



MEMORANDUM

TO: Deschutes County Planning Commission

FROM: Tanya Saltzman, AICP, Senior Planner
Will Groves, Planning Manager

DATE: December 5, 2024

SUBJECT: Dark Skies / Project Update

I. INTRODUCTION

At Board direction, staff is re-initiating the Dark Skies initiative after a pause due to capacity constraints and staffing changes in the Long Range Planning Division. Staff is providing the Planning Commission with a project update.

Staff last presented to the Board on this topic in early 2023, at which time the Board directed staff to convene an additional panel, which occurred in April 2023. Subsequently, due to staffing changes and capacity limitations, the project was temporarily paused. At the October 11 Joint BOCC-Planning Commission meeting, the group discussed the dark skies project and reiterated its importance. Staff met with the Board on October 21 to reorient them to the project and seek additional direction.

Given the amount of time that has passed since that last update, this memo will present some of the background that was last shared with the Planning Commission and the Board.

II. COORDINATION EFFORTS TO DATE

Since November 2021, both the Board and Planning Commission have expressed support for updating DCC Chapter 15.10, Outdoor Lighting Control. In February 2022, the Planning Commission convened an 8-person panel reflecting varying perspectives related to dark skies and outdoor lighting. The panel discussed the importance of dark sky best practices and the increase of light pollution in the region from approximately 2012-2020. Later in February, the Planning Commission made a motion to the Board to:

1. Update DCC Chapter 15.10; and
2. Explore an educational campaign related to dark skies best practices.

In April 2022, the Board directed staff to pursue dark skies best practices and potential goals and policies as part of the Deschutes County 2040 Comprehensive Plan Update process. In October, during a Community Development Department FY 2022-23 Planning Division Work Plan Update, the Board expressed support for revisiting DCC Chapter 15.10 as a standalone work item, emphasizing educational outreach efforts rather than code enforcement responses.

Staff convened a second panel discussion in April 2023 to further explore such issues. Panelists included:

- Bill Kowalik, Oregon Chapter of International Dark-Sky Association (Chairperson)
- Bob Grossfeld - Astronomer
- Kristine McConnell – Visit Central Oregon
- Morgan Greenwood – Central Oregon Builders Association
- Dan Smith – Deschutes County Code Enforcement
- Matt Cyrus – Farmer/rancher
- Rima Givot – Science educator

Notable points that were raised by individuals (but not necessarily group consensus) in this panel included:

- Code update should include a revised purpose statement
- Exception from shielding for lights on timers should be eliminated
- Dark skies initiative is a great example of a diverse economic driver that aligns with natural resource values, destination values, etc. associated with the types of visitors that come to Central Oregon
- Full cutoff fixtures and prevention of light trespass are already measures that the building community is supportive of, but they would likely not be supportive of additional inspection fees
- Timers are often subject of complaints - while they are on a timed window, they can be triggered multiple times each night, which creates more or less continuous lighting.
- HOA-controlled standards in Aspen Lakes Resort have very strict light trespass/fixture design provisions. They have a design review committee and perform inspections themselves as an HOA
- Brightness and color temperature and timing are all very important factors
- If all lighting is required to be shielded, it could aid with enforcement

Most recently, Deschutes 2040, the County's newly adopted Comprehensive Plan, reiterated the importance of dark skies in Policy 5.10.2:

Policy 5.10.2: Implement a dark skies educational and or incentive program and periodically update the Dark Skies ordinance to reduce the impacts of light pollution and reduce lighting impacts on adjacent properties.

III. EXISTING REGULATIONS

DCC Chapter 15.10, Outdoor Lighting Control was adopted in 1994. Presently, the code requires:

- All private and commercial outdoor lighting fixtures installed after August 10, 1994 utilizing a 110-

watt or brighter incandescent bulb located in the unincorporated areas must be shielded by design or modification that directs light downward, and must limit direct line-of-sight of the fixture's lamp to the property on which the fixture is installed. Other types of bulbs have different shielding requirements depending on wattage.

It offers examples of compliant shielding and fixture designs and specifies that shielding apply to all permanent fixtures. DCC Chapter 15.10 also provides exemptions for:

- Airport and aircraft operations
- Correctional Institutions
- Holiday lighting not to exceed 45 days
- Temporary lighting for carnivals and fairs
- Public safety at historical sights
- Motion-sensitive lights that shine for not longer than 20 minutes.
- Top-mounted lighting of US flags
- Internally lit advertising signs
- Television or film productions
- Customary agricultural practices
- Construction for an allowed use

IV. LEGISLATIVE APPROACH

Updating lighting regulations to improve dark skies has been a consistent theme of Board, Planning Commission, citizen, and panel discussion on this topic. Any new regulations must balance the effectiveness of the code against the public and private costs to operate and enforce the program.

