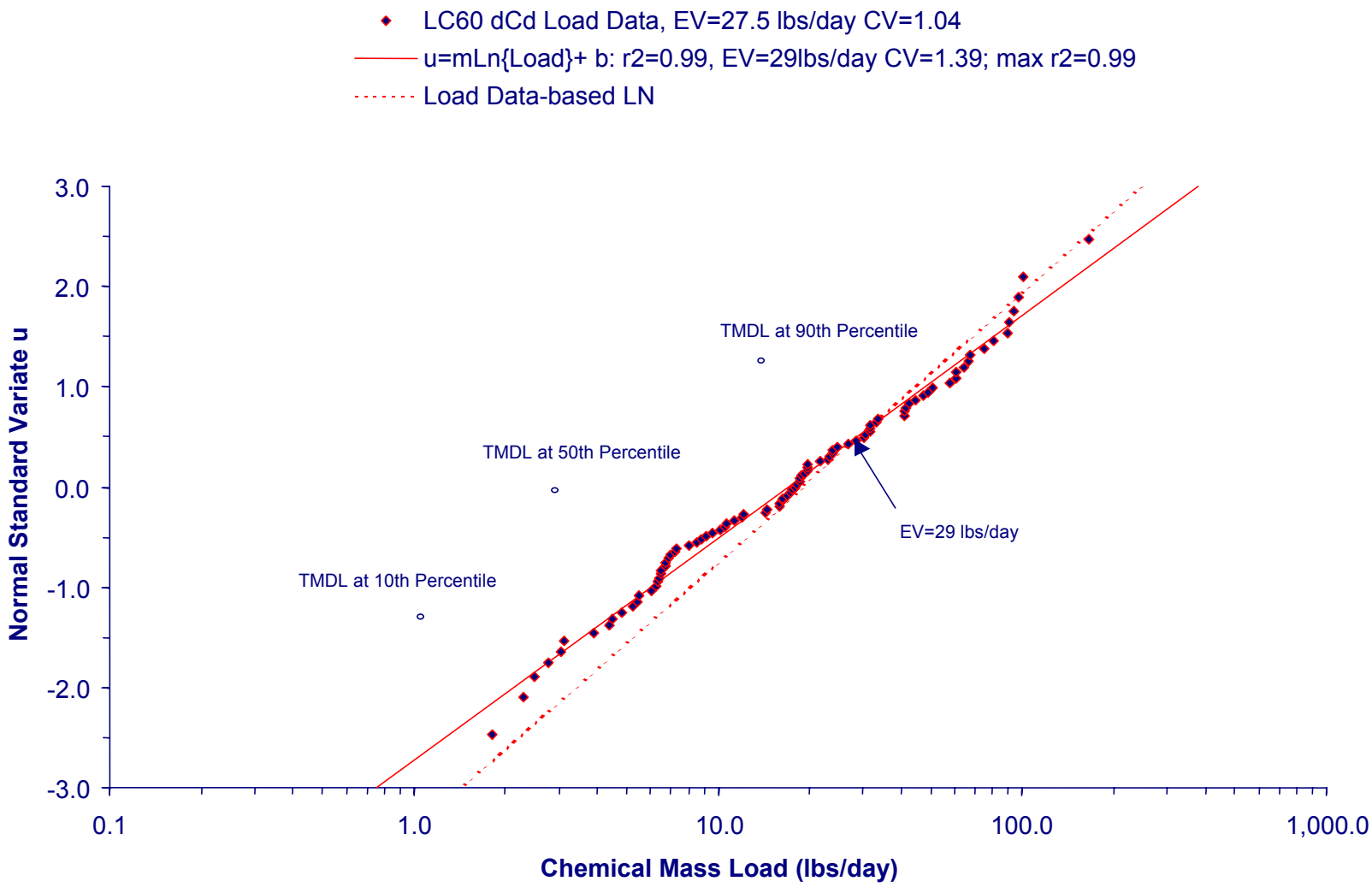
EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 5.2-5**

Probabilistic Modeling Results for Dissolved Zinc Concentrations at LC60



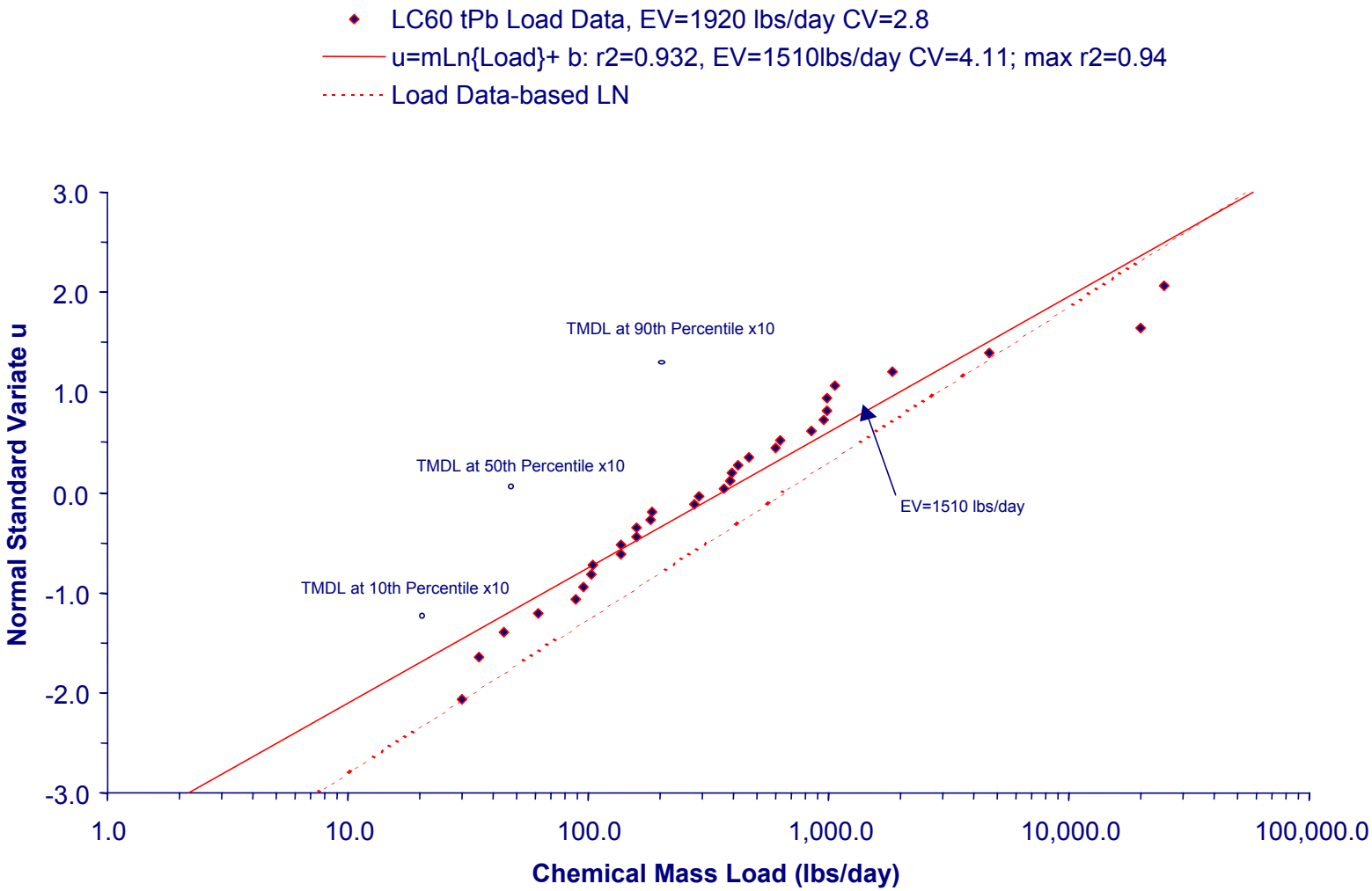
EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 5.2-6**

Probabilistic Modeling Results for Dissolved Cadmium Mass Loading at LC60



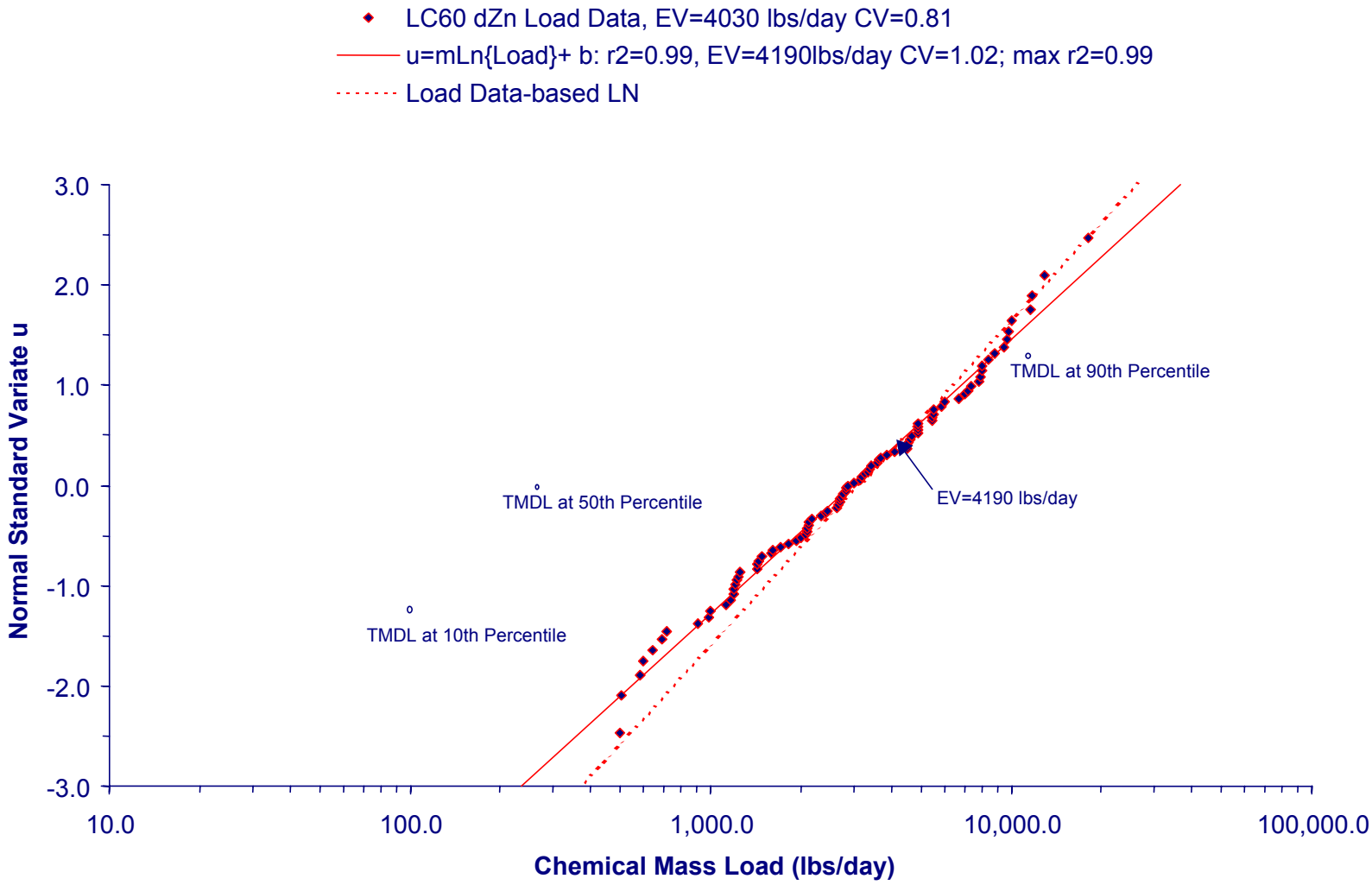
EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 5.2-7**

Probabilistic Modeling Results for Total Lead Mass Loading at LC60



EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 5.2-8**

Probabilistic Modeling Results for Dissolved Zinc Mass Loading at LC60



EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 5.2-9**

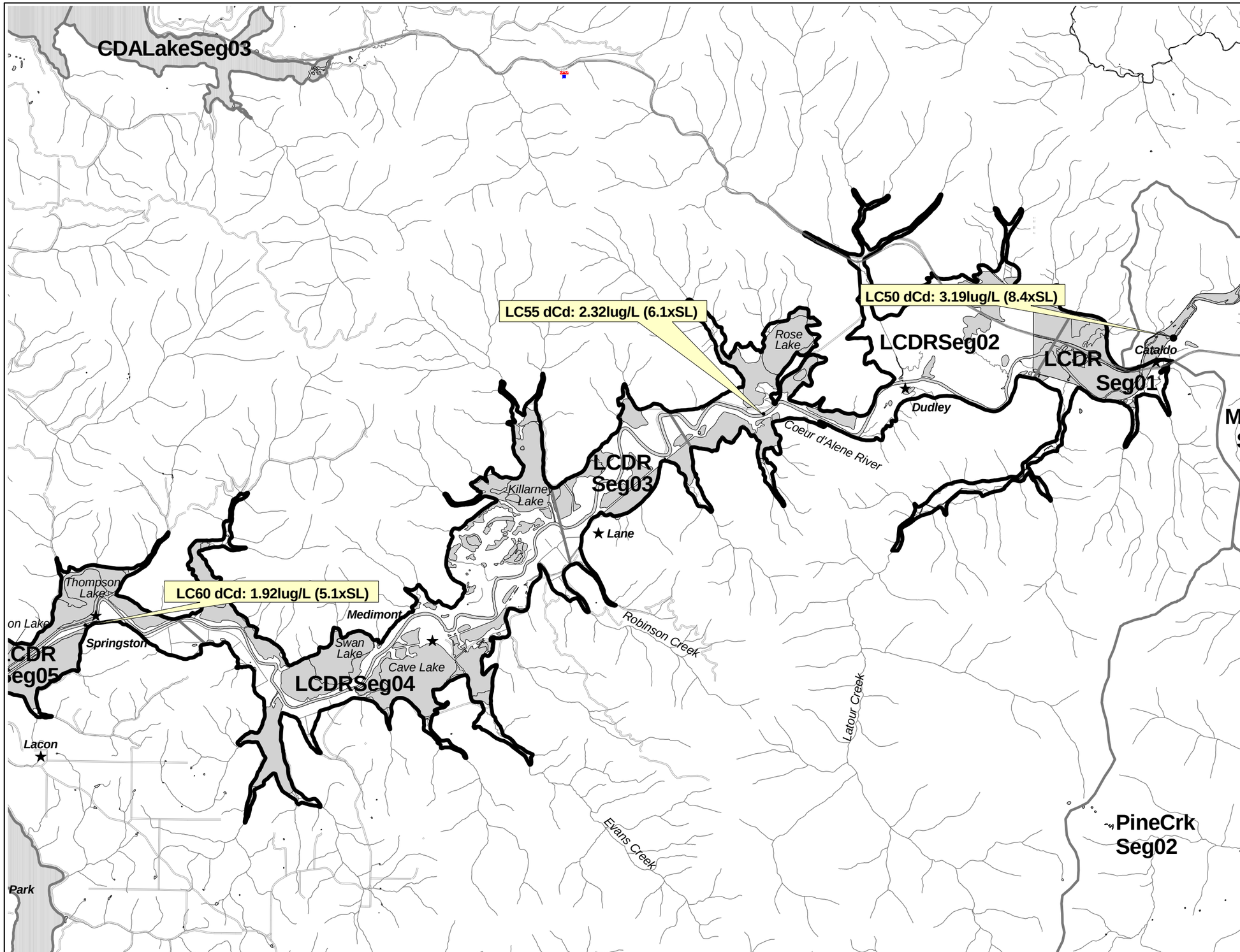


Figure 5.4-1
Lower Coeur d'Alene River Watershed
Estimated Expected Values for Dissolved Cadmium Concentrations

LEGEND

Sampling Location

Concentration

LC50 dCd: 3.19ug/L (8.4xSL)

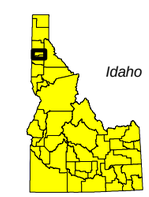
Analyte

Screening Level is 0.38 ug/L

Range of Dissolved Cadmium Concentrations in ug/L

- Range 0 - 2.5
- Range 2.5 - 5
- Range 5 - 10
- Range 10 - 15
- Range >15

- Stream
- Interstate 90
- City
- Lower Coeur d'Alene River Watershed
- River Segment
- Lake/River
- Source Area



Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner Inc., CH2M HILL, and the Bureau of Land Management.

SCALE 1:108,000

0.5 0 0.5 Miles

N

027-RI-C0-102Q
Coeur d'Alene Basin RI/FS
RI REPORT

EPA REGION 10

Document Control 4162500.6615.05a
Generation 1
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V:dCd concentrations
E:dCd
L: dCd Concentrations
7/23/2001

This map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983.

Date of Plot: July 23, 2001

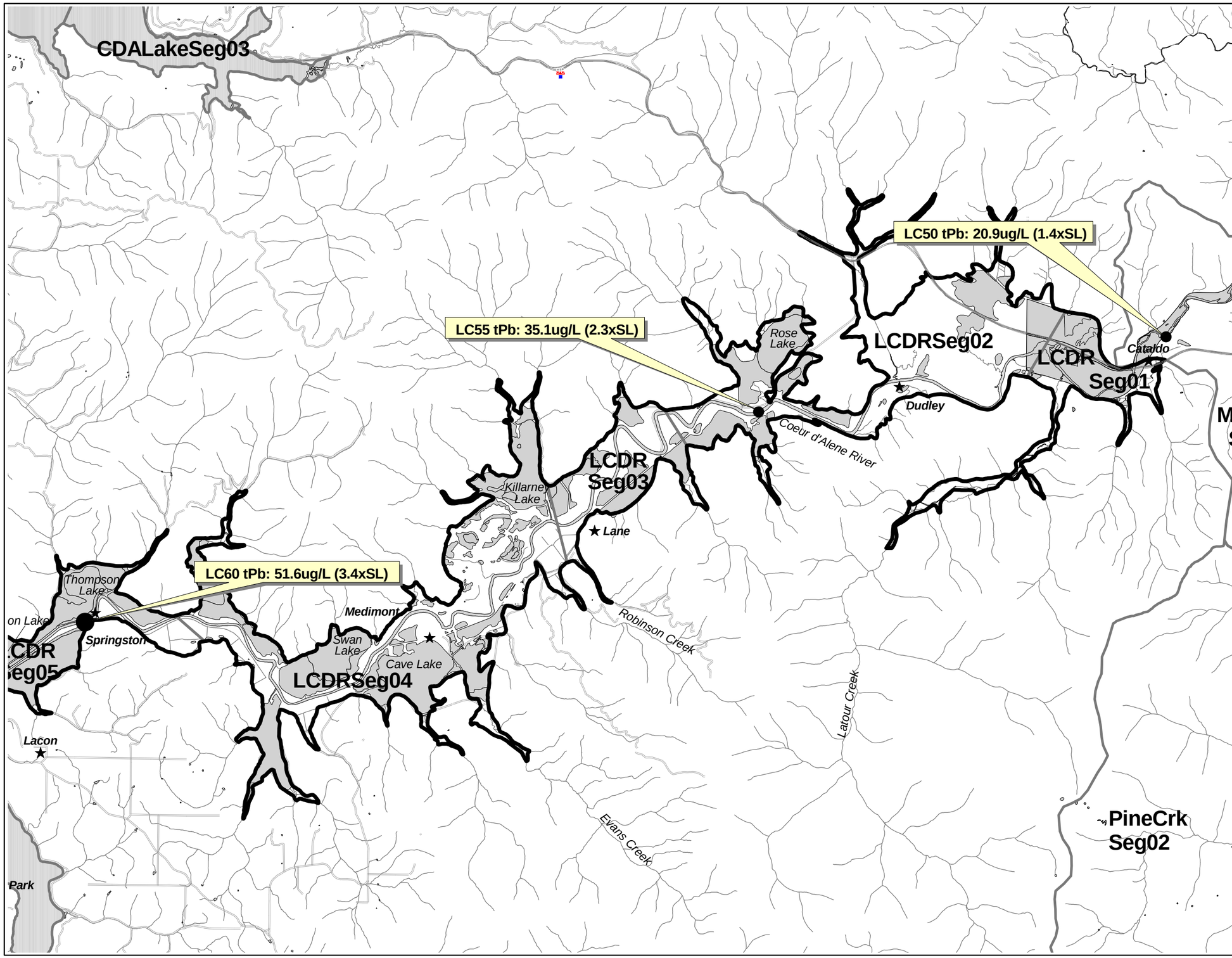


Figure 5.4-2
Lower Coeur d'Alene River Watershed
Estimated Expected Values for Total Lead Concentrations

LEGEND

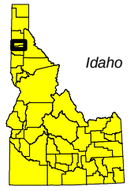
Sampling Location — Concentration

LC60 tPb: 51.6ug/L (3.4xSL)

Analyte — Screening Level is 15 ug/L

Range of Total Lead Concentrations in ug/L

- Range 0 - 5
- Range 5 - 10
- Range 10 - 50
- Range 50 - 100
- Range >100
- Stream
- Interstate 90
- Road
- City
- Lower Coeur d'Alene River Watershed
- River Segment
- Lake/River
- Source Area



Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner Inc., CH2M HILL, and the Bureau of Land Management.

SCALE 1:108,000

0.5 0 0.5 Miles

N

027-RI-C0-102Q
Coeur d'Alene Basin RI/FS
RI REPORT

EPA REGION 10

Document Control 4162500.6615.05.a
Generation 1
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V:tPb concentrations
E:tPb
L: tPb Concentrations
7/23/2001

This map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983.

Date of Plot: July 23, 2001

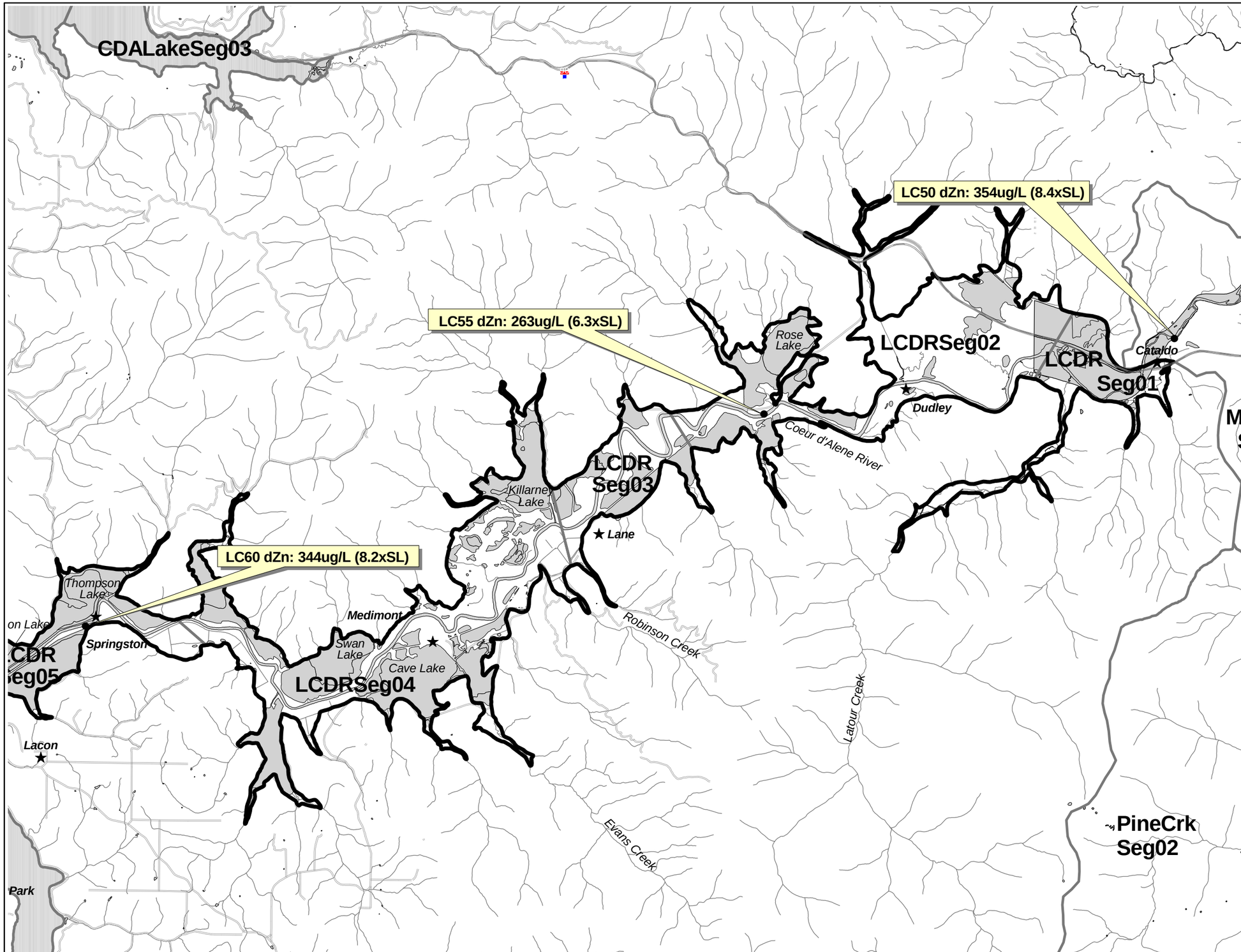


Figure 5.4-3
Lower Coeur d'Alene River Watershed Estimated Expected Values for Dissolved Zinc Concentrations

LEGEND

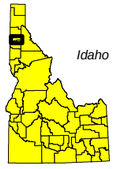
Sampling Location — Concentration

LC60 dZn: 344ug/L (8.2xSL)

Analyte — Screening Level is 42 ug/L

Range of Dissolved Zinc Concentrations in ug/L
- Range 0 - 100
- Range 100 - 500
- Range 500 - 1000
- Range 1000 - 1500
- Range >1500

- Stream
- Interstate 90
- Road
- City
- Lower Coeur d'Alene River Watershed
- River Segment
- Lake/River
- Source Area



Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner Inc., CH2M HILL, and the Bureau of Land Management.

SCALE 1:108,000

0.5 0 0.5 Miles

N

027-RI-C0-102Q
Coeur d'Alene Basin RI/FS
RI REPORT

EPA REGION 10

Document Control 4162500.6615.05.a
Generation 1
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lcdr_ev7-26.apr
V:dZn concentrations
E:dZn
L: dZn concentrations
7/23/2001

This map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983.

Date of Plot: July 23, 2001

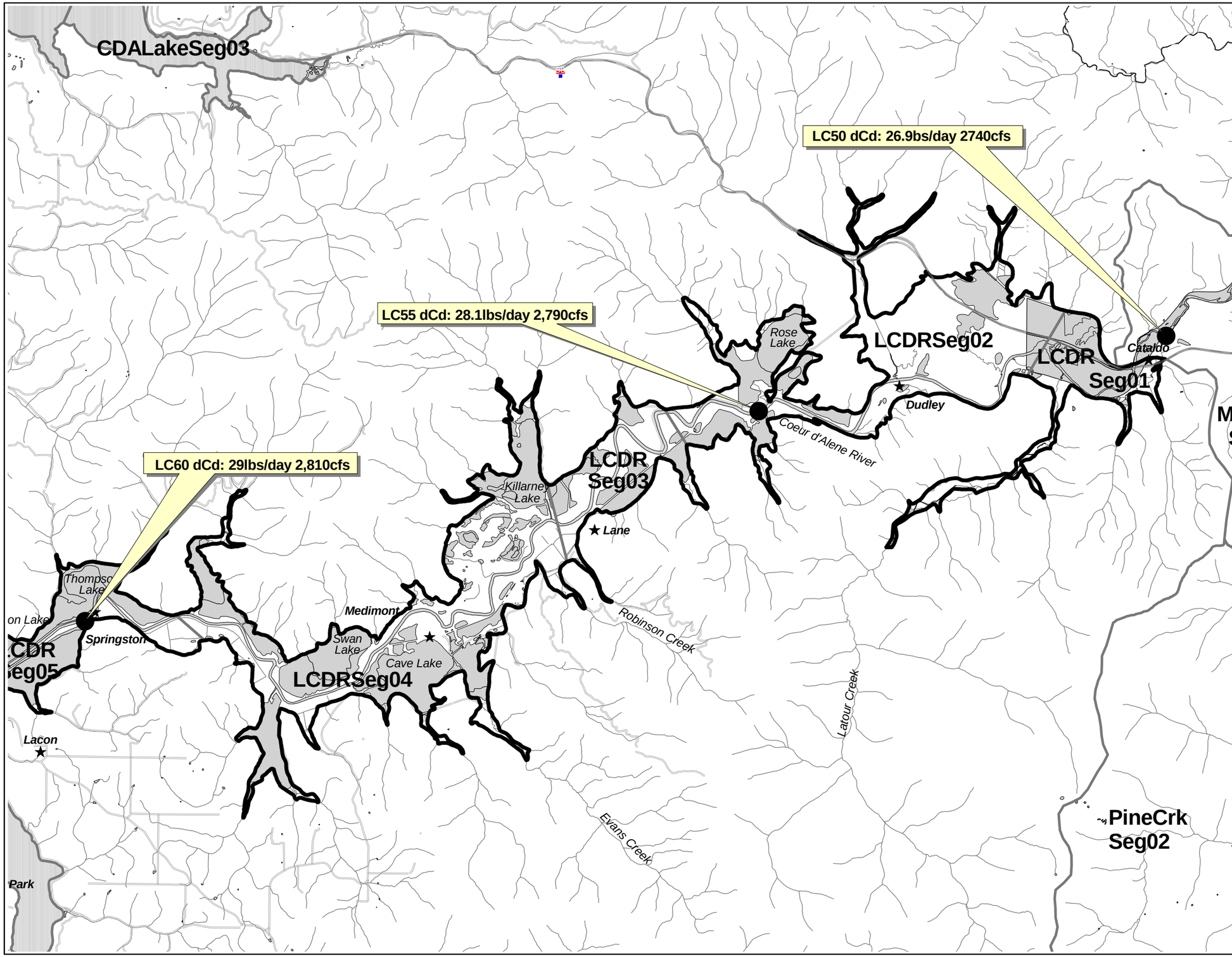

Figure 5.4-4
Lower Coeur d'Alene River Watershed
Estimated Expected Values for Dissolved Cadmium Mass Loading

LEGEND

Sampling Location

Mass Load

LC60 dCd: 29lbs/day 2,810cfs

Analyte

Flow in Cubic Feet per Second

Range of Total Cadmium Mass Loading in lbs/day

- Range 0 - 2.5
- Range 2.5 - 5
- Range 5 - 10
- Range 10 - 15
- Range >15

- Stream
- Interstate 90
- City
- Lower Coeur d'Alene River Watershed
- River Segment
- Lake/River
- Source Area

Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner Inc., CH2M HILL, and the Bureau of Land Management.

SCALE 1:108,000

0.5 0 0.5 Miles

N

027-RI-C0-102Q
Coeur d'Alene Basin RI/FS
RI REPORT

EPA REGION 10

Document Control 4162500.6615.05a
Generation 2
n:\Projects\watersheds\LCDR\
llcdr_ev7-26.apr
V:dCd Mass Loading
E:dCd
L: dCd Mass Loading
7/23/2001

This map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983.

Date of Plot: July 23, 2001

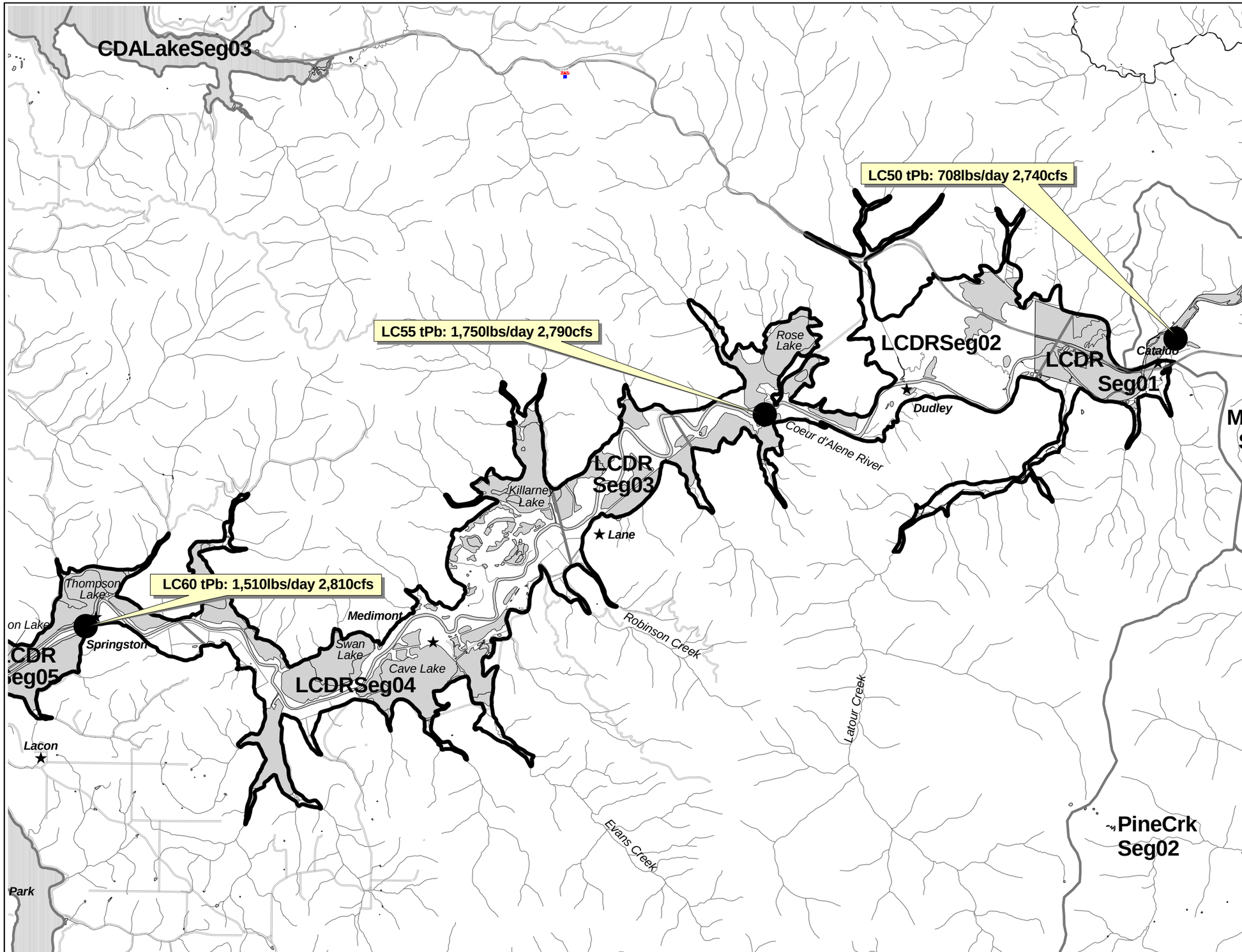

Figure 5.4-5
Lower Coeur d'Alene River Watershed Estimated Expected Values for Total Lead Mass Loading

LEGEND

Sampling Location — Mass Load

LC60 tPb: 1,510lbs/day 2,810cfs

Analyte — Flow measured in Cubic Feet per Second

Range of Total Lead Mass Loading in lbs/day

- Range 0 - 5
- Range 5 - 10
- Range 10 - 50
- Range 50 - 100
- Range >100

- Stream
- Interstate 90
- Road
- City
- Lower Coeur d'Alene River Watershed
- River Segment
- Lake/River
- Source Area

Location Map

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner Inc., CH2M HILL, and the Bureau of Land Management.

SCALE 1:108,000

0.5 0 0.5 Miles

N

027-RI-C0-102Q
Coeur d'Alene Basin RI/FS
RI REPORT

EPA REGION 10

Document Control 4162500.6615.05a
Generation 1
n:\Projects\watersheds\lcdr
\lcdrev_7-26.apr
V:tPb massloading
E:tPb
L: tPb Massloading
7/23/2001

This map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983.

Date of Plot: July 23, 2001

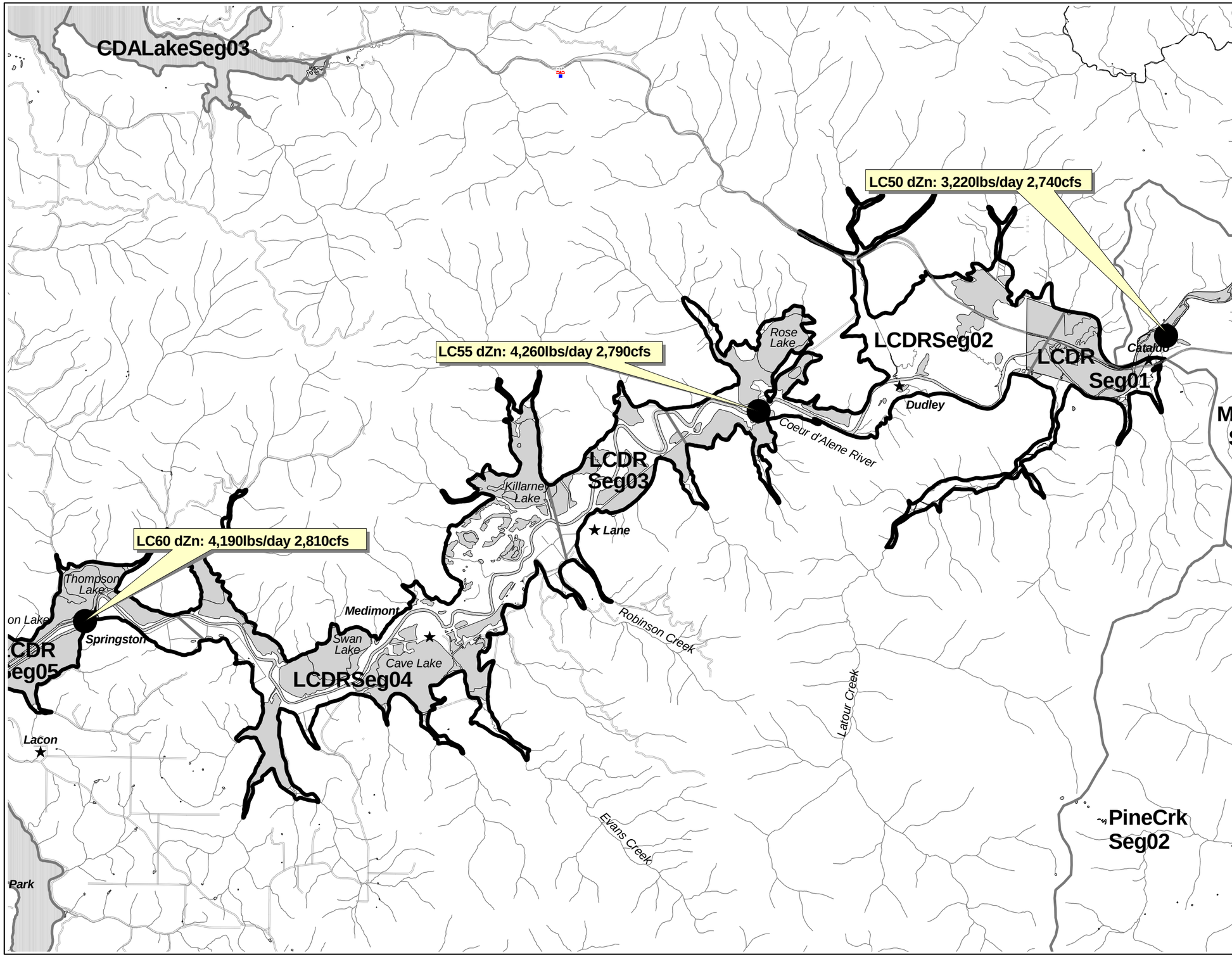

Figure 5.4-6
Lower Coeur d'Alene River Watershed
Estimated Expected Values for Dissolved Zinc Mass Loading

LEGEND

Sampling Location

Mass Load

LC60 dZn: 4,187lbs/day 2,810cfs

Analyte

Flow measured in Cubic Feet per Second

Range of Dissolved Zinc Mass Loading in lbs/day

- Range 0 - 100
- Range 100 - 500
- Range 500 - 1000
- Range 1000 - 1500
- Range >1500
- Stream
- Road
- Interstate 90
- City
- Lower Coeur d'Alene River Watershed
- River Segment
- Lake/River
- Source Area

Location Map

NOTES

1) Base map coverages obtained from the Coeur d'Alene Tribe, URS Greiner Inc., CH2M HILL, and the Bureau of Land Management.

SCALE 1:108,000

0.5 0 0.5 Miles

N

027-RI-C0-102Q
Coeur d'Alene Basin RI/FS
RI REPORT

EPA REGION 10

Document Control 4162500.6615.05a
Generation 1
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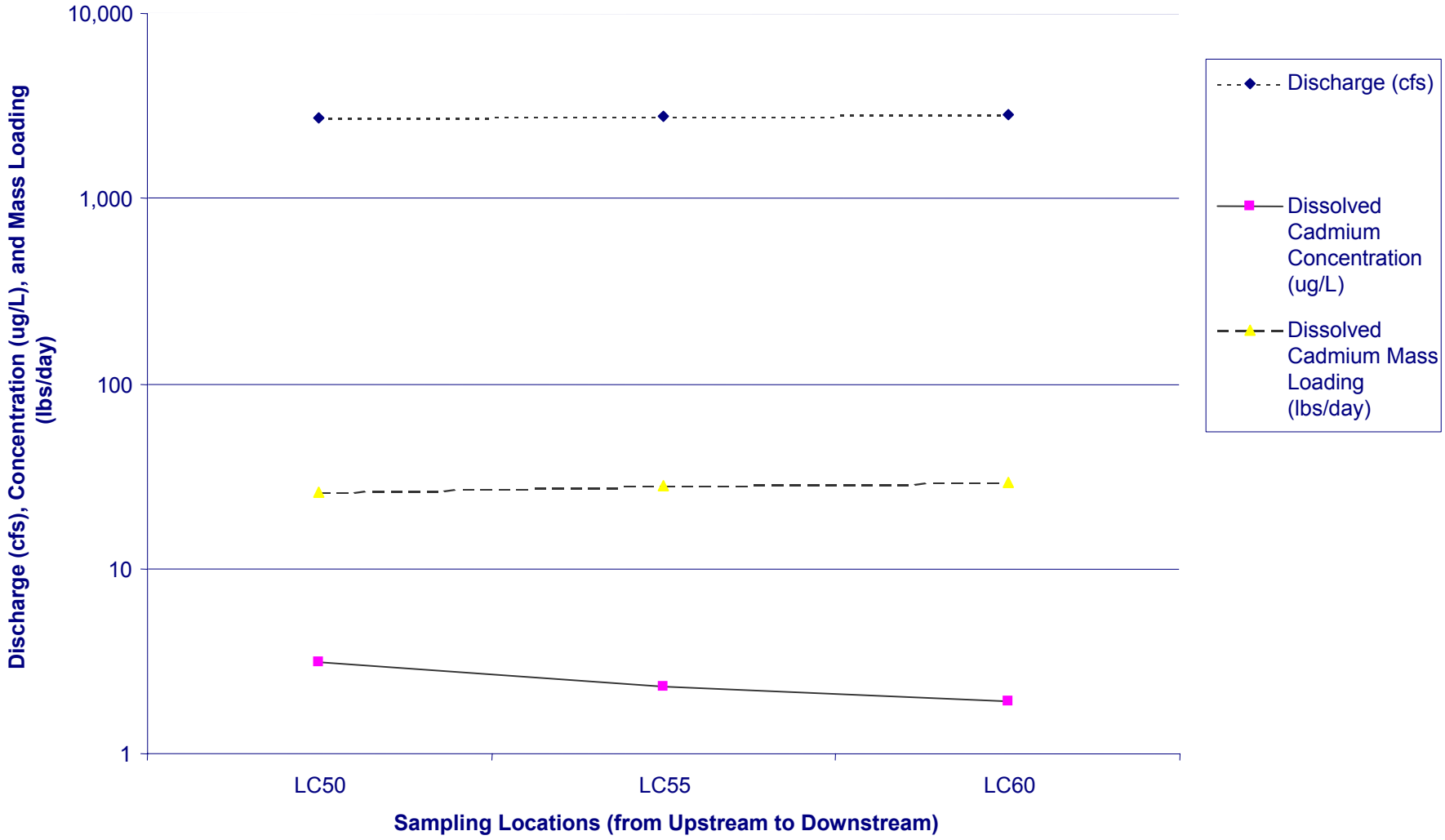
llcdr_ev7-26.apr
V:dZn Mass Loading
E:dZn
L: dZn Mass Loading
7/23/2001

This map is based on Idaho State Plane Coordinates West Zone, North American Datum 1983.

