Dear City Council, Shannon Buono, et al.,

I am writing in strong support of the Dark Skies Project Final Report and the proposed proclamation of September 19 as Lights Out Portland.

As a Portland native who has watched the city's light pollution vastly increase during my lifetime, I am hopeful that the Dark Skies Project will result in a measurable, significant decrease in Portland's light pollution. (I'm not sure I'd agree with the report's assessment of the city's light pollution as "moderate." It seems worse than that to me.)

I have one suggestion regarding the report's proposed strategy regarding streetlights. My recommendation would be not only to be proactive with streetlight shields but to fund the department to put shields on ALL streetlights that produce light trespass, etc. In other words, the City should assume that most if not all streetlights pollute (which they do) and should fund the reversal of such light pollution by installing shields all across the city.

As someone who has complained that the streetlight in front of our house throws light into a bedroom, I have yet to hear from the department. I submitted my complaint weeks ago. Obviously there is a problem.

Also, perhaps I missed it, but I didn't see anything in the report concerning property owners who install landscape lighting that throws light up into trees. In my neighborhood such lighting is popular. The result is tremendous light pollution directly on (and beyond) trees. Is there any way to eliminate such a wasteful, light-blight thing?

Thanks for the opportunity to comment.

Best Wishes, Christine Colasurdo 2776 SW Old Orchard Road Portland, OR 97201

## Memorandum

TO: Mayor Ted Wheeler and the Portland City Council

FROM: Roberta Jortner

SUBJECT: Comments on Dark Skies Report

I am writing to urge the Portland City Council to accept the Dark Skies report, with some amendments, and to direct staff to proceed with a comprehensive strategy to address light pollution in a proactive manner.

The Dark Skies Report dated August 2020 provides a solid launching point for discussion and prompt action. As a member of the Advisory Committee for this project, I have appreciated the opportunity to provide input and have enjoyed lively committee discussions during several zoom meetings. Although committee member opinions varied on some of the specifics, there was general agreement that excessive, poorly designed outdoor lighting and the impacts of light pollution are real problems that warrant attention and action.

Staff was responsive to feedback and did a good job identifying areas of common ground while also characterizing the complexity of the issues. As a result, this report has evolved into a well-written and succinct synopsis of the growing body of scientific literature documenting the human and ecological risks and impacts associated with light pollution. The report also provides a good summary of City goals and policies that support addressing light pollution and its impacts. And the report highlights important equity issues that must inform and help shape where the City goes from here.

In a nutshell, excess artificial outdoor light at night causes sleep disruption and impacts on melatonin levels in humans, which in turn is linked to impaired immune systems and various diseases, including cancer. The report also points to the potential for disproportionate impacts of light pollution on vulnerable, aging, low income, and/or historically under-represented communities. This was corroborated by input from the Equity Focus Group that City staff convened to inform the document and staff's recommendations.

From an ecological perspective, light pollution has been documented to cause significant negative impacts on birds, bats, and fish and wildlife, including impacts on migration, reproduction, foraging, and predator/prey behaviors. Studies also show that light pollution affects the health of insects, trees, and plants. Portland's flora and fauna are already feeling the impacts of a changing climate and light pollution adds another stressor on our already stressed natural systems.

In addition, poorly designed and excess lighting are indications of wasted energy and carbon emissions, which is counter to the City's Climate Mitigation and Climate Preparation goals and objectives. Ignoring the health, energy, and carbon footprint impacts of light pollution would also fly in the face of the City's Climate Emergency Declaration adopted not even three months ago.

As highlighted in the report, recently adopted policies in Portland's Comprehensive Plan 2035 call for the City to address the impacts of light pollution on humans and wildlife. By addressing light pollution proactively, the City Council can meet multiple objectives across topics of public and ecological health, equity, and community resilience.

My remaining comments pertain to the recommendations contained in the report.

- 1. General comment: The proposed recommendations are necessarily diverse and multi-faceted. Approaching the light pollution from many angles, including new regulations, enhanced City programs, education, outreach, and research, including education and training for City staff, will help ensure that the issue is integrated not only into City projects and programs, but into City culture. It will be helpful to have incorporated policies and guidelines for outdoor lighting into the City's Green Building Policy, Master Building Specifications, and Climate Action Plan update in the near-term so the City can provide leadership and demonstrate its commitment to "walking the talk" in conjunction with City buildings and facilities. And it will greatly improve the effectiveness of the City's efforts to coordinate with other municipalities and regional agencies such as Metro to elevate the issue of light pollution to the regional scale.
- 2. Strategy 1 Addressing light pollution associated with new and existing development on private and publicly owned property

Action 1.1 - Establish in the Portland City Code, a comprehensive set of regulations for outdoor lighting associated with new construction and remodeling projects.

