

**From:** [Jeffrey Delapena](#)  
**To:** [Steve Thalberg](#); [Cnty 2025 Comp Plan](#)  
**Cc:** [Oliver Orjiako](#); [Jose Alvarez](#); [Jenna Kay](#)  
**Subject:** FW: comment on the comprehensive plan update - regarding health, trees and the environmental impact statement (EIS) for the CGMP  
**Date:** Tuesday, November 25, 2025 8:08:15 AM  
**Attachments:** [^ Environmental Impact Statement.docx](#)  
[trees and health - columbian newspaper article 9-17-2025.docx](#)  
[trees and health - harvard article 4-19-2024.docx](#)  
[image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)

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Good day, Steve,

Thank you for this feedback related to the Draft Environmental Impact Statement for the 2025 Comprehensive Plan Update.

I have forwarded your comments to additional Staff and will enter these into the Index of Record.



**Jeff Delapena**  
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COMMUNITY PLANNING

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**From:** Steve Thalberg <sathalberg@gmail.com>  
**Sent:** Tuesday, November 25, 2025 12:35 AM  
**To:** Cnty 2025 Comp Plan <comp.plan@clark.wa.gov>; Oliver Orjiako <Oliver.Orjiako@clark.wa.gov>  
**Subject:** Fwd: comment on the comprehensive plan update - regarding health, trees and the environmental impact statement (EIS) for the CGMP

You don't often get email from [sathalberg@gmail.com](mailto:sathalberg@gmail.com). [Learn why this is important](#)

**EXTERNAL:** This email originated from outside of Clark County. Do not click links or open attachments unless you recognize the sender and know the content is safe.

the following was submitted by me on 8/20/2025.

in addition to the previously submitted Environmental Impact Statement, i am currently attaching 2 additional articles that discusses how trees and green spaces support human health.

sincerely,  
steve thalberg

dear planning commission,

please accept the attached comments that address the Environmental Impact Statement (**EIS**) portion of the Clark County Comp Growth Management Plan (**CGMP**).

these comments address issues in the proposed CGMP:

chapter 1 - land use, particularly 1.1.19, 1.6.3, 1.6.4;

chapter 4 - environment;

chapter 14 - climate, particularly 14.9 and 14.10;

and the Environmental Impact Statement (if it is separate from the above chapters of the CGMP).

there may be other pertinent chapters and sections for which my attached document is pertinent, if so, please forward my attached comments to those pertinent sections.

...

sincerely,  
steve thalberg, md

## Trees and Health & Prosperity

Environmental Impact Statement (EIS) portion of the Clark County Comp Growth Management Plan (CGMP).

With the passage of E2SHB 1181 during the 2023 Washington state legislative session, Clark County is now required to add a Climate Change Element to its Comprehensive Plan by December 31, 2025.

Please consider the following comments for the Environmental Impact Statement portion of the Comprehensive Growth Management Plan for Clark County.

Trees benefit long-term health of the local neighborhood citizens, improve neighborhood value, decrease summertime energy use and costs, and have an unmatched positive benefit-cost ratio.

1. Health benefits of trees far outweigh any of the other benefits.
2. Urban trees have not been properly included in Clark County's EIS, nor in the CGMP for Clark County.
3. Need to include the health benefits of trees, forests, and green spaces in order to make proper political decisions.
4. Trees can absorb air pollution, and air pollution is a risk factor for health problems.
5. Trees grow slowly, therefore need to plan now for future benefits.
6. There is strong link between greenness of neighborhood and health.
7. Climate change results in more tree mortality. The County need to step up and improve their policy of replacing dying/dead trees.
8. There is currently a failure to see trees as a community resource. This can literally be a matter of life and death. The benefits of trees on a lot spill over to the whole neighborhood.
9. There is a trend towards replacing single family dwellings with multifamily homes. Frequently this entails cutting down trees on the lot to make room for the larger multifamily dwelling. This has a negative impact on health and the economy. Preservation of large trees should be part of the permitting process for construction permits.

Clark County should dramatically increase its efforts at planting neighborhood trees, and protect habitat corridors and green spaces:

1. Longitudinal studies have found that planting of trees results in a decrease of non-accidental, cardiovascular, lower-respiratory, and accidental mortality. These studies were performed in Portland, Oregon, so they certainly pertain to the situation in Clark County.

The dose-response association between tree planting and non-accidental mortality increased in magnitude as the trees aged and grew. Each tree planted in the preceding 1-5 years was associated with a mortality rate of -0.154, whereas each tree planted in the last 6-10 and 11-15 years was associated with a reduction in mortality rate of -0.262 and -0.306, respectively.

The study estimated that planting a tree in each of Portland's 140 census tracts would generate \$14.2million in annual benefits. In contrast, the annual cost of maintaining those 140 trees would be under \$13,720. This results in a cost savings of over \$100,000 per tree planted.

The benefit-cost ratio is 1,727:1.

Very few other interventions by the County can result in such a huge return in benefits.

<https://doi.org/10.1015/j.envint.2022.107609>.