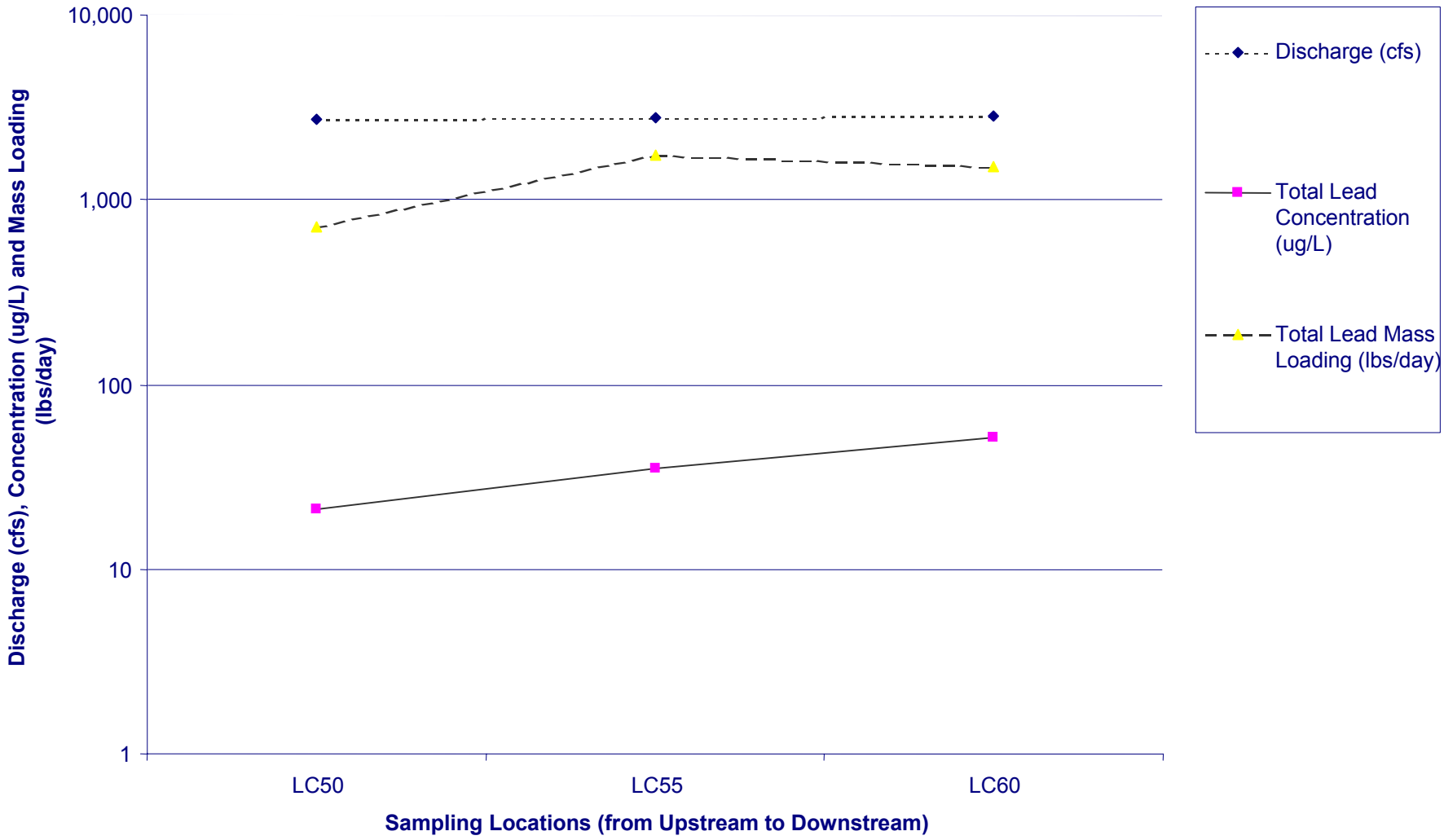
Date of Plot: July 23, 2001

Estimated Expected Values for Discharge, Dissolved Cadmium Concentrations and Dissolved Cadmium Mass Loading



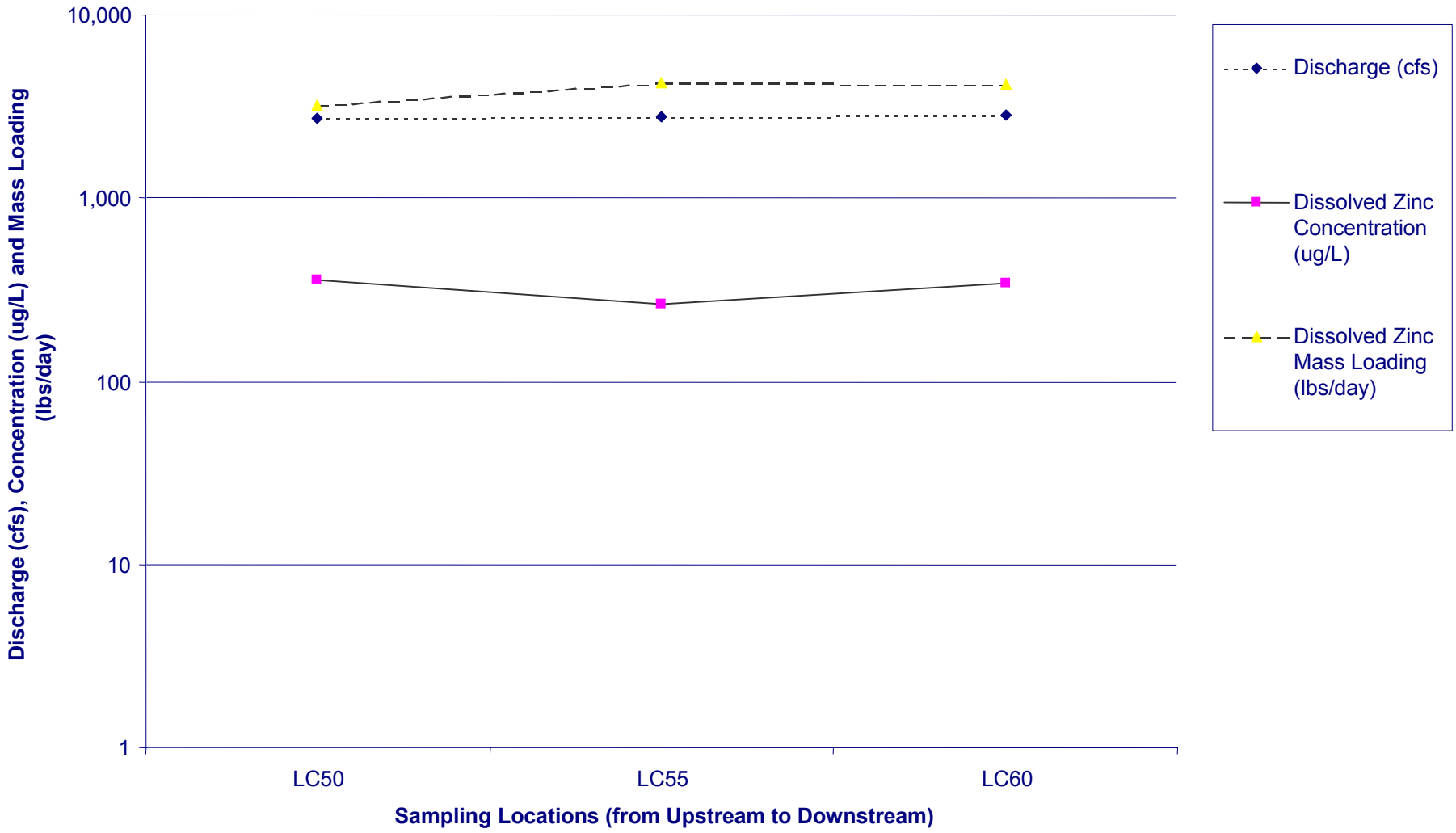
EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 5.4-7**

Estimated Expected Values for Discharge, Total Lead Concentrations and Total Lead Mass Loading



EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 5.4-8**

Estimated Expected Values for Discharge, Dissolved Zinc Concentrations and Dissolved Zinc Mass Loading



EPA REGION 10	027-RI-CO-102Q Coeur d'Alene Basin RI/FS RI REPORT	Doc Control: 4162500.6615.05.a Generation: 1 LCDA Series 07/13/01	**Figure 5.4-9**

Table 5.1-1
Low and High Instantaneous Metal Loading Values for CDR at Rose Lake and Harrison During May 1999

Metal	Loading (pounds/day)
Dissolved Cadmium	38.5 - 41.9
Total Lead	19,459 - 19,820
Dissolved Lead	388 - 924
Dissolved Zinc	6,000 - 6,529

Source: USGS 2000

Table 5.2-1
Estimated Expected Values of Concentrations and Loads Compared to Screening Levels and TMDLs for the Lower CDR Above Harrison

Sampling Location	Concentration (µg/L)			Mass Loading (pounds/day)			Discharge (cfs)
	Dissolved Cadmium	Total Lead	Dissolved Zinc	Dissolved Cadmium	Total Lead[b]	Dissolved Zinc	
Screening Level or TMDL[a]	0.38	15	42	13.7	20.1	1,200	NA
LC50	**3.19** (1.32)	**20.9** (1.43)	**354** (0.612)	**26.9** (1.32)	**708** (6.78)	**3,220** (0.725)	2,740 (1.54)
LC55	**2.32** (1.02)	**35.1** (1.34)	**263** (0.877)	**28.1** (1.34)	**1,750** (6.89)	**4,260** (0.688)	2,790 (1.43)
LC60	**1.92** (0.371)	**51.6** (1.08)	**344** (0.475)	**29** (1.39)	**1,510** (4.11)	**4,190** (1.02)	2,810 (1.42)

[a]TMDLs listed are the 90th percentile loading capacity for the Coeur d'Alene River at Harrison.
[b]The TMDL for dissolved lead was compared to the estimated total lead value for comparison because of the importance of particulate forms of lead.
NA - Not applicable
Values in parentheses are coefficients of variation
µg/L - micrograms per liter
cfs - cubic feet per second
Bold indicates exceedance of screening level or TMDL

Table 5.2-2
Estimated Gains or Losses in Discharge

Reach - between location Xi and Xj (# of samples), [segment]	Estimated expected value of gain or loss (EV[X]) in discharge, cfs	Coefficient of variation (CV) for reach ($p_{xi,xj}$ = 0.9)
LC50 (102) [MidGradSeg04] to LC55 [LCDRSeg02]	50	37.0
LC55 (32) to LC60 (91) [LCDRSeg05]	20	89.2

Note:
cfs - cubic feet per second

Table 5.2-3
Estimated Gains or Losses for Dissolved Zinc Concentrations and Dissolved Load

Reach - between location Xi and Xj (no. of samples), [segment]	Estimated expected value of increase or decrease in the concentration of dissolved zinc (µg/l)	Estimated coefficient of variation (CV) for the dissolved zinc ($p_{xi,xj}$ = 0.9)	Estimated expected value of gain or loss in the dissolved zinc load (lbs/day)	Estimated coefficient of variation (CV) for the dissolved zinc load ($p_{xi,xj}$ = 0.9)
LC50 (102) [MidGradSeg04] to LC55 [LCDRSeg02]	-91	1.1	1,040	1.3
LC55 (32) to LC60 (91) [LCDRSeg05]	81	1.4	-70	29.7

Notes:
µg/l - microgram per liter
lbs/day - pounds per day

Table 5.2-4
Estimated Gains or Losses for Total Lead Concentrations and Load

Reach - between location Xi and Xj (no. of samples), [segment]	Estimated expected value of increase or decrease in the total concentration of lead (µg/l)	Estimated Coefficient of variation (CV) for total lead concentrations	Estimated expected value of gain or loss in the total lead load (lbs/day)	Estimated coefficient of variation (CV) for the total lead load
LC50 (102) [MidGradSeg04] to LC55 [LCDRSeg02]	14.2	1.7	1,042.0	7.7
LC55 (32) to LC60 (91) [LCDRSeg05]	16.5	1.5	-240.0	29.2

Notes:
µg/l - microgram per liter
lbs/day - pounds per day

Table 5.2-5
Estimated Gains or Losses for Dissolved Cadmium Concentrations and Load

Reach - between location Xi and Xj (no. of samples), [segment]	Estimated expected value of increase or decrease in the concentration of dissolved cadmium (µg/l)	Estimated coefficient of variation (CV) for the dissolved cadmium ($p_{xi,xj}$ = 0.9)	Estimated expected value of gain or loss in the dissolved cadmium load (lbs/day)	Estimated coefficient of variation (CV) for the dissolved cadmium load ($p_{xi,xj}$ = 0.9)
LC50 (102) [MidGradSeg04] to LC55 [LCDRSeg02]	-0.87	2.7	1.2	13.7
LC55 (32) to LC60 (91) [LCDRSeg05]	-0.4	4.4	0.90	19.6

Notes:
µg/l - microgram per liter
lbs/day - pounds per day

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ATTACHMENT 1
Data Source References

Data Source References

Data Source References[a]	Data Source Name	Data Source Description	Reference
2	URS FSPA Nos. 1, 2, and 3	Fall 1997: Low Flow and Sediment Sampling	URS Greiner Inc. 1997. Field Sampling Plan Addendum 1 Sediment Coring in the Lower Coeur d'Alene River Basin, Including Lateral Lakes and River Floodplains
			URS Greiner Inc. 1997. Field Sampling Plan Addendum 2 Adit Drainage, Seep and Creek Surface Water Sampling
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4	MFG Historical Data Spring 1991	Spring 1991: High Flow Sampling	McCulley, Frick & Gillman, Inc. 1991. Upstream Surface Water Sampling Program Spring 1991 High Flow Event, South Fork Coeur d'Alene River Basin above Bunker Hill Superfund Site: Tables 1 and 2
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Data Source References (Continued)

Data Source References[a]	Data Source Name	Data Source Description	Reference
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10	URS FSPA No. 5	Common Use Areas Sampling	URS Greiner Inc. 1998. Field Sampling Plan Addendum 5 Common Use Areas: Upland Common Use Areas and Lower Basin Recreational Beaches; Sediment/Soil, Surface Water, and Drinking Water Supply Characterization
11	URS FSPA No. 8	Source Area Sampling	URS Greiner Inc. 1998. Field Sampling Plan Addendum 8 Tier 2 Source Area Characterization Field Sampling Plan
12	Historical Groundwater Data from MFG	1997 Annual Groundwater Data Report Woodland Park	McCulley, Frick & Gillman. 1998. 1997 Annual Groundwater Data Report Woodland Park
13	Historical Data from US Forest Service, Idaho Geological Survey and others	Historical Data on Inactive Mine Sites USFS, IGS and CCJM, 1994-1997, Prichard Creek, Pine Creek and Summit Mining District	Mackey K, Yarbrough, S.L. 1995. Draft Removal Preliminary Assessment Report Pine Creek Millsites, Coeur d'Alene District, Idaho, Contract No. 1422-N651-C4-3049
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Data Source References (Continued)

Data Source References[a]	Data Source Name	Data Source Description	Reference
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			US Forest Service. 1995. Pilot Inventory of Inactive and Abandoned Mine Lands, East Fork Pine Creek Watershed, Shoshone County, Idaho
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15	URS FSPA No. 9	Source Area Characterization; Field XRF Data	CH2M Hill and URS Greiner. 1998. Field Sampling Plan Addendum 9 Delineation of Contaminant Source Areas in the Coeur d'Alene Basin using Survey and Hyperspectral Imaging Techniques
16	Historical Sediment Data	Electronic Data compiled by USGS	U.S. Geological Survey. 1992. Effect of Mining-Related Activities on the Sediment-Trace Element Geochemistry of Lake Coeue d'Alene, Idaho, USA--Part 1: Surface Sediments, USGS Open-File Report 92-109, Prepared by A.J. Horowitz, K.A. Elrick, and R.B. Cook
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Data Source References (Continued)

Data Source References[a]	Data Source Name	Data Source Description	Reference
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			USGS. 2000. Concentrations and Loads of Cadmium, Lead and Zinc Measured on the Ascending and Descending Limbs of the 1999 Snomelt Runoff Hydrograph at Nine Stations, Coeur d'Alene River Basin Idaho
22	MFG Report on Union Pacific Railroad Right-of-Way Soil Sampling	Surface and Subsurface Soil Lead Data	MFG. 1997. Union Pacific Railroad Wallace Branch, Rails to Trails Conversion, Right-of-Way Soil Sampling, Summary and Interpretation of Data. McCulley, Frick and Gilman, Inc. March 14, 1997
23	URS FSPA No. 11A	Source Area Groundwater and Surface Water Sampling	URS Greiner Inc. 1999. Field Sampling Plan Addendum 11A Tier 2 Source Area Characterization
24	URS FSPA No. 15	Common Use Area Sampling—Spokane River	URS Greiner Inc. 1999. Field Sampling Plan Addendum 15 Spokane River - Washington State Common Use Area Sediment Characterization
25	URS FSPA No. 18	Depositional and Common Use Area Sediment Sampling - Spokane River	URS Greiner Inc. 2001. Final Field Sampling Plan Addendum No. 18, Fall 2000 Field Screening of Sediment in Spokane River Depositional Areas, Summary of Results. Revision 1. January 2001.
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[a]Reference Number is the sequential number used as cross reference to associate chemical results in data summary tables with specific data collection efforts.

ATTACHMENT 2
Data Summary Tables

ABBREVIATIONS USED IN DATA SUMMARY TABLE

LOCATION TYPES:

AD adit
BH borehole
FP flood plain
GS ground surface/near surface
HA hand auger boring
LK lake/pond/open reservoir
OF outfall/discharge
RV river/stream
SP stockpile
TL tailings pile

QUALIFIERS:

U Analyte was not detected above the reported detection limit
J Estimated concentration

DATA SOURCE REFERENCES:

Data source references listed in Attachment 1 are shown in the data summary tables in the "Ref" column.

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg01

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Soil (mg/kg)														
CUA0671	GS	10	07/29/1998	0	2.5 J	21	1.5	45.7	38400	355	1350	0.11 U	1.5 U	267
CUA0672	GS	10	07/29/1998	0	1 U	13.5	0.38 J	32.8	31600	123	979	0.1 U	0.41 U	148
CUA0673	GS	10	07/29/1998	0	3 J	27.2	2.5	41	31700	536	1410	0.56	1.8 U	450
CUA0674	GS	10	07/29/1998	0	7 J	59.7	7.7	53.5	29600	1270	1480	1.6	3.9	1470
CUA0675	GS	10	07/29/1998	0	1.4 J	17.9	1.4	38.3	31800	321	1150	0.29	0.56 J	315
CUA0681	GS	10	08/26/1998	0	16.8 J	72.9	10.8	89.7	46300	3050	3860	1.8	10.3	1640
CUA0682	GS	10	08/26/1998	0	21.7 J	88.8	13.5	109	62700	3740	5920	1.7	13.3	1940
CUA0683	GS	10	08/26/1998	0	17.9 J		12.6	92.8	54300	3280		1.7		1780
CUA0683	GS	10	08/26/1998	0		83.8					4970		17.9	
CUA0684	GS	10	08/26/1998	0	13.1 J	64.3	8.2	72.4	38300	2270	3220	1	8.4	1320
CUA0685	GS	10	08/26/1998	0	13.1 J	72	10	72.2	45800	2190	3730	0.86	8.6	1590
CUA0691	GS	10	08/26/1998	0	24 J	125	13.9	113	76561 J	3460	5630	1.6	13.6	2070
CUA0692	GS	10	08/26/1998	0	25.1 J	135	17.6	121	91800 J	3580	6910	1.5	15	2530
CUA0693	GS	10	08/26/1998	0	26.8 J			111				1.6		1770
CUA0693	GS	10	08/26/1998	0		150	13.9		85966 J	3690	5750		15.5	
CUA0694	GS	10	08/26/1998	0	24.4 J	127	10.2	90.6	87495 J	2430	7290	0.85	12.6	1610
CUA0695	GS	10	08/26/1998	0	22 J	135	14	97.4	83007 J	2740	7090	1.4	13.4	1680
LC10008	RV	22	---	0.5						1880				
LC10009	RV	22	---	0.5						4520				
LC10010	RV	22	---	0.5						* 4860				
LC10054	RV	22	---	0.5						1380				
LC10055	RV	22	---	0.5						1500				
LC10056	RV	22	---	0.5						3640				
LC10057	RV	22	---	0.5						2000				
LC10058	RV	22	---	0.5						1120				
LC10059	RV	22	---	0.5						3640				
LC10060	RV	22	---	0.5						3170				
LC11208	FP	16	---			107	27.9	81	52700	2140	6980			8850
LC11232	FP	16	---			123	19.9	82.3	29300	2320	1720			1550
LC1136	GS	15	10/09/1998				10.1	177	93000	3530				967
LC1137	GS	15	10/09/1998				21.8		134000	4040				2120
LC1141	GS	15	10/09/1998				7.37		49500	1620				702
LC1142	GS	15	10/09/1998				18.3	194	112000	3390				1780
LC1143	GS	15	10/09/1998				14.2	86.1	147000	3930				1370
LC1144	GS	15	10/09/1998				0.916		20500	32.9				67.9
LC1145	GS	15	10/09/1998				1.76		25200	191				151
LC1146	GS	15	10/09/1998				12		108000	3110				1160

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg01

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Soil (mg/kg)														
LC1205	GS	15	10/11/1998				15.1	100	119000	3590				1460
LC1205	GS	15	10/11/1998							3900				
LC1205	GS	15	10/11/1998					250						
LC1205	GS	15	10/11/1998				28.1		140000					2730
LC1212	GS	15	10/12/1998				19.1		95900	2990				1850
LC1213	GS	15	10/11/1998				16.1		65600	2380				1560
LC1213	GS	15	10/11/1998				39.4			3420				7990
LC1213	GS	15	10/11/1998					116	94200					
LC1213	GS	15	10/12/1998				14.1		124000	2640				1360
LC3010	GS	15	10/09/1998				17.4	158	120000	4510				1680
LC3011	GS	15	10/09/1998				8.41		55100	1670				804
LC3023	GS	15	10/09/1998				0.823		6740					58.8
LC3024	GS	15	10/09/1998				0.806	63.5	22700					57.1
LC3025	GS	15	10/09/1998				1.06		32600	29.2				82.4
LC3026	GS	15	10/09/1998				0.469		26800	7.69				24.1
LC3027	GS	15	10/09/1998				0.757		16000	18.1				52.2
LC3028	GS	15	10/09/1998				0.5		37200	53.9				27.1
Subsurface Soil (mg/kg)														
LC10008	RV	22	---	1						1960				
LC10008	RV	22	---	1.5						1120				
LC10009	RV	22	---	1						* 9880				
LC10009	RV	22	---	1.5						* 19600				
LC10010	RV	22	---	1						* 9940				
LC10010	RV	22	---	1.5						1830				
LC10054	RV	22	---	1						2250				
LC10054	RV	22	---	1.5						1170				
LC10055	RV	22	---	1						1380				
LC10055	RV	22	---	1.5						* 4900				
LC10056	RV	22	---	1						* 5940				
LC10056	RV	22	---	1.5						* 6000				
LC10057	RV	22	---	1						4180				
LC10057	RV	22	---	1.5						1380				
LC10058	RV	22	---	1						1040				
LC10058	RV	22	---	1.5						1000				
LC10059	RV	22	---	1						1540				
LC10059	RV	22	---	1.5						292				

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg01

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Subsurface Soil (mg/kg)														
LC10060	RV	22	---	1						* 6000				
LC10060	RV	22	---	1.5						458				
Sediment (mg/kg)														
CUA06810	RV	10	08/26/1998	0	14.8	84.8	4.8	60.4	57000	2340	3720	2.4	8	1440
CUA06811	RV	10	08/26/1998	0	16.6 J	92.8 J	18.2	77.2	64000	2660	6390	1.1 J	9.9 J	1990
CUA06812	RV	10	08/26/1998	0	16.1 J	79.7 J	13.2	79	62000	2400	5490	1.1 J	10.1 J	1730
CUA06813	RV	10	08/26/1998	0	17.8 J	78.6 J		99.1	58100		5000	1.2 J		
CUA06813	RV	10	08/26/1998	0			30.9			2540			9.7 J	2790
CUA06814	RV	10	08/26/1998	0	14.7 J	69	24.3	81.8	47700	2450	4100	0.94	9.5 J	2310
CUA06815	RV	10	08/26/1998	0	15.1 J	87.8	15.6	88.4	54400	2510	5450	1.6	9.5 J	1720
CUA0686	RV	10	08/26/1998	0	15.1 J	85.2	12.5	87.1	53500	2480	4830	1.4	9.6	1690
CUA0687	RV	10	08/26/1998	0	17 J	95.8	13.3	91.5	66400	2640	6320	1.2	10.5	1920
CUA0688	RV	10	08/26/1998	0	14.1 J	81.4	9.3	78.1	47000	2340	3940		9.6	1400
CUA0688	RV	10	08/26/1998	0								2.5		
CUA0689	RV	10	08/26/1998	0	10.9 J	63.5	8.8	56.5	39100	1950	2980	2	5	1440
CUA06910	RV	10	08/26/1998	0	21	110	8.1	76.7	69000	2660	5560	2.3	9.3	1700
CUA06911	RV	10	08/26/1998	0	10.5 J	132	20.9	84.9	79100	3010	6560	1.8	8.4	2710
CUA06912	RV	10	08/26/1998	0	13.9	156	21	80.9	71000	2750	6300	1.9	8	2650
CUA06913	RV	10	08/26/1998	0	15.5	143	19.4	87.8		2680	5800	1.9	8.1	2590
CUA06913	RV	10	08/26/1998	0					70900					
CUA06914	RV	10	08/26/1998	0	12.8	150	19.7	84.2	65500	2710	5660	2	8.5	2510
CUA06915	RV	10	08/26/1998	0	7.8 J	79.3	25.3	65.1	48200	2060	5010	1.2	5.6	2930
CUA0696	RV	10	08/26/1998	0	24.7 J	135	20.7	108	62159	3600	6680	1.9	16.8	2540
CUA0697	RV	10	08/26/1998	0	17.9 J	141	18.2	103	70286	2950	7300	1.5	12.2	2250
CUA0698	RV	10	08/26/1998	0			26.4	81.7			4500		9.7	2120
CUA0698	RV	10	08/26/1998	0	21	117			53300	2630		2.6		
CUA0699	RV	10	08/26/1998	0	17.5	120	9.7	68.3	55200	2100	4150	2	6.9	1890
LC10297	RV	16	---	0	26	88	6	65	5.14	1880	3450		6	1240
LC10298	RV	16	---	0	9	24	5	160	2.9	740	1240		2	520
LC10298	RV	16	---	0.49	22	68	11	130	4.1	1470	2560		5	820
LC10298	RV	16	---	1.15	40	181	10	150	7	2910	5450		10	1520
LC10298	RV	16	---	2.95	65	97	22	220	9.2	* 7560	8390		20	2710
LC10298	RV	16	---	5.41	73	97	20	190	8.3	* 8980	6850		24	2660
LC10298	RV	16	---	7.02	71	97	47	160	8.6	* 9630	5890		23	3720
LC10298	RV	16	---	7.94	57	30	55	170	5.2	* 8020	3610		20	3740
LC10299	RV	16	---	0	36	106	16	140	5.58	3310	4020	4	11	1840

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg01

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10299	RV	16	---	0.13	46	198	16	130	7.89	3820	6200	4	13	2110
LC10299	RV	16	---	0.98	56	72	20	230	9.83	* 10700	8640	10	26	3080
LC10299	RV	16	---	2.3	58	92	15	270	10.14	* 11300	8820	12	29	2460
LC10299	RV	16	---	3.12	62	36	15	200	10.4	* 12900	9190	13	31	1950
LC10299	RV	16	---	3.28	4	16	25	100	2.16	640	965		1	1100
LC10299	RV	16	---	4.26	4	2	40	55	2.4	55	800			1500
LC11185	RV	16	---	0	36	120	21	76	59000	2800	4700	2.6	9.3	2100
LC11185	RV	16	---	0.12	34	100	18	67	53000	2600	3600	2.2	9.2	1800
LC11185	RV	16	---	0.23	33	100	18	71	52000	2500	2600	2.1	9.1	1700
LC11185	RV	16	---	0.29	35	110	18	79	54000	2800	2400	2.1	9.6	1700
LC11185	RV	16	---	0.38	43	140	22	92	58000	3200	2500	2.8	12	1700
LC11185	RV	16	---	0.42	43	150	21	95	60000	3200	1900	2.6	11.9	1700
LC11185	RV	16	---	0.46	41	140	15	83	52000	2900	1800	2.1	11.1	1400
LC11185	RV	16	---	0.5	42	70	15	97	44000	2900	2000	3.4	11.4	1200
LC11185	RV	16	---	0.66	44	130	18	115	54000	3100	2400	4	11.3	1400
LC11185	RV	16	---	0.72	68	270	19	135	95000	4400	4400	7.6	17.1	2000
LC11185	RV	16	---	0.82	85	585	28	140	122000	4150	8400	7.1	18.9	2250
LC11185	RV	16	---	0.98	85	740	16	131	147000	3200	10000	5.2	19.6	2100
LC11185	RV	16	---	1.1	95	990	12	151	178000	3000	10000	3.3	22	2500
LC11185	RV	16	---	1.2	91	740	33	140	150000	3100	15800	2.8	20	3400
LC11185	RV	16	---	1.35	8.5	40	5	19	28000	250	1200	0.22	1.6	470
LC11185	RV	16	---	1.48	3.2	12.7	3	14	22000	63	300	0.04	0.01 U	280
LC11185	RV	16	---	1.54	2	5.2	2	11	20000	23	100	0.01 U	0.01 U	220
LC11185	RV	16	---	1.62	1.9	5.3	2	11	21000	22	100	0.01 U	0.01 U	230
LC11185	RV	16	---	1.8	1.9	5.8	2	13	22000	26	100	0.01 U	0.01 U	310
LC11185	RV	16	---	1.97	1.9	5.3	2	13	21000	24	100	0.02	0.01 U	290
LC11185	RV	16	---	2.08	1.9	5.1	2	13	22000	25	100	0.01 U	0.01 U	280
LC11185	RV	16	---	2.15	1.8	5.1	2	12	22000	25	100	0.01 U	0.01 U	280
LC11185	RV	16	---	2.28	1.9	4.8	2	11	21000	21	100	0.03	0.01 U	250
LC11185	RV	16	---	2.33	1.9	5	2	12	22000	24	100	0.02	0.01 U	280
LC11185	RV	16	---	2.46	1.6	3.3	2	11	19000	22	100	0.02	0.01 U	280
LC11185	RV	16	---	2.62	1.8	4.3	1	9	21000	18	100	0.01 U	0.01 U	230
LC11185	RV	16	---	2.82	1.7	3.9	3	12	21000	20	100	0.01 U	0.01 U	370
LC11185	RV	16	---	2.87	1.7	3.9	1	10	20000	18	100	0.01 U	0.01 U	300
LC11185	RV	16	---	3.03	1.7	3.2	1	8	18000	14	100	0.01 U	0.01 U	250
LC11185	RV	16	---	3.13	1.7	3.7	1	7	19000	15	100	0.01 U	0.01 U	270
LC114	RV	2	12/20/1997	0	21.5	106	15.3	108	53800	3440	3380	3.97	10.4	1590

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg01

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC114	RV	2	12/20/1997	3	35.4	464	19.8	125	121000	2900	6750	3.36	13.7	2150
LC114	RV	2	12/20/1997	5	58.6	414	15.4	139	123000	2180	8490	1.99	16.5	2180
LC115	RV	2	12/20/1997	0	23.9	194	18.4	124	66500	3630	4590	5.42	12.8	1880
LC115	RV	2	12/20/1997	3			25.5	201			8280		27.7	3170
LC115	RV	2	12/20/1997	6	6.15 J	10.2	12.1	45	17600	1620	544	0.133 U	5.87	1780
LC115	RV	2	12/20/1997	3	38.1	294			141000	* 9600		6.75		
LC116	RV	2	12/20/1997	0	26.5	160	15.7	137	84400	* 5560	6850	3.49	16.1	2790
LC116	RV	2	12/20/1997	2.7	28.2	91.8	16.4	150	106000	* 7190	7260	5.16	19	2620
LC116	RV	2	12/20/1997	5.5	36.6	116	* 158	168	96300	* 7680	7810	4.8	19.7	6830
LC117	RV	2	11/20/1997	0	8.84 J	56.9	8.78	61.1	36100	1480	1030	1.23	5.57	806
LC117	RV	2	11/20/1997	1.9	0.953 U	6.19	0.238 U	16.3	16900	31.7	71.6	0.124 U	0.238 U	44
LC117	RV	2	11/20/1997	3.7	1.12 J		0.244 U	16.3		91.5		0.119 U	0.244 U	
LC117	RV	2	11/20/1997	3.7		7.85			21400		101			60.2
SJ2922	LK	14	---	0.2			1 U		5.37		1107		1 U	
SJ2922	LK	14	---	0.26			1 U	38	2.87	663	344		1 U	924
SJ2922	LK	14	---	0.33			1 U	26	2.68	56	360		1 U	172
SJ2922	LK	14	---	0.39			1 U	28	5.07	34	755		1 U	161
SJ2922	LK	14	---	0.46			1 U	37	2.08	762	500		1 U	864
SJ2922	LK	14	---	0.53			1 U	34	2.97	72	526		1 U	274
SJ2922	LK	14	---	0.43			1 U	34	2.6	20 U	490		1 U	710
SJ2922	LK	14	---	1.41			1 U	33	3	20 U	720		1 U	540
SJ2922	LK	14	---	2.4			1 U	35	3	20 U	540		1 U	530

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Soil (mg/kg)														
CUA05611	GS	10	09/01/1998	0	21 J	111 J	22.5	114	78400	* 4780	8290	2.6 J	16.3 J	3340
CUA05612	GS	10	09/01/1998	0	14.7 J	75.1 J	21.1	92.3	62800	3690	5960	2.2 J	12.8 J	2990
CUA05613	GS	10	09/01/1998	0	20.4 J	94.5 J	23.9	109	73500	* 4850	7710	2.9 J	16.7 J	3360
CUA05614	GS	10	09/01/1998	0	18.4 J	98.7 J	32.5	112	86600	4160	8780	2.2 J	16.1 J	5210
CUA05615	GS	10	09/01/1998	0	19.4 J	113 J	29.5	108	89900	4370	8860	2.4 J	16.3 J	4400
CUA0571	GS	10	09/01/1998	0	26.6 J	97.3	60.8	160	119000	* 4760	12900	2.5	19.2	9630
CUA0572	GS	10	09/01/1998	0	14.5 J	91.8	20.7	96.6	68300	4060	6780	3.1	15.2	2950
CUA0573	GS	10	09/01/1998	0	11.5 J	86.1	14.1	85.7	60500	3190	5490	2.8	12.6	1890
CUA0574	GS	10	09/01/1998	0	20.9 J	119	44.5	125	95300	4610	10700	3.1	17.7	6850
CUA0575	GS	10	09/01/1998	0	19.9 J	117			113000	* 5140	12000	3.3		
CUA0575	GS	10	09/01/1998	0			48.2	147					18.9	7520
CUA0581	GS	10	08/27/1998	0	35.8	217	59.4	254	177000	3910	17700	2.6	28.3	* 10100
CUA0582	GS	10	08/27/1998	0	49.9	329	84.1	298	222000	* 5900	21100	1.9	34.5	* 13600
CUA0583	GS	10	08/27/1998	0	30.5	213	75.8	276	214000	* 6080	21200		28.3	* 12500
CUA0583	GS	10	08/27/1998	0								2.6		
CUA0584	GS	10	08/27/1998	0	35.7	163	85.8	264	190000	* 5570	19600	2	29.8	* 13600
CUA0585	GS	10	08/27/1998	0	20.4	115	41.2	160	113000	4420	8900	1.9	17.3	6700
CUA05910	GS	10	08/15/1998	0	12.5	75.1	26.7	104	74200	2970	6150	3.1 J	11.2	4580
CUA0596	GS	10	08/15/1998	0	30.4	114	36.2	130	98600	4330	8040	3.2	15.1	5650 J
CUA0597	GS	10	08/15/1998	0	46.9	163	73.8	207	167000	* 6010	17100	4.1	21.2	* 10900 J
CUA0598	GS	10	08/15/1998	0	36.9	256	41.3	162	144000	* 5590	25200	4.1	17	6710 J
CUA0599	GS	10	08/15/1998	0	40.2	126	49.3	184	134000	* 5480	13000	4.5	19.9	7600 J
CUA06010	GS	10	08/15/1998	0	41.5	123	53.6	182	135000	4420	14200	4.2	21.3	8550 J
CUA0606	GS	10	08/15/1998	0	56.5	154	82.1	267	188000	* 5580	19300	2.5	28	* 12100 J
CUA0607	GS	10	08/15/1998	0	31.8	107	53.3	189	131000	* 4960	13300	2.9	18.4	8300 J
CUA0608	GS	10	08/15/1998	0	37.4	110	57.9	188	136000	* 5140	14400	2.8	19.4	8910 J
CUA0609	GS	10	08/15/1998	0	29.8	103	29.1	138	104000	4420	8320	3	14.8	4720 J
CUA0631	GS	10	08/27/1998	0	17.8 J	116 J	19.8	127 J	81100	4300	8460	2.8	17.5	2790 J
CUA0632	GS	10	08/27/1998	0	34.9 J	150 J	48.8	174 J	131000	* 4930	13900	1.4	23.3	7480 J
CUA0633	GS	10	08/27/1998	0	45.9 J	187 J	86.4	284 J		* 6390		3.5		
CUA0633	GS	10	08/27/1998	0					184000		20000		31.9	* 14200 J
CUA0634	GS	10	08/27/1998	0	19.7 J	109 J	26.8	134 J	82600	4290	9390	1.6	17.8	3720 J
CUA0635	GS	10	08/27/1998	0	19.3 J	99.9 J	24.9	121 J	75200	4040	7990	1.9	17.2	3310 J
CUA0641	GS	10	09/01/1998	0	17.9 J	86.1 J	40.9	108	63700	3560	6680	2 J	14.3 J	6320
CUA0642	GS	10	09/01/1998	0	20.4 J	100 J	32.3	123	85000	3720	9300	2.4 J	15 J	5240
CUA0643	GS	10	09/01/1998	0	17.5 J	97.6 J	34.6	113	70700	3360	7190	2.5 J	15 J	5310
CUA0644	GS	10	09/01/1998	0	18.8 J	105 J	38.5	136	79500	3920	8730	2.3 J	14.8 J	6910

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Soil (mg/kg)														
CUA0645	GS	10	09/01/1998	0	17.4 J	82.5 J	31.5	107	67000	3490	6790	2 J	14.3 J	4830
CUA06516	GS	10	09/10/1998	0	30.9	94.8	37	136	94800	3530	7120 J	1.1	16.1	6370
CUA06517	GS	10	09/10/1998	0	20.8 U	70	21.4	108	62200	3280	4810 J	2.8	12.9	3750
CUA06518	GS	10	09/10/1998	0		115			86100	3060	5940 J	3.4		
CUA06518	GS	10	09/10/1998	0	21.1 U		20.3	101					11.9	3590
CUA06519	GS	10	09/10/1998	0	21.5 U	82.5	22	110	72000	3400	5440 J	2.7	13.8	3840
CUA06520	GS	10	09/10/1998	0	30 U	149	15.3	125	100000	3460	6590 J	11	14.5	3030
CUA0661	GS	10	08/02/1998	0	36.1 J	256 J	15.5 J	96.5	139000	2670	10900 J	1.1	20.7 J	2520 J
CUA0662	GS	10	08/02/1998	0	23.9 J	160 J	8.2	95.4	89200	3520	9180	1.5	20.9	5060
CUA0663	GS	10	08/02/1998	0	58.6 J	492 J	21.3 J	149 J	145000	3470 J	12800	1.1 J	30.9 J	3530 J
CUA0664	GS	10	08/02/1998	0	19.9 J	144 J	15	106	80500	3060	7810	1.6 J	19.1	3190
CUA0665	GS	10	08/02/1998	0	22.2 J	151 J	11.4	101	80900	2940	7770	1.9 J	20	1850
LC10006	RV	22	---	0.5						3860				
LC10007	RV	22	---	0.5						* 6260				
LC10049	RV	22	---	0.5						3290				
LC10050	RV	22	---	0.5						2130				
LC10051	RV	22	---	0.5						3670				
LC10052	RV	22	---	0.5						* 8590				
LC10053	RV	22	---	0.5						3430				
LC1095	GS	15	10/09/1998				0.875		8740	5.08				63.8
LC1106	GS	15	10/09/1998				14.5	98.2	132000	2850				1410
LC1108	GS	15	10/09/1998				19	82	125000	4050				1850
LC1109	GS	15	10/09/1998				14.1		97600	2940				1360
LC1110	GS	15	10/09/1998				24.6		114000	* 4890				2390
LC1112	GS	15	10/09/1998				21.1	185	192000	2990				2040
LC1113	GS	15	10/09/1998				16		113000	2930				1550
LC1116	GS	15	10/09/1998				13.6		125000	1860				1310
LC1117	GS	15	10/09/1998				13.4		137000	2470				1290
LC1118	GS	15	10/09/1998				26.8		151000	3800				2610
LC1120	GS	15	10/09/1998				31.4		108000	3500				3060
LC11201	FP	16	---			14.9	0.67	18.3	14600	143	96			136
LC11204	FP	16	---			150	17.2	160	72200	* 7600	4290			1850
LC1121	GS	15	10/09/1998				15.4	129	176000	2930				1490
LC11210	FP	16	---			9.7	4.6	23	9830	417	72.9			371
LC11217	FP	16	---			22.3	5	32.3	18500	1450	668			532
LC11218	FP	16	---			272.5	18.85	101.9	71450	3595	5230			1925
LC1122	GS	15	10/09/1998				10.6		121000	2070				1010

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Soil (mg/kg)														
LC11220	FP	16	---			6.1	1.05	24.65	19800	60.6	264			76.55
LC11223	FP	16	---			13.5	2.5	26.2	15100	243	308			156
LC11224	FP	16	---			4.6	3.8	16.1	7360	291	37.3			119
LC1123	GS	15	10/09/1998				16.1	168	182000	2830				1560
LC1124	GS	15	10/09/1998				14.9		93700	2570				1440
LC11240	FP	16	---			5.3	7.1	16.6	5890	773	75.6			341
LC1126	GS	15	10/09/1998				14.6	99.7	107000	2550				1410
LC1131	GS	15	10/09/1998				20.4	288	113000	2570				1980
LC1133	GS	15	10/09/1998				15.2	16.9	88700	3150				1470
LC1134	GS	15	10/09/1998				26	144	99500	2420				2530
LC1135	GS	15	10/09/1998				16.4		87900	2000				1590
LC1138	GS	15	10/09/1998				18	113	107000	4310				1740
LC1165	GS	15	10/09/1998				45.4	72.8	109000	* 5520				9370
LC1198	GS	15	10/05/1998				1.63							138
LC1200	GS	15	10/05/1998				9.7		100000	3240				930
LC1201	GS	15	10/05/1998				9.26	14.1	80100	1310				886
LC1203	GS	15	10/05/1998				58.8	165	74700	* 5150				* 12500
LC1204	GS	15	10/05/1998				1.28		578					104
LC1218	GS	15	10/11/1998				14.4		45200	1650				1390
LC1219	GS	15	10/11/1998				46.8	8.75	167000	* 6190				9700
LC1220	GS	15	10/11/1998				8.98		31400	1070				859
LC1222	GS	15	10/12/1998				11.2	73.4	31100	1960				1080
LC1223	GS	15	10/12/1998				4.52		28800	988				422
LC1224	GS	15	10/12/1998				7.98		42100	1210				761
LC1225	GS	15	10/11/1998				23.9		66200	2470				2320
LC1226	GS	15	10/11/1998				15.6		72300	1350				1510
LC1227	GS	15	10/11/1998				23.1		131000	2890				2250
LC1228	GS	15	10/11/1998				15.4		53800	1300				1490
LC1229	GS	15	10/11/1998				16		43100	2260				1550
LC1230	GS	15	10/11/1998				15.1	22.2	49700	2630				1460
LC1231	GS	15	10/11/1998				6.08		34200	2470				575
LC1240	GS	15	10/06/1998				2.87		20900	225				260
LC1581	GS	15	10/06/1998				17.5		75900	3230				1690
LC1582	GS	15	10/06/1998				32.2	91.1	86100	* 5270				3130
LC1584	GS	15	10/06/1998				27.7	132	68200	3750				2700
LC1587	GS	15	10/06/1998				25.9		68200	* 5840				2520
LC1591	GS	15	10/06/1998				38.5		86000	* 9640				7780

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Soil (mg/kg)														
LC1592	GS	15	10/06/1998				33.1	58.3	83100	* 4990				3230
LC1593	GS	15	10/06/1998				39.5		89000	* 5690				8010
LC1594	GS	15	10/06/1998						3180					
LC1595	GS	15	10/06/1998				23.8	267	87700	* 5090				2310
LC1596	GS	15	10/06/1998				6.43		30800	3060				609
LC1597	GS	15	10/06/1998				25.9		64800	* 5610				2520
LC1599	GS	15	10/06/1998				40.5	183	102000	4040				8230
LC1600	GS	15	10/06/1998				34.2	3.17	92700	3570				6770
LC1602	GS	15	10/06/1998				29.4	27.3	84700	4160				2860
LC1603	GS	15	10/06/1998				32.1		84200	* 5570				3120
LC1606	GS	15	10/06/1998					125						
LC1606	GS	15	10/06/1998				30.5		89400	4160				2970
LC1608	GS	15	10/06/1998				38.8		78900	* 4900				7830
LC1609	GS	15	10/06/1998				33		76600	4610				3220
LC1610	GS	15	10/06/1998				32	9.27	95500	4490				3120
LC1613	GS	15	10/06/1998				38.9	74.2	107000	* 5070				7860
LC1616	GS	15	10/06/1998				30.2		88600	* 5720				2940
LC1617	GS	15	10/06/1998				28.1		83200	4630				2740
LC1619	GS	15	10/06/1998				32.4		104000	* 7340				3160
LC1620	GS	15	10/06/1998				26.5		66000	3810				2580
LC1626	GS	15	10/06/1998				27.6	2020	90100	* 11600				2690
LC1627	GS	15	10/06/1998				1.11		7730					86.7
LC2000	GS	15	10/06/1998				32.5		82600	* 4830				3170
LC3001	GS	15	10/06/1998				26		104000	3660				2530
LC3003	GS	15	10/09/1998						2570					
LC3005	GS	15	10/09/1998				0.00909		4070	18.8				
LC3006	GS	15	10/09/1998				0.196		7100					
LC3007	GS	15	10/09/1998				0.404		692					17.7
LC3008	GS	15	10/09/1998				0.649		47500					41.7
LC3009	GS	15	10/09/1998				1.64		18700	147				139
LC3014	GS	15	10/06/1998				0.225							0.07
LC3017	GS	15	10/09/1998				0.935		19600	28.1				69.8
LC3018	GS	15	10/06/1998				1.27		19300	44.1				103
LC3020	GS	15	10/09/1998				1.17		19600					92.7
LC3021	GS	15	10/06/1998				1.26		17500	82.9				102

Subsurface Soil (mg/kg)

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Subsurface Soil (mg/kg)														
LC10006	RV	22	---	1						* 7500				
LC10006	RV	22	---	1.5						* 9780				
LC10007	RV	22	---	1						* 14000				
LC10007	RV	22	---	1.5						1960				
LC10049	RV	22	---	1						3380				
LC10049	RV	22	---	1.5						3670				
LC10050	RV	22	---	1						1650				
LC10050	RV	22	---	1.5						875				
LC10051	RV	22	---	1						2350				
LC10051	RV	22	---	1.5						333				
LC10052	RV	22	---	1						* 8410				
LC10052	RV	22	---	1.5						* 9750				
LC10053	RV	22	---	1						* 7220				
LC10053	RV	22	---	1.5						3050				
Sediment (mg/kg)														
CUA0561	RV	10	09/01/1998	0	31.7 J	130 J	55.1	154	125000	4450	13100	1.8 J	21.4 J	9410
CUA0562	RV	10	09/01/1998	0	9 J	44.7 J	19.9	69.3	48000	1750	4270	0.55 J	7.8 J	3090
CUA0563	RV	10	09/01/1998	0	22 J	99.8 J	44.1	129	88100	* 4740	9310	1.7 J	16.2 J	6920
CUA0564	RV	10	09/01/1998	0	27.1 J	105 J	54.1	136	115000	4400	11800	1.5 J	20.2 J	8610
CUA0565	RV	10	09/01/1998	0		138 J			117000		11700			
CUA0565	RV	10	09/01/1998	0	35.4 J		54.4	177		* 5000		2.3 J	21.4 J	8830
CUA05710	RV	10	09/01/1998	0	52.4	208	* 80.9	325	203000	* 5020	18200	2.5	35.1	* 12800
CUA05711	RV	10	09/01/1998	0	67.4	146	* 104	337	256000		25500		38	* 21800
CUA05711	RV	10	09/01/1998	0						* 4760		2.5		
CUA05712	RV	10	09/01/1998	0	51.2	137	* 105	313	222000	* 5200	22200	1.8	39	* 20900
CUA05713	RV	10	09/01/1998	0	42.5	126	* 82.9	264	190000	4080	19200	1.3	27.7	* 13800
CUA05714	RV	10	09/01/1998	0	48.6	143	* 95.6	277	212000	4550	20900	2.1	30.7	* 19000
CUA05715	RV	10	09/01/1998	0	38.8	108	* 83.3	279	206000	4010	20400	2.8	31.7	* 16800
CUA0576	RV	10	09/01/1998	0	20.8 J	139	26.8	129	118000	* 5610	11500	2.9	15.2	3850
CUA0577	RV	10	09/01/1998	0	42.7 J	127	* 94.4	290	180000	* 5360	20000	3.3	28.9	* 15300
CUA0578	RV	10	09/01/1998	0	46.5 J	153	* 87.6	241	178000	* 6080	19600	4	27.2	* 13700
CUA0579	RV	10	09/01/1998	0	40.3 J	151	* 87.2	259	183000	* 5280	20300	4.1	25.4	* 14200
CUA05810	RV	10	08/27/1998	0	28.4	132	54.2	212	138000	4680	14400	2.4	21.7	8010
CUA05811	RV	10	08/27/1998	0	49.4	185	* 80.9	246	190000	* 5200	20400	2.9 J	26.2	* 13000 J
CUA05812	RV	10	08/27/1998	0	48.6	184	* 84.1	270	185000	* 5300	19700	2.7 J	27.7	* 12900 J
CUA05813	RV	10	08/27/1998	0		117								

