

# **Abbreviated Preliminary Assessment for Idaho Transportation Department Turkey Island Site**

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Nez Perce County



**State of Idaho  
Department of Environmental Quality**

**January 2014**



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

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

January 23, 2014

Mr. Ken Marcy  
U.S. Environmental Protection Agency  
Region 10  
12928 SW 276<sup>th</sup> Street  
Vashon, WA 98070

Subject: Abbreviated Preliminary Assessment Report for the Idaho Transportation Department  
Turkey Island Site, Nez Perce County, Idaho

Dear Mr. Marcy:

The Idaho Department of Environmental Quality (DEQ) completed the enclosed Abbreviated Preliminary Assessment (APA) for the Turkey Island site under a cooperative agreement with Region 10 of the United States Environmental Protection Agency (EPA). Under this cooperative agreement, DEQ provides technical support for completion of preliminary assessments.

The Turkey Island site is owned by the Idaho Transportation Department (ITD). This assessment was conducted with the permission of ITD. DEQ inspected the site on May 30, 2013. ITD will receive a copy of this APA report.

At the time of the site inspection, the Turkey Island site had no potential sources or suspected releases due to highway maintenance industry practices. No hazardous or deleterious materials or products were evident at the site. Potential risks to human or ecological receptors associated with this site are negligible.

As a result of DEQ's research and observations, a No Remedial Action Planned (NRAP) designation is recommended for the ITD Turkey Island site. This APA report can also be found on DEQ Preliminary Assessment web page: <http://www.deq.idaho.gov/waste-mgmt-remediation/remediation-activities/preliminary-assessments.aspx>

If you have any questions, please feel free to give me a call at (208) 373-0296 or email ([dana.swift@deq.idaho.gov](mailto:dana.swift@deq.idaho.gov)).

Sincerely,

A handwritten signature in blue ink that reads "Dana Swift".

Dana Swift  
Mine Waste Project Coordinator

Attachments

cc: Mike Ponozzo, ITD  
Dennis Behler, DEQ

## **Acknowledgments**

DEQ would like to thank the Idaho Transportation Department for permitting access to the site.

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## Introduction

This abbreviated preliminary assessment (APA) for the Idaho Transportation Department (ITD) site known as Turkey Island near Arrow Junction, Idaho provides the rationale for the No Remedial Action Planned (NRAP) determination that no additional assessments or site inspections are necessary at this time. Section 1 provides the APA checklist (modified from EPA, 1999) filled out by the assessor to determine that an APA was warranted. The following sections contain additional relevant information and evidence to support the APA, including historical and geologic information (Section 2), current site conditions and photographs (Section 3), maps (Section 4), and references (Section 5).

**Preparer:** Dennis Behler **Date:** 1/2/2014  
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Lewiston, ID 83501  
208-799-4370  
dennis.behler@deq.idaho.gov

**Site Inspector:** Dennis Behler, DEQ Lewiston Regional Office

**Site Name:** Turkey Island

**Previous Names (aka):** N/A

**Site Owner:** Idaho Transportation Department

**Address:** 2600 Frontage Road  
Lewiston, ID 83501

**Site Location:** The Turkey Island site is located along U.S. Hwy 12 and the Clearwater River, approximately 3.5 miles east of the junction of U.S. Hwy 95 and U.S. Hwy 12.

Township 36 North, Range 4 West, Section 13

**Latitude:** 46.466918°N

**Longitude:** -116.780356°W

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

The Lewiston Department of Environmental Quality (DEQ) Regional Office identified the ITD Turkey Island site as a regional priority industrial site due to its close proximity to the Clearwater River, presence of an old railroad grade next to the river, visibility of the site by traffic passing along U.S. Hwy 12, use of the site as a storage facility, and presence of an asphalt strip for paint testing. The site was investigated by the DEQ on May 30, 2013 for potential releases to the airborne, surface water, or ground water pathways from current and historic highway maintenance industry practices. At the time of the site visit, no hazardous or deleterious materials or products 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 reconnaissance level preliminary assessment was conducted to determine if any potential sources or associated releases could be identified due to current and historical highway maintenance industry practices. No concerns were identified during desktop research. Observations during the site inspection include:

