Losing the Dark Short Film **Presented by: The International Dark-Sky Association** in collaboration with **Loch Ness Productions and Starmap**

https://darksky.org/resources/videos/losing-the-dark/



v.youtube.com/watch?v=dd82jaztFlo

DarkSky International

Grand Lake as a Dark Sky Community

Kim White Community Development Director Town of Grand Lake







WHO IS
 DarkSky
 INTERNATIONAL

The **DarkSky International** protects the night from light pollution and promotes responsible outdoor lighting.

HB22-1382

Support Dark Sky Designation and Promotion in

Colorado

Mentorship Program

The Town received 70 hours of free consultation

to help town staff prepare an application to

become a Dark Sky Community



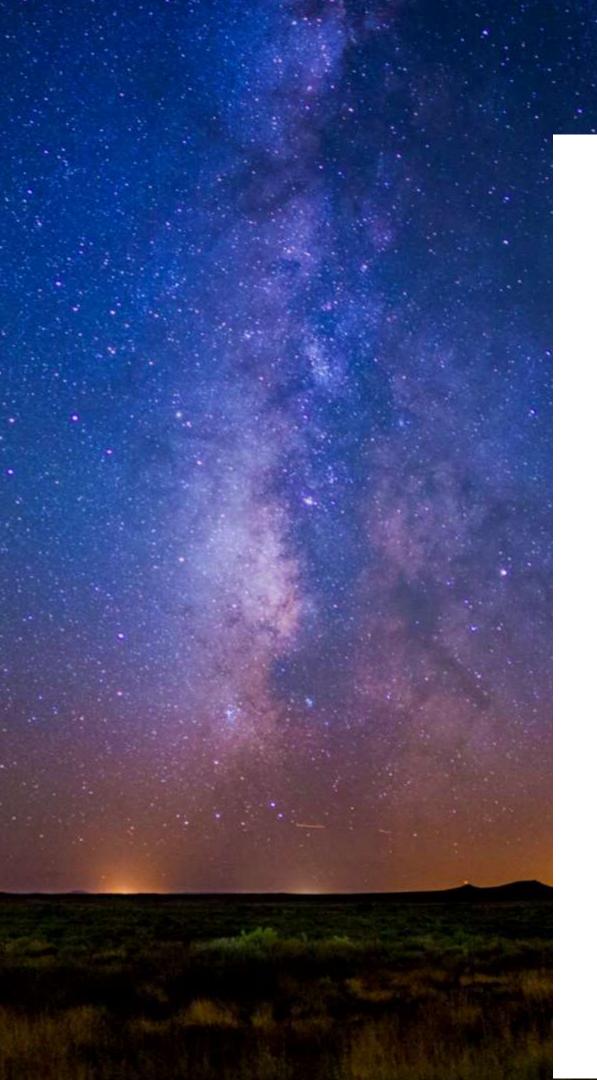




Mentor "Astro" Mark Laurin

- Coalition for the Stars
- Outreach Events
- Lighting Inventory
- Sky Quality readings
- Public lighting meetings
- Lighting Management Plan