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
CUA05813	RV	10	08/27/1998	0	39.3		* 79.6	225	184000	4010	19800	2.9 J	23.7	* 13200 J
CUA05814	RV	10	08/27/1998	0	50	136	* 88	235	176000	4560	18600	2.5 J	26.1	* 17900 J
CUA05815	RV	10	08/27/1998	0	39.5	129	* 81.7	243	179000	4340	18900	2.4 J	25.7	* 13300 J
CUA0586	RV	10	08/27/1998	0	21	139	39.6	207	142000	4500	15200	2.4	19.8	6280
CUA0587	RV	10	08/27/1998	0	26.3	126	42.9	211	132000	4610	14000	2.8	22.5	6720
CUA0588	RV	10	08/27/1998	0							26400	2.6		
CUA0588	RV	10	08/27/1998	0	23.8	135	52.9	235	148000	* 5280			22.1	8030
CUA0589	RV	10	08/27/1998	0	28.7	109	56.5	211	146000	4060	14000	3	23.1	8540
CUA0591	RV	10	08/15/1998	0		209							20.2	
CUA0591	RV	10	08/15/1998	0	44.2		67.4	198	162000	* 5170	16900	4.7		9530 J
CUA05911	RV	10	08/15/1998	0	11.8 J	87.9	27.7	99	66500	2930	4930	3.9 J	10.8	3970
CUA05912	RV	10	08/15/1998	0	1 U	9.5	4.3	11.3	13500	282	708	0.34 J	0.47 U	589
CUA05913	RV	10	08/15/1998	0	13	72.1	34.4	111	90100	1860	7260	2.6 J	11.4	5960
CUA05914	RV	10	08/15/1998	0	13.7	73.9	32.8	120	75400	3340	5710	3.3 J	12.6	5940
CUA05915	RV	10	08/15/1998	0	24.3	88.3	62.3	151	105000	3060	8290	2.6 J	16.5	8260
CUA0592	RV	10	08/15/1998	0	36.9	148	32.8	159	120000	* 4740	9470	13.5	16.9	5300 J
CUA0593	RV	10	08/15/1998	0	44.5	173	51.6	198	150000	* 6070	15200	4.2	20.3	8160 J
CUA0594	RV	10	08/15/1998	0	36.2	136	43.8	142	132000	* 6120	13300	3.5	17.8	5780 J
CUA0595	RV	10	08/15/1998	0	39.3	111	51.4	181	139000	4220	15000	3	19.4	8090 J
CUA0601	RV	10	08/15/1998	0	50.8	375	30.1	155	152000	3590	13700	4.2	18	4650 J
CUA06011	RV	10	08/15/1998	0	16.1	85.5	36.2	120	87000	2610	6890	3.1 J	11.9	5600
CUA06012	RV	10	08/15/1998	0	13.5	93.2	24.8	113	72500	3390	5130	3.6 J	11.8	4210
CUA06013	RV	10	08/15/1998	0	24.4	111	67	191	115000	3510	13000	2.2 J	0.39 U	* 9850
CUA06014	RV	10	08/15/1998	0	1 U	6.3	1	8.4	11400	34	112 J	0.1 U	0.4 U	235
CUA06015	RV	10	08/15/1998	0					24800		1280 J	0.9		
CUA06015	RV	10	08/15/1998	0	5.6 J	25.6	3.3	30.6		705			2.5	826
CUA0602	RV	10	08/15/1998	0	46	162	56.1	236	182000	* 5310	18000	4.7	22.9	8780 J
CUA0603	RV	10	08/15/1998	0	48.5	146	* 74.6	269	217000	4470	21000	3	27.4	* 11300 J
CUA0604	RV	10	08/15/1998	0	51.5	304	51.7	227	189000	* 5910	18600	15.2	28.3	8690 J
CUA0605	RV	10	08/15/1998	0	36.9	146	49.8	172	132000	* 4790	13000	2.4	19.6	7730 J
CUA06310	RV	10	08/27/1998	0	34.7	182	62.7	237	168000	* 7500	16500 J	3	28.3	* 10700
CUA06311	RV	10	08/27/1998	0	10.4 J	45.2	12.3	85.8	58100	2830	3780 J	2.3	9	2550
CUA06312	RV	10	08/27/1998	0	11.9 J	46.1	12.9	124	73000	* 5410	5210 J	3.4	13.1	2910
CUA06313	RV	10	08/27/1998	0	73.7									
CUA06313	RV	10	08/27/1998	0		84.3	25.3	554	124000	* 29200	4430 J	* 23	97.9	7340
CUA06314	RV	10	08/27/1998	0	53	68.1	4.7	490	116000	* 16800	3540 J	* 20.2	63.3	4900
CUA06315	RV	10	08/27/1998	0	24.6	73.4	17.5	246	98100	* 8680	6140 J	9.1	28.4	4230

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
CUA0636	RV	10	08/27/1998	0	38.8 J	163 J	35.7	277 J	179000	* 9070	19200	3.6	36.9	5580 J
CUA0637	RV	10	08/27/1998	0	33 J	165 J	30.4	204 J	137000	* 6390	12700	1.9	26.8	4400 J
CUA0638	RV	10	08/27/1998	0	31 J	151 J	50.6	224 J	135000	* 5940	13500		24.1	7170 J
CUA0638	RV	10	08/27/1998	0								4.8		
CUA0639	RV	10	08/27/1998	0	15.3	96.7	23.1	114	81100	3760	6340 J	4.5	12.2	4060
CUA0651	RV	10	09/10/1998	0	26.7 J	94.7	41.2	152	71800	3730	6270	2.3 J	19.9	6680
CUA06511	RV	10	09/10/1998	0	29.6 J		52.3	216	126000	4470	11400		22.3	8340
CUA06511	RV	10	09/10/1998	0		137						3.4 J		
CUA06512	RV	10	09/10/1998	0	20.9 J	136	25	122	85600	3400	8080	3.6 J	19.3	3750
CUA06513	RV	10	09/10/1998	0	42.7 J	147	59.2	197	117000	* 4810	10900	2.7 J	27.2	9560
CUA06514	RV	10	09/10/1998	0	29.1 J	154	40.3	174	111000	4500	9840	3.6 J	20.2	6140
CUA06515	RV	10	09/10/1998	0	16.7 U	94.6	16.5	86.6	63700	3150	4500 J	3	11.1	2840
CUA0652	RV	10	09/10/1998	0	31 J	112	38.2	138	93700	3120	9140	1.9 J	21.6	6330
CUA0653	RV	10	09/10/1998	0	25.8 J	94.1	67.5	152	79600	4590	7340	1.8 J	19.1	7690
CUA0654	RV	10	09/10/1998	0	12.2 J	51.8	32.4	78.1	50500	2420	4160	1.6 J	10.6	2870
CUA0655	RV	10	09/10/1998	0	17.7 J	73.6	29.1	132	75800	3490	7280	2.9 J	17.3	4400
LC100	RV	2	12/07/1997	0	22	119	15	69.2	59400	2170	4530	1.2	6.9	1520
LC100	RV	2	12/07/1997	2.2	47.8	239	24	123	88100	2660	7060	1.6	13.9	2370
LC100	RV	2	12/07/1997	5.4	51.1	266	29.7	113	84600	2720	6700	1.6	36.8	2200
LC100	RV	2	12/07/1997	14.1	1.7 J	9.1	0.24 U	8.6	10900	28.1	121	0.12 U	0.24 U	55.9
LC100	RV	2	12/07/1997	17.7	1 U	2.6	0.26 U	10.6	12300	16.2	113	0.12 U	0.26 U	48.9
LC101	RV	2	12/07/1997	0	44.9	140	* 75.3	143	64800	4640	4930	1.9	11.3	3780
LC101	RV	2	12/07/1997	2.8	28.6	119	16.3	69.6	56400	2570	3960	1	9	1700
LC101	RV	2	12/07/1997	4.9	31.1	148	10.4	68.1	54900	2150	4010	1.1	7.8	1290
LC101	RV	2	12/07/1997	6.1	40.5	106	9.7	73.4	51900	2220	3970	1.1	8	1160
LC102	RV	2	12/08/1997	0	40.7	137	9.57	92.9	73200	2160	5740 J	1.83	13.9	1900
LC102	RV	2	12/08/1997	2.4	28.6	92.4	4.43	56	47700	2040	3130 J	1.87	10	1130
LC102	RV	2	12/08/1997	4.8	40.3	161			69600		5470 J		10.8	
LC102	RV	2	12/08/1997	7.2	49	152	15.8	119	88300	2680	6330 J	1.1	12.2	2390
LC102	RV	2	12/08/1997	9.7	49.5	204	14.5	115	90600	2630	6970 J	2.07	13.6	2180
LC102	RV	2	12/08/1997	12.1	50	283	16.5	121	111000	2630	7980 J	2.57	14.7	2930
LC102	RV	2	12/08/1997	14.6	57.8	322	31.7	143	102000	2520	7900 J	2.76	15.5	2760
LC102	RV	2	12/08/1997	17.2	48.8	262	9.28	111	93400	2000	7400 J	1.55	13.1	1920
LC102	RV	2	12/08/1997	19.9	60.8	311	9.68	121	111000	2140	8580 J	1.39	14.3	1850
LC102	RV	2	12/08/1997	22.5	47.1	228	13.8	99	107000	2630	8330 J	1.22	13.1	2930
LC102	RV	2	12/08/1997	4.8			25.1	107		2720		2.26		2120
LC10296	RV	16	---	0				98		2950				2600

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10296	RV	16	---	0				79		2350				1800
LC103	RV	2	12/08/1997	0	29.2	130	15	58.5	59500	2030	3870	0.12 U	6.5	1710
LC103	RV	2	12/08/1997	2	31.2	131	22.9	78.7	73600	2520	5720	0.333	8.91	2100
LC103	RV	2	12/08/1997	4		195							9.37	
LC103	RV	2	12/08/1997	6	39.2	187	18.7	115	96300	2550	6620	0.132 U	16.3	2540
LC103	RV	2	12/08/1997	8	39.7	277	16	113	108000	2220	7390	2.73	15.4	2470
LC103	RV	2	12/08/1997	9.6	47.9	478	25.5	138	128000	2150	8920	5.31	13.7	2510
LC103	RV	2	12/08/1997	11.2	129	483	32.8	152	146000	2270	9790	2.52	13.7	2390
LC103	RV	2	12/08/1997	12.9	4.27 J	26.5	3.36	30	23900	634	1540	0.132 U	1.66 J	777
LC103	RV	2	12/08/1997	14.6	1.02 U	3.03	0.254 U	13.5	8910	12.1	72.9	0.124 U	0.254 U	47.9
LC103	RV	2	12/08/1997	17.1	0.937 U	2.94	0.234 U	13.3	9090	11.5	64	0.121 U	0.234 U	44.3
LC103	RV	2	12/08/1997	4	30.2		13.2	98.7	65600	2180	4510	2.12		1750
LC104	RV	2	12/09/1997	3.7	30.2	378	27.3	114	87400	1590	6180	5.61	7.71	2180
LC104	RV	2	12/09/1997	7.4	0.86 U	5.41	0.287 U	18	13800	20.3 J	149	0.146 U	0.287 J	44
LC104	RV	2	12/09/1997	11	1.15 U	4.04	0.286 U	16.8	11800	14.5	141	0.146 U	0.286 U	48.3
LC104	RV	2	12/09/1997	0	28.8	223	50.8	118	67600	2560	4480	6.19	9.37	3070
LC10769	RV	16	08/17/1995	0		285	35.8		99300	* 4770	6590			3170
LC10776	RV	16	08/23/1995	0		15.4	20.5		43700	2780	1060			2000
LC10777	RV	16	08/23/1995	0		15.1	20.6		33700	2120	725			1950
LC10778	RV	16	08/23/1995	0		11.3	19.5		37700	2090	688			1820
LC10779	RV	16	08/23/1995	0		10.1 U	18.4		40200	2420	765			1630
LC10780	RV	16	08/23/1995	0		17.4	17.7		43800	2420	891			1720
LC10781	RV	16	08/23/1995	0		14.5	17.1		40900	2090	746			1700
LC10782	RV	16	08/23/1995	0		15.2	20.5		40200	2280	753			1880
LC10783	RV	16	08/23/1995	0		24	9.2		13000	539	800			1080
LC10784	RV	16	08/23/1995	0		32.9	23.5		42800	* 7630	4430			3420
LC10785	RV	16	08/23/1995	0		10.2 U	10		11200	1550	401			1370
LC10786	RV	16	08/23/1995	0		10.3 U	7.2		9310	1130	384			1130
LC10787	RV	16	08/23/1995	0		11.9	17.8		28900	4390	2740			2330
LC10788	RV	16	08/23/1995	0		10.3 U	9.6		12600	1600	663			1210
LC10789	RV	16	08/23/1995	0		178	38.4		96700	4210	9630			6620
LC10790	RV	16	08/23/1995	0		163	39.3		84300	* 5240	8650			5390
LC10792	RV	16	08/23/1995	0		113	27.4		78500	* 5160	8540			3990
LC10793	RV	16	08/23/1995	0		269	24.8		81400	4620	5220			3030
LC10794	RV	16	08/23/1995	0		132	24.4		94200	4490	8990			3430
LC10795	RV	16	08/23/1995	0		23.9	5.6		13500	2430	442			421
LC10797	RV	16	08/24/1995	0		154	27.1		88600	* 5170	7890			3460

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10798	RV	16	08/24/1995	0		166	38.6		141000	* 8870	16100			6090
LC10799	RV	16	08/24/1995	0		105	30.1		100000	* 7440	11300			4820
LC10800	RV	16	08/24/1995	0		18.7	14.3		19000	* 5680	869			1810
LC10801	RV	16	08/24/1995	0		16.4	18.1		22300	2510	1150			1680
LC10804	RV	16	08/28/1995	0		10.6 U	1.2		4710	141	65.6			55.5
LC10805	RV	16	08/28/1995	0		10.5 U	1.5		5050	128	42.7			60.2
LC10808	RV	16	08/28/1995	0		21.1	1.7		25800	31.7	468			76.7
LC10809	RV	16	08/28/1995	0		15.3	1.7		22400	31.8	144			68.4
LC10810	RV	16	08/28/1995	0		143	30.1		101000	* 8210	11600			4010
LC10816	RV	16	08/30/1995	0		38.7	11.3		53300	* 4960	3870			1920
LC10817	RV	16	08/30/1995	0		15	12.4		17800	2200	1150			1540
LC10818	RV	16	08/30/1995	0		10.2 U	7.1		7440	426	186			815
LC10819	RV	16	08/30/1995	0		10.6	4.8		12100	1080	616			723
LC10820	RV	16	08/30/1995	0		25.6	12.5		23300	3460	1750			1910
LC10821	RV	16	08/30/1995	0		10.2 U	8.5		17600	2330	876			976
LC10822	RV	16	08/30/1995	0		12.2	9.1		25500	2160	2090			1310
LC10823	RV	16	08/30/1995	0		19.4	17.5		24100	2420	1960			2230
LC10824	RV	16	08/30/1995	0		110	17.5		64400	4480	3450			1870
LC10825	RV	16	08/30/1995	0		154	10.3		60800	3150	3050			1410
LC10826	RV	16	08/30/1995	0		115	12.7		81300	* 5090	4750			1880
LC10827	RV	16	08/30/1995	0		15.1	7.7		14600	2070	480			1020
LC10828	RV	16	08/30/1995	0		61.3	18.1		56700	* 6010	3530			1750
LC10829	RV	16	08/30/1995	0		51.8	20.9		28800	3490	1650			1720
LC10830	RV	16	08/30/1995	0		45.9	20.4		48700	* 5290	2910			2410
LC10831	RV	16	08/31/1995	0		15.7	17.1		35400	* 6270	2160			1860
LC10832	RV	16	08/31/1995	0		62.7	23.1		48400	* 7240	3520			1950
LC10833	RV	16	08/31/1995	0		44	16.2		45700	* 6230	3400			1850
LC10834	RV	16	08/31/1995	0		116	19.2		83800	* 9680	3260			2190
LC10835	RV	16	08/31/1995	0		59.4	17.4		43700	* 6000	3140			2000
LC10836	RV	16	08/31/1995	0		73.2	14.5		61000	* 5780	4240			1870
LC10837	RV	16	08/31/1995	0		38.3	9.4		32100	3570	1280			1280
LC10838	RV	16	08/31/1995	0		42.2	20.7		78100	* 5330	7420			1810
LC10839	RV	16	08/31/1995	0		26.3	12.8		31700	2250	2150			2000
LC109	RV	2	11/20/1997	0	21.4	143	10.5	81.6	81700	2640	7020	1.82	9.58	2310
LC109	RV	2	11/20/1997	3.2	30.9	126	14.5	209	127000	* 8730	8990	5.22	26	2970
LC109	RV	2	11/20/1997	8.5	2.56 J	10.6	4.37	26.6	25500	461	760	1.48	0.917 J	2090
LC110	RV	2	11/20/1997	0	31.7	189	7.73	91.4	86700	2080	6850	1.71	10.8	1590

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC110	RV	2	11/20/1997	4.4	27.4	153	12.7	109	89900	3050	7210	2.29	12.8	2090
LC110	RV	2	11/20/1997	8.9	40.3	193	22.6	122	139000	3930	10400	3.74	17.2	2650
LC11009	RV	16	10/12/1995	0		16.4	25		48700	3380	4790			2360
LC11010	RV	16	10/12/1995	0		25.2	10.4		35800	* 6230	2160			1210
LC11011	RV	16	10/12/1995	0		15.8	15.2		41700	* 8230	2420			1640
LC11012	RV	16	10/12/1995	0		15.4	11.3		14200	1700	489			1030
LC11013	RV	16	10/12/1995	0		13.6	13.1		17200	1090	713			1680
LC11022	RV	16	10/12/1995	0		10.2 U	11.6		28000	4210	2010			1320
LC11023	RV	16	10/16/1995	0		24.4	22.3		20500	* 6060	1120			2610
LC11024	RV	16	10/16/1995	0		10.9	13.5		15700	2590	603			1220
LC11025	RV	16	10/16/1995	0		16	5		15500	910	121			469
LC11026	RV	16	10/16/1995	0		10.5 U	1.9		8950	164	166			181
LC11027	RV	16	10/16/1995	0		8.5	3.3		12800	307	861			273
LC11028	RV	16	10/17/1995	0		85.2	19.8		39300	2370	2690			1810
LC11029	RV	16	10/17/1995	0		45.1	18.2		47100	1990	1720			1750
LC11030	RV	16	10/17/1995	0		29.8	31		35900	* 4860	1830			3960
LC11031	RV	16	10/17/1995	0		95.9	19.6		33500	2320	2260			1860
LC11032	RV	16	10/17/1995	0		43	22.7		46400	2950	2210			2430
LC11033	RV	16	10/17/1995	0		49.5	27		36400	2860	1620			3250
LC11034	RV	16	10/17/1995	0		29.3	24.4		34000	3710	1900			3020
LC11035	RV	16	10/17/1995	0		29.9	23.3		37500	3850	2020			2740
LC11036	RV	16	10/17/1995	0		15.9	7.9		12900	1330	157			620
LC11037	RV	16	10/17/1995	0		11.5	0.63		6100	87.9	51.7			63.4
LC11038	RV	16	10/17/1995	0		13.7	1.1		10100	120	41.3			67.3
LC11039	RV	16	10/17/1995	0		12.7	4.1		15700	586	188			368
LC11040	RV	16	10/17/1995	0		15.3	4.5		9840	1000	410			702
LC11041	RV	16	10/18/1995	0		284	29.9		98400	* 4930	8650			4010
LC11042	RV	16	10/18/1995	0		246	34.4		95500	4660	8930			3830
LC11056	RV	16	10/24/1995	0		10.4 U	0.68		8820	83.3	92.5			132
LC11057	RV	16	10/24/1995	0		10.3 U	1.4		12300	107	105			156
LC11058	RV	16	10/24/1995	0		10.2 U	10.4		26500	548	306			694
LC11059	RV	16	10/24/1995	0		10.3 U	3.2		16900	439	152			328
LC11060	RV	16	10/24/1995	0		10.4 U	1.2		8120	123	131			160
LC11061	RV	16	10/24/1995	0		10.5 U	3.2		9620	335	271			470
LC11062	RV	16	10/24/1995	0		72.4	62.6		35300	3530	1550			8360
LC11063	RV	16	10/24/1995	0		65.2	67.8		36200	1770	463			* 11700
LC11064	RV	16	10/24/1995	0		11 U	2.1		16900	249	181			215

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11065	RV	16	10/24/1995	0		259	43.5		75300	4470	7330			4900
LC11066	RV	16	10/24/1995	0		143	30.2		59800	* 5550	4850			3580
LC11067	RV	16	10/24/1995	0		133	19		45200	2830	2250			1700
LC11068	RV	16	10/24/1995	0		86.8	24.6		34400	2580	2380			2430
LC11069	RV	16	10/24/1995	0		165	18.9		84700	2870	4830			1790
LC11070	RV	16	10/24/1995	0		32	10.5		20800	1270	753			901
LC11071	RV	16	10/25/1995	0		11.7	11.4		13500	1720	731			1380
LC11072	RV	16	10/25/1995	0		16.3	16.2		17600	2640	1030			2030
LC11073	RV	16	10/25/1995	0		10.2 U	6.5		14600	1520	655			889
LC11074	RV	16	10/25/1995	0		10.4 U	4		9770	501	235			456
LC11075	RV	16	10/25/1995	0		127	40.1		95300	4300	9110			4190
LC11076	RV	16	10/25/1995	0		495	64.4		98800	* 5650	8410			3710
LC11077	RV	16	10/25/1995	0		284	21.7		119000	2490	11400			1890
LC11078	RV	16	10/25/1995	0		432	24.1		108000	2530	10800			2530
LC11079	RV	16	10/25/1995	0		10.4 U	7		12200	473	433			693
LC11080	RV	16	10/25/1995	0		291	60.7		99300	* 5500	9330			4300
LC11081	RV	16	10/25/1995	0		353	25.3		82200	* 5380	3240			2770
LC11082	RV	16	10/30/1995	0		20.2	15.4		25800	2800	530			2260
LC11083	RV	16	10/30/1995	0		60	30		36100	* 5300	1920			4090
LC11084	RV	16	10/30/1995	0		29.1	21.3		30100	4170	1000			3500
LC11085	RV	16	10/30/1995	0		41.2	35		34300	* 5860	1690			4690
LC11086	RV	16	10/30/1995	0		77.6	42		47300	* 6870	3420			5310
LC11087	RV	16	10/30/1995	0		94.9	46.1		64700	* 7350	4510			5720
LC11088	RV	16	10/30/1995	0		133	34.9		59300	4620	4940			4110
LC11089	RV	16	10/30/1995	0		87.3	19		37400	2880	2250			2090
LC11090	RV	16	10/30/1995	0		62.8	21.4		87100	* 13500	8220			3210
LC11091	RV	16	10/30/1995	0		38.7	11.8		61400	* 15400	3920			2390
LC11092	RV	16	10/30/1995	0		69.1	27.4		101000	* 13400	10200			4060
LC11093	RV	16	10/30/1995	0		153	33		113000	* 6450	13000			4230
LC11094	RV	16	10/30/1995	0		122	19.9		92100	* 6000	8640			2680
LC111	RV	2	11/21/1997	0	46.3	446	22.1	126	117000	3020	8740	2.98	13.8	2530
LC111	RV	2	11/21/1997	3.3	31.4	374	11.7	99.4	103000	2560	7850	2.83	14.2	1590
LC111	RV	2	11/21/1997	5	38.7	306	13.1	106	104000	2800	7820	2.34	14	2140
LC11103	RV	16	11/01/1995	0		386	45.3		102000	4320	10900			3850
LC11104	RV	16	11/01/1995	0		72.7	28.9		38300	4170	1400			1920
LC11105	RV	16	11/01/1995	0		33.9	27.7		30800	4230	1850			3290
LC11106	RV	16	11/01/1995	0		149	41.4		54300	* 5110	4720			4530

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11107	RV	16	11/06/1995	0		23.8	17.5		39200	4170	2750			1900
LC11108	RV	16	11/06/1995	0		18.4	19.1		41500	* 6170	2900			2040
LC11109	RV	16	11/06/1995	0		12.8	10.6		23000	2670	1590			1710
LC11110	RV	16	11/06/1995	0		17.8	10.1		26100	1070	1170			1290
LC11111	RV	16	11/06/1995	0		25.6	17.9		22800	1520	641			1490
LC11112	RV	16	11/06/1995	0		17.1	9		24400	1870	1430			1720
LC11113	RV	16	11/06/1995	0		20.8	11.7		28300	2140	1920			2460
LC11114	RV	16	11/06/1995	0		21	12.3		26600	2390	1110			1490
LC11115	RV	16	11/07/1995	0		20.5	16.6		24500	1270	847			2310
LC11116	RV	16	11/07/1995	0		29.6	18.8		28100	2260	1080			2010
LC11117	RV	16	11/07/1995	0		23.9	10.9		23100	1300	660			1260
LC11118	RV	16	11/09/1995	0		50.5	29.2		51700	3340	4160			3750
LC11179	RV	16	---	0.13	102	285	41	130	124000	* 4800	11500	4.1	16.2	5600
LC11179	RV	16	---	0.26	114	450	46	136	161000	4700	14700	3.3	18.3	6600
LC11179	RV	16	---	0.38	102	450	36	125	147000	4100	13600	3	16.1	5800
LC11179	RV	16	---	0.46	97	320	27	105	107000	3900	10000	3.3	14.1	4500
LC11179	RV	16	---	0.49	122	420	26	143	128000	* 5200	11400	3.7	17.6	4300
LC11179	RV	16	---	0.6	118	440	25	119	135000	4600	12100	3.4	16.5	4100
LC11179	RV	16	---	0.74	65	480	32	122	138000	4700	12400	3.1	16.5	4500
LC11179	RV	16	---	0.82	50	210	33	111	128000	* 5600	11900	3.3	15.2	5700
LC11179	RV	16	---	0.86	50	130	22	103	114000	* 5700	10400	3.5	14.6	4100
LC11179	RV	16	---	1	52	120	17	108	113000	* 6000	10300	3.6	14.8	3500
LC11179	RV	16	---	1.1	61	130	15	128	115000	* 7150	10000	3.7	17.9	2950
LC11179	RV	16	---	1.2	75	130	22	159	110000	* 8900	9400	5.2	23	3300
LC11179	RV	16	---	1.25	57	130	21	119	126000	* 7100	11200	3.7	15.7	3400
LC11179	RV	16	---	1.3	55	140	14	116	139000	* 6600	13200	4	15.3	2600
LC11179	RV	16	---	1.41	56	150	23	114	137000	* 6700	13100	3.7	16.6	2800
LC11179	RV	16	---	1.51	59	220	63	116	149000	* 6100	14800	3.4	17.7	6200
LC11179	RV	16	---	1.63	57	170	43	121	123000	* 6600	11500	3.7	18.6	6300
LC11179	RV	16	---	1.71	20.4	40	13	50	39000	2800	2800	1.4	7.8	1300
LC11179	RV	16	---	1.79	54	280	39	124	127000	4600	11300	3.4	16.8	6400
LC11179	RV	16	---	1.86	4.9	22.4	8	17	25000	290	900	0.19	1	840
LC11179	RV	16	---	1.97	2.5	9.4	5	11	20000	90	400	0.08	0.01 U	490
LC11179	RV	16	---	2.07	1.8	6.9	7	14	22000	35	400	0.02	0.01 U	530
LC11179	RV	16	---	2.24	1.9	6.8	6	14	22000	45	400	0.05	0.01 U	490
LC11179	RV	16	---	2.38	1.6	4.3	2	9	20000	25	200	0.01 U	0.01 U	285
LC11179	RV	16	---	2.53	1.7	5.4	2	10	21000	30	200	0.01 U	0.01 U	280

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11179	RV	16	---	2.7	1.7	6.2	2	10	21000	25	200	0.01 U	0.01 U	230
LC11179	RV	16	---	2.86	1.8	5.3	2	11	21000	31	200	0.01 U	0.01 U	200
LC11179	RV	16	---	3.02	1.6	4.6	1	10	21000	23	200	0.02	0.01 U	160
LC11179	RV	16	---	3.18	1.6	4	1	10	20000	20	100	0.01 U	0.01 U	150
LC11179	RV	16	---	3.35	1.6	4	1	10	20000	22	100	0.01 U	0.01 U	140
LC11179	RV	16	---	3.51	1.7	3.9	1	11	20000	20	100	0.02	0.01 U	140
LC11179	RV	16	---	3.67	1.7	4.3	1	11	20000	21	100	0.02	0.01 U	180
LC11179	RV	16	---	3.84	1.7	4.3	1	11	20000	22	100	0.02	0.01 U	200
LC11179	RV	16	---	4	1.7	3.8	1	10	20000	20	100	0.02	0.01 U	190
LC11179	RV	16	---	4.17	1.7	3.5	1	9	19000	21	100	0.01 U	0.01 U	160
LC11179	RV	16	---	4.33	1.7	3.7	1	10	19000	25	100	0.01 U	0.01 U	150
LC11179	RV	16	---	4.45	1.7	3.6	1	10	19000	26	100	0.05	0.01 U	160
LC11179	RV	16	---	4.57	1.8	4.5		11	20000	33	100	0.03	0.8	150
LC11179	RV	16	---	4.64	1.7	3.8		12	19000	36	100	0.03	0.01 U	250
LC11179	RV	16	---	4.73	38	200	21	81	93000	3500	9400	2.22	12.2	3300
LC11179	RV	16	---	4.86	4.3	16.3	2	15	25000	250	600	0.2	1	390
LC11179	RV	16	---	4.96	1.7	4.2		12	19000	28	100	0.04	0.01 U	210
LC11179	RV	16	---	5.13	1.7	4.5		13	21000	27	100	0.03	0.01 U	170
LC11179	RV	16	---	5.24	1.6	4.7		11	20000	24	100	0.01 U	0.01 U	140
LC11179	RV	16	---	5.38	1.6	4		10	20000	20	100	0.01 U	0.01 U	130
LC11179	RV	16	---	5.54	1.7	4		11	20000	21	100	0.02	0.01 U	130
LC11179	RV	16	---	5.71	1.5	3.9		11	20000	21	100	0.02	0.01 U	120
LC11179	RV	16	---	5.81	1.7	4.5		13	20000	23	100	0.01 U	0.01 U	130
LC11179	RV	16	---	5.93	1.7	4.2	2	15	20000	24	100	0.01 U	0.01 U	230
LC11179	RV	16	---	6.02	1.7	4		12	20000	19	100	0.01 U	0.01 U	110
LC11179	RV	16	---	6.12	1.6	4.1		10	19000	18	100	0.01 U	0.01 U	100
LC11179	RV	16	---	6.27	1.7	5.2		10	21000	18	100	0.01 U	0.01 U	110
LC11179	RV	16	---	6.36	1.8	4.6	1	18	22000	24	100	0.02	0.01 U	150
LC11179	RV	16	---	6.46	1.5	3	1	15	18000	19	100	0.01 U	0.01 U	130
LC11179	RV	16	---	6.56	1.5	2.9		11	19000	18	100	0.01 U	0.01 U	120
LC11179	RV	16	---	6.67	1.7	3.9		11	22000	19	100	0.01 U	0.01 U	110
LC11179	RV	16	---	6.8	1.6	4.8		14	22000	20	100	0.02	0.01 U	130
LC11179	RV	16	---	6.87	1.8	4.6		14	23000	22	100	0.03	0.01 U	150
LC11179	RV	16	---	7	1.6	2.8		15	21000	25	100	0.02	0.01 U	150
LC11179	RV	16	---	7.11	1.5	2.2		19	19000	23	100	0.02	0.01 U	160
LC11179	RV	16	---	7.19	1.7	5.8		15	27000	24	100	0.02	0.01 U	150
LC11179	RV	16	---	7.34	1.4	1.6		16	17000	25	100	0.01 U	0.01 U	180

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11179	RV	16	---	7.42	1.5	1.5	**2**	21	15000	31	100	0.01 U	0.01 U	**270**
LC11179	RV	16	---	7.52	1.7	2.5		12	17000	28	100	0.01 U	0.01 U	**210**
LC11179	RV	16	---	7.63	1.5	2.8		27	15000	28	100	0.02	0.01 U	**350**
LC11179	RV	16	---	7.71	1.7	8.4		15	20000	30	100	0.01 U	0.01 U	**250**
LC11179	RV	16	---	7.85	1.7	4.3		10	17000	24	100	0.03	0.01 U	**170**
LC11179	RV	16	---	8.01	1.7	4.2		16	16000	28	100	0.02	0.01 U	**190**
LC11179	RV	16	---	8.16	1.7	2.5		9	17000	19	100	0.02	0.01 U	**110**
LC11179	RV	16	---	8.27	1.7	2.2		9	17000	19	100	0.02	0.01 U	**110**
LC11179	RV	16	---	8.37	1.7	3		20	15000	29	100	0.02	0.01 U	**145**
LC11179	RV	16	---	8.48	1.7	3.2		20	16000	31	100	0.05	0.01 U	**140**
LC11179	RV	16	---	8.57	1.7	3.4		15	16000	27	100	0.03	0.01 U	**120**
LC11179	RV	16	---	8.74	**3.1**	6.7	**1**	9	19000	**71**	200	0.04	0.01 U	**150**
LC11179	RV	16	---	8.89	1.7	3.9		8	19000	25	100	0.02	0.01 U	**100**
LC11179	RV	16	---	9.06	1.7	4.1		8	20000	20	100	0.01 U	0.01 U	97
LC11179	RV	16	---	9.22	1.7	5.1		9	21000	18	100	0.04	0.01 U	**110**
LC11179	RV	16	---	9.35	1.3	5		9	21000	20	100	0.03	0.01 U	**120**
LC11179	RV	16	---	9.49	1.6	4		10	19000	21	100	0.03	0.01 U	**120**
LC11179	RV	16	---	9.65	1.7	5.2		8	21000	19	100	0.02	0.01 U	93
LC11179	RV	16	---	9.81	1.7	5.7		8	22000	19	100	0.02	0.01 U	89
LC11179	RV	16	---	9.97	1.7	5.1		9	21000	19	100	0.02	0.01 U	**100**
LC11179	RV	16	---	10.1	1.8	4.5		8	21000	19	100	0.05	0.01 U	95
LC11179	RV	16	---	10.3	1.6	4.6		12	20000	21	100	0.02	0.01 U	**160**
LC11179	RV	16	---	10.4	1.8	4.9		11	21000	21	100	0.04	0.01 U	**110**
LC11179	RV	16	---	10.5	1.8	3.1		11	19000	25	100	0.03	0.01 U	**100**
LC11179	RV	16	---	10.6	1.9	2.5		25	20000	32	100	0.02	0.01 U	**1000**
LC11179	RV	16	---	10.8	2	3.8		21	19000	33	100	0.03	0.01 U	**99**
LC11179	RV	16	---	11	1.8	1.9		14	17000	29	100	0.02	0.01 U	92
LC11179	RV	16	---	11.1	1.8	3.8		21	18000	28	100	0.03	0.01 U	97
LC11179	RV	16	---	11.3	2	3.2		12	18000	28	100	0.03	0.01 U	57
LC11179	RV	16	---	11.4	1.7	3.4		12	17000	24	100	0.03	0.01 U	52
LC11179	RV	16	---	11.5	1.8	6.7		23	16000	26	100	0.03	0.01 U	46
LC11179	RV	16	---	11.6	1.8	7.8		26	19000	33	100	0.04	0.01 U	62
LC11179	RV	16	---	11.7	1.9	5.1		16	19000	32	100	0.03	0.01 U	64
LC11179	RV	16	---	11.9	1.4	6.5		20	16000	24	100	0.02	0.01 U	39
LC11179	RV	16	---	12.1	1.5	6.2		20	17000	26	100	0.02	0.01 U	46
LC11179	RV	16	---	12.2	1.6	4.6		12	16000	25	100	0.01 U	0.01 U	60
LC11181	RV	16	---	0	**38**	**120**	**20**	**94**	**78000**	**3500**	**7100**	**3.2**	**11.4**	**2700**

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11181	RV	16	---	0.1	40	130	22	91	77000	3700	6900	3.2	12.3	2700
LC11181	RV	16	---	0.21	42	150	19	99	82000	3900	7200	3.6	12.3	2600
LC11181	RV	16	---	0.3	44	150	21	104	83000	4200	7400	3.6	13.9	2800
LC11181	RV	16	---	0.39	40	145	28	92	71000	3700	5700	3.1	12.3	2750
LC11181	RV	16	---	0.47	39	170	33	95	69000	4200	5800	2.9	11.5	2900
LC11181	RV	16	---	0.5	40	170	29	89	72000	3500	6300	3.1	12.1	2500
LC11181	RV	16	---	0.61	40	180	36	98	63000	3700	6200	2.9	11	2800
LC11181	RV	16	---	0.67	44	180	21	91	87000	3200	6400	3.5	12.4	2500
LC11181	RV	16	---	0.74	43	210	16	85	88000	3100	7500	3	12	2400
LC11181	RV	16	---	0.82	42	220	17	88	90000	2900	7400	2.7	11.6	2300
LC11181	RV	16	---	0.92	42	160	27	94	65000	4100	7700	3.1	10.6	2400
LC11181	RV	16	---	0.96	47	220	17	100	88000	3700	6600	3.8	12.1	2300
LC11181	RV	16	---	1.03	40	190	15	94	70000	3100	4400	3.9	10.3	1900
LC11181	RV	16	---	1.19	54	240	22	114	77000	4600	6800	6.2	14.3	2100
LC11181	RV	16	---	1.25	52	240	20	101	84000	4000	6300	5.4	13.4	2000
LC11181	RV	16	---	1.4	55	280	32	124	78000	4600	7100	6.3	13.5	2300
LC11181	RV	16	---	1.46	60	345	25	112	96000	4400	6500	8.4	15	2100
LC11181	RV	16	---	1.55	60	280	29	133	85000	4500	5700	8.9	15.3	2300
LC11181	RV	16	---	1.58	57	240	17	100	89000	3900	6100	4.2	13.9	2000
LC11181	RV	16	---	1.71	68	320	16	103	110000	3800	8400	5.1	13.1	2200
LC11181	RV	16	---	1.87	58	210	17	105	74000	4300	5500	7.5	16.5	2000
LC11181	RV	16	---	1.91	56	190	13	96	76000	4100	5300	3.7	14.2	2000
LC11181	RV	16	---	2.03	64	350	16	117	136000	4200	10000	4.4	15.4	2200
LC11181	RV	16	---	2.13	71	190	17	115	69000	* 5200	4600	4.4	18.1	2200
LC11181	RV	16	---	2.3	73	620	20	131	151000	* 5300	11600	5.5	20	2300
LC11181	RV	16	---	2.4	57	280	29	133	88000	4100	7400	4.7	15.3	2100
LC11181	RV	16	---	2.49	70	230	30	127	69000	* 4800	4600	4.6	15.9	2500
LC11181	RV	16	---	2.59	62	420	19	86	126000	3300	9500	3.9	15.6	1800
LC11181	RV	16	---	2.69	73	350	37	149	97000	* 4800	8100	7.9	15.8	2700
LC11181	RV	16	---	2.79	81	455	45	143	117000	* 4950	9500	10.6	16.9	2750
LC11181	RV	16	---	2.89	76	280	44	126	74000	4600	5700	7.8	17.5	3700
LC11181	RV	16	---	2.95	62	420	24	82	125000	3900	9900	4	14	2300
LC11181	RV	16	---	3.02	74	320	33	121	116000	3700	9500	7.2	17	3000
LC11181	RV	16	---	3.18	88	580	47	125	139000	4100	11400	7.9	17.1	3500
LC11181	RV	16	---	3.22	73	1240	24	110	201000	2700	16900	3.6	16.7	2300
LC11181	RV	16	---	3.32	76	1030	* 247	163	148000	3200	12400	7.5	17	4500
LC11181	RV	16	---	3.41	80	1160	* 167	100	152000	2900	13000	3.4	15.4	3300

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11181	RV	16	---	3.58	84	900	* 81	113	158000	2800	13700	3.7	15.7	3800
LC11181	RV	16	---	3.67	77	1000	26	113	186000	2900	15500	2.9	20	4400
LC11181	RV	16	---	3.71	87	920	36	112	157000	2700	13600	5.8	14.1	4700
LC11181	RV	16	---	3.77	84	755	30	129	157000	3350	13200	4.6	17.6	6050
LC11181	RV	16	---	3.85	59	640	22	101	159000	3300	13600	3	14	3600
LC11181	RV	16	---	3.9	71	570	28	117	112000	3300	9100	4.4	15.6	4300
LC11181	RV	16	---	3.95	103	890	27	124	150000	3300	12300	4.2	17.6	4900
LC11181	RV	16	---	3.99	101	850	43	137	159000	3300	14200	6.3	16.3	4500
LC11181	RV	16	---	4.05	74	770	18	116	168000	2900	14500	3	16.2	3600
LC11181	RV	16	---	4.18	82	440	29	132	110000	* 5200	9100	4.9	16.9	6300
LC11181	RV	16	---	4.23	83	730	18	113	154000	2600	13300	3.2	14.1	3000
LC11181	RV	16	---	4.33	78	685	28	113	149000	2900	13100	3.4	14	4350
LC11181	RV	16	---	4.42	72	710	16	105	144000	2200	12500	2.4	13.9	2800
LC11181	RV	16	---	4.52	80	850	19	125	165000	2800	14500	2.8	17.6	3100
LC11181	RV	16	---	4.69	116	* 1300	36	155	176000	3600	15600	8.1	23	4500
LC11181	RV	16	---	4.73	86	530	32	132	118000	* 5300	10200	4.5	17.8	4300
LC11181	RV	16	---	4.81	140	560	53	171	111000	* 6200	9700	5.6	21	8100
LC11181	RV	16	---	4.9	77	550	28	114	114000	3800	10000	3.4	16.3	3600
LC11181	RV	16	---	4.95	87	760	24	136	176000	3100	15000	2.4	17.5	3700
LC11181	RV	16	---	5.06	112	680	39	153	147000	2900	12700	2.5	16.2	5600
LC11181	RV	16	---	5.1	81	530	37	140	114000	4000	9400	3.4	18.6	6000
LC11181	RV	16	---	5.21	66	690	27	115	107000	3500	8900	2.9	13.9	4700
LC11181	RV	16	---	5.31	91	1140	33	148	149000	3200	12800	2.3	14	4800
LC11181	RV	16	---	5.41	96	1100	35	163	145000	3300	12900	2.4	15.1	5400
LC11181	RV	16	---	5.53	83	605	29	117	97000	4150	9400	3.2	15.3	6400
LC11181	RV	16	---	5.6	75	580	26	103	104000	3900	8900	2.9	14.3	5000
LC11181	RV	16	---	5.7	57	650	28	120	108000	4300	9100	3.2	16.4	4300
LC11181	RV	16	---	5.78	78	1180	26	133	164000	4100	14500	3	18.1	4000
LC11181	RV	16	---	5.93	95	1010	26	128	136000	3300	12800	1.8	13.3	4400
LC11181	RV	16	---	6	67	420	23	125	104000	4000	9400	2.7	15.9	3500
LC11181	RV	16	---	6.12	57	320	30	117	114000	4300	10300	3.2	15.2	4500
LC11181	RV	16	---	6.24	40	270	17	112	107000	4000	9600	1.3	9.5	3100
LC11181	RV	16	---	6.33	41	240	21	140	94000	3900	9800	1.7	11.4	3400
LC11181	RV	16	---	6.41	46	140	23	91	107000	3950	9500	2.2	12.7	3400
LC11181	RV	16	---	6.53	66	180	40	174	110000	* 7200	9800	3.8	18.3	4800
LC11181	RV	16	---	6.68	72	150	35	173	100000	* 7700	10000	4.1	19.4	4700
LC11181	RV	16	---	6.81	84	100	35	124	99000	* 7600	9800	4.4	15.9	4700

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11181	RV	16	---	6.83	67	110	27	147	99000	* 6900	9900	3.9	18.8	4300
LC11181	RV	16	---	6.94	64	80	48	136	90000	* 7700	8800	5.1	20	5500
LC11181	RV	16	---	7.01	60	70	43	122	92000	* 6600	9200	4.7	17.1	5200
LC11181	RV	16	---	7.06	52	110	44	139	111000	* 7600	10000	3.3	14.5	4100
LC11181	RV	16	---	7.08	43	100	36	114	132000	* 6200	11900	3	12.4	3900
LC11181	RV	16	---	7.17	52	130	67	204	117000	* 10200	10500	4.7	21	4700
LC11181	RV	16	---	7.21	52	170	66	158	139000	* 6300	12300	6.4	19	8700
LC11181	RV	16	---	7.26	8.4	9.4	37	11	17000	690	400	0.15	0.01 U	1900
LC11181	RV	16	---	7.41	6.1	1.9	16	7	15000	1400	100	0.02	0.01 U	500
LC11181	RV	16	---	7.58	5	1.8	4	6	16000	1450	100	0.04	0.01 U	300
LC11181	RV	16	---	7.7	4	2	1	7	15000	980	100	0.01 U	0.01 U	240
LC11181	RV	16	---	7.84	2.1	1.8	2	9	16000	130	100	0.01 U	0.01 U	180
LC11181	RV	16	---	8.01	1.8	1.8	1	10	16000	100	100	0.01 U	0.01 U	150
LC11181	RV	16	---	8.11	1.8	2.5		10	18000	80	100	0.02	0.01 U	130
LC11181	RV	16	---	8.27	1.8	3.7	1	11	19000	29	100	0.01 U	0.01 U	130
LC11181	RV	16	---	8.38	1.6	2.8	1	11	17000	24	100	0.01 U	0.01 U	140
LC11181	RV	16	---	8.46	1.7	6.9	1	14	22000	30	100	0.01 U	0.01 U	250
LC11182	RV	16	---	0	119	150	* 200	268	39000	4200	3300	4.2	16.3	4100
LC11182	RV	16	---	0.13	116	360	43	175	103000	* 5200	7100	3.9	22	3800
LC11182	RV	16	---	0.26	94	360	21	155	109000	* 5000	8100	3	18.2	3200
LC11182	RV	16	---	0.4	78	230	29	194	95000	* 6350	6300	3.1	19	3900
LC11182	RV	16	---	0.48	87	180	13	210	93000	* 7100	5800	4	24	3100
LC11182	RV	16	---	0.61	78	200	8	185	88000	* 6800	5300	3.4	21	2700
LC11182	RV	16	---	0.7	65	180	6	162	91000	* 5800	6400	2.9	17.3	2300
LC11182	RV	16	---	0.85	107	200	7	233	90000	* 8200	4900	4.4	26	3300
LC11182	RV	16	---	0.98	97	180	10	244	95000	* 8700	6300	4.9	27	3200
LC11182	RV	16	---	1.15	90	170	11	243	100000	* 8200	7600	4.6	26	3000
LC11182	RV	16	---	1.31	97	190	11	216	103000	* 8000	8100	4.3	23	2800
LC11182	RV	16	---	1.49	96	190	* 68	259	98000	* 8700	9100	4.6	26	5200
LC11182	RV	16	---	1.61	107	210	49	280	101000	* 8900	9000	4.8	26	4200
LC11182	RV	16	---	1.77	99	190	60	263	95000	* 8700	8600	4.9	27	6900
LC11182	RV	16	---	1.94	108	170	* 72	262	91000	* 9000	8200	5.4	27	7500
LC11182	RV	16	---	2.1	106	150	65	257	92000	* 9200	8400	5.5	29	7200
LC11182	RV	16	---	2.2	98	140	* 74	264	96000	* 9800	9400	6.2	30	7400
LC11182	RV	16	---	2.31	95	140	37	191	114000	* 9050	10200	3.9	24	5950
LC11182	RV	16	---	2.38	90	100	57	238	119000	* 10100	11300	6.8	32	8500
LC11182	RV	16	---	2.53	99	110	56	242	116000	* 10400	10900	6.9	33	7100

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11182	RV	16	---	2.69	114	110	47	225	87000	* 8700	8700	6.1	28	6500
LC11182	RV	16	---	2.85	99	100	46	215	95000	* 8600	10000	5.6	27	6600
LC11182	RV	16	---	2.97	108	120	44	198	97000	* 8300	8800	5.2	25	6300
LC11182	RV	16	---	3.08	48	100	30	94	44000	3400	3100	1.9	10.1	* 9900
LC11182	RV	16	---	3.25	37	16.7	6	73	35000	3900	1700	1.7	9.9	6700
LC11182	RV	16	---	3.35	10.9	30	10	39	28000	1250	1300	0.55	3.3	5050
LC11182	RV	16	---	3.51	2.6	9.6	1	24	24000	170	1000	0.07	0.7	270
LC112	RV	2	11/21/1997	0	25.1	247	7.75	100	107000	3350	8310	1.77	9.83	1990
LC112	RV	2	11/21/1997	0.8	29.8	141	33.2	134	100000	* 5010	8160	2.45	13.1	4680
LC112	RV	2	11/21/1997	2.7	2.54 UJ	14.9	0.966 J	18.9	27500	246	1010	0.121 U	0.444 UJ	359
LC113	RV	2	11/23/1997	0.5	1.33 U	2.9 J	0.334 U	17.8	11100	14.8	49.2	0.17 U	0.334 U	21.7
LC113	RV	2	11/23/1997	1.8	2.04 UJ	5.34	0.702 UJ	16.1	29300	19.5	128	0.142 U	0.279 U	50.2
LC119	RV	2	11/15/1997	0	16.7	80.6	7.6	86.2	49800	2810	3850	3	10.2	1230
LC119	RV	2	11/15/1997	1.9		7.6	11	15						908
LC119	RV	2	11/15/1997	1.9	2.2 J				14300	297	368	0.32	0.54 J	
LC120	RV	2	11/15/1997	0	13.7 J	80.2	5.1	78.5	42600	2380	2800	2.7	8.4	803
LC120	RV	2	11/15/1997	0.8	2 J	7.1	2.4	16.6	17000	50.2	304	0.12 U	0.24 U	386
LC121	RV	2	11/15/1997	0	2.5 J	9.1	4.1	31.4	11000	225	245	0.15 U	0.87 U	362
LC121	RV	2	11/15/1997	0.7	2.3 J	7.7	0.26 U	16.1	19500	20.2	145	0.13 U	0.26 U	85.6
LC122	RV	2	11/15/1997	0	5.8 J	16.1	9.2	54.6	24000	1530	1410	0.84	3.4	565
LC122	RV	2	11/15/1997	0.7	2.3 J	10.2	0.29 U	18.2	20900	25.7	62	0.15 U	0.29 U	137
LC123	RV	2	11/15/1997	0	3.9 J	8	4.2	36.5	11300	404	268	0.19 U	1.1 J	311
LC123	RV	2	11/15/1997	1.3	2.5 J	6	0.25 U	28.1	20000	21.5	202	0.13 U	0.25 U	167
LC168	LK	2	12/04/1997	0	6.99 U	10.5 U	1.75 U	53.9	13800	188	526 J	0.909 U	1.75 U	309
LC168	LK	2	12/04/1997	3.8	6.64 U	9.96 U	1.66 U	50.4	12600	164	250 J	0.855 U	1.66 U	255
LC169	LK	2	12/04/1997	0	7.3 U	19.2	2.4 J	67.8	29200	350	434	0.88 U	1.8 U	385
LC169	LK	2	12/04/1997	4.8	2.7 J	11.2		38	42300	43	343			116
LC169	LK	2	12/04/1997	4.8			0.62 U					0.32 U	0.62 U	
LC170	LK	2	12/04/1997	0	7.12 U	19.1	1.78 U	68.9	26700	203	401 J	0.85 U	1.78 U	278
LC170	LK	2	12/04/1997	4.3	3.58 U	13.4	0.896 U	58.2	42300	57.9	313	0.453 U	0.896 U	162
LC171	LK	2	12/05/1997	0	5.5 U	10.9 J	1.4 U	44.1	23700	40.3	279	0.71 U	1.4 U	152
LC171	LK	2	12/05/1997	3.8	2.2 U	5.2 J	0.56 U	24.4	16000	17.1	125	0.28 U	0.56 U	69.4
LC171	LK	2	12/05/1997	6.6	4.3 J	24.8	0.77 U	43.9	19300	22.5	196	0.4 U	0.77 U	89.5
LC2904	LK	14	---	0		21	17	86	43100	3296	786	1.3	12	2987
LC2904	LK	14	---	0.07		34	24	105	52800	3549	831	0.95	17	3239
LC2904	LK	14	---	0.13		37	23	109	44500	3614	910	1.22	19	3345
LC2904	LK	14	---	0.2		40	24	110	33500	3585	853	0.75	21	3296

