



Engineering/Remediation  
Resources Group, Inc.  
616 First Ave, Suite 300  
Seattle, WA 98104

P: 206-282-4749  
F: 206-282-4789  
www.errg.com

July 12, 2012

Ref.: 2010-084

Mr. Pete Jones  
Region 6 On-Scene Coordinator  
USDA Forest Service  
645 Washington Street  
Ashland, Oregon 97520

Technical Memorandum  
April 2012 Site Inspection Report  
Blue Ledge Mine  
Rogue River-Siskiyou National Forest

Dear Mr. Jones:

Engineering/Remediation Resources Group, Inc. (ERRG) is submitting this technical memorandum summarizing the April 22, 2012 site inspection of the Blue Ledge Mine site. ERRG performed the site inspection in coordination with operations, maintenance, and monitoring (O&M) requirements for the Blue Ledge Mine site under the U.S. Department of Agriculture Forest Service (Forest Service) Contract No. GS-10F-0294R, Delivery Order No. AG-0489-D-10-0126. For a full list of elements inspected, please see the attached site inspection checklist ([Enclosure 1](#)), overall site plan ([Enclosure 2](#)), and photographic log ([Enclosure 3](#)).

### **Background**

In 2010, ERRG was contracted to perform a removal action to remove waste rock from four waste rock piles (WRPs) near the mine adits. The waste rock was removed from the WRPs and relocated to a newly constructed on-site repository. The repository was capped following removal of all waste rock from the WRPs. Disturbed soil areas within the reclamation areas were re-vegetated with native species. Nine pH treatment and sediment basins were constructed below the WRPs to capture sediment and to treat mine drainage prior to discharge into Joe Creek. Following the removal action, ERRG was contracted to perform O&M of the repository cap and structures constructed to control erosion and treat mine drainage, as outlined in the O&M Plan<sup>1</sup>. The O&M Plan includes performing site inspections after rain events generating greater than 0.5 inches of precipitation, as recorded by nearby representative weather stations, and performing monthly site inspections when the site is accessible, defined as April through October.

During each site inspection, ERRG reviews the following elements:

- Integrity of the reclamation areas
- Condition of the erosion control and sediment control measures

---

<sup>1</sup> ERRG, "Removal Action Work Plan Non-Time-Critical Removal Action for Former Blue Ledge Mine Site", July 2010

- Needed maintenance and repairs
- Condition of reclamation plantings
- Integrity of constructed site elements (documented via photographs)
- Areas where erosion or deterioration has occurred since the last site visit

### **Summary of Site Inspection**

During the April 22, 2012 site inspection, the reclamation areas were observed to be intact and in good functioning condition. ERRG inspected all areas except for WRP 3, where access was limited because of snow.

Generally, minimal erosion had occurred at the site and best management practices (BMPs) to control erosion were in good condition. This was the first site inspection after storm water pollution prevention plan (SWPPP) inspections were conducted over the winter. The repository was in good shape with minimal erosion. The most accessible anchor trench drain outlet, northeast corner closest to the repository access road, was inspected; it was not plugged. Future inspections will include inspection of all drain outlets. Some maintenance of BMPs was performed over the winter. ERRG added straw bales and straw wattles to the lower edge of the repository and on the access road to reduce erosion over the winter and manage some rills.

Some erosion was observed on Forest Road 1060 and haul roads (as previously documented during the SWPPP inspections) and will require maintenance over the summer. Some culverts will be cleared by hand during May maintenance activities. Road condition was similar to that observed during the last SWPPP inspection. Overall, the roads are in very good shape.

The stockpile areas and WRP 2, 3, and 4 had minimal erosion, while a significant amount of sediment had eroded from WRP 1. All of the sediment, however, was captured in sediment basins 1F through 1A, and in the riprap above the sediment basins. No evidence was observed that sediment had entered Joe Creek. Sediment and debris were also observed in sediment treatment basins 2A and 2B. Sediment treatment basin 3 did not have significant sediment accumulation.

The pH and amount of accumulated sediment in the treatment and sediment basins were not assessed during this site inspection because a later site visit was planned, but did not occur due to weather. The pH and accumulated sediment measurements are not required as a part of the O&M Plan, but ERRG will track these site conditions to help facilitate planned maintenance activities. The pH and amount of accumulated sediment will be measured during the May site inspection as part of the biannual sampling event. An evaluation of limestone fouling will be made during clean out of the accumulated sediment in August 2012, when water runoff is at the annual minimum flow.