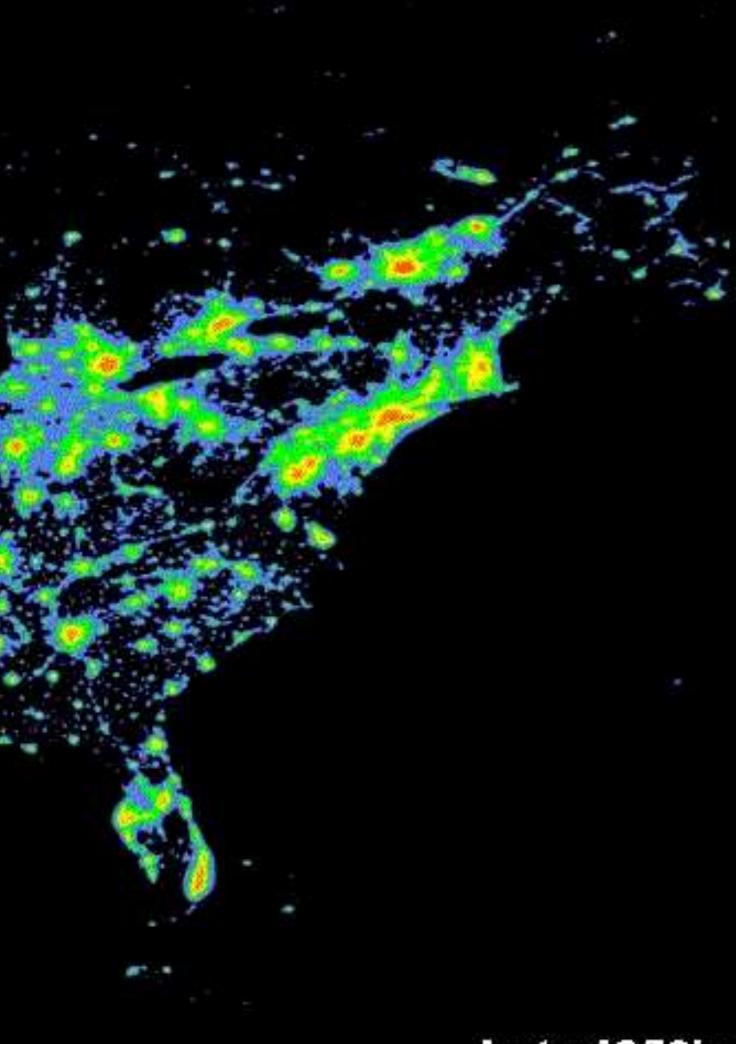


Projected Outcomes

- Reduced energy consumption, cost savings, and increased property value
 Increased local and regional quality of life through enhanced health and well-being, cultural heritage, and sense of place
- Increased awareness of the value of visible night skies and their benefit to local wildlife and ecology
- International Dark Sky Community Certification

