

Abbreviated Preliminary Assessment for Orofino City Landfill

Clearwater County



**State of Idaho
Department of Environmental Quality**

November 2012



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

November 29, 2012

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

Subject: Abbreviated Preliminary Assessment Report for the Orofino Landfill,
Clearwater County, Idaho

Dear Mr. Marcy:

The Orofino Landfill site is owned by the City of Orofino. The Idaho Department of Environmental Quality (DEQ) requested access to the property and received permission from the City administrator. The City of Orofino will receive a copy of this report.

Attached are two copies of DEQ's Abbreviated Preliminary Assessment report for the Orofino Landfill. As discussed in the report, toxicological risks to human and ecological receptors are unlikely at the site.

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. Highway 12 parallels the site. No evidence of livestock or grazing was observed. No sediment, soil, or water samples were taken.

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 pathways of contaminants to receptors and potential exposures to ecological and human receptors do not exist. **DEQ recommends the determination of the Orofino Landfill as No Remedial Action Planned (NRAP).**

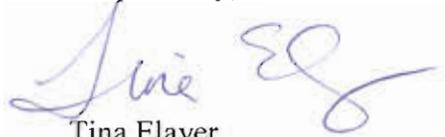
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A link to the Abbreviated Preliminary Assessment for the Orofino Landfill can also be found on DEQ's Preliminary Assessment Web page at:

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

If you have any questions about this site, the report, or DEQ's recommendations, please do not hesitate to call me at (208) 373-0563.

Respectfully,

A handwritten signature in blue ink, appearing to read "Tina Elayer", with a stylized flourish extending to the right.

Tina Elayer
Mine Waste Specialist

attachments

cc: City of Orofino
Orofino Landfill PA File

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Introduction

This is an abbreviated preliminary assessment (APA) for the Orofino City Landfill near Orofino, 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 Orofino City 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:** 9/26/2012
Idaho Department of Environmental Quality
1118 F Street
Lewiston, ID 83501
(208) 799-4370
dennis.behler@deq.idaho.gov

Site Name: Orofino Airport

Previous Names (aka): Orofino City Landfill

Site Owner: City of Orofino

Address: Airport Way
Orofino, ID 83544

Site Location: The Orofino Airport is located on Highway 12 approximately one mile northwest of Orofino along the Clearwater River.
Township 36 North, Range 1 East, Section 1

Latitude: 46.491928°N **Longitude:** -116.261375°W

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

The Orofino City Landfill was investigated by DEQ on August 23, 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. No airborne pathways exist to any residences. The closest residence to the site is downstream approximately 1/4 mile.

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:

The Orofino City 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 discharge from the landfill are unlikely.

During the site assessment, DEQ used references from several different documents, including United States Geological Survey (USGS) maps, county tax rolls, and historical reports. These documents often have different spellings for town sites, and/or geographic features. DEQ has retained the spelling from the original source document.

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 *12/3/2012*

 Dennis Behler Date

Please explain the rationale for your decision:

Very little evidence of the Orofino City Landfill still exists at the Orofino Airport. Pieces of rebar were observed. The Clearwater River bank is lush and green with no evidence of seeps. Riprap on the bank may create a suitable barrier. Macro invertebrates and small fish were observed in the river adjacent to the site as well as an established game trail along the bank. A surface water intake was observed, but it is no longer in use. No evidence or stress to the foliage or game was noticed.

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 Orofino City 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 Orofino City 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.

Site History: The Real Estators, LLC (2007) described the Orofino area as follows:

C. C. Fuller and his company, the Clearwater Improvement Co., plotted a portion of his homestead, creating the town of Orofino in 1898. This land was originally part of the Nez Perce Indian Reservation that was opened to homesteading in 1895. Settlement of the town started in earnest in 1899 when the railroad was built to the town, bringing settlers.

The present town is the second one to bear the name Orofino. The first settlement, Oro Fino City, located two miles south of Pierce, was created during the gold rush of 1861. The town succumbed to fire and the land was dredged thirty years before the settlement of the current town. The name, originally spelled Oro Fino, means "fine gold" in Spanish. The spelling of Orofino was adopted when the post office objected to two word names.

