Restoring Land After Fire

The Methow and Okanogan valleys experienced the largest fire in Washington State history in July 2014 and this August has brought another round of fires in our region. Our community has suffered, experiencing loss of life, homes, and livelihoods. Unlike our human communities, our native habitats are adapted to fire and will recover quickly in most circumstances without intervention. For example, in many places of the Carlton Complex Fire, sprouting/resprouting of bluebunch wheatgrass, lupine, yarrow, chokecherries, currants, elderberry, and aspen this past year has been remarkable.

For both the Carlton Complex and Twisp River fires, we have the unique opportunity to patiently observe this natural process unfold in the coming weeks and months. We encourage you to wait and see.

While nature will do most of the work, there are places where simple land restoration work will be an important part of the recovery process. Here, we outline basic strategies for rehabilitating:

- steep slopes
- previously weedy areas
- forests



Meadows, grasslands, shrub-steppe and riparian areas will flourish with flowers, grass and shrubs next year.

Forested Areas

• In the Carlton Complex Fire and Twisp River Fire, burned forested areas range from light understory burns to stand-replacing fires. Ponderosa pine and Douglas fir will be slower to regenerate than the grasses and shrubs. Some forest may initially actually convert into more grassland communities. It's important to remember that burned trees that do not threaten personal safety or property provide important wildlife habitat.



Our forests have evolved to live with fire, and although this forest burned completely, many of the trees will survive. Any green needles are a good sign a tree will recover with time.

- Many trees, even those with significant loss of foliage, will likely recover, as long as they have some green needles, but conifers that experienced high fire intensity with total loss of needles will not. The Washington Department of Natural Resources (DNR) has staff available to provide technical expertise related specifically to tree damage, merchantability, and recovery actions. Steve Harris is their local contact and he can be reached at 509.684.7474.
- If you have a heavily burned forest, please be aware that tree fall is a safety concern. Fire can smolder underground in tree roots, and the trees can fall readily, especially with winds. It is best to stay away from these areas, and potentially have an expert evaluate hazard trees for professional cutting. Please contact the DNR or one of the other resource professionals listed below if you have concerns about hazard trees.

Areas with Previous Weed Infestations

- If you have burned areas that were previously weedy or disturbed or adjacent to such areas, this is a good opportunity to seed with native perennial grasses to outcompete weedy species.
- For dryland pastures areas that have been burned, reseeding with a dryland pasture mix for the desired purpose and character of the site will be helpful in minimizing the weed population.
- The first couple of years following fire and especially important in reestablishment of our plant communities. Aggressive weed control during this time will be an important step. Plan ahead to monitor all burned areas for weeds and establish a weed control plan.





Firelines & Other Soil Disturbances

Restoring firelines is one of the most important post-fire rehabilitation tasks. Without prompt attention, firelines are

at risk of weed colonization and erosion. If fire crews built your fireline, they will return to pull disturbed soil and plant material from the edge of the fireline back onto the line, but they will not reseed it or restore it. Tips for landowners or landscaping services include:

- Avoid soil compaction.
- Reseed before in fall with habitat appropriate seed mix (see sidebar). Use native seeds for firelines within native shrub-steppe, forest or riparian habitat.



Pull natural debris back onto disturbed fireline soil.

Seed at a density of 15#/ac for bare areas.

- After heavy rain, look at water bars or log "dams" that fire crews may have installed on steep (15% or more) slopes to ensure they functioned properly.
- Control weeds for a couple of seasons until grass is established.

Areas with Burned Soil

- If you have large areas of deep ash (over 2"), particularly in a drainage or on a steep slope, consult a resource professional from the list provided.
- It is important to leave existing burnt or dead vegetation in place if the plants do not threaten personal safety or property because they help stabilize the soil.

Who Can Help

Okanogan Conservation District: http://www.okanogancd.org/Fires 509.422.0855

Methow Conservancy: www.methowconservancy.org/fire.html 509.996.2870, info@methowconservancy.org

Methow Natives

509.341.4060, methownatives1@gmail.com

Plantas Nativa

509.341.4133, camden@pneast.com

To Seed or Not to Seed

Large portions of the burn will recover naturally and do not need to be seeded. In some cases, seeding can actually slow natural recovery by providing additional competition. Initially seeding efforts should be focused on firelines and other fire fighting soil disturbances. Hydroseeding is effective on stabilizing steep slopes and enhancing germination.

Recommended Native Seed Species by habitat zone

- Shrub-steppe and/or dry forests: Bluebunch wheatgrass or bluebunch wheatgrass/Idaho fescue mix
- Disturbed areas along roads: Sand dropseed (1#/acre)
- Riparian areas: Blue wildrye or blue wildrye/ mountain brome mix
- Dryland pastures: See OCD recommendations

We recommend a site visit by a professional before any seeding to get advice on the species and seeding rate that best fit your situation and budget.

Places to buy local seed

Methow Natives, 509.341.4060, methownatives1@gmail.com YardFood, 509-997-0978, yardfood@tesshoke.com Twisp Feed, 509.997.3621 Cascade Pipe & Supply, 509.997.0720 Eastern Green (for hydroseeding), 509.997.0116

Steep Slopes

- If you have a steep slope that has burned and there are homes or significant infrastructure below or adjacent to this slope, call the Okanogan Conservation District (OCD). There may be a risk of flooding or debris flow.
- Property owners with burned properties or who are downhill from burned properties should consider purchasing a National Flood Insurance policy. Contact your insurance agent for details on obtaining flood insurance for possible flash floods post-fire.
- If you are concerned about the potential for general erosion, leave existing burnt vegetation to help stabilize soil, monitor slopes after rain events, and contact OCD

to learn about natural slope stabilization techniques and services available.



For general inquiries about post fire restoration or if you would like to have a natural resource professional evaluate your property for recovery actions, please contact the Methow Conservancy at 509.996.2870.