

AFTER THE FIRE – NOW WHAT? FIRE, WATER, EROSION, & MITIGATION TREATMENTS

Fire and the Hydrologic Cycle

Intense heat can:

- Create hydrophobic soils
- Reduce water infiltration
- Cause a loss of organic layer
- Increase runoff, erosion, dry ravel
- Lead to localized debris flows
- Affect water quality, temperature, and sediment delivery

Burn Severity

- Degree of fire effects on soils depend on severity and amount of the watershed affected.
- The potential for detrimental effects of wildfire are highest in areas of high burn severity and steep slopes in the first 1-3 years.

What Mitigation Measures Can You Take?

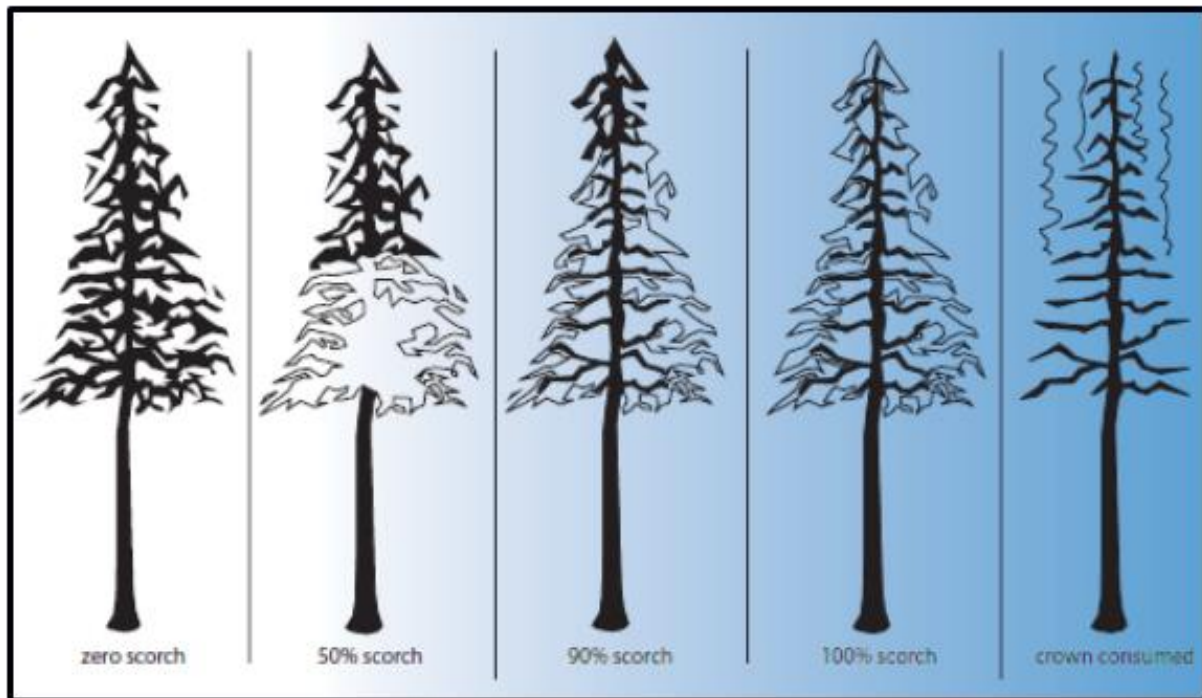
The following are some actions you can take to increase surface roughness to slow water movement, and improve infiltration to reduce erosion and sedimentation in targeted areas:

- Aerial and ground seeding of native grass/forbs
- Mulch only (weed free)
- Erosion control blankets/matting
- Contour wattles
- Contour logs placement
- Straw bales & silt fences
- Drainage maintenance & upgrades

Mitigation measures include:

- Seeding
- Mulching (wood chips or straw)
- Erosion control matting
- Log erosion barriers
- Contour wattles
- Silt fences
- Straw bales
- Drainage upgrades (to accommodate increased stream flow post-fire)

Assessing Fire Injury, Tree Damage, & Salvage Potential



Fire and heat injuries to look for

- Crown scorch (foliage & buds)
- Bole/trunk char
- Root collar char
- Other factors:
 - Species
 - Pre-fire vigor
 - Bark beetles
 - Drought

To Salvage or Not to Salvage?

- Do you have enough timber volume to harvest?
- What are current log prices?
- What are the logging costs?
- Can you salvage quickly before trees lose significant value through defect & decay?
- Is a logger available?
- Reforestation after salvage cutting

Summary/Resources

My Forest Burned: Now What?: This publication provide initial guidance for restoring your land in a way that emphasizes the wildlife habitat a post-fire landscape can provide:

<https://woodlandfishandwildlife.com/wp-content/uploads/2019/12/After-the-Fire-final-reduced.pdf>

Jute Matting Installation: An excellent 4-minute video on how to properly install jute matting so it stays in place: <https://www.youtube.com/watch?v=cFgL60LVJNc>