

# Post Fire Vegetation Management



Photo credit: Mark Graves, The Oregonian

# **Eagle Creek Fire 2017**

“The best thing that could have happened to the gorge”



September 2018



# **Ecological benefits of fire in 2018**

## **assuming no salvage logging**

- PNW lacks high quality early successional ecosystems.
- Greater diversity in plant life
- Dead wood (beetle larvae, insects, cavity nesting birds)
- “Because of the rich array of food sources, early successional habitats (pre forest) harbor numerous and complex food webs”. ~Dr. Jerry Franklin (U.W.)

# **Vision statement of the** **Scenic Area Act**

*“To establish a national scenic area to protect and provide for the enhancement of the scenic, cultural, recreational, and natural resources of the Columbia Gorge”*



# **Scenic Area Management Plan Refers to Invasive species.**

- Sensitive plant species
- Trail planning and recreation
- Rehabilitation of degraded areas

# **Burn Area Emergency Response Team**

... “recommended that appropriate measures to reduce impacts from invasive species”

... “monitoring for any new infestations and implementing EDRR”



# **EMSWCD Weed Control in the**

## **Columbia Gorge**

### **2007-2017**

- 2007 Knotweed
- 2008 Garlic Mustard
- 2009 EDRR
- 2010 Clematis Vitalba
- 2012 English Ivy