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC2904	LK	14	---	0.26		26	18	95	42900	2583	753	0.71	16	2447
LC2904	LK	14	---	0.33		19	12	74	50100	1656	621	0.64	11	1391
LC2904	LK	14	---	0.39		12	7	67	63200	800	493	0.75	9	803
LC2904	LK	14	---	0.46		18	5	53	21700	1158	528	0.79	8	1145
LC2904	LK	14	---	0.53		12	7	86	12500	844	557	0.78	9	828
LC2904	LK	14	---	0.59		16	8	68	12700	1180	567	0.77	8	865
LC2904	LK	14	---	0.66		18	6	52	32500	880	395	0.75	8	933
LC2904	LK	14	---	0.72		19	7	64	34800	951	492	0.52	9	885
LC2904	LK	14	---	0.79		19	8	75	36800	945	515	0.32	7	902
LC2904	LK	14	---	0.85		11	6	52	33100	796	442	0.2	5	691
LC2904	LK	14	---	0.92		7	5	58	16900	643	385	0.13	4.5	454
LC2904	LK	14	---	0.98		6	4	57	15500	370	333	0.21	4.1	380
LC2904	LK	14	---	1.05		7	3	56	21800	412	358	0.28	4.3	392
LC2904	LK	14	---	1.12		6	3	49	10200	296	290	0.25	3.9	326
LC2904	LK	14	---	1.18		7	2	46	9800	220	263	0.26	3.5	287
LC2904	LK	14	---	1.25		3.9	1.8	45	7300	180	271	0.25	3.1	243
LC2904	LK	14	---	1.31		3.4	2	47	8900	207	283	0.26	3.6	248
LC2904	LK	14	---	1.38		4.5	1.7	46	9100	134	254	0.23	2.8	153
LC2904	LK	14	---	1.44		4.3	1.3	41	6600	78	234	0.23	2.9	119
LC2904	LK	14	---	1.51		5.1	1.2	42	8600	65	233	0.23	3.1	116
LC2904	LK	14	---	1.57		2.6	0.8	42	6300	53	213	0.25	2.7	104
LC2904	LK	14	---	1.64		2.1	0.9	47	8600	51	219	0.29	2.5	115
LC2904	LK	14	---	1.71		2.2	1.2	42	9400	46	223	0.21	2.1	95
LC2907	LK	14	---	0.13		17	29	115	39600	3848	546	1.7	29	3738
LC2907	LK	14	---	0.2		20	42	154	40300	* 6111	645	2.01	43	5888
LC2907	LK	14	---	0.26		15	50	176	41500	* 8148	758	2.7	61	7716
LC2907	LK	14	---	0.33		12	54	208	56300	* 8149	562	2.6	59	7817
LC2907	LK	14	---	0.39		13	55	208	41000	* 7592	588	2.8	45	8680
LC2907	LK	14	---	0.46		12	54	180	39600	* 8148	549	2.5	31	8020
LC2907	LK	14	---	0.53		15	52	188	51500	* 8796	523	2.9	35	8172
LC2907	LK	14	---	0.59		35	54	164	40100	* 8100	517	3.3	37	8883
LC2907	LK	14	---	0.66		58	57	132	38000	* 8000	524	3.5	36	9442
LC2907	LK	14	---	0.72		41	55	172	39500	1673	501	3.1	29	8325
LC2907	LK	14	---	0.79		31	* 68	212	41500	* 9000	788	6.5	49	* 15144
LC2907	LK	14	---	0.85		55	* 107	404	51100	* 21390	1152	7.1	65	* 20578
LC2907	LK	14	---	0.92		41	* 99	636	65200	* 30160	1052	6.8	44	* 17168
LC2907	LK	14	---	0.98		38	* 99	568	58800	* 24406	897	6.7	35	* 15838

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC2907	LK	14	---	1.05		32	* 86	523	54200	* 27208	874	5.3	33	* 14551
LC2907	LK	14	---	1.12		29	41	527	52600	* 13440	663	3.2	22	6650
LC2907	LK	14	---	1.18		7	21	88	39800	* 5400	604	1.3	19	3037
LC2907	LK	14	---	1.25		9	15	85	37600	3593	696	1.1	12	2136
LC2907	LK	14	---	1.31		14	12	69	35200	2717	566	1.8	9	3318
LC2907	LK	14	---	1.38		8	6	42	34800	1580	558	1.3	8.2	1273
LC2907	LK	14	---	1.44		12	4.5	11	31100	459	488	0.13	7.5	380
LC2907	LK	14	---	1.51		10	4.2	45	33400	269	491	0.11	7.7	204
LC2907	LK	14	---	1.57		9	3.9	42	33200	286	560	0.1	7.9	209
LC2907	LK	14	---	1.64		8	4.1	35	31000	80	423	0.11	4.4	79
LC2907	LK	14	---	1.71		9	3.5	27	33000	219	402	0.13	5.3	151
LC2908	LK	14	---	0.07		209	36	208	42500	* 10353	1923	6.1	43	5157
LC2908	LK	14	---	0.13		147	67	426	77600	* 20588	2129	9.7	37	* 11907
LC2908	LK	14	---	0.2		150	14	158	65000	* 9800	1529	5.3	30	2944
LC2908	LK	14	---	0.26		156	11	144	39200	* 8000	1138	3.8	25	3178
LC2908	LK	14	---	0.33		75	12	124	41200	* 6400	1321	4.5	19	2944
LC2908	LK	14	---	0.39		25	7	54	35000	3469	1136	2.6	9	1909
LC2908	LK	14	---	0.46		60	7	50	34600	775	1068	0.7	15	1618
LC2908	LK	14	---	0.53		13	31	65	48500	2120	935	1.7	17	2573
LC2908	LK	14	---	0.59		12	5	46	32200	327	1114	0.6	7	1204
LC2908	LK	14	---	0.66		19	31	46	31900	269	948	0.5	5	1453
LC2908	LK	14	---	0.72		17	4.2	31	28800	192	624	0.3	4.5	796
LC2908	LK	14	---	0.79		11	4.8	21	29800	288	532	0.4	3	388
LC2908	LK	14	---	0.85		9	4.7	23	33000	153	562	0.2	2.8	524
LC2908	LK	14	---	0.92		5	3.6	22	31200	115	512	0.2	2.7	255
LC2908	LK	14	---	0.98		6	3.2	19	34500	153	544	0.2	2.3	81
LC2908	LK	14	---	1.05		11	2.7	18	31100	58	594	0.1	2.1	74
LC2908	LK	14	---	1.12		11	2.1	22	25600	15	522	0.09	2.5	60
LC2908	LK	14	---	1.18		13	2.3	24	31500	35	517	0.09	1.9	151
LC2908	LK	14	---	1.25		16	3.7	23	32500	211	510	0.3	3.4	123
LC2908	LK	14	---	1.31		12	3.6	22	29800	192	546	0.5	2.9	160
LC2908	LK	14	---	1.38		17	3.4	24	27600	307	522	0.7	3.4	253
Surface Water - Total Metals (ug/l)														
LC2918	LK	14	---				6	8						
LC2918	LK	14	---			7				7				431
LC55	RV	7	10/29/1996				2.3			10				454

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Water - Total Metals (ug/l)														
LC55	RV	7	11/26/1996				3.3			10				613
LC55	RV	7	12/13/1996				4.5			21				489
LC55	RV	7	01/29/1997				2.4			11				434
LC55	RV	7	02/21/1997				2.9			46				328
LC55	RV	7	03/26/1997				1.7			24				247
LC55	RV	7	04/16/1997				1			8				196
LC55	RV	7	05/16/1997				1.6			303				300
LC55	RV	7	06/24/1997				1.4			17				278
LC55	RV	7	07/24/1997				1.8			20				368
LC55	RV	7	08/13/1997				2.3			23				513
LC55	RV	7	09/01/1997				2.6			23				518
LC55	RV	7	10/16/1997				2.6			10				516
LC55	RV	7	11/24/1997				1.8			9				336
LC55	RV	7	12/17/1997				2.3			40				476
LC55	RV	7	01/21/1998				2.7			10				396
LC55	RV	7	02/25/1998				1.6			9				262
LC55	RV	7	03/19/1998				1.3			2.5				209
LC55	RV	7	04/23/1998				1.2			42				179
LC55	RV	18	10/23/1998				3			9				500
LC55	RV	18	11/16/1998				3			26				420
LC55	RV	18	11/16/1998				3			25				420
LC55	RV	18	12/14/1998				3			14				690
LC55	RV	18	03/23/1999				1			49				180
LC55	RV	18	04/21/1999				1 U			67				139
LC55	RV	18	05/06/1999				1			11				120
LC55	RV	18	05/26/1999				2		2200	230	210			
LC55	RV	18	06/17/1999				0.89			36.1				126
LC55	RV	18	07/07/1999				1.5			8.5				239
LC55	RV	18	08/11/1999				2.1			24.4				313
LC55	RV	18	09/02/1999				2.4			18				395
LC55	RV	7	05/28/1998				1.6			64				202
LC55	RV	7	06/24/1998				2.1			11				320
LC55	RV	7	07/27/1998				2.2			26				369
LC55	RV	7	08/25/1998				2.2			21				440
LC55	RV	7	09/23/1998				3			8				521
LC55	RV	7	10/26/1998				2.9			12				627
LC55	RV	7	11/24/1998				2.7			28				363

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Water - Total Metals (ug/l)														
LC55	RV	7	01/04/1999				1.5			8				207
LC55	RV	7	01/14/1999				1.4			9				237
LC55	RV	7	02/23/1999				2.4			9				368
LC55	RV	7	03/09/1999				2			10				265
Surface Water - Dissolved Metals (ug/l)														
LC55	RV	7	10/29/1996				2.3			3				456
LC55	RV	7	11/26/1996				3.5			3				613
LC55	RV	7	12/13/1996				4.8			6				521
LC55	RV	7	01/29/1997				2.2			4				432
LC55	RV	7	02/21/1997				3.6			8				341
LC55	RV	7	03/26/1997				1.6			7				241
LC55	RV	7	04/16/1997				1			6				214
LC55	RV	7	06/24/1997				1.5			8				282
LC55	RV	7	07/24/1997				1.9			7				380
LC55	RV	7	08/13/1997				2.3			9				514
LC55	RV	7	09/01/1997				2.9			8				553
LC55	RV	7	10/16/1997				2.6			3				522
LC55	RV	7	11/24/1997				1.6			3				336
LC55	RV	7	12/17/1997				2.1			7				458
LC55	RV	7	01/21/1998				2.5			6				404
LC55	RV	7	02/25/1998				1.6			4				268
LC55	RV	7	03/19/1998				1.2			6				186
LC55	RV	7	04/23/1998				0.9			4				160
LC55	RV	18	10/23/1998				2.5			4				526
LC55	RV	18	11/16/1998				2.3			2.9				455
LC55	RV	18	11/16/1998				2.3			2.2				428
LC55	RV	18	12/14/1998				2.4			1.5				387
LC55	RV	18	03/23/1999				1			2.2				148
LC55	RV	18	04/21/1999				1 U			2				97
LC55	RV	18	05/06/1999				1			2.2				113
LC55	RV	18	05/26/1999				1 U		20	4.7	31			78
LC55	RV	18	06/17/1999				1 U			4				109
LC55	RV	18	07/07/1999				1			3				244
LC55	RV	18	08/11/1999				2			5				318
LC55	RV	18	09/02/1999				2			6				407
LC55	RV	7	05/28/1998				1.2			8				176

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Water - Dissolved Metals (ug/l)														
LC55	RV	7	06/24/1998				2.2			4				308
LC55	RV	7	07/27/1998				2.2			12				354
LC55	RV	7	08/25/1998				1.9			5				456
LC55	RV	7	09/23/1998				2.2			4				512
LC55	RV	7	10/26/1998				2.9			3				628
LC55	RV	7	11/24/1998				2.7			6				364
LC55	RV	7	01/04/1999				1.6			3				215
LC55	RV	7	01/14/1999				1.9			3				243
LC55	RV	7	02/23/1999				2.3			4				369
LC55	RV	7	03/09/1999				2.4			3 U				257
LC55	RV	7	03/05/1994				2.88			12				270.7
LC55	RV	7	03/17/1994				0.97			6				230.8
LC55	RV	7	04/07/1994				0.02			4.4				151
LC55	RV	7	04/12/1994				0.97			4.5				171
LC55	RV	7	04/19/1994				1.93			12.8				210.8
LC55	RV	7	05/10/1994				0.97			4.1				190.9
LC55	RV	7	06/16/1994				1.93			3.2				380.3
LC55	RV	7	07/20/1994				1.93			5.1				440.2
LC55	RV	7	08/16/1994				1.93			6.3				460.1
LC55	RV	7	09/19/1994				1.93			3.7				539.9
LC55	RV	7	10/06/1994				2.21			1.5				607.6
LC55	RV	7	11/22/1994				3.36			1.5				579.7
LC55	RV	7	12/16/1994				2.5			1.5				464.1
LC55	RV	7	01/12/1995				2.02			3				216.8
LC55	RV	7	03/07/1995				1.16			4				231.8
LC55	RV	7	03/23/1995				1.26			5				183.9
LC55	RV	7	04/14/1995				1.35			1.5				194.9
LC55	RV	7	04/25/1995				1.35			5				197.9
LC55	RV	7	05/11/1995				1.45			7				165
LC55	RV	7	05/24/1995				1.54			7				206.9
LC55	RV	7	06/12/1995				1.54			7				261.7
LC55	RV	7	06/28/1995				1.73			6				324.5
LC55	RV	7	07/12/1995				1.93			10				381.3
LC55	RV	7	07/26/1995				2.5			7				498
LC55	RV	7	08/15/1995				2.21			4				493
LC55	RV	7	09/14/1995				1.93			5				483
LC55	RV	7	10/18/1995				2.78			5				460.1

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg02

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Water - Dissolved Metals (ug/l)														
LC55	RV	7	11/21/1995				1.54			3				229.8
LC55	RV	7	12/28/1995				1.83			6				315.5
LC55	RV	7	01/18/1996				1.35			5				165
LC55	RV	7	02/28/1996				1.83			8				307.5
LC55	RV	7	03/27/1996				1.45			10				268.7
LC55	RV	7	04/18/1996				0.97			6				186.9
LC55	RV	7	05/09/1996				1.45			7				251.7
LC55	RV	7	06/20/1996				1.73			8				365.4
LC55	RV	7	07/23/1996				2.5			5				645.5
LC55	RV	7	08/21/1996				2.5			5				618.6
LC55	RV	7	09/26/1996				2.21			5				644.5

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg03

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Soil (mg/kg)														
CUA0501	GS	10	08/13/1998	0	1.2 J	9.9	0.6 J	15.6	19900	44.6	722	0.1 U	0.41 U	123
CUA0502	GS	10	08/13/1998	0	0.99 U	7.9	0.25 J	13.2	17200	16.7	622	0.1 U	0.4 U	94.9
CUA0503	GS	10	08/13/1998	0	1 U	8.4	0.21 J	12.6	12700	15.3	511	0.1 U	0.4 U	65.7
CUA0504	GS	10	08/13/1998	0	1.8 J	9.7	1 J	15.2	22200	271	749	0.1 U	0.4 U	155
CUA0505	GS	10	08/13/1998	0	1 U	8.9	0.23 J	14.2	15700	17.3	582	0.1 U	0.4 U	74.1
CUA0511	GS	10	08/31/1998	0	19.4 J	106	40.9	108	94800	3910	10900	2.6	16.5	6600
CUA0512	GS	10	08/31/1998	0	15.5 J	139	31.6	101	81800	4000	9280	2.8	14.8	4490
CUA0513	GS	10	08/31/1998	0	14.2 J	106	27.6	106	74900	* 4850	7620	2.3	15.8	3930
CUA0514	GS	10	08/31/1998	0	16.2 J	103	36.4	110	80600	4440	9250	3.7	15.1	5470
CUA0515	GS	10	08/31/1998	0	18.1 J	111	38.5	130	98700	4490	11000	2.9	16.5	5730
CUA0521	GS	10	08/30/1998	0	25.9 J	112	47	134 J	116000	4370	12700	2.2	18.7 J	7910
CUA0522	GS	10	08/30/1998	0	17.7 J	101	44.2	137 J	93200	4200	10200	1.9	18 J	7240
CUA0523	GS	10	08/30/1998	0	27.9 J	151	52.8	174 J	149000	4040	16300	2.7	21.4 J	8710
CUA0524	GS	10	08/30/1998	0	17.8 J	110	37.7	111 J	100000	4060	11200	2.4	17.4 J	6240
CUA0525	GS	10	08/30/1998	0	15.1 J	111	35.7	127 J	91400	4560	10000	2.2	16.5 J	5650
CUA0531	GS	10	08/30/1998	0	33.3	153	58.8	193	166000	4580	16300	2.9	22.4	* 9740 J
CUA0532	GS	10	08/30/1998	0	22.4	121	38.1	140	119000	4460	9490	2.6	16.2	6930 J
CUA0533	GS	10	08/30/1998	0	20.4	109	31.7	136	112000	4270	9030	2.9	15.7	5810 J
CUA0534	GS	10	08/30/1998	0	40.7	219	54.2	217	185000	* 4890	18400	2.8	26.2	9690 J
CUA0535	GS	10	08/30/1998	0	42.2	229	57.8	217	195000	* 5330	19100	2.5	25.3	* 10200 J
CUA0541	GS	10	08/29/1998	0	19.3	96.5	27.9	117	78900	4540	6220 J	2.1 J	14.5	4220 J
CUA0542	GS	10	08/29/1998	0	14.6	135	13.7	102	85300	3580	5700 J	4 J	12.8	2280 J
CUA0543	GS	10	08/29/1998	0	14.4 J	83.9	29.9	115	76300	4640	8350	3.3	16.6	4690
CUA0544	GS	10	08/29/1998	0	16.5 J	100	41.8	150	96300	* 5120	11000	3.9	19	6670
CUA0545	GS	10	08/29/1998	0		97.8	31	115	83500		9590	2.7		4960
CUA0545	GS	10	08/29/1998	0	17.1 J					4600			16	
CUA0551	GS	10	08/29/1998	0	17.5	84.8	28.9	124	87500	4270	7520	2.9 J	15.7	4630 J
CUA0552	GS	10	08/29/1998	0	18.1	94.3	29.9	126	95000	4100	7930	2.9 J	17.1	4670 J
CUA0553	GS	10	08/29/1998	0								2.6 J		
CUA0553	GS	10	08/29/1998	0	23.5	113	33.4	128	102000	* 4910	8250		16.7	5380 J
CUA0554	GS	10	08/29/1998	0	22.4	96.9	29.2	112	85800	4170	7090	2.8 J	14.5	4730 J
CUA0555	GS	10	08/29/1998	0	20.5	95	30.6	124	85400	4390	7180	2.9 J	17.1	4770 J
LC10005	RV	22	---	0.5						1620				
LC10028	RV	22	---	0.5						* 16300				
LC10044	RV	22	---	0.5						2740				
LC10045	RV	22	---	0.5						1480				
LC10046	RV	22	---	0.5						* 7780				

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg03

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Soil (mg/kg)														
LC10047	RV	22	---	0.5						458				
LC10048	RV	22	---	0.5						1080				
LC11200	FP	16	---			10.4	3.2	28.5	9540	1000	56.9			205
LC11202	FP	16	---			295	21.4	113	87300	4470	8390			2530
LC11203	FP	16	---			21.6	5.3	39.7	19900	1080	239			445
LC11221	FP	16	---			5	1.4	23	11400	65.2	62.1			68.4
LC11222	FP	16	---			105	22.6	99	83000	4020	8710			3110
LC11225	FP	16	---			156	25	103	97300	4250	9820			3140
Subsurface Soil (mg/kg)														
LC10005	RV	22	---	1						833				
LC10005	RV	22	---	1.5						2430				
LC10028	RV	22	---	1						* 18600				
LC10028	RV	22	---	1.5						1520				
LC10044	RV	22	---	1						1520				
LC10044	RV	22	---	1.5						870				
LC10045	RV	22	---	1						2130				
LC10045	RV	22	---	1.5						2520				
LC10046	RV	22	---	1						* 7330				
LC10046	RV	22	---	1.5						1870				
LC10047	RV	22	---	1						292				
LC10047	RV	22	---	1.5						292				
LC10048	RV	22	---	1						1120				
LC10048	RV	22	---	1.5						917				
Sediment (mg/kg)														
CUA05110	RV	10	08/31/1998	0		122	36.4	136	132000	3670	13300		16.5	6570
CUA05110	RV	10	08/31/1998	0	22.6							2.5 J		
CUA05111	RV	10	08/31/1998	0	32	114	47.3	151	142000	3410	14600	2.1 J	18.9	8290
CUA05112	RV	10	08/31/1998	0	40.7	165	* 70.5	206	183000	4450	18700	1.9 J	26.7	* 11500
CUA05113	RV	10	08/31/1998	0	25.3	118	39.2	138	140000	3430	14200	2.4 J	18.9	7070
CUA05114	RV	10	08/31/1998	0	25.6	122	40.9	136	114000	3790	9000	2.1 J	17.4	7100
CUA05115	RV	10	08/31/1998	0	28.3	127	52.5	155	136000	4000	13700	2.1 J	20.3	8760
CUA0516	RV	10	08/31/1998	0	13.8 J	128	25.7	99.5	84500	4260	9040	2.4	14.8	3790
CUA0517	RV	10	08/31/1998	0	27 U	128	30.3	114	121000	3870	9410	2.8 J	16.6	5270
CUA0518	RV	10	08/31/1998	0	16.6 U	124	18.1	105	102000	3930	7860	4.8 J	16.2	3010

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg03

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
CUA0519	RV	10	08/31/1998	0	23.3 U	132	35.2	118	125000	3460	9740	2.1 J	15.9	6250
CUA05210	RV	10	08/30/1998	0	28 J	180			159000					* 10200
CUA05210	RV	10	08/30/1998	0			60.7	191 J		* 5960	17100	3.3	22.1 J	
CUA05211	RV	10	08/30/1998	0	21.4 J	123	49.1	151 J	134000	3920	14600	2.6	19.6 J	8130
CUA05212	RV	10	08/30/1998	0	25.3 J	138	60.6	157 J	138000	4140	15200	2.1	21.4 J	* 10500
CUA05213	RV	10	08/30/1998	0	49.1 J	145	* 74.7	224	163000	4350	17800	4.5	26.8 J	* 11900
CUA05214	RV	10	08/30/1998	0	25.6 J	111	50.6	151	102000	4030	10800	3	17.8 J	7120
CUA05215	RV	10	08/30/1998	0	46 J	144	* 77.3	209	169000	* 4860	18300	4.3	26.9 J	* 12700
CUA0526	RV	10	08/30/1998	0	19.8 J	124	31	141 J	128000	3960	13800	3.3	19.6 J	4700
CUA0527	RV	10	08/30/1998	0	17 J	148	36.1	124 J	109000	3900	11100	3.3	16.5 J	5240
CUA0528	RV	10	08/30/1998	0	22.1 J	112	42.4	147 J	124000	4460	13400	3.5	19.5 J	6830
CUA0529	RV	10	08/30/1998	0	21 J	134	38.5	136 J	136000	4150	14800	3	17 J	6300
CUA05310	RV	10	08/30/1998	0		120			131000	3900	12900			6000 J
CUA05310	RV	10	08/30/1998	0	19.6 J		36.3	151 J				2.8	17.9 J	
CUA05311	RV	10	08/30/1998	0	48.5 J		* 100	272 J					28.5 J	* 17200
CUA05311	RV	10	08/30/1998	0		171			197000	* 5530	22000	2.7		
CUA05312	RV	10	08/30/1998	0	36 J	137	* 88.9	226 J	182000	* 4800	20500	3.5	23.7 J	* 15000
CUA05313	RV	10	08/30/1998	0	19.8 J	108	57.5	130 J	86800	4060	9810	2.7	17.7 J	6950
CUA05314	RV	10	08/30/1998	0	36.1 J	106	* 79.6	209 J	188000	4050	21600	3.3	23.9 J	* 13300
CUA05315	RV	10	08/30/1998	0	35.8 J	56	* 88.6	232 J	94500	* 15000	11000	7	37.8 J	* 14000
CUA0536	RV	10	08/30/1998	0	27.3	164	42.2	172	153000	* 4800	14800	3.3	20.1	7380 J
CUA0537	RV	10	08/30/1998	0	39.9	178	54.9	202	190000	* 5760	18900	2.7	24.5	9620 J
CUA0538	RV	10	08/30/1998	0	34.3	172	49.1	195	176000	* 4950	17700	2.9	24.1	8800 J
CUA0539	RV	10	08/30/1998	0	29.7	162	39	166	162000	4680	16200	3.4	19.1	7060 J
CUA05410	RV	10	08/29/1998	0	16.4 J	133	31.3	131	112000	* 4780	11700	4.2	17.9	4920
CUA05411	RV	10	08/29/1998	0	20.9 J	84.4	56.6	150	121000	4030	13400	4.1	18.3	9490
CUA05412	RV	10	08/29/1998	0	44.2	111	* 85.9	239	180000	4020	18900 J	2 J	28	* 12200 J
CUA05413	RV	10	08/29/1998	0	51.8	113	* 87.1	204	189000	4450	20200	2.7	25.8	* 17400 J
CUA05414	RV	10	08/29/1998	0	37.9	132	* 70.1	176	170000	4490	18300	2.7	22.8	* 11900 J
CUA05415	RV	10	08/29/1998	0	24.5	102	48	147	123000	3580	12700	3	18.4	8360 J
CUA0546	RV	10	08/29/1998	0	14.1 J	108	22.9	111	136000	* 6550	15000	4	16.9	2630
CUA0547	RV	10	08/29/1998	0	31.1 J	112	* 75.4	223	165000	4700	18600	4.7	24.3	* 12800
CUA0548	RV	10	08/29/1998	0	26.6 J	115	* 73.6	203	157000	4640	17600	4	24.3	* 12800
CUA0549	RV	10	08/29/1998	0	17.3 J	136	59.6	159	133000	* 7120	13600	4.9	20.7	7260
CUA05510	RV	10	08/29/1998	0	31.4	107	58	196	154000	4330	16000 J	2.3 J	20.7	9370 J
CUA05511	RV	10	08/29/1998	0	42.8	154	* 96.7	275	194000	* 5100	20400 J	1.8 J	32.7	* 17800 J
CUA05512	RV	10	08/29/1998	0	36.5	164	* 94.3	269	186000	* 5410	19900 J	1.9 J	28.9	* 13900 J

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg03

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
CUA05513	RV	10	08/29/1998	0	47					* 4970		2.5 J	28	
CUA05513	RV	10	08/29/1998	0		143	* 83	248	160000		16500 J			* 12100 J
CUA05514	RV	10	08/29/1998	0	41.9	137	* 83.1	259	174000	* 4760	17700 J	1.8 J	27.7	* 12100 J
CUA05515	RV	10	08/29/1998	0	44.5	123	* 77.4	212	155000	4720	15800 J	1.9 J	27.3	* 11400 J
CUA0556	RV	10	08/29/1998	0	29.8	141	44.7	198	149000	4530	15800	3.6 J	22.9	7280 J
CUA0557	RV	10	08/29/1998	0	34.7	143	63.1	201	145000	* 4870	15300	2.6 J	24.1	* 9950 J
CUA0558	RV	10	08/29/1998	0	40	150	59	209	149000	* 4980	15600	2.6 J		9320 J
CUA0558	RV	10	08/29/1998	0									24.9	
CUA0559	RV	10	08/29/1998	0	29.2	126	64	208	143000	4430	13200 J	2 J	23.7	9260 J
LC10286	RV	16	---	0	38	260	21	145	8.96	* 4750	6690	3	13	3450
LC10287	RV	16	---	0	54	154	56	180	6.91	3280	3440	2	14	2820
LC10287	RV	16	---	0.36	26	106	6	190	4.48	2970	1770		10	981
LC10287	RV	16	---	0.53	74	318	48	200	10.32	3980	7160	3	17	4000
LC10287	RV	16	---	0.82	36	234	19	130	9.87	4250	7970		12	2980
LC10287	RV	16	---	1.12	32	120	20	150	8.31	* 5030	6950		12	3230
LC10287	RV	16	---	1.21	44	38	24	210	6.68	* 7150	5340	1	18	3480
LC10287	RV	16	---	1.34	32	16	10	170	4.94	* 5880	3480		21	1580
LC10287	RV	16	---	0	22	292	13	210	8.72	1960	2260		5	1530
LC10287	RV	16	---	0.82	48	210	19	302	5.47	3900	2170	4	16	1550
LC10287	RV	16	---	0.92	70	308	37	203	10.91	3650	7280	1	15	3900
LC10287	RV	16	---	1.21	34	198	19	160	9.84	4330	8090		12	2910
LC10287	RV	16	---	1.57	38	86	23	220	8.32	* 5840	6910		15	3380
LC10287	RV	16	---	1.77	28	26	13	170	3.67	* 6820	1920	1	17	1840
LC10287	RV	16	---	2.1	4	82	20	160	1.79	350	300		1	2280
LC10287	RV	16	---	2.36	2	34	1	160	1.42	79	190			910
LC10287	RV	16	---	2.72		28	1	180	1.3	68	135			540
LC10287	RV	16	---	3.05	2	18	1	430	1.44	300	240		1	490
LC10288	RV	16	---	0	28	66	11	230	3.47	2850	1440		10	1490
LC10288	RV	16	---	0.2	46	158	55	390	6.55	* 4830	4730		13	6800
LC10288	RV	16	---	0.39	40	138	28	280	7.44	* 5120	5950		14	3860
LC10288	RV	16	---	0.66	32	26	15	340	4.52	* 7470	3020		21	2100
LC10288	RV	16	---	0.92	12	52	19	130	2.49	1430	915		3	2170
LC10288	RV	16	---	1.12	2	14	2	97	1.41	270	375		1	240
LC10288	RV	16	---	1.57	2	22	3	220	1.42	280	445		1	340
LC10289	RV	16	---	0	30	132	16	140	7.83	4720	5620	2	13	1900
LC10289	RV	16	---	0.23	46	324	33	136	11.23	4300	9120	1	14	3800
LC10289	RV	16	---	0.59	44	326	21	132	12.92	3650			13	3300

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg03

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10289	RV	16	---	0.75	40	274	14	117	10.95	4000	9060		13	2300
LC10289	RV	16	---	0.98	40	314	13	163	10.65	1850	8670	1	13	3950
LC10289	RV	16	---	1.15	34	248	9	108	9.6	1450	7790	1	11	3450
LC10289	RV	16	---	1.38	38	274	10	107	10.03	3700	7700		12	1600
LC10289	RV	16	---	1.57				108		4050				2200
LC10289	RV	16	---	2				94		3950				1950
LC10289	RV	16	---	2.2				96		3950				2400
LC10289	RV	16	---	2.39	32	334	10	120	11.6	4550	8330		13	2150
LC10289	RV	16	---	2.85				91		4300				2350
LC10289	RV	16	---	3.54				97		4650				2850
LC10289	RV	16	---	4.26	32	104	60	140	10.72	* 5200	9010	1	12	5380
LC10289	RV	16	---	4.49	30	90	* 75	150	8.76	* 5150	7570	1	11	4850
LC10289	RV	16	---	4.79	32	80	24	160	8.94	* 5280	7810	1	12	7500
LC10289	RV	16	---	6.07	26	74	25	240	9.54	* 6240	7980	1	12	4780
LC10289	RV	16	---	6.56	24	52	26	190	9.1	* 5320	8050	2	11	4780
LC10290	RV	16	---	0	12	54	12	167	4.76	2650	3870	2	7	1700
LC10290	RV	16	---	0.1	32	214	21	129	8.93	* 4800	5600		13	2200
LC10290	RV	16	---	0.36	8	6	6	82	2.58	2050	1260	3	5	577
LC10290	RV	16	---	0.53	82	58	3	284	8.07	* 23000	3270	12	62	950
LC10290	RV	16	---	0.79	2	12	3	58	2.33	830	695		1	328
LC10290	RV	16	---	1.02		6	2	305	2.16	72	465			38
LC10291	RV	16	---	0	47	160	27	140	8.8	* 5200	9320		13	4300
LC10291	RV	16	---	0.13	69	297	28	198	11	* 5150	8880		15	5200
LC10291	RV	16	---	0.3	58	289	18	182	11	* 5000	9290		13	3650
LC10291	RV	16	---	0.59	54	120	13	1650	10	* 6300	9160		14	* 9800
LC10291	RV	16	---	0.75	60	112	11	154	11	* 6950	9890		17	2900
LC10291	RV	16	---	0.95	54	132	9	150	12	* 5850	10900		15	2700
LC10291	RV	16	---	1.05	45	98	7	120	11	* 5550	6400		17	3110
LC10291	RV	16	---	1.21	4	6	5	60	1.9	440	820		1	930
LC10291	RV	16	---	1.57	1	5	3	55	2	79	364			600
LC10291	RV	16	---	2.03	1	5	2	61	2.2	40	272			410
LC10291	RV	16	---	2.53	1	4	1	50	2.1	48	208			290
LC10291	RV	16	---	3.28				42		48				240
LC10291	RV	16	---	4.17	1	4		120	2	46	122			130
LC10291	RV	16	---	4.53	2	4	1	160	2.2	40	251			360
LC10291	RV	16	---	4.76	1	3		91	1.9	47	142			180
LC10291	RV	16	---	5.22	1	4		110	1.9	45	95			110

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg03

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10291	RV	16	---	5.64	1	4		180	2	47	110			140
LC10291	RV	16	---	5.9	2	6	1	260	2.5	71	1860			220
LC10292	RV	16	---	0	36	104	33	134	9.75	4050	8700	5	14	5700
LC10293	RV	16	---	0	28	116	25	210	8.74	4460	7010	1	13	3460
LC10293	RV	16	---	0.13	36	138	25	160	10.36	* 4910	9160	2	14	4330
LC10293	RV	16	---	0.53	40	320	38	160	11.04	4570	8540	2	14	4890
LC10293	RV	16	---	0.75	38	250	20	160	10.28	* 5030	8430		13	3380
LC10293	RV	16	---	1.12	34	120	20	130	10.22	* 5390	8620	1	13	2000
LC10293	RV	16	---	1.41	34	100	16	150	10.11	* 6090	8220	2	14	2100
LC10293	RV	16	---	1.74	34	130	10	120	10.94	* 5330	8420		14	1740
LC10293	RV	16	---	2.26	18	20	15	110	2.89		1350		10	1580
LC10293	RV	16	---	0	50	127	29	150	10	4610	10600		15	4200
LC10293	RV	16	---	0.23	54	168	28	140	11	4230	12000		16	4340
LC10293	RV	16	---	0.62	59	289	34	160	12	4370	11200		15	3100
LC10293	RV	16	---	0.75	58	270	31	120	13	4320	13800		14	4070
LC10293	RV	16	---	1.28	54	346	23	130	11	4180	10900		13	4180
LC10293	RV	16	---	1.51	55	327	23	160	11	* 5490	11900		16	4150
LC10293	RV	16	---	1.64	50	265	47	150	12	* 5050	11800		15	5330
LC10293	RV	16	---	1.97	2	5	9	54	2	63	273			960
LC10293	RV	16	---	2.49	2	5	7	54	2.1	57	212			530
LC10293	RV	16	---	2.95	2	6	4	72	2.2	60	227			310
LC10635	RV	16	07/18/1995	0		634	43.8		113000	4020	11300			5520
LC10636	RV	16	07/18/1995	0		510	24.1		117000	3970	8000			2660
LC10637	RV	16	07/18/1995	0		257	27.4		95300	* 5350	7890			2790
LC10638	RV	16	07/19/1995	0		95.2	6.8		51800	4640	721			815
LC10639	RV	16	07/19/1995	0		116	18.1		96100	* 5280	10100			3330
LC10640	RV	16	07/19/1995	0		114	18		74600	* 6660	6210			1780
LC10641	RV	16	07/19/1995	0		140	16.2		80100	* 5230	7510			1830
LC10642	RV	16	07/19/1995	0		159	34		85300	* 6570	15500			3060
LC10643	RV	16	07/19/1995	0		194	22		92300	* 5980	7880			2740
LC10644	RV	16	07/20/1995	0		87.2	34.1		71400	* 11100	6500			4380
LC10645	RV	16	07/20/1995	0		60.1	30.7		42900	* 8840	3890			3430
LC10646	RV	16	07/20/1995	0		126	18.6		79900	* 7250	4230			3050
LC10647	RV	16	07/20/1995	0		123	29		70900	* 4910	6130			2450
LC10648	RV	16	07/20/1995	0		319	58.8		96400	* 5240	7140			4660
LC10649	RV	16	07/20/1995	0		199	23		78100	4390	5150			2810
LC10650	RV	16	07/24/1995	0		170	20.4		79400	* 4740	7170			2440

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg03

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10651	RV	16	07/24/1995	0		135	21.3		77200	* 5570	6920			2480
LC10652	RV	16	07/24/1995	0		265	43.7		94100	4560	7620			3170
LC10653	RV	16	07/24/1995	0		153	18.3		88800	* 7250	8070			2480
LC10654	RV	16	07/24/1995	0		258	22.5		98200	* 5190	9240			2630
LC10655	RV	16	07/25/1995	0		162	25.4		87100	* 5040	7860			2710
LC10656	RV	16	07/25/1995	0		140	20.6		96400	* 5130	9800			3160
LC10657	RV	16	07/25/1995	0		204	31.4		113000	* 4740	12100			5200
LC10658	RV	16	07/25/1995	0		132	17		77000	* 8180	4220			2710
LC10725	RV	16	08/14/1995	0		116	14.4		49200	3220	3420			1430
LC10726	RV	16	08/14/1995	0		10.1 U	6.3		19000	740	634			374
LC10727	RV	16	08/14/1995	0		85.7	12.7		55600	3110	4940			1190
LC10728	RV	16	08/14/1995	0		46.3	7.5		34100	2770	1720			863
LC10729	RV	16	08/14/1995	0		181	24.7		66400	* 5540	3880			2640
LC10730	RV	16	08/14/1995	0		109	18.8		88100	4640	8400			2590
LC10731	RV	16	08/14/1995	0		41.7	10.1		33300	3170	2450			849
LC10732	RV	16	08/14/1995	0		10.1 U	7.9		14600	1470	560			1040
LC10733	RV	16	08/14/1995	0		165	28.9		74700	* 5940	3480			3210
LC10734	RV	16	08/15/1995	0		152	23		75000	* 4750	6420			2020
LC10735	RV	16	08/15/1995	0		119	27.1		80500	* 5080	7910			3050
LC10736	RV	16	08/15/1995	0		340	20		94500	4320	4630			3050
LC10737	RV	16	08/15/1995	0		94.9	31.6		62200	* 7550	4900			3890
LC10738	RV	16	08/15/1995	0		10.3 U	8.9		15700	1490	398			976
LC10739	RV	16	08/15/1995	0		31.3	22.3		34100	4680	1830			2200
LC10740	RV	16	08/15/1995	0		112	21.5		73400	4730	5890			2280
LC10741	RV	16	08/15/1995	0		135	25.9		91200	* 4830	9320			2950
LC10742	RV	16	08/15/1995	0		180	23.2		90400	* 4980	9080			2380
LC10743	RV	16	08/15/1995	0		256	24		94500	* 5010	9120			2730
LC10744	RV	16	08/16/1995	0		10.4 U	3		12400	445	166			402
LC10745	RV	16	08/16/1995	0		13.4	8.1		16300	1640	445			970
LC10746	RV	16	08/16/1995	0		10.2 U	5.4		12200	338	332			903
LC10747	RV	16	08/16/1995	0		18.7	14		17800	1200	589			1130
LC10748	RV	16	08/16/1995	0		11.7	6.3		14900	968	207			584
LC10765	RV	16	08/17/1995	0		125	24.8		75100	4370	6670			2700
LC10766	RV	16	08/17/1995	0		241	17.5		96300	4710	9080			2230
LC10767	RV	16	08/17/1995	0		213.3	31.2		90500	* 5590	8190			3230
LC10768	RV	16	08/17/1995	0		190	25.7		94100	* 5370	8680			2800
LC10770	RV	16	08/17/1995	0		163	21.6		88500	* 7120	6830			2510

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg03

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10773	RV	16	08/22/1995	0		37.5	18.6		22800	1700	519			1760
LC10774	RV	16	08/22/1995	0		10.3 U	2.2		10100	318	147			209
LC10775	RV	16	08/22/1995	0		10.4 U	1.9		20300	324	107			192
LC10791	RV	16	08/23/1995	0		153	19.9		101000	* 5660	10900			3080
LC10796	RV	16	08/24/1995	0		10.5 U	0.31 U		11300	64.2	46.2			48.9
LC10806	RV	16	08/28/1995	0		10.4 U	1.3		15100	219	88.4			163
LC10807	RV	16	08/28/1995	0		10.1 U	0.38		20800	63	149			100
LC10934	RV	16	09/21/1995	0		152	37.5		92900	* 5710	9370			4010
LC10935	RV	16	09/21/1995	0		317	43.4		88000	4050	8650			4060
LC10936	RV	16	09/21/1995	0		340	31.2		95400	3780	9490			3130
LC10937	RV	16	09/21/1995	0		248	33.9		96400	3960	10100			3340
LC10938	RV	16	09/21/1995	0		413	33.5		98900	4090	9770			3160
LC10939	RV	16	09/21/1995	0		309	31.4		94600	4340	9340			3160
LC10948	RV	16	09/26/1995	0		228	35.6		92400	4150	9180			3270
LC10949	RV	16	09/26/1995	0		169	23.7		70400	* 5290	4930			2340
LC10950	RV	16	09/26/1995	0		138	24		91400	* 9200	7950			2970
LC10951	RV	16	09/26/1995	0		84.6	15.7		63000	* 8190	1850			1770
LC10952	RV	16	09/26/1995	0		127	37.6		76300	* 9230	7110			4470
LC10953	RV	16	09/26/1995	0		83.2	36		68200	* 9680	6140			4450
LC11100	RV	16	11/01/1995	0		285	25.5		92800	4520	6660			2720
LC11101	RV	16	11/01/1995	0		111	41.5		100000	* 6600	9960			4760
LC138	LK	2	11/22/1997	0	3.01 U	17.1	0.751 U	37.8	28100	47.6	372	0.348 U	0.751 U	134
LC138	LK	2	11/22/1997	5.1	9.66 J	79.3	39.2	76	33900	1670	1500 J	1.02	5.02	2810
LC140	RV	2	11/17/1997	0	32.6	159	10.1	183	114000	* 7490	3850	4.1	23.8	3840
LC140	RV	2	11/17/1997	1.8	1.7 J	6.1	2.9	16.4	17000	94.7	84.7	0.14 U	0.27 U	254
LC140	RV	2	11/17/1997	3.9	1.14 J	15.3	0.48 J	20.2	22300	34.4	2620	0.127 U		196
LC140	RV	2	11/17/1997	3.9									0.25 U	
LC141	RV	2	11/17/1997	0	31.6	160	24	140	120000	* 7210	9190	4.5	18.5	4590
LC141	RV	2	11/17/1997	1.3	1.12 U	5.23	5.41	14.2	13900	171	199	0.516	0.279 U	339
LC141	RV	2	11/17/1997	3.1	1.6 UJ	4.3	0.24 U	9.8	11000	50.4	117	0.12 U	0.24 U	123
LC142	RV	2	11/18/1997	0	33.7	402	18.9	126	115000	4520	7530	3.54	14.4	2830
LC142	RV	2	11/18/1997	0.9	15.1 J	44.5	19.9	135	19100	3280	1610	2.9	4.77	2010
LC142	RV	2	11/18/1997	1.8	1.1 U	5.36	3.64	14.5	12200	94.2	543	0.76	0.276 U	489
LC143	RV	2	11/18/1997	0	27.6	53.1	12.9	157	43700	* 6210	1420	3.72	21.6	1810
LC143	RV	2	11/18/1997	0.6	1.57 U	14.5	2.97	26	22400	144	595	0.206 U	0.392 U	505
LC143	RV	2	11/18/1997	1.4	1.29 UJ	11.5	0.271 U	16.7	27000	87.7	256	0.136 U	0.271 U	154
LC144	RV	2	11/15/1997	0	44.4	63.9	5.4	207	65500	* 9910	2160	4.6	38.7	1710

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg03

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC144	RV	2	11/15/1997	2.8	1.5 J	6.4	**0.69 J**	14.3	15100	21.7	91.3	0.13 U	0.25 U	**229**
LC145	RV	2	11/14/1997	0	**5.24 J**	**22.9**	**16.1**	**49.9**	20800	**905**	507	**0.356**	1.76 J	**864**
LC145	RV	2	11/14/1997	2.7	1.5 J	4.88	0.285 U	25.2	13800	26.7	93.8	0.148 U	0.285 U	63.6
LC146	RV	2	11/14/1997	0	**4.9 J**	11.9	**3.4**	**36.7**	19100	**1030**	**634**	**0.68**	2.6 J	
LC146	RV	2	11/14/1997	1.6	0.996 U	5.33	0.249 U	17.3	15500	24.4	40.5	0.128 U	0.249 U	43.6
LC146	RV	2	11/14/1997	0										**414**
LC147	RV	2	11/14/1997	0	**6.8 J**	11.1	**6.3**	**44.3**	19600	**2040**	510	**0.85**	4.2	**618**
LC147	RV	2	11/14/1997	1.2	1.3 J	5.5	0.31 U	17.9	12900	6.7	104	0.16 U	0.31 U	16.7
LC148	RV	2	11/15/1997	0	2.4 J	5.3	0.38 U	20.9	16600	30.2	48.6	0.17 U	0.38 U	**127**
LC148	RV	2	11/15/1997	1	2.5 J	2.5 U	0.42 U	10.3 J	6190	19.3	33	0.21 U	0.42 U	62.1