- Pit rock and gravel piles are located on the site. Concrete barriers known as Eco blocks are also stored at the site.
- The site has an asphalt strip for paint testing. Paint is contained on the asphalt.
- Hazardous or deleterious materials were not present at the site.
- No evidence for releases or potential releases that would impact the airborne, surface water or ground water pathways.
- The site is well vegetated and the vegetation appears healthy.
- There was an abundance of birds and evidence of aquatic activity.

## 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.

**If the answer is “no” to any of questions 1, 2, or 3, proceed directly to task 3.**

	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:

No hazardous or deleterious materials or products were evident during the site visit; therefore, there are no identified releases or potentials for release. Potential risks to human or ecological receptors are negligible.

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.**

<b>Suspected/Documented Site Conditions</b>	<b>EPA-Recommended Site Assessment Activities</b>
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:**

Dana Swiff for Dennis Behler  
Dennis Behler

1/23/2014  
Date

**Please explain the rationale for your decision:**

As a result of DEQ’s research and site observations, a NRAP designation is recommended for the ITD Turkey Island site. Desktop research and site inspection observations confirm that there

are no current releases or evidence of past releases of hazardous or deleterious materials by airborne, surface water, or ground water pathways. The site is located approximately one mile from the closest downstream occupied dwelling. Additional information supporting this designation is included in the following sections.

## Section 2. Historical and Geologic Information

Desktop research was conducted prior to visiting the site. DEQ cannot improve or expand upon these reports; therefore, the information is included as direct quotations.

**History:** The following historical information describes the area surrounding the Turkey Island site (Sabota, 2001):

The Clearwater River flows through forested mountains and grasslands in north-central Idaho before entering the Snake River at the Idaho—Washington border. Fault uplift, basalt lava flows, and glacial floods shaped the basin eons ago. As a result, flora and fauna of basin are diverse (USGS, 1964). The river was and still is the major population center of the Nez Perce. The present-day Nez Perce Reservation and the Nez Perce National Historical Park located in the basin. The Lewis and Clark expedition of 1805-1806 was the first European account of the river basin. Other early European explorers and fur traders used the Clearwater as a passageway to and from the Pacific Northwest. The first missionary, farm, and sawmill in Idaho were established on the Clearwater in the 1830's and 1840's.

Gold was discovered on tributaries of the Clearwater River in 1860, and the region experienced a massive influx of immigrants. The latter half of the 19<sup>th</sup> and early 20<sup>th</sup> century saw agriculture and timber production become the major sources of income to the basin. Several dams were constructed on the river and its tributaries in the 20<sup>th</sup> century for hydroelectric production and flood control.

**Geologic Features:** The following (Sabota, 2001) describes the general geology of the area of the Turkey Island site:

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

Turkey Island site observations and photographs were collected during the DEQ site inspection on May 30, 2013. ITD uses the site to store gravel, concrete barriers (Eco blocks), pit rock, and various other highway-related maintenance items (Photos 1-7). ITD also uses a stretch of asphalt on site for testing the spray pattern from the paint trucks (Photo 8). The current conditions at the

site appear to be stable and clean. The site is well vegetated, healthy, and is bordered on the Clearwater River side with an old railroad grade which will act as a settling pond if the area should ever flood (Photos 9-12). Evidence of birds, big game, and aquatic life were observed on the site (Photo 13).