Some of the reclamation area plantings were lost over the winter. Since many plants were just beginning their spring growth, the final determination of plant survival will not be made until late September 2012. Fewer than 50 plants out of 5,428 plants on the repository and repository stockpile have died. Fewer than 30 plants out of 1,366 plants on the north stockpile have died. Plants on WRP 1 and WRP 2 are just beginning spring growth. Plants on WRP 3 were not inspected at this time, since those areas were inaccessible because of snow and high runoff. Big game repellent will be applied in May after a minimum of three days of no precipitation have occurred.

Site access gates and locks are in good condition, and no evidence of unauthorized access was observed during this site inspection. No immediate maintenance or further action (beyond that recommended after the last SWPPP inspection) is recommended based on the findings of this site inspection. Maintenance

Mr. Jones  
July 12, 2012  
Page 3



that requires heavy equipment will be performed in August 2012 in conjunction with removal of sediment from the sediment/treatment basins. Repair and maintenance of minor erosion noted above will be performed during subsequent site inspections.

If you have any questions or need additional information, please do not hesitate to contact me at (206) 512-3171 to discuss the site inspection further.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Hudson", written over a light blue horizontal line.

Mike Hudson  
Project Manager

MH/kj

[Enclosure 1](#) – April 2012 Blue Ledge Mine Inspection Checklist

[Enclosure 2](#) – Overall Site Plan

[Enclosure 3](#) – April 2012 Site Inspection Photographic Log

cc: Brian Wetzsteon, ERRG  
ERRG Project File

# **Enclosure 1.      April 2012 Blue Ledge Mine Inspection Checklist**

---

**BLUE LEDGE MINE  
INSPECTION CHECKLIST**

**MONTHLY INSPECTION**

**Month:** April, **Year:** 2012

**BLUE LEDGE MINE MONTHLY INSPECTION CHECKLIST**

Month: April, Year: 2012

**Blue Ledge Mine Removal Project  
Siskiyou County, California  
Operation and Maintenance Period**

NOTE: All photos included in this checklist were taken on date: 22 April 2012  
Refer to Figures P-1 through P-8 for O&M Inspection

**Repository**

1. Inspect the silt fence, wattles, and other BMPs at the repository and repository stockpile area (See Figure P-2). Do BMPs require repair or replacement?

Yes\*  
 No

*\*If yes, repair or replace damaged components and make recommendations to reduce future damage. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: \_\_\_\_\_

2. Inspect repository cover soil. Is there evidence of excessive or preferential erosion (See Figure P-2)?

Yes\*  
 No

*\*If yes, notify project manager and place temporary BMPs to minimize further erosion until a solution can be found. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: Minor preferential erosion has occurred below the repository access road. Slash was placed on the minor erosion which appears to have stopped any additional erosion. No major erosion has occurred.

3. Inspect the repository access road (See Figure P-2). Are there any areas of excessive erosion or other areas where the road requires repair?

Yes\*  
 No

*\*If yes, notify project manager of potential need for repair.*

Comments: Rills have developed on the road by the rock stockpile which will require maintenance.

4. Inspect repository leachate sump tank and cap (See Figure P-2). Is the sump and cap in good condition and locked? Is there any liquid in the sump?

Yes  
 No\*

*\*If no, take several pictures of damage and make repairs to fix or secure prior to leaving site (if possible). If there is liquid in the sump, measure the depth (requires a minimum 25 foot tape measure). A liquid sample may be required for profiling and disposal.*

Comments: Top level of liquid is 267" from lip

5. Inspect anchor trench drainage pipes and the repository underdrain where they daylight (See Figure P-2). Is the screening damaged or evidence of any of the pipes being blocked?

Yes\*  
 No

*\*If yes, unblock pipe and/or repair screen.*

Comments: Expose pipe drain outlets

6. Inspect the repository stormwater drain ditch (See Figure P-2). Is the stormwater drain ditch damaged or is there evidence of any portion of the stormwater drain ditch being blocked?

Yes\*  
 No

*\*If yes, unblock ditch.*

Comments: \_\_\_\_\_

7. Inspect plants in the repository and repository stockpile area (See Figure P-3). Does it appear the plants have been fed on by animals?

Yes\*  
 No

*\*If yes, reapply Big Game Repellant to prevent further browsing. A listing of grass seeds, fertilizers, animal repellants, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: Need to apply Big Game Repellant to shrubs and trees on repository and repository stockpile area.

8. Are there any plants which have died in the repository and repository stockpile areas (See Figure P-3)?

Yes\*  
 No

*\*If yes, estimate number of plants and record it in the comments. The total number of plants installed at the repository and repository stockpile areas are shown.*

Comments: \_\_\_\_\_ less than 50 \_\_\_\_\_

9. Inspect Flexterra and grass seeded areas on the repository (See Figure P-3). Are any repairs needed or invasive species present?