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Soil (mg/kg)														
CUA04111	GS	10	09/02/1998	0	1 U	15.3	2.3	19.6	25300	424	1290	0.12	1.3 J	429
CUA04112	GS	10	09/02/1998	0	2.4 J	32.2	4.2	25.8	29800	829	2110	0.12	2.2	731
CUA04113	GS	10	09/02/1998	0	3.3 J	75.4	4.7	38.6	43700	1540	2880	0.77	4.5	848
CUA04114	GS	10	09/02/1998	0	1 U	17.5	3.6	13.6	22400	382	1450	0.12	0.82 J	649
CUA04115	GS	10	09/02/1998	0			8.2			2150	4810			1370
CUA04115	GS	10	09/02/1998	0	14.2	263	5.9	70.8	80000	1950	4360	2.5	8.4	1240 J
CUA0431	GS	10	09/10/1998	0	19.3 J	124 J	26.6	107	95900	4210	10100	3.5	15.7	4510
CUA0432	GS	10	09/10/1998	0	22.7 J	121 J	37	130	123000	4140	13100	3.8	17.8	6150
CUA0433	GS	10	09/10/1998	0	20.7 J	116 J	30.5	119	114000	3990	12100	3.3	17.1	5150
CUA0434	GS	10	09/10/1998	0	15.9 J	132 J	22.4	110	94700	3540	9500	3.1	13.4	3730
CUA0435	GS	10	09/10/1998	0	19.1 J	128	42.2 J	131 J	115000 J	3790	12100	2.2 J	18.9 J	6540
CUA0441	GS	10	09/09/1998	0	5.7 J	85.4 J	14.6	70.9	75400	2160	6870	1.8	7.9	2030
CUA0442	GS	10	09/09/1998	0	6 J	79.9 J	17.8	77.1	82700	2330	7240	1.8	8.9	2700
CUA0443	GS	10	09/09/1998	0	13.9 J	100 J	23.7	94.6	79600	3730	8010	2.3	13.3	3880
CUA0444	GS	10	09/09/1998	0	9 J	95.2 J	22.8	85.8	93900	2360	9860 J	1.9	10.8	3520
CUA0445	GS	10	09/09/1998	0	11.7 J	117 J	27.4	105	112000	2730	11000		13.3	4660
CUA0445	GS	10	09/09/1998	0								2.8		
CUA04511	GS	10	09/09/1998	0	19.4	114	18	110	110000	2980	7900 J		13.6	3720 J
CUA04511	GS	10	09/09/1998	0								2.3		
CUA04512	GS	10	09/09/1998	0	18.9	105	25.4	92.9	95700	2840	7570 J	2.1	11.5	4520 J
CUA04513	GS	10	09/09/1998	0	21.1	167	25.9	115	108000	3490	7840 J	2.4	13.1	4650 J
CUA04514	GS	10	09/09/1998	0	21.2	110	35	132	116000	3550	9020 J	1.8	14.3	6290 J
CUA04515	GS	10	09/09/1998	0	23.9 U	130	23.4	118	105000	4690	7470 J	3.6	14.5	4460
CUA0461	GS	10	08/10/1998	0	28.2	132		105	112000	4180	8570 J			4630
CUA0461	GS	10	08/10/1998	0			29.7					2.3	13.8	
CUA0462	GS	10	08/10/1998	0	24.4	138	37	103	126000	4190	9660 J	2.2	14	5600
CUA0463	GS	10	08/10/1998	0	21.6	150	38.4	113	126000	4540	9890 J	2.3	14.7	5910
CUA0464	GS	10	08/10/1998	0	20.8	144	31.7	106	126000	4050	9700 J	2.2	14.1	4990
CUA0465	GS	10	08/10/1998	0	21.3	139	28.2	93.6	124000	3770	9500 J	2	13.6	4330
CUA0471	GS	10	08/09/1998	0	15.6	106	18.2	82	72600	3290	5480	1.6	9.6	2370
CUA0472	GS	10	08/09/1998	0	13.7	87.9	16.3	64.9	81000	2170	6050	2	7.7	2600
CUA0473	GS	10	08/09/1998	0	10.4 J	62	9.3	42	60700	1710	4530	1.8	5.7 U	1520
CUA0474	GS	10	08/09/1998	0	6.6 J	40.9	7.5	33.1	53300	1060	3320	1	3.6	1160
CUA0475	GS	10	08/09/1998	0	7.9 J	64.1	7.4	49.6	68200	1420	4330	1.5		1350
CUA0475	GS	10	08/09/1998	0									4.1 U	
CUA04810	GS	10	08/15/1998	0	20.9	102	32.2	105	103000	3590	8280	2.3	12.6	5690
CUA0486	GS	10	08/15/1998	0	26.2	121	32.1	124	119000	3680	9020	2.2	16.4	5810

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Soil (mg/kg)														
CUA0487	GS	10	08/15/1998	0	25.7	117	32.1	112	110000	3640	8580	1.9	14	5910
CUA0488	GS	10	08/15/1998	0	21.1	103	29.2	95.8	103000	3570	8100	2.5	12.6	5280
CUA0489	GS	10	08/15/1998	0	21.5	87.9	31.1	96.9	97200	3000	7920	1.6	12.4	5600
CUA0491	GS	10	08/31/1998	0	16.6 J	106	29.6	110	79700	4720	8510	2.9	15.3	4390
CUA0492	GS	10	08/31/1998	0	54.6 J	114	39.8	163	79100	* 4900	8560	2.5	26	4480
CUA0493	GS	10	08/31/1998	0	16.3 J	87.9	35.9	99.6	79300	3960	9240	2.4	14.5	5570
CUA0494	GS	10	08/31/1998	0	22.3 J	94.2	46.7	137	117000	3870	12800	2.3	17.8	7350
CUA0495	GS	10	08/31/1998	0		91.4					9870			
CUA0495	GS	10	08/31/1998	0	24.7 J		37.1	118	82400	3740		2.7	15.8 J	5420
LC10004	RV	22	---	0.5						2040				
LC10042	RV	22	---	0.5						2520				
LC10043	RV	22	---	0.5						2520				
LC11212	FP	16	---			13.6	3.2	21.8	12400	597	218			303
LC11213	FP	16	---			146	21.4	92.2	85900	4130	8110			2780
LC11214	FP	16	---			32.8	6.3	83.2	28000	4100	319			677
LC11215	FP	16	---			12.3	4.8	18.5	18200	326	492			332
LC11216	FP	16	---			18.8	5.5	52.7	21600	2330	319			515
LC11219	FP	16	---			5.9	1.5	19.1	21800	43.7	236			85.6
LC11226	FP	16	---			11.7	0.3 U	11.4	14900	19.8	220			55
LC11227	FP	16	---			16.9	2.6	26.9	17600	166	191			279
LC11228	FP	16	---			117	20.6	126	53300	* 6100	3510			1790
LC11229	FP	16	---			316	24.9	126	85300	3820	6720			2340
LC11230	FP	16	---			29	11.8	53.2	27800	2270	454			581
LC11231	FP	16	---			142	21.8	149	52900	* 5760	2720			2190
LC11238	FP	16	---			25.9	9.9	28.1	33400	1050	368			606
LC11239	FP	16	---			29	4.9	41	24200	1050	543			328
LC11241	FP	16	---			190	31.8	186	72000	* 8030	8160			2720
LC11242	FP	16	---			266	30.6	129	95500	4580	10500			3090
LC8289	TL	13	---			160	4.3	230	59000	100	1000			120
LC8291	TL	13	---			160	5.7	170	71000	110	1200			160
Subsurface Soil (mg/kg)														
LC10004	RV	22	---	1						4140				
LC10004	RV	22	---	1.5						* 8390				
LC10042	RV	22	---	1						3730				
LC10042	RV	22	---	1.5						2390				
LC10043	RV	22	---	1						* 6840				

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Subsurface Soil (mg/kg)														
LC10043	RV	22	---	1.5						* 8110				
Sediment (mg/kg)														
CUA0411	RV	10	09/02/1998	0	1 U	5.9	1.9	8.7	17100	154	386	0.1 U	0.4 U	421
CUA0412	RV	10	09/02/1998	0	0.98 U	4.3	0.38 J	7.2	15900	38.6	138	0.1 U	0.39 U	195
CUA0413	RV	10	09/02/1998	0	5.5 J	68.9	11.9	56	55200	3420	4120	1.5	7.4	2550
CUA0414	RV	10	09/02/1998	0	1 U	17.9	2.6	20.4	21700	997	1160	0.39	1.5 J	510
CUA0415	RV	10	09/02/1998	0	1 U	7	1.9	11.8	16200	288	322	0.12	0.68 J	378
CUA0451	RV	10	09/09/1998	0	26.7	142	39.4	131	135000	3290	9970 J	2.1	16.8	6990 J
CUA0452	RV	10	09/09/1998	0	21.1	130	41.9	139	138000	3790	13900 J	1.5	15.2	7410 J
CUA0453	RV	10	09/09/1998	0	26.2	118	35.7	135	127000	3110	9660 J	1.6	15.9	6490 J
CUA0454	RV	10	09/09/1998	0	21.6	136	32.1	137	139000	2740	13600 J	1.6	14.2	6040 J
CUA0455	RV	10	09/09/1998	0	18.8	152	28	124	155000	2620	14000 J	2	16	5310 J
CUA0476	LK	10	08/09/1998	0	16	122	18.7	63.8	70900	2180	5430	1.2	7.4	2220
CUA0477	LK	10	08/09/1998	0	27.5	166	22.3	89.8	112000	3590	8970	1.2	9.2	3260
CUA0481	RV	10	08/15/1998	0	33.1	147	35.4	136	127000	4090	12500 J	2.8	16.7	4960
CUA04811	RV	10	08/15/1998	0	30.2	137	42.3	143	150000	3770	14400	1.9	17.2	7400
CUA04812	RV	10	08/15/1998	0	18.5	111	50.6	103	87700	3160	6650	1.6	11	5390
CUA04813	RV	10	08/15/1998	0	25.3	128	55	118	107000	3620	8040	2.5	13.3	6650
CUA04814	RV	10	08/15/1998	0	28.5	127	40.1	108	129000	3010	9470 J	1.8 J	15.4 J	7160 J
CUA04815	RV	10	08/15/1998	0	35.3	170	44.2	136	140000	4370	11900 J	1.6 J	17.8 J	7810 J
CUA0482	RV	10	08/15/1998	0	35.5	153	40.1	132	131000	4260	13300 J	2.6	16.6	5720
CUA0483	RV	10	08/15/1998	0	36.1	165	33	134	144000	4170	14000 J	3	16.5	4610
CUA0484	RV	10	08/15/1998	0	28	160	26.2	104	111000	4400	8040 J	2.9	14.3	3630
CUA0485	RV	10	08/15/1998	0	41.1	194	45.7	169	174000	* 5000	16400 J	2.6	23.1	6830
CUA04910	RV	10	08/31/1998	0	13.4	85.8	25.5	103	114000	3060	8950	2.5	13.4	4450 J
CUA04911	RV	10	08/31/1998	0								2 J		
CUA04911	RV	10	08/31/1998	0	28.3	148	55.4	157	150000	4110	15700		21.5	9230
CUA04912	RV	10	08/31/1998	0	27.4	155	46.7	157	163000	3910	16300	2.3 J	21	8180
CUA04913	RV	10	08/31/1998	0	30.5	129	40.1	138	146000	3320	14500	2.1 J	20.5	7030
CUA04914	RV	10	08/31/1998	0	28.9	123	33.9	127	143000	3390	14600	2.4 J	17.2	6280
CUA04915	RV	10	08/31/1998	0	27	115	33.6	132	154000	2960	15700	2 J	17.2	6380
CUA0496	RV	10	08/31/1998	0	22.8	112	20.4	112	109000	3510	8470	2.5 J	14.9	4020
CUA0497	RV	10	08/31/1998	0	36.1	168	43.8	162	172000	4670	16800	2.3 J	21.9	7920
CUA0498	RV	10	08/31/1998	0	26.7 U	99.1	33.3	133	115000	3460	9190	1.9 J	17.3	6300
CUA0499	RV	10	08/31/1998	0	25.1 U	101	37.1	122	110000	3670	8890	2.1 J	15.7	6500
LC10106	RV	16	---	0.23	39	140	38	108	77000	4610	6800	3.1	11	4100

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10107	RV	16	---	0.38	37	140	33	103	100000	4200	9800	3.6	12	4800
LC10108	RV	16	---	0.36	13	30	3.1	15	25000	1670	600	0.37	1	970
LC10109	RV	16	---	0.25	20	60	7.9	33	46000	2090	2700	1.1	3	1900
LC10110	RV	16	---	0.34	19	40	14	42	72000	1300	6500	1.4	6	2600
LC10111	RV	16	---	0.28	29	75	5.6	26	37000	3440	1300	0.6	2	1500
LC10112	RV	16	---	0.16	25	70	13	56	54000	2330	4700	1.5	6	2700
LC10281	RV	16	---	0	32	140	21	128	9.85	4200	8550	3	13	3450
LC10281	RV	16	---	0.36	34	152	20	130	9.23	4000	7920	6	13	3150
LC10281	RV	16	---	0.72	46	332	50	138	11.54	4150	9250	4	14	5450
LC10281	RV	16	---	1.18	36	194	18	138	9.06	4150	8480	2	11	2250
LC10281	RV	16	---	1.44	42	318	16	120	11.38	* 5050	8930	3	13	2700
LC10281	RV	16	---	2.16	34	52	9	108	8.44	* 5900	7710	3	12	1650
LC10281	RV	16	---	2.79	24	60	33	106	7.41	4600	5450	2	9	3200
LC10281	RV	16	---	3.18	2	4	7	56	2.07	70	165			620
LC10281	RV	16	---	3.61		4	8	60	2.23	70	240			525
LC10281	RV	16	---	0	36	166	24	120	9.18	4700	7680	4	12	3000
LC10281	RV	16	---	3.18		4	7	48	2	60	150			555
LC10281	RV	16	---	0	34	218	27	110	9.8	* 4900	8100	3	12	3350
LC10281	RV	16	---	3.18	2	14	8	42	2.17	57	175			570
LC10282	RV	16	---	0	36	120	25	118	10.08	3700	8850	4	13	4000
LC10282	RV	16	---	0.43	36	134	20	38	9.84	3900	8430	6	13	2750
LC10282	RV	16	---	0.72	40	188	45	122	10.07	3850	9010	3	12	6000
LC10282	RV	16	---	1.05	42	170	21	98	10.96	3350	9470	3	12	3450
LC10282	RV	16	---	1.38	40	252	23	97	11.43	3700	9780	3	12	2700
LC10282	RV	16	---	1.57	50	198	22	160	12.31	* 10400		6	24	3450
LC10282	RV	16	---	2.49	6	6	4	48	2.32	340	1090		1	340
LC10284	RV	16	---	0	20	92	9	64	5.96	2800	5160		6	1050
LC10284	RV	16	---	0	4	8	1	40	2.32	83	160			129
LC10285	RV	16	---	0	42	300	36	140	12	* 6170		2	18	6440
LC10285	RV	16	---	0	38	34	17	184	8.37	* 10200	4880	4	25	3350
LC10285	RV	16	---	0	62	30		380	8.47	* 25700	7120	10	45	* 13200
LC10285	RV	16	---	0	66	58	15	248	10.05	* 19700	2630	8	50	3900
LC10285	RV	16	---	0	62	32		380	8.53	* 26400	7340	12	51	* 14100
LC10285	RV	16	---	0	58	66	18	215	10.15	* 19500	4150	6	40	4100
LC10285	RV	16	---	0	52	64	37	232	11.15	* 18400	6650	6	36	4650
LC10285	RV	16	---	0	46	48		300	12.73	* 19100		8	36	* 11400
LC10285	RV	16	---	0	52	48	28	254	13.65	* 17400	8970	8	36	6300

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC105	LK	2	11/25/1997	0	14.4 J	41.8	20.7	98.4	34200	4160	1810 J	1.77	9.99	2250
LC105	LK	2	11/25/1997	6.7	0.971 U	3.25	0.243 U	8.46	14800	11.6	127 J	0.117 U	0.243 U	39.6
LC106	LK	2	11/25/1997	0	27.8 J	62.4	34.1	120	50800	4230	3030 J	1.12	12.2	3660
LC106	LK	2	11/25/1997	2.4	34.8 J	24.8	39.1	209	47900	* 9360	3090 J	0.693	26.8	5280
LC10680	RV	16	07/28/1995	0		249	36.3		76300	3860	7010			3400
LC10681	RV	16	07/28/1995	0		212	37.8		80500	4090	6810			3480
LC10682	RV	16	07/28/1995	0		278	40.1		92700	4270	8510			3770
LC10683	RV	16	07/28/1995	0		245	33.2		79500	4170	6640			3540
LC10684	RV	16	07/28/1995	0		278	38.2		89500	4540	8220			3660
LC10685	RV	16	07/28/1995	0		171	31.7		79100	4530	7950			3590
LC10689	RV	16	08/01/1995	0		147	* 72		49000	3120	2700			4880
LC10690	RV	16	08/01/1995	0		11.5 U	2.7		14600	213	311			241
LC10691	RV	16	08/02/1995	0		130	40		89900	4630	9180			5060
LC10692	RV	16	08/02/1995	0		17.3	6.3		23200	1250	441			534
LC10693	RV	16	08/02/1995	0		207	21.9		89000	4270	7820			2230
LC10694	RV	16	08/02/1995	0		88.1	50.8		61400	* 7230	5630			5780
LC10695	RV	16	08/02/1995	0		45.9	18		26100	2270	1860			1680
LC10696	RV	16	08/03/1995	0		264	42.7		98200	* 5780	10500			4430
LC10697	RV	16	08/03/1995	0		489	38		111000	4080	10600			3780
LC10698	RV	16	08/03/1995	0		85.2	38.6		73500	* 8350	6990			5150
LC10699	RV	16	08/03/1995	0		264	30.2		83600	4160	7430			2860
LC107	LK	2	11/25/1997	0			2.67 J	45.3		706			1.83 J	
LC107	LK	2	11/25/1997	0	5.7 J	13.2			36900		471	0.29 U		509
LC10700	RV	16	08/03/1995	0		310	21.6		91500	* 5120	3260			3130
LC10701	RV	16	08/03/1995	0		305	18.1		97300	* 5250	2220			3390
LC10702	RV	16	08/03/1995	0		56.7	28.8		66700	* 7370	5580			3320
LC10703	RV	16	08/08/1995	0		69.2	32.3		101000	* 16200	10200			6030
LC10704	RV	16	08/08/1995	0		19.4	17		20300	2680	754			1710
LC10705	RV	16	08/08/1995	0		12.2	4.5		11300	552	307			577
LC10706	RV	16	08/09/1995	0		12.8 U	1.7		10100	131	139			135
LC10707	RV	16	08/09/1995	0		10.2 U	0.61		11000	50.8	109			68.3
LC10708	RV	16	08/09/1995	0		10.3 U	0.82		11600	42.9	60.5			57.1
LC10709	RV	16	08/09/1995	0		10.9 U	0.64		11600	48.1	87.8			50.3
LC10710	RV	16	08/09/1995	0		10.3 U	0.53		12700	32.3	50.9			43.3
LC10711	RV	16	08/09/1995	0		21	27.6		33200	3200	2020			2070
LC10712	RV	16	08/09/1995	0		101	14		48800	4100	3700			1170
LC10713	RV	16	08/09/1995	0		60.4	15.5		31600	1840	2410			1010

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10714	RV	16	08/09/1995	0		20.7	14.4		19100	1970	372			922
LC10715	RV	16	08/09/1995	0		12.2	9.9		16700	916	790			1190
LC10716	RV	16	08/09/1995	0		24	24.6		23300	2280	1100			2480
LC10717	RV	16	08/10/1995	0		28.6	25		23800	1910	1100			2100
LC10718	RV	16	08/10/1995	0		28.6	20.2		22900	2450	1220			2410
LC10719	RV	16	08/10/1995	0		20.9	8.1		11600	887	568			753
LC10720	RV	16	08/10/1995	0		22.2	13.5		24300	1590	473			1230
LC10721	RV	16	08/10/1995	0		10.2 U	4.5		17800	349	292			506
LC10722	RV	16	08/10/1995	0		41.1	44.1		32000	* 5140	2140			4450
LC10723	RV	16	08/10/1995	0		10.8	6.4		25700	3610	884			1190
LC10724	RV	16	08/10/1995	0		13.6	6.5		20100	1250	491			537
LC10749	RV	16	08/16/1995	0		27.4	20.9		19100	1290	1210			1540
LC10750	RV	16	08/16/1995	0		10.1 U	3.2		12800	279	767			381
LC10751	RV	16	08/16/1995	0		48.9	22.7		41700	2450	2020			2200
LC10752	RV	16	08/16/1995	0		48.1	23.4		47900	3670	2350			2890
LC10753	RV	16	08/16/1995	0		10.7	15		14400	1060	919			1310
LC10754	RV	16	08/16/1995	0		10.1 U	14.6		13200	1290	662			1120
LC10755	RV	16	08/16/1995	0		22.9	15		27600	1500	1220			1370
LC10756	RV	16	08/16/1995	0		37.2	28.1		23000	1590	1790			1970
LC10771	RV	16	08/21/1995	0		55	31.7		44900	2140	2380			2590
LC10772	RV	16	08/21/1995	0		24.5	20.5		34900	1340	1510			1680
LC108	LK	2	11/25/1997	0	2 J	5.6	0.46 J	19.1	18600	85.9	294	0.16 U	0.3 U	107
LC10802	RV	16	08/25/1995	0		20.5	20.1		26700	1090	904			2080
LC10803	RV	16	08/25/1995	0		20.3	12		31300	962	921			1230
LC10811	RV	16	08/29/1995	0		10.2 U	3.3		14300	337	248			339
LC10812	RV	16	08/29/1995	0		10.2 U	0.88		14600	36.1	68.4			48.2
LC10813	RV	16	08/29/1995	0		10.2 U	1.4		15400	65	187			211
LC10814	RV	16	08/29/1995	0		19.6	6.8		22100	1360	458			662
LC10815	RV	16	08/29/1995	0		10.2 U	2.1		16800	200	159			238
LC10840	RV	16	08/31/1995	0		10.3 U	4		14500	309	423			383
LC10841	RV	16	08/31/1995	0		10.2 U	2.1		19300	127	184			183
LC10842	RV	16	08/31/1995	0		178	16.4		73400	3720	5520			1680
LC10843	RV	16	08/31/1995	0		10.2 U	4.9		15200	502	330			257
LC10844	RV	16	09/05/1995	0		10.1 U	1.7		21200	679	375			192
LC10845	RV	16	09/05/1995	0		10.2 U	7.6		16800	1010	308			763
LC10854	RV	16	09/06/1995	0		248	18.5		99500	4490	6660			3220
LC10855	RV	16	09/06/1995	0		107	18.4		56100	* 6440	4920			1450

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10856	RV	16	09/06/1995	0		122	25.8		58200	* 7460	1830			2150
LC10857	RV	16	09/06/1995	0		73	46.9		41800	* 9190	1770			2860
LC10858	RV	16	09/06/1995	0		169	34.6		80700	* 6400	3180			3140
LC10859	RV	16	09/06/1995	0		267	34.3		93000	4580	8520			2640
LC10860	RV	16	09/07/1995	0		54.3	35.5		27300	* 5430	1090			1820
LC10861	RV	16	09/07/1995	0		41.5	19.8		35100	2650	4710			1030
LC10862	RV	16	09/07/1995	0		91	16.7		44600	3940	1830			1510
LC10876	RV	16	09/11/1995	0		36.7	10.5		30100	2120	1780			820
LC10877	RV	16	09/11/1995	0		119	24		56300	4620	3680			1800
LC10878	RV	16	09/11/1995	0		125	24.2		55500	4540	3560			1760
LC10879	RV	16	09/11/1995	0		19.3	16.6		23300	* 6250	1010			1730
LC10880	RV	16	09/11/1995	0		10.4 U	4.3		11200	198	260			509
LC10881	RV	16	09/11/1995	0		10.4 U	3		16300	49.3	185			383
LC10882	RV	16	09/11/1995	0		15.5	14.3		21100	2100	126			635
LC10883	RV	16	09/11/1995	0		10.2 U	11.5		25500	* 4910	1600			1470
LC10884	RV	16	09/12/1995	0		153	35.6		76900	4350	6750			4140
LC10885	RV	16	09/12/1995	0		28.9	32.1		19100	2250	794			2440
LC10886	RV	16	09/12/1995	0		40.9	12.9		29800	2920	1630			1170
LC10887	RV	16	09/12/1995	0		173	30.8		50100	2390	3490			2230
LC10888	RV	16	09/12/1995	0		109	37.8		70300	3620	5880			3580
LC10889	RV	16	09/12/1995	0		52.1	13.2		30100	947	1140			1240
LC10890	RV	16	09/12/1995	0		89.6	45.9		31400	1690	1730			3170
LC10891	RV	16	09/12/1995	0		138	28.5		47000	1890	2520			2050
LC10892	RV	16	09/12/1995	0		10.2 U	1.1		14600	158	139			95
LC10893	RV	16	09/12/1995	0		24	1.1 U		20900	36.3	127			49
LC10894	RV	16	09/12/1995	0		10.1 U	1 U		12000	87.1	233			108
LC10895	RV	16	09/13/1995	0		264	30		80800	3730	6810			1960
LC10896	RV	16	09/13/1995	0		239	41.1		90900	3870	9100			3530
LC10897	RV	16	09/14/1995	0		19	28.7		19500	2420	1110			2270
LC10898	RV	16	09/14/1995	0		10.2 U	0.82		18200	83.2	134			104
LC10899	RV	16	09/14/1995	0		10.3 U	1.2		16600	71.5	195			201
LC10900	RV	16	09/14/1995	0		10.4 U	22.1		37600	4310	3080			2430
LC10901	RV	16	09/14/1995	0		57	64		15900	* 5400	4590			1220
LC10902	RV	16	09/14/1995	0		15.6	5.5		24700	956	535			527
LC10903	RV	16	09/14/1995	0		13	5.5		16600	485	324			486
LC10904	RV	16	09/14/1995	0		12.2	8.7		17400	2050	650			1100
LC10905	RV	16	09/14/1995	0		56.2	* 80.6		66600	* 19900	6130			* 10400

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10906	RV	16	09/14/1995	0		10.2 U	6.2		14500	743	357			808
LC10907	RV	16	09/14/1995	0		10.2 U	3.4		10100	564	276			465
LC10908	RV	16	09/15/1995	0		2	27.7		23200	2480	1190			2470
LC10909	RV	16	09/15/1995	0		10.2 U	1.4		13500	302	216			203
LC10910	RV	16	09/15/1995	0		11.2 U	1.2		9940	502	55.8			94.7
LC10911	RV	16	09/15/1995	0		50.7	36.1		26900	2670	1570			2920
LC10912	RV	16	09/18/1995	0		142	32.1		78700	* 5200	7640			3140
LC10913	RV	16	09/18/1995	0		146	26.3		71600	* 5490	5280			1770
LC10914	RV	16	09/18/1995	0		192	27		86600	* 5530	5820			3470
LC10915	RV	16	09/18/1995	0		18.3	14.6		16700	1260	321			992
LC10916	RV	16	09/18/1995	0		10.3 U	5		15800	228	253			576
LC10917	RV	16	09/18/1995	0		10.3 U	6.3		15600	1440	446			540
LC10918	RV	16	09/20/1995	0		166	31.5		60400	3710	4430			3140
LC10919	RV	16	09/20/1995	0		161	35.4		77700	* 4740	7230			4010
LC10920	RV	16	09/20/1995	0		169	37.3		76600	* 5350	7330			4160
LC10921	RV	16	09/20/1995	0		176	46.4		62300	3550	4410			4000
LC10922	RV	16	09/20/1995	0		179	49.8		64000	3340	4950			4150
LC10923	RV	16	09/20/1995	0		89.9	36.6		32100	1890	1660			2810
LC10924	RV	16	09/20/1995	0		97.2	23		61500	* 8890	5320			3330
LC10925	RV	16	09/20/1995	0		102	29.9		57100	* 7390	4690			3420
LC10926	RV	16	09/20/1995	0		79.4	35.3		49600	* 5030	4100			3550
LC10927	RV	16	09/20/1995	0		37.8	29.6		27800	4170	1670			2690
LC10928	RV	16	09/20/1995	0		10.2 U	2.7		12000	312	264			239
LC10929	RV	16	09/20/1995	0		37.6	37.4		32300	* 8100	2280			3990
LC10930	RV	16	09/20/1995	0		10.2 U	3.6		17400	312	399			337
LC10931	RV	16	09/20/1995	0		70.6	32.2		62600	* 6310	3830			2800
LC10932	RV	16	09/20/1995	0		1	* 76.2		44100	3160	1900			5860
LC10933	RV	16	09/20/1995	0		173	56.5		76100	4380	8470			4890
LC10940	RV	16	09/21/1995	0		73.8	23.7		50100	* 6840	3060			2300
LC10941	RV	16	09/21/1995	0		46	28.5		28200	3320	1040			2370
LC10942	RV	16	09/21/1995	0		18.9	35.9		25300	3260	1660			3490
LC10943	RV	16	09/21/1995	0		35.4	10		30000	2380	1290			1040
LC10944	RV	16	09/21/1995	0		70.1	35		49200	* 6970	4200			4020
LC10945	RV	16	09/21/1995	0		55.6	24.1		30300	3080	2030			2410
LC10946	RV	16	09/22/1995	0		63.5	33.8		43200	* 6180	3280			3930
LC10947	RV	16	09/22/1995	0		13.5	8.3		19700	2030	1110			1080
LC10954	RV	16	09/26/1995	0		62.5	22.5		50300	* 4960	3380			2220

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10955	RV	16	09/26/1995	0		186	28.3		101000	* 8300	8270			2650
LC10956	RV	16	09/26/1995	0		34.2	17.1		22200	3570	1400			1660
LC10957	RV	16	09/26/1995	0		65.5	20.6		37500	4720	3180			2310
LC10958	RV	16	09/26/1995	0		18.1	3.6		12400	641	575			461
LC10959	RV	16	09/27/1995	0		106	31.7		71200	* 8540	7880			4330
LC10960	RV	16	09/27/1995	0		224	9.7		84100	* 5060	3630			2310
LC10961	RV	16	09/27/1995	0		14.1	4.3		15900	986	748			489
LC10962	RV	16	09/27/1995	0		49.7	* 77.3		49600	* 6340	4710			1700
LC10963	RV	16	09/27/1995	0		19.7	24.7		18400	3770	1570			2480
LC10964	RV	16	09/27/1995	0		11.4 U	5.2		16000	1490	315			479
LC10965	RV	16	09/27/1995	0		76.9	20.8		29300	3270	2120			2870
LC10966	RV	16	09/28/1995	0		43.8	17		43100	* 5450	3540			2110
LC10967	RV	16	09/28/1995	0		11.6	5.8		11100	569	259			541
LC10968	RV	16	09/28/1995	0		142	16.9		66200	* 5510	2600			2100
LC10969	RV	16	09/28/1995	0		39.3	41.4		22000	3040	1250			3610
LC10970	RV	16	09/28/1995	0		12	3.6		17600	362	260			397
LC10971	RV	16	09/28/1995	0		26.1	29.9		21600	2420	993			2780
LC10972	RV	16	09/28/1995	0		159	38.6		93100	* 6760	9630			5300
LC10973	RV	16	10/03/1995	0		10.3 U	3.7		14000	447	323			358
LC10974	RV	16	10/03/1995	0		11.1	3.5		13600	514	199			311
LC10975	RV	16	10/03/1995	0		10.3 U	4.8		16700	1020	428			498
LC10976	RV	16	10/03/1995	0		14.1	5.1		14300	1010	350			442
LC10977	RV	16	10/03/1995	0		12.3	4.5		14800	932	359			435
LC10978	RV	16	10/03/1995	0		10.6	3.5		12500	594	109			302
LC10979	RV	16	10/03/1995	0		10.3 U	3.6		13300	936	124			290
LC10980	RV	16	10/03/1995	0		15.9	3.8		16800	576	337			323
LC10981	RV	16	10/03/1995	0		11.1	3.6		13300	461	105			285
LC10982	RV	16	10/03/1995	0		11.9	3.2		16000	770	151			243
LC10983	RV	16	10/04/1995	0		13	3		16000	429	115			246
LC10984	RV	16	10/04/1995	0		11.5	2.2		19300	271	220			229
LC10985	RV	16	10/04/1995	0		15.1	2.9		18400	294	86			232
LC10986	RV	16	10/04/1995	0		213	20.4		79300	4720	5400			1990
LC10987	RV	16	10/04/1995	0		10.2 U	2.7		15900	650	328			286
LC10988	RV	16	10/05/1995	0		10.1 U	1.5		19400	174	281			185
LC10989	RV	16	10/05/1995	0		55.9	25.8		47000	2070	2680			2280
LC10990	RV	16	10/05/1995	0		16.9	9.9		21000	746	991			1250
LC10991	RV	16	10/05/1995	0		58.4	33		44600	2270	2280			2760

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10992	RV	16	10/05/1995	0		32.3	20.8		34500	1390	1170			1920
LC11014	RV	16	10/12/1995	0		36.8	34.6		41600	2160	2140			3150
LC11015	RV	16	10/12/1995	0		31.3	31.8		39500	2830	2410			3400
LC11016	RV	16	10/12/1995	0		61.3	27.7		49600	3490	7570			3030
LC11017	RV	16	10/12/1995	0		72.1	23.1		49400	3290	3920			2680
LC11018	RV	16	10/12/1995	0		82.4	37		80200	* 5390	4570			4220
LC11019	RV	16	10/12/1995	0		106	56.5		62600	4110	5570			4460
LC11020	RV	16	10/12/1995	0		206	30		47400	3370	2890			3370
LC11021	RV	16	10/12/1995	0		170	23.4		66200	3380	11100			2610
LC11043	RV	16	10/19/1995	0		85.8	18.7		45600	4040	3370			1420
LC11044	RV	16	10/19/1995	0		19.3	23.6		22200	3940	765			1930
LC11045	RV	16	10/19/1995	0		10.3 U	1.7		13400	171	195			257
LC11046	RV	16	10/19/1995	0		10.1 U	4.1		17300	1470	401			493
LC11047	RV	16	10/19/1995	0		168	24.2		104000	* 7490	10400			4450
LC11102	RV	16	11/03/1995	0		10.4 U	11.1		8900	2130	162			1020
LC11119	RV	16	11/20/1995	0		14.6	20.7		26500	475	402			1500
LC11120	RV	16	11/20/1995	0		10.1 U	1.5		18400	69.8	241			172
LC11121	RV	16	11/20/1995	0		10.1 U	1.8		27900	61	319			143
LC11122	RV	16	11/20/1995	0		10.2 U	1.7		27500	80.9	416			129
LC11123	RV	16	11/20/1995	0		10.1 U	1.6		27900	31	736			96.8
LC11124	RV	16	11/21/1995	0		125	32.4		103000	* 7860	9380			3330
LC11125	RV	16	11/21/1995	0		215	29.8		107000	* 6010	8510			3350
LC11126	RV	16	11/21/1995	0		246	26		96200	3830	8310			2540
LC11127	RV	16	11/21/1995	0		302	26.6		108000	3880	9370			2820
LC11128	RV	16	11/21/1995	0		73.8	20.2		76400	* 7410	5900			2410
LC11129	RV	16	11/21/1995	0		233	21.4		92900	4050	7200			2410
LC11130	RV	16	11/21/1995	0		29.8	24.5		46800	* 7690	2520			2310
LC11131	RV	16	11/21/1995	0		10.6 U	6		18900	1490	494			768
LC11135	RV	16	11/22/1995	0		335	40.2		96000	4080	9460			3500
LC11136	RV	16	11/22/1995	0		307	25		105000	4060	8060			2920
LC11137	RV	16	11/22/1995	0		250	32		98400	3580	9430			3110
LC11152	RV	16	12/14/1995	0		10.5 U	12.4		12900	1930	707			1140
LC11153	RV	16	12/14/1995	0		12.8	5.2		13200	1460	1110			636
LC11154	RV	16	12/14/1995	0		53.6	22.8		47200	* 5420	4050			2510
LC11155	RV	16	12/19/1995	0		20	15.4		32200	4560	2590			1990
LC11174	RV	16	---	0	36	30	22	99	33000	3800	900	2	11.7	1800
LC11174	RV	16	---	0.16	33	23.5	23	96	32000	3800	1000	1.7	11.9	2100

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11174	RV	16	---	0.31	22	60	14	77	29000	3000	700	1.4	9.1	2300
LC11174	RV	16	---	0.41	17.7	50	14	73	29000	2400	700	1.1	6.8	1700
LC11174	RV	16	---	0.55	1.4	30	1	41	26000	73	500	0.07	0.01 U	500
LC11174	RV	16	---	0.64	2.9	18.6	2	44	25000	260	500	0.18	0.8	340
LC11174	RV	16	---	0.72	37	30	26	100	31000	4000	900	2	12	2000
LC11174	RV	16	---	0.82	37	30	28	100	33000	4300	1000	2	11.9	2100
LC11174	RV	16	---	0.95	34	16.3	23	97	32000	4400	1000	2	12.7	2800
LC11174	RV	16	---	1.12	37	19.8	23	103	32000	4250	900	2.1	12.8	2150
LC11174	RV	16	---	1.25	31	19.8	21	84	30000	3300	800	1.5	8.9	2100
LC11175	RV	16	---	0	56	210	20	121	104000	4100	9200	4.3	16.8	2700
LC11175	RV	16	---	0.1	63	200	30	137	90000	* 4900	9100	5.2	19.5	3500
LC11175	RV	16	---	0.18	60	250	24	136	111000	4400	9200	4.7	19.1	3400
LC11175	RV	16	---	0.26	54	210	18	117	122000	3500	11400	4.5	16.5	2500
LC11175	RV	16	---	0.41	60	325	27	135	112000	4250	10100	6	17.6	2500
LC11175	RV	16	---	0.51	58	320	28	121	113000	3500	10200	4.9	15.8	2600
LC11175	RV	16	---	0.62	72	390	49	137	111000	4100	9300	4.7	18.1	5400
LC11175	RV	16	---	0.72	46	220	24	97	95000	3100	8700	3.5	13.2	4000
LC11175	RV	16	---	0.79	57	290	24	113	108000	3400	10200	3.2	15.3	3600
LC11175	RV	16	---	0.93	75	500	66	131	131000	3500	13100	4.5	17.6	6200
LC11175	RV	16	---	0.99	74	460	49	102	130000	3700	10300	3.7	17.7	5200
LC11175	RV	16	---	1.13	81	550	57	103	144000	3300	11100	2.9	17.7	6500
LC11175	RV	16	---	1.26	93	570	63	109	144000	3700	13200	2.8	15.6	7000
LC11175	RV	16	---	1.32	58	480	24	116	121000	4600	10600	3	15.6	3500
LC11175	RV	16	---	1.45	55	510	12	115	120000	4200	8900	2.7	14.9	2300
LC11175	RV	16	---	1.58	50	295	8	108	115000	4350	9400	2.9	14.1	1800
LC11175	RV	16	---	1.72	45	160	7	102	109000	4300	8500	2.7	13	1700
LC11175	RV	16	---	1.84	51	260	14	116	117000	4700	10200	2.5	14.5	1900
LC11175	RV	16	---	1.96	47	310	20	124	123000	* 5100	11200	2.2	14.4	2200
LC11175	RV	16	---	2.01	39	140	7	111	111000	* 4800	8300	2.6	13.9	1700
LC11175	RV	16	---	2.12	52	200	25	156	111000	* 6400	10000	3.2	19.1	2900
LC11175	RV	16	---	2.21	5.9	18.5	14	43	29000	1100	2200	0.32	2.2	1500
LC11175	RV	16	---	2.24	2.2	8.3	33	18	24000	290	3100	0.04	0.01 U	1300
LC11175	RV	16	---	2.4	1.7	6.9	11	17	24000	25	300	0.02	0.01 U	400
LC11175	RV	16	---	2.53	1.7	7	8	17	24000	26	200	0.02	0.01 U	300
LC11175	RV	16	---	2.69	1.6	6.9	4	17	23000	25	200	0.03	0.01 U	230
LC11175	RV	16	---	2.85	1.8	7.7	3	17	24000	35	200	0.03	0.5	190
LC11175	RV	16	---	3.02	1.8	7.8	2	17	25000	28	200	0.03	0.01 U	165

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11175	RV	16	---	3.18	1.7	8.1	2	17	25000	27	200	0.04	0.01 U	150
LC11175	RV	16	---	3.35	1.8	8.5	2	18	26000	30	200	0.04	0.01 U	150
LC11175	RV	16	---	3.51	1.9	9.7	2	17	26000	30	200	0.04	0.01 U	150
LC11175	RV	16	---	3.61	1.9	9.4	2	16	25000	30	200	0.04	0.01 U	140
LC11175	RV	16	---	3.73	1.9	9.1	2	17	26000	34	200	0.04	0.01 U	140
LC11175	RV	16	---	3.84	8.1	30	4	30	35000	460	1500	0.49	2.1	480
LC11175	RV	16	---	3.97	2.3	9.8	2	18	26000	64	200	0.07	0.6	160
LC11175	RV	16	---	4.13	1.8	7.2	2	17	25000	31	100	0.04	0.01 U	140
LC11175	RV	16	---	4.3	1.8	6.5	2	16	24000	31	100	0.04	0.01 U	150
LC11175	RV	16	---	4.46	1.8	6.3	2	16	24000	29	100	0.04	0.01 U	150
LC11175	RV	16	---	4.59	1.8	6.5	1	15	23000	31	100	0.04	0.01 U	150
LC11175	RV	16	---	4.73	1.8	6.7	1	14	24000	29	100	0.03	0.01 U	140
LC11175	RV	16	---	4.77	1.7	5.8	2	20	24000	29	100	0.05	0.01 U	180
LC11175	RV	16	---	4.92	1.6	4.7	2	18	23000	32	100	0.04	0.01 U	165
LC11175	RV	16	---	5.09	1.6	5.3	2	17	23000	31	100	0.04	0.01 U	170
LC11175	RV	16	---	5.25	1.7	4.8	2	18	23000	27	100	0.03	0.01 U	160
LC11175	RV	16	---	5.41	1.6	5.2	2	18	23000	28	100	0.03	0.01 U	160
LC11175	RV	16	---	5.58	1.7	5.8	1	18	23000	29	100	0.07	0.01 U	150
LC11175	RV	16	---	5.74	1.7	5.6	1	16	23000	28	100	0.05	0.01 U	150
LC11175	RV	16	---	5.91	1.6	5.1	1	15	22000	26	100	0.04	0.01 U	140
LC11175	RV	16	---	6.04	1.6	5.2	1	14	22000	25	100	0.04	0.01 U	130
LC11175	RV	16	---	6.14	2.3	7.9	1	15	24000	59	200	0.06	0.01 U	165
LC11175	RV	16	---	6.3	1.7	5.7	1	15	23000	28	100	0.04	0.01 U	140
LC11175	RV	16	---	6.46	3.5	14.1	2	19	27000	160	500	0.16	0.01 U	260
LC11175	RV	16	---	6.63	3.5	14.4	1	18	26000	160	500	0.17	0.01 U	240
LC11175	RV	16	---	6.79	1.9	7	1	15	24000	36	100	0.03	0.5	140
LC11175	RV	16	---	6.96	1.8	6.7	1	15	24000	27	100	0.03	0.01 U	140
LC11175	RV	16	---	7.12	1.8	5.9		14	22000	23	100	0.03	0.01 U	130
LC11175	RV	16	---	7.28	1.7	6.3		13	22000	25	100	0.02	0.01 U	110
LC11175	RV	16	---	7.45	1.7	6	1	14	23000	26	100	0.02	0.01 U	130
LC11175	RV	16	---	7.61	1.7	5.7	1	15	22000	26	100	0.02	0.01 U	130
LC11175	RV	16	---	7.78	1.8	6.5	1	17	25000	28	100	0.03	0.01 U	150
LC11175	RV	16	---	7.94	1.8	7.2	1	17	25000	28	100	0.03	0.01 U	150
LC11175	RV	16	---	8.04	1.8	8.8		14	25000	28	100	0.03	0.01 U	130
LC11175	RV	16	---	8.15	1.9	9		14	25000	27	200	0.03	0.01 U	130
LC11175	RV	16	---	8.3	1.8	8.8		14	25000	27	200	0.03	0.01 U	130
LC11175	RV	16	---	8.46	2	12.3		14	28000	31	300	0.04	0.01 U	130

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11175	RV	16	---	8.63	1.9	11.9		12	25000	24	200	0.03	0.01 U	**110**
LC11175	RV	16	---	8.79	1.9	11.6		11	24000	21	200	0.03	0.01 U	**98**
LC11175	RV	16	---	8.96	1.9	9.8		12	24000	20	200	0.02	0.01 U	**110**
LC11175	RV	16	---	9.12	1.8	10		13	25000	23	200	0.03	0.01 U	**120**
LC11175	RV	16	---	9.28	1.9	10.6		15	27000	27	200	0.04	0.01 U	**140**
LC11175	RV	16	---	9.45	2	10.7	**1**	18	28000	33	200	0.03	0.01 U	**170**
LC11175	RV	16	---	9.61	1.9	9.2	**1**	18	27000	31	200	0.03	0.01 U	**170**
LC11175	RV	16	---	9.74	2.2	**15.4**	**1**	18	32000	36	300	0.03	0.01 U	**180**
LC11176	RV	16	---	0	**3.4**	8.2	**2**	**30**	30000	**270**	300	**0.25**	0.5	**200**
LC11176	RV	16	---	0.16	**3.8**	6.8	**1**	**30**	31000	**270**	300	**0.29**	0.8	**180**
LC11176	RV	16	---	0.26	1.5	9.3	**1**	**29**	31000	**93**	300	0.12	0.01 U	**210**
LC11176	RV	16	---	0.36	1	7.5	**1**	**30**	30000	**78**	300	0.07	0.01 U	**160**
LC11176	RV	16	---	0.49	0.9	6.2	**1**	27	29000	**70**	300	0.06	0.01 U	**140**
LC11176	RV	16	---	0.64	0.7	6.1		24	30000	**49**	200	0.04	0.01 U	**110**
LC11176	RV	16	---	0.79	0.6	4.7		20	26000	35	300	0.03	0.01 U	92
LC11176	RV	16	---	0.95	0.6	4.6		22	25000	33	300	0.05	0.01 U	**180**
LC11176	RV	16	---	1.12	0.6	5.6		28	27000	35	300	0.03	0.01 U	**130**
LC11176	RV	16	---	1.28	0.6	4.9		19	25000	33	300	0.03	0.01 U	**98**
LC11176	RV	16	---	1.44	0.6	4.8		20	24000	32	300	0.03	0.01 U	88
LC11176	RV	16	---	1.61	0.6	4.9		21	24000	31	300	0.02	0.01 U	87
LC11176	RV	16	---	1.77	0.7	4.9		21	25000	33	300	0.02	0.01 U	84
LC11176	RV	16	---	1.94	0.6	5.2		25	26000	36	200	0.02	0.01 U	72
LC11176	RV	16	---	2.1	0.7	5		17	24000	36	200	0.03	0.01 U	58
LC11176	RV	16	---	2.26	0.6	5.7		14	23000	34	200	0.02	0.01 U	57
LC11176	RV	16	---	2.43	0.6	5.3		17	24000	35	200	0.01 U	0.01 U	61
LC11176	RV	16	---	2.59	0.7	5		20	26000	35	200	0.02	0.01 U	66
LC11176	RV	16	---	2.69	0.7	10.5		27	34000	36	300	0.01 U	0.01 U	70
LC11176	RV	16	---	2.85	0.7	9.5		18	33000	34	300	0.01 U	0.01 U	67
LC11176	RV	16	---	3.02	0.7	11.9		25	34000	33	300	0.01 U	0.01 U	69
LC11176	RV	16	---	3.18	0.7	6.5		16	31000	32	300	0.01 U	0.01 U	65
LC11176	RV	16	---	3.35	0.8	9.4		16	33000	34	300	0.01 U	0.01 U	60
LC11176	RV	16	---	3.51	0.7	**13.7**		17	34000	32	300	0.02	0.01 U	56
LC11176	RV	16	---	3.67	0.6	**18.4**		19	39000	29	400	0.01 U	0.01 U	52
LC11176	RV	16	---	3.84	0.6	**30**		20	**41000**	28	400	0.01 U	0.01 U	52
LC11176	RV	16	---	4	0.6	12.6		19	36000	26	400	0.01 U	0.01 U	56
LC11176	RV	16	---	4.17	0.5	12.5		19	38000	24	400	0.02	0.01 U	57
LC11176	RV	16	---	4.33	0.7	**16.1**		22	**51000**	26	400	0.01 U	0.01 U	56

