

May 15, 2015 – 1.5 months pre-fire



# Balsamroot Trail Post Wild-fire Photo Monitoring Project

Sleepy Hollow wildfire  
June 28-29, 2017

Post-fire monitoring  
established July 10, 2015

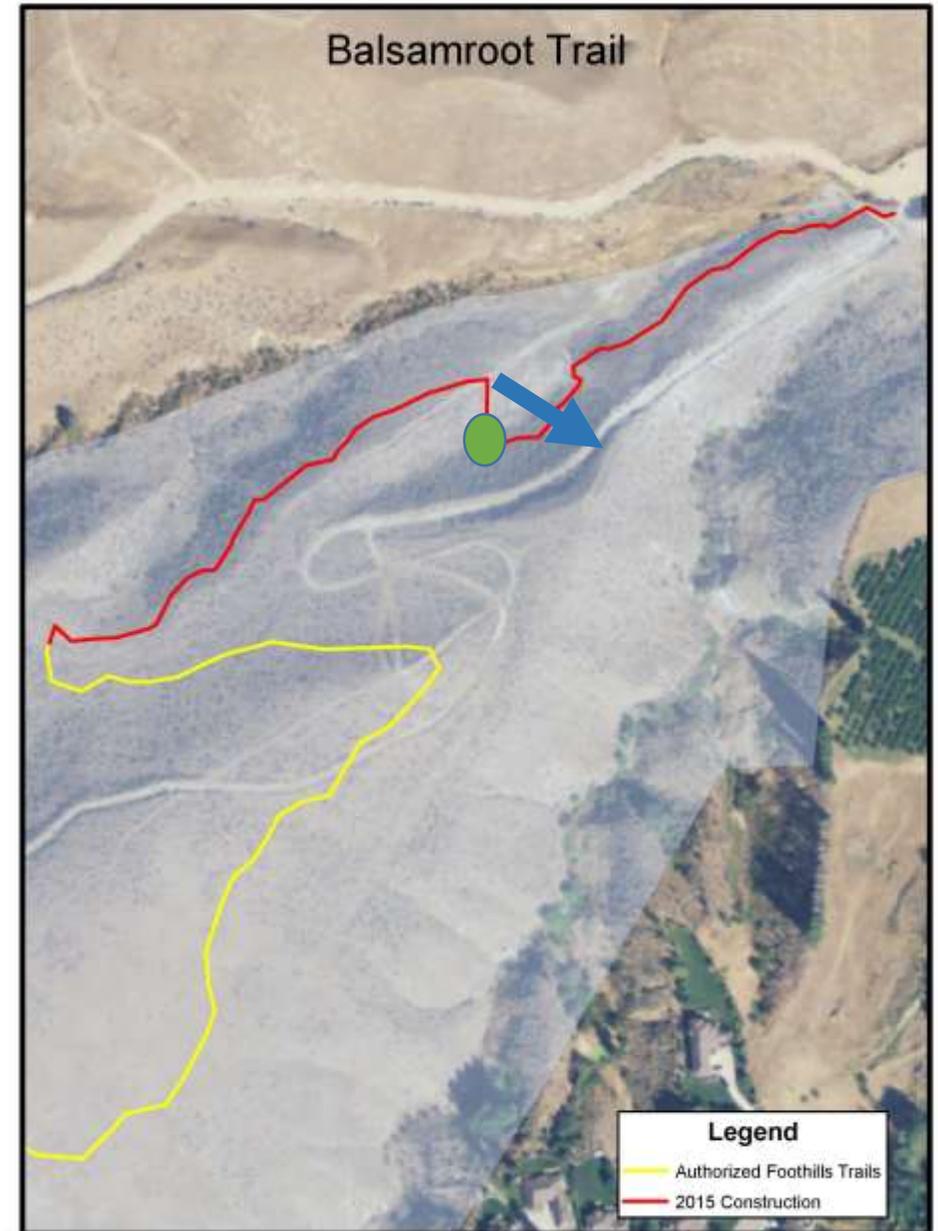
May 11, 2015- 8 months post fire



Chelan-Douglas Land Trust staff and volunteers completed the construction of the Balsamroot Trail (red on map), less than one week before the Sleepy Hollow fire burned across this hillside on June 28-29, 2015.