- Yes\*
- No

*\*If yes, identify areas for repair or pull weeds and dispose of properly.*

Comments: \_\_\_\_\_

## North Storage Area

1. Inspect road leading to the repository and north storage area (See Figure P-2). Is there evidence of excessive erosion? Are the waterbars damaged?

Yes\*  
 No

*\*If yes, apply temporary BMPs and make recommendations for repair. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: Some rilling has occurred on the access road leading to the repository. Maintenance will be required. Additional BMPs were added during the winter which has stopped further rilling.

2. Inspect the silt fence, wattles, and other BMPs at the north storage area (See Figure P-4). Do BMPs require repair or replacement?

Yes\*  
 No

*\*If yes, repair or replace damaged components and make recommendations to reduce future damage. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: \_\_\_\_\_

3. Inspect Flexterra and grass seeded areas on the north storage area (See Figure P-4). Are any repairs needed or any invasive species present?

Yes\*  
 No

*\*If yes, identify areas for repair or pull weeds and dispose of properly.*

Comments: \_\_\_\_\_

4. Inspect plants in the north storage area (See Figure P-4). Does it appear the plants have been fed on by animals?

Yes\*  
 No

*\*If yes, reapply Big Game Repellent to prevent further browsing. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: Apply Big Game Repellent to reduce further Browsing.

5. Are there any plants which have died in the north storage area (See Figure P-4)?

Yes\*  
 No

*\*If yes, estimate number of plants and record it in the comments. The total number of plants installed at the north storage area is shown on Figure P-4.*

Comments: 30

### South Storage Area

1. Inspect the silt fence, wattles, and other BMPs at the south staging area (See Figure P-5). Do BMPs require repair or replacement?

Yes\*  
 No

*\*If yes, repair or replace damaged components and make recommendations to reduce future damage. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: \_\_\_\_\_

2. Inspect plants in the south staging area. Does it appear the plants have been fed on by animals (See Figure P-5)?

Yes\*  
 No

*\*If yes, reapply Big Game Repellent to prevent further browsing. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: \_\_\_\_\_

3. Are there any plants which have died in the south staging area (See Figure P-5)?

Yes\*  
 No

*\*If yes, estimate number of plants and record it in the comments. The total number of plants installed at the south storage area is shown on Figure P-5.*

Comments: \_\_\_\_\_

4. Inspect Flexterra and grass seeded areas along Joe Creek (See Figure P-5). Are any repairs needed or any invasive species present?

Yes\*  
 No

*\*If yes, identify areas for repair or pull weeds and dispose of properly.*

Comments: \_\_\_\_\_

### Rock Stockpile Area

1. Inspect the silt fence, wattles, and other BMPs at the rock stockpile area (See Figure P-6). Do BMPs require repair or replacement?

Yes\*  
 No

*\*If yes, repair or replace damaged components and make recommendations to reduce future damage. A listing of approved BMPs for implementation is shown in Appendix H of the SWPPP.*

Comments: Place Slash on Rills on slope west

2. Inspect plants in the rock stockpile area (See Figure P-6). Does it appear the plants have been fed on by animals?

Yes\*  
 No

*\*If yes, reapply Big Game Repellent to prevent further browsing. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: Reapply Big Game repellent

3. Are there any plants which have died in the rock stockpile area (See Figure P-6)?

Yes\*  
 No

*\*If yes, estimate number of plants and record it in the comments. The total number of plants installed at the south storage area is shown on Figure P-6.*

Comments: 10

4. Inspect Flexterra and grass seeded areas (See Figure P-6). Are any repairs needed or any invasive species present?

Yes\*  
 No

*\*If yes, identify areas for repair or pull weeds and dispose of properly.*

Comments: \_\_\_\_\_

## Forest Service Roads and Haul Roads

1. Are there areas of Forest Service Road 1060 which have experienced excessive?

- Yes\*  
 No

*\*If yes, document road condition with photos and install temporary BMPs to help minimize further erosion. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: Several rills have developed over the winter that will require repair during the summer maintenance period. The rill by the water bar is the largest of the rills.

2. Are culverts along USFS road 1060 marked and draining properly?

- Yes  
 No\*

*\*If no, perform necessary maintenance or repair to culvert to return to good working condition.*

Comments: The culverts at the south stockpile and haul road are partially blocked and need to have sediment removed to allow complete flow through the culvert.

3. Inspect haul roads 1,2,3, and 4, the miner's trail parking area, and the decommissioned haul roads 2 and 4 (See Figure P-2). Are there areas of excessive erosion? Are waterbars damaged?

