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## **Understanding the Forest Park Landscape**

Plans for Portland's park natural areas including Forest Park describe management goals as working toward a "desired future condition." This term isn't unique to Portland parks, but is used by many land managers, scientists and

restoration experts as a means for setting goals for restoration activities. The term acknowledges that natural landscapes change over time and that humans play a key role in determining the degree and direction of that change.

## **How has the land changed?**

All of the natural lands within the Portland Metropolitan Area have been modified by humans over time. For centuries the native people of the Willamette River Valley and the Columbia River Gorge burned the land periodically and strategically in areas where they gathered food. Burning removed brush and young trees and opened seed pods. Burned land produced more food in subsequent seasons and provided better visibility for hunting.

European American trappers in the early 1800s nearly exterminated beavers, those industrious creatures that clear trees, dam streams and create wetlands. Oregon Trail pioneers cleared upland and streamside forests and plowed native prairies. They did not continue the burning practices of the native people and before long brush and fir trees grew into the Oak savannahs and prairies.

Settlers sometimes used fire to clear land for farming, and it wasn't unusual for them to lose

control of these blazes. Many large fires throughout the area in the early 1900s are thought to have been caused by settlers' fires. Photographs of the Columbia Gorge in the 1900s show a wide open landscape with scattered scorched trees. Three large fires burned Forest Park in recent history--in 1889, 1940 and 1951.

The forests throughout the Portland area were logged, many of them two and three times. What had been old-growth conifer forests in the early 1800s weren't replanted with trees after logging but instead grew in through "natural succession" that started with wildflowers, then shrubs, then hardwoods like alders and bigleaf maples. Eventually firs, hemlocks and cedars returned.

Today, many forests in and around Portland including Forest Park are composed of mixed hardwoods and conifers. In Forest Park, middle-aged Douglas firs and hemlocks grow among large moss-covered bigleaf maples.

## What is a “Desired Future Condition?”

A “desired future condition” is a planning goal that describes the conditions that land managers are attempting to achieve over a specified period of time in a given geographic area. In some cases, the land may already be in the desired condition and land managers would focus on maintaining those conditions. If the natural area is not currently in the desired condition, managers may take actions to encourage a different pattern of change over time in order to reach the desired conditions.

People who practice ecological restoration frequently seek to understand the historical condition of the landscape and identify a desired future condition that emulates that historic

condition or historic pattern of change. However, in natural areas that lie inside cities or in other radically altered landscapes, it may not be feasible or desirable to return the land to its historic condition. Managers may instead choose a condition that provides similar functions such as water purification and habitat but that is more resilient to urban pressures, can be managed without use of fire and resists encroachment by non-native weedy species.

Ideally, the land’s desired future condition is established by managers in consultation with community stakeholders.

## What are Forest Park managers trying to achieve?

The Natural Resource Management Plan for Forest Park, developed in 1995, called for returning the park to old-growth conifer forest. While this may be the desired future condition for parts of the park, today there is a greater recognition of the risk of wildfire in natural areas adjacent to homes. Deciduous trees including bigleaf maples and alders are less likely to ignite and burn because they retain vast amounts of moisture and lack the volatile resins found in firs, hemlocks and cedars. They can actually act as fire breaks if placed strategically in areas where fires are likely to start or spread.

It may be appropriate to consider old growth a bit differently. We are familiar with the look and feel of iconic Northwest old growth conifer forests with their widely spaced giant trees, mossy downed logs, standing dead snags and moist groundcovers. Hardwood forests such as those on the east coast achieve old growth status as well. In Forest Park we may consider a desired future condition that is old growth in three forms:

- ❖ Old growth conifer forest
- ❖ Old growth maple fir mix
- ❖ Old growth oak woodland

In each case, we are seeking to grow large mature trees, but the exact species and spacing would vary. Dense, multi-layer conifer forests would occupy the cooler, moister parts of the park, mostly on north facing slopes and in ravines. Oak woodlands with wide tree spacing would be on the driest parts of the park, generally the lower east end. Maple-fir forests would grow in the intermediate areas.

Because they are the most fire retardant, maple-fir forests could be strategically located adjacent to existing housing areas in Linnton, along Skyline and in northwest Portland. Maple and fir are the two most common trees in Forest Park at present and this would likely remain the case 50 years from now.

This future condition works in harmony with natural conditions in Forest Park, acknowledging the ecological variations across its landscape. It focuses new attention on oak woodland restoration where intervention is needed to prevent shading from Douglas fir trees and invasion by weedy brush. It emphasizes maintenance of a wildfire resistant forest well into the future by retaining large areas of maple or a maple-fir mix.