●  
Location  
of  
photo  
point 2



The blue arrows correlate the map on the right to this landscape photo of the hillside, south of Photo Point 2 .

Photos taken on April 4, 2015



Spring, 2015 construction of the Balsamroot Trail, connecting at Horse Lake Road. This shows the hillside locations for photo points 1 and 2



This shows the high quality native shrub-steppe plant community on the north-face hillside where photo Points 1, 2, and 3 were located. Big sagebrush and bluebunch wheatgrass are the dominant plants. CDLT estimates that over 80 total species of native wildflowers, shrubs, and grasses were here.



Photos taken May 15, 2015 during trail construction, 6 weeks before the wildfire.

*Wenatchee World:* <https://www.wenatcheeworld.com/news/2015/jun/29/firestorm-destroys-28-homes-ignites-commercial-area/>

Full story: ***Firestorm destroys 28 homes, ignites commercial area***

by [Dee Riggs](#), Aug. 11, 2015, 4:22 p.m.

WENATCHEE — A fast-moving wildfire burned 28 homes in north Wenatchee Sunday night, sending out embers that started commercial buildings on fire about a mile away along North Wenatchee Avenue, and forcing the evacuation of hundreds of people.

The cause was still under investigation Monday but the fire started along Sleepy Hollow Road just below the Sleepy Hollow Heights subdivision. It was reported at 2:16 p.m.

As of Monday afternoon, the fire had burned 4,000 acres, fire officials said. From Sleepy Hollow Road, it burned along ridge lines almost to No. 1 Canyon.

The fire died down on Monday but firefighters are still worried about flare-ups, said Mike Burnett, chief of Chelan County Fire District 1.

“If a flare-up gets blown into a house, or the siding on a house or a wood pile or bushes, the potential for a serious fire still exists,” Burnett said.

Still, he said, “the hazard is definitely diminished significantly. If we have another day like this tomorrow, we’ll be looking really good.”

Burnett estimated that 200 firefighters were rotating on and off the fire Monday. Most are state firefighters.

“We’ve sent most of the local guys home to get some rest,” he said.

On Sunday, firefighters worked hard to keep houses in and near the Sleepy Hollow Heights subdivision from catching fire, said Phil Mosher, chief of Chelan County Fire District 6 at Monitor said during a press conference Monday morning. They succeeded, but winds kept the fire moving south and, about 5 p.m., it headed toward the Broadview subdivision a ridge away from Sleepy Hollow.

That, Mosher said, is when “fire conditions rapidly changed on us and we started experiencing extreme fire behavior, which we classify as a firestorm with multiple structures involved.”

Burnett said he was taken aback as he drove into the Broadview subdivision.

“I had never seen that type of fire behavior, burning that many structures at one time,” he said.

Heavy rain fell in Wenatchee about 6:30 a.m. Monday, helping fire efforts but not putting the blaze out, said Fire Chief Mike Burnett.

The big problem, he said, is that “we have so much light, flashy fuel and it dries out fast.” Through the night, firefighting focus remained on structure protection. Burnett said about 300 firefighters were battling the flames at the peak of the fire.

Firefighters came from around North Central Washington and the state, he said.

Crews had to split up when embers flew into cardboard and plastic and spread to three warehouse yards: Blue Bird Inc. fruit company, Northwest Wholesale Inc., and Michelson Packaging Company. Fire was still burning strong in that area Monday morning, sending black smoke into the air.

No one was seriously injured in the fires, Mosher said...

**Photo Point 1:**  
Balsamroot  
Trail north  
trailhead **July  
10, 2015.**  
Wildfire  
burned on  
May 15, 2015  
**6 weeks pre-  
fire**



## Photo Point 1:

Balsamroot Trail north trailhead July 10, 2015.

