

2021-08-13

Hello Heather,

At the EEPAC meeting on August 19 I would like to discuss light pollution as it relates to London's Bird Friendly Skies program. I see that this has already been added to the agenda (item 5.1). I am writing to provide more context and information to be included in the agenda.

**Background:** Artificial light at night represents a major source of environmental pollution that impacts ecosystems and human health. Light pollution stems from existing and new development, particularly from light fixtures that cast light upwards at night producing skyglow. Skyglow elevates the risk of migratory birds colliding with windows on buildings. Artificial light at night also harms birds and other organisms locally when it spills or trespasses into natural areas.

The City of London is addressing light pollution through the Bird Friendly Skies program, including updates to the Site-Plan Control By-law. Section 8.2. of the bylaw, "Yard Lighting", includes the following: *"(d) Light Study – a qualified engineer will prepare and provide a report demonstrating how the lighting is contained on the site and that the selection/style of light will not create glare and/or broadcast light onto adjacent properties or roadways, by the adjustment of refractors and/or the placement of shields (see Figure 8.1)."*

In 2019 a delegation from Development Services gave a presentation to the Planning and Environment Committee about the Bird Friendly Skies program that included the above text and added: *"To ensure bird-friendly development, this tool can be used for larger developments which have the potential for significant light pollution."*

**Questions:** I have not been able to find any more information about the Light Study mentioned in this report. I am wondering if: 1) the City currently has a protocol for measuring light pollution locally (i.e. light trespass or spillage) as described above; 2) there exists quantitative data for London's light pollution on a city-wide scale (e.g. satellite imagery or standardized monitoring); 3) if the City has set targets for overall reduction in light pollution.

**Proposal:** I believe that in order to characterize and mitigate the effects of light pollution on London's Natural Heritage System, a valuable approach would be to first examine baseline conditions and then to monitor changes over time. I would like to propose that EEPAC forms a working group to research available methodology and standards for measuring and reducing light pollution. The working group could provide recommendations for developing a protocol for a Light Study and a framework to monitor the extent of light pollution in the City of London.

Thank you,

Brendon Samuels  
Member, EEPAC