## Trees and Health & Prosperity

### 2. There is a link between trees and human health:

Trees lost from the emerald ash borer, which poses no direct threat to humans, killed more than 100million trees in the united states, was associated with an additional 15,000 deaths from cardiovascular disease and an additional 6,000 deaths from lower respiratory disease. Deaths occurred at higher rates in wealthier counties, where more trees are typically found in urban areas.

USDA Forest Service Science Findings, issue 158, Jan/Feb 2014, Pacific NW Research Station.

### 3. There is a positive association between urban trees and birth outcomes:

Study location: Portland, Oregon.

Greater tree canopy cover within 50 meters of the mother's house was associated with a reduced risk of having an underweight baby. Exposure to the natural environment reduces stress levels, which may be the source of improved birth outcomes.

Houses fronted with more street trees experienced lower crime rates, as did houses with large yard trees.

USDA Forest Service Science Findings, issue 137, Nov 2011, Pacific NW Research Station.

4. Street trees increase home prices by \$8,870 in Portland, Oregon, and a neighborhood tree growing along the public right-of-way added an average of \$12,828 to the combined value of all the houses within 100 feet.

Shade trees reduce household energy use by an average of \$25.16/month in summertime, in Sacramento, California.

USDA Forest Service Science Findings, issue 126, Sept 2010, Pacific NW Research Station.

Clark County's revised CGMP should reflect the above concerns and the County should encourage compliance with the above (by educational outreach, volunteer opportunities, coaching opportunities, code and ordinances, grants, credits, and/or other incentives).

Respectively submitted,  
Steve Thalberg, MD.

<https://epaper.columbian.com/html5/reader/production/default.aspx?pubname=&edid=cef4c9eb-3fbc-46a5-9e1d-785de5ae2aaf>

editorial on page A4 of the columbian newspaper 9-17-2025:

# Efforts to expand tree canopy beneficial to all

## In Our View

For some 60 years, the phrase “concrete jungle” has been used to describe American cities — evoking images of hot, hardscrabble urban spaces.

In recent years, however, increasing attention has been placed on the need for trees and greenery in populated areas. As Samantha Frundle of the Clark Conservation District told The Columbian this year: “Trees provide a lot of benefits. When there’s shade, it’s better for your health. It also has a greater impact on stormwater, as well. By having more trees on the ground, they can uptake more rainfall and reduce runoff. It will reduce the overall temperature on sidewalks and areas where there’s concrete, so there’s a lot of really good benefits.”

That is impetus for a new online tool from the state Department of Natural Resources and American Forests, a Washington, D.C.-based nonprofit. The website shows the percentage of tree canopy for your home, street or neighborhood and analyzes tree canopy data to create a tree equity score — a measure of access to the benefits of trees.

As The Columbian explains: “The tool can guide landowners, government agencies, nonprofits and others in their efforts to expand and maintain treed areas. Users can also create scenarios to evaluate existing tree cover and available space to then calculate how many trees are needed to reach a targeted equity score.”

As Dan Lambe, president of the Arbor Day Foundation, told The Guardian: “We are seeing a surge in attention around urban trees around the world ... not just because they are beautiful, but because cities realize that trees are an important part of resiliency, health, wellness, happiness, economic benefit — the list goes on.”

Vancouver is among dozens of Washington cities to earn a “Tree City USA” designation from the Arbor Day Foundation, which writes, “A city that takes care of its trees takes care of its people.” But taking care of trees is becoming more difficult in the age of climate change, which is altering tree mortality rates.

In 2023, Charles Ray, the city of Vancouver's urban forester, said: "Our palette of trees is going to have to change. We need all development projects, as well as private property owners, planting large climate-forward species, not small ornamental trees that do not provide the ecosystem and public health benefits."

The Clark Conservation District last year partnered with Clark County to plant 500 trees in local parks. Now, said Ryan Savaikie of the conservation district, "We have funding through Lower Columbia Fish Recovery board to plant between 50 to 80 trees in yards throughout the Hazel Dell neighborhood."

Hazel Dell's tree canopy ranges from 10 percent to 26 percent; by comparison, the canopy in Felida is between 27 percent and 40 percent. On average, urban neighborhoods have 33 percent tree canopy cover.

Savaikie said: "A lot of the areas that lack canopy are also historically underserved or have higher numbers of people of color and things like that. So we do try to target those areas with our programming."

The efforts are valuable, and they reflect a holistic approach to making urban areas more livable. Numerous studies have detailed that trees improve human health in addition to providing habitat for a variety of wildlife.

As a paper for Harvard Medical School surmised last year, there is "accumulating evidence that simply spending time around trees and green spaces uplifts our health and mood." That sounds healthier than a concrete jungle.

# How do trees and green spaces enhance our health?

*Trees help prevent flooding, release oxygen, reduce pollution, and boost both health and mood.*

April 19, 2024

By Wynne Armand, MD

Trees enhance life in a multitude of ways. They combat climate change by reducing greenhouse gases in the atmosphere. They muffle sound pollution and reduce air pollution, drawing in carbon dioxide and releasing oxygen. When rain pours from the skies, trees decrease stormwater runoff, preventing flooding and soil erosion. They also provide valuable habitats to support biodiversity in insects, birds, and other animals, and microorganisms. The list goes on.