**Photo 1. Pit rock pile on west end of the site.**



**Photo 2. Asphalt pile on west end of the site located well above the high water mark.**



**Photo 3. Gravel piles on the east end of the site.**



**Photo 4. Overview of the site.**



**Photo 5. Clean gravel piles.**



**Photo 6. View of concrete barriers known as Eco blocks.**



**Photo 7. Close-up view of concrete barriers (Eco blocks) stored on-site.**



**Photo 8. View of the stretch of asphalt used for paint testing.**



**Photo 9. Pond on west end of the site.**



**Photo 10. Close-up view of pond and vegetation on the west end of the site.**



**Photo 11. Clearwater River bank along the border of the site.**



**Photo 12. View of the old railroad grade that borders the site along the Clearwater River.**



**Photo 13. Osprey and nest on the site.**

## Section 4. Maps

The Turkey Island site is located 10 miles east of the City of Lewiston and 8.5 miles southwest of the town of Juliaetta, Idaho. Figure 1 is a topographic map and Figure 2 shows the aerial view of the location. Specific site features and location details, identified in the above checklist, are shown on Figure 2. The generalized geology of this area is shown in Figure 3 with a description included in Section 2 of this report.

The Turkey Island site is located on the north bank of the Clearwater River. The 15-mile target distance limit (TDL) follows the Clearwater River and ends in the City of Lewiston at the confluence of the Clearwater and Snake Rivers (Figure 4). In addition to the Clearwater River, other surface water features within a 2-mile radius of the site include riverine wetlands along the Clearwater River, the on-site freshwater pond and freshwater forested/shrub wetlands (Figure 5). Potential ground water pathways include two public drinking water systems and approximately 200 domestic wells located within the 4-mile radius of the site (Figure 4). One of the public drinking water systems, Spaulding Park and Visitor Center (PWS#ID2350028), is located downgradient of the site and serves ~25 people through 2 connections.

No rare or sensitive plant species are documented to exist within the 4-mile radius of the Turkey Island site. Four 'no status' plant species are present (Figure 6):

- Green-band mariposa lily (*Calochortus macrocarpus* var. *maculosus*)
- Idaho hawkbeard (*Crepis bakeri* ssp. *idahoensis*)
- Broad-fruit mariposa (*Calochortus nitidus*)
- Salmon-flower desert-parsley (*Lomatium salmoniflorum*)

Animals within the 4-mile radius of the site include several 'no status' nongame animal species (Figure 6):

- Northern river otter (*Lontra canadensis*)
- Northern pocket gopher (*Thomomys talpoides*)
- American beaver (*Castor canadensis*)
- Prairie rattlesnake (*Crotalus viridis*)
- Bullfrog (*Rana catesbeiana*)
- Racer (*Coluber constrictor*)
- Ringneck snake (*Strix nebulosa*)
- Mountain cottontail (*Sylvilagus nuttallii*)
- Bushy-tailed woodrat (*Neotoma cinerea*)
- Montane vole (*Microtus montanus*)
- Idaho forest snail (*Allogona ptychophora*)
- Long-tailed weasel (*Mustela frenata*)
- Great basin pocket mouse (*Perognathus parvus*)
- Western harvest mouse (*Reithrodontomys megalotis*)
- Sorex (*Sorex*)
- Bobcat (*Lynx rufus*)

The Clearwater basin is host to many species of fish, including habitat for both Sockeye salmon and Chinook salmon. The Idaho Department of Fish and Game (IDFG) has observed the following fish species in the streams within the 4-mile radius of the site (Figure 6):

- Sockeye salmon (Snake River runs) (*Oncorhynchus nerka*)
- Chinook salmon (fall run) (*Oncorhynchus tshawytscha*)
- Chinook salmon (summer run) (*Oncorhynchus tshawytscha*)
- Chinook salmon (spring run) (*Oncorhynchus tshawytscha*)
- Steelhead (*Oncorhynchus mykiss*)



