



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

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

C.L. "Butch" Otter, Governor  
Toni Hardesty, Director

January 4, 2008

Ron Lake  
5570 Apsley Avenue  
Boise, Idaho 83709

RE: Preliminary Site Assessment of the Cleveland Patented Mining Claim

Dear Mr. Lake:

The Idaho Department of Environmental Quality (IDEQ) has completed a review of historical mining data and geological information, and completed a site visit to the east half of the Cleveland patented mining claim. During the site visit, former mining sites were evaluated and photographs were collected for documentation in a Preliminary Assessment (PA).

PAs are conducted according to the federal Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA). The reasons to complete a PA include:

- 1) To identify those sites which are not eligible for CERCLIS because they do not pose a threat to public health or the environment (No Remedial Action Planned (NRAP));
- 2) To determine if there is a need for removal actions or other programmatic management of sites;
- 3) To determine if a Site Investigation, which is a more detailed site characterization, is needed; and/or
- 4) To gather data to facilitate later evaluation of the release through the Hazard Ranking System (HRS)

IDEQ has completed PAs under contract with the U.S. Environmental Protection Agency in order to identify risks to human health and the environment, and make recommendations to land owners regarding how risks might be managed, if necessary.

No samples were collected during the site visit because no open adits or evidence of potential soil contamination were observed. There was no evidence of acid mine drainage or impacted surface waters. One small waste dump was observed down the hill on the northern portion of the property towards Lager Beer Gulch creek; however, the exact property boundaries were not clear in this area. The subject property consists of undeveloped land covered with trees and shrubs. There is one small summer cabin in a clearing in a flat spot on top of the hill. The site has a gated entrance off an unimproved Forest Service road. Based on existing conditions and uses of the properties, no potential risks to human health and the environment were identified.

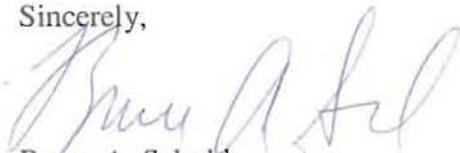
Subsequent to our analysis IDEQ has determined that No Remedial Action is Planned (NRAP) for this property.

However, if you discover mine or mill tailings during development of the site, you may want to conduct additional site and risk assessment work. This may suggest that your future development plans should incorporate risk management provisions for residential home sites, and to protect worker health and safety from potential risks associated with heavy metals which may be present. IDEQ did not note any dangerous openings or other physical hazards which should be managed or closed.

Attached is the Abbreviated Preliminary Assessment Checklist for the property which summarizes how IDEQ came to its NRAP recommendation for the property. Photos of the subject area are also attached. Maps showing the property parcel, area geology, nearby ground water wells, nearby threatened and endangered species, nearby surface water bodies and wetlands are attached. Several quartz gold prospects existed in this area, however, limited historical information on the former mine sites was found. The adjacent Cloverleaf mine had a stamp mill that operated up until the late 1930's. The President Cleveland Consolidated mine land patent was issued in 1904, and was predominantly worked during the late 1800s. The workings of the Cleveland mine are located on the west half of the parcel on land that appears to be currently owned by Interex Minerals of Canada. Excerpts from A. Anderson's "Geology and Ore Deposits of Boise Basin, Idaho," 1947 USGS report are also included.

IDEQ very much appreciates your cooperation and approval for our access, and looks forward to addressing any questions you may have regarding our findings. Please call me if you have any comments, questions, or if I may be of any other assistance. We very much appreciate any feedback you can give us relative to our services.

Sincerely,



Bruce A. Schuld  
Mine Waste Projects Coordinator  
Waste Management and Remediation Division

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#### Attachments

cc: Ken Marcie – U.S. Environmental Protection Agency (2)  
USDA Forest Service, Boise National Forest  
file



Looking west over the east half of the Cleveland mine patented land in the left-hand portion of the picture. Lager Beer Gulch creek is in the valley in the middle of the picture.



View of possible exploration cut and thick vegetation on north-facing slope of the Cleveland mine patented land

## ABBREVIATED PRELIMINARY ASSESSMENT CHECKLIST

This checklist can be used to help the site investigator determine if an Abbreviated Preliminary Assessment (APA) is warranted. This checklist should document the rationale for the decision on whether further steps in the site investigation process are required under CERCLA. Use additional sheets, if necessary.

**Checklist Preparer:** Pete Johansen Idaho DEQ 12/20/07  
(Name/Title) (Date)  
1410 N. Hilton, Boise, ID 83706 (208)373-0230  
(Address) (Phone)  
www.deq.idaho.gov  
(E-Mail Address)

**Site Name:** Cleveland mine (east half)

**Previous Names (if any):** \_\_\_\_\_

**Site Location:** Approx. 5 miles NE of Idaho City,  
(Street)  
T 6N, R 6E, Sec 6  
(City) (ST) (Zip)

**Latitude:** N 43° 53' 28" **Longitude:** W 115° 47' 31"

**Describe the release (or potential release) and its probable nature:** This site was investigated for potential releases of heavy metals and sediment from mine waste dumps, and potential discharges of other deleterious materials, such as petroleum products and ore processing chemicals.