A. Pursue a Stand-alone Outdoor Lighting Code Title rather than relying on amendments to Title 33, Zoning Code. This recommendation calls for carrying out Action 1.1. either by amending Title 33, Portland Zoning Code, or by developing a new stand-alone Outdoor Lighting Code Title. I strongly support the development of a new stand-alone Outdoor Lighting Code title, rather than regulating outdoor lighting primarily through Title 33, Portland Zoning Code. It is not appropriate or necessary in most instances to tether outdoor lighting regulations to the land use system, or even necessarily to new development. A separate code title would allow the City to develop a comprehensive, cohesive set of regulations that address public and private property, including rights-of-way and streetlights. A separate code title would also allow the City to address installation of new exterior lighting and retrofits of existing lighting when no additional development is proposed. This will be critical to be able to effectively reduce light pollution associated with existing development. While some Title 33 amendments would also be needed (e.g., historic districts), a separate code title is more appropriate to address outdoor lighting. There are good examples of Outdoor Lighting Codes from other cities that the City could use as a starting point. If Council agrees that a separate code title is preferable, then a few additional revisions to the recommendations will be needed, e.g., the language of the recommended action in the Climate Action Plan update. (Strategy 2, Action 2.2.).

- **B.** Broaden the title of this action to include installation and replacement of new exterior lighting systems. As noted above, it will be important for Portland's outdoor lighting regulations to address the installation and replacement of specified new exterior lighting systems on existing development. Given that Portland is largely developed, this is the only way to ensure that light pollution is effectively addressed.
- C. Allocate funding within 1 2 years to complete the development of a new Outdoor Lighting Code Title in a timely manner. Page 33 Strategy 1, Action 1.1 - The recommended timeline for this action is overly long. I recognize that the Covid-19 Crisis has placed additional burden on the City Budget. However, this project provides a great opportunity to improve human and ecological health and resilience, address equity-related disparities and impacts, and further our climate goals. Also, the report provides strong direction and there are many existing outdoor lighting ordinances that the City can refer to and that will help expedite the project.

## Action 1.4 Continue to analyze who benefits from and who is burdened by outdoor light at night.

- **D.** Carry out this action in a timely fashion and in conjunction with Action 1.4. which will involve research into "whether there are neighborhoods and/or development patterns (high density, low income residential housing and/or adjacent to major arterials) that accentuate disproportionate impacts of light pollution on marginalized communities, e.g. evaluate whether there are areas or development types associated with higher ambient light levels and lower tree canopy, and whether there are greater human health or sleep quality and quantity impacts of light pollution in those areas."
- 3. Shorten the proposed timeline for Strategy 4 Addressing Light Pollution through Public Awareness, Outreach, Education, and Research. It is important that the City begin building awareness of light pollution issues and impacts within the community, as preparation for and during the development of new regulations. People need to understand why light pollution is important to address sooner rather than later, and the anticipated benefits and avoided costs of acting now. I encourage the City to carry out this strategy in partnership with community organizations to ensure that education and outreach are reaching broad populations and geographies throughout the city and region. This strategy should be broadened to include collaboration with local architects, lighting engineers, and developers, and should look for synergies such as attaining LEED Light Pollution Reduction credit. I also strongly support the City in moving forward in partnership with PSU to research potential correlations between light pollution and certain development types, socio-economic factors, and tree canopy. Addressing these questions will inform future voluntary and regulatory approaches. (Action 4.4.)

Thank you for considering these comments and suggestions.

Roberta Jortner, 7201 SE 36<sup>th</sup> Ave. Portland Oregon, 97202



5151 NW Cornell Road Portland, OR 97210

September 16, 2020

Mayor Wheeler Commissioner Hardesty Commissioner Fritz Commissioner Eudaly

RE: Dark Skies: Strategies for Reducing Light Pollution in Portland

Mayor and Commissioners,

We are writing to express strong support for the adoption of the Dark Skies Report, and to urge Council to ensure the implementation of a strategic multi-pronged plan to address light pollution in the City of Portland including code development within the next 2 years.