- Yes\*  
 No

*\*If yes, place temporary BMPs and repair damaged waterbars. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: Several areas of erosion on the side bank (see photo log). These areas will require additional berms/ water bars and maintenance on the side bank to reduce further erosion.

4. Inspect BMPs along haul roads 1,2,3, and 4, the miner's trail parking area, and the decommissioned haul roads 2 and 4 (See Figure P-2). Are BMPs in good condition?

- Yes  
 No\*

*\*If no, repair and/or replace BMPs as necessary. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: Silt fence need maintenance at crossings. Erosion of side banks will also require repair. (see above inspection item 3.)

5. Inspect areas of haul roads 1,2,3, and 4, the miner's trail parking area, and the decommissioned haul roads 2 and 4 (See Figure P-2). Record grass growth progress. Are there bare areas which will require reseeding?

- Yes\*  
 No

*\*If yes, reseed bare areas. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: \_\_\_\_\_

**Waste Rock Pile #1**

1. Inspect log wattles, straw wattles, and other BMPs at the reclamation areas on waste rock pile #1 (See Figure P-7). Are all BMPs in good condition?

Yes  
 No\*

*\*If no, repair and/or replace BMPs as necessary. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: \_\_\_\_\_

2. Inspect Flexterra and grass seeded areas at the reclamation areas on waste rock pile #1 (See Figure P-7). Are any repairs needed or any invasive species present?

Yes\*  
 No

*\*If yes, identify areas for repair or pull weeds and dispose of properly.*

Comments: \_\_\_\_\_

3. Inspect plants at the reclamation areas on waste rock pile #1 (See Figure P-7). Does it appear the plants have been fed on by animals?

Yes\*  
 No

*\*If yes, reapply Big Game Repellent to prevent further browsing. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: \_\_\_\_\_

4. Are there any plants at the reclamation areas which have died on waste rock pile #1 (See Figure P-7). Does it appear the plants have been fed on by animals?

Yes\*  
 No

*\*If yes, estimate number of plants and record it in the comments. The total number of plants installed at waste rock pile #1 is shown on Figure P-7.*

Comments: Apply Big Game Repellant to discourage more browsing.

5. Are there areas of excessive erosion on waste rock pile #1 (See Figure P-7)?

Yes\*  
 No

*\*If yes, apply temporary BMPs. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: A small landslide has deposited sediment into sediment/ treatment basin 1F.

6. Inspect each Sediment/pH treatment basin at waste rock pile #1 (See Figure P-7). For each basin, record the volume of sediment accumulated (as a percentage of capacity), the amount of fouled limestone (in inches), and the pH of water as listed below (if any). Record and photograph any excessive erosion in or around the sediment basin.

Sediment/pH treatment basin 1A (closest to the Joe Creek):

Accumulated sediment 25% or less

Fouled limestone N/A

pH below basin A \_\_\_\_\_

Water depth 1.5 feet deep

Excessive erosion around the basin?  Yes\*  No

Sediment/pH treatment basin 1B

Accumulated sediment 25% or less

Fouled limestone N/A

pH below basin B \_\_\_\_\_

Water depth water is leaking around liner at 1B, not  
Spilling over liner. (Water ~1 foot deep).

Excessive erosion around the basin?  Yes\*  No

Sediment/pH treatment basin 1C

Accumulated sediment 50%

Fouled limestone N/A

pH below basin C \_\_\_\_\_

Water depth 2 feet deep

Excessive erosion around the basin?  Yes\*  No

Sediment/pH treatment basin 1D

Accumulated sediment 33%

Fouled limestone N/A

pH below basin D \_\_\_\_\_

Water depth 2 feet deep

Excessive erosion around the basin?  Yes\*  No

Sediment/pH treatment basin 1E

Accumulated sediment 90%

Fouled limestone N/A

pH below basin E

Water depth water flowing through basin

Excessive erosion around the basin?  Yes\*  No

Sediment/pH treatment basin 1F

Accumulated sediment 100% due to landslide and  
sediment

Fouled limestone N/A

pH below basin F

pH above basin F

Water depth Full water flowing through basin

Excessive erosion around the basin?  Yes\*  No

**Waste Rock Pile #2**

1. Inspect wattles, silt fence, and other BMPs at the reclamation areas on waste rock pile #2 (See Figure P-8). Are all BMPs in good condition?

Yes  
 No\*

*\*If no, repair and/or replace BMPs as necessary. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: \_\_\_\_\_

2. Inspect plants at the reclamation areas on waste rock pile #2 (See Figure P-8). Does it appear the plants have been fed on by animals?

Yes\*  
 No

*\*If yes, reapply Big Game Repellent to prevent further browsing. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: No browsing seen at reclamation area.