### Part 1 - Superfund Eligibility Evaluation

If all answers are "no" go on to Part 2, otherwise proceed to Part 3.

	YES	NO
1. Is the site currently in CERCLIS or an "alias" of another site?		x
2. Is the site being addressed by some other remedial program (Federal, State, or Tribal)?		x
3. Are the hazardous substances potentially released at 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 NRC, UMTRCA, or OSHA)?		x
4. Are the hazardous substances potentially released at the site excluded by policy considerations (i.e., deferred to RCRA corrective action)?		x
5. Is there sufficient documentation to demonstrate that no potential for a release that could cause adverse environmental or human health impacts exists (e.g., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, documentation showing that no hazardous substance releases have occurred, or an EPA approved risk assessment completed)?	x	

**Please explain all "yes" answer(s).** \_\_\_\_\_

Historical records research and site visit confirmed that contaminants of concern do not exist in concentrations that present a threat to human health or the environment.



## EXHIBIT 1 SITE ASSESSMENT DECISION GUIDELINES FOR A SITE

Exhibit 1 identifies different types of site information and provides some possible recommendations for further site assessment activities based on that information. You will use Exhibit 1 in determining the need for further action at the site, based on the answers to the questions in Part 2. Please use your professional judgement when evaluating a site. Your judgement may be different from the general recommendations for a site given below.

Suspected/Documented Site Conditions		APA	Full PA	PA/SI	SI
1. There are no releases or potential to release.		<u>Yes</u>	No	No	No
2. No uncontained sources with CERCLA-eligible substances are present on site.		<u>Yes</u>	No	No	No
3. There are no on-site, adjacent, or nearby targets.		Yes	<u>No</u>	No	No
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.	Option 1: APA SI	Yes	<u>No</u>	No	Yes
	Option 2: PA/SI	No	No	Yes	NA
5. There is an apparent release at the site with no documentation of targets, but there are targets on site or immediately adjacent to the site.	Option 1: APA SI	Yes	No	No	Yes
	Option 2: PA/SI	<u>No</u>	No	Yes	NA
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.		<u>No</u>	Yes	No	No
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.		<u>No</u>	Yes	No	No

### Part 3 - EPA Site Assessment Decision

When completing Part 3, use Part 2 and Exhibit 1 to select the appropriate decision. For example, if the answer to question 1 in Part 2 was "no," then an APA may be performed and the "NFRAP" box below should be checked. Additionally, if the answer to question 4 in Part 2 is "yes," then you have two options (as indicated in Exhibit 1): Option 1 --conduct an APA and check the "Lower Priority SI" or "Higher Priority SI" box below; or Option 2 -- proceed with a combined PA/SI assessment.

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

<input checked="" type="checkbox"/>	NFRAP	Refer to Removal Program - further site assessment needed
<input type="checkbox"/>	Higher Priority SI	Refer to Removal Program - NFRAP
<input type="checkbox"/>	Lower Priority SI	Site is being addressed as part of another CERCLIS site
<input type="checkbox"/>	Defer to RCRA Subtitle C	Other: _____
<input type="checkbox"/>	Defer to NRC	

Regional EPA Reviewer: \_\_\_\_\_

Print Name/Signature

Date

**PLEASE EXPLAIN THE RATIONALE FOR YOUR DECISION:** \_\_\_\_\_

Subject area consists of unpopulated shrubland with forested hillsides. No impacts to surface water were observed. No evidence of significant historic mining activities was observed on this site, as most of the mining activity appears to have occurred on the adjacent property to the west and at the Cloverleaf mine to the north. No potential releases or threats to human health and the environment were observed.