The village was incorporated in 1905 with a population of 207 people. Half of those were under the age of 18. At the beginning, Orofino was located in Shoshone County. Later, it became part of Nez Perce County when the south end of Shoshone County was annexed. In 1911, Clearwater County was created with Orofino as the county seat.

Orofino suffered another fire in 1906 with the lower town from Canada Hill to the Orofino Creek burning. The State Hospital started construction in 1905 with much of the labor being completed by patients brought from the hospital at Blackfoot.

The town experienced fairly rapid growth in the early 1900's. A new school was erected around 1910. This school still stands as the base of the middle school.

Orofino served as the hub for the largely agricultural area. The timber industry also played a part in the economy, although it was mainly composed of temporary sawmills. When the railroad completed a spur

line from Orofino to Headquarters, located north of Pierce, the logging industry became a major employer of the area.

The Orofino Landfill (currently the Orofino Airport) is located on the west side of the river approximately 1-1/4 miles down gradient from the city was operated during the time described above and closed in the mid-1970s. The landfill was located next to a small airport that was activated in 1940. Sometime after the landfill was closed, it was covered and very little evidence of landfill activity remains. A common practice during the time the landfill was in use was to burn the landfill several times a year to get rid of the garbage and let high water from the Clearwater River clean out what was left.

Geologic Features: The following is the description of the Orofino area from Kauffman, et.al. (2009):

GeoLava flows of the Miocene Columbia River Basalt Group cover much of the area. In the Eagle Creek drainage, the basalt sequence exceeds 1,130 m (3,700 feet) in thickness. These

Fissure-erupted lavas invaded the area and inundated the paleotopography, leaving a few prominences above the plateau surface. Older rocks are exposed on the steptoes or in canyons where streams have eroded through the basalt. Interbedded with some basalt flows are sediments of the Latah Formation. In the older basalt formations, the interbeds are predominantly near the plateau margin where dammed drainages overflowed the basalt surface and deposited sediments before the next flow was emplaced. Near the top of the basalt sequence, where individual flows are separated by longer periods of time, interbedded sediments are mostly restricted to structural depressions, such as the Lewiston basin. Quaternary sediments and surficial deposits are shown where they are significant geological units or mask the underlying rock. These units include alluvium, alluvial fan deposits, loess, landslide deposits, and Bonneville and Missoula Flood deposits.

Section 3. Site Conditions and Photographs

All of the Orofino City Landfill photographs in this section were taken by DEQ on August 23, 2012.

Photo 1 shows the Orofino Airport (formerly the Orofino City Landfill). Other than some rebar observed by DEQ, very few remnants of a landfill were visible on the surface.



Photo 1. Orofino Airport (formerly Orofino City Landfill).

Photo 2 shows the Clearwater River bank is lush and green with no signs of stress. Asphalt pieces were observed, but it was hard to tell where they came from as there are other industrial sites up gradient.



Photo 2. Clearwater River bank.

Photo 3 shows the riprap base along the Clearwater River which may create a suitable barrier between potential landfill remnants and the river. Aquatic life was observed in the river including macro invertebrates and small fish.



Photo 3. Clearwater River bank rip rap base.

Photo 4 shows a surface water intake that is no longer in use near the former Orofino City Landfill.



Photo 4. Surface water intake that is no longer used.

Photo 5 shows the healthy vegetation and well established game trails between the former Orofino City Landfill and the Clearwater River.



Photo 5. Healthy vegetation along the Clearwater River.

Photo 6 is a view from the east end of the former Orofino City Landfill and shows a healthy lush greenbelt between the Clearwater River and the current Orofino Airport.



Photo 6. East end of former Orofino City Landfill.

Section 4. Maps



Figure 1. Location of the Orofino City Landfill in Clearwater County, Idaho.

