



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor
Curt Fransen, Director

June 4, 2013

Mr. Ken Marcy
U.S. Environmental Protection Agency
12928 SW 276th Street
Vashon, WA 98070

RE: Abbreviated Preliminary Assessment Report for the Cub Creek Landfill,
Clearwater County, Idaho

Dear Mr. Marcy:

The Cub Creek Landfill site is located on U.S. Forest Service land in the Clearwater National Forest.

Attached are two copies of DEQ's Abbreviated Preliminary Assessment report for the Cub Creek Landfill. As discussed in the report, toxicological risks to human and ecological receptors are unlikely at the site. This is due to the lack of residences or structures, no site workers present, and limited use of this area by the public.

The air, soil, and water pathways are not complete. All historic dumping related disturbances are well vegetated and stable. Although no evidence existed of any recent disturbances or activity, the site is accessible. U.S. Forest Service Road 250 parallels the North Fork of the Clearwater River through the area. No evidence of livestock or grazing was observed. No sediment, soil or water samples were taken.

The landfill is not located within the source water delineation zone. No drinking water sources, wells, or ground water sources exist on the site.

Based on existing conditions and uses, historic information, observations made during the site visit, and visual analysis of the site; potential pathway of contaminants to receptors and potential exposures to ecological and human receptors do not exist. **DEQ recommends the determination of the Cub Creek Landfill as No Remedial Action Planned (NRAP).**

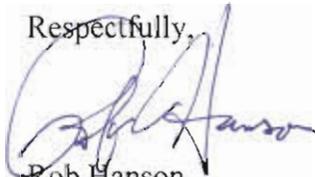
Mr. Ken Marcy
June 4, 2013
Page 2

A link to the Preliminary Assessment and Site Inspection Report for the site can also be found on DEQ's Mining Preliminary Assessment Web page at:

<http://www.deq.idaho.gov/waste-mgmt-remediation/remediation-activities/mining-preliminary-assessments.aspx>

If you have any questions about these sites, the report, or DEQ's recommendations, please do not hesitate to call me at (208) 373-0290.

Respectfully,

A handwritten signature in blue ink, appearing to read "Rob Hanson", is written over a light blue rectangular background.

Rob Hanson
Mine Waste Program Manager

attachments

cc: U.S. Forest Service

Abbreviated Preliminary Assessment for Cub Creek Landfill

Clearwater County



**State of Idaho
Department of Environmental Quality**

September 2012

Contents

Introduction.....	1
Section 1. APA Checklist	2
Task 1—Superfund Eligibility Evaluation.....	2
Task 2—Initial Site Evaluation	2
Task 3—DEQ Site Assessment Decision.....	4
Section 2. Historical and Geologic Information	5
Section 3. Site Conditions and Photographs.....	5
Section 4. Maps.....	9
Section 5. References.....	13
GIS Coverages.....	13

Tables

Table 1. Site assessment decision guidelines for a site.....	4
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Figures

Figure 1. Location of the Cub Creek Landfill in Clearwater County, Idaho.....	9
Figure 2. Map of major lithology in the vicinity of the Cub Creek Landfill.....	10
Figure 3. Domestic well locations.....	11
Figure 4. Plant, nongame animal, and fishery sensitive species within 4-mile radius and surrounding area of the Cub Creek Landfill.....	12

Photos

Photo 1. Cub Creek Landfill.....	6
Photo 2. Cub Creek Landfill vegetation.....	6
Photo 3. Some evidence of landfill activity.....	7
Photo 4. North Fork of the Clearwater River.....	7
Photo 5. North Fork of the Clearwater River and Cub Creek.....	8

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Introduction

This is an abbreviated preliminary assessment (APA) for the Cub Creek Landfill near Weitas Creek, Idaho. This document provides the rationale for the No Remedial Action Planned (NRAP) determination and that no additional analysis or site investigation is necessary for the Cub Creek Landfill. Section 1 provides the APA checklist filled out by the assessor to determine that an APA was warranted and that no further action is required from the Idaho Department of Environmental Quality (DEQ). The following sections contain additional relevant information and evidence to support the APA, including historical and geologic information (Section 2), photographs (Section 3), maps (Section 4), and references generated during the site visit or desktop research (Section 5).

Preparer: Dennis Behler **Date:** 9/28/2012
Idaho Department of Environmental Quality
1118 F Street
Lewiston, ID 83501
(208) 799-4370
dennis.behler@deq.idaho.gov

Site Name: Cub Creek Landfill

Previous Names (aka): N/A

Site Owner: U.S. Forest Service

Address: 104 Airport Rd
Grangeville, Id 83530

Site Location: The Cub Creek Landfill is located on the North Fork of the Clearwater River approximately one mile northeast of Weitas Creek.
Township 38 North, Range 8 East, Section 11

Latitude: 46.63878°N

Longitude: -115.40697°W

Description of release (or potential release) and its probable nature:

The Cub Creek Landfill was investigated by DEQ on August 18, 2012, for potential releases of heavy metals by airborne, surface water, or ground water pathways. Additionally, DEQ investigated potential discharges of other deleterious materials, such as petroleum products and processing chemicals. No deleterious materials, petroleum products, or processing chemicals were evident at the site.

Section 1. APA Checklist

Task 1—Superfund Eligibility Evaluation

Assessor, if all answers are “no,” continue to task 2; otherwise, explain any “yes” answers below and then skip to task 3.

- | | YES | NO |
|--|-------------------------------------|-------------------------------------|
| 1. Is the site currently in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) or an “alias” of another site? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Is the site being addressed by some other remediation program (i.e., federal, state, or tribal)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Are the hazardous substances that may be released from the site regulated under a statutory exclusion (e.g., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the Nuclear Regulatory Commission, Uranium Mill Tailings Radiation Control Act, or Occupational Safety and Health Administration)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Are the hazardous substances that may be released from the site excluded by policy considerations (i.e., deferred to Resource Conservation and Recovery Act corrective action)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Is there sufficient documentation to demonstrate that there is no potential for a release that constitutes risk to human or ecological receptors (e.g., comprehensive remedial investigation equivalent data showing no release above applicable or relevant and appropriate requirements (ARARs), completed removal action, documentation showing that no hazardous substance releases have occurred, or an EPA-approved risk assessment)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Assessor, please explain all “yes” answer(s):

Regarding question 5: A site inspection involving direct observations confirmed that contaminants of concern, including hazardous materials and petroleum products, do not exist in concentrations that present a threat to human health or the environment. No contaminants or hazardous substances remain on the site.

Task 2—Initial Site Evaluation

If information is not available to make a “yes” or “no” response below, further investigation may be needed. In these cases, the assessor should determine whether an APA is appropriate.

- | <u>If the answer is “no” to any of questions 1, 2, or 3, proceed directly to task 3.</u> | YES | NO |
|--|--------------------------|-------------------------------------|
| 1. Does the site have a release or a potential to release? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Does the site have uncontained sources containing CERCLA-eligible substances? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Does the site have documented on-site, adjacent, or nearby targets? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

If the answers to questions 1, 2, and 3 above were *all* “yes,” then answer questions 4–7 before proceeding to task 3.

	YES	NO
4. Does documentation indicate that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site?	<input type="checkbox"/>	<input type="checkbox"/>
5. Is there an apparent release at the site with no documentation of exposed targets, but targets are on site or immediately adjacent to the site?	<input type="checkbox"/>	<input type="checkbox"/>
6. Is there an apparent release and no documented on-site targets or targets immediately adjacent to the site, but targets are nearby (e.g., within 1 mile)?	<input type="checkbox"/>	<input type="checkbox"/>
7. Are there uncontained sources containing CERCLA hazardous substances, a potential to release with targets present on site or in proximity to the site, but no indication of a hazardous substance release?	<input type="checkbox"/>	<input type="checkbox"/>

Notes:

The Idaho Department of Environmental Quality (DEQ) has a cooperative agreement with the United States Environmental Protection Agency (EPA) Region 10 to provide technical support for completion of preliminary assessments at various sites (mining and industrial) on private or state lands. The Cub Creek landfill site is located on federally administered lands and was included in a list of potential sites provided by the Lewiston Regional Office (LRO). There were concerns expressed from the regional office about the close proximity of the site to the North Fork Clearwater River. The North Fork is a heavily used and well-known recreational and fishing river.

The Cub Creek Landfill is not located near any occupied dwellings, towns, or inhabitants. No hazardous materials were evident during the site visit. Any human health risks or ecological health risks associated with this landfill are unlikely.

Table 1 parallels the questions above and should be used by the assessor to make decisions during task 3. Table 1 identifies different types of site information and provides some possible recommendations for further site assessment activities based on that information. The assessor should use Table 1 in determining the need for further action at the site, based on the answers to the questions in task 2. Assessors should use professional judgment when evaluating a site. An assessor’s individual judgment may be different from the general recommendations for a site given below.

Table 1. Site assessment decision guidelines for a site.

Suspected/Documented Site Conditions	EPA-Recommended Site Assessment Activities
1. There are no releases or potential to release.	APA
2. No uncontained sources with CERCLA-eligible substances are present on site.	APA
3. There are no on-site, adjacent, or nearby targets.	APA
4. There is documentation indicating that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site.	APA → SI or PA/SI
5. There is an apparent release at the site with no documentation of exposed targets, but there are targets on site or immediately adjacent to the site.	APA → SI or PA/SI
6. There is an apparent release and no documented on-site targets and no documented targets immediately adjacent to the site, but there are nearby targets. Nearby targets are those targets that are located within 1 mile of the site and have a relatively high likelihood of exposure to a hazardous substance migration from the site.	Full PA
7. There is no indication of a hazardous substance release, and there are uncontained sources containing CERCLA hazardous substances, but there is a potential to release with targets present on site or in proximity to the site.	Full PA

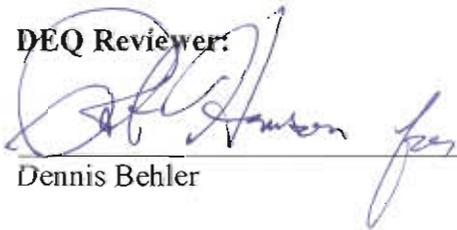
Task 3—DEQ Site Assessment Decision

When completing task 3, the assessor should use task 2 and Table 1 to select the appropriate decision. For example, if the answer to question 1 in task 2 was “no,” then an APA is appropriate and the “NRAP” box below should be checked. Additionally, if the answer to question 4 in task 2 is “yes,” then two options are available (as indicated in Table 1): (1) proceed with an APA and check the “Lower Priority SI” or “Higher Priority SI” box below or (2) proceed with a combined PA/SI.

Check the box that applies based on the conclusions of the APA checklist:

- No Remedial Action Planned (NRAP) Defer to NRC
 Higher Priority SI Refer to Removal Program
 Lower Priority SI Site is being addressed as part of another CERCLIS site
 Defer to RCRA Subtitle C Other: _____

DEQ Reviewer:


Dennis Behler

June 4, 2013

Please explain the rationale for your decision:

Very little to no evidence of an active landfill is present at Cub Creek. A site inspection involving direct observations confirmed that contaminants of concern, including hazardous materials and petroleum products, do not exist in concentrations that present a threat to human health or the environment. The landfill is not located near any occupied dwellings, towns, or inhabitants. No hazardous materials were evident during the site visit.

As a result of DEQ's research and observations, the department recommends an NRAP designation for the Cub Creek Landfill. Sections 2 through 5 provide further support for this determination.

Section 2. Historical and Geologic Information

Numerous sources were used during desktop research prior to visiting the site. DEQ could not improve or expand upon these reports by writing additional historical or geological text, so they are directly quoted below.

History: Cub Creek Landfill has not been used since the 1970s and not much prior to that timeframe. No other history was found for the Cub Creek Landfill. The site was chosen for assessment from the DEQ Landfills Database due to the concern of its close proximity to the North Fork of the Clearwater River. The river is a well-known recreational and fishing river and heavily used.

Geologic Features: The following is the description of the site from Daniel J. Sobota (2001):

The Clearwater River established approximately 13 million years b.p. (Reidel, 2001). The river cuts through batholithic rocks of the Bitterroot and Clearwater mountains in eastern Idaho before flowing west through Columbia basalts (Keeler 1973; Hooper, 1982). The oldest rocks in Idaho are found in the Clearwater Basin. Gneiss (a type of rock) has been found underlying pre-Cambrian rocks (>600 million years b.p.) in the basin (USGS, 1964). The lower Clearwater experienced basalt lava flows from 20 to 7 million years b.p., as did the rest of the Columbia River Basin (USGS 1964). Approximately 12 million b.p., the Pomona lava flow originated in the eastern flank of north-central Idaho and followed the course the Clearwater westward to the Columbia Plateau (Hooper, 1982).

The Clearwater Basin experienced glacial scouring during the Pleistocene glaciation epoch, but not during the Wisconsin period (Keeler, 1973). Loess deposited on the plains of the lower river following the Wisconsin glaciation (Keeler, 1973). These wind-blown deposits are virtually absent in the upper part of the basin (Keeler, 1973). Granite boulders near Lewiston, Idaho, indicate that the Missoula Floods penetrated the lower Clearwater River (Landeem and Pinkham, 1999). At the confluence of the Clearwater and Snake Rivers, backflows from these floods reached 180 m in depth (Landeem and Pinkham, 1999).

Section 3. Site Conditions and Photographs

All of the Cub Creek Landfill photographs in this section were taken by DEQ on August 18, 2012.

Photo 1 shows the Cub Creek Landfill on the North Fork of the Clearwater River.



Photo 1. Cub Creek Landfill.

Photo 2 shows the healthy lush vegetation apparent throughout the Cub Creek Landfill area.



Photo 2. Cub Creek Landfill vegetation.

Photo 3 shows there is little evidence remaining of landfill activity in the Cub Creek area.



Photo 3. Some evidence of landfill activity.

Photo 4 shows the river bank of the North Fork of the Clearwater River is heavily vegetated and does not show signs of stress. Macro invertebrates and small fish were observed at the time of the assessment.



Photo 4. North Fork of the Clearwater River.

Photo 5 shows that at the confluence of Cub Creek and the North Fork of the Clearwater River there is lush vegetation and no signs of plant stress on the stream banks.



Photo 5. North Fork of the Clearwater River and Cub Creek.

Section 4. Maps



Figure 1. Location of the Cub Creek Landfill in Clearwater County, Idaho.

(Source: USGS 100K quads)

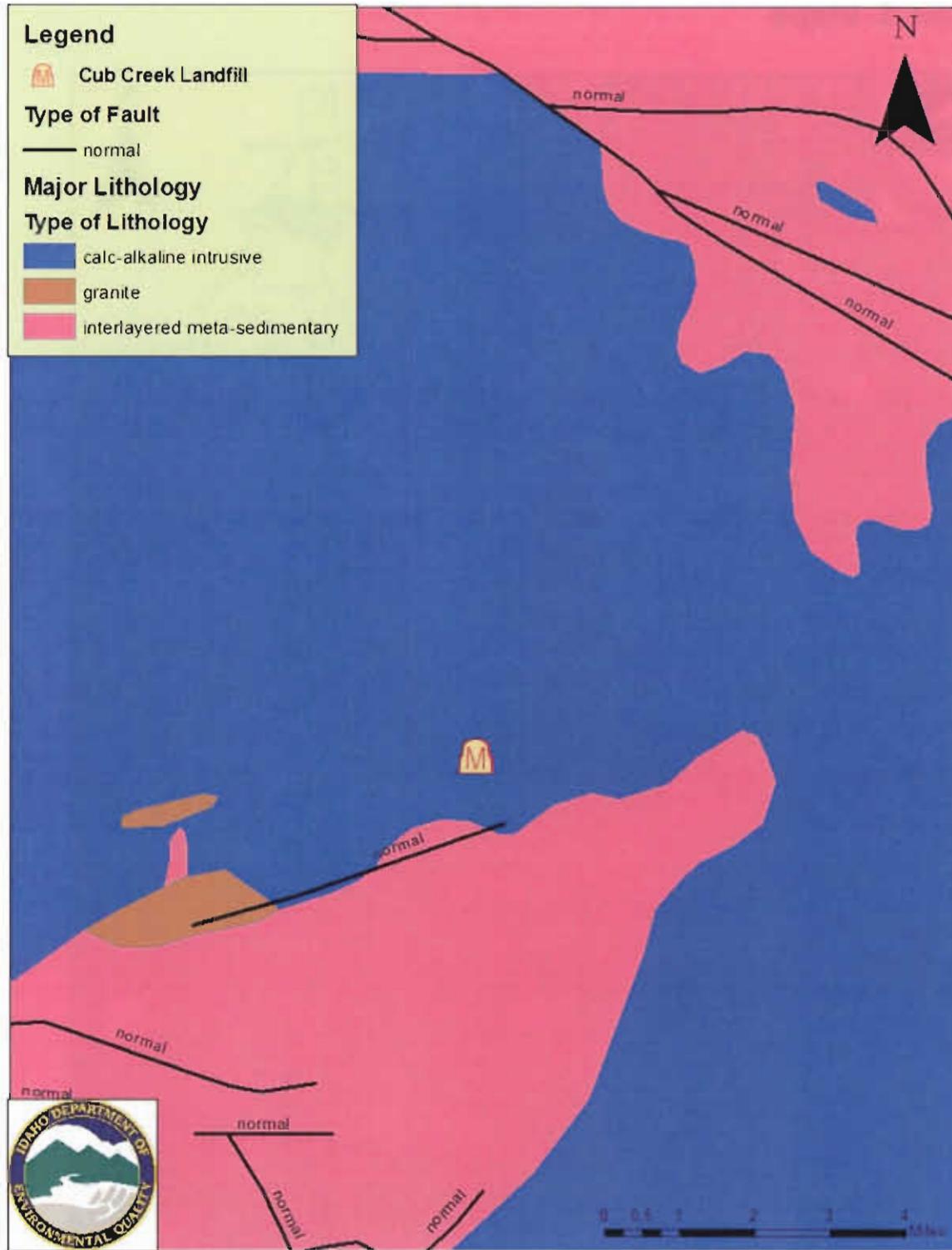


Figure 2. Map of major lithology in the vicinity of the Cub Creek Landfill.

(Source: SDE Feature Class, USGS 1995, Idaho GIS ArcSDE 9.2 Geodatabase)

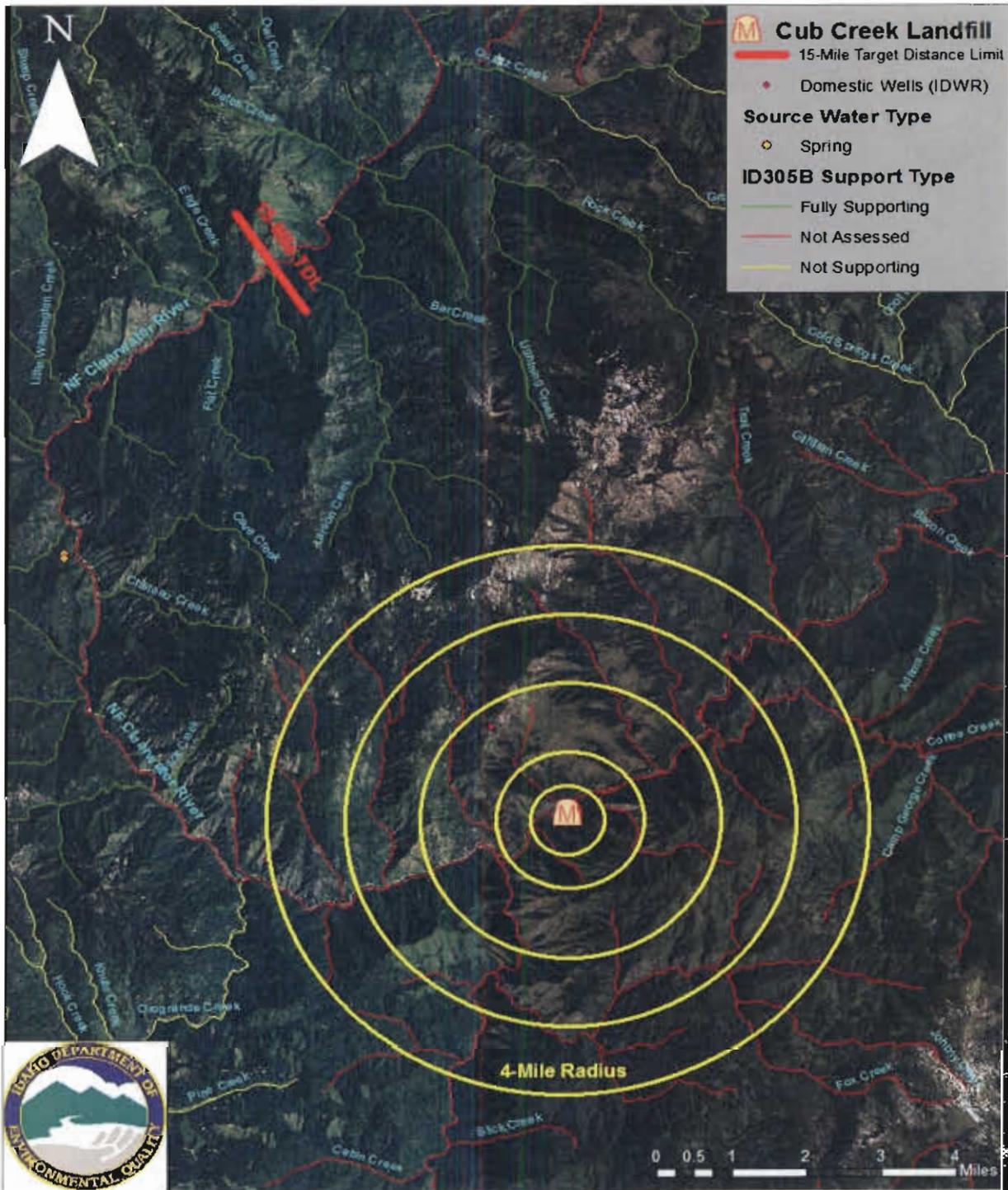


Figure 3. Domestic well locations.

There are 2 domestic well locations within the 4-mile radius. There are no public water systems within the 4-mile radius. Two Public Water Systems (PWS) are located within the 15-mile TDL. There are no significant wetlands within a 2-mile radius or in the general area. Sensitive streams located in the vicinity of the Cub Creek Landfill are also shown (indicated as "not supporting").

(Source: Idaho GIS ArcSDE 9.3 Geodatabase, National Agricultural Imagery Program 2004)

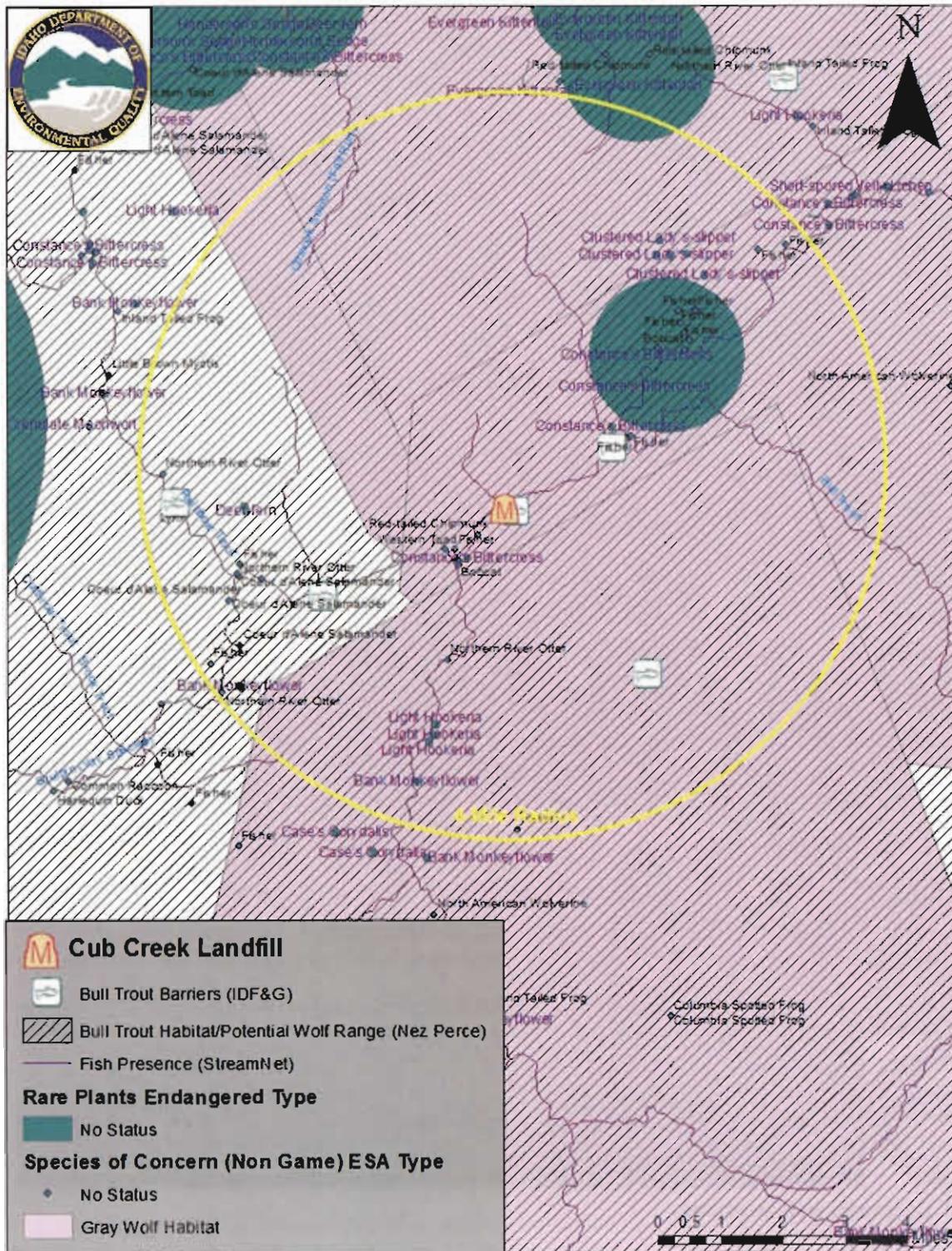


Figure 4. Plant, nongame animal, and fishery sensitive species within 4-mile radius and surrounding area of the Cub Creek Landfill.

(Source: SDE Feature Dataset, Animal Conservation Database, Idaho GIS ArcSDE 9.2 Geodatabase)

Section 5. References

DEQ (Idaho Department of Environmental Quality). 2012. Safe Drinking Water Information System (SDWIS).

Sobota, Daniel J. 2001. *The Clearwater River Basin, Idaho, USA*. FW570.

GIS Coverages

Animal Conservation Database. Using: ArcMap GIS. Version 10. Redlands, CA: Environmental Systems Research Institute, Inc., 1992–1999.

IDFG (Idaho Department of Fish and Game). 2002. Fisheries information GIS layer.

IDWR (Idaho Department of Water Resources). 1997. COVERAGE IDOWN—Idaho Surface Ownership.

IDWR (Idaho Department of Water Resources). 2010. GIS shapefile of well database.

Major Lithology (DEQGIS83.DBO). Using: ArcMap GIS. Version 10. Redlands, CA: Environmental Systems Research Institute, Inc., 1992–1999.

NAIP (National Agricultural Imagery Program). 2004. Using: ArcMap GIS. Version 10. Redlands, CA: Environmental Systems Research Institute, Inc., 1992–1999.

NAIP (National Agricultural Imagery Program). 2009. Using: ArcMap GIS. Version 10. Redlands, CA: Environmental Systems Research Institute, Inc., 1992–1999.

USGS (US Geological Society). 100K Quad Map. Using: ArcMap GIS. Version 10. Redlands, CA: Environmental Systems Research Institute, Inc., 1992-1999.