We have greatly appreciated the opportunity to work with City staff on the development of the Dark Skies Report, and believe that it gives a good overview of the issue and lays a strong foundation for implementation of actionable steps to begin to address light pollution and to preserve our night skies. Dark skies preservation goals have been written into various City plans over the past decade, and we applaud the city for now outlining a comprehensive plan to adopt policies and practices that ensure that thoughtful, well-designed lighting will be a standard in this City.

Light Pollution is an issue that deleteriously impacts wildlife behavior and entire ecological systems as well as human health and public safety. The many and significant ecological impacts of light pollution have been documented in migrating and nesting birds as well as in mammals, amphibians, fish, reptiles, invertebrates and plants. Light pollution is far more disruptive than we can imagine, with widespread consequences on complex and highly choreographed ecosystems, the extent of which is still being discovered and documented. Exposure to artificial light at night also suppresses melatonin secretion in humans, causing sleep disruption, which has been flagged by the American Medical Association as potentially linked to the development of a number of diseases including diabetes, cardiovascular disease, obesity and depression. The report also highlights the need for more research into potentially disproportionate impacts on BIPOC, low income and marginalized communities that may be facing already disproportionate health stressors including Covid-19 and/or may be living in areas with higher ambient lighting and lower tree canopy levels. Poorly designed lighting also wastes a tremendous amount of energy and results in excess carbon emissions, which undermines the City's Climate Action Plan and Climate Emergency Goals at a time when we are seeing the consequences of climate change play out right here in the Portland metropolitan region. Light pollution also, quite simply, obscures our view of the night sky.

This Report is the culmination of a number of city plans that identify concerns about the impacts of light pollution on humans and wildlife, and reflects a large amount of work and a growing awareness about the issue by City staff and leadership. We enthusiastically support the adoption of the report as a means by which the City can protect public health and ecological health, as well as address equity and support community resilience.

## Our recommendations regarding *Strategy 1: Addressing light pollution associated with new and existing development on private and publicly owned property* are as follows:

- <u>Allocation of funding for code development to be completed within the next 2 years</u>. We understand and acknowledge the challenges that Council is faced with regarding the impacts of Covid 19 on budget and operations, and we still feel that it is important to move forward with this work while the project has the momentum that has been gained over the last year. There are many existing Dark Skies and Light Pollution ordinances both locally and nationally that the City can reference in development of this code. Portland is growing and developing rapidly, and many businesses are engaging in lighting retrofit projects; addressing this issue sooner than later will ensure that we are on track to slow the proliferation of light pollution, preserve what we have left of our night skies, and to bring the City's lighting practices into better alignment with other complementary plans and policies;
- <u>Development of a new Exterior Lighting Code rather than amendments to Title 33 Zoning Code.</u> We are strongly in favor of establishing a readily identifiable new City Code title specific to exterior lighting and dark sky preservation lighting codes, which will facilitate more public awareness about the issue, and will decouple lighting regulations from land use and new development, will ensure that street lighting is addressed in the code, and will ensure that light pollution associated with existing development.

We appreciate the tremendous amount of work that has been done to date, and as a process that has been in the works for some years, applaud City Council for setting a two year timeline for completion of code development.

Thank you for your consideration of these comments and for your hard work and commitment to the human health and ecosystem health of our city!

Sincerely,

Mary Coolidge Bird Safe Campaign Coordinator Portland Audubon

Bol Sully

Bob Sallinger Conservation Director Portland Audubon

From:	Mary Coolidge
То:	Council Clerk – Testimony; Wheeler, Mayor; Commissioner Fritz; Commissioner Eudaly; Commissioner Hardesty
Cc:	<u>Buono, Shannon; Edmunds, Sallie; Durbin, Andrea; Bob Sallinger</u>
Subject:	Dark Skies Report Comments from Portland Audubon
Date:	Wednesday, September 16, 2020 6:30:38 PM
Attachments:	Portland Audubon Dark Skies Final comments Sept2020.docx (1).pdf

Please find attached Portland Audubon's comments on the Dark Skies Report that is scheduled for acceptance by City Council tomorrow, September 17th. Thank you. All the best, Mary

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Mary Coolidge BirdSafe and Non-Lead Campaign Coordinator Portland Audubon <u>Bird Safe Buildings program</u> <u>Take the Pledge to go Lights Out!</u> <u>Watch the Science on Tap Case for Dark Sky Preservation</u> 503.866.3779 cell