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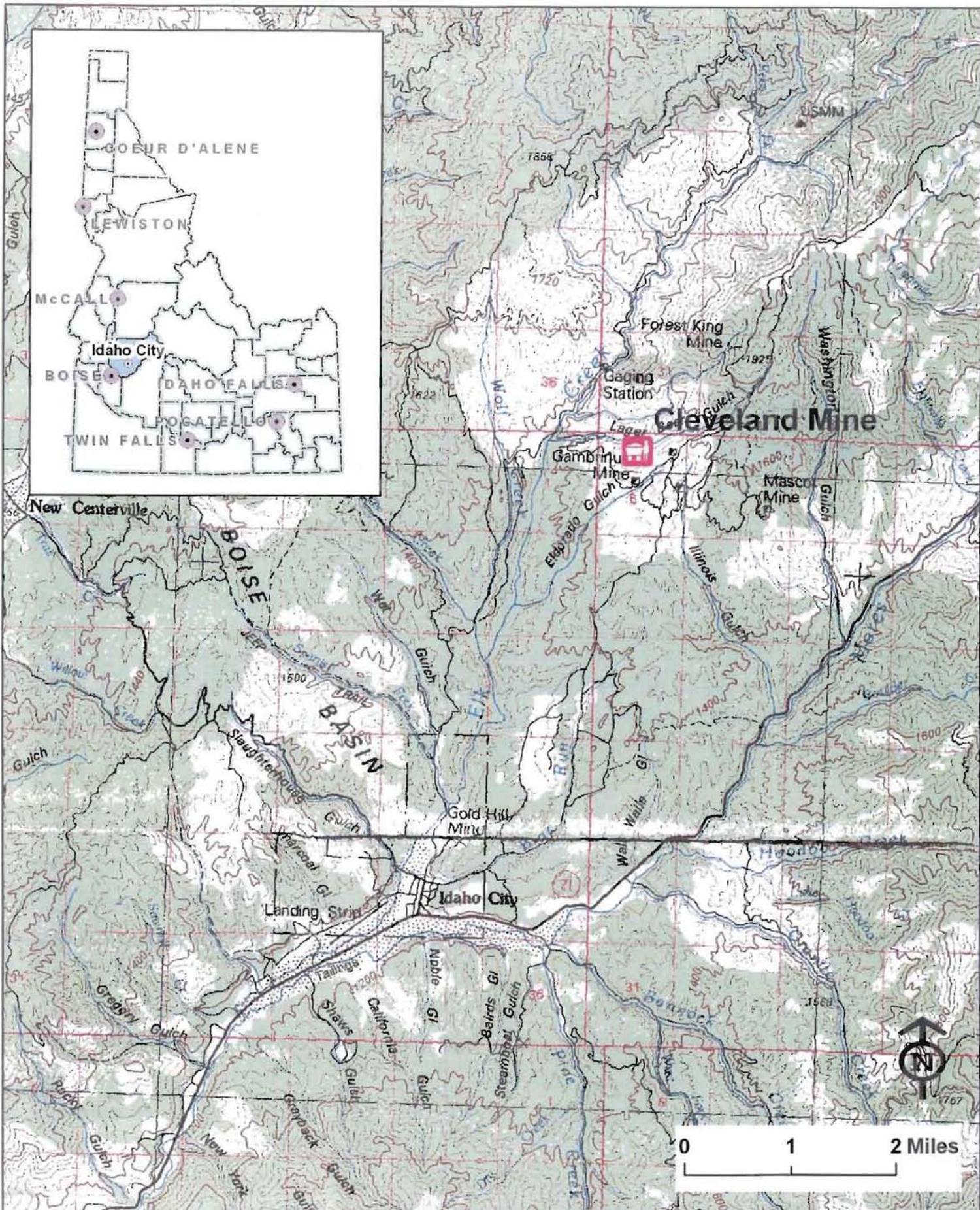
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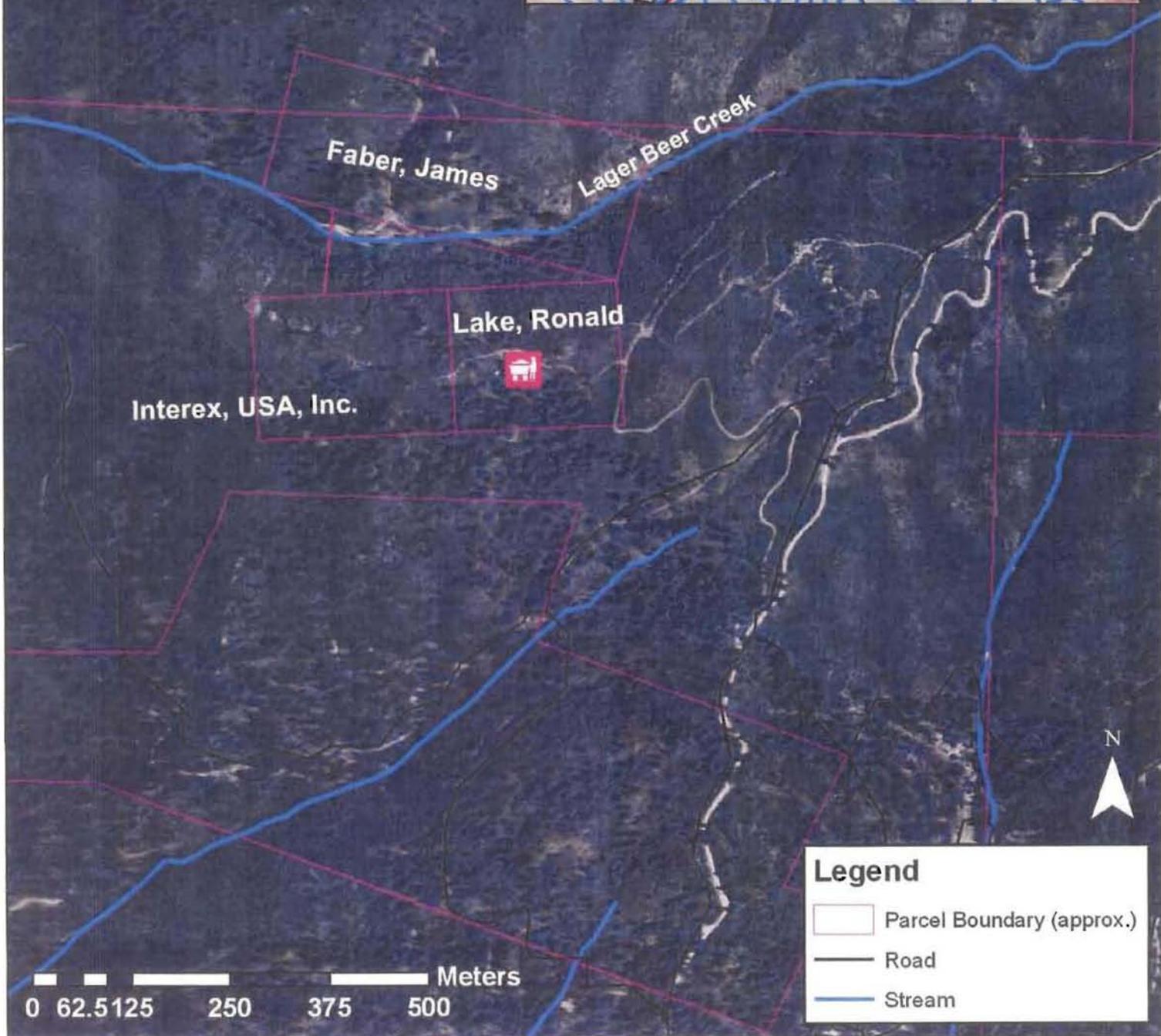