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11176	RV	16	---	4.49	0.6	12.1		22	40000	24	400	0.01 U	0.01 U	60
LC11176	RV	16	---	4.59	0.6	12.4		22	41000	22	400	0.01 U	0.01 U	59
LC11177	RV	16	---	0	44	60	18	81	30000	2400	1100	1.9	6.7	1300
LC11177	RV	16	---	0.1	98	150	13	120	29000	3900	800	4	13.6	1000
LC11177	RV	16	---	0.21	108	95	18	167	34000	* 5550	1600	4.1	21	1400
LC11177	RV	16	---	0.33	85	60	51	166	29000	* 9600	1100	5	31	3500
LC11177	RV	16	---	0.49	59	110	* 83	84	21000	* 8100	900	1.4	5.5	9700
LC11177	RV	16	---	0.66	42	120	* 212	49	16000	2400	800	0.35	2.7	* 12000
LC11177	RV	16	---	0.82	9.4	130	20	20	13000	330	600	0.15	0.7	* 9900
LC11177	RV	16	---	0.98	13.9	80	19	17	11000	300	700	0.07	0.01 U	4600
LC11177	RV	16	---	1.15	13.7	120	33	17	11000	250	700	0.07	0.5	7400
LC11177	RV	16	---	1.31	10.6	60	9	15	10000	100	700	0.06	0.5	3900
LC11177	RV	16	---	1.48	3.5	30	2	15	13000	59	700	0.07	0.01 U	1300
LC11177	RV	16	---	1.64	1.2	7.9		14	13000	26	600	0.08	0.01 U	210
LC11177	RV	16	---	1.8	2.2	13.9	1	16	14000	46	700	0.08	0.01 U	440
LC11177	RV	16	---	1.92	2.4	14.4	1	18	14000	74	700	0.06	0.01 U	430
LC11177	RV	16	---	2.07	1.5	7.7		18	14000	36	400	0.03	0.01 U	90
LC11177	RV	16	---	2.23	2.4	7.4	2	18	13000	80	400	0.01 U	0.01 U	200
LC11177	RV	16	---	2.33	1	8.9		19	13000	30	200	0.01 U	0.01 U	130
LC11177	RV	16	---	2.46	1.3	9.9		20	13000	35	300	0.01 U	0.01 U	180
LC11177	RV	16	---	2.62	0.9	12.6		24	15000	20	200	0.07	0.01 U	72
LC11177	RV	16	---	2.79	1.3	12		27	20000	30	200	0.05	0.01 U	94
LC11177	RV	16	---	2.95	0.9	12.1		26	17000	23	200	0.04	0.01 U	80
LC11177	RV	16	---	3.12	1	13.7		28	18000	25	200	0.04	0.01 U	93
LC11177	RV	16	---	3.28	1	15.2		31	20000	28	200	0.05	0.01 U	100
LC11177	RV	16	---	3.44	0.9	13		25	17000	21	200	0.05	0.01 U	74
LC11177	RV	16	---	3.61	0.8	15.1		24	17000	20	200	0.03	0.01 U	75
LC11177	RV	16	---	3.77	1.1	16.2		28	20000	26	200	0.04	0.01 U	87
LC11177	RV	16	---	3.94	0.8	14.2		23	17000	21	200	0.03	0.01 U	71
LC11177	RV	16	---	4.1	0.7	15.2		21	16000	19	200	0.04	0.01 U	64
LC11177	RV	16	---	4.24	3	12.2		20	16000	80	400	0.06	0.5	92
LC11177	RV	16	---	4.35	3.9	17.5	3	22	17000	160	400	0.07	0.5	400
LC11178	RV	16	---	0	1.4	20.8	1	15	31000	48	700	0.07	0.01 U	100
LC11178	RV	16	---	0.16	1.2	17		17	31000	33	800	0.05	0.01 U	95
LC11178	RV	16	---	0.33	0.8	18.2		18	33000	27	900	0.03	0.01 U	90
LC11178	RV	16	---	0.49	1	16.8		16	30000	24	600	0.02	0.01 U	77
LC11178	RV	16	---	0.66	0.8	18.9		17	31000	25	600	0.02	0.01 U	66

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11178	RV	16	---	0.82	0.9	**20.4**		17	33000	26	500	0.02	0.01 U	61
LC11178	RV	16	---	0.98	0.9	**80**		15	31000	21	300	0.02	0.01 U	57
LC11178	RV	16	---	1.15	1	**30**		15	32000	24	400	0.02	0.01 U	58
LC11178	RV	16	---	1.26	0.9	**30**		15	31000	23	400	0.02	0.01 U	56
LC11180	RV	16	---	0	**3.5**	5	**3**	**33**	25000	**390**	500	**0.22**	0.8	**360**
LC11180	RV	16	---	0.14	**3.6**	5	**3**	**31**	24000	**390**	300	**0.23**	0.8	**370**
LC11180	RV	16	---	0.23	**3.7**	7.1	**2**	**31**	28000	**430**	300	**0.21**	0.9	**400**
LC11180	RV	16	---	0.37	**7.6**	**16.3**	**6**	**176**	**63000**	**860**	500	**0.2**	1.5	**1000**
LC11180	RV	16	---	0.49	**4.4**	**15.2**	**3**	**136**	**43000**	**350**	500	0.17	0.8	**460**
LC11180	RV	16	---	0.59	2.3	8	**2**	**35**	26000	**91**	300	0.11	0.01 U	**340**
LC11180	RV	16	---	0.76	1.7	9.3	**1**	**45**	23000	40	200	0.09	0.5	**240**
LC11180	RV	16	---	0.85	1.8	**14.5**	**1**	**48**	24000	43	200	0.09	0.5	**200**
LC11180	RV	16	---	0.97	1.9	**45**		**51**	**41000**	**52**	200	0.08	0.5	**170**
LC11180	RV	16	---	1.06	1.1	**15.9**		19	30000	31	100	0.01 U	0.01 U	**280**
LC11180	RV	16	---	1.21	1	**14**		18	32000	31	200	0.01 U	0.01 U	70
LC11180	RV	16	---	1.33	1.2	11.9		15	32000	31	200	0.04	0.01 U	53
LC11180	RV	16	---	1.44	1.4	**18.9**		16	**57000**	29	500	0.03	0.01 U	62
LC11180	RV	16	---	1.61	1.5	**18.1**		19	**62000**	29	600	0.05	1.2	81
LC11180	RV	16	---	1.77	1.3	**15.5**		20	**56000**	25	500	0.04	0.01 U	77
LC11180	RV	16	---	1.89	1.2	**15**		22	**54000**	24	**700**	0.04	0.01 U	62
LC11180	RV	16	---	1.98	1.1	**13.6**		20	**45000**	24	400	0.04	0.01 U	56
LC11180	RV	16	---	2.07	1.1	10.6		26	**48000**	21	500	0.05	0.01 U	50
LC11180	RV	16	---	2.19	1	7.9		21	39000	20	500	0.04	0.01 U	45
LC11180	RV	16	---	2.36	0.9	12.3		23	**48000**	19	400	0.04	0.01 U	46
LC11180	RV	16	---	2.45	1	10.3		**29**	**61000**	16	300	0.04	0.01 U	49
LC11180	RV	16	---	2.58	0.9	8.3		26	36000	15	400	0.03	0.01 U	50
LC11180	RV	16	---	2.73	1	10.2		**30**	**50000**	18	400	0.03	0.01 U	61
LC11180	RV	16	---	2.82	1.2	3.7		16	29000	18	200	0.01 U	0.01 U	44
LC11180	RV	16	---	2.99	1.1	6.5		20	33000	24	300	0.02	0.01 U	60
LC11180	RV	16	---	3.15	1.2	5.7		19	32000	25	300	0.01 U	0.01 U	63
LC11180	RV	16	---	3.31	1.5	3.2		15	23000	27	200	0.01 U	0.01 U	64
LC11180	RV	16	---	3.48	1.3	3.4		16	20000	24	200	0.01 U	0.01 U	66
LC11180	RV	16	---	3.64	1.2	3		14	18000	23	200	0.01 U	0.01 U	67
LC11180	RV	16	---	3.81	1.3	2		15	18000	24	100	0.02	0.01 U	73
LC11180	RV	16	---	3.97	1.3	2.7		14	24000	23	200	0.02	0.01 U	63
LC11180	RV	16	---	4.13	1.2	10.5		14	**46000**	24	300	0.02	0.01 U	83
LC11180	RV	16	---	4.3	1.2	9.5		14	32000	22	500	0.02	0.01 U	72

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11180	RV	16	---	4.46	1.2	6.4		10	25000	21	300	0.01 U	0.01 U	55
LC11180	RV	16	---	4.63	1.3	8.2		9	29000	20	200	0.01 U	0.01 U	43
LC11180	RV	16	---	4.79	1.9	10.1		14	33000	22	200	0.02	0.01 U	42
LC11180	RV	16	---	4.95	1.5	3.7		15	26000	19	200	0.02	0.01 U	40
LC11180	RV	16	---	5.12	1.2	2.6		12	23000	17	300	0.02	0.01 U	40
LC11180	RV	16	---	5.28	1.3	3.3		11	21000	18	200	0.02	0.01 U	40
LC11180	RV	16	---	5.45	1.9	4.3		10	17000	17	100	0.02	0.01 U	26
LC135	LK	2	11/21/1997	0	28	91.9	36.6	104	98600	3010	8340	2.81	13.1	6050
LC135	LK	2	11/21/1997	4.1	37.1	173	30.9	127	112000	* 6910	9330	3.92	19.6	4880
LC135	LK	2	11/21/1997	7.6	33.5	211	28.6	109	122000	* 6310	9810	3.18	17.7	5430
LC136	LK	2	11/21/1997	0	29.9	158	32.4	126	72400	4620	5490	4.42	13.9	3560
LC136	LK	2	11/21/1997	3.7	47.3	66.7	55.8	213	92200	* 12800	7870	6.12	30.8	8710
LC136	LK	2	11/21/1997	7.1	3.24 U	19.7	0.81 U	50.2	25900	48	220	0.413 U	0.81 U	167
LC137	LK	2	11/22/1997	0	20.1 J	159	24.7	102	56700	3200	4080	3.53	9.7	2980
LC137	LK	2	11/22/1997	4	3.75 U		1.46 J	58.3		261		0.465 U	0.938 U	320
LC137	LK	2	11/22/1997	4		29			28000		662			
LC139	RV	2	11/17/1997	0.9	30.2	141	24	135	111000	* 5160	8490	4	17.5	4110
LC139	RV	2	11/17/1997	2.3	2.3 U	8.1	9.5	14	17200	159	811	0.12 U	0.31 J	829
LC139	RV	2	11/17/1997	3.4	1.5 U	6.3	0.24 U	16.3	16000	18.3	148	0.12 U	0.24 U	394
LC149	RV	2	12/11/1997	0	39.4	129	27.6	135	103000	* 5670	8310 J	2.11	14.9	4820 J
LC149	RV	2	12/11/1997	2.7	56.2	105	60.9	222	133000	* 12500	10800 J	2.28	29.2	9700 J
LC149	RV	2	12/11/1997	7.8	33.5	19.6	26.1	107	35800	* 7070	2400 J	6.15	14.3	4200 J
LC149	RV	2	12/11/1997	10.8	3.13 J	4.77	1.24 J	14.7	11500	540	133 J	1.04	1.49 J	301 J
LC149	RV	2	12/11/1997	12.4	1.14 U	5.72	0.284 U	14.5	13800	29.6	113 J	0.132 U	0.284 U	51.6 J
LC149	RV	2	12/11/1997	16.4	1.4 J	3.55	0.295 U	13.3	12300	22	59.4 J	0.139 U	0.295 U	45.1 J
LC150	RV	2	12/10/1997	2.8	35.4	140	37.8	142	128000	* 6810	9870	1.37	15.9	6830
LC150	RV	2	12/10/1997	5.6	30.5	128	29	113	128000	* 6230	10100	1.35	15	5410
LC150	RV	2	12/10/1997	8	45.2	51.4	* 71.2	204	107000	* 8850	9210 J	3.81	21	* 10800 J
LC150	RV	2	12/10/1997	11.8	11 J	12.8	19.2	72.4	28500	3060	1680 J	0.61	7.26	2980
LC150	RV	2	12/10/1997	15.2	1.1 J	4.55	0.249 U	7.29	12300	21.6	50.8 J	0.131 U	0.249 U	53.4
LC150	RV	2	12/10/1997	0	36.4	152	33.4	129	136000	* 6250	10700 J	3.12	15.1	6390
LC151	RV	2	12/10/1997	0	29.5	84.4	24.8	107	97100	3550	8170 J	2.46	12.4	4950
LC151	RV	2	12/10/1997	2.6	35.4	148	36.5	128	126000	* 6360	10100 J	3.07	16.2	6800
LC151	RV	2	12/10/1997	5.7		97.2	33.9		112000			2.78		
LC151	RV	2	12/10/1997	9.2	102	51.3	* 114	523	75100	* 32900	5830 J	6.57	77.8	* 15400
LC151	RV	2	12/10/1997	11.2	6.88 J	6.51	3.33	17.6	14600	2030	298 J	0.121 U	2.67	693 J
LC151	RV	2	12/10/1997	14.4	1.66 J	8.73	0.257 U	17.2	17200	132	252 J	0.125 U	0.257 U	131 J

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC151	RV	2	12/10/1997	5.7	47.7			167		* 9240	9630 J		20.2	6210 J
LC152	RV	2	12/11/1997	0	40.8	266	19.5	86.2	63600	3970	4600 J	1.38	8.18	2520 J
LC152	RV	2	12/11/1997	1.9	87.8	87.6	* 83.4	335	96400	* 21000	8020 J	3.8	50.4	* 12200 J
LC152	RV	2	12/11/1997	5	72.2	54.1	47.7	223	58000	* 16900	4630 J	5.71	45.9	7480 J
LC152	RV	2	12/11/1997	11.2	0.806 U	9.82	0.422 J	20.6	19100	39.9 J	230	0.141 U	0.269 J	78.3
LC152	RV	2	12/11/1997	13.6	0.85 U	6.99	0.32 J	17.2	15400	18.6 J	208	0.139 U	0.284 J	53.7
LC152	RV	2	12/11/1997	9.3	3.4 J	12.4	3.31	20.9	14600	890 J	324	0.289	0.977 J	441
LC153	RV	2	12/11/1997	0	0.806 U	9.24	0.36 J	20.3	21000	33.7 J	190	0.123 U	0.269 J	73.3
LC153	RV	2	12/11/1997	3.5	0.966 J	12.5	0.342 J	27.1	22200	33.9 J	210	0.195	0.276 J	62.4
LC153	RV	2	12/11/1997	6.9	0.879 J	9.08	0.278 U	19.8	18000	22.7 J	243	0.142 U	0.278 J	61.2
LC153	RV	2	12/11/1997	11	0.805 U	6.2	0.268 U	17.4	11200	16.7 J	70.3	0.129 U	0.268 J	53.5
LC154	LK	2	11/23/1997	0	26.4	212	28.9	109	108000	3430	7630 J	2.01	11.7	4460
LC154	LK	2	11/23/1997	2.4	38.7	319	34.8	131	124000	* 6810	10600	2.7	18.1	5300
LC154	LK	2	11/23/1997	6.7	84.5	62.3	* 83.3	319	76800	* 25800	5960 J	6.37	68.2	* 12500
LC155	LK	2	11/23/1997	0	26.7	174	34.7	106	74300	3520	5750 J	4.1	11.6	2990
LC155	LK	2	11/23/1997	0.9		270								
LC155	LK	2	11/23/1997	0.9	41.5		26.6	142	112000	4660	9170 J	2.98	14.1	3490
LC156	LK	2	11/23/1997	0	36	97.6	28.4	143	76900	* 6770	6640 J	2.51	16.5	4300
LC156	LK	2	11/23/1997	3.8	2.48 U	11.3	0.62 U	35.8	25200	29.8	173	0.323 U	0.62 U	165
LC157	LK	2	11/23/1997	0	12.3 J	82	14.7	53.1	36100	934	1630	1.64	3.54 J	1310
LC157	LK	2	11/23/1997	3.6	2.1 U	10.9	0.526 U	29.7	25200	52.5	215	0.271 U	0.526 U	130
LC158	RV	2	11/17/1997	0	37.5	351	23.8	123	125000	4370	9860	4	15.6	3640
LC158	RV	2	11/17/1997	2.9	1.5 U	7	0.28 U	15.7	16700	50.8	71.3	0.13 U	0.28 U	74.4
LC158	RV	2	11/17/1997	6.2	36.7	336	21	121	119000	4050	9000	3.4	14.8	3530
LC159	RV	2	11/17/1997	0	46.3	500	18.5	127	149000	4100	3150	3.6	12.6	4190
LC159	RV	2	11/17/1997	1.4	31.4	114	17.7	131	89200	* 6510	7030	3.5	17.7	4510
LC159	RV	2	11/17/1997	2.9	1.2 U	4.2	0.91 J	15.3	13800	36.5	158	0.24	0.27 U	302
LC160	RV	2	11/16/1997	0	39.6	101	16.4	279	96400	* 14500	5450	7.9	41.5	3140
LC160	RV	2	11/16/1997	0.7	2.8 U	9.9	0.25 U	24.3	32900	85.2	166	0.21	0.25 U	223
LC160	RV	2	11/16/1997	2.4	1.6 U	8.4	0.26 U	23.8	17300	25.8	85.2	0.13 U	0.26 U	58.2
LC161	RV	2	11/16/1997	0	1.8 J	3.9	0.31 U	14	11200	29.5	57.4	0.15 U	0.31 U	38.2
LC161	RV	2	11/16/1997	2.8	1.4 U	5.8	0.26 U	17.5	18200	23.9	137	0.13 U	0.26 U	61
LC162	RV	2	11/16/1997	0	2 J	5	0.33 U	13.5	17000	38.8	113	0.16 U	0.33 U	73.2
LC162	RV	2	11/16/1997	2.2	2.5 J	4.3	0.29 U	13.8	18100	24.2	49.7	0.14 U	0.29 U	31.7
LC163	RV	2	12/20/1997	0	22.3	79.7	13.8	140	72300	* 6300	5230	3.6	16.4	2180
LC163	RV	2	12/20/1997	1.2	2.3 J	9.44		26.7	20100	545	389	0.198	1.59 J	
LC163	RV	2	12/20/1997	3.6	0.763 U	5.11	0.254 U	17.9	15100	17.6	165	0.132 U	0.254 U	58.9

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC163	RV	2	12/20/1997	1.2			2.45							261
LC164	RV	2	11/25/1997	0	27	111	12.1	138	109000	* 6730	8680 J	3.3	16.8	3260
LC164	RV	2	11/25/1997	1.2	1 U	4.1	0.39 J	17.1	16000	69.3	82.5	0.13 U	0.25 U	133
LC165	RV	2	11/25/1997	0	31	74	10.1	144	56700	* 5570	974 J	2.57	17.1	1430
LC165	RV	2	11/25/1997	0.5	1.08 U	6	0.269 U	15.8	17000	29.9	179 J	0.137 U	0.269 U	156
LC166	RV	2	11/24/1997	0	1.03 U	3.46	0.258 U	13.2	19300	26.9	120 J	0.127 U	0.258 U	36.1
LC166	RV	2	11/24/1997	3	1.17 U	3.2	0.293 U	15.4	12500	29	169 J	0.139 U	0.293 U	29.9
LC167	RV	2	11/24/1997	0	1.05 U	4.62	0.395 J	10.6	19700	25.8	121 J	0.119 U	0.261 U	121
LC167	RV	2	11/24/1997	1.6		4.18		14	13800		150 J			
LC167	RV	2	11/24/1997	1.6	1.09 U		0.273 U			41.1		0.133 U	0.273 U	49.8
LC172	RV	2	12/19/1997	0	10 J	47.7	17.3	72.1	30300	1560	2130	0.401	5.54	1000
LC172	RV	2	12/19/1997	1.7	0.729 U	4.25	1.12 J	17.1	18900	22.7	141	0.124 U	0.243 U	169
LC172	RV	2	12/19/1997	5.6	0.981 U	1.31 U	0.327 U	23.8	8730	5.75	90.7	0.17 U	0.327 U	53.4
LC173	RV	2	12/19/1997	0	7.2 J	26.9	10.7	47.6	25000	1210	756	0.216 U	3.56 U	1050
LC173	RV	2	12/19/1997	1.9	0.888 U		0.296 U			30.1		0.145 U	0.296 U	
LC173	RV	2	12/19/1997	1.9		9.16		20.5 J	36500		155			42.3
LC174	RV	2	12/19/1997	0	1.3 U	2.69 J	0.433 U	25.4	9590	25.2	25.5	0.227 U	0.433 U	31.2
LC174	RV	2	12/19/1997	3.5	11.4 J	6.78	1.3 J	31.2	11400	131	98.2	0.322 U	0.618 U	145
LC175	RV	2	11/12/1997	0	34	220	17	122	97400	* 5610	7570	2.51	15.7	2540
LC175	RV	2	11/12/1997	1.4	1.06 U	10.7	0.361 J	21.6	23100	34.3	249	0.137 U	0.264 U	215
LC175	RV	2	11/12/1997	7.4	1.01 U	5.02	0.252 U	14.9	17200	21.9	121	0.129 U	0.252 U	135
LC176	RV	2	11/13/1997	0	38	183	15.5	135	103000	* 6530	7520		20.3	2730
LC176	RV	2	11/13/1997	0								4.38		
LC176	RV	2	11/13/1997	2.2	1.81 J	8.14	0.257 U	16.1	18900	25.7	201	0.117 U	0.257 U	121
LC177	RV	2	11/13/1997	0	10.9 J	108	6.18	52.4	43200	1800	2190	0.938	3.95	772
LC177	RV	2	11/13/1997	0.8	1.08 U	8.04	0.27 U	23.9	22400	29.4	297	0.123 U	0.27 U	56.6
LC178	RV	2	11/13/1997	0	5.87 J	23.2	5.48	46.9	39000	1020	741	0.729	2.22 J	756
LC178	RV	2	11/13/1997	0.9	2.84 UJ	11.8	0.746 J	23.2	40500	54.5	134	0.149 U	0.287 U	256
LC179	RV	2	11/13/1997	0	14.7 J	35.3	6.75	78.2	56300	3250	2350	2.84	8.07	1100
LC179	RV	2	11/13/1997	1.1	1.52 UJ	10.3	0.238 U	9.35	24500	25.4	76.8	0.125 U	0.238 U	131
LC180	RV	2	12/12/1997	0	9.18 J	20.1	7.8	40		2480 J	977	1.03		1190
LC180	RV	2	12/12/1997	3	2.69 J	13.9	2.23	24.4	21900	689 J	440	0.635	0.953 J	341
LC180	RV	2	12/12/1997	5.3	0.893 U	6.86	0.508 J	15.8	14300	90.1 J	188	0.143 U	0.366 J	76.1
LC180	RV	2	12/12/1997	7.8	0.899 U	6.89	0.351 J	16	15500	37.5 J	160	0.134 U	0.272 J	60.3
LC180	RV	2	12/12/1997	9.6	0.728 U	5.35	0.243 U	10.8	14200	18.4 J	96.6	0.127 U	0.243 J	50.2
LC180	RV	2	12/12/1997	12.9	0.782 U	8.62	0.329 J	16.7	21600	20.2 J	234	0.121 U	0.261 J	64.5
LC180	RV	2	12/12/1997	0					25300				4.88	

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC181	RV	2	12/12/1997	0	36.4	113	25.3	131	106000	* 5310	8350 J	2.06	13.5	4340
LC181	RV	2	12/12/1997	4.7			31.2				9400			
LC181	RV	2	12/12/1997	7.6	33.6	129	29.7	124	112000	* 7010 J	9880	3.36	17.6	4900
LC181	RV	2	12/12/1997	9.1	48.3	123	46.8	215	127000	* 10900 J	11100	4.7	27.9	7190
LC181	RV	2	12/12/1997	11.1	20.7	26.4	20.4	122	30800	* 5790 J	1760	1.02	14.8	3030
LC181	RV	2	12/12/1997	13	0.728 U	3.58	0.243 U	5.82 J	14700	18.6 J	55.7	0.126 U	0.243 J	51
LC181	RV	2	12/12/1997	4.7	45.4	223		144	116000	* 6880		3.11	18.3	5150
LC182	RV	2	12/13/1997	0	37.3	120	24.3	112	123000	* 5520	9570	2.72	12.7	4270
LC182	RV	2	12/13/1997	1.8	41.8	169	27.1	116	121000	* 5500	9620	2.6	14.7	4750
LC182	RV	2	12/13/1997	3.4	47.3	276	28	134	131000	* 6700	10300	2.87	19.7	5000
LC182	RV	2	12/13/1997	4.8	46.8		30.8	152	128000	* 9040			21.9	5910
LC182	RV	2	12/13/1997	7.6	67.3	72	63.8	259	104000	* 16700	8570	6.08	36.6	* 10200
LC182	RV	2	12/13/1997	9.5	0.957 J	3.38	0.233 U	5.89	14500	114	46	0.115 U	0.233 U	103
LC182	RV	2	12/13/1997	4.8		264					10100 J	3.11		
LC183	RV	2	12/13/1997	0	26.3	92.2	23.1	92.8	96000	3380	7770	1.24	10.5	4390
LC183	RV	2	12/13/1997	2.7	37.9	97.8	24	133	112000	* 5860	8750	3.09	13.6	4330
LC183	RV	2	12/13/1997	5.2	38.4	142	28.1	134	97300	* 5910	7860	3.12	17.6	5260
LC183	RV	2	12/13/1997	8.3	48.4	119	35.2	163	125000	* 9370	10200	4.07	21.4	6530
LC183	RV	2	12/13/1997	11.3	54.4	51.6	* 70.6	205	102000	* 14200	7890	4.91	31.5	* 10700
LC183	RV	2	12/13/1997	13.8	4.13 J	3.32	2.3	12.1	12100	1200	108	0.214	1.18 U	322
LC184	RV	2	12/14/1997	0	133	52.1	62.2	382	68200	* 35600	5160	6.15	84.7	9540
LC184	RV	2	12/14/1997	1.8	22.8	15.4	11.8	61.3	19700	* 5180	827 J	2.97	16	1920 J
LC184	RV	2	12/14/1997	8	1.13 U	4.73	0.281 U	12.4	11600	31.8	73.6 J	0.286	0.281 U	54.6 J
LC184	RV	2	12/14/1997	10.8	1.09 U	5.25	0.271 U	12.6	12700	31.2	85.5 J	0.141 U	0.271 U	58 J
LC2900	LK	14	---	0	26	99	56	162	76101	* 6003	6625	0.85	18	3997
LC2900	LK	14	---	0.07	18	79	22	106	57063	4306	4733	0.52	13	2920
LC2900	LK	14	---	0.13	20	116	22	138	83168	* 6313	6252	0.57	18	3559
LC2900	LK	14	---	0.2	22	100	21	149	90377	* 7020	6650	0.54	21	4000
LC2900	LK	14	---	0.26	26	81	33	199	97119	* 10473	7487	0.67	24	5609
LC2900	LK	14	---	0.33	21	336	50	133	87085	3055	7126	1.03	14	3018
LC2900	LK	14	---	0.39	27	408	38	141	97208	2710	8364	0.99	14	2503
LC2900	LK	14	---	0.46	25	383	32	136	101107	2798	8784	0.97	14	2344
LC2900	LK	14	---	0.53	29	343	31	133	99985	2582	8818	0.77	15	2378
LC2900	LK	14	---	0.59	38	348	26	148	105346	2545	9136	0.63	16	2214
LC2900	LK	14	---	0.66	38	319	27	149	94955	2846	8466	0.58	16	2462
LC2900	LK	14	---	0.72	32	427	24	149	89587	3339	7994	0.55	15	2847
LC2900	LK	14	---	0.79	25	368	22	146	89297	3374	8290	0.49	15	2614

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC2900	LK	14	---	0.85	13	208	19	139	85892	4027	8272	0.47	12	2781
LC2900	LK	14	---	0.92	26	192	18	138	78829	3786	7527	0.94	11	2833
LC2900	LK	14	---	0.98	20	162	20	121	82536	* 4754	7622	0.71	13	3173
LC2900	LK	14	---	1.05	16	155	20	128	73788	4591	6810	0.47	12	3013
LC2900	LK	14	---	1.12	14	145	25	152	75226	* 5858	6854	0.68	14	3510
LC2900	LK	14	---	1.18	17	133	26	179	97073	* 8053	8837	1.01	20	4199
LC2900	LK	14	---	1.25	15	103	26	158	94678	* 7577	8863	1.11	20	3930
LC2900	LK	14	---	1.31	20	96	24	153	92365	* 6199	8704	1.15	16	3600
LC2900	LK	14	---	1.38	23	106	22	146	91364	* 5046	8557	0.68	14	3345
LC2900	LK	14	---	1.44	35	111	23	132	93991	* 5138	8653	0.85	15	3142
LC2900	LK	14	---	1.51	26	148	24	125	97230	* 5602	9176	0.76	16	3253
LC2900	LK	14	---	1.57	25	171	24	123	108787	* 6407	10361	0.93	20	4017
LC2900	LK	14	---	1.64	20	154	21	122	90755	* 5897	8126	0.71	17	3936
LC2901	LK	14	---	0	23	110	29	186	88140	* 7582	7502	0.94	22	4022
LC2901	LK	14	---	0.07	15	80	17	113	48443	4097	3737	0.49	11	2398
LC2901	LK	14	---	0.13	8	111	19	62	40792	2067	2613	0.56	6	1709
LC2901	LK	14	---	0.2	24	136	28	90	58712	2932	3791	1.15	10	2319
LC2901	LK	14	---	0.26	10	93	23	73	42342	2059	2704	0.75	7	1632
LC2901	LK	14	---	0.33	12	112	25	81	47881	2487	3206	0.85	8	1915
LC2901	LK	14	---	0.39	17	193	38	96	57986	2689	4262	0.97	10	2414
LC2901	LK	14	---	0.46	9	57	41	191	71851	* 11655	6355	1.11	29	6476
LC2901	LK	14	---	0.53	11	53	45	288	61087	* 14357	5167	1.2	40	7327
LC2901	LK	14	---	0.59	20	45	53	314	57833	* 18000	4177	1.82	49	7850
LC2901	LK	14	---	0.66	19	39	52	217	50434	* 15881	3523	1.73	44	6797
LC2901	LK	14	---	0.72	30	30	38	126	35254	* 11641	2017	1.32	26	4646
LC2901	LK	14	---	0.79	14	23	21	68	24471	* 5494	831	0.92	14	3126
LC2901	LK	14	---	0.85	10	23	18	59	22015	3706	663	0.64	11	2964
LC2901	LK	14	---	0.92	9	24	17	57	22058	3323	663	0.66	8	2931
LC2901	LK	14	---	0.98	6	34	10	51	21310	2157	650	0.43	7	2201
LC2901	LK	14	---	1.05	4	39	8	40	19755	1366	533	0.33	4	1375
LC2901	LK	14	---	1.12	3	36	6	30	17877	826	333	0.32	2	851
LC2901	LK	14	---	1.18	2	28	4	36	19088	518	359	0.34	2	496
LC2901	LK	14	---	1.25	15	30	4	31	19805	442	337	0.69	2	458
LC2901	LK	14	---	1.31	4	23	2	31	18764	287	312	0.35	1	279
LC2901	LK	14	---	1.38	2	17	2	26	18431	216	270	0.23	1	208
LC2901	LK	14	---	1.44	1	16	2	25	17947	134	262	0.19	1	156
LC2901	LK	14	---	1.51	1	17	2	28	18844	122	249	0.3	1	140

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC2901	LK	14	---	1.57	1	20	2	35	21836	338	460	0.29	1	288
LC2901	LK	14	---	1.64	2	25	3	34	22839	488	518	0.46	2	339
LC2909	LK	14	---	0		46	30	223	85400	* 9324	5253	2.04	40	5180
LC2909	LK	14	---	0.07		45	60	341	79900	* 18574	5191	2.45	70	8179
LC2909	LK	14	---	0.13		42	40	364	50200	* 9912	2630	2.45	41	7350
LC2909	LK	14	---	0.2		43	61	405	72800	* 21248	5807	2.47	50	* 10038
LC2909	LK	14	---	0.26		42	23	67	27400	1454	1063	2.36	30	4439
LC2909	LK	14	---	0.33		41	25	71	75700	2150	1176	2.21	25	3700
LC2909	LK	14	---	0.39		30	29	109	47100	* 5587	2010	2.31	31	5972
LC2909	LK	14	---	0.46		35	36	121	41800	* 6856	477	2.41	40	6541
LC2909	LK	14	---	0.53		31	12	56	25900	599	561	2.23	15	1322
LC2909	LK	14	---	0.59		27	11	54	28200	513	757	2.31	12	1560
LC2909	LK	14	---	0.66		26	18	74	32300	1903	1628	2.35	20	3600
LC2909	LK	14	---	0.72		24	17	74	29300	1698	1271	2.43	18	3097
LC2909	LK	14	---	0.79		26	3	53	4300	193	558	2.13	10	643
LC2909	LK	14	---	0.85		20	5	48	5900	357	529	2.06	9	764
LC2909	LK	14	---	0.92		18	7	52	28000	582	568	2.2	14	1396
LC2909	LK	14	---	0.98		16	8	55	29600	698	610	2.22	10	930
LC2909	LK	14	---	1.05		18	3	52	14200	129	506	2.23	11	378
LC2909	LK	14	---	1.12		17	3	55	14400	111	525	4.6	10	352
LC2909	LK	14	---	1.18		18	2	55	10700	135	378	5.45	13	260
LC2909	LK	14	---	1.25		20	4	114	23800	328	816	3.84	7	541
LC2909	LK	14	---	1.31		21	2	54	11000	112	368	3.09	9	258
LC2909	LK	14	---	1.38		18	2	57	13300	130	391	2.32	5	257
LC2909	LK	14	---	1.44		16	2	44	11600	135	361	1.91	6	269
LC2909	LK	14	---	1.51		14	3	84	22600	151	579	1.38	5	322
LC2909	LK	14	---	1.57		13	2	51	11700	141	342	1.07	3	260
LC2909	LK	14	---	1.64		17	2	44	17000	131	361	0.72	3	305
LC2910	LK	14	---	0.07		208	* 77	27	52000	2710	3250	1.6	14	2385
LC2910	LK	14	---	0.13		211	* 72	24	60400	2585	3000	1.7	12	2454
LC2910	LK	14	---	0.2		209	* 80	30	54000	2740	2900	1.7	12	2305
LC2910	LK	14	---	0.26		207	* 77	29	51400	2500	3350	2.3	11	2366
LC2910	LK	14	---	0.33		230	* 89	35	56100	2700	4650	2.7	12	2436
LC2910	LK	14	---	0.39		261	* 92	37	69600	2785	4575	3.9	15	2635
LC2910	LK	14	---	0.46		270	* 122	44	80200	3025	5660	3.8	16	2755
LC2910	LK	14	---	0.53		280	* 137	42	90900	2965	6810	3.9	18	2920
LC2910	LK	14	---	0.59		311	* 144	33	106000	3130	8075	3.8	20	2898

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC2910	LK	14	---	0.66		317	* 155	31	98500	3040	8230	3.8	19	2895
LC2910	LK	14	---	0.72		322	* 157	27	103000	3335	8160	3.8	21	2816
LC2910	LK	14	---	0.79		327	* 152	25	94500	3595	8080	2.7	20	2870
LC2910	LK	14	---	0.85		280	* 155	23	93300	4325	7880	2.2	19	3052
LC2910	LK	14	---	0.92		215	* 143	22	84700	4700	7560	1.5	18	3418
LC2910	LK	14	---	0.98		193	* 147	23	84100	* 5275	7170	2.1	19	3576
LC2910	LK	14	---	1.05		191	* 153	26	86800	* 6360	7560	2.3	21	3690
LC2910	LK	14	---	1.12		196	* 157	27	93700	* 7180	8480	3	24	4090
LC2910	LK	14	---	1.18		180	* 147	25	89800	* 6345	7540	3.8	23	3943
LC2910	LK	14	---	1.25		185	* 155	27	95700	* 6355	8490	2.9	22	3964
LC2910	LK	14	---	1.31		193	* 147	25	95700	* 5475	8360	2.7	22	3760
LC2910	LK	14	---	1.38		190	* 137	24	102000	* 5850	9000	3.3	23	3902
LC2910	LK	14	---	1.44		213	* 140	28	108000	* 6510	9950	2.4	25	4336
LC2910	LK	14	---	1.51		170	* 138	30	107000	* 6965	9510	2	26	4682
LC2910	LK	14	---	1.57		160	* 145	30	55200	* 6775	9100	3.1	33	4544
LC2910	LK	14	---	1.64		165	* 161	34	95200	* 8395	8360	3.7	30	4952
LC2910	LK	14	---	1.71		150	* 188	45	99100	* 10645	8650	3.7	35	6456
LC2910	LK	14	---	1.77		142	* 259	55	98800	* 12455	9080	3.7	28	8270
LC2910	LK	14	---	1.84		131	* 318	71	94400	* 17265	8400	3.7	58	* 10250
LC2910	LK	14	---	1.9		133	* 381	73	88600	* 19565	7480	5.1	85	* 10190
LC2910	LK	14	---	1.97		123	* 348	65	87600	* 18715	4700	6.7	69	* 10116
LC2910	LK	14	---	2.03		121	* 363	70	83200	* 20050	6840	7.5	69	* 10188
LC2910	LK	14	---	2.1		119	* 327	65	78200	* 19290	6300	9.1	70	8900
LC2911	LK	14	---	0		33	20	150	67700	* 8547	2339	2.8	61	4290
LC2911	LK	14	---	0.07		34	22	114	51100	* 7775	1385	2.4	56	3500
LC2911	LK	14	---	0.13		35	31	115	57200	* 9124	1451	2.9	63	4665
LC2911	LK	14	---	0.2		28	32	117	52500	* 9352	1426	3.1	72	5766
LC2911	LK	14	---	0.26		24	21	85	46700	* 6093	972	2.5	57	4890
LC2911	LK	14	---	0.33		20	13	65	39500	3455	838	2.4	41	2916
LC2911	LK	14	---	0.39		21	9	52	36700	2031	593	2	24	1814
LC2911	LK	14	---	0.46		20	6	56	21200	1599	706	1.8	20	1603
LC2911	LK	14	---	0.53		18	5	52	35500	1253	610	1.1	17	1262
LC2911	LK	14	---	0.59		16	2	39	20300	547	472	0.8	19	650
LC2911	LK	14	---	0.66		22	2	36	20300	563	452	0.3	12	534
LC2911	LK	14	---	0.72		21	2	44	17900	520	512	0.09	11	505
LC2911	LK	14	---	0.79		16	1	32	10400	294	342	0.1	13	327
LC2911	LK	14	---	0.85		14	0.9	46	11000	475	412	0.092	12	458

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC2911	LK	14	---	0.92		15	0.8	31	12400	327	342	0.085	17	662
LC2911	LK	14	---	0.98		14	0.6	62	6300	368	386	0.088	11	330
LC2911	LK	14	---	1.05		14	0.7	22	7700	170	263	0.086	11	290
LC2911	LK	14	---	1.12		15	0.8	24	6700	140	208	0.09	13	138
LC2911	LK	14	---	1.18		14	0.7	50	9600	130	414	0.05 U	11	320
LC2911	LK	14	---	1.25		13	0.6	25	13700	56	187	0.05 U	9	133
LC2911	LK	14	---	1.31		12	0.4	41	10400	33	290	0.05 U	7	234
LC2911	LK	14	---	1.38		13	0.8	34	13600	48	212	0.05 U	6	174
LC2911	LK	14	---	1.44		12	0.6	20	13600	47	151	0.05 U	5	143
LC2911	LK	14	---	1.51		10	0.7	27	11000	37	176	0.05 U	7	161
LC2911	LK	14	---	1.57		11	0.6	26	10700	36	187	0.05 U	6	155
LC2911	LK	14	---	1.64		11	0.5	25	10700	37	181	0.05 U	5	140
LC2911	LK	14	---	1.71		115	0.7	40	10500	36	235	0.05 U	6	167
LC2911	LK	14	---	1.77		13	0.7	29	10400	37	166	0.05 U	7	138
LC2912	LK	14	---	0		31	8	100	36300	2170	1235	17	13	1696
LC2912	LK	14	---	0.07		55	21	132	51300	* 6231	1730	2.3	22	3645
LC2912	LK	14	---	0.13		79	21	136	57100	* 7077	1913	3	26	3785
LC2912	LK	14	---	0.2		78	22	180	63600	* 7538	2160	2.5	23	3832
LC2912	LK	14	---	0.26		81	26	184	71200	* 6231	2721	2	24	4673
LC2912	LK	14	---	0.33		85	24	180	73300	* 6385	2958	2	25	4252
LC2912	LK	14	---	0.39		91	26	200	72100	* 6867	3125	2.7	27	7563
LC2912	LK	14	---	0.46		83	24	196	68900	* 6584	3005	3.2	23	5939
LC2912	LK	14	---	0.53		71	26	200	69500	* 7363	3103	4	24	6091
LC2912	LK	14	---	0.59		84	27	200	73300	* 11752	3248	3.3	37	7766
LC2912	LK	14	---	0.66		68	59	343	75100	* 19151	3406	3	56	* 9898
LC2912	LK	14	---	0.72		88	* 77	356	76200	* 20094	3649	2.8	61	* 12139
LC2912	LK	14	---	0.79		49	67	325	67500	* 16991	3109	3	47	7817
LC2912	LK	14	---	0.85		45	52	160	63300	* 8254	2987	1.9	29	6751
LC2912	LK	14	---	0.92		41	53	168	68700	* 5924	3241	1	18	9086
LC2912	LK	14	---	0.98		37	42	156	64100	* 7733	2871	0.8	18	7978
LC2912	LK	14	---	1.05		35	20	153	58800	* 6623	2614	0.9	24	4928
LC2912	LK	14	---	1.12		33	13	62	59800	2300	2314	1.3	6	3522
LC2912	LK	14	---	1.18		29	4.8	32	43600	463	1621	1.5	3	651
LC2912	LK	14	---	1.25		28	4.4	42	47700	688	1823	0.97	3	964
LC2912	LK	14	---	1.31		20	3.9	33	39800	237	962	0.77	1.9	324
LC2912	LK	14	---	1.38		13	3.88	28	38500	327	789	0.86	1.5	374
LC2912	LK	14	---	1.44		12	4.3	32	36400	231	874	0.55	1.1	286

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC2912	LK	14	---	1.51		10	4.5	37	32500	135	852	0.56	1.2	229
LC2912	LK	14	---	1.57		9	3.5	38	36200	244	863	0.48	1.1	267
LC2913	LK	14	---	0		41	24	128	49000	3327	1450	2.11	14	3271
LC2913	LK	14	---	0.07		65	22	144	31300	3882	1230	2.6	18	3878
LC2913	LK	14	---	0.13		78	28	172	54000	4726	1702	2.7	19	3458
LC2913	LK	14	---	0.2		43	25	180	56200	3982	1910	2.3	22	3318
LC2913	LK	14	---	0.26		10	25	188	44200	3557	1860	1.9	20	3645
LC2913	LK	14	---	0.33		48	19	196	56600	4726	1713	2	23	3224
LC2913	LK	14	---	0.39		95	17	184	55600	* 4938	1780	2.1	13	3551
LC2913	LK	14	---	0.46		35	27	188	65300	* 7611	1765	2.2	9	4486
LC2913	LK	14	---	0.53		18	27	176	55900	* 7522	1795	2.5	6	4252
LC2913	LK	14	---	0.59		44	24	184	59000	* 7168	2050	2.6	39	5953
LC2913	LK	14	---	0.66		66	39	338	57000	* 15094	1850	3.4	41	5685
LC2913	LK	14	---	0.72		59	50	334	66900	* 15755	2345	5.1	43	6396
LC2913	LK	14	---	0.79		52	40	290	75000	* 11887	2750	3.8	28	4953
LC2913	LK	14	---	0.85		48	47	198	65000	* 7788	2250	2.3	21	7208
LC2913	LK	14	---	0.92		44	41	176	52500	* 6991	2125	2	19	7310
LC2913	LK	14	---	0.98		48	40	100	68900	* 5519	2450	1.1	8	8849
LC2913	LK	14	---	1.05		56	21	55	52900	2533	1645	10	10	4285
LC2913	LK	14	---	1.12		42	12	64	46800	2400	1640	0.8	8	2714
LC2913	LK	14	---	1.18		40	5	53	45000	1218	1250	0.6	6	1725
LC2913	LK	14	---	1.25		40	9	66	42500	1900	1125	0.4	3	1748
LC2913	LK	14	---	1.31		20	16	68	41600	2589	1380	0.3	6	2806
LC2913	LK	14	---	1.38		19	10	70	43200	1069	1160	0.2	5	959
LC2913	LK	14	---	1.44		32	4.3	32	40300	913	1015	0.19	5	857
LC2913	LK	14	---	1.51		15	4.1	14	34900	152	745	0.16	4	369
LC2913	LK	14	---	1.57		14	3.2	35	32500	304	625	0.11	3	327
LC2914	LK	14	---	0		48	40	194	12400	2030	3590	2	10	2640
LC2914	LK	14	---	0.07		49	38	167	13500	2290	3710	2.4	13	2650
LC2914	LK	14	---	0.13		46	32	240	14600	2390	4645	2.4	11	2670
LC2914	LK	14	---	0.2		41	36	233	15000	2490	4940	2.5	12	2685
LC2914	LK	14	---	0.26		39	30	147	15500	2990	5520	2.3	17	2725
LC2914	LK	14	---	0.33		35	26	186	16500	3730	6665	2.2	15	2730
LC2914	LK	14	---	0.39		38	26	175	17000	4345	6596	2.3	22	2865
LC2914	LK	14	---	0.46		42	24	205	17600	4300	7665	2.4	21	2882
LC2914	LK	14	---	0.53		37	25	210	17500	4610	7155	2.2	24	2895
LC2914	LK	14	---	0.59		35	26	206	18000	* 5380	7995	2.3	27	2850

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC2914	LK	14	---	0.66		36	27	172	18400	* 5400	7625	2.3	26	2855
LC2914	LK	14	---	0.72		36	29	153	19700	* 5860	7920	2.4	24	3968
LC2914	LK	14	---	0.79		34	27	141	19700	* 5040	8285	2.1	21	2920
LC2914	LK	14	---	0.85		33	27	151	21100	* 5155	9241	2	34	2900
LC2914	LK	14	---	0.92		35	25	216	20800	* 5170	8905	2.2	32	3202
LC2914	LK	14	---	0.98		31	25	159	20700	* 6480	7710	2.2	35	4390
LC2914	LK	14	---	1.05		30	31	177	19100	* 7680	7760	3.2	40	4830
LC2914	LK	14	---	1.12		31	40	235	16700	* 10420	6767	4.6	42	5470
LC2914	LK	14	---	1.18		25	56	277	17400	* 11520	6452	5.4	51	5720
LC2914	LK	14	---	1.25		24	41	186	12300	* 8550	3587	3.8	47	4700
LC2914	LK	14	---	1.31		21	33	161	11200	* 8300	3096	3.1	42	3699
LC2914	LK	14	---	1.38		22	28	137	9600	* 6970	2520	2.3	27	3546
LC2914	LK	14	---	1.44		23	16	102	7700	3280	1276	1.9	25	2480
LC2914	LK	14	---	1.51		20	13	77	6900	2940	1389	1.4	23	1770
LC2914	LK	14	---	1.57		21	14	50	5700	2940	1391	1.1	19	1260
LC2914	LK	14	---	1.64		22	10	71	7100	1860	916	0.7	22	1113
LC2914	LK	14	---	1.71		21	8	66	7900	1480	938	0.5	21	914
LC2914	LK	14	---	1.77		24	7	72	6400	1287	763	0.4	20	960
LC2914	LK	14	---	1.84		25	6	47	5400	932	669	0.3	13	735
LC2914	LK	14	---	1.9		26	4	52	5800	475	416	0.3	11	334
LC2914	LK	14	---	1.97		27	4	26	5100	530	466	0.1	12	375
LC2914	LK	14	---	2.03		15	5	45	5100	677	537	0.2	7	330
LC2914	LK	14	---	2.1		12	4	43	4600	500	423	0.2	8	347
LC2914	LK	14	---	2.17		14	7	65	6000	1197	447	0.1	9	332
LC2914	LK	14	---	2.23		13	5	42	5600	377	397	0.1	7	293
LC2914	LK	14	---	2.3		11	6	48	5700	995	332	0.1	6	241
LC2915	LK	14	---	0		40	25	130	53400	* 5300	5000	3.6	41	3000
LC2915	LK	14	---	0.07		51	25.5	120	51700	* 5950	4900	3.9	49	3400
LC2915	LK	14	---	0.13		61	30.5	140	45000	* 7700	2950	6.3	53	3850
LC2915	LK	14	---	0.2		47	28	125	28600	* 6600	1300	4.3	44	5800
LC2915	LK	14	---	0.26		49	33.5	100	31700	* 6150	1100	3.9	39	3750
LC2915	LK	14	---	0.33		51	17	75	26100	4250	650	4.3	31	2050
LC2915	LK	14	---	0.39		41	9.5	50	23600	1750	350	2.8	19	1850
LC2915	LK	14	---	0.46		47	5	40	21500	575	300	1.1	14	850
LC2915	LK	14	---	0.53		37	3.5	40	21100	455	290	1.7	13	700
LC2915	LK	14	---	0.59		45	4.5	40	22500	430	280	1.9	6	800
LC2915	LK	14	---	1.64		41	1.5	40	21300	91	320	0.9	4.9	150