Wildfire burned on June 28-29, 2015

2 weeks post-fire

- **Site 1A:** Balsamroot Trail, north trailhead
- NAD83, latitude 47.45823 longitude 120.35770
- Photographer location: 2 feet south of south trail margin, with rebar and orange cap, tag #52
- **Target 1:** green 1 meter metal fence post set 80 feet 8 inches west of rebar #52 Heading: 251 degrees
- **Comment:** Distant Ponderosa Pine (*Pinus ponderosa*) in valley floor, 95% burned. Prior to the fire, plant community in valley was Big Sagebrush (*Artemisia tridentata*), Serviceberry (*Amelanchier alnifolia*), native grasses (Bluebunch Wheatgrass, *Pseudoroegneria spicata*), non-native grasses (cheatgrass, *Bromus tectorum*, and bulbous bluegrass, *Poa bulbosa*), and non-native weeds (whitetop, *Lepidium draba*, and diffuse knapweed, *Centaurea diffusa*). Photo and compass reading taken 5 feet above rebar marker.



## Photo Point 1:

Balsamroot Trail, north trailhead **May 11, 2016.**

Wildfire burned on June 28-29, 2015

**10 months post fire**

- **Site 1A:** Balsamroot Trail, north trailhead
- NAD83, latitude 47.45823 longitude 120.35770
- Photographer location: 2 feet south of south trail margin, with rebar and orange cap, tag #52
- **Target 1:** green 1 meter metal fence post set 80 feet 8 inches west of rebar #52 Heading: 251 degrees
- Comment: Distant Ponderosa Pine (*Pinus ponderosa*) in valley floor, 95% burned. Prior to the fire, plant community in valley was Big Sagebrush (*Artemisia tridentata*), Serviceberry (*Amelanchier alnifolia*), native grasses (Bluebunch Wheatgrass, *Pseudoroegneria spicata*), non-native grasses (cheatgrass, *Bromus tectorum*, and bulbous bluegrass, *Poa bulbosa*), and non-native weeds (whitetop, *Lepidium draba*, and diffuse knapweed, *Centaurea diffusa*). Photo and compass reading taken 5 feet above rebar marker.



## Photo Point 1:

Balsamroot Trail, north trailhead July 11, 2016.

Wildfire burned on June 28-29, 2015

1 year post fire

- **Site 1A:** Balsamroot Trail, north trailhead
- NAD83, latitude 47.45823 longitude 120.35770
- Photographer location: 2 feet south of south trail margin, with rebar and orange cap, tag #52
- **Target 1:** green 1 meter metal fence post set 80 feet 8 inches west of rebar #52 Heading: 251 degrees
- Comment: Distant Ponderosa Pine (*Pinus ponderosa*) in valley floor, 95% burned. Prior to the fire, plant community in valley was Big Sagebrush (*Artemisia tridentata*), Serviceberry (*Amelanchier alnifolia*), native grasses (Bluebunch Wheatgrass, *Pseudoroegneria spicata*), non-native grasses (cheatgrass, *Bromus tectorum*, and bulbous bluegrass, *Poa bulbosa*), and non-native weeds (whitetop, *Lepidium draba*, and diffuse knapweed, *Centaurea diffusa*). Photo and compass reading taken 5 feet above rebar marker.



## Photo Point 1:

Balsamroot Trail, north trailhead July 10, 2017.

Wildfire burned on June 28-29, 2015

2 years post fire

- **Site 1A:** Balsamroot Trail, north trailhead
- NAD83, latitude 47.45823 longitude 120.35770
- Photographer location: 2 feet south of south trail margin, with rebar and orange cap, tag #52
- **Target 1:** green 1 meter metal fence post set 80 feet 8 inches west of rebar #52 Heading: 251 degrees
- Comment: Distant Ponderosa Pine (*Pinus ponderosa*) in valley floor, 95% burned. Prior to the fire, plant community in valley was Big Sagebrush (*Artemisia tridentata*), Serviceberry (*Amelanchier alnifolia*), native grasses (Bluebunch Wheatgrass, *Pseudoroegneria spicata*), non-native grasses (cheatgrass, *Bromus tectorum*, and bulbous bluegrass, *Poa bulbosa*), and non-native weeds (whitetop, *Lepidium draba*, and diffuse knapweed, *Centaurea diffusa*). Photo and compass reading taken 5 feet above rebar marker.



