

DARK SKY INITIATIVES IN MUSKOKA

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From a municipal perspective, the effective implementation of a dark sky strategy should take place within a framework of stewardship, regulatory and corporate initiatives.

Today, I would like to explain the regulatory framework available to municipalities in Ontario for lighting controls as well as some of the dark sky initiatives presently underway in the Muskoka area.

Stewardship involves community based, non-regulatory initiatives for promoting community awareness and understanding of the need for preserving our dark skies. In Muskoka, we have many strong and interested community organizations. Groups which have had some influence on the dark sky issue include: the Muskoka Heritage Foundation; Muskoka Lakes Association; and the Muskoka Lakes Ratepayers Association. The Muskoka Heritage Foundation, in particular, was influential in the establishment of the Torrance Barrens Dark Sky Reserve, and this Dark Sky Symposium. The Heritage Foundation has also worked in association with a working group of Muskoka and Area planners that was assembled in 2002 to explore stewardship and regulatory initiatives for dark skies. The working group set out to undertake a stewardship initiative for promoting sensible lighting in waterfront areas and a guideline for regulating outdoor lighting in new industrial, commercial and institutional development through site plan controls.

Waterfront lighting presents a special concern for Muskoka and its neighbouring municipalities. In recent years, waterfront property values have escalated dramatically as waterfront homes are being renovated and expanded from summer, seasonal cottages to large year-round homes. Intensification of development and lot coverage resulting from the construction and renovation of waterfront properties is a major issue in cottage country.

Lighting associated with waterfront properties includes lights in homes, boathouses, shoreline structures, docks and gazebos. Lighting fixtures along the shoreline can result in cross-lake glare and light trespass. The vast number of existing waterfront residential properties makes it difficult for local municipalities to implement lighting controls. Until recently, there has been no mechanism for regulating outdoor lighting fixtures for existing development. Consequently, Muskoka and Area municipalities, in association with the

Muskoka Heritage Foundation, the Muskoka Lakes Association and the GBA Foundation from Georgian Bay, developed a “Sensible Waterfront Lighting Guide” for distribution to waterfront residents throughout the region. The Guide includes a number of tips for sensible lighting along the waterfront such as:

- Replacing high-wattage bulbs with lower-wattage bulbs;
- Use of dimmer switches and timers;
- Use of full cut-off fixtures;
- Avoidance of flood lights; and
- Direct fixtures away from the water.

From a regulatory perspective, the main tools available to municipalities in Ontario for regulating outdoor lighting include site plan control under the Planning Act and lighting by-laws under the new Municipal Act.

Until recently, the only way a municipality could pass a by-law for regulating outdoor lighting was through special legislation approved by the provincial government. The Town of Richmond Hill was successful in obtaining special legislation for regulating light pollution in the mid 1990’s. This initiative was in response to the effect of light pollution on the Donald Dunlop Observatory. Richmond Hill’s implementing by-law for regulating outdoor lighting is at the forefront of lighting controls in Ontario.

Site plan control, is a tool that is widely used by municipalities in Ontario. Most municipalities currently have some form of site plan review and approval procedure currently in place. In order to implement site plan control, a municipality must have an official plan with policies defining the site plan control areas within their municipality as well as the circumstances and uses to which site plan control will be applied. Typically, site plan control is only applied to new commercial, industrial and institutional development. It is not normally applied to single, detached dwellings and does not apply to existing development, unless a property is re-developed.

In Muskoka, a site plan control guideline for outdoor illumination has been drafted and circulated for review by the planners in the Muskoka and area-working group. The guideline is based largely upon the regulations contained in the Richmond Hill lighting by-law and includes requirements for such things as shielding light fixtures, mounting height of lighting, use of automatic timing devices, the hours of operation and requirement for illuminating horizontal and vertical surfaces.

Some of the obstacles that have been observed include the additional staff time and resources that are required to implement the guideline. Also, municipal staff

does not presently have the expertise and training required to implement the lighting guideline. With larger projects such as resorts, Wal-Mart or Home Depot, municipal staff can have a lighting plan peer reviewed by a consultant with the cost of this review recovered by the applicant. This procedure is not always possible with smaller development proposals. Consequently, we are working on a simplified version of the lighting guideline that will be easiest for municipal staff to implement. One of the disadvantages associated with site plan control as a tool for implementing lighting controls is that it applies only to new development, while most light glare and trespass results from existing development.

Section 129 of the new Municipal Act now allows municipalities to pass by-laws to regulate outdoor illumination, among other issues such as noise, dust and odours. The Act sets up a permit system for regulating outdoor lighting fixtures. Municipalities in Ontario that have recently passed lighting by-laws under the new Municipal Act include the Township of Mississippi Mills, which is located in eastern Ontario, and the Township of Central Manitoulin. These by-laws address many of the same issues as a site plan control except that the lighting by-law approach allows those municipalities to regulate new lighting fixtures for existing development through a permit process.

In conclusion, the final component for the effective implementation of a municipal dark sky strategy is the preparation of a corporate lighting policy. Many municipalities, including Muskoka, are investigating opportunities to reduce the impact of municipal lighting systems on the night-time sky. Steps that can be considered for developing a corporate lighting policy include:

1. Define the quality of lighting required to address their safety, security and functional requirements;
2. Identify lighting fixtures that need the functional requirements of their facilities but minimize the impact on the night sky;
3. Identify opportunities for the use of timing devices and motion detectors; and,
4. Develop an implementation strategy for new lighting fixtures and operating plans.