Light pollution is increasing at 9.6% per year*

2001 Cinzena P., Feichi F., Elvidge C.D.



*Per GloberatNight.org 2023 report Late 1950's

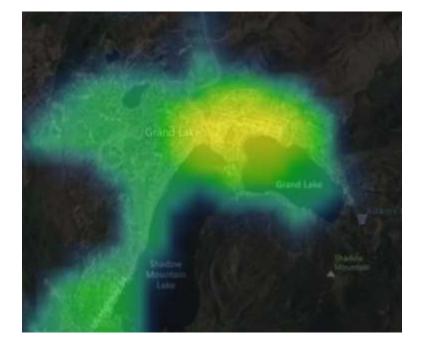
Grand Lake

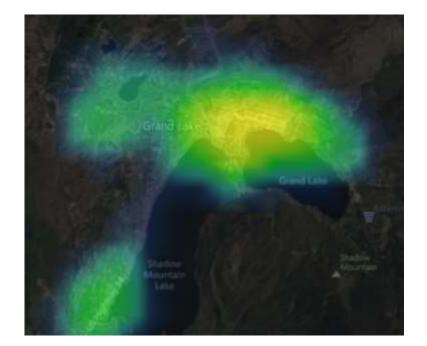
Lightpollutionmap.info

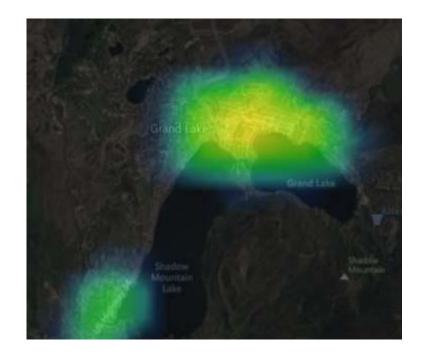




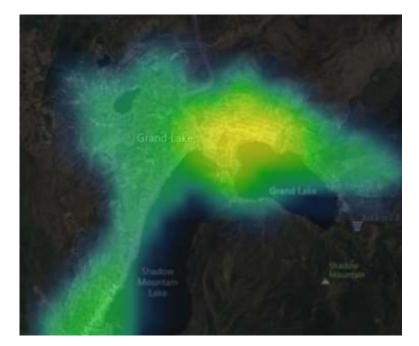






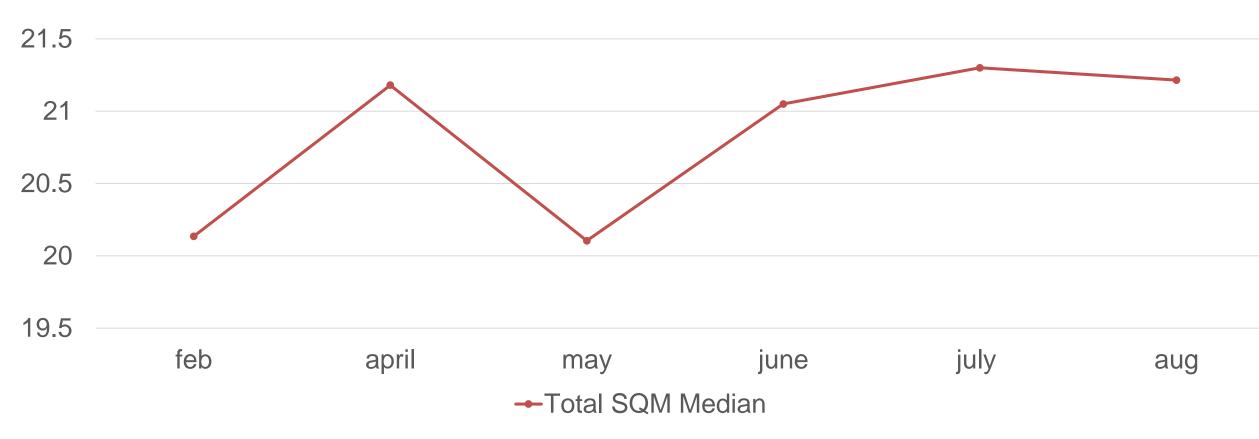


2021



2023

HOW DARK ARE YOUR SKIES? DARK SKY METER



PC: HERITAGE STARFEST



WE ARE YOU ONE OF THE **LUCKY ONES**

ONLY 2 OUT OF 10 PEOPLE ON EARTH CAN SEE THE MILKY WAY

99% OF THE USA AND EUROPE

live under light polluted skies

WE CAN MAKE A DIFFERENCE

LIGHT POLLUTION

Has a simple solution: better lighting design



LIGHT POLLUTION





LIGHT TRESPASS

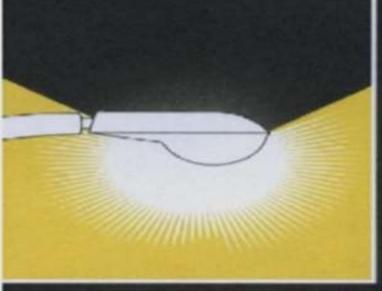
GLARE

Image: Mike Knell



SKYGLOW

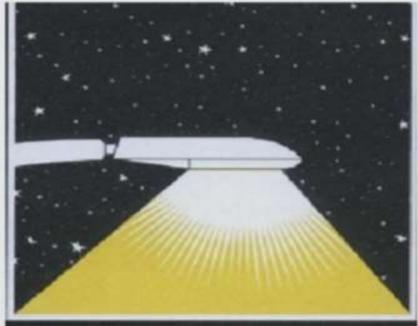
Shielded Luminaires SHIELDING



AIM LIGHTS DOWN









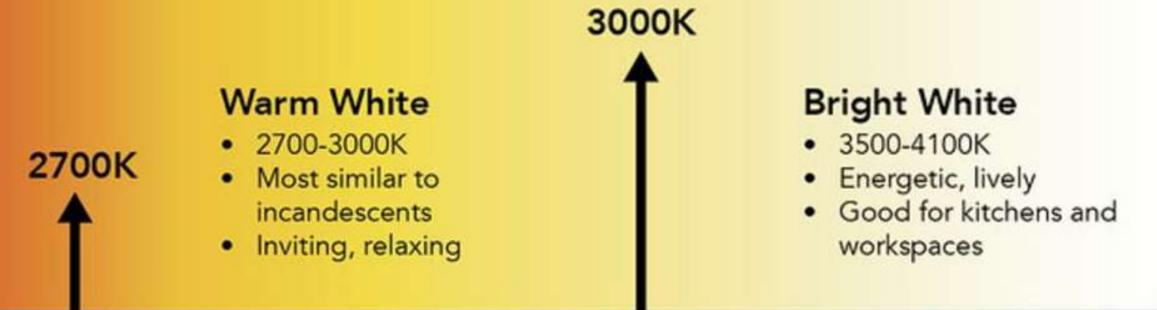
WHERE TO FIND THIS LIGHTING?

