

From: Eileen [mailto:ems45@comcast.net]
Sent: Tuesday, January 12, 2016 12:32 PM
To: Planning and Sustainability Commission <psc@portlandoregon.gov>
Subject: Comments on proposed amendments to Title 11

I am a resident of Beaumont Wilshire neighborhood, and a landscape designer and author.

I am appalled at the number of healthy trees that have been destroyed in Portland and I think I speak for many people and voiceless wild animals when I say that we need a tree code that champions tree preservation over mitigation.

Large, mature trees are extremely important to wildlife for food and shelter, and they provide myriad other environmental benefits and as such ought to be protected. But we also need to recognize that we will have much fewer large trees in the future if developers are allowed to any remove smaller trees that are in their way now.

A 48 or 50-inch threshold is a travesty. Trees over 48 inches DBH account for less than 3 percent of Portland's trees! Under the two proposals you are considering, the vast majority of trees in development situations would not be safe.

The 2035 Portland Comprehensive Plan clearly states, "... *potential adverse impacts of development must be well understood and avoided where practicable. These policies also call for an evaluation of design alternatives to minimize negative impacts, and the use of mitigation approaches that fully mitigate unavoidable impacts.*" It also recommends preserving Pacific Northwest native trees.

Title 11 provides no incentive to keep trees, nor does it require consideration of design alternatives. A paltry "fee in lieu" cannot possibly fully mitigate the loss of ecologically and aesthetically significant trees that are part of our neighborhoods and region, and whose loss permanently impacts people and devastates wildlife. We must first seek to avoid, then minimize, and then, and only as a last resort, mitigate.

But it's virtually impossible to replicate the irreplaceable ecological and aesthetic benefits that a mature tree can provide—especially a large, native conifer. What happens to exhausted migratory birds that counted on certain trees as stopover habitat? Planting a few sapling trees cannot possibly supply the lost cover and food for wildlife any more than they can supply the shade, oxygen, and carbon sequestration provided by a mature tree. The graph below (borrowed from the [OAC's recommendations](#)) shows how terribly long it takes for young replacement trees to begin to supply benefits, and some never will! Plus, the replacements are often planted off site, possibly many miles away, so the benefit to local wildlife is nonexistent.

Preserving the towering, big-canopy trees that supply the most environmental and public health benefits (like cleaner air and water) makes perfect sense, but we also need to look at species as well as diameter. While large trees—especially conifers—are immensely important for wildlife, shade, and storm water mitigation, studies have concluded that certain tree types—some of which do not grow large—are enormously supportive of native insect herbivores, which provide essential food for wild species like birds. And others are so slow growing that even at age 50 they would not have the girth that would be considered “large.” Native oaks support the most insect herbivores (over 540 species of butterfly and moth, alone), but oaks—especially our beloved Oregon white oak (*Quercus garryana*)—are very slow growers and to reach 30 inches DBH could take well over 100 years, depending on conditions. Native wild cherries (genus *Prunus*), willows (genus *Salix*), birch (genus *Betula*), aspens/cottonwood (genus *Populus*), and pines (*Pinus* spp.) are other highly productive species that support wildlife. With the exception of ponderosa pine and cottonwood, all of the faster growing native trees mentioned do not grow to a large diameter. Moreover, we need to consider the repercussions of removing trees that are, for example, preventing erosion on hillsides, providing a windbreak, or protecting nearby vegetation.

Some cities have adopted regulations that could serve as a model for Portland. Vancouver, B.C. requires that all new houses be built on existing footprints; they do not allow a modest house to be replaced with a 3,000 or 4,000 square foot home that no one needs and does not contribute to urban density. Lake Oswego requires that *“Removal of the tree will not have a significant negative impact on erosion, soil stability, flow of surface waters, protection of adjacent trees, or existing windbreaks”* and *“Removal of the tree will not have a significant negative impact on the character, aesthetics, or property values of the neighborhood. The City may grant an exception to this criterion when alternatives to the tree removal have been considered and no reasonable alternative exists to allow the property to be used as permitted in the zone. In making this determination, the City may consider alternative site plans or placement of structures or alternate landscaping designs that would lessen the impact on trees, so long as the alternatives continue to comply with other provisions of the Lake Oswego Code.”*

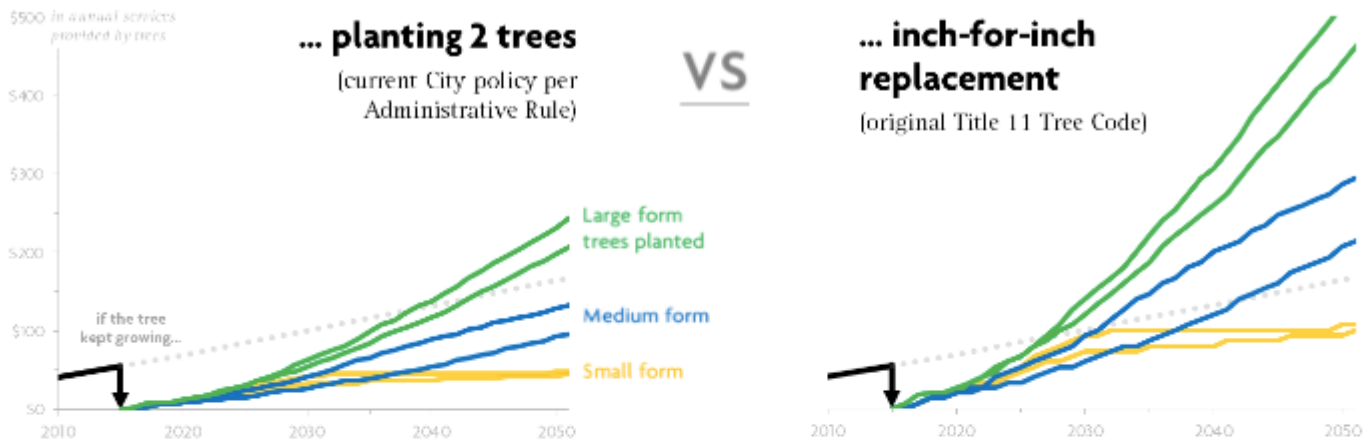
Recommendations:

- ? Remove the Title 11 exemptions for small lots and commercial and industrial land
- ? Avoid destruction by requiring design alternatives to cutting
- ? Require a site review process with public involvement for trees greater than 20 inches DBH.
- ? Require mandatory posting/public notice, notification to neighborhood associations, and at least a 30-day period before any tree greater than 20 inches DBH is cut down

- ? Consider tree species, giving special consideration to the superior ecological value of Willamette Valley native trees, no matter their size.
- ? Use mitigation only as a last resort, adding an inch-for-inch protocol, at least \$300 per inch for healthy trees greater than 20 inches DBH, and \$500 per inch for native species, and changing the 1/3 preservation rule to apply to preservation of caliper inches of trees on site, not just number of trees on site.

Mitigating for Removal of a 20-inch Douglas Fir, Nov 2015
 UFC member David Diaz

Choosing to mitigate for the removal of a 20" diameter Douglas-fir by...



With two trees planted for each tree removed:

- ▶ It takes two newly-planted *large form* trees nearly 30 years to resume providing services at the rate the removed tree was already providing (and could have continued providing). Medium form trees take 50-60 years to match the rate of annual services lost, and *small form trees never match it*.
- ▶ There is a time lag in the provision of tree benefits. If the value of the services these trees provide for the next 100 years is discounted (5% per year), there are unmitigated losses in all planting scenarios. Each 20" Douglas-fir removed and replaced by planting two small trees results in a *loss* of present value of *\$1,750-1,800*; a *loss of \$1,160-1,350* if medium trees are planted; or *\$270-290 lost* with large trees planted.

From January-June 2015, more than 630 trees removed* in Portland were 20" diameter or larger. Only 210 trees planted for mitigation were large form trees.

With inch-for-inch replacement:

- ▶ If the 20 newly-planted 1.5" seedlings are from a large form tree species, it still takes at least 10 years before they will resume providing services at the rate of the removed tree; medium form trees take 12 years, and *small form trees still never match it*.
- ▶ Due to the time lag in replacing the services of the removed tree, it takes large form trees 25-30 years to make up the present value lost to the original tree removal. Depending on which species of medium form tree is planted, the present value may never be recouped, or may take more than 60 years. *Even with inch-for-inch replacement, planting small-form trees still results in \$1,020-1,130 net loss of present value.*

Note: Storm water, air quality, and carbon sequestration benefits are factored into the value of the environmental services provided by trees (calculated using iTree). This does not capture the additional aesthetic value, reduction of urban heat islands, energy savings, or property value enhancements trees provide.

* For permits on private property in non-development situations alone. Through Q3 2015, 654 additional trees were removed in development situations. They averaged 17.6" in diameter.

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