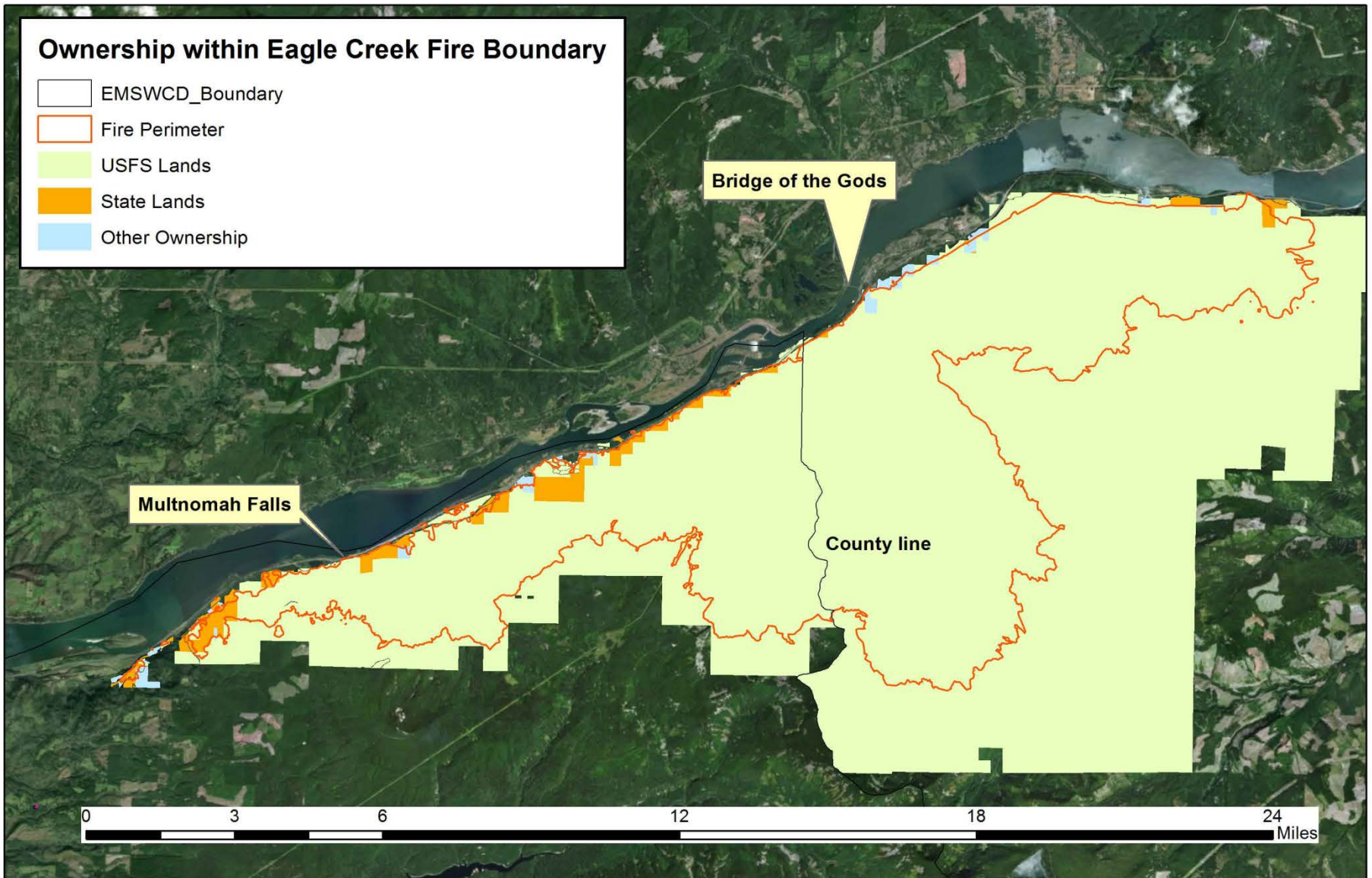
# Partnerships

- **USFS** funding \$17,450 for 1 year
- **OPRD** funding ~\$40,000 for 2 years
- **EMSWCD** funding \$95,000 per year for existing control projects
- **Friends of the Gorge**
- **ODOT**

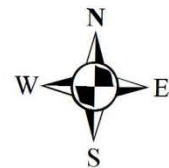