(Source: USGS 100K quads)

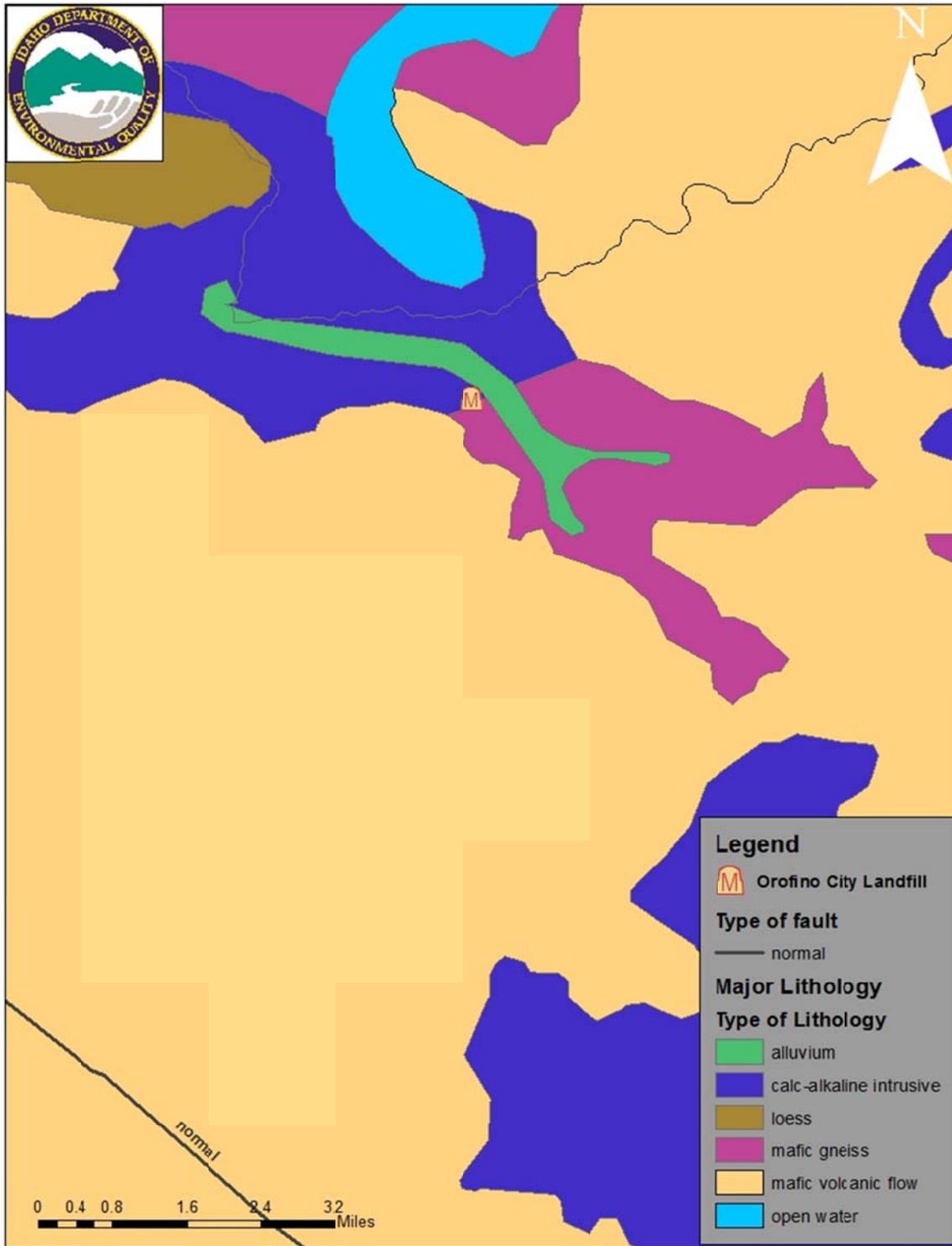


Figure 2. Map of major lithology in the vicinity of the Orofino City Landfill.

