

**From:** [Trees for Life Oregon](#)  
**To:** [Parks - Tree Code Amendments](#); [Council Clerk – Testimony](#)  
**Subject:** written testimony for CC's Oct. 5 hearing on tree code amendments  
**Date:** Thursday, September 29, 2022 4:10:59 PM  
**Attachments:** [Letter to CC supporting Title 11 tech amendments for Oct 5, 2022 public hearing.docx](#)

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Attached please find Trees for Life Oregon's written testimony for City Council's upcoming Oct. 5 hearing on the Title 11 technical amendments. Thank you.

Kyna Rubin

Trees for Life Oregon



September 29, 2022

RE: Written Testimony for City Council's October 5, 2022 Public Hearing on Title 11 (Technical and Minor Policy) Amendments

Dear City Council:

We believe Parks/Urban Forestry's technical Title 11 amendment proposals will help to solidify Urban Forestry's work to regulate trees as key green infrastructure and we support these amendments, as noted in these examples:

Proposals 11 and 40 will help guide permitting by reconciling Title 11 and Title 33 inconsistencies on tree removal and landscaping requirements—adding pruning regulations in River Greenway zones and clarifying the definition of multi-family dwelling zones.

Proposals 15, 16, 17, and 44--by clarifying code provisions relating to tree removal, planting, and protection in development--would improve early coordination relating to trees in private and City projects.

Proposal 10--by allowing Urban Forestry to consider neighboring trees in denying a permit for removal--would help the City avoid the cascading impact of removing one tree. It would avoid damaging nearby trees but also potentially help to preserve groves of interdependent trees. Avoiding hazards is crucial in forest management generally; preserving groves is especially important in outer SE Portland, where mixed stands of Douglas-firs, maples, and understory trees are invaluable forest remnants in areas of Multnomah County that the City annexed decades ago.

Proposals 4, 27, and 32 further ensure Urban Forestry's regulatory authority—enabling the City Forester to record Heritage Trees on property deeds, place liens on properties where violations of Title 11 provisions remain unresolved, and issue stop-work orders while any permit provisions are put in place.

Finally, proposal 1 gets at the heart of why we need Title 11 itself by clarifying the meaning of the urban forest as green infrastructure.

There has never been a more crucial time for all bureaus to integrate tree preservation and space for trees, especially large-form trees, into their protocols and practices, and for the City Council to put the urban forest front and center in budgetary and policy decisions.

On a daily basis, Portland's current codes (Title 11 and Title 33/RIP 1 and 2) and multiple bureaus' administrative rules (PBOT, Water Bureau) threaten the City's own canopy goals. Because we are losing precious canopy every day, we urge you to work with all deliberate speed to expedite the comprehensive update of the 2004 Urban Forest Management Plan and the substantive rehaul of Title 11 *sooner rather than later*.

Thank you.

Sincerely,

Kyna Rubin

[Trees For Life Oregon](#)

**From:** [Betsy](#)  
**To:** [Wheeler, Mayor](#); [Commissioner Rubio](#); [Commissioner Hardesty](#); [Commissioner Ryan Office](#); [Commissioner Mapps](#); [Council Clerk – Testimony](#)  
**Subject:** Please add tree-smothering vines to tree code amendments tomorrow  
**Date:** Tuesday, October 4, 2022 1:20:49 PM  
**Attachments:** [image.png](#)  
[image.png](#)  
[image.png](#)

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Please add tree-smothering vines to tree code amendments tomorrow.

Perhaps these two words could be added here:

[11.60.060 Tree Maintenance Specifications and Responsibilities.](#)

*The following specifications apply to all trees in the city. The purpose of these provisions is to protect the health, safety and welfare of the public, safeguard public infrastructure assets, and ensure the continued health of the urban forest.*

**3. City Forester authority for tree maintenance.** *The City Forester may or may direct others to prune, remove or treat to control insects and disease for any trees in the streets, parks, other City owned or managed properties, or private properties if the City Forester determines that controlling [insert here: **invasive vines**], insect infestations, disease or dangerous conditions is needed to maintain the public health, safety or health of the urban forest.*

No city code that requires a property owner to deal with the devastating vines clematis vitalba, English ivy, or others. Even if it's damaging someone else's property. That enforcement language just doesn't exist.

