

IDAHO RARE PLANT OBSERVATION REPORT

Fill out the form by tabbing through and completing the fields. Some fields contain check boxes and drop-down menus. If you do not have information for the field, leave it blank. Use F1 for help in any shaded field. E-mail completed form to scooke@idfg.state.id.us or send to Botany Information Manager, Idaho Conservation Data Center, Idaho Department of Fish and Game, PO Box 25, Boise, ID 83707.

Species: Lewisia sacajaweana

Date of Observation: 10 July 2012

Company: American CuMo Mining Corporation, John R. Moeller Ph.D. JMoeller@Forsgren.com

Address: 415 S. 4th Street, Boise, ID 83702

Phone: (208) 863 7343

Observer(s): Conservation Seeding and Restoration, Inc. Allison Dubenezic, Kent Fothergill, Adam Olivier, Kelly V. Tindall, and Noel Sanyal

County: Boise

Quad: Grimes Pass

Township: 8N Range: 6E SE 1/4 of Section 7

Township: 8N Range: 6E SW 1/4 of Section 8

Township: 8N Range: 6E NE 1/4 of Section 18

Township: 8N Range: 6E NW 1/4 of Section 17

GPS Information: Enter **either** UTM's **or** latitude/longitude coordinates from GPS, as well as datum, way points (optional) and accuracy information in the table below. **If you did not take GPS readings, please leave this table blank.**

Have your GPS Coordinates been differentially corrected? Yes No Unsure

Do you have this report location digitized already? Yes No

If yes, you may send shape-files in lieu of a paper map. Did you submit shape-files with this form? Yes No.

If yes, list projection of shape-files:

Please give the parameters if the projection is not standard:

Datum	Way Point	UTM Northing	UTM Easting	Latitude	Longitude	Accuracy
Datum	WP#			44.03363	-115.785335	+/- 2-5 m

If you have more coordinates, please list them under Additional Comments.

Minimum Elevation: 5200 ft.

Maximum Elevation: 6600 ft.

Stand # or other identification #: _____

Directions (be specific): _____

Is this a new location? Yes No Unsure? Give occurrence # if known: _____

Mapping Instructions: If submitting paper maps, complete A - C. If submitting shape-files complete parts B and C.

A) Please attach a photocopy of the appropriate part of the USGS 7.5 minute quad (or comparable map) and delineate the population and all subpopulations (if present) on the map using the guidelines listed below. **Label subpopulations if you have population and/or habitat information for them.**

* If the population/subpopulation area is < 12.5 meters (40 ft.) in diameter, place a single point on the map marking its location. If necessary, indicate these point locations with an arrow so they are easier to see.

