

# 2020 JEFFERSON COUNTY FOREST RESTORATION THINNING

## OVERVIEW

### Changing Forest Management Priorities

Much of the forest we live in and around has been managed for timber production at some point. This type of management is characterized by forests that are uniform, even-aged, and more than 80% Douglas-fir for ease of harvest and highest profit. These forests were meant to be managed regularly and as we transition land to different uses, like parks and open space, the management strategies should change as well to reflect user values. Thinning is one of the strategies to transition forests and better reflect these values.

*The goal of thinning is to improve overall forest health and resiliency by increasing biological and structural diversity. For optimal forest health a forest should have multiple ages and multiple species of trees to ensure that if and when threats like fire, disease, or mortality arise the forest will be able to respond.*

*Thinning is similar to boosting the forest's immune system: if all the trees are one species and one age and a disease comes through, most of them are likely to be similarly affected and the forest could face major losses. However, when a forest has a mix of species and mix of ages, a disease will most likely impact them differently because some trees could be immune. And even if some mortality does occur, there are new younger trees to quickly fill in and recover quicker.*



**Figure 1. Finished thinning at Newberry Hill Heritage Park, Kitsap County**

These areas represent three different forest health issues and will offer insight on future management of forest lands for restoration. Each of the properties were surveyed in 2019 as part of a feasibility study to assess the state of Jefferson County owned forest lands and were identified as the highest priority:

- **Trailhead County Park:** Young overstocked forest stand, high risk
- **Chimacum County Park Complex:** Laminated root rot, hazard trees; Mature overstocked forest stand
- **Silent Alder, Gibbs Lake County Park:** Mid-age, slightly overstocked forest stand, ideal time for thinning

# VARIABLE DENSITY THINNING

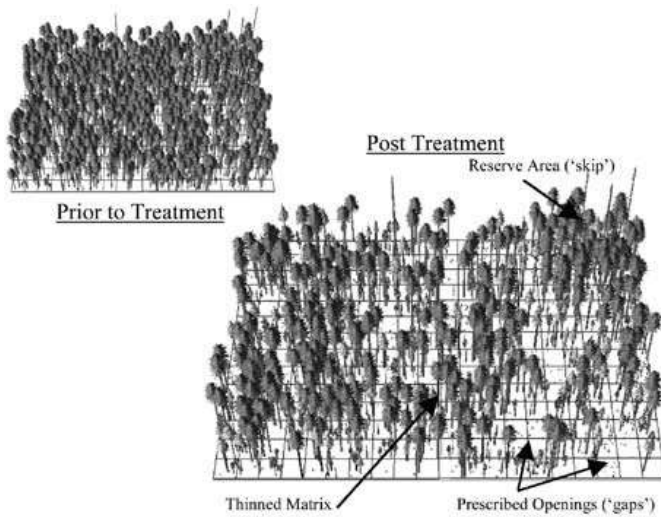


Figure 2. Diagram of Variable Density Thinning from [USFS](#)

This is the style of thinning that will be used on each of the harvests included here. This style of thinning is designed. It is low impact and mimics natural disturbances that would occur over time through normal forest development, like windthrow, fire, and pests.

The forests selected for harvesting are generally even-aged, Douglas-fir dominant, and lacking structural/biological diversity. Variable density thinning removes about 30% of the trees from the stand in a mosaic pattern leaving “skips” and “gaps” to allow understory species opportunities to grow. [Learn more about Variable Density Thinning](#)

## Harvest Equipment

Harvesting is designed to be as low impact as possible while also being a practical application to demonstrate that forestry can be done in an environmentally sensitive and cost-effective manner. The harvest equipment can reach 30 feet over the forest floor to harvest trees, which means that most of the forest floor is left undisturbed. Slash and brush are placed on the trail from the harvester and driven over to manually break down the material to help it decompose on site more quickly. Wherever possible the trails created from harvesting will be used to create new recreational trails in the forest.



Figure 3. Skid trail with slash broken down after thinning at [Newberry Hill Heritage Park, Kitsap County](#)

## Community Partners

This project will work with a variety of community partners to sell wood directly back into the community and offer educational opportunities on forest ecology and management. One of the goals of the Jefferson County Forestry Program is to promote a sustainable local wood economy through forest restoration.

For information on partnering, [contact Mallore Weinheimer](#)