



Comments on Portland's Climate Emergency Work Plan, July 2022, Exhibit A

August 8, 2022

Dear City Council:

We appreciate all the work that City staff have done on Portland's Climate Emergency Work Plan. As the Plan states, "the time is now" to take action to address how to mitigate heat impacts on our city.

We agree that cutting carbon emissions by improving mass transit and pedestrian ease is important. But if such improvements exist in a sea of concrete and asphalt, they will not provide cooling, storm-water mitigation, and filtering of air pollutant and noise. These environmental services are crucial for climate resilience and human health. They are best ensured by large-form trees and green spaces.

Large-form trees, which grow more than 50 feet tall and live for more than 75 years if given the space and conditions to do so, provide significant human health and environmental benefits that dwarf those of small-form trees. Space for large-form trees in our rights-of-way near where people live—not only in our parks or distant natural areas—should be given equal priority with other climate measures such as solar panels, paint for streets, roof membranes, and heat pumps. Large-form trees take time to reach their full environmental services potential, including carbon storage. That's why the time to make room for them across the city is *now*.

As a whole, the Climate Emergency Work Plan appears more aspirational than an actual blueprint for managing projects throughout the city in a new way that addresses the extreme urgency of the climate crisis. We don't need another call for climate action, we need specifics. Moreover, the plan does not address the way the City bureaucracy itself is deeply entrenched in only enforcing minimum code requirements rather than looking for ways to maximize opportunities that go beyond such minimums. Emergencies demand solutions that go beyond the status quo.

Nor does the plan articulate new, creative ideas for how the City will meet its climate goals. For instance, nowhere in this plan does the City model specific ideas for how our buildings, sidewalks, streets, and parks might be redesigned to still be livable in the extreme climate conditions we are beginning to experience. Pilot

projects provide a way for the City to model best practices and evaluate what works and what doesn't but no pilots are mentioned in the plan. The Work Plan must name at the very least a handful of sites or areas where new designs will be tried and evaluated within the next few years for their impact on human health and living conditions.

Change comes from on-the-ground redesign, not from broad directives. The City must design space for large-form trees within 100 feet of housing, workplaces, and institutions, starting with the rights-of-way. Importantly, to increase space for large-form trees, the Work Plan must reduce impervious area. The Title 33 zoning code does not regulate impervious surface coverage. Unless action is taken to do so, our hottest, most vulnerable neighborhoods in East Portland, slated for high-density development, will be cursed with increased impervious surfaces just at the time they need *more* green, not less.

In order for any real change to take root in how the City does things, the Work Plan should include an inter-bureau design and implementation checklist to be used for every new individual project. Every checklist must include how the project's design will enhance or detract from the urban forest, which is essential to our climate resilience. Proposed projects should be evaluated on how far beyond merely fulfilling minimal code requirements they go. Serious, effective emergency planning and action require that smarter, innovative design to accommodate space for large-form trees (or at least medium-form trees) be applied from the very start to all new development and capital improvement projects.

No less than an on-the-ground design revolution is required to meet our climate emergency. The Work Plan should stipulate pilot projects that result in large-form trees in the ground with guaranteed City maintenance in low-canopy areas. The plan should state specific ways to achieve this end along transportation corridors. For instance:

- PBOT and Urban Forestry together should look for one-way streets perpendicular to transportation corridors to serve as pilots for more climate-adapted design. Such streets would still have a bike lane and on-street parking, but one lane could be used to make room for 8-foot or wider treeways on the non-powerline side of the street. These wider planting strips would allow planting of large-form trees big enough to shade the entire street.
- On streets where planting strips are less than 6 feet wide, PP&R should purchase, on the side of the street without powerlines, 2 feet of frontage across the front of

the adjoining lot(s) to enable the planting of large-form trees. These wider strips will reduce sidewalk conflicts and costly repairs. The larger trees that can be planted also will be able to shade and cool the street and surrounding buildings far better than small-form trees can.

- PP&R should pilot the purchase of treed lots in low-canopy neighborhoods near transportation corridors for the purpose of creating pocket parks that function as large-form tree canopy reservoirs that clean and cool air.
- BES should lead in piloting creation of island canopy reservoirs in institutional parking lots where stands of at least three trees are possible. Any City-owned parking lot should be first in line for such a pilot. BES should maintain the trees if the island is a stormwater facility, and PP&R if the trees are planted at curb level.
- PBOT, BES, and PP&R/UF should cooperate in installing shaded electric car charging stations to make the connection between carbon reduction and trees.
- Affordable housing should be required to have one or more large-form trees to benefit residents. This would be supported by an easement system.

### *Specific Language and Other Changes*

In addition to creating a much bolder and more specific emergency work plan, we would like to see the following changes in the text:

—Combine the “Trees T” items now on p.13 with Natural Resources/Green Infrastructure (NR) items to reinforce that trees are infrastructure on an equal par with other infrastructure when designing roads, sidewalks, and buildings. All City bureaus must be required to treat trees this way *or little will change*.

—T-1 (p.13) Change Action text to this: “Expedite updating and implementing the Urban Forestry Management Plan and ensure that it is informed by the science showing the public health benefits of living and working near large-form trees.”

—T-2 Change Action text to this: “Update Title 11 regulations to improve tree preservation and require that all new development and capital improvement projects are designed to include adequate space to hold large-form trees.”

—T-3 Change Action text to this: “Accelerate tree planting in East Portland and other priority neighborhoods through existing and additional funding, and ensure these efforts include partnering with community organizations with the capacity to

plant trees. In these tree-planting target areas mandate greater space for large-form trees in the right-of-way.”

—Add a T-4 whose Action reads: “Expedite City funding to maintain street trees across the city. Maintaining essential public infrastructure like street trees should not be left to property owners, many of whom are unable to afford such maintenance, a factor that contributes to canopy deterioration and wasteful tree-planting efforts.”

—Add a T-5 whose Action reads: “Using creative design, preserve more public space in the right-of-way for large-form trees in new projects such as the transformation of 82<sup>nd</sup> Avenue from a state highway to a City-owned corridor.”

—Land Use-1 [add to end of Action text]: “All such plans must require heat reduction approaches that include preservation of large-form trees and space to plant new ones. This is especially essential in plans to improve major East Portland corridors such as 82<sup>nd</sup> Avenue and other important north-south corridors.”

—IP-1 Change Action text to this: “Incorporate information about rapidly changing weather patterns resulting in flood risk, canopy loss, and heat islands. These changes compromise environmental and human health and their effects must now be taken into account in all capital planning and infrastructure design by incorporating tree canopy.” Under the Why This Matters column, add to the last sentence the italicized words here: “This includes evaluating the social cost of carbon ... and repair for assets *such as trees killed or damaged* by climate stressors.”

—H-1 (p. 16) Add the italicized words here to the last sentence under Action: “... such as landscaping *including large-form trees, which at maturity grow tall enough to shade buildings*; construction type, and resident practices.”

In closing, the Climate Emergency Work Plan reflects some of the broad knowledge we already have amassed but it will not bring about the kind of bold changes this emergency requires. These changes must occur on the ground, and therefore must be imbedded across City codes, which climate crisis has rendered out-of-date. But we won’t move the dial here unless and until codes are rewritten and practices revamped to reflect the crisis we’re facing.

Sincerely,

Kyna Rubin on behalf of [Trees for Life Oregon](#)