**Photo Point 2.1:**  
Balsamroot Trail  
**July 10, 2015.**  
Wildfire burned on June  
28-29, 2015  
**2 weeks post-fire**

**Site 2A:** Second small ravine crossing from trailhead (Horse Lake Road gate visible to the north); 4 photo points at different Headings (photographer location is the same in all 4 photos)

NAD83, lat. 47.45936 long. 120.35470

Photographer location: upslope 2 feet southwest of trail, with rebar and orange cap, tag #53

**Target 2.1:** upslope in ravine, green 1 meter metal fence post set 53 feet southwest of rebar #53 Heading: 232 degrees

Comment: Single burned Serviceberry is 1.5 meter SW of green post. Photo and compass reading taken 2 feet above rebar marker.



**Photo Point 2.1:**  
Balsamroot Trail  
**May 11, 2016.**  
Wildfire burned on June  
28-29, 2015  
**10 months post-fire**

**Site 2A:** Second small ravine crossing from trailhead (Horse Lake Road gate visible to the north); 4 photo points at different Headings (photographer location is the same in all 4 photos)

NAD83, lat. 47.45936 long. 120.35470

Photographer location: upslope 2 feet southwest of trail, with rebar and orange cap, tag #53

**Target 2.1:** upslope in ravine, green 1 meter metal fence post set 53 feet southwest of rebar #53 Heading: 232 degrees

Comment: Single burned Serviceberry is 1.5 meter SW of green post. Photo and compass reading taken 2 feet above rebar marker.



**Photo Point 2.1:**  
Balsamroot Trail  
**July 11, 2016.**  
Wildfire burned on June  
28-29, 2015  
**1 year post-fire**

**Site 2A:** Second small ravine crossing from trailhead (Horse Lake Road gate visible to the north); 4 photo points at different Headings (photographer location is the same in all 4 photos)

NAD83, lat. 47.45936 long. 120.35470

Photographer location: upslope 2 feet southwest of trail, with rebar and orange cap, tag #53

**Target 2.1:** upslope in ravine, green 1 meter metal fence post set 53 feet southwest of rebar #53 Heading: 232 degrees

Comment: Single burned Serviceberry is 1.5 meter SW of green post. Photo and compass reading taken 2 feet above rebar marker.



**Photo Point 2.1:**  
Balsamroot Trail  
**July 10, 2017.**  
Wildfire burned on June  
28-29, 2015  
**2 years post-fire**

**Site 2A:** Second small ravine crossing from trailhead (Horse Lake Road gate visible to the north); 4 photo points at different Headings (photographer location is the same in all 4 photos)

NAD83, lat. 47.45936 long. 120.35470

Photographer location: upslope 2 feet southwest of trail, with rebar and orange cap, tag #53

**Target 2.1:** upslope in ravine, green 1 meter metal fence post set 53 feet southwest of rebar #53 Heading: 232 degrees

Comment: Single burned Serviceberry is 1.5 meter SW of green post. Photo and compass reading taken 2 feet above rebar marker.



**Photo Point 2.2:**  
Balsamroot Trail,  
July 10, 2015.  
Wildfire burned on June  
28-29, 2015  
**2 weeks post-fire**

**Target 2.2:** Top of hill to north (no green fence  
post)  
Heading: 312 degrees  
NAD83, lat. 47.45936 long. 120.35470  
Photographer location: upslope 2 feet  
southwest of trail, with rebar and orange cap,  
tag #53



**Photo Point 2.2:**  
Balsamroot Trail,  
**May 11, 2016.**  
Wildfire burned on June  
28-29, 2015  
**10-months post-fire**

**Target 2.2:** Top of hill to north (no green fence  
post)  
Heading: 312 degrees  
NAD83, lat. 47.45936 long. 120.35470  
Photographer location: upslope 2 feet  
southwest of trail, with rebar and orange cap,  
tag #53



**Photo Point 2.2:**  
Balsamroot Trail,  
**July 11, 2016.**  
Wildfire burned on June  
28-29, 2015  
**1 year post-fire**

**Target 2.2:** Top of hill to north (no green fence  
post)  
Heading: 312 degrees  
NAD83, lat. 47.45936 long. 120.35470  
Photographer location: upslope 2 feet  
southwest of trail, with rebar and orange cap,  
tag #53



**Photo Point 2.2:**  
Balsamroot Trail,  
**July 10, 2017.**  
Wildfire burned on June  
28-29, 2015  
**2 years post-fire**