# Strategy

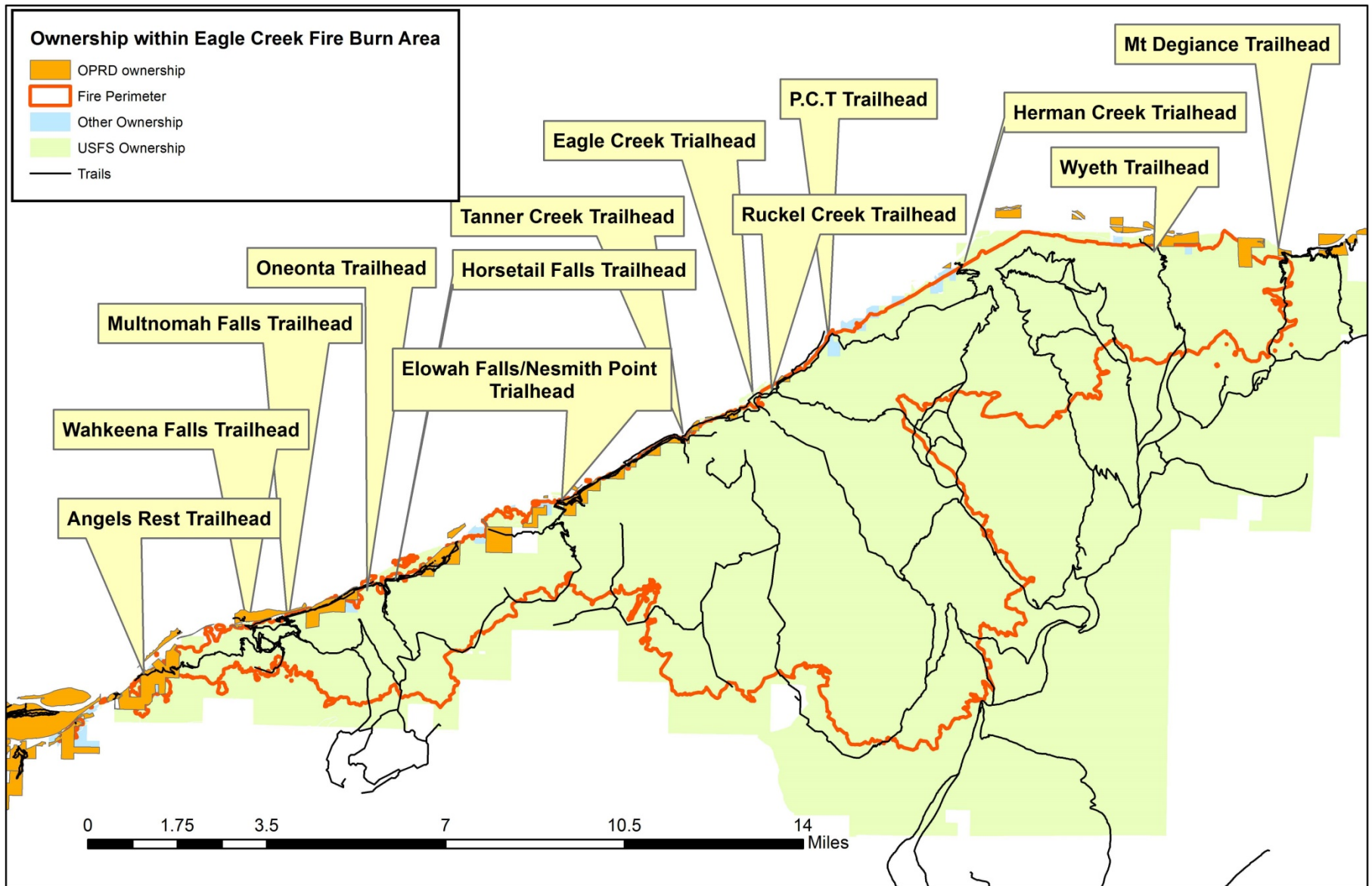
- **USFS** to prioritize woody species such as blackberry, ivy, scotch broom.
- **OPRD** to prioritize weeds from the **CGCWMA** weed list. ~200 species.
- **EMSWCD** to continue EDRR.
  - Prioritize garlic mustard and false brome.
  - Keeping r.o.w weeds in the r.o.w
  - Context.