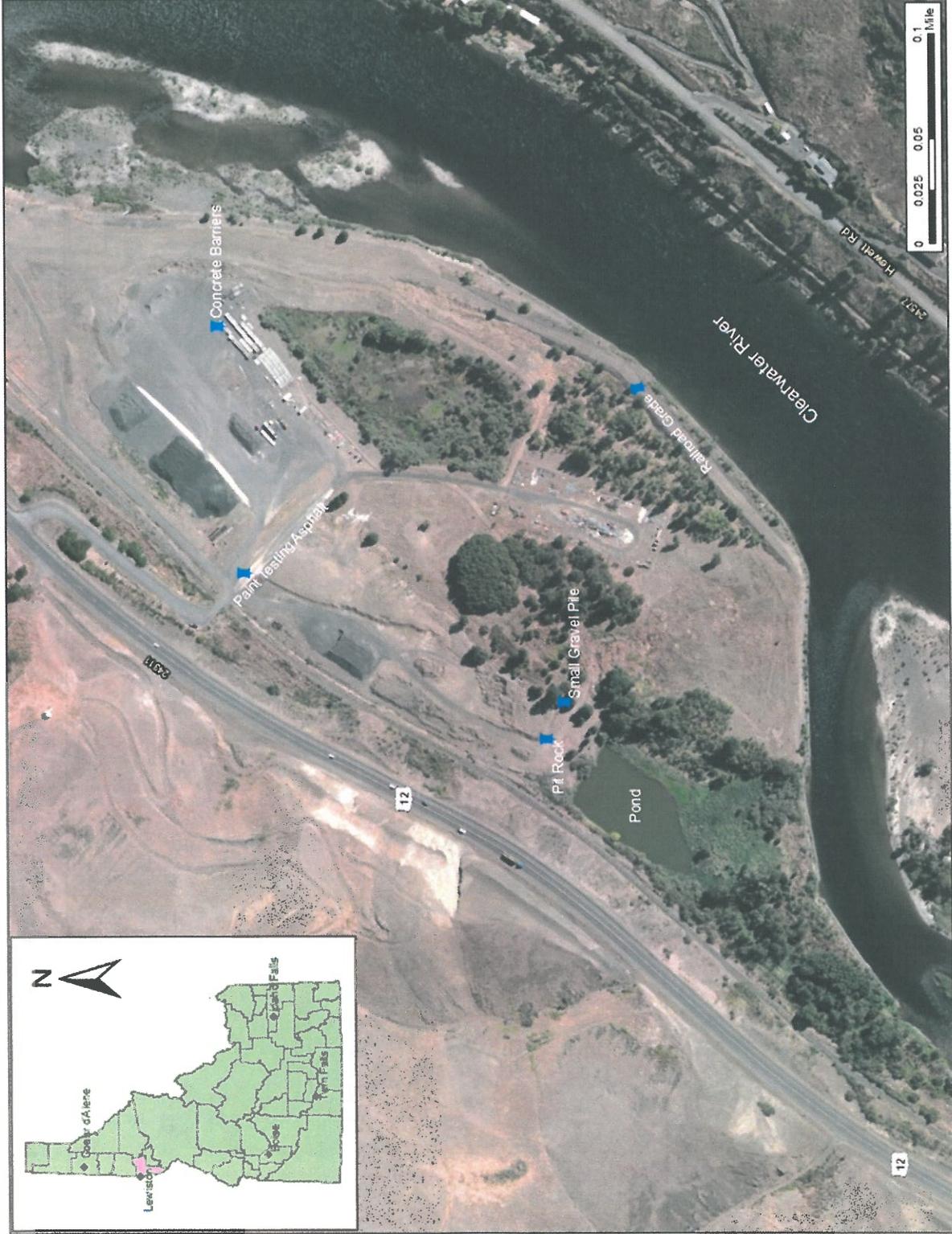


Figure 2. Aerial view of the ITD Turkey Island Site and identified site features.

