

2. Vancouver Outdoor Lighting By-law

MOVER: Councillor Ball

SECONDER:

Towards enacting a healthy, safe and energy efficient outdoor lighting by-law in order to reduce harmful outdoor lighting; set standards for outdoor lighting and provide for the designation of dark-sky preserves.

WHEREAS

1. Careful management of outdoor lighting is necessary to protect the health, safety, energy, security, environment and general welfare of citizens. Until the turn of the nineteenth century, evening brought an end to many of mankind's activities. The introduction of incandescent lamps dramatically increased the range of pursuits possible after dark. As the science of lighting evolved, technical advancements gradually outstripped the basic requirement of providing illumination simply for the task at hand. Today, in the case of outdoor lighting, there is growing recognition that the consequences are not always benign;
2. Scientific evidence demonstrates that misdirected, unshielded, excessive or unnecessary outdoor night lighting has detrimental effects on humans, animals and birds. Energy is wasted when illumination is used excessively and inefficiently. The human eye automatically adjusts to the brightest light in view, and the glare from unshielded or excessively bright outdoor lighting can actually interfere with the clear perception of other objects in one's field of vision;
3. Inappropriate use of outdoor lighting can have a negative impact on the natural environment, interfering with normal patterns of activity, behavior and physiology of flora and fauna. Recent research has indicated that exposure to light at night can upset normal human circadian rhythms, thereby disrupting hormone secretions and weakening the body's immune system;
4. Cost-efficient means and practices exist through which appropriate use of shielded luminaires provide adequate night lighting that is safe and effective with minimal light trespass, glare, and sky glow;
5. Vancouver City Council adopted the Clouds of Change report in 1990;
6. Vancouver City Council adopted the Greenest City Action Plan in 2011;
7. The City of Vancouver has adopted the British Columbia Building Code (By-Law No 10908), which in turn references the Energy Efficiency requirements of ASHRAE 90.1. The exterior lighting requirements outlined in Section 9 Lighting of ASHRAE 90.1 do not, however, specifically address Dark Sky issues;

8. The City of Vancouver has adopted LEED Gold criteria for all new City buildings and, although LEED includes a possible point for Light Pollution Reduction, this is not a mandatory requirement;
9. The City of Vancouver Bird Strategy Initiative and Design Guidelines includes recommendation 2.3 - "Explore solutions to the impact of light pollution on birds";
10. The International Dark Sky Association and the Illuminating Engineering Society have prepared a Model Lighting Ordinance to assist municipalities in the implementation of appropriate Dark Sky lighting legislation;
11. Other jurisdictions including New York City and the State of New York have recently adopted Lighting Ordinances.

THEREFORE BE IT RESOLVED

- A. THAT City Council direct staff to consult with stakeholders, including industry, architects, lighting designers, naturalists, Council Advisory Committees including the Women's, Seniors and Persons with Disabilities Committees, appropriate non-profit agencies and the general public, in order to develop recommendations for a Vancouver Outdoor Lighting By-law based on best international practices, with specific local recommendations and observations.
- B. THAT the purpose of this planned Outdoor Lighting By-law is to provide regulations for outdoor lighting that will:
 - a. Permit the use of outdoor lighting with reference to the minimum levels specified in IES recommended practices for nighttime safety, utility, security, productivity, enjoyment, and commerce;
 - b. Consider the inclusion of illuminated signs and their effects on the environment;
 - c. Minimize adverse offsite impacts of lighting such as light trespass, and obtrusive light;
 - d. Curtail outdoor light pollution, reduce sky glow and improve the nighttime environment for astronomy;
 - e. Help protect the natural environment from the adverse effects of night lighting from gas or electric sources;
 - f. Conserve energy and resources to the greatest extent possible;
 - g. Limit light pollution in Vancouver in a cost-effective and socially feasible manner in order to protect public health, safety and the environment and yet still allow for artistic and creative design and events.