Urban Forestry can only wait until it is too late to save the tree that has been smothered by the vine and then order the dead/dieing tree to be cut down as it poses a hazard.

Please, either:

1. Vote to add these two words to the tree code, or
2. Address this request directly and publicly with a logical official explanation of why tree-smothering vines will not be added, or
3. Postpone voting on the amended tree code until this issue can be further studied, and until Commissioner Rubio who introduced this amendment is present.

Thank you for hearing my testimony.

Betsy Reese

SE Portland



February 2022: 60-foot Western Cedar half-dead from smothering Clematis Vitalba - City Forester can do nothing except wait for the tree to be dead enough to present a hazard of falling.



July 2022 - Same tree, covered with fresh new green leaves of *clematis vitalba*.



**August 2022 - Same tree, vine has spread to surrounding trees and has gone to seed, spreading its dandelion-like fluffy seeds all over the neighborhood. - What will we see of this tree when the leaves fall off the vine this winter, revealing how much more of the tree has been killed? What is the City's responsibility if and when this big tree does fall onto a home, into the ROW, or on top of a person, killing them. This is predictable, and the City knew/should have known that this was the inevitable fate of this tree reported to Urban Forestry if the vine continued to grow unchecked.**



**From:** [Doug K](#)  
**To:** [Wheeler, Mayor](#); [Commissioner Mapps](#); [Commissioner Rubio](#); [CommissionerRyanOffice@portlandoregon.gov](mailto:CommissionerRyanOffice@portlandoregon.gov);  
[Commissioner Hardesty](#); [Council Clerk – Testimony](#)  
**Cc:** [Betsy Reese](#); [Bruce Carolyn](#)  
**Subject:** Tree Code Title 11 and additional changes needed to protect trees from vines like Clematis  
**Date:** Tuesday, October 4, 2022 2:55:54 PM

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Mayor Wheeler, Commissioner Ryan, Commissioner Hardesty, Commissioner Mapps, Commissioner Rubio:

I support the Title 11 Tree Code amendments before you. Trees are an important part of our city, and provide shade and cooling throughout our city, and are especially needed in street rights-of-way.

I have recently learned about a threat to tree health, and is apparently not mentioned in the Tree Code, and that regulations need to be added.

The threat is trees being taken over, and in essence "strangled" by climbing vines such as Clematis vitalba and English Ivy. For trees that are regulated, there should be language to require property owners ( and the city, if the city takes over street tree maintenance in the future) to remove these vines from the regulated trees. Some have suggested that a person who is denied a tree removal permit could resort to planting these vines, which would render the tree dangerous and allow removal.

It has been suggested that this vine language could be a future regulatory effort if it's not feasible to add this into the current Title 11 amendments. If so, I would like to see that path followed.

Thank you.

Doug Klotz

October 1, 2022

Contrary the official analysis, the financial and budgetary impact will actually be lowered expenses/losses of the city, the residents, and businesses if you **vote YES on 836** [updating the 2004 Urban Forest Management Plan, "Amend Trees Code to improve clarity, efficiency, and outcomes of tree regulations (amend Code Title 11)"] **AND promptly implement the new science on WHY the city must immediately and persistently further protect, expand, and care for more and diverse trees with increased leaf volume as essential green infrastructure ASAP.**

We need to immediately increase and strengthen our trees to protect human health and safety, increase city water supply, improve sewage treatment, reduce violence, improve city livability and investments, improve social justice, reduce City costs/losses, and improve taxpayer/citizen trust and goodwill. The longer we delay, the more dangerous our city will be, the more costly it will be to plant and care for trees, and the more our city budget will be wasted and decreased.

Alarming new science shows that even if the population in Portland and surrounding area were greatly reduced, and if miraculously the air pollution and climate change were reversed, **the feedback loops from existing harm to trees would mean we would need more and more quantity and diversity and size of trees each year to do the same ecosystem functions.** For each tree of a given age, size, type that sequestered carbon a decade ago, we will need more and more trees that same type, age, size, and health to do the same work. And with those trees no longer able to thrive, we also need additional types of trees.