Equally important is accumulating evidence that simply spending time around trees and green spaces uplifts our health and mood. Below are a few of the biggest benefits we reap.

## Keeping it cool: Trees help prevent heat-related illness

Climate change is causing rising temperatures and more heat waves across the US. These effects are worse for those who live in neighborhoods known as urban heat islands [<https://www.epa.gov/heatislands/what-are-heat-islands>], where asphalt and concrete soak up heat during the day and continue to radiate it at night. Temperatures can reach 7° F hotter than suburban, rural, or simply wealthier and leafier neighborhoods.

Trees and their leafy canopy provide shade that helps to prevent urban heat islands. What does that mean for individuals? It translates to fewer heat-related health illnesses [<https://www.health.harvard.edu/blog/extreme-heat-staying-safe-if-you-have-health-issues-202108062563>], which strike outdoor workers and younger, older, and medically vulnerable people more often. A study [<https://pubmed.ncbi.nlm.nih.gov/36736334/>] published in *The Lancet* calculated that increasing tree canopy to 30% coverage in 93 European cities could prevent an estimated four in 10 premature heat-related deaths in adults in those cities.

## How trees help children: Better mood, behavior, attention, and more

Spending more time in nature has been linked with better health outcomes like lower blood pressure, better sleep, and improvement in many chronic conditions in adults. These findings are prompting a growing interest in forest therapy [<https://www.health.harvard.edu/blog/can-forest-therapy-enhance-health-and-well-being-2020052919948>], a guided outdoor healing practice that leads to overall improved well-being. But what's also remarkable are the varied benefits of trees and nature for children.

One study [<https://pubmed.ncbi.nlm.nih.gov/articles/PMC8885429/>] of children 4 to 6 years old found that those who lived close to green space demonstrated less hyperactive behavior and scored more highly on attention and visual memory testing measures compared with children who did not.

Just *seeing* trees can have mental health benefits. In Michigan, a study [<https://pubmed.ncbi.nlm.nih.gov/articles/PMC10177887/>] of children between the ages of 7 and 9 demonstrated that students who could see trees from their school windows had fewer behavioral problems than those with limited views.

In Finland, researchers modified daycare outdoor playscape environments [<https://pubmed.ncbi.nlm.nih.gov/articles/PMC7556828/>] to mimic the forest undergrowth. These daycares were compared to control standard daycares and nature-oriented daycares where children made daily visits to nearby forests. At the end of 28 days, the children in the daycares with modified forest undergrowth playscapes harbored a healthier microbiome and had improved markers of their immune systems as compared to their counterparts.

## How green space helps communities

Having green space in neighborhoods also does a lot to enrich the well-being of communities. A randomized trial in a US city [<https://pubmed.ncbi.nlm.nih.gov/articles/PMC5866574/>] planted and maintained grass and trees in previously vacant lots. Researchers then compared these green spaces to lots that were left alone.

In neighborhoods below the poverty line, there was a reduction in crime for areas with greened lots compared to untouched vacant lots. Meanwhile, residents who lived near lots that were greened reported feeling safer and increased their use of the outside space for relaxing and socializing.

## How can you help?

Unfortunately, urban tree canopy cover has been declining over the years. To counter this decline, many towns and nonprofit organizations have programs that provide trees for planting.

A few examples in Massachusetts are Canopy Crew [<https://www.greencambridge.org/canopycrew>] in Cambridge and Speak for the Trees [<https://treeboston.org/>] in Boston. (Speak for the Trees also offers helpful information on selecting and caring for trees [<https://treeboston.org/get-involved/resource/>]). Neighborhood Forest [<https://www.neighborhoodforest.org/>] provides trees for schools and other youth organizations across the US. Look for a program near you!

Planting trees native to your region will better suit the local conditions, wildlife, and ecosystem. Contact your regional Native Plant Society [<https://www.fs.usda.gov/managing-land/wildflowers/links>] for more information and guidance. If you are worried about seasonal allergies [<https://www.health.harvard.edu/blog/save-the-trees-prevent-the-sneeze-2019091017666>] from tree pollen, many tree organizations or certified arborists can give you guidance on the best native tree selections.

If planting trees is not for you but you are interested in contributing to the mission, consider donating to organizations that support reforestation, like The Canopy Project [<https://www.earthday.org/campaign/canopy-tree-project/>] and the Arbor Day Foundation [<https://www.arborday.org/>].

Dr. Wynne Armand is a physician at Massachusetts General Hospital (MGH), where she provides primary care; an assistant professor in medicine at Harvard Medical School; associate director of the MGH Center for the Environment and Health [<https://www.massgeneral.org/environment-and-health>]; and affiliated faculty, Harvard Chan Center for Climate, Health, and Global environment (C-CHANGE).