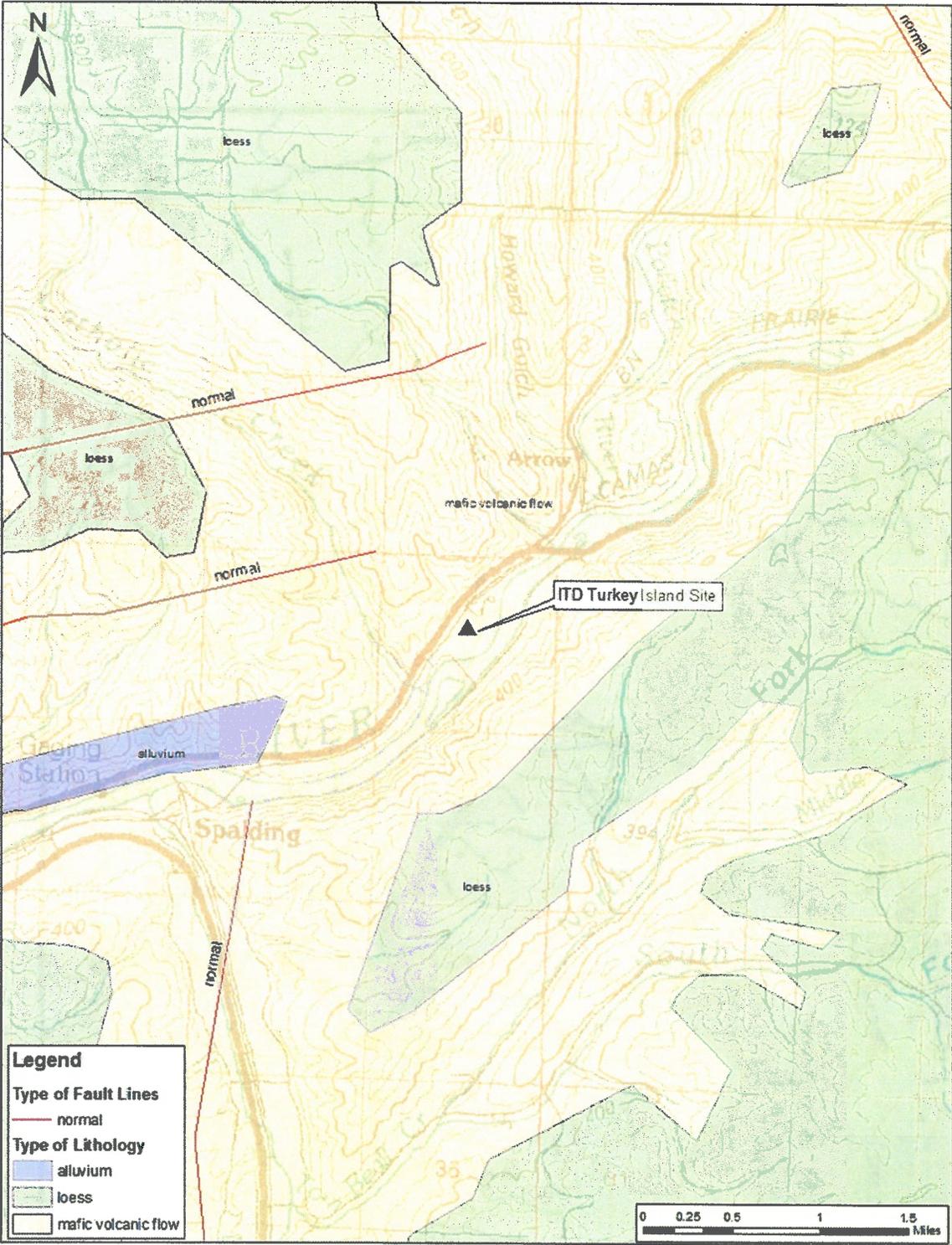


Figure 3. Map of major lithology in the vicinity of the ITD Turkey Island site.