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

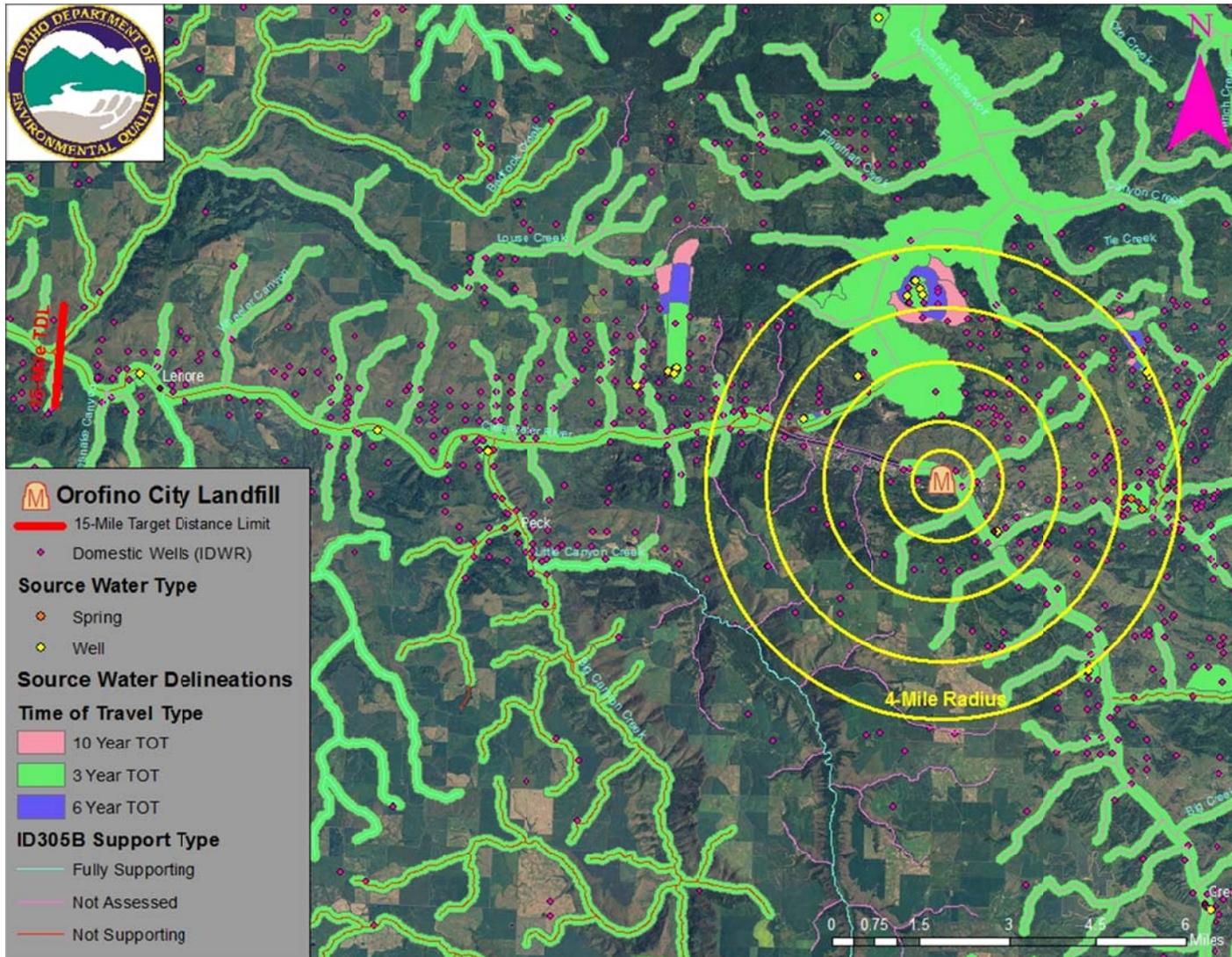


Figure 3. Domestic well locations.

There are approximately 10 domestic well locations and 9 public water systems within the 4-mile radius. Eighteen domestic wells and 3 public water systems are located in close proximity to the Clearwater River 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 Orofino City Landfill are also shown (indicated as “not supporting”).

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

Section 5. References

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

Kauffman, J.D., D.L. Garwood, K.L. Schmidt, R.S. Lewis. 2009. Geologic Map of the Idaho Parts of the Orofino and Clarkston 30 x 60 Minute Quadrangles, Idaho. Moscow, ID: Idaho Geological Survey, Geologic Map 48.

The Real Estaters, LLC. 2007. *Web site* available at:
http://idahorealestaters.com/orofino_history.htm

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.