Ownership based on taxlots within burn area.










**Trailheads with parking lots leading into the burned area.**





## Fire Lines

-  Eagle Creek Fire Perimeter
-  Handline
-  Dozerline

Multnomah Falls



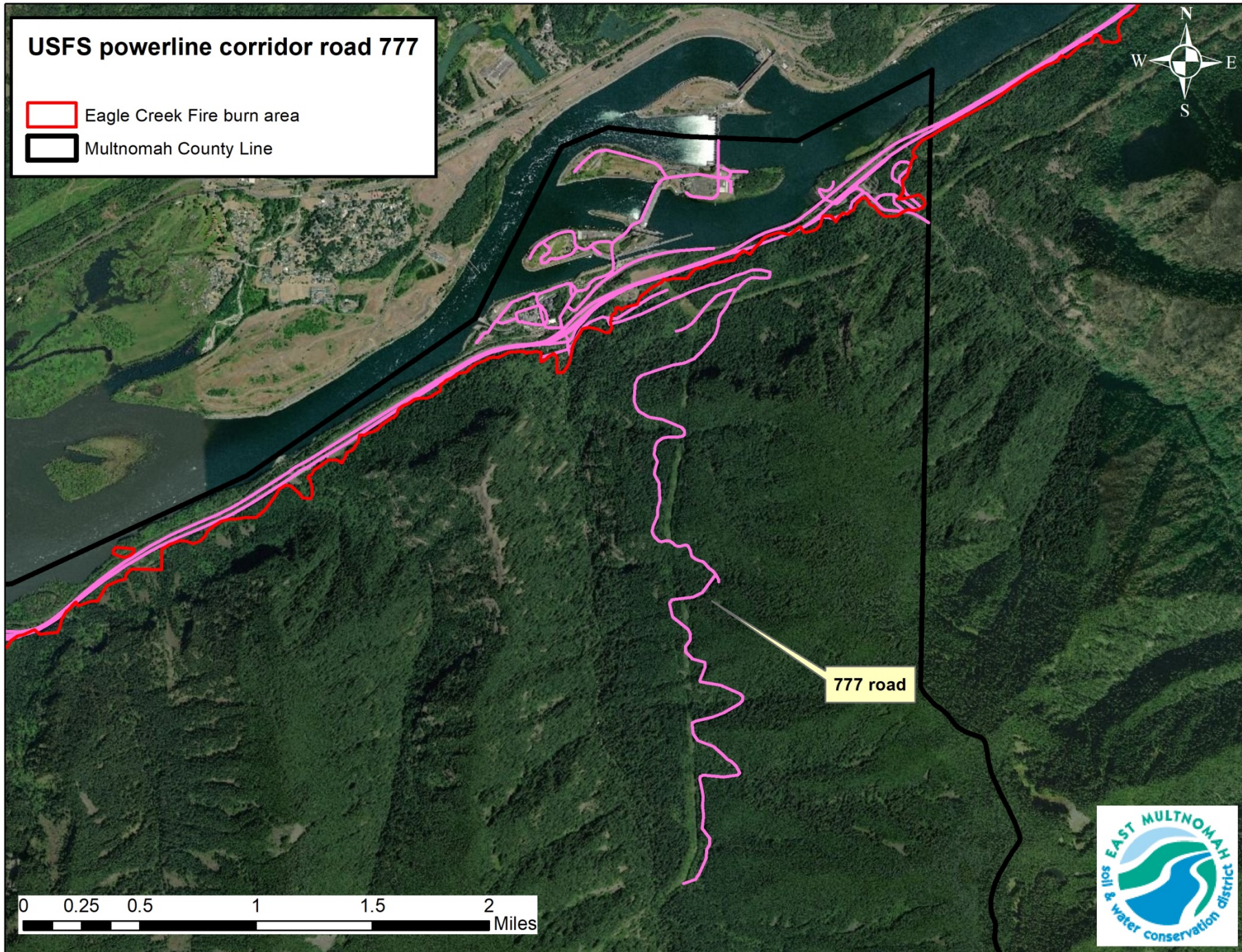
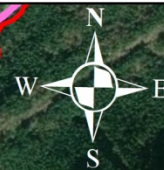
0 0.3 0.6 1.2 1.8 2.4 Miles





