

What is Light Pollution ?

- Unwanted and unwarranted glare and glow of artificial lighting on anything or anywhere outside of the intended target area



7 Excellent Dark Sky Site	6 Dark Sky Site	5 Rural Sky	4 Suburban/Rural Transition	3 Suburban Sky	2 Bright Suburban Site	1 City/Suburbia Transition	0 City/Inner City Sky
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NORILab/NSF/Aura, P. Marenfeld

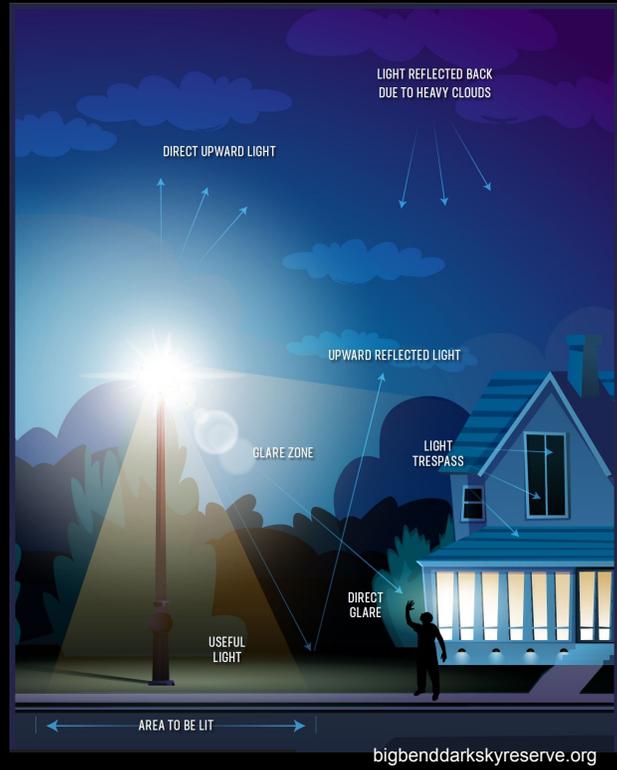
Consequences of Light Pollution

1. Wildlife
2. Human health
3. Economic
4. Environmental
5. Cultural heritage



Components of Light Pollution

- Sky glow
 - Light that beams up needlessly into the sky and appears as the dome of light seen over a city and into the countryside
- Glare
 - Excessive brightness that causes visual discomfort and potentially unsafe conditions
- Light trespass
 - Artificial lighting that spills beyond the intended target area onto a neighbouring property, the upper floors of a building, and even up into the sky
- Clutter/Overillumination
 - Grouping light fixtures too close together, often in a haphazard way or beyond what is required for a specific activity that increases the effects of glare



Sky Glow



Sky Glow



2003 Northeast Power Outage: Todd Carlson

Glare



International Dark Sky Association

Glare



International Dark Sky Association

Glare

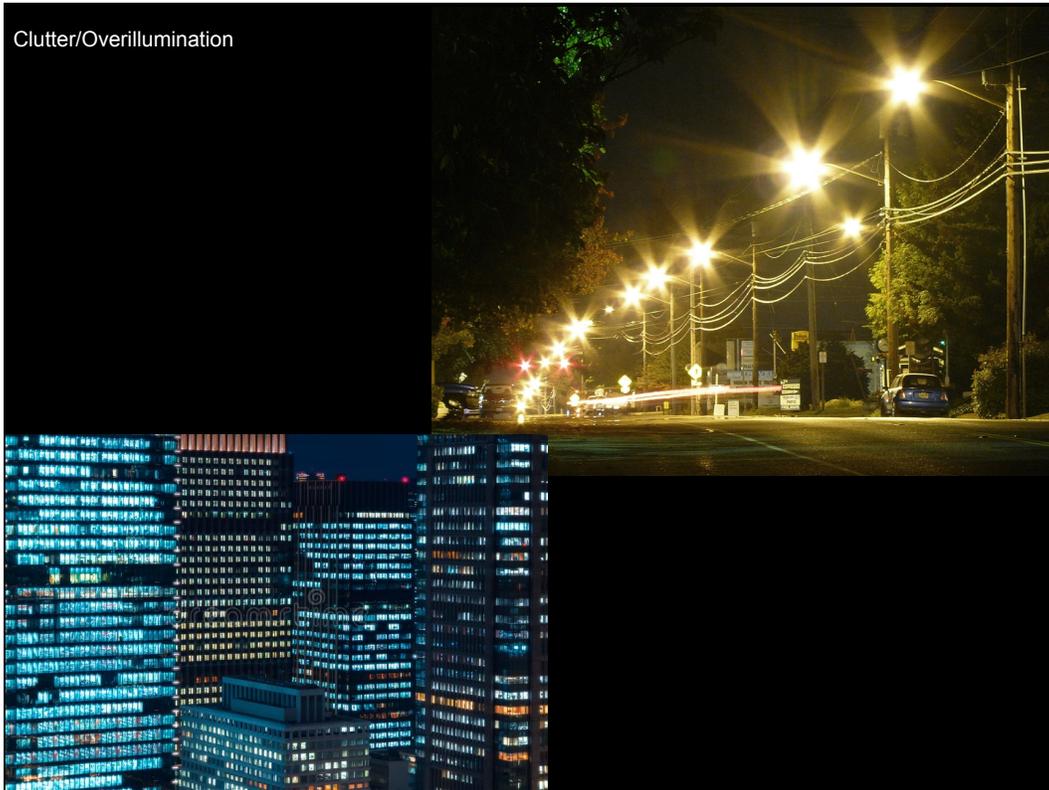


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Light Trespass



Clutter/Overillumination



Light Pollution Abatement

- PAA initiative in 2004
- Mark Coady: Light Pollution Abatement Director 2004 – 2012 & 2016 - 2020
- Seven of the eight townships that make up Peterborough County now have light pollution abatement in their noise bylaws as something “likely to interfere with another’s enjoyment of their property”
- Those same townships have light pollution abatement in their property standards bylaws



Earth Hour from Armour Hill 2008: Rick Stankewicz

Light Pollution Abatement

- And those same townships have also changed all of their streetlights to full cut off low temperature LED fixtures that illuminate the ground, reduce light trespass and sky glow, and save them electricity and infrastructure costs
- After seeing the positive results out in the county, the City of Peterborough used the same service provider and replaced most of their own streetlights with similar fixtures



Earth Hour from Armour Hill 2019: Rick Stankewicz



What Can YOU Do ?

- Assess lighting needs
- Change outdoor fixtures
- Change night-time illumination behaviour



Globe at Night

- Global citizen science initiative
 - globeatnight.org

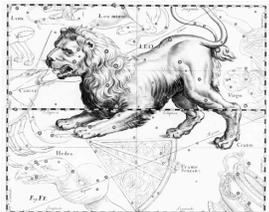
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Globe At Night

Globe at Night is an international citizen-science campaign to raise public awareness of the impact of light pollution by inviting citizen-scientists to measure & submit their night sky brightness observations.

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Can you find Leo?

Once you have found Leo, you will be able to see why the ancients visualized this asterism as a lion and you will find it very easy to spot in the night sky. However, if you have never had anyone point out this constellation, looking for Leo can be very much like trying to spot a lion hiding in the grasslands of the African Savannah. Much like any time you are looking for something new, it is usually easier to start with something you already know. In the case of the night sky, one of the most recognizable constellations is that of the Big Dipper. Look for it in the North. You can trace it's curved handle to the four stars that make up the bowl of the dipper. The two stars that delineate the far side of the bowl are often called pointer stars. If you follow them to the North, they

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- Learn more

