

**FIRE AND ICE**

*OR*

**5 REASONS TO  
RETIRE**




**Douglas Complex**  
**July 26<sup>th</sup>, 2013**  
**24,000 Acres**  
**Salvage: 26MMBF**










**Yellow Point Fire**  
**September 5<sup>th</sup>, 2014**  
**790 Acres**  
**Salvage: 5 MMBF**






Stouts Creek Fire  
July 30<sup>th</sup>, 2015  
26,000 Acres  
Salvage: 35 MMBF









**Ice Storm**  
**December 15<sup>th</sup>, 2016**  
**2800 Acres**  
**Salvage: 52 MMBF**












**Horse Prairie Fire**  
**August 26<sup>th</sup>, 2017**  
**16,000 Acres**  
**Salvage: 15 MMBF**









**2017**  
**23% of Oregon**  
**Fee Harvest**  
**Fire and Ice Damage**





# Linear Thinking



# SAFETY

---

## Fire

1. Ash Pits
2. Ash/Rain
3. Pine Needles
4. Falling Trees
5. Debris Flows
6. Structures
  - a. Rail Car Bridges
  - b. Plastic Culverts
7. Hazard Trees

## Ice

1. Access
2. Downed Timber











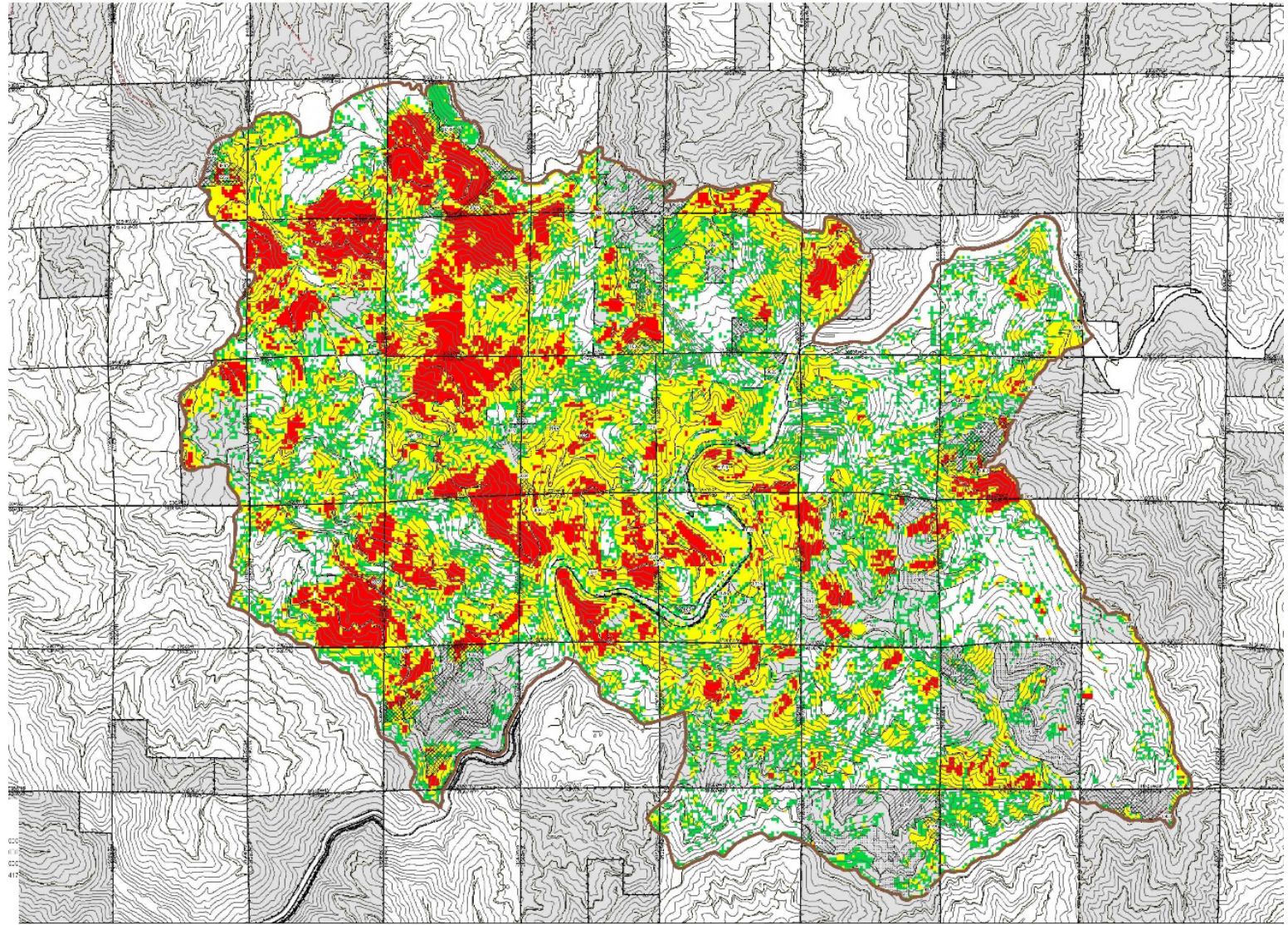
# Identification

---

## Fire

1. The Obvious
2. Fire Intensity Maps
3. High Elevation Photos
4. Inventory
5. Dirty Burn
  - a. Is it going to die?





1000  
800  
600  
400  
200





# Ice

---

- Getting There
- Road Identification
- Helicopter
- Side Looking Radar
- Drones
- High Elevation Photos





How Low Can You Go?



Height  
Diameter  
Volume/Acre  
Markets

# Stouts

## The New Variable











# Communication





Thank you!