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg04

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC2915	LK	14	---	3.28		43	0.7	35	20700	85	156	0.4	6.1	110
LC2915	LK	14	---	4.92		28	2.5	36	21600	95	115	0.7	7	115
LC2915	LK	14	---	6.56		33	1.5	30	21500	60	155	0.6	7.2	100
LC2915	LK	14	---	8.2		31	0.5	29	25500	61	165	0.5	6.1	120
LC2915	LK	14	---	9.84		17	1	35	26800	60	220	0.23	5.3	110
LC2915	LK	14	---	11.48		13	2.5	35	32500	45	260	0.21	5.5	105
LC2915	LK	14	---	13.12		16	4.5	40	26200	55	265	0.18	4.3	115
LC2915	LK	14	---	14.76		29	1	33	33300	60	280	0.24	4.2	125
LC2915	LK	14	---	16.4		11	1.5	29	31000	55	370	0.2	4.1	105
LC2915	LK	14	---	18.04		13	1.5	32	34100	65	400	0.12	3.4	125
LC2915	LK	14	---	19.69		10	0.5	22	21400	45	365	0.11	3.6	93
LC2915	LK	14	---	21.33		11	1	21	22800	45	250	0.1	3.1	85
LC2915	LK	14	---	22.97		9	1	21	16100	55	230	0.1	3.2	80
LC2915	LK	14	---	24.61		12	0.5	17	17700	50	220	0.11	3.4	85
LC2915	LK	14	---	26.25		10	1	21	20800	40	225	0.14	3.3	70
LC2915	LK	14	---	27.89		9	1.5	21	21700	40	275	0.13	3.5	37
LC2915	LK	14	---	28.74		8	2	15	11500	25	135	0.14	3.3	5
Surface Water - Total Metals (ug/l)														
LC2919	LK	14	---			20	21	9		12				512
LC2920	LK	14	---				11	7						
LC2920	LK	14	---			17				12				410
LC8257	AD	13	---			29 U	10	43	18	15 U	6	5 U		6
LC8261	RV	13	---			29 U	4	35 U	12 U	15 U	2 U	5 U		3 U
LC8262	SP	13	---			29 U	3 U	35 U	12 U	2	2 U	5 U		3 U
Surface Water - Dissolved Metals (ug/l)														
LC8257	AD	13	---				2.3 U	8 U	7.5		5			2.5 U
LC8261	RV	13	---				2.9	14	3.7 U		2 U			2.5 U
LC8262	SP	13	---				3.9	13	3.7 U		2 U			2.5 U

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Soil (mg/kg)														
CUA0331	GS	10	08/07/1998	0	8.9 J	93.7	12.7	52.1	54800	1930	4370	2.4	5.5	1800
CUA0332	GS	10	08/07/1998	0	6.9 J	84.8	8.4	42.7	51200	1500	3810	1.4	4.3	1070
CUA0333	GS	10	08/07/1998	0	12.7	128	16.3	68.5	74000	2470	5510	2.1	7	2290
CUA0334	GS	10	08/07/1998	0	12.8	108	19.6	65.9	69700	2400	5800	1.1	8.1	2940
CUA0335	GS	10	08/07/1998	0	11 J	96.6	14.2	63	64900	1980	4930	1.5	6.1	1960
CUA03510	GS	10	08/13/1998	0	17.7	102	18	71.2	74300	2240	6600 J	2	9.5	3050
CUA0356	GS	10	08/13/1998	0	20.4	135	29.7	86.2	97700	2710	8470 J	2.1	11.1	4780
CUA0357	GS	10	08/13/1998	0	21.6	138	27.5	94.7	93500	2580	8100 J	2	10.7	4550
CUA0358	GS	10	08/13/1998	0	18.7	110	19.1	72	78300	2140	6900 J	1.4	8.3	3160
CUA0359	GS	10	08/13/1998	0	22.4	148	28.8	99.7	104000	2530	8940 J	2.1	11.5	4730
CUA03610	GS	10	08/14/1998	0	20.2	274	10.7	86.2	96700	2840	5740	2.8	10.3	1120
CUA0366	GS	10	08/14/1998	0	23.3	189	37.7	128	138000	* 4890	10300	4	15.6	5070
CUA0367	GS	10	08/14/1998	0	34.7	351	10.2	117	151000	3940	9370	5.8	14.7	1580
CUA0368	GS	10	08/14/1998	0	27	150	37.6	114	128000	3020	10200	2.5	13.8	5830
CUA0369	GS	10	08/14/1998	0	27.9	216	61.6	159	154000	* 7250	11600	5	18.3	6780
CUA03811	GS	10	09/02/1998	0	1 U	5.4	2.2	18.7	18100	366	1020	0.1 U	0.66 J	448
CUA03812	GS	10	09/02/1998	0				183	15900		780	0.45	1.6 J	800
CUA03812	GS	10	09/02/1998	0	4.3 J	13.2	6.5			2420				
CUA03813	GS	10	09/02/1998	0	2.1 J	17.5	5.1	46.3	18600	725	1200	0.12	1.2 J	772
CUA03814	GS	10	09/02/1998	0	0.96 U	5.8	1.9	20.2	16700	250	739	0.1 U	0.53 J	370
CUA03815	GS	10	09/02/1998	0	1.3 J	36.4	2.3	43.2	20900	329	881	0.1 U	0.54 J	411 J
CUA03910	GS	10	08/14/1998	0	32.3	190	42.2	122	133000	3400	13100 J	2.5	15.4	5900
CUA0396	GS	10	08/14/1998	0	30.3	159	38.3	113	121000	2830	10000 J	2	14.5	5360
CUA0397	GS	10	08/14/1998	0	35.8	167	41.3	125	132000	3090	12800 J	2.3	15.6	5810
CUA0398	GS	10	08/14/1998	0	30.1	170	32.7	111		3580		2.8	14.8	4530
CUA0398	GS	10	08/14/1998	0					118000		9380 J			
CUA0399	GS	10	08/14/1998	0	37.9	203	43.3	130	142000	3550	13900 J	2.3	16	6030
LC10001	RV	22	---	0.5						* 12900				
LC10002	RV	22	---	0.5						* 5760				
LC10003	RV	22	---	0.5						* 6700				
LC10027	RV	22	---	0.5						3450				
LC10031	RV	22	---	0.5						2420				
LC10032	RV	22	---	0.5						2420				
LC10033	RV	22	---	0.5						* 9940				
LC10034	RV	22	---	0.5						2190				
LC10035	RV	22	---	0.5						4000				
LC10036	RV	22	---	0.5						2420				

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Soil (mg/kg)														
LC10037	RV	22	---	0.5						1960				
LC10038	RV	22	---	0.5						348				
LC10039	RV	22	---	0.5						130				
LC10040	RV	22	---	0.5						2420				
LC10041	RV	22	---	0.5						2620				
LC11205	FP	16	---			25.5	10.2	57.2	21200	2290	608			874
LC11206	FP	16	---			97.6	13.9	85.9	43200	3130	2250			1380
LC11207	FP	16	---			38.1	3.8	16.4	15200	372	1100			253
LC11211	FP	16	---			39.6	22.1	52.5	25000	2350	849			2350
LC11236	FP	16	---			25.2	17.1	93.3	35200	* 5620	1950			1690
LC11237	FP	16	---			8	4.1	22.6	15300	505	473			433
Subsurface Soil (mg/kg)														
LC10001	RV	22	---	1						* 23900				
LC10001	RV	22	---	1.5						* 6750				
LC10002	RV	22	---	1						* 9890				
LC10002	RV	22	---	1.5						1810				
LC10003	RV	22	---	1						* 6650				
LC10003	RV	22	---	1.5						* 12500				
LC10027	RV	22	---	1						* 7000				
LC10027	RV	22	---	1.5						* 21200				
LC10031	RV	22	---	1						2150				
LC10031	RV	22	---	1.5						1690				
LC10032	RV	22	---	1						3160				
LC10032	RV	22	---	1.5						808				
LC10033	RV	22	---	1						* 10400				
LC10033	RV	22	---	1.5						1460				
LC10034	RV	22	---	1						2580				
LC10034	RV	22	---	1.5						2460				
LC10035	RV	22	---	1						2760				
LC10035	RV	22	---	1.5						731				
LC10036	RV	22	---	1						* 5140				
LC10036	RV	22	---	1.5						4680				
LC10037	RV	22	---	1						2090				
LC10037	RV	22	---	1.5						1480				
LC10038	RV	22	---	1						391				
LC10038	RV	22	---	1.5						522				

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Subsurface Soil (mg/kg)														
LC10039	RV	22	---	1						87				
LC10039	RV	22	---	1.5						87				
LC10040	RV	22	---	1						2580				
LC10040	RV	22	---	1.5						2420				
LC10041	RV	22	---	1						77				
LC10041	RV	22	---	1.5						39				
Sediment (mg/kg)														
CUA03310	RV	10	08/07/1998	0	15.2	142	16.9	72.6	80100	2290	6060	3.4	8.2	2580 J
CUA0336	RV	10	08/07/1998	0	19.9	254	18.5	95.3	102000	2800	6900	2.8	10.8	2990
CUA0337	RV	10	08/07/1998	0	15.4	154	20.2	81.6	90100	2650	6850	2.4	9.9	3180
CUA0338	RV	10	08/07/1998	0	14.1	161	14.2	82.3	83000	2780	5590	2.7	8.9	2360
CUA0339	RV	10	08/07/1998	0	13	152	16	74.6	74200	2520	5670	2.4	8	2430
CUA0351	RV	10	08/13/1998	0	17.4	148	19.1	72.6	82200	2310	6900	3.3	9.3	2750
CUA03511	RV	10	08/13/1998	0	26.5	124	27.4	78	98700	2190	8650 J	1.6	10.7	4700
CUA03512	RV	10	08/13/1998	0	20.8	105	24.9	84.7	88200	2170	7860 J	1.7	10	4270
CUA03513	RV	10	08/13/1998	0	19.7	113	23.3	83.1	92000	1850	8130 J	1.8	8.7	4030
CUA03514	RV	10	08/13/1998	0	20.4	98.1	22.8	61.8	75600	2360	6810 J	2	9.3	3800
CUA03515	RV	10	08/13/1998	0	25.4	146	36.1	111	146000	2500	13000	2.3	14.1	5720
CUA0352	RV	10	08/13/1998	0								3.2		
CUA0352	RV	10	08/13/1998	0	18.6	155	24.3	86.6	102000	2600	8380		10.3	3680
CUA0353	RV	10	08/13/1998	0	16.1	123	15.6	72.4	96500	2260	7760	3.9	7.3	2330
CUA0354	RV	10	08/13/1998	0	14.3	133	22.1	80.2	104000	2550	8510	3.1	8.6	3440
CUA0355	RV	10	08/13/1998	0	8.9 J	67.3	13.3	50.9	55400	1460	4650	2.6	3.2	2090
CUA0361	RV	10	08/14/1998	0	23.7	168	29.6	107	126000	3160	10000	3.3	12.5	4400
CUA03611	RV	10	08/14/1998	0	24	159	33.1	106	128000	3030	10100	2	12.6	5310
CUA03612	RV	10	08/14/1998	0	27.3	167	35.4	126	168000	2560	14800	2.6	15	5680
CUA03613	RV	10	08/14/1998	0	23.3	169	40.7	134	143000	3580	11400	2.3	16	6390
CUA03614	RV	10	08/14/1998	0	28.6	162	35.8	118	159000	2690	14100	4.4	13.7	5610
CUA03615	RV	10	08/14/1998	0	16.2	119	28.3	99	102000	3250	8190	2	11.5	4330
CUA0362	RV	10	08/14/1998	0	21.9	250	28.2	118	123000	3470	9560	4.4	13.5	3650
CUA0363	RV	10	08/14/1998	0	16.7	132	28.4	93.3	106000	2710	8940	2.6	10.7	4340
CUA0364	RV	10	08/14/1998	0	20.7	209	34.3	119	125000	2940	9880	3.4	13.4	4900
CUA0365	RV	10	08/14/1998	0	23.5	154	33	123	144000	2800	13000	2.8	14.8	5120
CUA0381	LK	10	09/02/1998	0	1 U	3.6	0.28 J	8.1	7370	117	271	0.1 U	0.4 U	106
CUA0382	LK	10	09/02/1998	0	0.99 U	1.8 J	0.2 U	8.6	6080	92.5	154	0.1 U	0.4 U	64.7
CUA0383	LK	10	09/02/1998	0	0.99 U	1.5 J	0.2 U	2.1 J	4450	18.3	141	0.1 U	0.4 U	14.3

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
CUA0384	LK	10	09/02/1998	0	0.99 U	2.4	0.2 U	3 J	7870	22.5	97.5	0.1 U	0.4 U	19.5
CUA0385	LK	10	09/02/1998	0	0.99 U	4	0.2 U	2.7 J	10000	27.8	92.3	0.09 U	0.4 U	30.8
CUA0391	RV	10	08/14/1998	0	23	153	29.7	104	129000	2980	10300	2.3	13.5	4510
CUA03911	RV	10	08/14/1998	0	29.2	318	28.9	106	103000	3890	7740 J	2.8	13.5	4180
CUA03912	RV	10	08/14/1998	0	25.8	118	30.5	104	83300	4250	6490 J	2	13.7	4270
CUA03913	RV	10	08/14/1998	0	34.3	143	40.3	112	141000	2520	14100 J	2.1	15.3	5750
CUA03914	RV	10	08/14/1998	0	34.7	153	36.5	118	125000	3340	10100 J	1.7	14.6	5430
CUA03915	RV	10	08/14/1998	0	35.4	122	30.9	136	116000	* 7480	9400 J	3.6	18.4	5020
CUA0392	RV	10	08/14/1998	0	28.2	188	37.3	132	165000	2680	14200	2.3	15.7	5880
CUA0393	RV	10	08/14/1998	0	32.1	148	37.7	117	144000	2600	14300 J	2.2	15.7	5530
CUA0394	RV	10	08/14/1998	0								2.4		
CUA0394	RV	10	08/14/1998	0	25.5	172	33.5	106	126000	2860	12500 J		14.4	4870
CUA0395	RV	10	08/14/1998	0	23.8	179	26.7	86.5	104000	2820	8200 J	3.4	11.5	3150
LC10102	RV	16	---	0.25	9	40	5.8	18	40000	1050	2300	0.58	2	1300
LC10103	RV	16	---	0.28	40	110	30	109	105000	4140	10300	3.4	13	4870
LC10104	RV	16	---	0.3	50	180	31	105	119000	* 4800	11200	3.7	12	4970
LC10105	RV	16	---	0.39	42	120	31	99	101000	3740	9200	3.3	12	4650
LC10274	RV	16	---	0.23	32	90	21	82	97000	1990	9700	2.6	10	3850
LC10275	RV	16	---	0.22	28	140	23	77	93000	2620	8400	2.7	9	3800
LC10277	RV	16	---	0	42	304	22	110	11.02	3220	8110	3	12	2930
LC10278	RV	16	---	0	40	144	28	110	11	3090	10800		12	4580
LC10278	RV	16	---	1.34	53	331	23	120	12	3760	11200		12	3200
LC10278	RV	16	---	2.36	41	150	10	110	11	4720	9240		12	2520
LC10278	RV	16	---	2.76	45	102	13	110	11	* 5350	9250		12	1880
LC10278	RV	16	---	3.25	50	91	62	110	11	* 5830	11200		13	2840
LC10278	RV	16	---	3.64	4	17	3	43	2.4	360	354		1	1370
LC10278	RV	16	---	3.94	1	4	2	31	1.9	50	139			230
LC10278	RV	16	---	4.26	1	4	2	32	2	46	127			180
LC10278	RV	16	---	4.85	1	3	1	35	1.7	40	96			97
LC10278	RV	16	---	5.25	1	4	1	30	2.2	47	99			89
LC10278	RV	16	---	5.67	2	7	1	340	2.8	120	298			340
LC10278	RV	16	---	5.9	2	7	1	180	2.8	98	221		1	220
LC10278	RV	16	---	6.3	2	4		160	2.5	40	121			160
LC10279	RV	16	---	0	14	18	5	87	2.85	1180	1740	1	5	480
LC10279	RV	16	---	0.16	34	42	6	200	7.19	2620	5360	2	11	970
LC10279	RV	16	---	0.26	44	248	14	120	10.25	4170	6490	1	14	1860
LC10279	RV	16	---	0.39	52	460	29	160	12.25	4200	4600		13	4060

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10279	RV	16	---	0.49	34	246	11	120	11.09	* 5140	4930		13	3240
LC10279	RV	16	---	0.62	42	156	8	150	11.31	* 9740	3760	1	20	3370
LC10279	RV	16	---	0.85	70	78	4	210	7.91	* 16800	3460	6	42	1680
LC10279	RV	16	---	0.95	4	4	18	85	1.82	580	1290			1090
LC10279	RV	16	---	1.18	6	8	5	190	2.15	74	505			450
LC10279	RV	16	---	1.57	2	6	3	160	2.41	40	290			270
LC10279	RV	16	---	1.97	4	4		54	2.2	50	160			120
LC10280	RV	16	---	0	34	200	16	120	9.62	3950	7880		12	2400
LC10280	RV	16	---	0.16	30	122	18	98	9.62	2530	8260		11	3310
LC10280	RV	16	---	0.39	34	256	29	140	9.94	3810	8330		11	4430
LC10280	RV	16	---	0.56	36	270	17	130	10.12	4550	8230	1	12	3590
LC10280	RV	16	---	0.72	34	136	18	120	10.85	* 4760	9040		12	2540
LC10280	RV	16	---	0.98	36	106	17	150	10.11	* 6280	8550	1	13	2430
LC10280	RV	16	---	1.51	40	166	35	170	11.29	* 7030	9800		16	5800
LC10280	RV	16	---	1.74		2	4	36	2.22	63	290			620
LC10280	RV	16	---	2.82	4	6	1	40	2.27	63	260			290
LC10491	RV	16	05/17/1995	0		15.3	5.6		16900	717	437			470
LC10493	RV	16	05/17/1995	0		10.6	1.1		8520	168	146			128
LC10494	RV	16	05/17/1995	0		21	6.5		19700	1950	1030			1060
LC10495	RV	16	05/17/1995	0		18.9	2.9		11400	492	399			350
LC10496	RV	16	05/17/1995	0		10.4 U	3.6		9660	341	299			506
LC10497	RV	16	05/17/1995	0		35.7	9		27000	2270	1790			1330
LC10498	RV	16	05/18/1995	0		16.1	3.4		16100	295	360			355
LC10499	RV	16	05/18/1995	0		15	2		9650	229	254			186
LC10500	RV	16	05/18/1995	0		18.3	3.9		13400	582	529			411
LC10501	RV	16	05/18/1995	0		33.4	46		24900	* 5870	1330			6180
LC10502	RV	16	05/19/1995	0		18.6	0.81		9640	108	114			118
LC10503	RV	16	05/19/1995	0		48.7	12.4		20000	1190	1300			1320
LC10504	RV	16	05/22/1995	0		19.5	5.8		22300	896	661			825
LC10505	RV	16	05/22/1995	0		24.4	4.9		14800	466	762			420
LC10506	RV	16	05/22/1995	0		124	33		43500	3940	3890			3720
LC10507	RV	16	05/22/1995	0		21.9	1.7		13200	148	366			181
LC10508	RV	16	05/23/1995	0		19.2	3.7		18400	539	880			434
LC10509	RV	16	05/23/1995	0		10.4 U	0.92		13100	70.6	148			64
LC10510	RV	16	05/23/1995	0		257	27.4		104000	4210	9800			2940
LC10511	RV	16	05/23/1995	0		10.3 U	9.8		24300	1230	1530			1400
LC10512	RV	16	05/23/1995	0		14.9	7.1		17100	751	969			976

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10513	RV	16	05/23/1995	0		175	39.1		96300	* 7020	8760			3700
LC10514	RV	16	05/23/1995	0		13.6	6.1		18500	655	1060			660
LC10515	RV	16	06/05/1995	0		10.4 U	1.7		12800	324	328			163
LC10516	RV	16	06/05/1995	0		15.4	10.7		19100	1370	992			814
LC10517	RV	16	06/05/1995	0		58.3	37		35600	* 6490	2630			4300
LC10518	RV	16	06/05/1995	0		22.9	11.3		23400	2390	1510			1590
LC10519	RV	16	06/06/1995	0		28.6	28.9		33200	* 6610	2760			4160
LC10520	RV	16	06/06/1995	0		28.3	14.5		38800	2820	3530			1890
LC10521	RV	16	06/06/1995	0		110	33.1		119000	* 6480	12400			4000
LC10522	RV	16	06/06/1995	0		10.1 U	2.7		13800	457	151			203
LC10523	RV	16	06/08/1995	0		124	37.1		106000	* 6260	11100			4330
LC10524	RV	16	06/08/1995	0		119	45.7		90700	* 8880	9210			6520
LC10525	RV	16	06/08/1995	0		35.6	15		19100	2790	1590			1830
LC10526	RV	16	06/08/1995	0		32.9	17.4		28500	3150	2090			2320
LC10527	RV	16	06/08/1995	0		42	23.8		22800	4530	1530			2100
LC10528	RV	16	06/08/1995	0		14.7 U	5.1		11800	486	533			555
LC10529	RV	16	06/08/1995	0		102	15.4		25200	2040	1740			4170
LC10530	RV	16	06/08/1995	0		16.6	13.4		18200	2150	797			1500
LC10531	RV	16	06/13/1995	0		121	35.4		72100	3740	5280			3260
LC10532	RV	16	06/13/1995	0		81.9	24		50600	2340	3040			2210
LC10533	RV	16	06/13/1995	0		112	37.6		73700	3820	5660			3390
LC10534	RV	16	06/13/1995	0		93.5	33.2		56400	2620	3320			2550
LC10535	RV	16	06/13/1995	0		55.7	48.7		32200	* 5440	2540			4500
LC10536	RV	16	06/13/1995	0		121	* 85.2		62800	4700	4920			7330
LC10537	RV	16	06/14/1995	0		42.1	41.8		34500	* 5530	2820			5170
LC10538	RV	16	06/14/1995	0		98.9	34.6		89100	3930	5530			3370
LC10659	RV	16	07/26/1995	0		10.3 U	2.4		8310	307	194			176
LC10660	RV	16	07/26/1995	0		10.1 U	2.6		13800	1150	114			159
LC10661	RV	16	07/26/1995	0		10.4 U	1.1 U		12100	233	247			145
LC10662	RV	16	07/26/1995	0		10.4 U	0.66 U		11900	104	229			116
LC10663	RV	16	07/26/1995	0		25.5	16.4		27200	4310	1600			2160
LC10664	RV	16	07/26/1995	0		10.1 U	5.1		18700	1080	697			594
LC10665	RV	16	07/27/1995	0		17.1	14.1		23100	2900	663			1270
LC10666	RV	16	07/27/1995	0		10.3 U	4.5		15500	741	624			637
LC10667	RV	16	07/27/1995	0		10.2 U	12.4		17700	2400	1400			1620
LC10668	RV	16	07/27/1995	0		16.2	18.9		27200	* 4750	1840			2400
LC10669	RV	16	07/27/1995	0		13.8	9.4		16600	796	457			955

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10670	RV	16	07/27/1995	0		10.4 U	2.6		11600	361	512			311
LC10671	RV	16	07/27/1995	0		15.9	14.8		19700	2370	685			1860
LC10672	RV	16	07/27/1995	0		10.4 U	8		13600	908	347			855
LC10673	RV	16	07/27/1995	0		10.5 U	1.5		8640	168	215			125
LC10674	RV	16	07/27/1995	0		11.6	3		11400	396	238			387
LC10675	RV	16	07/27/1995	0		10.3 U	11.4		14800	1480	607			1110
LC10676	RV	16	07/27/1995	0		10.3 U	3.7		12700	574	257			391
LC10677	RV	16	07/27/1995	0		10.2 U	0.97		9340	99.4	142			83
LC10678	RV	16	07/28/1995	0		10.2 U	2		12400	113	208			468
LC10679	RV	16	07/28/1995	0		12.6	4.7		24600	638	406			442
LC10686	RV	16	08/01/1995	0		10.2 U	6.4		19900	1290	519			658
LC10687	RV	16	08/01/1995	0		11.4 U	19.9		29500	4130	1870			2450
LC10688	RV	16	08/01/1995	0		52.8	16		74100	* 12200	4590			1690
LC10757	RV	16	08/17/1995	0		66.7	40.3		39600	2180	2860			3320
LC10758	RV	16	08/17/1995	0		10.1 U	2.2		10200	74.8	1080			240
LC10759	RV	16	08/17/1995	0		60.6	35.8		47300	3350	3060			3540
LC10760	RV	16	08/17/1995	0		10.1 U	3.8		11100	160	1020			445
LC10761	RV	16	08/17/1995	0		23.3	53.9		13000	2590	1330			6520
LC10762	RV	16	08/17/1995	0		15.6	7.3		14100	314	1140			766
LC10763	RV	16	08/17/1995	0		148	30.6		77400	3860	7750			3840
LC10764	RV	16	08/17/1995	0		54.3	22.5		35300	1920	2220			1860
LC10993	RV	16	10/05/1995	0		10 U	5.1		14700	574	179			754
LC10994	RV	16	10/05/1995	0		10.1 U	1.8		12700	88	187			254
LC10995	RV	16	10/05/1995	0		76.4	11.6		39400	2630	3740			1090
LC10996	RV	16	10/05/1995	0		10.1 U	2.8		10300	512	148			347
LC10997	RV	16	10/05/1995	0		10.2 U	2.1		14700	290	150			338
LC10998	RV	16	10/05/1995	0		54.2	12.3		37300	2730	3810			1070
LC10999	RV	16	10/06/1995	0		10.1 U	2.2		16000	396	625			286
LC11000	RV	16	10/06/1995	0		10.2 U	4		14100	227	164			510
LC11001	RV	16	10/06/1995	0		10.1 U	1.7		12400	48.7	102			166
LC11002	RV	16	10/06/1995	0		10.1 U	1.2		14400	147	643			215
LC11003	RV	16	10/06/1995	0		209	22.8		89100	3550	9320			2330
LC11004	RV	16	10/06/1995	0		10.1 U	0.34		14000	55.9	94			98.1
LC11005	RV	16	10/06/1995	0		10.2 U	3.5		13800	113	215			506
LC11006	RV	16	10/06/1995	0		10.2 U	4.7		20200	334	370			506
LC11007	RV	16	10/06/1995	0		10.1 U	0.38		19400	20.3	708			73.4
LC11008	RV	16	10/06/1995	0		10.1 U	6.1		15200	353	346			772

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11172	RV	16	---	0	47	240	23	108	98000	4600	8700	3.3	12.1	2100
LC11172	RV	16	---	0.1	33	180	17	91	73000	3200	6300	2.7	9.6	1600
LC11172	RV	16	---	0.13	50	300	21	107	107000	4200	9000	3.7	13.4	2100
LC11172	RV	16	---	0.2	54	340	15	100	132000	3500	11100	3.5	14	1900
LC11172	RV	16	---	0.36	65	545	43	122	121000	3900	9400	5.2	15.1	5400
LC11172	RV	16	---	0.53	72	560	20	118	138000	3800	10500	4.1	16.2	2800
LC11172	RV	16	---	0.57	55	510	11	93	144000	3000	10800	2.8	12.7	1700
LC11172	RV	16	---	0.66	85	600	17	128	144000	3400	10600	4.5	16.2	2200
LC11172	RV	16	---	0.73	89	680	14	140	146000	3900	10700	3.4	17.4	2000
LC11172	RV	16	---	0.86	93	750	20	133	148000	3500	10400	2.9	15.2	2600
LC11172	RV	16	---	0.97	66	830	16	122	129000	4000	8600	2.4	14.4	2300
LC11172	RV	16	---	1.09	69	750	17	122	120000	4300	8500	2.5	14.7	2400
LC11172	RV	16	---	1.21	51	300	12	117	121000	4500	8700	2.2	13.2	2200
LC11172	RV	16	---	1.3	52	190	9	112	106000	* 5500	8400	2.6	13.8	2000
LC11172	RV	16	---	1.42	50	170	13	118	102000	* 5500	8300	2.5	13.5	2200
LC11172	RV	16	---	1.52	58	160	14	126	113000	* 6500	9100	3.3	16.1	2200
LC11172	RV	16	---	1.62	58	120	30	135	118000	* 8200	9800	3.8	18.4	2100
LC11172	RV	16	---	1.72	84	110	35	204	123000	* 11700	10000	5.1	24	2400
LC11172	RV	16	---	1.82	172	100	31	422	108000	* 27900	8700	11.9	72	2600
LC11172	RV	16	---	1.93	260	120	31	561	115000	* 34300	4100	14.7	87	3400
LC11172	RV	16	---	1.99	220	90	14	336	85000	* 25500	4000	13.2	89	2100
LC11172	RV	16	---	2.08	12.3	5.9	30	50	30000	2800	7900	0.36	1.9	1200
LC11172	RV	16	---	2.2	2	5.7	4	15	22000	130	300	0.07	0.01 U	280
LC11172	RV	16	---	2.36	7.7	7.3	3	19	23000	445	500	0.46	2.8	315
LC11172	RV	16	---	2.49	2.4	5.9	1	14	22000	240	200	0.06	0.01 U	140
LC11172	RV	16	---	2.66	1.9	6.5	1	16	24000	74	200	0.04	0.01 U	120
LC11172	RV	16	---	2.82	1.7	6.3		12	23000	28	100	0.02	0.01 U	91
LC11172	RV	16	---	2.99	1.8	7.3		14	25000	28	100	0.02	0.01 U	100
LC11172	RV	16	---	3.15	1.7	8		13	23000	38	200	0.03	0.01 U	100
LC11172	RV	16	---	3.25	1.5	7.1		13	23000	27	200	0.02	0.01 U	94
LC11172	RV	16	---	3.35	1.6	8.7		14	25000	28	100	0.01 U	0.01 U	93
LC11172	RV	16	---	3.48	1.6	7.6		14	24000	29	100	0.01 U	0.01 U	84
LC11172	RV	16	---	3.59	1.5	4.8		14	22000	30	100	0.01 U	0.01 U	80
LC11172	RV	16	---	3.76	1.6	4.9		13	21000	29	100	0.03	0.01 U	77
LC11172	RV	16	---	3.85	1.6	5.8		18	23000	29	200	0.02	0.01 U	85
LC11172	RV	16	---	3.94	1.8	10.9	1	30	27000	32	200	0.03	0.01 U	110
LC11172	RV	16	---	4.03	1.7	6.7		16	23000	28	100	0.02	0.01 U	84

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11172	RV	16	---	4.17	1.7	5.4		13	22000	27	100	0.02	0.01 U	69
LC11172	RV	16	---	4.33	1.7	6		12	24000	30	100	0.02	0.01 U	68
LC11172	RV	16	---	4.49	1.5	4.8		11	22000	25	100	0.01 U	0.01 U	65
LC11172	RV	16	---	4.66	1.8	8.6		14	32000	30	200	0.01 U	0.01 U	70
LC11172	RV	16	---	4.82	1.7	9		13	31000	28	200	0.03	0.01 U	70
LC11172	RV	16	---	4.99	1.7	10.2		12	27000	29	200	0.02	0.01 U	67
LC11172	RV	16	---	5.09	1.9	**15.3**		14	33000	31	300	0.02	0.01 U	72
LC11172	RV	16	---	5.17	1.7	8.1		12	26000	23	200	0.01 U	0.01 U	59
LC11172	RV	16	---	5.31	1.7	6.4		12	24000	25	200	0.02	0.01 U	63
LC11172	RV	16	---	5.41	1.7	4.1		11	21000	26	100	0.01 U	0.01 U	60
LC11172	RV	16	---	5.53	1.6	3.5		14	20000	26	100	0.02	0.01 U	78
LC11172	RV	16	---	5.64	1.6	3.5		13	20000	27	100	0.03	0.01 U	90
LC11172	RV	16	---	5.74	1.6	3.9		14	21000	30	200	0.01 U	0.01 U	**120**
LC11172	RV	16	---	5.81	1.6	4.4		15	21000	29	200	0.01 U	0.01 U	**190**
LC11172	RV	16	---	5.91	1.7	4.8	**1**	14	21000	28	200	0.01 U	0.01 U	**300**
LC11172	RV	16	---	6.01	1.6	7.8	**1**	25	26000	27	300	0.01 U	0.01 U	**310**
LC11172	RV	16	---	6.14	1.5	6.8	**1**	20	25000	29	300	0.01 U	0.01 U	**410**
LC11172	RV	16	---	6.23	1.4	5.5	**1**	26	24000	27	300	0.03	0.01 U	**720**
LC11172	RV	16	---	6.36	1.5	8.3	**1**	**33**	30000	29	400	0.02	0.01 U	**470**
LC11172	RV	16	---	6.44	1.4	4.2	**1**	19	22000	24	300	0.01 U	0.01 U	**310**
LC11172	RV	16	---	6.51	1.5	6.4		24	26000	29	500	0.01 U	0.01 U	**350**
LC11172	RV	16	---	6.56	1.5	6.8		20	26000	28	400	0.01 U	0.01 U	**280**
LC11172	RV	16	---	6.63	1.6	6	**2**	23	25000	29	300	0.04	0.01 U	**275**
LC11172	RV	16	---	6.78	1.7	4.9		15	21000	30	200	0.01 U	0.01 U	**110**
LC11172	RV	16	---	6.92	1.7	4.4	**2**	15	21000	31	200	0.03	0.01 U	**140**
LC11172	RV	16	---	7.09	1.7	4.9	**2**	15	21000	30	200	0.04	0.01 U	**280**
LC11172	RV	16	---	7.25	1.6	5.2	**2**	16	21000	29	200	0.04	0.01 U	**330**
LC11173	RV	16	---	0	**126**	**50**	**14**	**97**	30000	**1800**	**1200**	**2.2**	**9.2**	**1100**
LC11173	RV	16	---	0.23	**85**	**90**	**31**	**179**	**72000**	* **5400**	**5600**	**4**	**23**	**3900**
LC11173	RV	16	---	0.39	**86**	**100**	**31**	**182**	**86000**	* **5100**	**7200**	**3.7**	**23**	**4800**
LC11173	RV	16	---	0.49	**79**	**30**	**42**	**191**	**53000**	* **5800**	**3600**	**4.1**	**27**	**6000**
LC11173	RV	16	---	0.61	**5.4**	**70**	**6**	21	23000	**240**	**700**	**0.26**	1.6	**3200**
LC11173	RV	16	---	0.74	2.8	12.6	**2**	18	23000	**253**	600	0.16	0.7	**530**
LC11173	RV	16	---	0.87	**5.7**	8.7	**2**	23	24000	**260**	**700**	**0.24**	1.7	**440**
LC11173	RV	16	---	0.98	1.7	4.7	**1**	17	21000	**125**	500	0.04	0.5	**135**
LC11173	RV	16	---	1.1	1.9	5	**1**	14	19000	**150**	400	0.1	0.01 U	**160**
LC11173	RV	16	---	1.21	1.5	3.7		11	17000	**97**	400	0.08	0.01 U	73

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11173	RV	16	---	1.35	**3.5**	6.6	**1**	15	17000	**320**	400	**0.19**	0.6	**200**
LC11173	RV	16	---	1.44	0.8	3.2		11	15000	20	300	0.04	0.01 U	44
LC11173	RV	16	---	1.48	0.8	3.5		11	15000	24	300	0.04	0.01 U	45
LC11173	RV	16	---	1.6	0.8	2.6		24	15000	21	200	0.04	0.01 U	**1300**
LC11173	RV	16	---	1.72	0.7	3.6		11	14000	19	200	0.06	0.01 U	25
LC11173	RV	16	---	1.86	0.8	2.9		12	14000	16	200	0.05	0.01 U	28
LC11173	RV	16	---	1.99	0.9	3.6		11	14000	18	100	0.05	0.01 U	26
LC11173	RV	16	---	2.17	0.8	3.2		12	13000	18	100	0.04	0.01 U	33
LC11173	RV	16	---	2.3	0.8	3		12	13000	17	100	0.04	0.01 U	44
LC11173	RV	16	---	2.37	0.8	3		12	13000	17	100	0.05	0.01 U	21
LC11173	RV	16	---	2.54	0.7	2.9		11	12000	20	100	0.04	0.01 U	22
LC11173	RV	16	---	2.71	1	3.9		12	14000	40	100	0.04	0.01 U	38
LC11173	RV	16	---	2.9	0.8	3.2		14	14000	21	100	0.04	0.01 U	**230**
LC11173	RV	16	---	3	0.8	3.3		13	13000	25	100	0.05	0.01 U	26
LC11173	RV	16	---	3.1	1.3	3.6		14	13000	**72**	100	0.05	0.5	64
LC11173	RV	16	---	3.24	1.3	3.8		15	13000	**77**	100	0.06	0.01 U	63
LC11173	RV	16	---	3.41	0.8	3.4		12	11000	20	100	0.03	0.01 U	20
LC11173	RV	16	---	3.48	0.9	3.5		12	11000	33	100	0.03	0.01 U	34
LC11173	RV	16	---	3.64	0.8	4.4		12	10000	13	100	0.03	0.01 U	19
LC11173	RV	16	---	3.82	1.2	3.2		12	13000	41	100	0.03	0.01 U	37
LC11173	RV	16	---	3.99	1.4	4		14	13000	**64**	100	0.04	0.01 U	47
LC11173	RV	16	---	4.07	1.2	3.2		14	16000	38	100	0.03	0.01 U	47
LC11173	RV	16	---	4.2	1	3.3		15	14000	24	100	0.05	0.01 U	29
LC11173	RV	16	---	4.36	1	4.1		15	13000	18	100	0.03	0.01 U	21
LC11173	RV	16	---	4.53	0.9	4.2		14	14000	24	100	0.03	0.01 U	28
LC11173	RV	16	---	4.69	0.8	4.1		14	13000	24	100	0.03	0.01 U	25
LC11173	RV	16	---	4.86	0.7	4		13	12000	12	100	0.03	0.01 U	20
LC11173	RV	16	---	4.99	0.8	4.2		13	12000	22	100	0.03	0.01 U	25
LC11173	RV	16	---	5.14	0.9	4.4		14	14000	20	100	0.05	0.01 U	28
LC11173	RV	16	---	5.25	0.8	6.9		20	15000	17	100	0.04	0.01 U	29
LC11173	RV	16	---	5.43	1	6.7		20	15000	16	100	0.05	0.01 U	29
LC11173	RV	16	---	5.58	1.1	8.9		19	16000	20	100	0.03	0.01 U	32
LC11173	RV	16	---	5.74	1	6.9		17	14000	14	100	0.02	0.01 U	25
LC11173	RV	16	---	5.91	1	6.8		20	16000	19	100	0.01 U	0.01 U	44
LC11173	RV	16	---	6.07	1	5.9		20	16000	18	100	0.01 U	0.01 U	35
LC11173	RV	16	---	6.23	0.9	5.4		17	15000	18	100	0.01 U	0.01 U	31
LC11173	RV	16	---	6.4	1.1	8		20	16000	19	100	0.01 U	0.01 U	33

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11173	RV	16	---	6.56	1.1	6.6		18	17000	16	100	0.01 U	0.01 U	25
LC11173	RV	16	---	6.69	1.1	1		19	17000	13	100	0.01 U	0.01 U	20
LC11173	RV	16	---	6.86	1.3	6.2		24	16000	14	100	0.01 U	0.01 U	26
LC11173	RV	16	---	6.99	1.6	6.5		25	18000	19	100	0.03	0.01 U	32
LC11173	RV	16	---	7.1	1.5	9.2		23	18000	18	100	0.03	0.01 U	30
LC11173	RV	16	---	7.25	1.5	6.8		21	18000	18	100	0.01 U	0.01 U	27
LC11173	RV	16	---	7.3	1.6	5.8		27	18000	21	200	0.02	0.01 U	36
LC11173	RV	16	---	7.37	1.8	7.3		23	18000	20	100	0.01 U	0.01 U	27
LC11173	RV	16	---	7.43	1.6	7.1		26	19000	16	100	0.01 U	0.01 U	31
LC11173	RV	16	---	7.59	2.2	8.7		24	18000	19	100	0.03	0.01 U	23
LC11173	RV	16	---	7.66	1.4	6.4		24	18000	16	100	0.03	0.01 U	29
LC11173	RV	16	---	7.81	1.2	7.2		20	17000	12	100	0.01 U	0.01 U	24
LC11173	RV	16	---	7.89	1.5	7.2		23	18000	20	100	0.01 U	0.01 U	29
LC11173	RV	16	---	7.96	2.1	8.1		22	19000	21	100	0.01 U	0.01 U	24
LC11173	RV	16	---	8.07	1.7	7.1		24	20000	20	100	0.02	0.01 U	30
LC11173	RV	16	---	8.2	1.4	6.7		19	19000	14	200	0.01 U	0.01 U	19
LC11173	RV	16	---	8.37	1.4	7.7		20	18000	16	200	0.01 U	0.01 U	22
LC11173	RV	16	---	8.53	1.4	9.2		20	18000	18	200	0.02	0.01 U	26
LC11173	RV	16	---	8.64	1.4	10.1		22	18000	16	100	0.01 U	0.01 U	34
LC11173	RV	16	---	8.81	1.3	12.6		24	17000	15	100	0.01 U	0.01 U	36
LC11173	RV	16	---	8.99	1.5	10.8		25	18000	25	100	0.03	0.01 U	56
LC11173	RV	16	---	9.1	1.3	11.4		24	17000	22	100	0.01 U	0.01 U	57
LC11173	RV	16	---	9.22	1.4	10.7		25	18000	24	100	0.01 U	0.01 U	64
LC11173	RV	16	---	9.28	2.1	8.9		27	21000	38	100	0.03	0.01 U	82
LC11173	RV	16	---	9.38	2.1	10.3		26	21000	36	100	0.01 U	0.01 U	79
LC11173	RV	16	---	9.47	1.3	10		21	18000	21	100	0.01 U	0.01 U	61
LC11173	RV	16	---	9.58	1.4	10.6		23	19000	26	100	0.04	0.01 U	70
LC11173	RV	16	---	9.69	1.7	10.5		25	20000	41	100	0.03	0.01 U	94
LC11173	RV	16	---	9.72	1.4	**13.3**		22	19000	22	100	0.01 U	0.01 U	65
LC11173	RV	16	---	9.84	1.4	10.3		22	21000	18	100	0.01 U	0.01 U	81
LC11173	RV	16	---	9.96	1.5	10.8		23	21000	19	100	0.01 U	0.01 U	91
LC11173	RV	16	---	10.1	1.4	12.2		25	21000	18	100	0.03	0.01 U	76
LC11173	RV	16	---	10.2	1.4	**15.1**		24	22000	18	100	0.02	0.01 U	83
LC11173	RV	16	---	10.4	1.5	**15.2**		24	23000	18	100	0.02	0.01 U	85
LC11173	RV	16	---	10.6	1.6	**12.9**		23	21000	19	100	0.01 U	0.01 U	79
LC11173	RV	16	---	10.7	1.4	**14.4**		22	21000	20	100	0.01 U	0.01 U	76
LC11173	RV	16	---	10.8	1.9	10.6		26	23000	24	100	0.05	0.01 U	89

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11173	RV	16	---	11	1.7	**12.9**		24	22000	22	100	0.01 U	0.01 U	84
LC11173	RV	16	---	11.1	1.5	**12.9**		24	22000	20	100	0.04	0.01 U	85
LC11173	RV	16	---	11.2	1.7	**13.1**		23	23000	22	100	0.03	0.01 U	91
LC11173	RV	16	---	11.3	1.5	**14.5**		24	23000	20	100	0.03	0.01 U	87
LC11173	RV	16	---	11.5	1.8	10		25	24000	23	100	0.03	0.01 U	95
LC11173	RV	16	---	11.5	1.3	**13.3**		24	22000	19	100	0.03	0.01 U	85
LC11173	RV	16	---	11.7	1.5	**13.9**		24	24000	19	100	0.03	0.01 U	90
LC11173	RV	16	---	11.8	1.6	**13.4**		24	23000	20	100	0.03	0.01 U	86
LC11173	RV	16	---	12	1.6	10.9		23	23000	19	100	0.03	0.01 U	84
LC11173	RV	16	---	12.2	1.6	**13.6**		25	24000	22	100	0.04	0.01 U	93
LC11173	RV	16	---	12.2	1.5	**15.6**		24	22000	21	100	0.03	0.01 U	87
LC11173	RV	16	---	12.4	1.5	**14.4**		23	23000	21	100	0.03	0.01 U	84
LC11173	RV	16	---	12.5	1.8	**14.1**		**32**	26000	24	200	0.03	0.01 U	**98**
LC11173	RV	16	---	12.7	1.7	**16.2**		25	25000	23	200	0.03	0.01 U	94
LC11173	RV	16	---	12.8	1.7	**13.4**		25	25000	23	200	0.02	0.01 U	**100**
LC11173	RV	16	---	13	1.9	10.2		24	26000	23	200	0.02	0.01 U	93
LC11173	RV	16	---	13.1	1.8	10.8		25	26000	25	200	0.03	0.01 U	95
LC11173	RV	16	---	13.2	1.7	12.1		25	27000	23	200	0.03	0.01 U	95
LC11173	RV	16	---	13.4	1.8	11.3		25	26000	24	200	0.04	0.01 U	94
LC11173	RV	16	---	13.5	1.9	10.8		25	27000	26	200	0.03	0.01 U	**100**
LC11173	RV	16	---	13.7	1.9	11.1		24	26000	26	200	0.03	0.01 U	**99**
LC11173	RV	16	---	13.8	2	8.2		25	25000	28	200	0.03	0.01 U	97
LC11173	RV	16	---	13.9	1.9	10.8		24	26000	27	200	0.03	0.01 U	97
LC11173	RV	16	---	14	2	11.4		25	27000	27	200	0.03	0.01 U	**98**
LC11173	RV	16	---	14.2	2	11.3		24	28000	27	200	0.07	0.01 U	97
LC11173	RV	16	---	14.3	2.1	9.3		25	28000	28	200	0.04	0.01 U	96
LC11173	RV	16	---	14.5	2	11		26	28000	29	200	0.04	0.01 U	**100**
LC11173	RV	16	---	14.6	1.9	10.2		23	28000	27	200	0.03	0.01 U	97
LC11173	RV	16	---	14.8	1.9	11.4		24	28000	27	200	0.03	0.01 U	**98**
LC11173	RV	16	---	14.9	1.9	10.3		23	28000	29	200	0.06	0.01 U	**120**
LC11173	RV	16	---	15	1.8	10.8		23	27000	29	200	0.04	0.01 U	**110**
LC11173	RV	16	---	15.2	1.8	10.8		22	27000	28	200	0.03	0.01 U	95
LC11173	RV	16	---	15.4	1.8	10.3		22	27000	28	200	0.03	0.01 U	96
LC11173	RV	16	---	15.5	1.9	9.8		22	26000	30	200	0.04	0.01 U	95
LC11173	RV	16	---	15.7	1.9	9.5		22	27000	28	200	0.02	0.01 U	88
LC11173	RV	16	---	15.8	2	9.6		22	26000	28	200	0.02	0.01 U	89
LC11173	RV	16	---	16	1.9	9.4		22	26000	30	200	0.02	0.01 U	90