**At the same time we will need more services from more trees, trees will get sicker and less effective, so we will need more trees and better care for our trees.**

But actually, we know that there will be more and more pollution, increased people populations and reduced ecosystem populations, worse crowding, heat/drought, uneven rain/flooding, sickened soil communities, more and worse tree diseases and pests, and poorer and more distracted and less housing secure and more ineffective residents/businesses doing a worse job of caring for the trees we will need more and more. **The worse climate change gets, the more we will need more trees, and the harder it will be for those trees to survive. The more reasons that trees will suffer are the more serious and urgent reasons that we need the city to plant and care for and protect more and more trees and maintain larger and larger trees, while preparing for those trees to die sooner.**

**Trees will get sicker and sicker and dying as species-- and we don't know how to replace them.**

**Our western red cedar "tree of life", Douglas fir, and Oregon maple and bigleaf maple are becoming extinct. Engleman spruce, lodge pole pine, and ponderosa pine are dying out, so we must increase the numbers, density, diversity, and health of trees, and do more to protect and care for sick trees within the city limits, while expanding our city safety by expanding our responsibility for trees outside of our city limits and Bull Run Watershed.**

We will also urgently and immediately need to prevent logging and harm to trees on Mt. Hood surrounding the Bull Run watershed so those trees will better seed clouds with their transvaporation and volatile organic compounds and hormones that attract more needed rain and prevent flooding and mudslides or water pipe problems, for our aquifers, agriculture, and fire management.

Drought-weakened trees are vulnerable to insect pests that are not killed off now that winters are milder. More trees are dying from turpentine beetles, aphids, elm leaf beetle, emerald ash borer, web worm and tent

caterpillar, gypsy moth, etc. According to the British Ecological Society research article "Hotspots of pest-induced US urban tree death, 2020–2050": *"We estimate that 1.4 million street trees will be killed by invasive insects from 2020 through 2050, costing an annualized average of US\$ 30 M."*

According to USDA's "Sustaining America's Urban Trees and Forests", *Forests on the Edge*: *"As urban areas expand across the country, the importance of the benefits that urban forests provide, as well as the challenges to their conservation and maintenance, will increase."* (This includes the compounding harm from droughts/heat, fires, explosions, windstorms, ice storms, tornadoes, flooding, air pollution, habitat destruction and over development, human violence/vandalism, water pollution, insects and other pests, social injustice, mismanagement/corruption, logging, root or branch damage, etc.)

**Each year we will need more trees to do the same work, and more trees and older/larger trees to do more needed work. And each year, we will lose more and more trees to disease, pests, drought/flooding, air pollution/heat, so we will need to replace more trees for each sickened or dead tree.**

**We will need to replace each tree with more trees and a wider variety of species, since more of them won't survive, and we will need more trees to do the same services as one tree formerly did.**

**Without the ecosystem infrastructure of trees, and just distribution of healthy diverse large trees, it will be more and more costly and difficult for the city to function, and it will be harder to have taxpayers, bond backers, and fees-payers to support the city, and meanwhile more Portlanders will distrust and be angry at the city, or suffer more disease, depression/despair, addiction, or commit violence, and get poorer and less able to buy and maintain increasingly more costly trees.**

**We will need more young trees, and more older trees to compensate for their carbon release.**

Depending on the specie and its health, the first ten to twenty years of a tree's life, it will release more carbon dioxide than it can absorb and carbon it can clean from the air. We will need to plant more and more trees and give them more and more water and care so they can grow to larger trees to compensate for this when the weather is harsher for trees and there are more tree pests and diseases. The same tree type will grow more slowly, producing a smaller volume of needed leaves to clean and cool the air at the same age, so we will need more and more trees to compensate.

**Older and larger trees and healthier trees sequester more carbon from the air and add more cooling humidity and oxygen to the air, while better stabilizing soil moisture and strengthening soil communities. Healthy trees release chemicals we need in the air, and sick trees release chemicals that we don't want.**

**We will need increasingly more drought-resilient trees to compensate for the increased loss of trees to drought and heat.**

The hotter and drier the weather, the more irregular the weather patterns, the greater the air pollution, the hotter and drier the soil, the more reflected and radiant heat from pavement, glass, and stone/brick buildings and metal, the sicker the trees will be, and less effective at cooling and cleaning the air, adding cooling humidity and oxygen to the air, reducing aerosols that increase rain and reduce atmospheric heating, reducing the tree chemicals into the air we need for human health, and increasing the volatile organic compounds that increase global warming and local toxic air.