3. Are there any plants at the reclamation areas which have died on waste rock pile #2 (See Figure P-8)?

Yes\*  
 No

*\*If yes, estimate number of plants and record it in the comments. The total number of plants installed at waste rock pile #2 is shown on Figure P-8.*

Comments: \_\_\_\_\_

4. Are there areas of excessive erosion on waste rock pile #2?

Yes\*  
 No

*\*If yes, apply temporary BMPs. A listing of grass seeds, fertilizers, animal repellants, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: No area have excessive erosion, but the sediment basins have accumulated significant sediment.

5. Inspect each Sediment/pH treatment basin at waste rock pile #2 (See Figure P-8). For each basin, record the volume of sediment accumulated (as a percentage of capacity), the amount of fouled limestone (in inches), and the pH of the water as listed below (if any). Record and photograph any excessive erosion in or around the sediment basin.

Sediment/pH treatment basin 2A

Accumulated sediment 50% - Half full of slide debris

Fouled limestone N/A

pH below basin G \_\_\_\_\_

pH above basin G \_\_\_\_\_

Water depth Basin Full. Water flowing through basin

Excessive erosion around the basin?  Yes\*  No

Sediment/pH treatment basin 2B

Accumulated sediment 50% - Half full of slide debris

Fouled limestone N/A

pH below basin H \_\_\_\_\_

pH above basin H \_\_\_\_\_

Water depth Basin Full, water flow through basin

Excessive erosion around the basin?  Yes\*  No

**Waste Rock Pile #3**

1. Inspect log wattles, straw wattles, and other BMPs at the reclamation areas on waste rock pile #3 (See Figure P-8). Are all BMPs in good condition?

Yes  
 No\*

*\*If no, repair and/or replace BMPs as necessary. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: Some wattles require repair

2. Inspect plants at the reclamation areas on waste rock pile #3 (See Figure P-8). Does it appear the plants have been fed on by animals?

Yes\*  
 No

*\*If yes, reapply Big Game Repellent to prevent further browsing. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: Did not inspect area due to access. Follow up next inspection.

3. Are there any plants at the reclamation areas which have died on waste rock pile #3 (See Figure P-8)?

Yes\*  
 No

*\*If yes, estimate number of plants and record it in the comments. The total number of plants installed at waste rock pile #2 is shown on Figure P-8.*

Comments: Did not inspect area due to access. Follow up next inspection.

4. Are there areas of excessive erosion on waste rock pile #3?

Yes\*  
 No

*\*If yes, apply temporary BMPs. A listing of grass seeds, fertilizers, animal repellants, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: No areas of excessive erosion were seen.

5. Inspect each Sediment/pH treatment basin at waste rock pile #2 (See Figure P-8). For each basin, record the volume of sediment accumulated (as a percentage of capacity), the amount of fouled limestone (in inches), and the pH of the water as listed below (if any). Record and photograph any excessive erosion in or around the sediment basin.

Sediment/pH treatment basin 3

Accumulated sediment <25%

Fouled limestone N/A

pH below basin 3 \_\_\_\_\_

pH above basin 3 \_\_\_\_\_

Water depth 2 feet deep

Excessive erosion around the basin?  Yes\*  No

**Waste Rock Pile #4**

1. Inspect log wattles, straw wattles, and other BMPs at the reclamation areas on waste rock pile #4 (See Figure P-7). Are all BMPs in good condition?

Yes  
 No\*

*\*If no, repair and/or replace BMPs as necessary. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: \_\_\_\_\_

2. Inspect plants at the reclamation areas on waste rock pile #4 (See Figure P-7). Does it appear the plants have been fed on by animals?

Yes\*  
 No

*\*If yes, reapply Big Game Repellent to prevent further browsing. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: \_\_\_\_\_ Did not inspect on WRP4 and could not discern.

3. Are there any plants at the reclamation areas which have died on waste rock pile #4 (See Figure P-7)?

Yes\*  
 No

*\*If yes, estimate number of plants and record it in the comments. The total number of plants installed at waste rock pile #2 is shown on Figure P-8.*

Comments: \_\_\_\_\_ Did not inspect on WRP4 and could not discern.

4. Are there areas of excessive erosion on waste rock pile #4?

Yes\*  
 No

*\*If yes, apply temporary BMPs. A listing of grass seeds, fertilizers, animal repellants, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: \_\_\_\_\_

5. Inspect the reinforced slope stability fabric area at waste rock pile #4 (See Figure P-7). Is the fabric in good condition?

Yes  
 No\*

*\*If no, perform maintenance or repair.*

Comments: \_\_\_\_\_ View from haul road shows no degradation of the fabric.

