

Appendix A: Updated officer's recommended amendments to the Light chapter

Note the below provisions represent the Section 42A Report Writing Officer's recommended amendments to the provisions of the Proposed District Plan, in response to submissions (with red underline used for new text and ~~red strikethrough~~ for deleted text as recommended in the section 42A report, and blue underline used for new text and ~~blue strikethrough~~ for deleted text as recommended in the Right of Reply report).

Overview

Artificial outdoor lighting performs an important operational and functional role for a range of activities that operate in the District. There are many positive benefits associated with lighting. It enables activities to occur beyond daylight hours thereby providing for business, recreation and entertainment to operate outside daylight hours. It can also improve safety and security for people and property and enable rural, commercial and industrial activities to be undertaken safely. Artificial outdoor lighting also ensures safety along the land transport network.

However, light spill from these activities needs to be managed where located in proximity to sensitive receiving environments. Poorly designed artificial outdoor lighting has the potential to cause glare or light spill and interfere with the use or enjoyment of adjacent properties or within the transport network. Light spill and glare from artificial outdoor lighting have the potential, if not managed appropriately, to affect indigenous biodiversity by disrupting natural patterns and behaviours. For example, excessive artificial outdoor lighting can interfere with the movement and feeding of nocturnal insects, which in turn affects species that rely on them for food¹. In the Kaipara district, species such as the New Zealand fairy tern and the Cook's petrel are particularly vulnerable to the effects of artificial outdoor lighting, including potential impacts on the fairy tern breeding grounds at Mangawhai Spit and Papakanui on the Kaipara Harbour².

Objectives

LIGHT-O1	Design and location of artificial lighting
The design and location of artificial outdoor lighting minimises adverse effects and is compatible with the characteristics and qualities of the surrounding environment.	
LIGHT-O2	Supporting amenity values and health and safety
Lighting supports the health and safety of people and communities and maintains and enhances amenity values.	
LIGHT-O3	Artificial outdoor lighting
Artificial outdoor lighting enables a range of activities in all zones including rural, commercial and recreation activities, as well as supporting a safe transport network.	

¹ Forest & Bird [149.96]

² NZ Fairy Tern Trust [333.1]

Policies

LIGHT-P1	Artificial outdoor lighting
<p>Provide for artificial outdoor lighting by:</p> <ol style="list-style-type: none"> 1. Enabling lighting in all zones to support a range of activities; 2. Enabling lighting that supports security and safety; 3. Managing the adverse effects, including cumulative effects and amenity values of sensitive environments, from lighting and glare to maintain the amenity and character of the surrounding locality; 4. Recognising that lighting supports the social, cultural and economic wellbeing of people and communities and their health and safety; and 5. Enabling lighting for the transport network to support the safety of users. 	

LIGHT-P2	Managing the intensity, location and direction of artificial outdoor lighting
<p>Manage the intensity, location and direction of any artificial outdoor lighting and glare to:</p> <ol style="list-style-type: none"> 1. Avoid conflict with existing sensitive activities, existing land use activities and the transport network; 2. Minimise light spill at the site boundary; and 3. Minimise the night glow from urban environments and light spill from new greenfield development-: <u>and</u> 4. <u>Minimise adverse effects on indigenous biodiversity, including on the habitats and natural behaviours of indigenous fauna.</u>³ 	

Rules

³ Forest & Bird [149.98], NZ Fairy Tern Trust [333.1]

LIGHT-R1	Artificial outdoor lighting	
All zones	<p>1. Activity status: Permitted</p> <p>Where:</p> <ul style="list-style-type: none"> a. Artificial outdoor lighting must not exceed 10 lux (both horizontal and vertical illuminance) between the hours of 22:00 and 07:00 measured at the following points: <ul style="list-style-type: none"> i. on the boundary of any site zoned General residential zone or; ii. at the boundary of any other site containing an existing residential unit; and b. Lighting must be measured and assessed in accordance with AS/NZS 4282:2023 Control of the Obtrusive Effects of Outdoor Lighting; and c. For externally illuminated surfaces such as artificially lit building facades, lighting shall be measured in accordance with CIE 150:2017 Guide on the limitation of the effects of obtrusive light from outdoor lighting installations, Second Edition. 	<p>2. Activity status when compliance not achieved: Restricted Discretionary</p> <p>3. Matters over which discretion is restricted:</p> <ul style="list-style-type: none"> a. Operational or functional purpose of the artificial outdoor lighting; b. Effect of light spill on the amenity and character values of the surrounding environment; c. Adverse effects on the health, safety, <u>security</u>⁴ and wellbeing of people and communities; d. Adverse effects on the land transport network; e. Cumulative effect of lighting and glare in the locality; and f. Effects on light spill and views of the night sky and intrinsically dark landscapes; ; <u>and</u> g. <u>The extent to which adverse effects on indigenous biodiversity, including on the habitats and natural behaviours of indigenous fauna, can be avoided, remedied or mitigated, including consideration of alternative options for the location or design of artificial outdoor lighting.</u>⁵

⁴ Federated Farmers [136.147]

⁵ Forest and Bird [149.99], NZ Fairy Tern Trust [333.1]