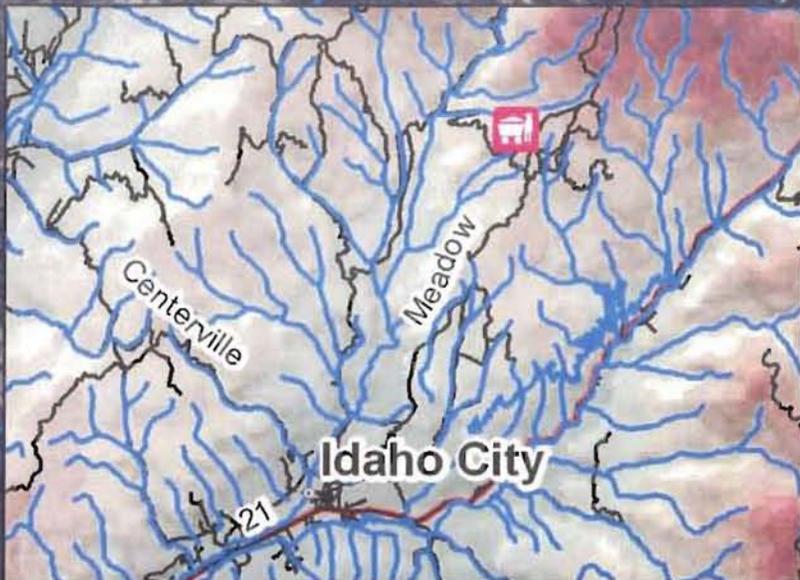
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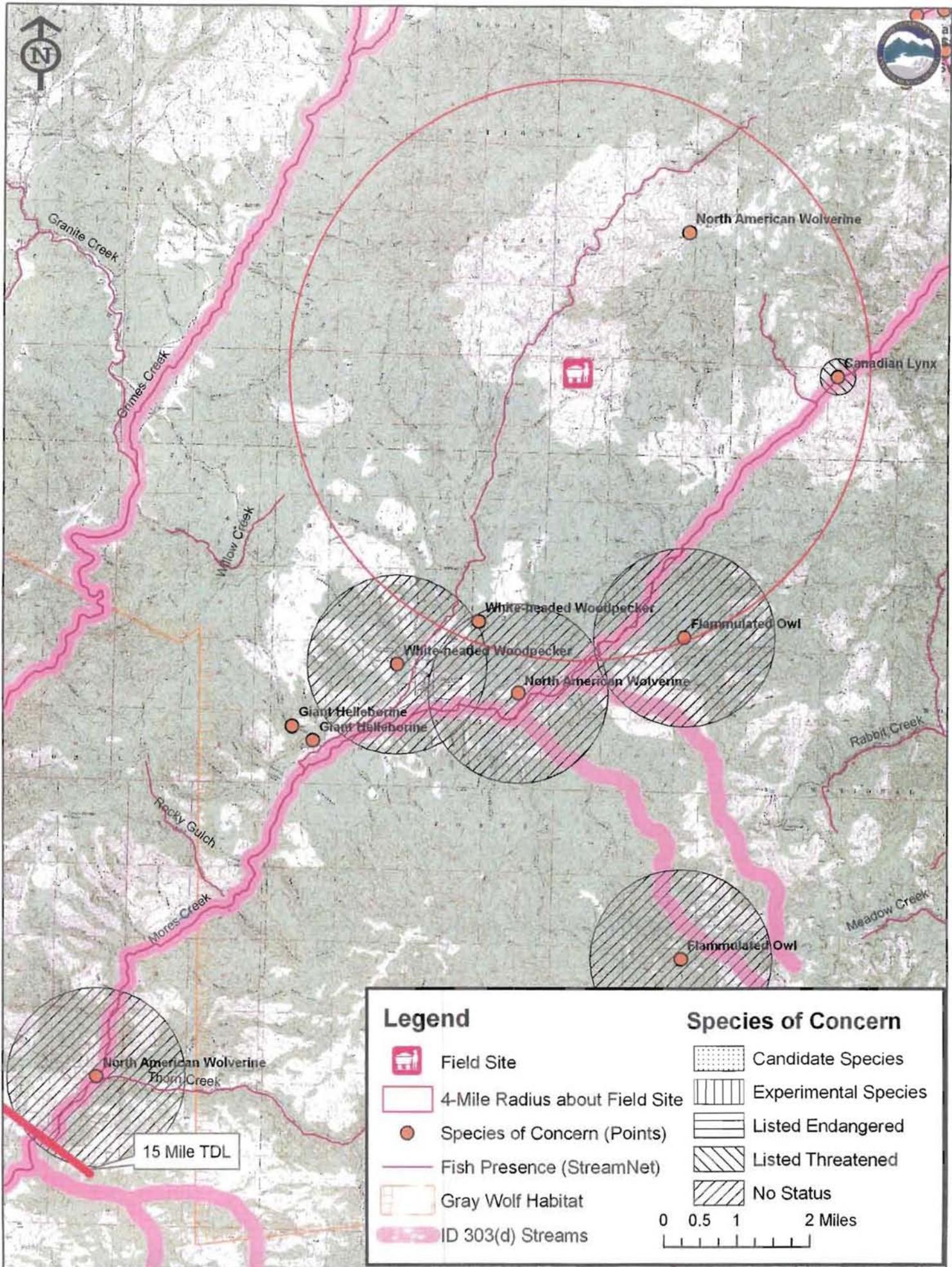
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**NOTES:**