**Additional Notes (Time, temperature, wind direction, evidence of unauthorized access, condition of green gate, locks, and other observations)**

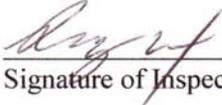
There was no evidence of unauthorized access. The green gate is in good condition. The inspection was performed in the morning. There was a light easterly wind and the sky was clear and sunny.

---

---

Randy West  
Name of Inspector(s)

Engineering/Remediation Resources Group, Inc. (ERRG)  
Company

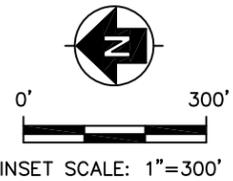
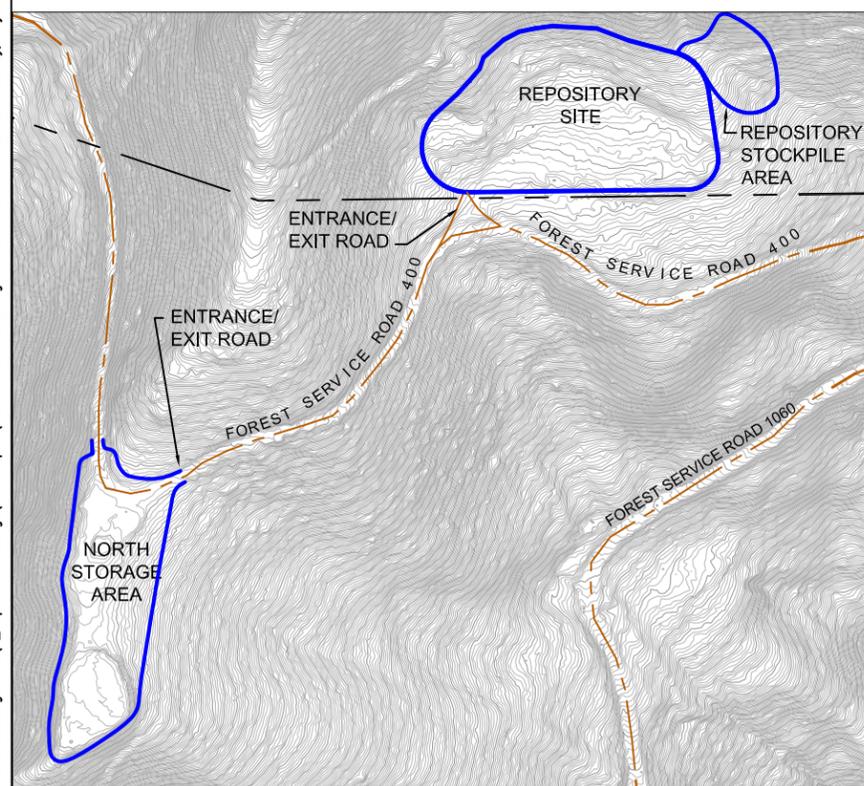
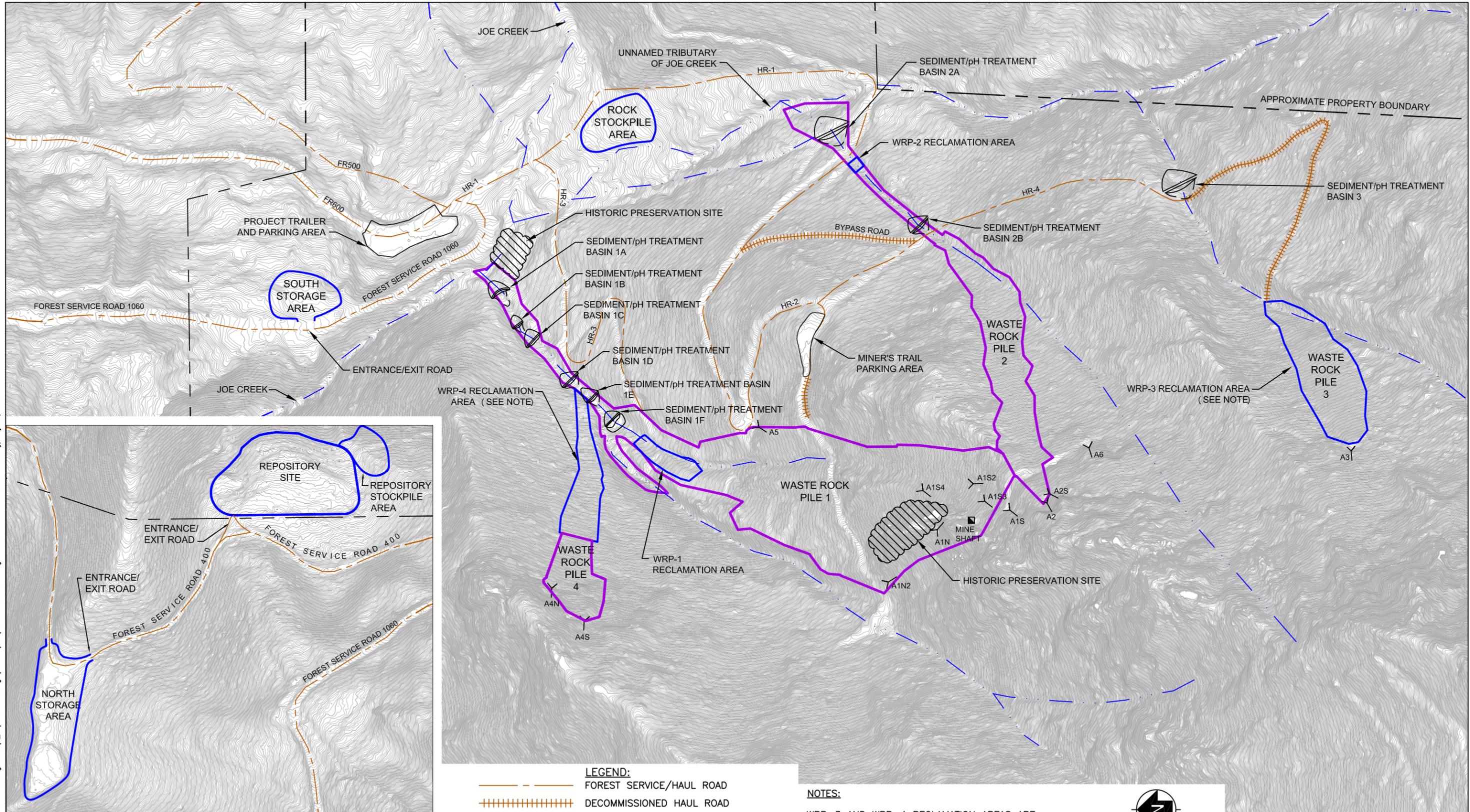
  