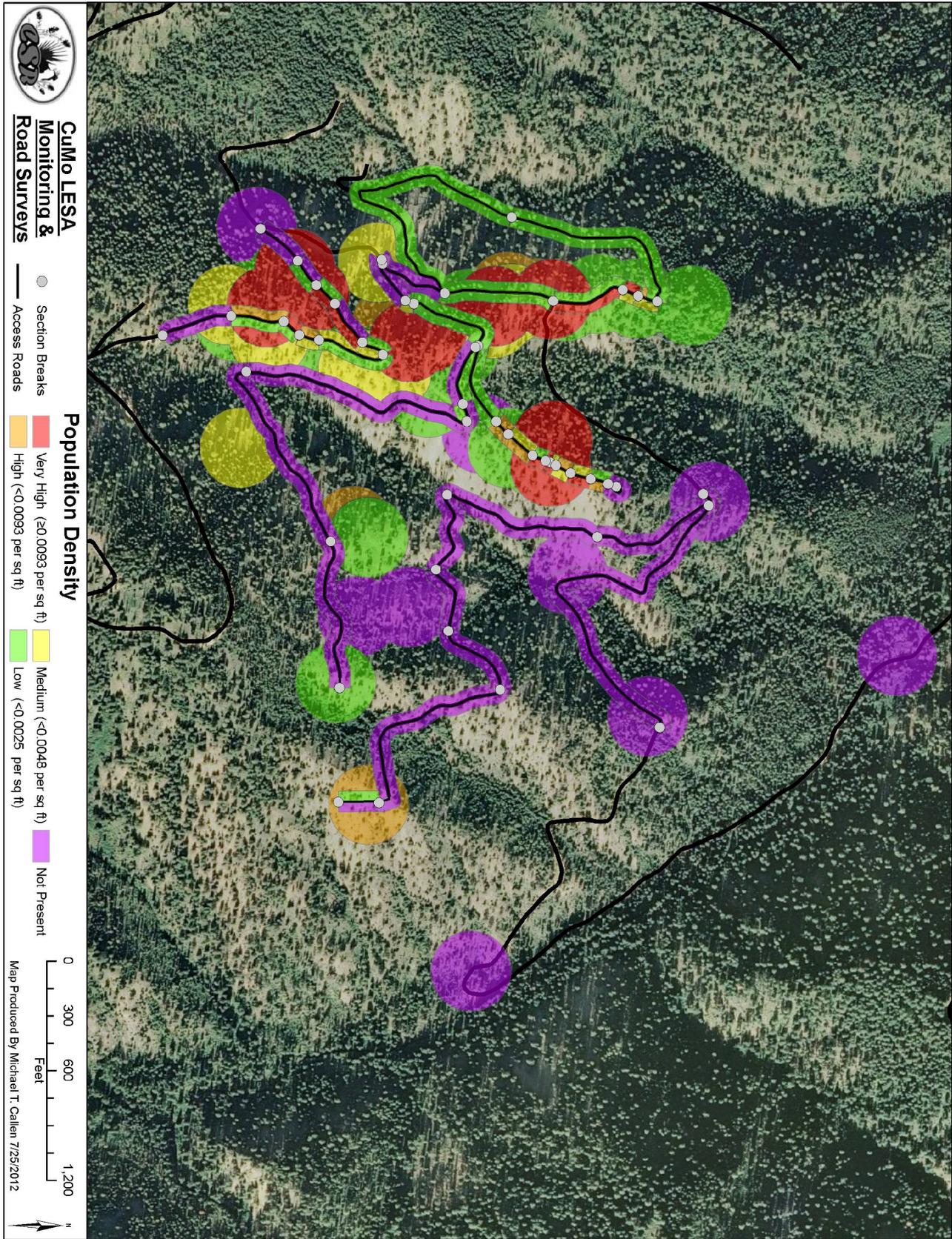


Figure 1. Map of roads and points surveyed during 2012 demonstrating pattern and density of LESA occurrence.

* If the population/subpopulation area is >12.5 meters (40 ft.) in diameter, draw a polygon on the map marking its location.

* If the population/subpopulation follows the boundary of a trail, lake, stream, road, etc., draw the boundary on the edge of this feature. Where needed, add notes on where boundary lines are.

B) How accurately do you feel you mapped or digitized the population compared to its actual location on the ground? Use the guidelines to determine how many meters (m) or miles on the ground correspond to millimeters (mm.) or inches (in.) on a 1:24,000 scale map. Within 25 m (0 - 1 mm. on map) Custom:

C) I sent Other Other:

Population Information - Please fill in this section with the information for the **entire population**. If subpopulations exist and you have information for them, complete the subpopulation information forms on the last page.

Total # of individuals in the population(s) is >4921 Actual Estimated

What was counted? Genets Ramets N/A (non-vascular etc.) Unknown

Phenology: <5 % seedling 28-80 % non-reproductive 20-72 % reproductive _____ % dormant _____ % unknown

The size of the population area is ~ 25 acres

Population vigor is excellent good fair poor

Do you feel you mapped the full extent of the population? Yes No Unsure

Is there more potential habitat in the area that hasn't been surveyed? Yes No Unsure

The survey was: very thorough somewhat thorough cursory incidental observation

Additional population comments: The 2012 survey efforts performed by Conservation Seeding and Restoration, Inc. on behalf of the American CuMo Mining Corporation were not designed to be a complete census of all LESA populated areas within the operation area and are therefore labeled somewhat thorough, even though these surveys were very thorough in order to accomplish survey goals. The goals of the surveys performed were to accomplish certain tasks associated with minimizing impact of exploration activities on LESA populations. The number, >4921, refers to the total number of plants counted during road and point surveys and acknowledges the existence of plants beyond survey boundaries. As such these data are not directly comparable to the 2011 Idaho Rare Plant Occurrence Report for this area, but do demonstrate a robust population at this site.

Habitat Description – Please fill in this section with information for the **entire population**, using ranges where appropriate. If subpopulations exist and there is specific habitat information or threats that need noting, use the forms on page 4. Please avoid abbreviations if possible, thanks!

General habitat description: Open montane ridges with granitic soils

Aspect: Variable Slope: Variable

Substrate/soil: Granitic, well draining

Light regime: Variable, but leaning toward full sun

Community type:

1 *Pseudotsuga menziesii* - *Carex geyeri* - *Pinus ponderosa*

2 *Pseudotsuga menziesii* - *Spiraea betulifolia* - *Pinus ponderosa*

3 *Pseudotsuga menziesii* - *Physocarpus malvaceus* - *Calamagrostis rubescens*

4 *Abies lasiocarpa* - *Spiraea betulifolia*

Associated Species include: _____

Look-alike species that are present: Claytonia lanceolata

Comment on threats to the population and its immediate habitat including **level** and **imminency** of threat if known.

Include factors such as land use, disturbance, disease or predation, invasive weeds, etc: Operations associated with mineral exploration have the potential to directly impact individual plants, but LESA appears to have an affinity for disturbed areas and may actually benefit long term from these activities. Invasive weeds can be found within the project area, but not within areas occupied by LESA.

CONDITION is an integrated measure of the quality of biotic and abiotic factors, structures, and processes **within** the occurrence, and the degree to which they affect the continued existence of the occurrence. Condition has the following components: reproduction and health for species, ecological processes, species composition and biological structure, and abiotic/chemical factors.

Briefly comment on the **CONDITION** of the occurrence:

Overall **condition** is: B (good)

LANDSCAPE CONTEXT is an integrated measure of the quality of biotic and abiotic factors, structures, and processes **surrounding** the occurrence, and the degree to which they affect the continued existence of the EO. Components of Landscape Context are: landscape structure and extent, including genetic connectivity, and condition of the surrounding landscape.

Briefly comment on the **LANDSCAPE in the area surrounding the population**. Include factors such as current and past land use (farmland, residential area etc.), disturbance factors, and fragmentation: _____

Overall **landscape** is: B (good)

Land Owner/Managers (forest/ranger district/BLM/ or private land owner if known): Boise National Forest, Idaho City Ranger District

Owner Comments: _____

Management, Monitoring, and Research Needs (include any steps that you think should be taken to protect the population): _____

Collector/Collection #: _____

Herbarium: _____

Photo Attached? Yes No

Other knowledgeable individuals: Kay Beall

Additional Comments (anything you think is important that did not fit in any other space on the form):



Figure 2. Habitat view, 24 June 2012, flags represent LESA plants.



Figure 3. LESA in bloom 19 June 2012