Granite Creek

Crimes Creek

Willow Creek

Rocky Gulch

Mores Creek

Boon Creek

North American Wolverine

Canadian Lynx

White-headed Woodpecker

Flammulated Owl

White-headed Woodpecker

North American Wolverine

Giant Hellebore

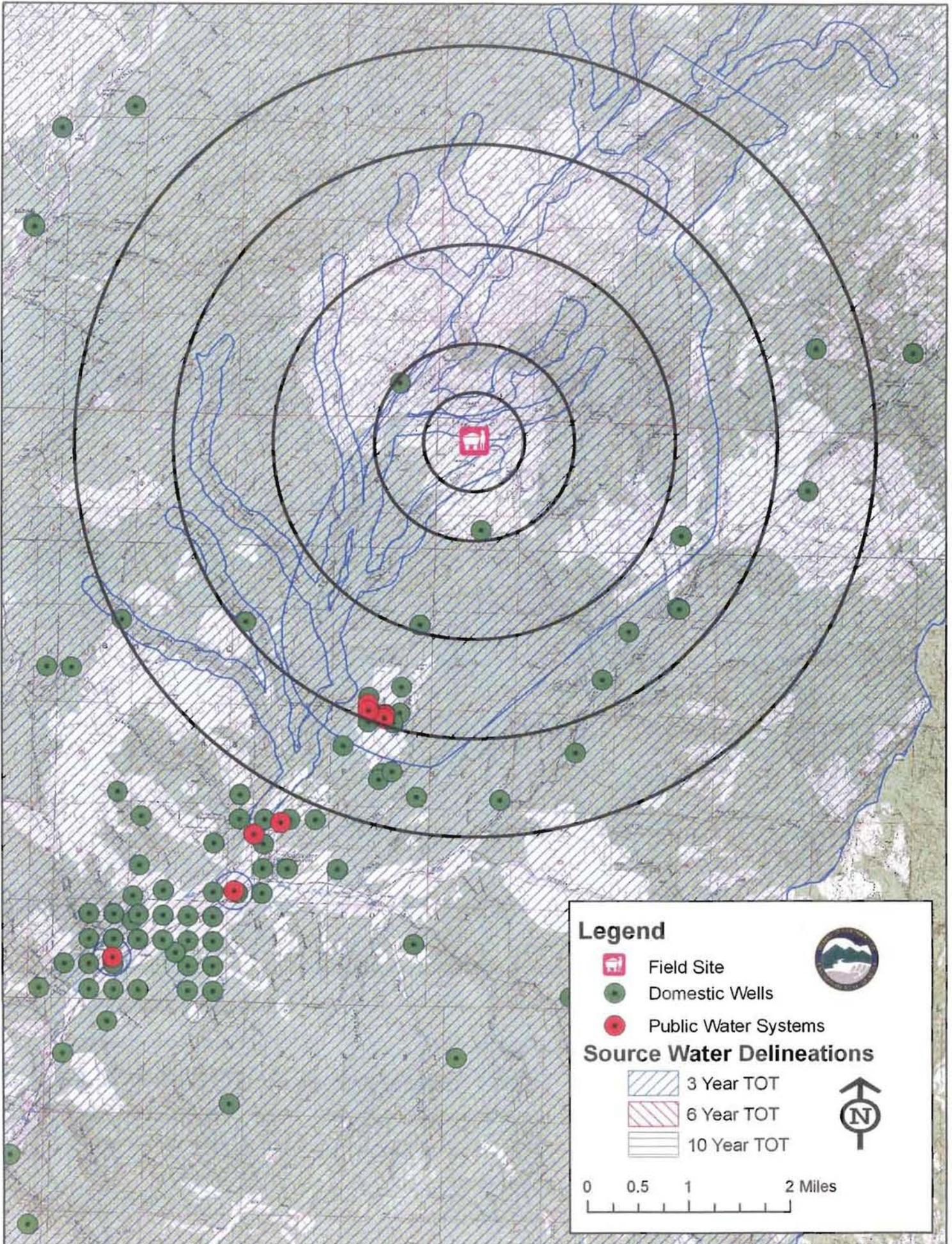
Giant Hellebore

Rabbit Creek

Meadow Creek

Flammulated Owl

15 Mile TDL



**Legend**

-  Field Site
-  Domestic Wells
-  Public Water Systems



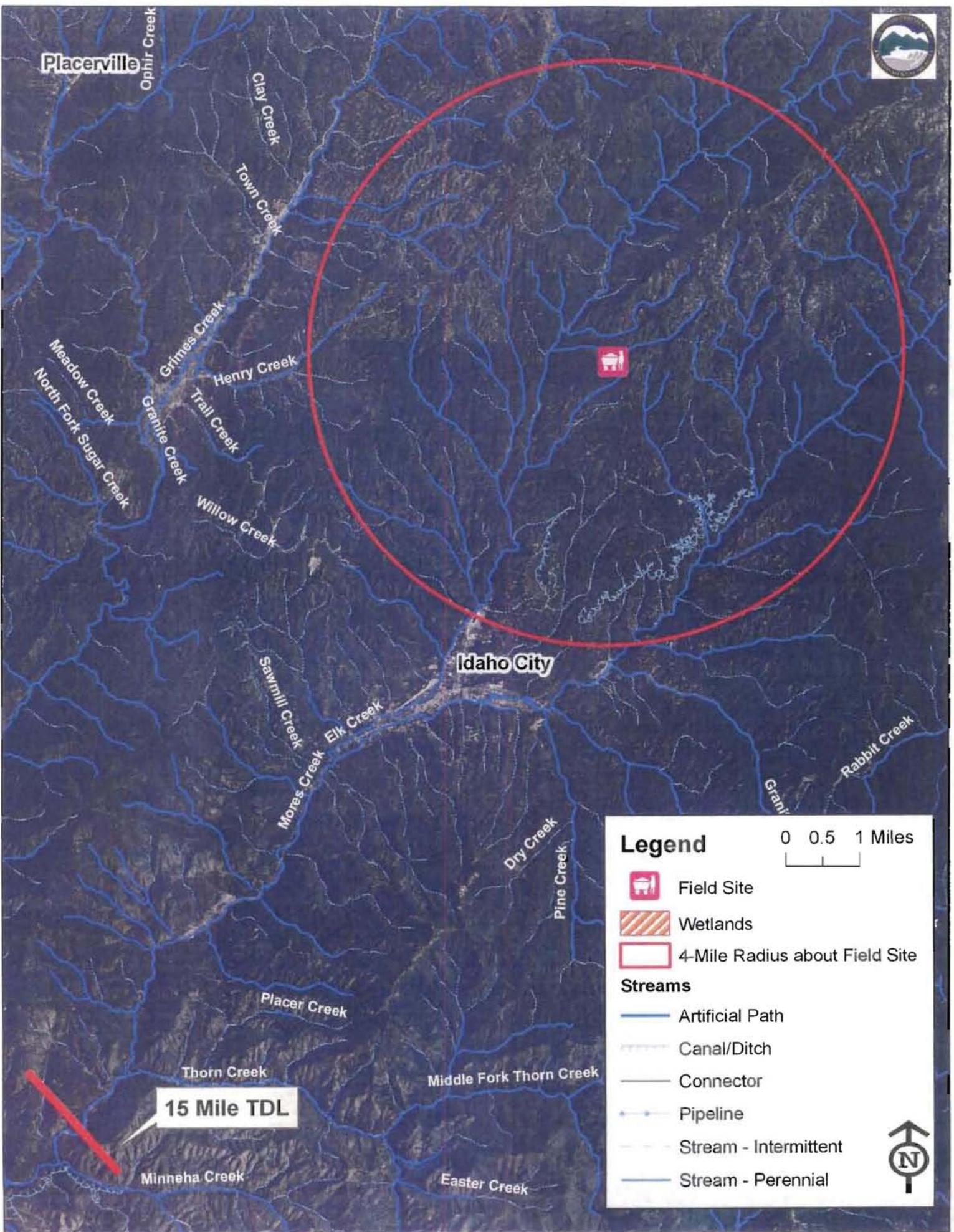
**Source Water Delineations**

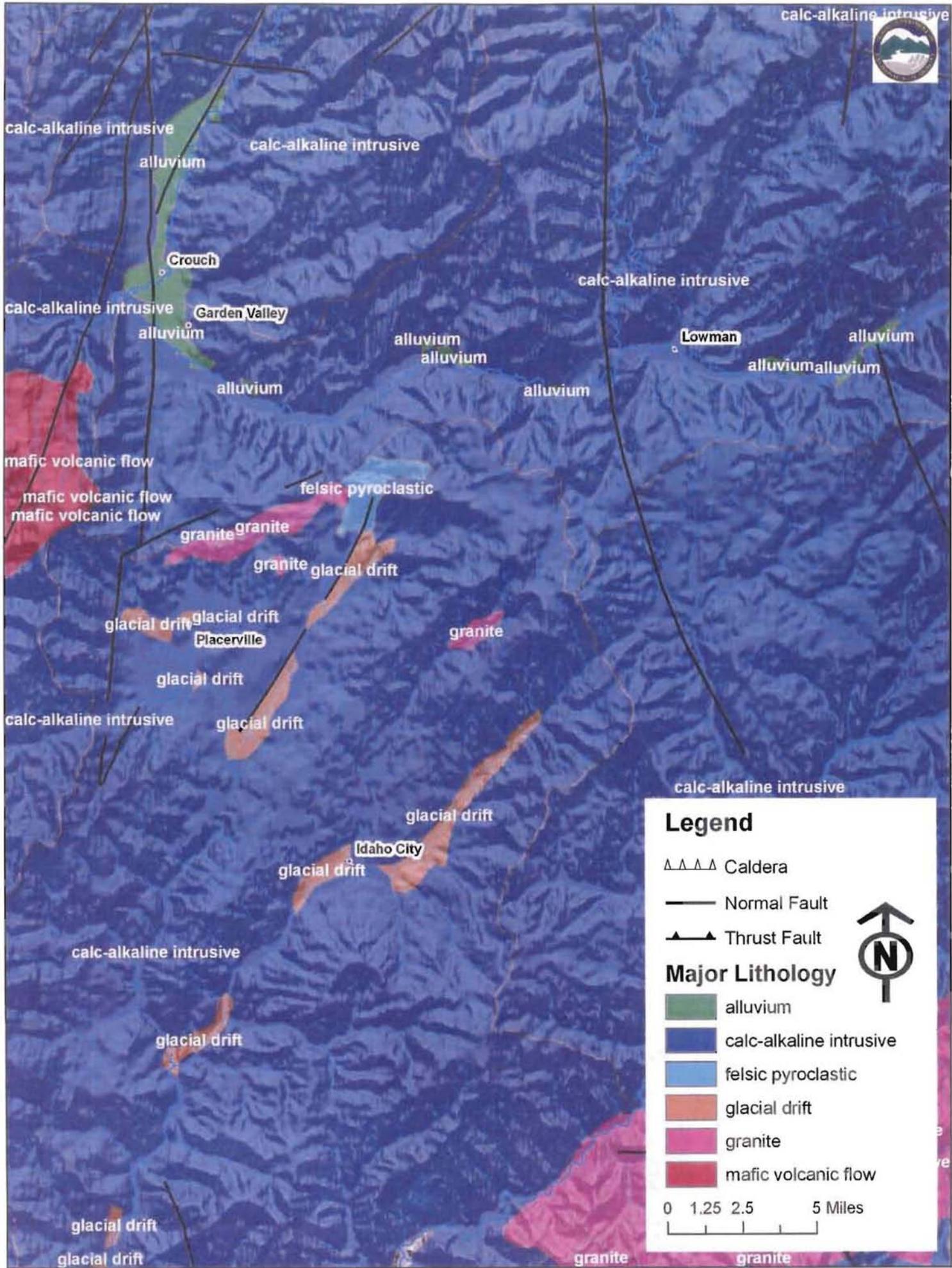
-  3 Year TOT
-  6 Year TOT
-  10 Year TOT



0 0.5 1 2 Miles







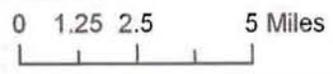
### Legend

- △△△△ Caldera
- Normal Fault
- ▲ Thrust Fault



### Major Lithology

- alluvium
- calc-alkaline intrusive
- felsic pyroclastic
- glacial drift
- granite
- mafic volcanic flow



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**UNITED STATES DEPARTMENT OF THE INTERIOR**

**GEOLOGY AND ORE DEPOSITS  
OF  
BOISE BASIN, IDAHO**

Prepared in cooperation with the  
**IDAHO BUREAU OF MINES AND GEOLOGY**

**GEOLOGICAL SURVEY BULLETIN 944-C**

of auriferous pyrite. The young-stage quartz occurs largely with a breccia of the earlier quartz. Some of the richest ore was reported mined where the second-stage quartz had been fractured and cemented by the third-stage quartz, the sulfides having been effective precipitants of the gold carried in by the youngest ore solutions. The country rock is but slightly sericitized along the lode but in places is slightly impregnated with a little disseminated pyrite.