Updates to the code have been suggested by the public and panelists, including the following:

- Color: light spectrum 2700k or lower/warmer
- Shielding: Require shielding for all lights
- Brightness: Lumen control
- Extinguish lights after 11pm with motion control for security lights
- Limits on string lights (50 lumens per light, max of 3000 lumens total)
- Reduce night illumination of signs
- Ornamental lighting: off when not occupied
- Prohibit upward lighting on trees and shrubs
- Street lighting including roundabouts must follow lighting requirements

However, some of this list of potential changes may present difficulties with implementation and enforcement.

Inspection and Enforcement Limitations

While legislative updates would seek to modernize the lighting code, acknowledge some of the concerns voiced by the panels and the public, and address changes in technology, enforcement remains a concern.

Any new code language would only apply to new permits—it would not be retroactively applied to existing buildings and uses. In addition, specific issues have been raised by the Building Safety and Code Enforcement divisions:

Building Safety Capacity

The Building Safety Division administers and implements state building codes. Plans examiners and building inspectors do not presently have the capacity to review or inspect outdoor lighting fixtures through a separate, unfunded application for lighting review. Their priorities focus on structural, mechanical, plumbing and electrical requirements and corresponding permits. Currently, every building permit reviewed by the Building Safety Division Plan is stamped with a notation that exterior lighting must comply with Deschutes County’s lighting regulations. At final inspection, however, not everything noted or stamped on a building plan is inspected.

Any change to the dark skies program that would require review by the Building Safety Division will likely require hiring additional plans examiners and building inspectors, raising fees, potentially delaying the issuance of building permits and the final inspection process. These actions could lead to unintended consequences related to increasing housing costs.

Code Enforcement Capacity

The Board has established the following priorities for code violations:

1. Violations that present an imminent threat to public life, health and safety;
2. Violations which impact rivers, streams, floodplains, and wetlands;
3. Solid waste, onsite wastewater, and building code violations consisting of non-permitted construction or failure to obtain permits; and
4. Land use violations.

Outdoor lighting-related code enforcement violations are currently identified as a relatively low priority for resolution. Currently, outdoor lighting-related complaints constitute approximately 2% of the total received annually. Code enforcement specialists typically send educational materials to violators to encourage them to achieve compliance through changing their lights and/or shielding their lighting fixtures. Generally, outdoor lighting regulations are difficult to enforce for reasons of property access, inaccuracy of photos as evidence, after-hours site visits/investigations, inaccuracies/calibration/training for measurement devices, and other issues. Notably, code enforcement staff observed during the 2023 panel that a simpler code is easier to enforce.

Similar to Building Safety, if expectations are to establish a robust compliance program for outdoor lighting violators, CDD will need to reprioritize complaints and/or look to additional resources to hire more Code Compliance staff.

V. EDUCATIONAL MATERIALS AND INFORMATION

The Board previously expressed interest in pursuing an educational campaign around dark skies best practices. In July 2022, CDD began to include DarkSky (formerly known as International Dark-Sky Association) educational materials and information in the automated lobby displays. These displays are designed to provide customers and other members of the public with helpful information.

Staff continues to explore additional methods with which to distribute dark skies information as an educational campaign. One such method would potentially involve informational releases through the County's website and social media platforms, ideally managed by the County's Digital Communications Coordinator. Another option includes providing dark skies regulations as part of the online permitting process—for instance, when someone receives a building permit, they would automatically receive dark skies information about current regulations and best practices. While some educational materials would focus on specific code provisions, some parts of an educational campaign could focus on general best practices that are not necessarily codified, but are simply recommendations from DarkSky and are considered “good neighbor” practices.

Staff recommends waiting until adoption of new amendments, if any, before moving forward with new educational materials. This will allow staff to align the education outreach with any new regulations, to avoid confusion.

VI. NEXT STEPS

The Board directed staff to initiate the project as follows:

Legislative amendments:

Staff will initiate legislative amendments shortly. Based on prior discussion, it is likely that these updates would initially be focused on shielding of lighting and providing appropriate exceptions to those requirements, while seeking to minimize public and private costs for implementation and enforcement. The Planning Commission will conduct the first evidentiary hearing at a date to be determined.

Education:

Staff will explore various methods of education concerning dark skies best practices, some of which may occur simultaneously with the legislative process as appropriate, and some may follow any legislative changes.

Staff will update the Planning Commission as further details emerge.