**Target 2.2:** Top of hill to north (no green fence post)  
Heading: 312 degrees  
NAD83, lat. 47.45936 long. 120.35470  
Photographer location: upslope 2 feet southwest of trail, with rebar and orange cap, tag #53



**Photo Point 2.3:**  
Balsamroot Trail  
**July 10, 2015.**  
Wildfire burned on June  
28-29, 2015  
2-weeks post-fire

**Target 2.3:** Looking toward trailhead, power  
pole (no green fence post)  
Heading: 17 degrees  
Heading: 312 degrees  
NAD83, lat. 47.45936 long. 120.35470  
Photographer location: upslope 2 feet  
southwest of trail, with rebar and orange cap,  
tag #53



**Photo Point 2.3:**  
Balsamroot Trail,  
**May 11, 2016.**  
Wildfire burned on June  
28-29, 2015  
**10 months post-fire**

**Target 2.3:** Looking toward trailhead, power  
pole (no green fence post)  
Heading: 17 degrees  
Heading: 312 degrees  
NAD83, lat. 47.45936 long. 120.35470  
Photographer location: upslope 2 feet  
southwest of trail, with rebar and orange cap,  
tag #53



**Photo Point 2.3:**  
Balsamroot Trail,  
**July 11, 2016.**  
Wildfire burned on June  
28-29, 2015  
**1 year post-fire**



**Target 2.3:** Looking toward trailhead, power  
pole (no green fence post)  
Heading: 17 degrees  
Heading: 312 degrees  
NAD83, lat. 47.45936 long. 120.35470  
Photographer location: upslope 2 feet  
southwest of trail, with rebar and orange cap,  
tag #53

**Photo Point 2.3:**  
Balsamroot Trail,  
**July 10, 2017.**  
Wildfire burned on June  
28-29, 2015  
**2 years post-fire**

**Target 2.3:** Looking toward trailhead, power pole (no green fence post)  
Heading: 17 degrees  
Heading: 312 degrees  
NAD83, lat. 47.45936 long. 120.35470  
Photographer location: upslope 2 feet southwest of trail, with rebar and orange cap, tag #53



**Photo Point 2.4:**  
Balsamroot Trail,  
**July 10, 2015.**  
Wildfire burned on June  
28-29, 2015  
2 weeks post-fire



**Target 2.4:** Looking toward hillside above trail  
(no green fence post)  
Heading: 83 degrees

**Photo Point 2.4:**  
Balsamroot Trail,  
**May 11, 2016.**  
Wildfire burned on June  
28-29, 2015  
**10 months post-fire**



**Target 2.4:** Looking toward hillside above trail  
(no green fence post)  
Heading: 83 degrees

**Photo Point 2.4:**  
Balsamroot Trail,  
**July 11, 2016.**  
Wildfire burned on June  
28-29, 2015  
**1 year post-fire**



**Target 2.4:** Looking toward hillside above trail  
(no green fence post)  
Heading: 83 degrees

**Photo Point 2.4:**  
Balsamroot Trail,  
**July 10, 2017.**  
Wildfire burned on June  
28-29, 2015  
**2 years post-fire**



**Target 2.4:** Looking toward hillside above trail  
(no green fence post)  
Heading: 83 degrees

**Photo Point 3:**  
Balsamroot Trail,  
**July 10, 2015.**  
Wildfire burned on June  
28-29, 2015  
**2 weeks post-fire**

**Site 3** Before trail tops out on bench looking nw toward red and white radio tower and white building to the right of tower  
NAD83, lat. 47.45823 long. 120.35770  
Photographer location: on trail, rebar with orange cap, tag #54, looking across ravine  
**Target 1:** green 1 meter metal fence post, placed across the ravine  
Heading: 320 degrees  
Comment: Single dead deciduous shrub snag is downslope 10 feet from green metal fence post. Photo and compass reading taken 2 feet above rebar marker.



## Photo Point 3:

Balsamroot Trail,

May 11, 2016.

Wildfire burned on June  
28-29, 2015

10 months post-fire

**Site 3** Before trail tops out on bench looking nw  
toward red and white radio tower and white  
building to the right of tower

NAD83, lat. 47.45823 long. 120.35770

Photographer location: on trail, rebar with  
orange cap, tag #54, looking across ravine

**Target 1:** green 1 meter metal fence post,  
placed across the ravine

Heading: 320 degrees

Comment: Single dead deciduous shrub snag is  
downslope 10 feet from green metal fence post.  
Photo and compass reading taken 2 feet above  
rebar marker.



**Photo Point 3:**  
Balsamroot Trail,  
**July 11, 2016.**  
Wildfire burned on June  
28-29, 2015  
**1 year post-fire**

**Site 3** Before trail tops out on bench looking nw  
toward red and white radio tower and white  
building to the right of tower  
NAD83, lat. 47.45823 long. 120.35770  
Photographer location: on trail, rebar with  
orange cap, tag #54, looking across ravine  
**Target 1:** green 1 meter metal fence post,  
placed across the ravine  
Heading: 320 degrees  
Comment: Single dead deciduous shrub snag is  
downslope 10 feet from green metal fence post.  
Photo and compass reading taken 2 feet above  
rebar marker.



**Photo Point 3:**  
Balsamroot Trail,  
**July 10, 2017.**  
Wildfire burned on June  
28-29, 2015  
**2 years post-fire**

**Site 3** Before trail tops out on bench looking nw toward red and white radio tower and white building to the right of tower  
NAD83, lat. 47.45823 long. 120.35770  
Photographer location: on trail, rebar with orange cap, tag #54, looking across ravine  
**Target 1:** green 1 meter metal fence post, placed across the ravine  
Heading: 320 degrees  
Comment: Single dead deciduous shrub snag is downslope 10 feet from green metal fence post. Photo and compass reading taken 2 feet above rebar marker.



## Photo Point 4:

Balsamroot Trail,

July 10, 2015.

Wildfire burned on June  
28-29, 2015

2 weeks post-fire

**Site 4:** On plateau, at bench curve in trail as  
trail heads east

NAD83, lat. 47.45827 long. 120.35772

Photographer location: 1 meter west of trail,  
rebar with orange cap, tag #55

**Target 1:** green 1 meter metal fence post, in line  
with exposed rock outcrop to west

Heading: 264 degrees

Comment: Power poles on the horizon and  
Horse Lake Road switchback. Photo and  
compass reading taken 5 feet above rebar  
marker.



## Photo Point 4:

Balsamroot Trail,

May 11, 2016.

Wildfire burned on June  
28-29, 2015

10 months post-fire

**Site 4:** On plateau, at bench curve in trail as  
trail heads east

NAD83, lat. 47.45827 long. 120.35772

Photographer location: 1 meter west of trail,  
rebar with orange cap, tag #55

**Target 1:** green 1 meter metal fence post, in line  
with exposed rock outcrop to west

Heading: 264 degrees

Comment: Power poles on the horizon and  
Horse Lake Road switchback. Photo and  
compass reading taken 5 feet above rebar  
marker.



## Photo Point 4:

Balsamroot Trail,

July 11, 2016.

Wildfire burned on June

28-29, 2015

1 year post-fire



**Site 4:** On plateau, at bench curve in trail as trail heads east

NAD83, lat. 47.45827 long. 120.35772

Photographer location: 1 meter west of trail, rebar with orange cap, tag #55

**Target 1:** green 1 meter metal fence post, in line with exposed rock outcrop to west

Heading: 264 degrees

Comment: Power poles on the horizon and Horse Lake Road switchback. Photo and compass reading taken 5 feet above rebar marker.

## Photo Point 4:

Balsamroot Trail,  
July 10, 2017.

Wildfire burned on June  
28-29, 2015

2 years post-fire

**Site 4:** On plateau, at bench curve in trail as  
trail heads east

NAD83, lat. 47.45827 long. 120.35772

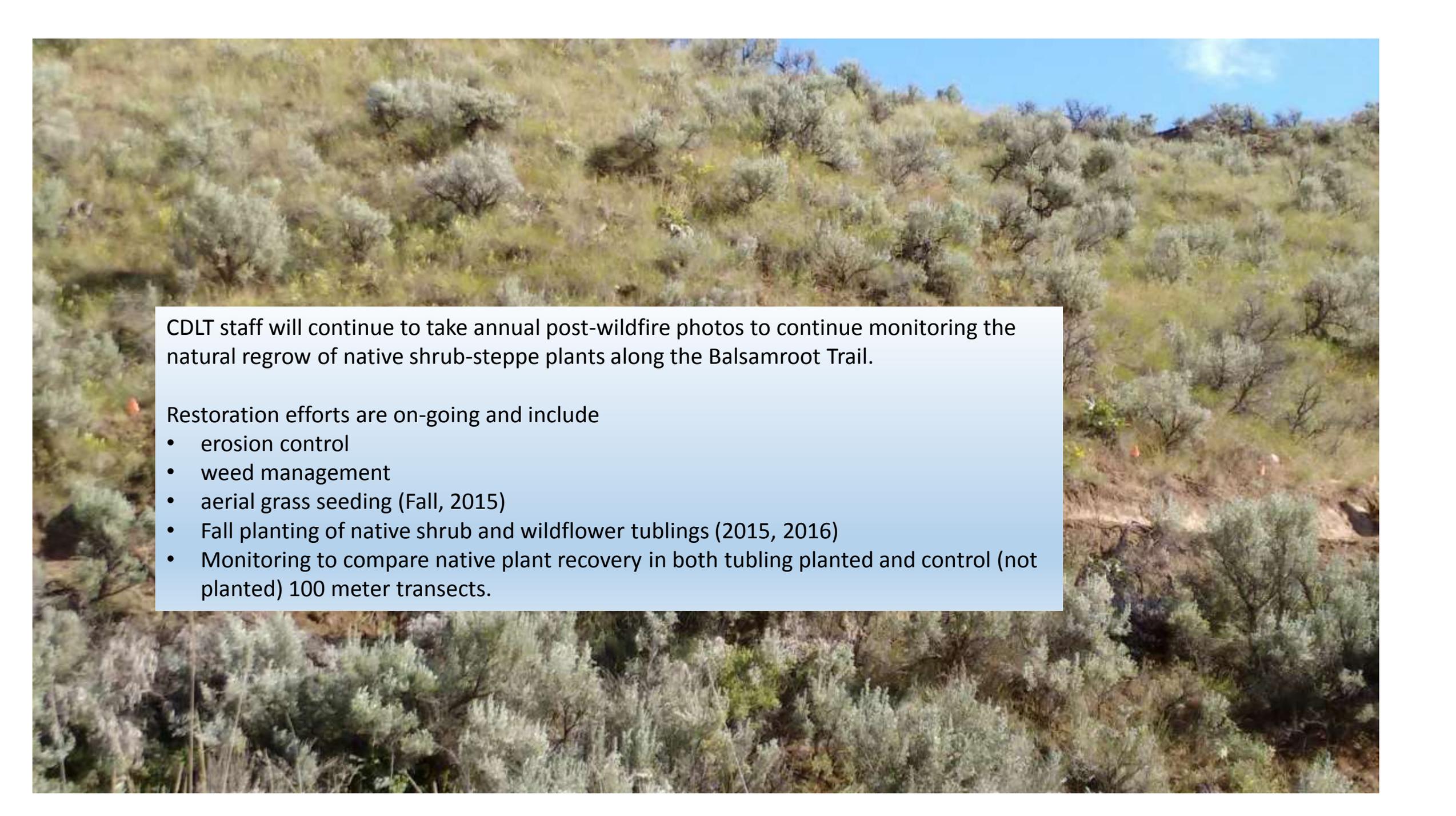
Photographer location: 1 meter west of trail,  
rebar with orange cap, tag #55

**Target 1:** green 1 meter metal fence post, in line  
with exposed rock outcrop to west

Heading: 264 degrees

Comment: Power poles on the horizon and  
Horse Lake Road switchback. Photo and  
compass reading taken 5 feet above rebar  
marker.





CDLT staff will continue to take annual post-wildfire photos to continue monitoring the natural regrow of native shrub-steppe plants along the Balsamroot Trail.

Restoration efforts are on-going and include

- erosion control
- weed management
- aerial grass seeding (Fall, 2015)
- Fall planting of native shrub and wildflower tublings (2015, 2016)
- Monitoring to compare native plant recovery in both tubling planted and control (not planted) 100 meter transects.