**We will need more diversity and volume of trees able to photosynthesize as each sickened tree becomes less efficient at that.**

As trees get too hot and their leaves and bark get clogged by air pollution, and they don't have the rain they need when and how they need it, they will close the breathing holes of their leaves stoma and bark, so they can absorb and process less poison in the air. Their leaves will become more damaged, their bark more coated. They will produce fewer and smaller and less efficient leaves to protect them from the excess carbon dioxide

and other toxins. They will produce less chlorophyll as the sunlight is more diffuse, they are more shaded by buildings, and the air is less clear. They will become less efficient at photosynthesis, so it will take more trees to do the same amount of work fewer trees did a decade ago. They will be less and less able to quickly monitor and change the speed and effectiveness of the opening and shutting of their stoma.

**We will need more and more trees protected from air pollution and more diversity for faster adaptation.** As more lead and poisons from jet and vehicle fuel and pollution, more industrial pollution, more militarized policing chemical weapons, and more human waste with drugs, the sicker the soil communities will be, and less able to support the trees. So the trees will need deeper and broader roots that will be more damaged by overcrowding from buildings, sidewalks, roads, underground pipes and cables, etc. They won't have the needed time for that evolution.

**We will need better ways to protect trees from irregular watering, flooding, poor drainage, and root rot that dries them out and kills them.**

The more the soil is too wet, the more the trees will actually not get the water they need up the rest of the tree, and so will die from drying out. The more the soil is too wet, the more the roots won't have the stability they need to support the tree's weight in the wind, and the more the tree roots will rot and weaken the tree's ability to be secure and to pull up nutrients.

**We will need more and better ways to protect more trees from drying air by surrounding them with more trees and other vegetation and green infrastructure.**

The more the soil is dried out because the wind patterns will be worsened without the needed healthy forests to manage and cool and moisten winds, the more the trees will dry out. The more they lose moisture, the more they will protect themselves by closing their leaf stomas, not cleaning the air so more carbon in the air will cause more global warming and the trees drying out. We need to protect people and trees from the heat of buildings without green walls and green roofs, and we need to require new buildings to have green skins of living photosynthesizing plants to cool and clean the air, provide biodiversity, and reduce winds heating and drying out trees we need for public health and safety.

**We will need to find better ways to support more trees with accessing and using water and nutrients.**

As the trees are stressed by heat, drying winds and drier and sicker soil, with fewer supportive nutrients and fungi networks, they will be less and less able to pull water up their xylem. This will get worse as their cells have less water and silicon and needed nutrients to be strong enough to handle the internal pressure changes. As the trees are less and less able to draw water up their trunks to their branches, they will both need to reduce the energy they expend on branches and leaves (reducing the air cooling and air cleaning and rain inviting), but that means they will have less sun energy, sugar, and carbon dioxide they will need to feed and heal the tree. When tree roots are flooded or rotted, they are less able to pull water to their branches that then dry out. We need to prevent the use of RoundUp, MossOut, Tricate, etc. that kill the trees and their supportive soil communities and that prevent healthy water retention, oxygen, and support structures in soil. We need to provide more healthy organic material and composting around trees, with less pavement and petroleum/poisons.

**We will need better protections for trees from ice damage and badly timed frosts, especially when we also need to increase our urban fruit trees for food security and urban evergreens to increasingly clean winter air pollution.**

**We will need better ways to protect trees from harmful insects without harming the trees and people with insecticides.** We have over 60 insects harmful to Portland trees, without sustainable solutions.