DarkSky Approved program

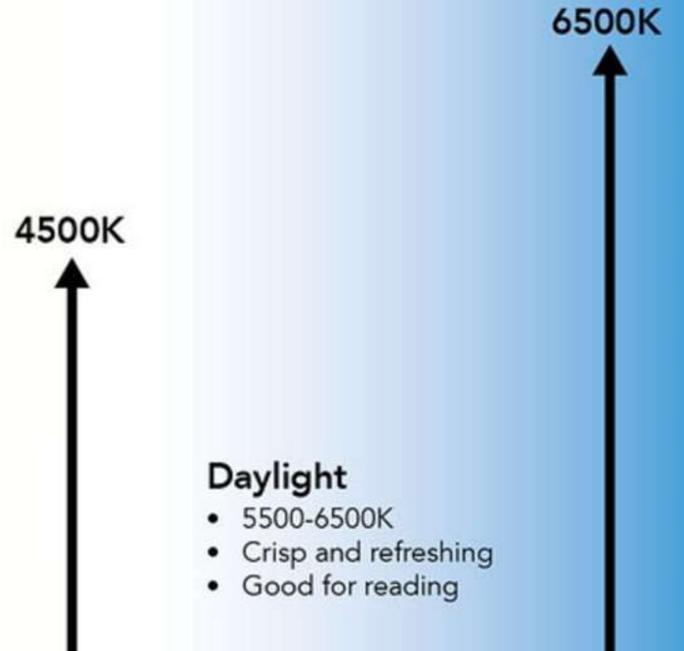


Certified by DarkSky.org

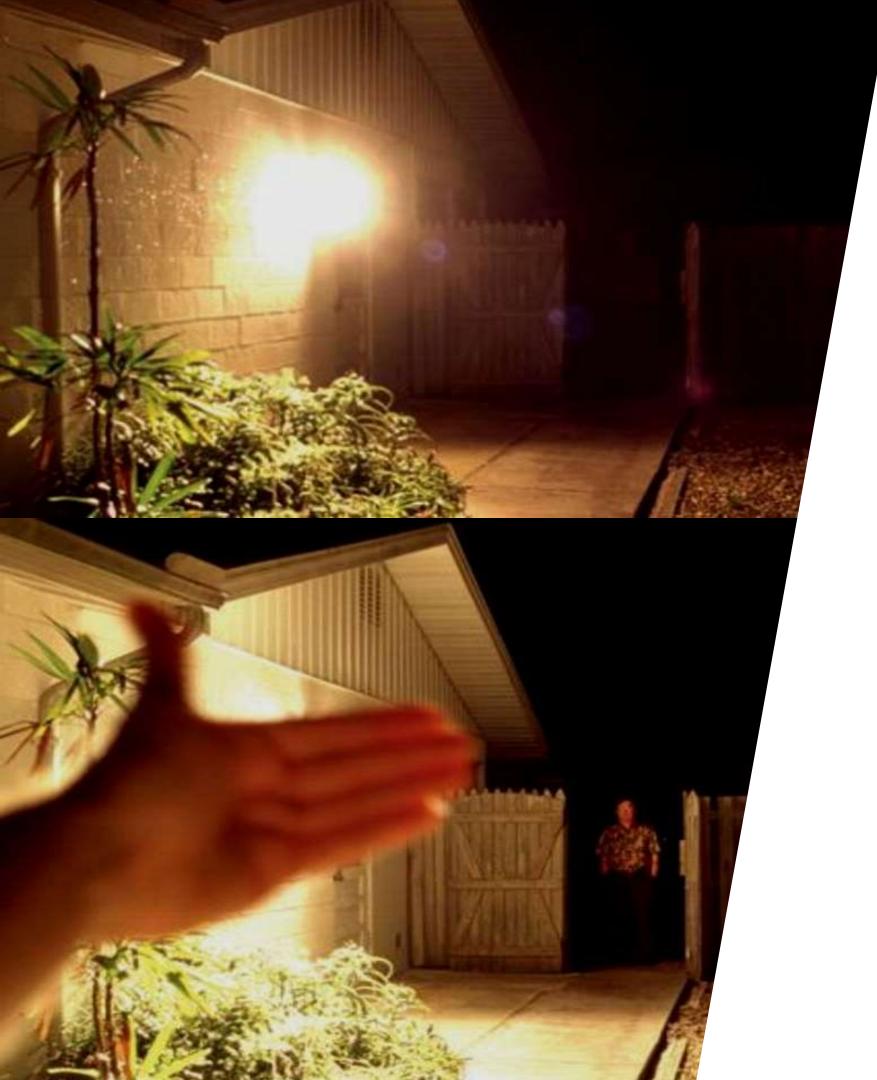
KELVIN (CORRELATED COLOR TEMPERATURE)



CORRELATED COLOR TEMPERATURE (CCT)



INTENSITY AND WARRANTING



MYTH: MORE LIGHTING IS SAFER

REALITY: WELL DESIGNED LIGHTING IS SAFER



Dark Sky Community Certification Checklist (for submission)

Letters of Support Lighting Management Plan Public Lighting Inventory Quarterly meetings of Coalition of the Stars Documentation of new construction after LMP adoption OR Sky Quality program is established (continuous reader) Ensure all Town-owned fixtures are in compliance by 2030 2 dark-sky awareness events per year AND/OR Inclusion of dark-sky education in local school curricula.

Ordinance items

Community Commitment Full shielding Light source temp. **Total site limits Over-lighting policy New Public lighting** Lit Signage

Outdoor recreation

Amortization

Enforcement of lighting management plan Fixtures over 1000 lumens (100w) NTE 3000K Limits on lumens/acre No more than 10% Must prove necessary & have adaptive control/curfew 1st hour before sunrise and after sunset NTE 100nit & on only during activity/open hours & NTE 200sf Curfew 1 hr after game end & lighting on play surface and stands only & ANSI/IES RP-6 guidelines followed & timers are installed

10 year private & 5 year Public period to comply



Appendix

Exhibit A- Draft Lighting ordinance with highlights indicating minimal IDSC requirements

Exhibit B – Checklist provided by DSI for application into IDSC

Exhibit C- Current ToGL code pertaining to Dark Sky lighting