



MEMORANDUM

TO: Planning Policy Commission
Environmental Board

FROM: Lucy Sloman, Current Planning Manager

RE: IMC 18.614 Outdoor Lighting Discussion Draft Public Hearing

DATE: January 24, 2022

Meeting Purpose

This public hearing is the second PPC phase of review and adoption of an updated Land Use Code, Title 18. Outdoor Lighting is part of Bucket 1, Natural Environment. (Title 18's chapters have been divided into six buckets.) The February 24th meeting will be a joint one of Planning Policy Commission (PPC) and the Environmental Board (EB) to introduce the discussion draft of Outdoor Lighting/Bucket 1, and other chapters, and receive the commission/board's input.

Background

The City of Issaquah has a number of lighting codes currently in place:

- **IMC 18.07.107:** adopted in 2004 and covering the City outside of Central Issaquah and Urban Villages with Development Agreements including Rowley, Lakeside, Swedish, and Costco.
- **Central Issaquah Development and Design Standards (CIDDS), Chapter 17:** adopted in 2013 and in 2018 expanded to cover Issaquah Highlands and Talus with the termination of their Development Agreements.
- **Olde Town Design Standards:** adopted in 2001 includes one page on Site Lighting for the CBD. The components include Intent and Standards. These are additive to 18.07.107.

The following items from the Council's Title 18 Goals and Outcomes chart are relevant to SMP code changes:

- Goal 13 – Modernize code and incorporate best practices.

Analysis

The following summarizes the substantive changes made to develop the proposed IMC 18.614 Outdoor Lighting chapter:

- Consolidation into a new chapter, 18.614, of IMC 18.07.107 (Outdoor Lighting), CIDDS 17 (Lighting), IMC 18.19 (Olde Town Design Standards, CBD Site Design, Site Lighting, pg 14).
- The draft uses the 2011 Model Lighting Ordinance (MLO) developed in a partnership of the International Dark Sky Association and Illuminating Engineering Society of North America (IESNA), tailored for the City.
- Applicability threshold is broader: Olde Town lighting section was limited to CBD zone; 18.07.107 established a high threshold before existing properties had to come into compliance; CIDDS didn't have separate applicability for lighting. The proposed threshold in the discussion draft for complying with the code has been lowered to:
 - an increase of 25% in dwelling units, gross square feet, seating capacity, parking spaces
 - 25% of installed outdoor lighting luminaires are added, modified, or replaced.
- Non-residential and Multi-family: As proposed, Small and Simple projects have fixed lighting levels based on the Lighting Zone; Complex projects must model lighting levels and comply with the IESNA levels for the use; Sports fields can no longer exceed the IESNA lighting levels by 5%. When compared to existing codes: in Central Issaquah, this simplifies lighting review for Small and Simple projects but maintains the review for Complex projects. Areas of the City where 18.07.107 applies will no longer use footcandles and will have a more nuanced review based on the actual project.
- Residential: as proposed, a project below a certain threshold (7 dwelling units) is regulated but no permit is required. City review would occur with other permits such as a building permit or in response to a complaint. This maintains the Central Issaquah thresholds for review but under IMC 18.07.107 expands the review as only residential common areas are reviewed now.
- IMC 18.07.107's Lighting Zones, which were based on the Comprehensive Plan, are altered in the proposed draft to use the MLO Light Zones. The proposed Light Zones rely on groupings of land use zoning based on the intensity of land use. Both now and as proposed, Light Zones are the basis for allowed lighting levels and fixture types.
- The draft establishes Dark Sky Hours by which lighting is either reduced or turned off. The curfew is fixed for private uses; City establishes one for public property. The City does not currently have a curfew.
- The proposed code primarily relies on BUG ratings for lights (light fixtures rated for Backlight, Uplight, Glare) or lumens; however, the proposed code retains the maximum footcandles for light spill to facilitate evaluation. Central Issaquah currently relies on BUG ratings; however, IMC 18.07.107 relied on outdated tools such as "full cutoff fixtures", foot candles, and similar terminology.
- Opportunities for the use of Accent lighting have been narrowed to a specific list.
- A smaller, consolidated list of Design Standards are used. The list is synthesized from the three existing codes.
- Revised restrictions on lighting along I-90 have been added to implement the Mountain to Sounds vision, in consultation with Mountains to Sound.
- Lighting prohibitions in the sign code are moved into this chapter and will be removed from IMC 18.11 when the Sign Code is codified with Title 18.
- Some ROW lighting standards are placed in this chapter until the City updates and incorporates them into an updated version of the Street Standards.
- Responses to Public Comments and City actions: See the summary of public comments also available on the City's webpage with the draft.