**Larger, older trees are dying sooner from sustained droughts and lightening.**

**Older trees are being killed for lumber or destructive development, and damage to their roots from sidewalks and digging or conflicts with water mains and utility wires, etc.**

**Younger trees are dying sooner from lack of older trees protecting them and from fires, diseases, pests, and injuries.**

**Trees are not producing as many productive cones, seeds, and nuts, and these are not landing in supportive environments to germinate and grow. A larger percentage of seeds/nuts are eaten by rodents, etc. because of loss of predators, so fewer trees can grow. Fewer city trees have good soil and wild animals spreading seeds/nuts to good growing environments, instead of onto pavement.**

**Younger seedlings are not able to withstand the climate and pollution stressors, pests, animals feeding on them, or human negligence.**

**We will need to find better ways of protecting and replacing our main tree species that are becoming extinct.**

**American chestnut trees are almost extinct. Redwood and giant Sequoia are dying out. Ponderosa pine can no longer thrive in the valley. White oaks are dying out. Invasive trash trees compete for resources. Newer species specializing in our increased air pollution and changing climate have not established themselves.**

**Western red cedar are dying out.**

To many indigenous peoples, who used the western red cedar trees for houses, clothes, weapons, tools, medicines, art and canoes, they're known as The Tree of Life. They've been recorded to live for more than 1,500 years. But these trees are now dying, and each year it gets worse. Their range is shrinking and shifting, but cooler areas don't have the moisture, ecosystem supports, salmon nitrogen remains, etc. they need. Other trees cannot replace the ecosystem services western red cedars provided.

**Douglas fir are dying out.**

Douglas fir trees are to grow in communities that support each other so they can have shallow narrow root systems, protected by a diversity of other plants they now don't have and need more and more. Worse and worse, Doug firs don't have the ecosystems they need, so more and more cannot support them isolated and under the unnatural and stressful logging and bad tree placement, so the trees and their support systems will be in more danger. More pesticides will continue to kill the needed fungi networks that feed and inform and medicate the trees. Doug fir seedlings can't thrive in too much sunlight, and won't have the nutrients from the mycelium network that feeds them from older trees sharing the sun energy sugar and nutrients. Younger trees are not having the older trees to care for them and pass on wisdom and nutrients/immunization they need. Younger trees will have a harder and harder time growing strong and straight.

**Oregon maple and big leaf maple are dying out.**

Across the Pacific Northwest, big maple trees are dying from climate change, and as they do, they release more carbon into the atmosphere, so we will need more and more trees not only to replace the volume of leaves from that dead tree, but also more and more healthy larger trees to compensate for the released carbon.

**Nationwide, our forests and tree species are dying, making urban trees more needed and at risk.**

*"The Dying of the Trees: The Pandemic in American Forests" gives a detailed picture - from New England to Oregon and California, from Alaska to Florida, across the upper midwest, across the southern border states, and even into the desert southwest where the giant saguaro cactus is in major decline - of sick and dying trees.*

*Why is this happening? The reasons are many and varied. In New England, New York, North Carolina, Tennessee, Georgia, Ohio, Indiana and Kentucky, it is a combination of **acid rain and clearcuts**. In California, it is **killer smog**. In Arizona and New Mexico, it is **excessive ultraviolet light** filtering through the earth's damaged ozone shield. In other places, it is **pesticides, or toxic heavy metals** released by burning coal and oil. In Alaska and Florida, it is **rising temperatures and rising sea levels** from global warming. In Colorado,*

Oregon and Washington, it is **destructive forestry practices, such as clearcut logging and fire suppression, that leave forests weakened, unable to withstand extremes of weather or attacks by insects and fungi.**

**In most places, it is probably various combinations of all these factors.**

*"I am very concerned that a great deal of forest research is funded by the federal government, by chemical companies, and forest industry companies - and it's very difficult for people who depend on that funding to stick their necks out or to help influence policy that might go counter to what the funders are interested in. Many scientists I talk to will not publicly say anything about the connection between air pollution and forest decline, but privately, to a person, they tell me, yes, we've got a problem." "*

**We need to plant and care for more trees, and instead of cutting down some sick trees, we need to better care for them.** We need to update the tree code so it does not allow so many excuses to remove trees instead of supporting and healing them.

**At the same time, some common tree diseases or pests will require prompt pruning or removal and clean-up, and replacing those trees with more and more trees that age and older and greater volume of leaves for more of the year, so we need more care and expertise about the difference, funded by the city.**

**Phytophthora root rot** is generally caused by flooding or overwatering the soil around the tree or subpar drainage, worsened by drought stress and improper drying out in between. The tree becomes unable to receive the nourishment and moisture necessary from the soil, and as a result, the roots are deprived of oxygen and slowly decay and die out. The process can take years, and the tree may suffer for a very long period before it dies, or it can be quick, and the tree can die within one season.