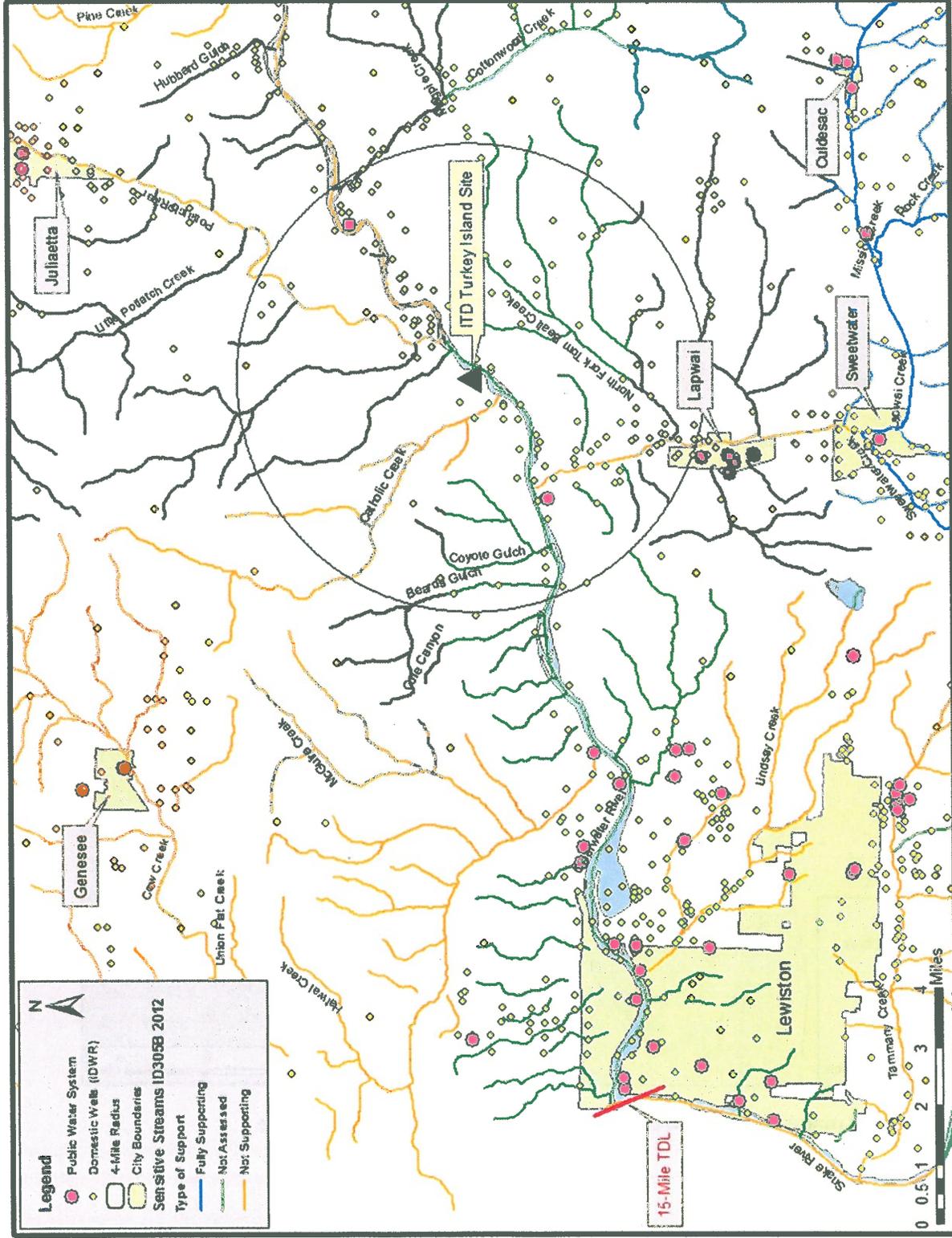


Figure 4. 15-mile target distance limit, domestic wells, and public water system locations.

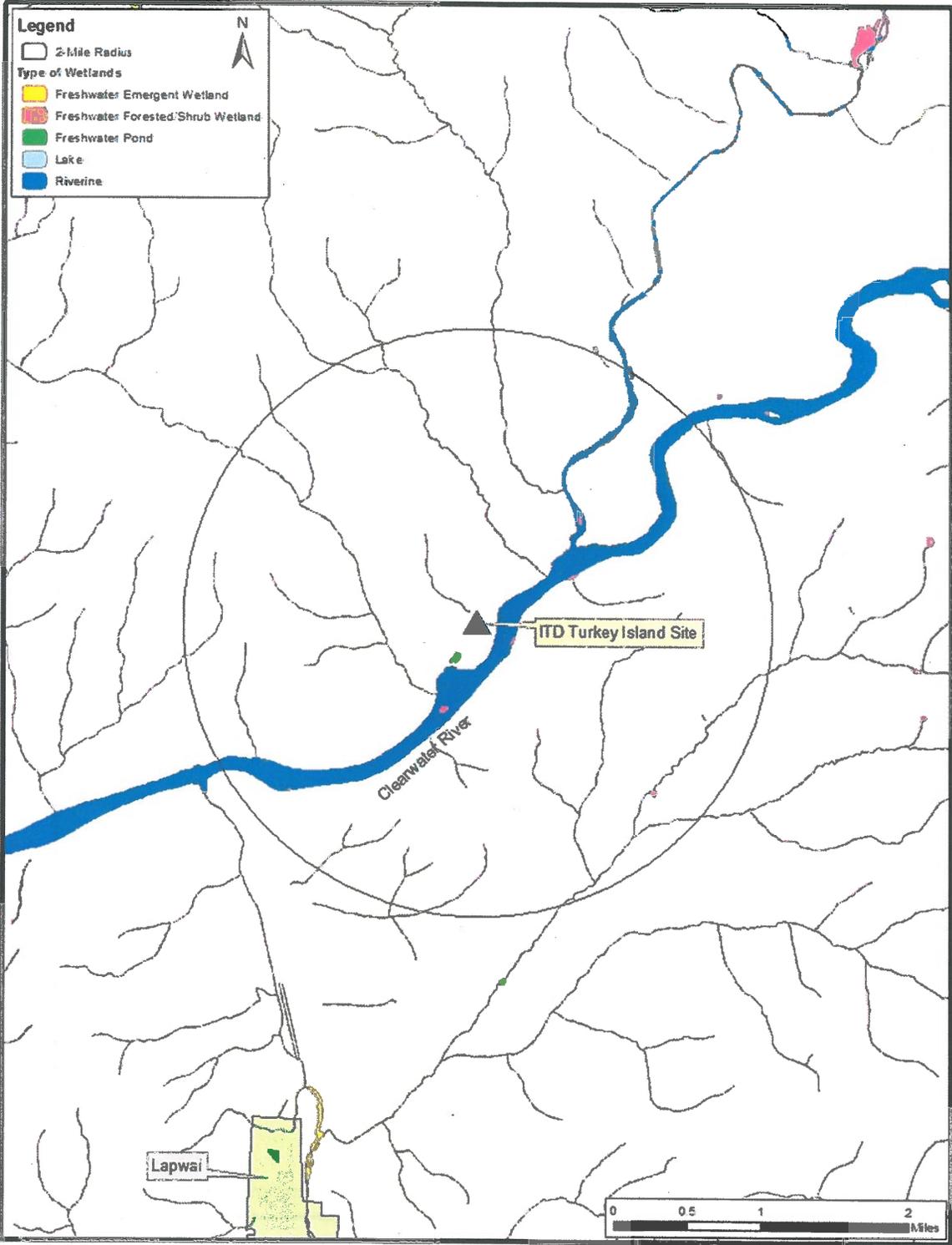


Figure 5. Wetland locations.