# USFS powerline corridor road 777

- Eagle Creek Fire burn area
- Multnomah County Line

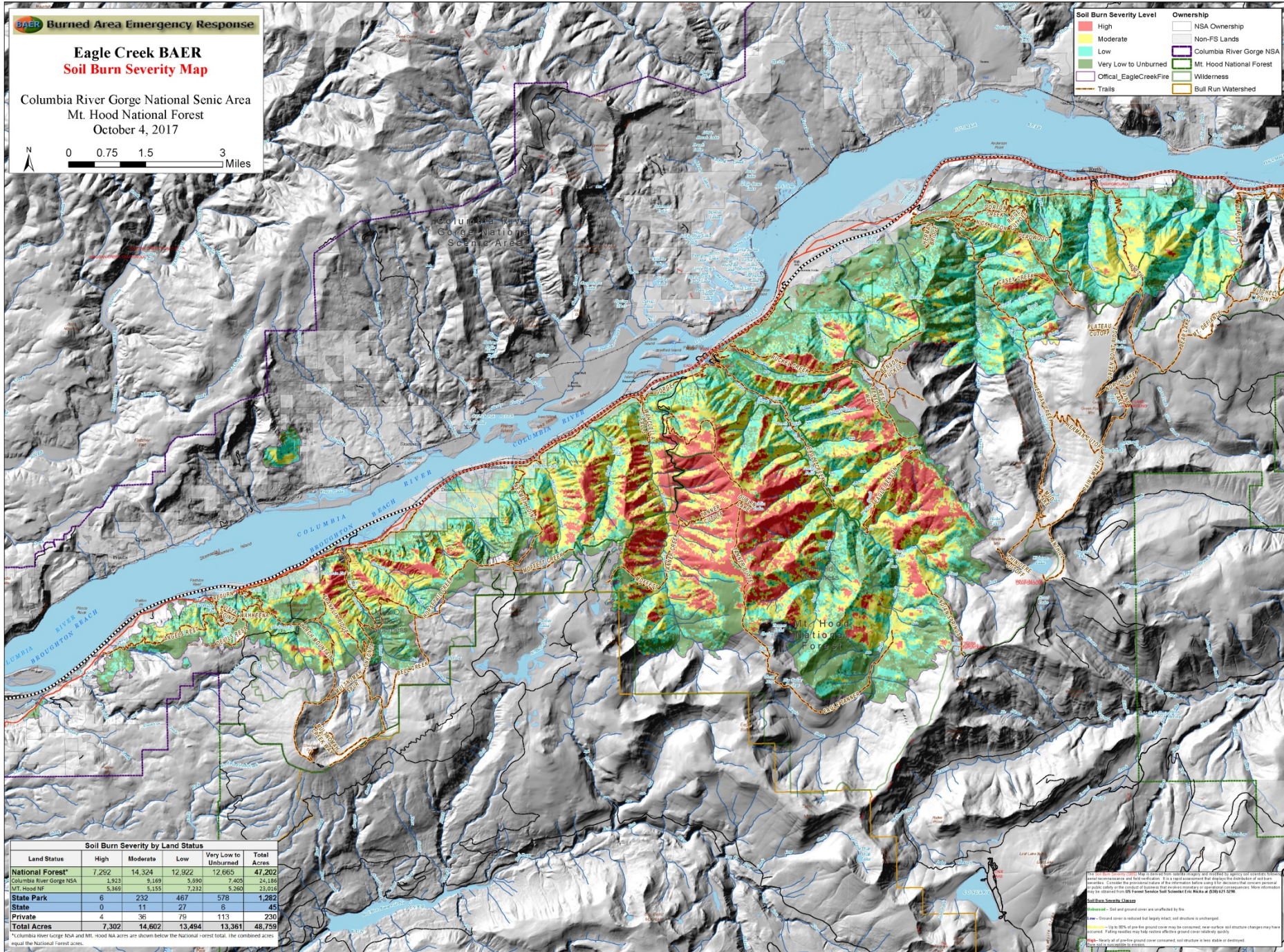


0 0.25 0.5 1 1.5 2 Miles





Columbia River Gorge National Senic Area  
Mt. Hood National Forest  
October 4, 2017



Soil Burn Severity by Land Status					
Land Status	High	Moderate	Low	Very Low to Unburned	Total Acres
<b>National Forest*</b>	7,292	14,324	12,922	12,665	47,203
Columbia River Gorge NSA	1,913	9,169	5,990	7,405	24,481
Mt. Hood NF	5,365	5,155	7,232	5,260	23,012
<b>State Park</b>	6	232	467	578	1,283
<b>State</b>	0	11	27	6	45
<b>Private</b>	4	36	79	113	233
<b>Total Acres</b>	7,302	14,602	13,494	13,361	48,759

\*Columbia River Gorge FSW and ML Hood NA acres are shown below the National Forest total. The combined acres equal the National Forest acres.

**Pre-Event:** No more than 10% of the ground surface may be disturbed by agency soil scientists to install monitoring equipment and field verification is a rapid assessment that depends the distribution of soil borers per acre. Consider the potential for the presence of the soil structure below using the following information for public safety or the condition of habitats that involves multiple or sporadic consequences. More information may be obtained from the U.S. Forest Service Soil Sampling Use Notice (FS-2012-02-2028).

**Soil Bore Severity Classification**

**Unharmed:** Soil and ground cover are unaffected by fire.

**Low:** Ground cover is reduced but largely intact, soil structure is unchanged.

**Medium:** Up to 50% of the pre-fire ground cover may be consumed, tree surface and structure changes may have occurred. Fading needles may reduce effective ground cover reliability slightly.

**High:** Nearly all of pre-fire ground cover consumed, soil structure is less stable or destroyed.

**Dead:** Soil and ground cover is missing.





Project areas



Eagle Creek Fire burn area



0 1 2 4 6 8 Miles





# Project Areas within & adjacent to burn area

- Eagle Creek Fire burn area
- project areas
- Multnomah County Line



Eagle Creek

777 road

0 0.25 0.5 1 1.5 2 Miles



# Treatment totals

- **667 acres** covered (gross)
  - 296 USFS
  - 372 OPRD
- **20.28 miles**; trail and roadside
  - 17 miles USFS
  - 4 miles OPRD

# Key observations

- Native regeneration happening quickly.
- Areas that were weedy **before** the fire tended to be weedy post fire. Blackberry, herb robert. Except false brome.
- Pristine tended to be pristine **after**.
- Annual weeds w/ windborne seeds already seemed to be everywhere. Wall lettuce, prickly lettuce...
- Perrenial Peavine, shiny geranium???



# October 2017





# December 2017





April 2018





April 2018





May 2018





May 2018





May 2018





May 2018





June 2018





# June 2018





July 2018





July 2018





# July 2018





August 2018





August 2018





September 2018





# September 2018





September 2018





# September 2018







September 2018



September 2018







# **Moving Forward**

- USFS & OPRD decisions
- Fire lines
- EMSWCD continue EDRR
  - Expand control list.