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC11173	RV	16	---	16.2	2	11.9		22	26000	31	200	0.04	0.01 U	93
LC11173	RV	16	---	16.3	2	11		23	26000	31	200	0.03	0.01 U	91
LC2903	LK	14	---	0	21	95	42	130	59112	* 6820	5317	0.9	16	5839
LC2903	LK	14	---	0.07	13	71	26	91	41251	4075	3396	0.78	11	4025
LC2903	LK	14	---	0.13	9	59	19	51	26734	1965	1875	0.77	6	2688
LC2903	LK	14	---	0.2	7	92	20	44	21554	1703	1386	0.56	4	3692
LC2903	LK	14	---	0.26	18	42	10	35	18860	929	1144	0.77	3	1221
LC2903	LK	14	---	0.33	5	28	6	27	15157	508	814	0.6	2	706
LC2903	LK	14	---	0.39	5	36	7	29	16196	636	917	0.47	2	929
LC2903	LK	14	---	0.46	3	36	5	25	14365	448	719	0.46	1	759
LC2903	LK	14	---	0.53	3	37	4	26	14327	412	654	0.37	1	682
LC2903	LK	14	---	0.59	2	30	3	24	13552	271	538	0.3	1	515
LC2903	LK	14	---	0.66	1	25	2	22	13267	157	503	0.37	1	207
LC2903	LK	14	---	0.72	1	18	2	19	12880	89	426	0.32	1	109
LC2903	LK	14	---	0.79	16	24	3	26	13495	181	491	0.86	1	195
LC2903	LK	14	---	0.85	5	20	2	20	12163	155	452	0.52	1	168
LC2903	LK	14	---	0.92	3	19	1	21	12565	71	402	0.38	1	102
LC2903	LK	14	---	0.98	2	15	2	18	11680	56	359	0.3	1	77
LC2917	LK	14	---	0		54	31	190	67500	* 7427	3159	3.8	43	5178
LC2917	LK	14	---	0.07		64	35	190	66200	* 8110	3470	4.2	55	5890
LC2917	LK	14	---	0.13		88	37	170	56600	* 8130	2470	4.3	53	6310
LC2917	LK	14	---	0.2		58	36	150	48600	* 7710	1760	2	39	6250
LC2917	LK	14	---	0.26		46	23	100	41400	* 4930	960	2.5	30	4480
LC2917	LK	14	---	0.33		47	18	40	34000	3551	755	2.7	22	3827
LC2917	LK	14	---	0.39		55	14	70	35000	2652	763	1.7	18	3050
LC2917	LK	14	---	0.46		63	8	32	17800	423	262	2.3	10	625
LC2917	LK	14	---	0.53		66	4	37	18000	497	657	1.3	12	749
LC2917	LK	14	---	0.59		8	3	33	17400	367	616	1.5	7	562
LC2917	LK	14	---	0.66		6	3	37	17600	285	577	0.9	5	450
LC2917	LK	14	---	0.72		68	2	33	18000	269	567	1.3	6	399
LC2917	LK	14	---	0.79		87	2	36	17900	146	495	0.6	7.5	274
LC2917	LK	14	---	0.85		7	1	37	17900	129	459	0.5	6.5	230
LC2917	LK	14	---	0.92		6	0.8	33	17900	106	400	0.4	6	185
LC2917	LK	14	---	0.98		5	0.6	31	17900	95	414	0.4	7.1	183
LC2917	LK	14	---	1.05		4	1.1	33	17600	93	337	0.3	4.5	168
LC2917	LK	14	---	1.12		5	1.2	32	17400	180	329	0.4	5.2	173
LC2917	LK	14	---	1.18		5	1.2	32	17200	88	326	0.4	4.1	154

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC2917	LK	14	---	1.25		4	0.8	35	18100	197	343	0.4	4.2	254
LC2917	LK	14	---	1.31		3	0.7	34	17900	167	3.9	0.3	6.2	230
LC2917	LK	14	---	1.38		4	0.8	33	17100	91	248	0.3	4.5	157
LC2917	LK	14	---	1.44		4	0.8	34	17200	74	247	0.3	3.1	146
LC2917	LK	14	---	1.51		2	0.6	35	17200	61	260	0.3	3.3	147
LC2917	LK	14	---	1.57		4	0.6	34	17800	80	240	0.3	3.4	161
LC2917	LK	14	---	1.64		6	0.7	35	17600	77	223	0.2	3.1	151
LC2917	LK	14	---	1.71		6	0.6	39	17400	54	208	0.3	3.1	131
LC2917	LK	14	---	1.77		5	0.6	35	17500	38	191	0.2	3.1	118
LC2917	LK	14	---	1.84		6	0.5	36	17900	38	187	0.3	3.3	124
LC2917	LK	14	---	1.9		5	0.6	40	17700	40	185	0.3	3.4	129
Surface Water - Total Metals (ug/l)														
LC2921	LK	14	---					11						
LC2921	LK	14	---			16	17			13				589
LC60	RV	7	10/29/1996				1.9			28				444
LC60	RV	7	11/26/1996				3.6			30				592
LC60	RV	7	12/13/1996				4.8			26				494
LC60	RV	7	01/30/1997				2.1			40				382
LC60	RV	7	02/19/1997				1.9			36				436
LC60	RV	7	03/27/1997				1.5			40				238
LC60	RV	7	04/16/1997				1.4			25				244
LC60	RV	7	06/24/1997				1.3			31				281
LC60	RV	7	07/24/1997				2			83				401
LC60	RV	7	08/13/1997				2.1			32				428
LC60	RV	7	09/03/1997				2.2			25				454
LC60	RV	7	10/16/1997				2.1			30				373
LC60	RV	7	11/24/1997				2.2			18				441
LC60	RV	7	12/17/1997				2			56				391
LC60	RV	7	01/21/1998				2.6			27				466
LC60	RV	7	02/25/1998				1.6			16				290
LC60	RV	7	03/19/1998				1.3			44				212
LC60	RV	7	04/23/1998				1.3			30				222
LC60	RV	18	10/23/1998				3			27				570
LC60	RV	18	11/16/1998				3			27				600
LC60	RV	18	12/14/1998				2			22				380
LC60	RV	18	03/23/1999				2			110				210

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Water - Total Metals (ug/l)														
LC60	RV	18	04/21/1999				2			430				300
LC60	RV	18	05/06/1999				1			22				120
LC60	RV	18	05/27/1999				2		3700	300	380			240
LC60	RV	18	06/17/1999				1			32				140
LC60	RV	18	07/14/1999				1.6			27.2				237
LC60	RV	18	08/11/1999				2			30.4				312
LC60	RV	18	09/09/1999				2.1			17.9				340
LC60	RV	7	05/28/1998				1.5			21				234
LC60	RV	7	06/26/1998				2.4			20				334
LC60	RV	7	07/27/1998				1.8			47				309
LC60	RV	7	08/25/1998				1.4			19				281
LC60	RV	7	09/23/1998				1.6			15				345
LC60	RV	7	10/26/1998				2.4			21				500
LC60	RV	7	11/24/1998				2.4			60				410
LC60	RV	7	01/05/1999				2.1			41				206
LC60	RV	7	01/14/1999				2.2			24				258
LC60	RV	7	02/23/1999				2.3			17				369
LC60	RV	7	03/09/1999				2.2			42				280
Surface Water - Dissolved Metals (ug/l)														
LC60	RV	7	10/29/1996				1.9			6				666
LC60	RV	7	11/26/1996				3.9			8				605
LC60	RV	7	12/13/1996				4.8			8				920
LC60	RV	7	01/30/1997				1.8			10				369
LC60	RV	7	02/19/1997				1.9			8				442
LC60	RV	7	03/27/1997				1.4			10				252
LC60	RV	7	04/16/1997				1.2			9				232
LC60	RV	7	06/24/1997				1.4			14				215
LC60	RV	7	07/24/1997				1.9			12				370
LC60	RV	7	08/13/1997				2			9				452
LC60	RV	7	09/03/1997				2.2			3				453
LC60	RV	7	10/16/1997				2			8				364
LC60	RV	7	11/24/1997				2.1			6				478
LC60	RV	7	12/17/1997				1.6			14				381
LC60	RV	7	01/21/1998				2.7			7				472
LC60	RV	7	02/25/1998				1.7			15				300
LC60	RV	7	03/19/1998				1.2			10				203

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Water - Dissolved Metals (ug/l)														
LC60	RV	7	04/23/1998				1.3			11				221
LC60	RV	18	10/23/1998				2.8			5.7				543
LC60	RV	18	11/16/1998				2.7			5.5				579
LC60	RV	18	12/14/1998				2.4			2.5				375
LC60	RV	18	03/23/1999				1.2			6.7				170
LC60	RV	18	04/21/1999				1			11				117
LC60	RV	18	05/06/1999				1			3.7				110
LC60	RV	18	05/27/1999				1 U		67	14	56			90
LC60	RV	18	06/17/1999				1			4.2				137
LC60	RV	18	07/14/1999				1			10				239
LC60	RV	18	08/11/1999				2			4				296
LC60	RV	18	09/09/1999				2			3				331
LC60	RV	7	05/28/1998				1.5			10				248
LC60	RV	7	06/26/1998				2.4			8				330
LC60	RV	7	07/27/1998				1.9			5				272
LC60	RV	7	08/25/1998				1.3			3 U				249
LC60	RV	7	09/23/1998				1.4			3 U				348
LC60	RV	7	10/26/1998				2.2			4				526
LC60	RV	7	11/24/1998				2			9				373
LC60	RV	7	01/05/1999				1.8			10				201
LC60	RV	7	01/14/1999				2.3			8				249
LC60	RV	7	02/23/1999				2.2			6				386
LC60	RV	7	03/09/1999				2.4			11				259
LC60	RV	7	10/06/1992				2.88			5.3				659.5
LC60	RV	7	10/20/1992				1.93			5.7				450.1
LC60	RV	7	11/17/1992				1.93			4.2				380.3
LC60	RV	7	12/09/1992				1.93			5.7				509.9
LC60	RV	7	02/03/1993				3.83			4.9				440.2
LC60	RV	7	02/16/1993				2.88			9.7				509.9
LC60	RV	7	03/10/1993				2.88			5.9				440.2
LC60	RV	7	03/24/1993				3.83			4.9				420.2
LC60	RV	7	03/26/1993				1.93			13.1				240.8
LC60	RV	7	04/12/1993				1.93			9.8				161
LC60	RV	7	04/20/1993				0.97			9.9				161
LC60	RV	7	05/05/1993				1.93			9				171
LC60	RV	7	05/17/1993				1.93			8.6				190.9
LC60	RV	7	06/02/1993				1.93			5.2				280.6

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Water - Dissolved Metals (ug/l)														
LC60	RV	7	06/21/1993				1.93			6.1				350.4
LC60	RV	7	07/22/1993				1.93			4.8				280.6
LC60	RV	7	08/17/1993				1.93			5.8				370.4
LC60	RV	7	09/20/1993				1.93			5.2				430.2
LC60	RV	7	10/20/1993				1.93			4.9				500
LC60	RV	7	11/16/1993				1.93			5.6				569.8
LC60	RV	7	12/13/1993				3.83			6.6				599.7
LC60	RV	7	01/18/1994				1.93			4.5				280.6
LC60	RV	7	02/23/1994				1.93			7.6				480
LC60	RV	7	03/14/1994				1.93			5.1				280.6
LC60	RV	7	04/06/1994				0.97			7.8				180.9
LC60	RV	7	04/20/1994				1.93			4.5				190.9
LC60	RV	7	05/11/1994				0.97			4.9				190.9
LC60	RV	7	06/14/1994				2.88			5.1				340.5
LC60	RV	7	07/20/1994				1.93			5.7				410.2
LC60	RV	7	08/15/1994				0.97			5.5				270.7
LC60	RV	7	09/20/1994				1.93			5.6				420.2
LC60	RV	7	10/06/1994				1.64			1.5				396.3
LC60	RV	7	11/22/1994				2.88			5				500
LC60	RV	7	12/16/1994				2.12			7				386.3
LC60	RV	7	01/12/1995				3.74			7				364.4
LC60	RV	7	02/16/1995				1.16			5				226.8
LC60	RV	7	03/07/1995				0.97			22				204.9
LC60	RV	7	03/23/1995				1.35			12				174
LC60	RV	7	04/14/1995				1.64			10				219.8
LC60	RV	7	04/27/1995				1.83			13				240.8
LC60	RV	7	05/11/1995				1.45			10				188.9
LC60	RV	7	05/24/1995				1.73			12				201.9
LC60	RV	7	06/14/1995				1.83			11				288.6
LC60	RV	7	06/28/1995				1.64			16				288.6
LC60	RV	7	07/12/1995				1.83			12				341.4
LC60	RV	7	07/26/1995				2.12			6				365.4
LC60	RV	7	08/15/1995				2.31			4				449.1
LC60	RV	7	09/14/1995				2.02			3				443.1
LC60	RV	7	10/16/1995				2.21			7				330.5
LC60	RV	7	11/21/1995				1.35			4				211.8
LC60	RV	7	12/28/1995				1.83			10				315.5

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg05

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Water - Dissolved Metals (ug/l)														
LC60	RV	7	01/18/1996				1.54			14				199.9
LC60	RV	7	02/28/1996				1.45			11				251.7
LC60	RV	7	03/27/1996				1.45			11				304.6
LC60	RV	7	04/18/1996				1.26			10				249.7
LC60	RV	7	05/09/1996				1.26			15				237.8
LC60	RV	7	06/20/1996				2.12			12				321.5
LC60	RV	7	07/23/1996				2.5			6				546.8
LC60	RV	7	08/21/1996				2.4			1.5				520.9
LC60	RV	7	09/26/1996				2.21			4				630.6

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg06

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Surface Soil (mg/kg)														
LC10000	RV	22	---	0.5						2980				
LC10029	RV	22	---	0.5						3090				
LC10030	RV	22	---	0.5						2350				
Subsurface Soil (mg/kg)														
LC10000	RV	22	---	1						* 19100				
LC10000	RV	22	---	1.5						* 23300				
LC10029	RV	22	---	1						2190				
LC10029	RV	22	---	1.5						3540				
LC10030	RV	22	---	1						2520				
LC10030	RV	22	---	1.5						1520				
Sediment (mg/kg)														
LC10254	RV	16	---	0.05	54	170	* 92	164	50000	* 7680	3900	3.4	18	9000
LC10255	RV	16	---	0.05	96	160	31	148	124000	3740	11100	4.3	18	3500
LC10256	RV	16	---	0.46	31	170	* 84	109	67000	3300	4800	3.4	11	6000
LC10258	RV	16	---	0.7	31	480	27	97	87000	3910	8000	3.6	11	3200
LC10272	RV	16	---	0.03	33	200	19	91	164000	2650	15600	2.9	11	3500
LC10273	RV	16	---	0.23	28	90	19	71	96000	2010	9200	2.4	8	3600
LC10611	RV	16	07/11/1995	0		146	15.9		92300	4360	8450			2370
LC10612	RV	16	07/11/1995	0		268	13.3		103000	* 5260	8710			2530
LC10613	RV	16	07/11/1995	0		367	29.9		120000	4300	10900			3010
LC10614	RV	16	07/11/1995	0		191	13.5		95700	4420	8190			2010
LC10615	RV	16	07/11/1995	0		252	28.7		102000	* 4790	9600			2740
LC10616	RV	16	07/11/1995	0		183	21.8		108000	3050	11100			3080
LC10617	RV	16	07/12/1995	0		251	34.6		83100	4070	8140			3600
LC10618	RV	16	07/12/1995	0		187	20		89300	3480	8610			1830
LC10619	RV	16	07/12/1995	0		275	19.8		89500	4020	8000			2440
LC10620	RV	16	07/12/1995	0		223	11.6		93100	4200	8190			1700
LC10621	RV	16	07/12/1995	0		215	26.2		107000	* 8270	8810			3800
LC10622	RV	16	07/12/1995	0		295	44.8		111000	* 6450	10300			4120
LC10623	RV	16	07/12/1995	0		447	23.6		125000	4420	10800			3080
LC10624	RV	16	07/12/1995	0		243	23.1		97300	3690	8630			3010
LC10625	RV	16	07/12/1995	0		307	24.5		104000	4370	9830			2450
LC10626	RV	16	07/12/1995	0		217	19.2		95500	4480	7710			2200
LC10627	RV	16	07/13/1995	0		107	25.7		85500	3030	8290			3410

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg06

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC10628	RV	16	07/13/1995	0		149	* 96.4		64700	3270	4380			5750
LC10629	RV	16	07/13/1995	0		128	67.4		71100	* 8660	6420			7040
LC10630	RV	16	07/13/1995	0		193	52.6		93200	4390	8310			4380
LC10631	RV	16	07/13/1995	0		261	28.4		114000	3310	11000			3810
LC10632	RV	16	07/13/1995	0		150	54.8		61600	4100	5280			4720
LC10633	RV	16	07/13/1995	0		204	55.2		64300	4300	4200			5250
LC10634	RV	16	07/13/1995	0		297	23.6		121000	3660	12000			3860
LC11048	RV	16	10/20/1995	0		150	48.2		72000	3840	6090			3920
LC11049	RV	16	10/20/1995	0		222	40		80300	4100	7250			3330
LC11050	RV	16	10/20/1995	0		105	19.7		77400	1540	8180			2870
LC11051	RV	16	10/20/1995	0		109	27.4		80800	2160	8560			4240
LC11052	RV	16	10/20/1995	0		166	31		95300	3730	10400			4660
LC11053	RV	16	10/20/1995	0		160	45.1		80500	3520	7550			4000
LC11054	RV	16	10/20/1995	0		192	31.3		116000	* 7000	12300			4410
LC11055	RV	16	10/20/1995	0		230	28.2		95600	2950	9470			3250
LC11095	RV	16	10/31/1995	0		289	48.8		106000	4660	12500			4060
LC11096	RV	16	10/31/1995	0		290	40.4		114000	* 5070	11600			3730
LC11097	RV	16	10/31/1995	0		228	36.6		95700	* 4940	9750			4190
LC11098	RV	16	10/31/1995	0		287	35		115000	4530	12400			3640
LC11099	RV	16	10/31/1995	0		186	63.3		79200	* 5640	7100			5170
LC118	RV	2	12/16/1997	0	16.8	96.6	25.9	72.9	83200	2180	7210	2.2	8.41	3780
LC118	RV	2	12/16/1997	3.8	21.5	106	32.8	97.6	84500	3030	7020	2.22	10.4	4260
LC118	RV	2	12/16/1997	7.6	31.8	139	40.4	85.1	74600	3860	5970 J	3.16	9.79	3760
LC118	RV	2	12/16/1997	12.5	33.1	133	21.3	119	101000	* 5640	8060 J	2.7	14	3560
LC118	RV	2	12/16/1997	15.6	64	58.5	* 72.1	369	81700	* 17500	6760 J	6.34	46.2	* 10700
LC118	RV	2	12/16/1997	18.8	1.16 U	4.76	0.289 U	12.7	13700	60	109 J	0.146 U	0.289 U	89.1
LC124	RV	2	12/14/1997	0	69.3		64.6	266	105000	* 15100			38.2	* 10300
LC124	RV	2	12/14/1997	5.4	16.4 J	33.1	16.3	77.3	40300	4670	2690	2.26	11.2	2820
LC124	RV	2	12/14/1997	8.4	36.2	26.1	27.5	149	41100	* 7340	2970	1.61	19.8	4390
LC124	RV	2	12/14/1997	10.5	9.67 J	12.4	6.21	41.1	20800	2270	882	0.136 U	6.89	1110
LC124	RV	2	12/14/1997	13	1.08 U	2.38 J	0.27 U	11	11300	29.1	87.1 J	0.136 U	0.27 U	59.2
LC124	RV	2	12/14/1997	15.7	1.02 U	1.75 J	0.256 U	6.91	11300	10.7	58.3 J	0.133 U	0.256 U	48.2
LC124	RV	2	12/14/1997	0		113					8860 J	5.86		
LC125	RV	2	12/14/1997	0	39.1	181	24.1	133	114000	* 6460	9490 J	3.02	18.5	4430 J
LC125	RV	2	12/14/1997	3.3	49.4	107	32.7	167	110000	* 9430	9430 J	3.04	20.8	5900 J
LC125	RV	2	12/14/1997	5.9	82.4	58.2	* 77.6	350	91600	* 19900	7580 J	3.77	45.7	* 11500 J
LC125	RV	2	12/14/1997	7.9	51.9	35.4	53.9	194	55300	* 17300	4070	6.42	47.6	8010

Data Summary Table
Lower Coeur d'Alene River - segment LCDRSeg06

Boxed Sample Results Exceed Screening Level By More Than 1X

Shaded Sample Results Exceed Screening Level By More Than 10X

Shaded Results With (*) Exceed Screening Level By More Than 100X

Location	Location Type	Ref	Date	Depth In Feet	Antimony	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Mercury	Silver	Zinc
Sediment (mg/kg)														
LC125	RV	2	12/14/1997	10	0.911 U	8.45	0.468 J	19.2	21600	48.2	173	0.152 U	0.304 J	87.4
LC125	RV	2	12/14/1997	16.4	0.901 U	9.13	0.324 J	18.9	18500	31.2	140	0.153 U	0.3 J	73.4
LC126	RV	2	12/14/1997	0	21.2	117	30.5	92.1	110000	2380	9280	2.63	11.5	4880
LC126	RV	2	12/14/1997	2.3	24.8	88.2	26.7	118	107000	* 5960	8770	3.59	13.5	4120
LC126	RV	2	12/14/1997	10.3	0.843 U	6.88	0.377 J	14.3	17400	36.5	171	0.145 U	0.281 J	74.2
LC126	RV	2	12/14/1997	14.6	0.937 U	8.75	0.506 J	19.9	19100	71.7	184	0.159 U	0.312 J	106
LC126	RV	2	12/14/1997	17.2	0.906 U	9.68	0.35 J	18.4	17900	24.2	141	0.148 U	0.302 J	71.6
LC126	RV	2	12/14/1997	4.5	49.6	66.3	* 79.5	264	105000	* 16900	8860	6.5	37.2	* 11500
LC127	RV	2	12/16/1997	0	32.2	184	20.4	119	93000	3540	7350 J	3	11.6	3150
LC127	RV	2	12/16/1997	3.9	31.7	108	24.5	134	96600	* 6280	7650 J	3.37	14.2	3780
LC127	RV	2	12/16/1997	6.7	122	67.9	34.2	165	72600	* 9160	6170 J	3.16	19.5	5320
LC127	RV	2	12/16/1997	8.9	1.23 U	6.21	0.295 U	14.8	13200	102	127 J	0.151 U	0.295 U	98.9
LC127	RV	2	12/16/1997	11.5	1.49 U	6.09	0.292 U	17.2	16900	40.9	144 J	0.147 U	0.292 U	75.7
LC127	RV	2	12/16/1997	15.7	1.26 U	6.86	0.291 U	18.5	16200	31.9	140 J	0.148 U	0.291 U	68.2
LC128	RV	2	12/16/1997	0	1.33 U	6.82	0.259 U	15.3	16100	60.7	167 J	0.135 U	0.259 U	106
LC128	RV	2	12/16/1997	2.5	1.33 U	5.2	0.273 U	13.6	11700	17.2	52.6 J	0.13 U	0.273 U	48.4
LC128	RV	2	12/16/1997	6.4	1.08 U	4.36	0.271 U	10.5	11800	12.5	72.6 J	0.138 U	0.271 U	54
LC128	RV	2	12/16/1997	10.5	0.843 U	7.55	0.337 J	17.8	18600	25.3	152	0.148 U	0.281 J	71.5
LC129	RV	2	11/13/1997	0	27.5	105	24.7	77.9	97700	2170	8290	1.66	11.3	4570
LC129	RV	2	11/13/1997	2.8	31.4	266	25.4	98.1	114000	3870	9160	3.91	12.7	3840
LC130	RV	2	11/13/1997	0	34.5	161	15.9	112	104000	* 4740	8070	3.13	15	3100
LC130	RV	2	11/13/1997	0.8		209	35.8	126	105000	* 5600	8740	3.45	15.2	
LC130	RV	2	11/13/1997	0.8	50.4									3770
LC131	RV	2	12/18/1997	0							2520 J			
LC131	RV	2	12/18/1997	5	1.09 U	8.07	1.41	15.4	18800	44	130 J	0.142 U	0.274 U	273
LC131	RV	2	12/18/1997	0	10.1 J	36.6	7.97	64.9	32500	2820		1.61	8.68	882
LC132	RV	2	12/18/1997	0	15 J	66.8	16	104	55300	4170	4690	2.03	8.17	1480
LC132	RV	2	12/18/1997	1.6	0.761 U	5.48	0.254 U	14.2	16600	22.3	114	0.133 U	0.254 U	45.4
LC132	RV	2	12/18/1997	5.4	0.79 U	6.08	0.284 J	19.3	17000	23.1	177	0.133 U	0.263 U	46
LC133	RV	2	12/18/1997	0	2.2 J	15.4	1.83	25.3	22400	375	426	0.134 U	0.833 J	261
LC133	RV	2	12/18/1997	1.9	0.77 J	11.7	0.359 UJ	21.8	25000	35.8	1190	0.125 U	0.257 U	62.9
LC133	RV	2	12/18/1997	5.7	0.842 U	6.27	0.317 J	20.5	21900	23.6	80.3	0.136 U	0.281 U	53.8
LC134	RV	2	12/18/1997	0	14.7 J	20.7	12.6	79.4	39900	3590	2010	1.94	9.57	1650
LC134	RV	2	12/18/1997	1.7	0.753 U	2.39 J	0.452 J	11	13200	35.2	76.2	0.132 U	0.251 U	54.9
LC134	RV	2	12/18/1997	5.9	0.868 J	5.3	0.258 U	15.6	13100	20.8	49.2	0.129 U	0.258 U	46.4

ATTACHMENT 3
Statistical Summary Tables for Metals

Statistical Summary of Total Metals Concentrations in Surface Soil
Segment LCDRSeg01
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Antimony	15	14	1.4	26.8	15.6	0.58	31.3	0	0	0
Arsenic	17	17	13.5	150	83.7	0.54	12.6	17	4	0
Cadmium	39	39	0.38	39.4	11.1	0.82	9.8	23	0	0
Copper	25	25	32.8	250	99.5	0.51	100	9	0	0
Iron	39	39	6,740	147,000	65,700	0.6	27,600	33	0	0
Lead	47	47	7.69	4,860	2,350	0.61	47.3	43	38	1
Manganese	17	17	979	7,290	4,080	0.59	1,760	11	0	0
Mercury	15	13	0.29	1.8	1.27	0.39	23.5	0	0	0
Silver	15	12	0.56	17.9	11.1	0.45	391	0	0	0
Zinc	39	39	24.1	8,850	1,510	1.2	97.1	32	24	0

Statistical Summary of Total Metals Concentrations in Subsurface Soil
Segment LCDRSeg01
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Lead	20	20	292	19,600	4,090	1.15	47.3	20	18	7

Statistical Summary of Total Metals Concentrations in Sediment
Segment LCDRSeg01
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Antimony	77	76	1.12	95	26.9	0.91	3	61	28	0
Arsenic	77	77	2	990	126	1.4	12.6	59	22	0
Cadmium	86	75	1	158	17	1.15	0.678	75	56	1
Copper	85	85	7	270	85	0.71	28	65	0	0
Iron	86	86	2.08	178,000	41,800	0.98	40,000	41	0	0
Lead	85	82	14	12,900	2,770	1.04	47.3	66	60	11
Manganese	86	86	71.6	15,800	3,690	0.89	630	62	20	0
Mercury	67	54	0.02	13	3.04	0.9	0.179	49	38	0
Silver	85	59	1	31	12.7	0.54	4.5	56	0	0
Zinc	85	85	44	6,830	1,590	0.72	97.1	83	56	0

Statistical Summary of Total Metals Concentrations in Surface Soil
Segment LCDRSeg02
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Antimony	45	41	11.5	58.6	27.9	0.43	31.3	14	0	0
Arsenic	54	54	4.6	492	124	0.68	12.6	50	17	0
Cadmium	132	132	0.00909	86.4	24.9	0.78	9.8	102	0	0
Copper	81	81	3.17	2,020	146	1.53	100	54	1	0
Iron	132	132	578	222,000	84,700	0.57	27,600	111	0	0
Lead	131	131	5.08	11,600	3,640	0.54	47.3	127	119	36
Manganese	54	54	37.3	25,200	9,310	0.64	1,760	47	7	0
Mercury	45	45	1.1	11	2.74	0.55	23.5	0	0	0
Silver	45	45	11.2	34.5	18.8	0.3	391	0	0	0
Zinc	130	130	0.07	14,200	3,620	0.94	97.1	122	103	8

Statistical Summary of Total Metals Concentrations in Subsurface Soil
Segment LCDRSeg02
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Lead	14	14	333	14,000	5,280	0.78	47.3	14	13	6

Statistical Summary of Total Metals Concentrations in Sediment
Segment LCDRSeg02
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Antimony	348	330	1.3	140	39.5	0.87	3	239	187	0
Arsenic	609	587	1.5	1,300	130	1.56	12.6	425	205	1
Cadmium	554	535	0.63	247	25	1	0.678	534	417	28
Copper	476	476	4.5	636	102	0.89	28	348	12	0
Iron	609	609	4,710	256,000	61,900	0.8	40,000	308	0	0
Lead	611	611	11.5	30,160	3,310	1.08	47.3	513	443	149
Manganese	609	609	37	26,400	4,580	1.16	630	395	201	0
Mercury	474	416	0.02	23	2.54	1.02	0.179	343	238	2
Silver	474	364	0.287	97.9	17.4	0.71	4.5	317	10	0
Zinc	611	611	21.7	21,800	2,990	1.12	97.1	571	415	25

Statistical Summary of Total Metals Concentrations in Surface Water
Segment LCDRSeg02
Units: ug/L

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Arsenic	1	1	7	7	7	< 0.001	50	0	0	0
Cadmium	43	42	0.89	6	2.24	0.43	2	24	0	0
Copper	1	1	8	8	8	< 0.001	1	1	0	0
Iron	1	1	2,200	2,200	2,200	< 0.001	300	1	0	0
Lead	43	43	2.5	303	31.8	1.73	15	22	2	0
Manganese	1	1	210	210	210	< 0.001	50	1	0	0
Zinc	42	42	120	690	357	0.4	30	42	26	0

Statistical Summary of Dissolved Metals Concentrations in Surface Water
Segment LCDRSeg02
Units: ug/L

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Cadmium	79	76	0.02	4.8	1.94	0.38	0.38	75	1	0
Iron	1	1	20	20	20	< 0.001	1,000	0	0	0
Lead	79	78	1.5	12.8	5.19	0.48	1.09	78	3	0
Manganese	1	1	31	31	31	< 0.001	20.4	1	0	0
Zinc	79	79	78	645.5	343	0.44	42	79	27	0

Statistical Summary of Total Metals Concentrations in Surface Soil
Segment LCDRSeg03
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Antimony	30	27	1.2	42.2	19.8	0.45	31.3	3	0	0
Arsenic	36	36	5	295	100	0.65	12.6	29	8	0
Cadmium	36	36	0.21	58.8	28.1	0.62	9.8	28	0	0
Copper	36	36	12.6	217	106	0.52	100	27	0	0
Iron	36	36	9,540	195,000	84,200	0.55	27,600	28	0	0
Lead	43	43	15.3	16,300	3,660	0.75	47.3	39	36	7
Manganese	36	36	56.9	19,100	8,060	0.64	1,760	28	2	0
Mercury	30	25	1.9	4	2.78	0.19	23.5	0	0	0
Silver	30	25	12.8	26.2	17.5	0.18	391	0	0	0
Zinc	36	36	65.7	10,200	4,480	0.67	97.1	32	28	2

Statistical Summary of Total Metals Concentrations in Subsurface Soil
Segment LCDRSeg03
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Lead	14	14	292	18,600	3,020	1.59	47.3	14	12	2

Statistical Summary of Total Metals Concentrations in Sediment
Segment LCDRSeg03
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Antimony	152	142	1	82	28.8	0.64	3	118	72	0
Arsenic	228	217	3	634	134	0.77	12.6	188	104	0
Cadmium	224	215	0.38	100	28.5	0.79	0.678	213	181	18
Copper	160	160	9.8	1,650	158	0.89	28	147	7	0
Iron	228	228	1.3	197,000	58,100	1.03	40,000	112	0	0
Lead	233	233	6.7	23,000	4,000	0.69	47.3	220	191	89
Manganese	227	227	33	22,000	7,250	0.79	630	181	132	0
Mercury	99	87	0.356	12	2.7	0.6	0.179	87	69	0
Silver	139	125	1	62	16.6	0.51	4.5	115	1	0
Zinc	234	234	16.7	17,800	3,830	0.95	97.1	228	181	21

Statistical Summary of Total Metals Concentrations in Surface Soil
Segment LCDRSeg04
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Antimony	40	37	2.4	54.6	18	0.51	31.3	1	0	0
Arsenic	58	58	5.9	316	102	0.62	12.6	55	17	0
Cadmium	59	58	1.5	46.7	20.7	0.61	9.8	40	0	0
Copper	58	58	11.4	230	91.1	0.51	100	28	0	0
Iron	58	58	12,400	126,000	76,500	0.46	27,600	49	0	0
Lead	62	62	19.8	8,030	2,880	0.58	47.3	60	54	4
Manganese	59	59	191	13,100	6,170	0.64	1,760	45	0	0
Mercury	40	40	0.12	3.8	2.11	0.4	23.5	0	0	0
Silver	40	38	0.82	26	12.4	0.41	391	0	0	0
Zinc	59	59	55	7,350	3,060	0.71	97.1	57	43	0

Statistical Summary of Total Metals Concentrations in Subsurface Soil
Segment LCDRSeg04
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Lead	6	6	2,390	8,390	5,600	0.45	47.3	6	6	3

Statistical Summary of Total Metals Concentrations in Sediment
Segment LCDRSeg04
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Antimony	438	392	0.5	133	19.4	1.14	3	229	115	0
Arsenic	853	803	1	570	75.4	1.25	12.6	595	177	0
Cadmium	758	721	0.32	381	26.4	1.52	0.678	697	485	44
Copper	640	640	5.82	523	80.5	0.95	28	409	18	0
Iron	853	853	2	174,000	44,900	0.81	40,000	338	0	0
Lead	853	853	5.75	35,600	3,230	1.35	47.3	669	537	203
Manganese	850	850	25.5	16,800	3,120	1.19	630	494	205	0
Mercury	633	546	0.02	17	1.77	1.1	0.179	399	247	0
Silver	635	455	0.243	85	16.9	0.88	4.5	372	27	0
Zinc	853	853	5	15,400	2,300	1.1	97.1	735	478	19

Statistical Summary of Total Metals Concentrations in Surface Water
Segment LCDRSeg04
Units: ug/L

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Arsenic	5	2	17	20	18.5	0.11	50	0	0	0
Cadmium	5	4	4	21	11.5	0.61	2	4	1	0
Copper	5	3	7	43	19.7	1.03	1	3	1	0
Iron	3	1	18	18	18	< 0.001	300	0	0	0
Lead	5	3	2	12	8.67	0.67	15	0	0	0
Manganese	3	1	6	6	6	< 0.001	50	0	0	0
Zinc	5	3	6	512	309	0.87	30	2	2	0

Statistical Summary of Dissolved Metals Concentrations in Surface Water
Segment LCDRSeg04
Units: ug/L

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Cadmium	3	2	2.9	3.9	3.4	0.21	0.38	2	1	0
Copper	3	2	13	14	13.5	0.05	3.2	2	0	0
Iron	3	1	7.5	7.5	7.5	< 0.001	1,000	0	0	0
Manganese	3	1	5	5	5	< 0.001	20.4	0	0	0

Statistical Summary of Total Metals Concentrations in Surface Soil
Segment LCDRSeg05
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Antimony	25	23	1.3	37.9	20	0.55	31.3	4	0	0
Arsenic	31	31	5.4	351	114	0.74	12.6	28	14	0
Cadmium	31	31	1.9	61.6	20.6	0.74	9.8	23	0	0
Copper	31	31	16.4	183	82.6	0.5	100	10	0	0
Iron	31	31	15,200	154,000	74,900	0.64	27,600	22	0	0
Lead	46	46	130	12,900	3,020	0.8	47.3	46	40	7
Manganese	31	31	473	13,900	5,860	0.74	1,760	22	0	0
Mercury	25	22	0.12	5.8	2.3	0.57	23.5	0	0	0
Silver	25	25	0.53	18.3	9.43	0.6	391	0	0	0
Zinc	31	31	253	6,780	2,840	0.74	97.1	31	23	0

Statistical Summary of Total Metals Concentrations in Subsurface Soil
Segment LCDRSeg05
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Lead	30	30	39	23,900	4,580	1.28	47.3	29	25	9

Statistical Summary of Total Metals Concentrations in Sediment
Segment LCDRSeg05
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Antimony	306	301	0.7	260	15.8	1.84	3	129	53	0
Arsenic	433	396	1	830	68.8	1.66	12.6	214	71	0
Cadmium	291	285	0.28	85.2	16.7	0.93	0.678	275	170	3
Copper	337	337	2.1	561	64.3	1.09	28	163	6	0
Iron	433	433	1.7	168,000	38,200	1.01	40,000	111	0	0
Lead	433	433	12	34,300	2,000	1.82	47.3	274	190	54
Manganese	433	433	3.9	14,800	2,730	1.4	630	186	98	0
Mercury	311	263	0.02	14.7	1.18	1.58	0.179	149	72	0
Silver	325	166	0.5	89	13.8	0.98	4.5	129	5	0
Zinc	433	433	14.3	11,250	1,540	1.34	97.1	301	170	4

Statistical Summary of Total Metals Concentrations in Surface Water
Segment LCDRSeg05
Units: ug/L

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Antimony	2	1	0.79	0.79	0.79	< 0.001	6	0	0	0
Arsenic	3	1	16	16	16	< 0.001	50	0	0	0
Cadmium	43	43	1	17	2.37	1	2	19	0	0
Copper	3	2	1.4	11	6.2	1.1	1	2	1	0
Iron	3	2	174	3,700	1,940	1.28	300	1	1	0
Lead	43	43	13	430	47.6	1.57	15	41	2	0
Manganese	3	3	46.3	380	183	0.96	50	2	0	0
Zinc	43	43	120	600	347	0.36	30	43	25	0

Statistical Summary of Dissolved Metals Concentrations in Surface Water
Segment LCDRSeg05
Units: ug/L

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Antimony	2	2	0.68	1.3	0.99	0.44	2.92	0	0	0
Arsenic	2	1	0.46	0.46	0.46	< 0.001	150	0	0	0
Cadmium	102	101	0.94	4.8	1.96	0.36	0.38	101	5	0
Copper	2	1	1.1	1.1	1.1	< 0.001	3.2	0	0	0
Iron	3	2	41.2	67	54.1	0.34	1,000	0	0	0
Lead	102	100	1.5	22	7.77	0.47	1.09	100	21	0
Manganese	3	3	37.4	115	69.5	0.58	20.4	3	0	0
Zinc	102	102	90	920	342	0.43	42	102	30	0

Statistical Summary of Total Metals Concentrations in Surface Soil
Segment LCDRSeg06
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Lead	3	3	2,350	3,090	2,810	0.14	47.3	3	3	0

Statistical Summary of Total Metals Concentrations in Subsurface Soil
Segment LCDRSeg06
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Lead	6	6	1,520	23,300	8,700	1.13	47.3	6	6	2

Statistical Summary of Total Metals Concentrations in Sediment
Segment LCDRSeg06
Units: mg/kg

Analyte Name	Quantity Tested	Quantity Detected	Minimum Detected Value	Maximum Detected Value	Average Detected Value	Coefficient of Variation	Screening Level (SL)	Quantity Exceeding 1X the SL	Quantity Exceeding 10X the SL	Quantity Exceeding 100X the SL
Antimony	55	35	0.77	122	36.1	0.73	3	32	21	0
Arsenic	92	92	1.75	480	133	0.83	12.6	69	46	0
Cadmium	92	80	0.284	96.4	30	0.74	0.678	71	68	6
Copper	55	55	6.91	369	86	0.97	28	32	2	0
Iron	92	92	11,300	164,000	71,800	0.54	40,000	66	0	0
Lead	92	92	10.7	19,900	4,050	0.99	47.3	75	69	24
Manganese	92	92	49.2	15,600	6,070	0.68	630	70	54	0
Mercury	55	31	1.61	6.5	3.31	0.41	0.179	31	28	0
Silver	55	39	0.281	47.6	14.5	0.87	4.5	32	3	0
Zinc	92	92	45.4	11,500	3,160	0.83	97.1	74	68	4

ATTACHMENT 4
Screening Levels

SCREENING LEVELS

Based on the results of the human health and ecological risk assessments, 10 chemicals of potential concern (COPCs) were identified for inclusion and evaluation in the RI. The COPCs and appropriate corresponding media (soil, sediment, groundwater, and surface water) are summarized in Table 1. For each of the COPCs listed in Table 1, a screening level was selected.

The screening levels were used in the RI to help identify source areas and media of concern that would be carried forward for evaluation in the feasibility study (FS). The following paragraphs discuss the rationale for the selection of the screening levels.

Applicable risk-based screening levels and background concentrations were compiled from available federal numeric criteria (e.g., National Ambient Water Quality Criteria), regional preliminary remediation goals (PRGs) (e.g., EPA Region IX PRGs), regional background studies for soil, sediment, and surface water, and other guidance documents (e.g., National Oceanographic and Atmospheric Administration freshwater sediment screening values). Selected RI screening levels are listed in Tables 2 through 4.

For the evaluation of site soil, sediment, groundwater, and surface water chemical data, the lowest available risk-based screening level for each media was selected as the screening level. If the lowest risk-based screening level was lower than the available background concentration, the background concentration was selected as the screening level.

Groundwater data are screened against surface water screening levels to evaluate the potential for impacts to surface water from groundwater discharge.

For site groundwater and surface water, total and dissolved metals data are evaluated separately. Risk-based screening levels for protection of human health (consumption of water) are based on total metals results, therefore, total metals data for site groundwater and surface water were evaluated against screening levels selected from human health risk-based screening levels. Risk-based screening levels for protection of aquatic life are based on dissolved metals results, therefore, dissolved metals data for site groundwater and surface water were evaluated against screening levels selected from aquatic life risk-based screening levels.

Table 1
Chemicals of Potential Concern

Chemical	Human Health COPC			Ecological COPC		
	Soil/Sediment	Groundwater	Surface Water	Soil	Sediment	Surface Water
Antimony	X	X				
Arsenic	X	X	X	X	X	
Cadmium	X	X	X	X	X	X
Copper				X	X	X
Iron	X					
Lead	X	X	X	X	X	X
Manganese	X		X			
Mercury			X		X	
Silver					X	
Zinc	X	X	X	X	X	X

Table 2
Selected Screening Levels for Groundwater and Surface Water—Coeur d'Alene River Basin and Coeur d'Alene Lake

Chemical	Surface Water Total (µg/L)	Surface Water Dissolved (µg/L)	Groundwater Total (µg/L)	Groundwater Dissolved (µg/L)
Antimony	6[a]	2.92[b]	6[a]	2.92[b]
Arsenic	50[a]	150[c,d]	50[a]	150[c,d]
Cadmium	2[e]	0.38[b]	2[e]	0.38[b]
Copper	1[e]	3.2[c,d]	1[e]	3.2[c,d]
Iron	300[a]	1,000[c,d]	300[a]	1,000[c,d]
Lead	15[a]	1.09[b]	15[a]	1.09[b]
Manganese	50[a]	20.4[b]	50[a]	20.4[b]
Mercury	2[a]	0.77[c,d]	2[a]	0.77[c,d]
Silver	100[a]	0.43[c,d]	100[a]	0.43[c,d]
Zinc	30[e]	42[c,d]	30[e]	42[c,d]

[a]40 CFR 141 and 143. National Primary and Secondary Drinking Water Regulations. U.S. EPA Office of Water. Office of Groundwater and Drinking Water. http://www.epa.gov/OGWDW/wot/appa.html. October 18, 1999.
[b]Dissolved surface water 95th percentile background concentrations calculated from URS project database.
[c]Freshwater NAWQC for protection of aquatic life are expressed in terms of the dissolved metal in the water column.
[d]Freshwater NAWQC for cadmium, copper, lead, silver, and zinc are expressed as a function of hardness (mg/L of CaCO3) in the water column.
Values above correspond to a hardness value of 30 mg/L.
[e]Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. U.S. Department of
Energy. Office of Environmental Management. ES/ER/TM-96/R2. Value based on total metals concentration.

Note:
µg/L - microgram per liter

Table 3
Selected Screening Levels for Surface Water—Spokane River Basin

Chemical	SpokaneRSeg01		SpokaneRSeg02		SpokaneRSeg03	
	Surface Water Total (µg/L)	Surface Water Dissolved (µg/L)	Surface Water Total (µg/L)	Surface Water Dissolved (µg/L)	Surface Water Total (µg/L)	Surface Water Dissolved (µg/L)
Antimony	6[a]	2.92[b]	6[a]	2.92[b]	6[a]	2.92[b]
Arsenic	50[a]	150[c]	50[a]	150[c]	50[a]	150[c]
Cadmium	2[e]	0.38[b]	2[e]	0.38[b]	2[e]	0.38[b]
Copper	1[e]	2.3[c,d]	1[e]	3.8[c,d]	1[e]	5.7[c,d]
Iron	300[a]	1,000[c]	300[a]	1,000[c]	300[a]	1,000[c]
Lead	15[a]	1.09[b]	15[a]	1.09[b]	15[a]	1.4[c,d]
Manganese	50[a]	20.4[b]	50[a]	20.4[b]	50[a]	20.4[b]
Mercury	2[a]	0.77[c]	2[a]	0.77[c]	2[a]	0.77[c]
Silver	100[a]	0.22[c,d]	100[a]	0.62[c,d]	100[a]	1.4[c,d]
Zinc	30[e]	30[c,d]	30[e]	50[c,d]	30[e]	75[c,d]

[a]40 CFR 141 and 143. National Primary and Secondary Drinking Water Regulations. U.S. EPA Office of Water. Office of Groundwater and Drinking Water. http://www.epa.gov/OGWDW/wot/appa.html. October 18, 1999.
[b]Dissolved surface water 95th percentile background concentrations calculated from URS project database. Technical Memorandum. Estimation of Background Concentration in Soils, Sediments, and Surface Waters. Coeur d'Alene Basin RI/FS. URS. May 2001.
[c]Freshwater NAWQC for protection of aquatic life are expressed in terms of the dissolved metal in the water column.
[d]Freshwater NAWQC for cadmium, copper, lead, silver, and zinc are expressed as a function of hardness (mg/L of CaCO3) in the water column.
[e]Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. U.S. Department of Energy. Office of Environmental Management. ES/ER/TM-96/R2. Value based on total metals concentration.

Note:
µg/L - microgram per liter

Table 4
Selected Screening Levels—Soil and Sediment

Chemical	Upper Coeur d'Alene River Basin		Lower Coeur d'Alene River Basin		Spokane River Basin	
	Soil (mg/kg)	Sediment (mg/kg)	Soil (mg/kg)	Sediment (mg/kg)	Soil (mg/kg)	Sediment (mg/kg)
Antimony	31.3[a]	3.30[b]	31.3[a]	3[c]	31.3[a]	3[c]
Arsenic	22[b]	13.6[b]	12.6[b]	12.6[b]	9.34[b]	9.34[b]
Cadmium	9.8[d]	1.56[b]	9.8[d]	0.678[b]	9.8[d]	0.72[b]
Copper	100[d]	32.3[b]	100[d]	28[c]	100[d]	28[c]
Iron	65,000[b]	40,000[c]	27,600[b]	40,000[c]	25,000[b]	40,000[c]
Lead	171[b]	51.5[b]	47.3[b]	47.3[b]	14.9[b]	14.9[b]
Manganese	3,597[b]	1,210[b]	1,760[a]	630[c]	1,760[a]	663[b]
Mercury	23.5[a]	0.179[b]	23.5[a]	0.179[b]	23.5[a]	0.174[c]
Silver	391[a]	4.5[c]	391[a]	4.5[c]	391[a]	4.5[c]
Zinc	280[b]	200[b]	97.1[b]	97.1[b]	66.4[b]	66.4[b]

[a]U.S. EPA Region IX Preliminary Remediation Goals for Residential or Industrial Soil http://www.epa.gov/region09/wasate/sfund/prg. February 3, 2000.
[b]Technical Memorandum. Estimation of Background Concentration in Soils, Sediments, and Surface Waters. Coeur d'Alene Basin RI/FS. URS. May 2001.
[c]Values as presented in National Oceanographic and Atmospheric Administration Screening Quick Reference Tables, NOAA HAZMAT Report 99-1, Seattle, WA. M. F. Buchman, 1999. Values generated from numerous reference documents.
[d]Final Ecological Risk Assessment. Coeur d'Alene Basin RI/FS. Prepared by CH2M HILL/URS for EPA Region 10. May 18, 2001. Values are the lowest of the NOAEL-based PRGs for terrestrial biota (Table ES-3).

Note:
mg/kg - milligrams per kilogram