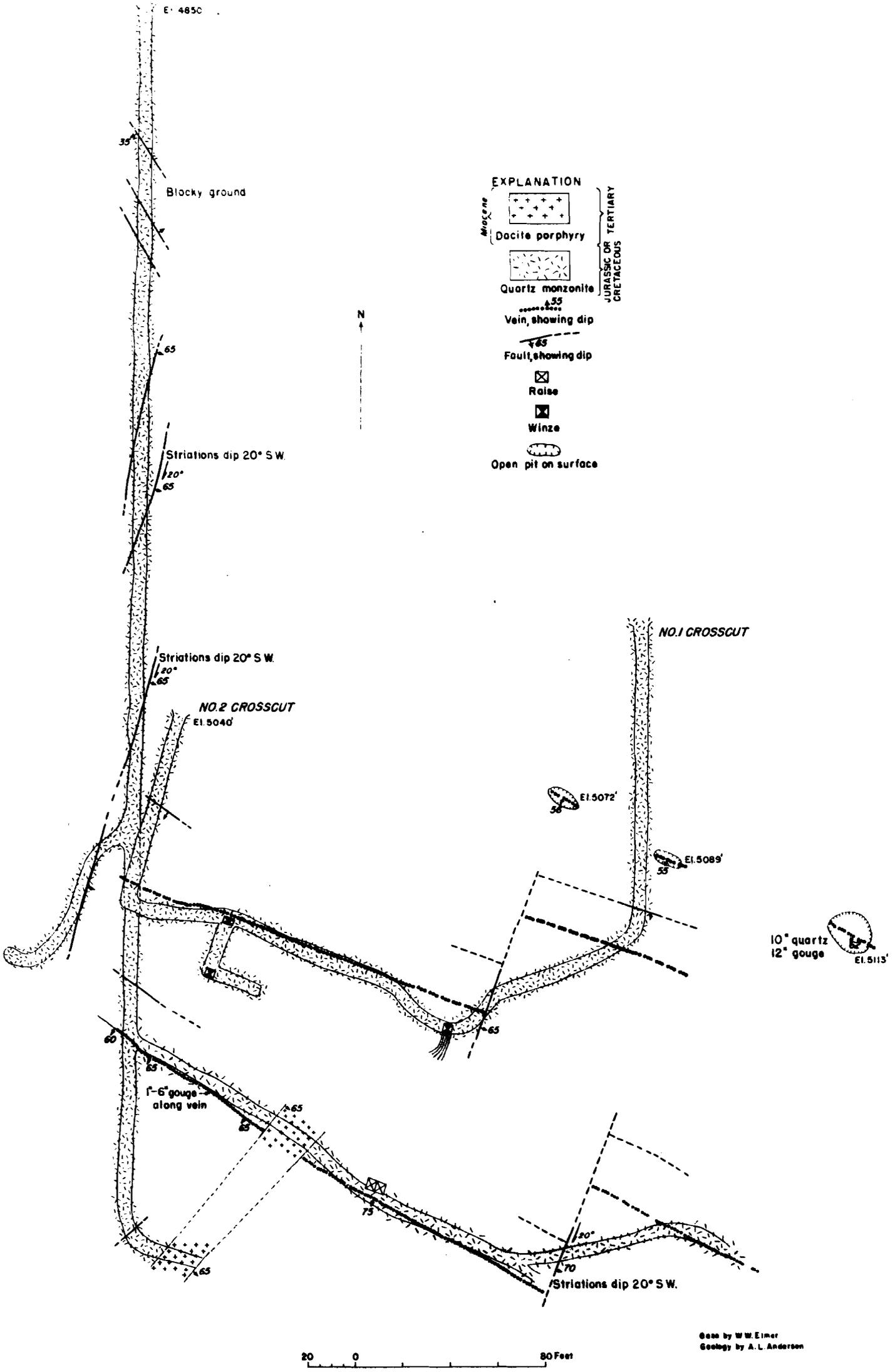
#### CLEVELAND MINE

The Cleveland mine is in upper Eldorado Gulch, across the gulch from the Cloverleaf mine (formerly MacCarthy), in sec. 6, T. 6 N., R. 6 E. It is one of the oldest mines in the Gambirinus district but, like so many of the old properties, had remained idle from the nineties until taken over by the Cloverleaf Metals Co. in 1937. Most of the older workings in the upper tunnel level were rehabilitated, disclosing two winzes below the tunnel level. Much new work was done from a long crosscut some distance below. As ore of commercial grade was not uncovered at the deeper level, the work was abandoned early in August 1938. An ore shoot about 100 feet long, from which considerable gold was milled in the early days, is reported. A plan of the old and recent workings is shown in plate 43.

The Cleveland fissure strikes about N. 65° W. and dips 60° to 65° SW., the dip increasing with depth. It contains a vein 1 to 2 feet thick, exceptionally as much as 4 feet thick. In places additional quartz seams occur alongside. The fissure shows a marked reverse movement, with prominent vertical striations and grooves on slickensided surfaces. The vein is thicker and the subsidiary seams more numerous where the dip is not so steep. The fissure zone contains much gouge, especially on the footwall.

The lode has been considerably disturbed by Miocene shearing and has been cut by several faults and many minor slips. These faults strike N. 20°-30° E. and dip about 65° SE. One has offset the lode 40 feet horizontally, and grooves and striations on the slickensided plane show that the movement has been northeastward at a low angle. These striations dip southwest at an angle of 20°. The lode has also been cut by a Miocene dacite porphyry dike 15 to 20 feet wide, exposed, however, only in the lower workings (pl. 43).

The ore is like that in the Cloverleaf and consists of the early barren and younger auriferous quartz, as well as minor amounts of the second-stage quartz, with scant amounts of galena, sphalerite, and minute crystals of arsenopyrite. The sulfides are so meagerly represented as to escape detection except in the mill concentrate. The ore deposition, as elsewhere, has been attended with but slight alteration of the fractured wall rock.



GEOLOGIC MAP OF THE CLEVELAND MINE, BOISE BASIN, IDAHO