Signature of Inspector

4-22-2012  
Date of Inspection

## **Enclosure 2. Overall Site Plan**

---

FILE NAME: N:\Graphics\2010\2010-084 USFS Blueledge Mine\N\_Maps and Drawings\Final Report\Overall Site Plan 2.dwg LAYOUT NAME: 2 PLOTTED: Tuesday, May 29, 2012 - 11:08am



- LEGEND:**
- FOREST SERVICE/HAUL ROAD
  - DECOMMISSIONED HAUL ROAD
  - PROPERTY BOUNDARY
  - RECLAMATION AREA
  - STREAM
  - WASTE ROCK BOUNDARY REMOVAL LIMIT
  - APPROXIMATE LOCATION OF ADIT
  - APPROXIMATE LOCATION OF MINE SHAFT

**NOTES:**  
 WRP-3 AND WRP-4 RECLAMATION AREAS ARE ALSO THE WASTE ROCK BOUNDARY REMOVAL LIMITS.  
 FR = FOREST SERVICE ROAD  
 HR = HAUL ROAD

SOURCE: URS BLUE LEDGE MINE REMOVAL ACTION, DRAWING NO. 101, SHEET 7 OF 60, CAD FILE NO. 101, DATED: 2/2010.

<b>Engineering/Remediation Resources Group, Inc.</b> 4585 Pacheco Blvd, Suite 200 Martinez, California 94553 (925) 969-0750	<b>CLIENT:</b> USDA FOREST SERVICE	<b>OVERALL SITE PLAN</b>		
	<b>LOCATION:</b> BLUE LEDGE MINE REMOVAL ACTION	<b>DRAWN BY:</b> RDB 11/18/11	<b>CHECKED BY:</b> JGS 11/21/11	<b>PROJECT NO.</b> 2010-084

# **Enclosure 3.      April 2012 Site Inspection Photographic Log**

---



**Photograph 1: Joe Creek at Joe Creek Bridge.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



**Photograph 2: Repository hydroseed and reclamation plantings.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 3: **Repository stockpile with hydroseed and reclamation plantings.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 4: **Repository hydroseed and reclamation planting.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 5: **North stockpile with hydroseed and reclamation planting.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 6: **Reclamation plantings at north stockpile.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 7: **Water in sediment treatment basin 1A at bottom of WRP 1.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 8: **Water in sediment treatment basin 1B at bottom of WRP 1.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 9: **Water in sediment treatment basin 1C at bottom of WRP 1.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 10: **Water in sediment treatment basin 1D at bottom of WRP 1.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 11: **Water in sediment/ treatment basin 1E bottom of WRP 1.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 12: **Debris in sediment/treatment basin 1F bottom of WRP 1.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 13: **Water in sediment/treatment basin 1F bottom of WRP 1.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 14: **Erosion control fabric at base of WRP 4; rock-lined channel in lower part of photograph.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 15: **Erosion control fabric at base of WRP 4; sediment treatment basin 1F in lower part of photograph.**

Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 16: **Hydroseeded slope at base of WRP 1; reclamation area just uphill from hydroseeded slope.**

Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 17: **Reclamation area and rip rap channel on WRP 1.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



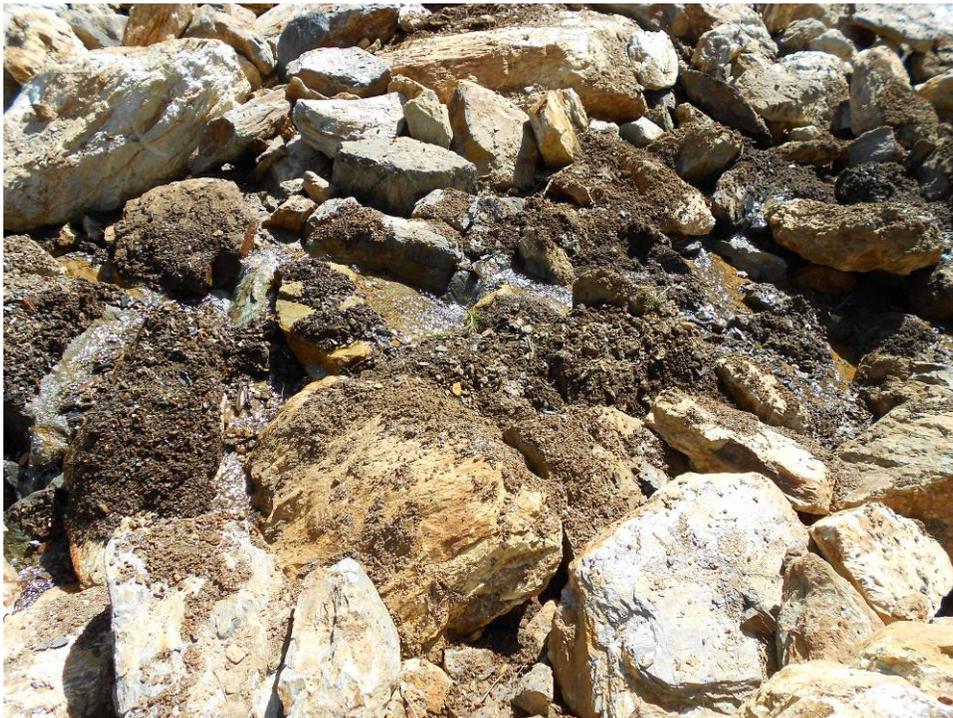
Photograph 18: **Log wattles and reclamation plantings on WRP 1.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 19: **Winter debris deposited on riprap channel at base of WRP 1.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 20: **Winter debris deposited on riprap channel at base of WRP 1.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 21: **Winter debris deposited on riprap channel at base of WRP 1.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 22: **Rock Stockpile reclamation area along haul road 1.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



**Photograph 23: Rock and soil slide into sediment treatment basin 2A at bottom of WRP 2.**

Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



**Photograph 24: Haul Road 1 washed out above sediment basin 2A.**

Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 25: **Haul Road 1 washed out above sediment basin 2A.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 26: **Stream flow downhill from sediment basin 2B to Haul Road 1 crossing above sediment basin 2A at WRP 2.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 27: **Haul road 4 crossing upslope from sediment basin 2B at WRP 2.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 28: **Sediment in sediment treatment basin 2B at WRP 2.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 29: **Sediment in 2B sediment treatment basin at WRP 2.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 30: **WRP 2 looking up from Haul Road 4.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 31: **Erosion rill downslope of water bar along Haul Road 4.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 32: **Water in sediment treatment basin 3 at WRP 3.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 33: **Erosion on slope along Haul Road 4.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 34: **Erosion on slope along Haul Road 4.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 35: **Erosion on slope along Haul Road 4.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 36: **WRP 3 showing straw and log wattles.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 37: **WRP 1 showing erosion controls on ridge.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 38: **Erosion rill on Haul Road 3.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012



Photograph 39: **Haul truck accident site; no obvious erosion.**  
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA  
Photographed by: Randall West (ERRG)

Date: April 22, 2012