Previous Meetings

- July 22, 2021 PPC/EB Bucket 1 (Natural Environment) Gap Analysis Memo and Meeting [links to packets, memos, minutes and video](#)
- Aug 26, 2021 PPC/EB Bucket 1 (Natural Environment) Environmental survey discussion [links to packets, memos, minutes and video](#)

Things to Consider: Policy Discussion

PPC and EB could give additional thought to the following topics in their review of the Discussion Draft:

1. The threshold between Residential (18.614.060) and Non-Residential/Multi-family (18.614.050). This threshold is important because Non-residential/Multi-family projects require permits and sometimes a lighting designer while Residential projects only require a permit if another permit is required such as a building permit. The discussion draft proposes that the threshold between Residential and Non-Residential/Multi-family is 7 dwelling units with no common area, consistent with the MLO.
2. For Non-Residential/Multi-family, the criteria for distinguishing between Small and Simple projects that may use a Prescriptive Method (18.614.050(C)) and Complex projects that must use a Performance method, which requires the use of a lighting designer (18.614.050(D)). As currently proposed, the criteria for Small and Simple projects is a building equal to or less than 4000 sq.ft. and/or a site equal to or less than a half-acre or 21,780 sq.ft.
3. Dark Sky Hours (curfew) when Outdoor Lighting must be turned down or off. (18.614.050(B.7)) As proposed for private property, it is 30 minutes after closing or 10pm, whichever is later, and 6 am or 30 minutes before opening, whichever is earlier. Dark Sky Hours do not apply to public property, due to the public investment, benefit, and use.

Timeline

- February 9, 2022: Community Q&A Open House on Bucket 1 (partial, Natural Environment). This meeting is to give community members the opportunity to ask Staff questions about the draft prior to the PPC meeting.
- February 24, 2022: PPC/EB Bucket 1 (partial, Natural Environment) Discussion Draft Public Hearing
- March 10, 2022: PPC Bucket 1 (partial, Natural Environment) Deliberation and Recommendation
- August/September 2022: PPC Public Hearing on Title 18 consolidated draft

Illustration of terms

Lumens (from <https://www.lumens.com/how-tos-and-advice/light-bulb-facts.html>)

Lumens equals brightness! And watts do not. Not that watts are bad, but they measure energy use, not light output. With new, energy-efficient LED technology, we can no longer rely upon wattage to indicate how bright a bulb is. Use the chart above to determine exactly how many lumens are in a watt and vice versa. See how to measure lumens below:

HOW MANY LUMENS DO YOU NEED? MORE LUMENS = MORE LIGHT				
If you used to buy this in incandescent	Look for this much light in lumens	LED (most efficient)	CFL (more efficient)	Halogen (more efficient incandescent)
100 W	1600	up to 22 W	up to 26 W	up to 72 W
75 W	1100	up to 20 W	up to 23 W	up to 53 W
60 W	800	up to 12 W	up to 15 W	up to 43 W
40 W	450	up to 9 W	up to 11 W	up to 29 W

Illustration of lighting color temperature:



Illustration of lighting zones from the International Commission on Illumination:

