



MEMORANDUM

TO: Council

FROM: Alain D. Muise, CPA. Chief Administrative Officer

SUBJECT: Community engagement – Light pollution and dark sky initiatives

DATE: September 19, 2025

Briefly, you are aware of our first reading of a proposed Light pollution, aka Light nuisance bylaw. The contents of this bylaw are detailed and outline a new area or service for the municipality. Its intent is to reduce light pollution for the night sky, thereby protecting the designated dark sky reserve of the area. Its second intent is to address light trespass, or problematic glare of lighting that can occur when used improperly.

Our first reading resulted in feedback from our residents; some official letters of concern were received by the office. Based on the feedback, we noted three major items; first, there is a lot of misunderstanding around the intent of the bylaw on the part of the resident; second, there are elements of the bylaw that require deeper understanding and review to increase the municipality's understanding of how to address light pollution, and finally, there are significant enforcement issues associated with this bylaw as written.

It is my opinion that the first reading of the light pollution bylaw, as approved by me, was premature. It required further analysis both internally and from third party experts in this field. We do **not** recommend a second reading of this bylaw in its current form.

The time delay shall be used to communicate directly with residents in the area, starting with commercial operators, as having the highest demand and requirement for lighting. These discussions will be had one on one with about 10 commercial owners, with more if needed.

Second, we will be engaging with other municipalities that have light nuisance bylaws in place to understand their experience.

Finally, we will reengage with dark sky preservation organizations. All of which to find a balanced approach that benefits our environment without undue cost or discomfort to our residents.

That feedback will be summarized in a 'what we heard' report and will amend any future document.



Enforcement issues:

There are errors in wording in our draft bylaw. An enforcement officer has no right to enter residential or commercial property without permission to engage in light pollution issues. That right exists but is limited to breaches or complaints regarding Land use, or Dangerous or Unsightly premises. In short, a bylaw that applies to all residents would be impossible to effectively enforce.

Which is why the bylaw was written to be an educational document for about 2 years before any enforcement could even be considered. In re-examining this, that may **still** not be practically achieved, nor was it ever the intent of the bylaw to be enforcement driven. We intended voluntary lighting improvements, based on education.

For further clarity, we do have land use regulations surrounding new construction, and there are regulations around lighting in those instances. New construction and in some instances, amendments to construction may have to follow those lighting regulations.

New builders are made aware of the lighting regulations as part of their building permit process. Our bylaw enforcement officer has **not** enforced any lighting issues but **has** had conversations with residents and made suggestions to change the current lighting, or direction of the lighting, thereby addressing nuisance complaints. All complaints were resolved voluntarily without incident. Any comments around this draft bylaw being enforced already are based on a lack of understanding or intentionally misleading. Only land use regulations apply.

If land use has light regulations, then why another bylaw?

This item was addressed in a council meeting verbally but is worth documenting. First, land use regulations do **not** apply to existing buildings. Light is clearly a necessary item in security and safety! It is also, if used improperly, a form of nuisance. We all have examples where a light was too bright and causes nuisance or even danger. For example, we have all experienced an incoming car with its lights on “high beam” and its potential impacts. Light is essential but can be a nuisance and a pollutant. Residents using lights as a nuisance to others or a night sky pollutant, either intentionally or not, are creating a potential nuisance, no different than noise. In either case, grandfathering provisions should not apply to ongoing nuisances or safety issues.

The intention of a bylaw is to establish a standard where nuisances and light pollution are reduced. There is **no** wording around light elimination, rather guidance on proper lighting. We do not have the interest nor the legislative authority to eliminate lights on a property. Second, any lighting necessary to meet federal or provincial regulations (i.e. food security, safety) are



exempt from our draft bylaw. We do not override the legislative authority of those levels of government.

The bylaw, as currently written, attempts to address three areas to reduce light pollution.

1. Lights should have a shield. A shield on top of a light, regardless of its intensity, directs the light where it is intended, the ground. Unshielded lights allow for night sky pollution. Neither the star gazers nor the companies want to light the sky. The cost of shielding is dependant on the amount of lights. While relatively inexpensive for one exterior residential light, it can be costly for commercial users. The shielding is considered the best of the three options in addressing light pollution. A high intensity light can still be a nuisance even if shielded through glare.
2. Lights shouldn't be too hot. Our draft bylaw states that 2,700 Kelvin is the standard heat for lighting. NS Power shall be using 3,000 Kelvin for their residential lights. 2,700 Kelvin is suitable for residential homes and are very efficient. For commercial use, 2,700 may not be sufficiently bright to address lighting for safety, it really depends on the use of the light. ***This is an area of municipal concern as the draft is written, it appears too rigid at 2,700 K. I have attached an example of the difference in the lighting at 2,700 and at 3,000. An image is not nearly as effective as actually seeing the light at night.***
3. Consider timers or movement sensors for lighting. Timers would ensure the light is only used when it is required. This is a very useful item on residential homes but could be more cumbersome or expensive for heavier users.

The feedback we received was positive surrounding environmental stewardship. Our commercial companies wish to be good citizens and are committed to better practices in support of the concept.

There are however notable concerns surrounding the extent of the new regulations, and raise questions on the necessity to do one, two or all changes as noted above. Feedback includes concerns for cost, and the lack of intensity of the 2,700 Kelvin mark. Commercial written concerns remind council of the need for effective lighting to run their businesses. Much of the feedback in this area should result in amendments to the bylaw.

Concerns and compliments were received around more regulations in this area. Compliments include agreement that there is light pollution/trespass, and it should be addressed. Concerns include the infringement of property and individual rights to do what they want on their property. Some residents dislike the thought of enforcement.



Next steps:

1. Attend one on one conversations with commercial users – estimated completion October 31, 2025
2. Engage in municipal conversations with units with a light pollution bylaw (there are none in NS) as well as dark sky organizations. Estimated completion September 30, 2025
3. Present what we heard report to Council by November 13th, 2025
4. Council to consider next steps on further engagement with residents, along with amendments to current state of the bylaw, including its current form as a bylaw.

Kelvin Color Scale