**Anthracnose** is a fungal disease that infects shade trees and causes cupping or curling of leaves, early leaf drop, or leaf spots. The most common way for a tree to catch this disease is if strong wind and rain hit it in the spring following a mild winter, so this is a common problem for Pacific Northwest. Anthracnose can reduce growth so the tree is less able to fulfill its ecosystem services.

**Verticillium wilt** is a serious fungal disease that lives in soil and gets into the tree through the roots. It spreads through the branches and plugs up the cells, resulting in water not being able to reach the leaves. The best way to prevent verticillium wilt is to always keep the tree healthy by pruning dead branches regularly, since usually only trees that are already sick or damaged will catch the disease. Unfortunately, more and more stressors on trees are making them more vulnerable.

Two major tree diseases and pests in Portland require us to immediately prune and remove the infected trees and prevent the spread of the diseases and pests, but most homeowners and renters don't have the knowledge, money, or city responses in time, so as those trees die and spread diseases/pests, or are removed, they will need to be promptly replaced with healthier disease-free and pest-free soil and new trees with equal leaf coverage for equal ecosystem services in that same space.

A tree that's infected by one of these diseases can be a gateway to pests and bugs and spread to other trees nearby. For each of these sickened trees and removed trees, we need more trees to replace each failed tree's ecosystem services.

**Due to milder winters, more crowding, more stressed trees, more adapted stronger insecticide-resistant pests, and unknown variables, urban tree insect pests are worsening.** We have worsening cases of Dutch elm disease, hawthorn leaf blight, thousand cankers disease, western pine beetle, etc.

**The city needs to promptly invest in knowledgeable, ethical arborists and public education and community collaboration, preventing unethical developers and loggers from killing trees we need, and from others neglecting the prompt care needed to heal trees we need to heal us.**

**We need to require all new developments to not have methane (so-called natural gas) hook-ups and to have more tree canopy** with a greater diversity of climate-resilient species and tree care systems, all buildings and parking lots and sites to have trees and green roofs or growing green eaves and living green walls, and all strips along rail lines and roads to have protective shade vegetation, from hemp and bamboo for growing fiber

for personal protective masks and aprons to permaculture food forests and gardens to plants for growing fuel from algae to hemp oil. We need to require apartment buildings, especially those with tax subsidies and investments, to increase their shade trees along sidewalks, trees and vegetation on roofs and walls, and for private quiet gardens. We can house more Portlanders better for less and with more environmental benefits when we hold developers, realtors, landlords, and absentee investors accountable and have just tax law and enforcement/collections and campaign finance and corruption protections.

**We need to increase the percentage of diverse resilient, maintained tree canopy more of the year for all properties (government, private, nonprofit, commercial and residential, etc.)**

**We need to better inventory and map what temperature patterns we have where in the city correlated to trees and socio-economic status/injustice, and what types, density, and timing of what poisons we have in our air and water and soil, and what trees we have nearby to mitigate that, and how those trees are struggling, and what solutions must be implemented by whom with what accountability and city oversight. We need to have a better way of using our water for our trees, when drinking water is not needed and stormwater or purple or gray/recycled water would suffice, and we must protect the trees from poisonous water. We need to better care for our most vulnerable Portlanders so they have the safe, fair housing each needs without harm to the trees, and the trees each needs for public health, safety, justice, well-being.**

**Each year it will increasingly take more and more trees with more support to make Portland safe and healthy for all. The sooner we act responsibility, the more Portlanders' lives we save. The longer we delay creating the expanded resilient, regenerative urban forest we need, the more it will cost in city funds and loss of bond values and increased insurance rates, the more cost and loss in public health, safety, and trust.**

Please email me how you and your staff will specifically increase, diversity, support, and improve our urban trees and Bull Run surroundings' trees. [edith.j.gillis@gmail.com](mailto:edith.j.gillis@gmail.com)

**City Council Meeting - Wednesday October 4, 2022 9:30 a.m.**

<b>Agenda No.</b>	<b>First Name</b>	<b>Last Name</b>
836-01	Betsy	Reese
836-02	Edith	Gillis
836-03	Yee Won	Chong