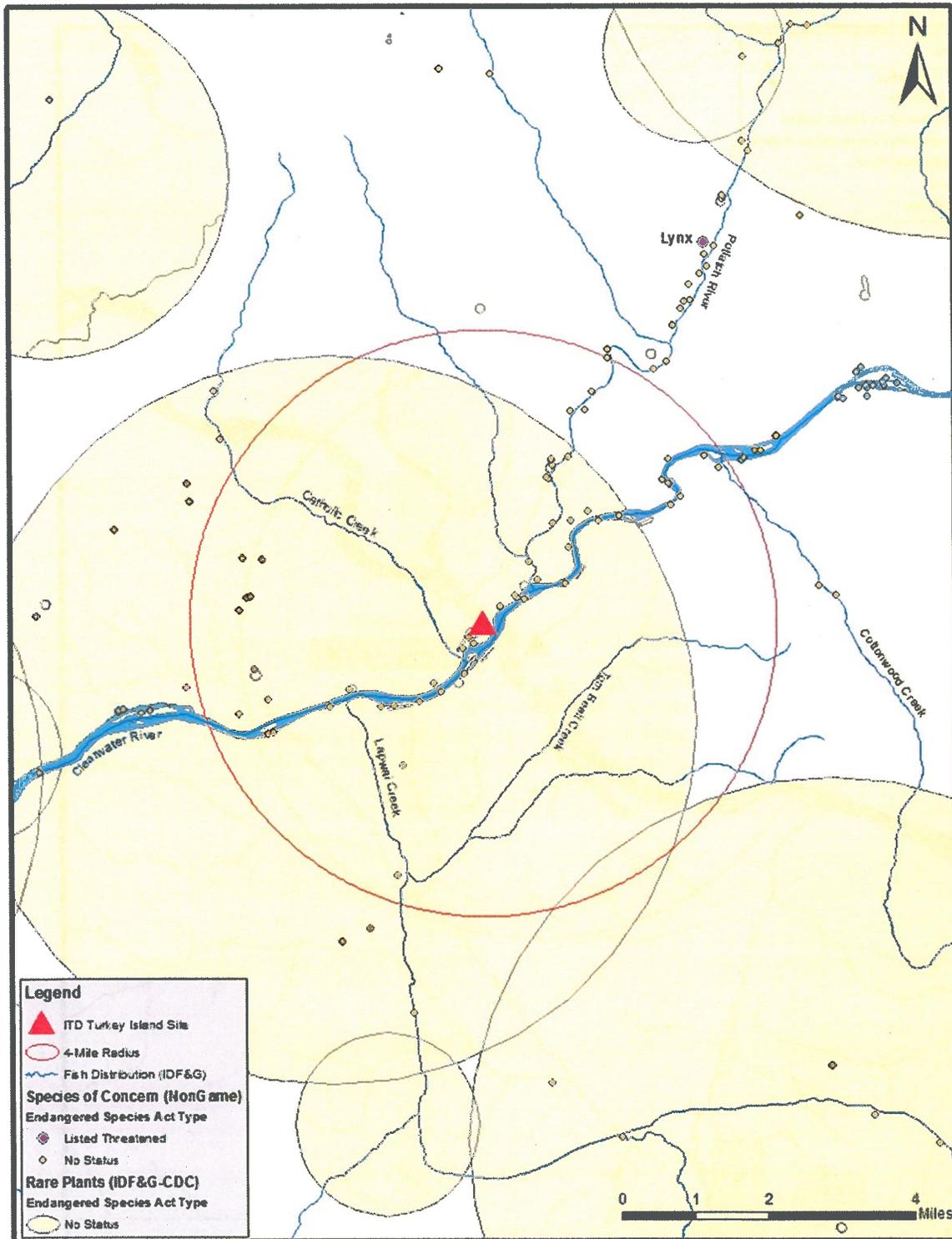


Figure 6. Plant, nongame animal, and fishery species within the 4-mile radius and surrounding area of the ITD Turkey Island site.

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## Section 5. References

DEQ (Idaho Department of Environmental Quality). Source Water Assessments in Idaho.

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EPA (U.S. Environmental Protection Agency). 1999. *Improving Site Assessment: Abbreviated Preliminary Assessments*. Quick Reference Guidance Series. Office of Emergency and Remedial Response Site Assessment Team. EPA-540-F-98-037. OSWER 9375.2-09FS. PB98-963308.

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## GIS Coverages

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