Eagle Creek Fire burn area



Garlic mustard



0 1 2 4 6 8 Miles







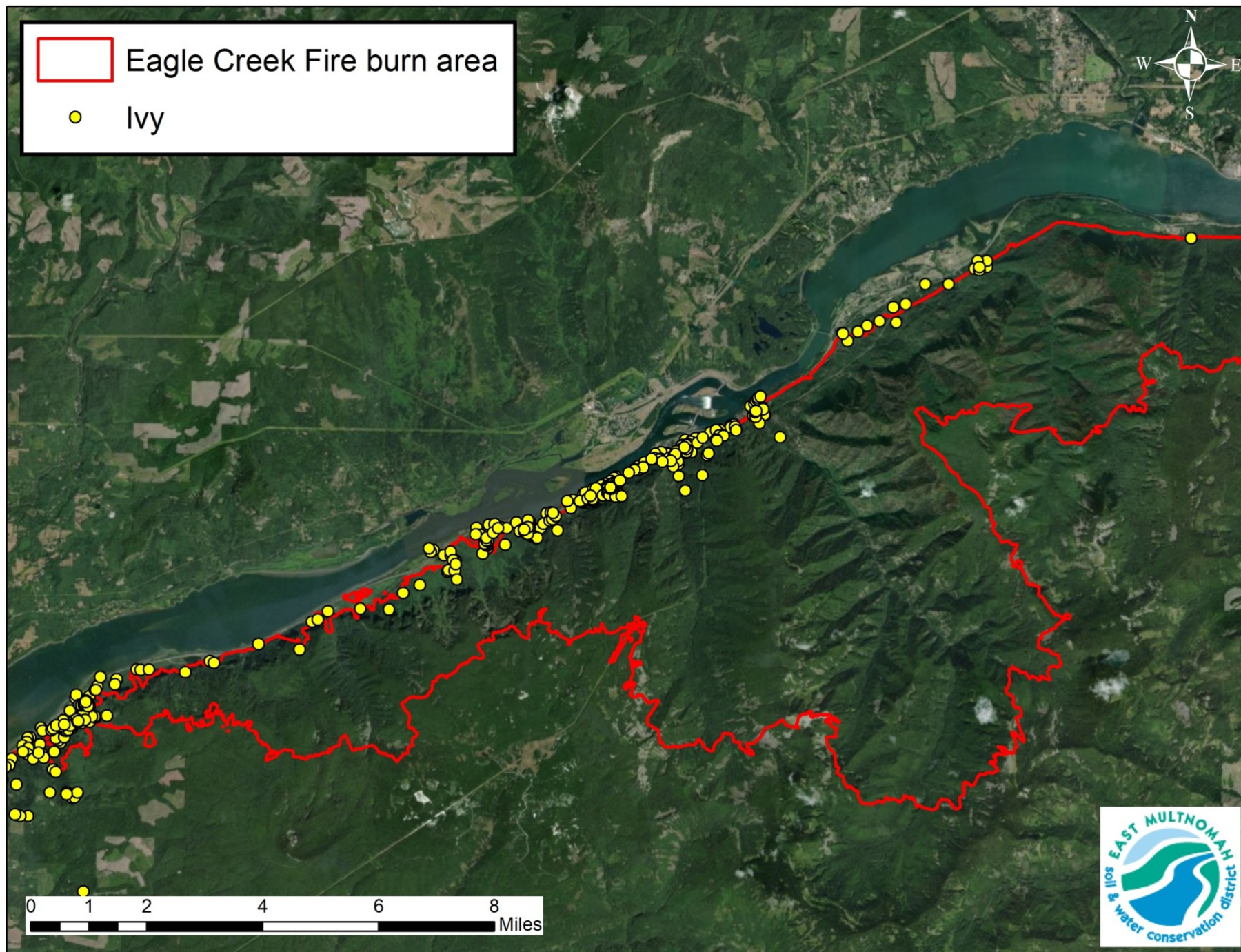
Eagle Creek Fire burn area



False brome







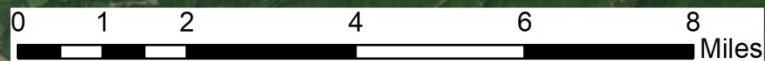




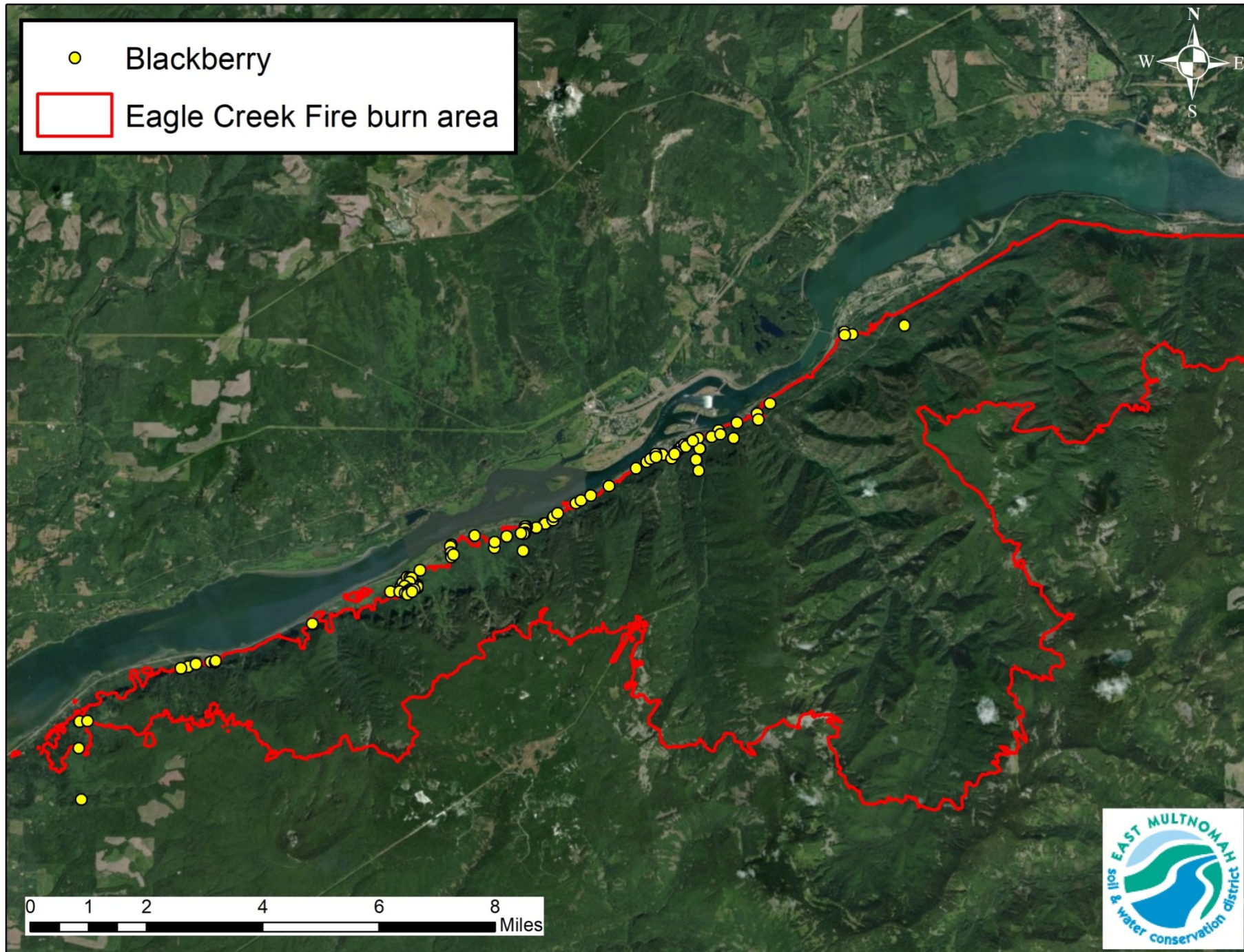
Shining Geranium



Eagle Creek Fire burn area







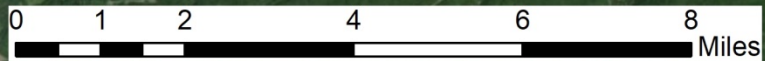




Herb Robert



Eagle Creek Fire burn area







Perennial Peavine



Eagle Creek Fire burn area







Foxglove



Eagle Creek Fire burn area



0 1 2 4 6 8 Miles







Clematis



Eagle Creek Fire burn area



0 0.75 1.5 3 4.5 6 Miles



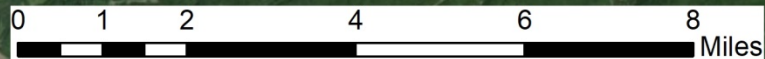




Scotch Broom



Eagle Creek Fire burn area





- Bindweed
- Bishops weed
- Blackberry
- Burdock
- Dames Rocket
- Knapweed sp.
- Foxglove
- Groundsel
- Herb Robert
- Holly
- Ivy
- Knotweed
- Lemon Balm
- Perennial Peavine
- Prickly Lettuce
- Reed Canary Grass
- Scotch Broom
- Shinning Geranium
- Travelers Joy
- Velvet Grass
- Vinca minor
- Wall lettuce
- Yellow Hawkweed



# Many Thanks!

- Robin Dobson, Katie Santini, Sarah Callahan, & Sarah Uvodic –U.S. Forest Service
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- Amaral Nursery
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# Questions

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