

## Light

Artificial outdoor lighting enables work, recreation and entertainment activities to occur beyond normal daylight hours. It also enables night-time activities to be conducted safely and provides for site security. Where lighting is poorly designed, selected, controlled or orientated, lighting may adversely affect the amenity of neighbouring properties; result in loss of views of the night sky; and potentially disturb wildlife.

### Issues

- Use of inconsistent terminology between different zones
- Disconnect between objectives, policies and rules
- Inconsistency with lux spill in different zones and on adjoining activities
- Effects of glare and light trespass overlooked
- Commercial zone and mixed-use interfaces not addressed
- Light spill from recreational activities inconsistent
- Inconsistent with the CPTED guidelines
- Every zone and general rule are silent on lighting and glare in relation to the adverse effects on energy use, ecology, health and the night sky.

### Operative District Plan Approach

The Timaru District Plan contains specific zone-based rules to control the effects of lighting. Generally exterior lighting is required to be directed away from neighbouring sites and roads other than in the recreation zone. Spill light (vertical only) at the boundary is limited to 10 lux between 10:00pm and 7:00am and 20 lux at other times across all zones other than the rural zone.

A limit of 1 lux in the vertical plane on windows of other sites applies between 10:00pm and 7:00am and 10 lux at other times across the industrial and recreation zones. A higher level of control applies in the rural zone where a limit of 5 lux of light spill on adjoining properties applies throughout the night and all outdoor lighting (notably including street lighting) is required to be shielded from above in such a manner that the edge of the shield is below the whole of the light source.

### Draft Plan Approach

As there is an increasing awareness in the community of the effects of light pollution, the approach of the draft plan for artificial outdoor lighting is to provide for adequate lighting to support night-time activities and site security, while minimising potential adverse effects.

In addition, the benefits associated with astro-tourism and enhanced quality of life by protecting the night sky from the effects of light pollution are recognised. The draft plan contains rules to limit the effects of spill light and glare from adjacent uses, objectives to limit light pollution and control the type and quantity lighting that can be installed as of right.

### Draft Plan Approach

The new draft Light chapter of the District Plan Review includes provisions that manage the use of outdoor lighting across the District. The provisions for artificial outdoor lighting provide for adequate lighting to support activities and site security, while minimising potential adverse effects.

### Reasons

- If outdoor lighting is poorly designed, controlled, located or orientated, it may adversely affect the amenity of neighbouring properties and light sensitive areas; result in a loss or reduction of views of the night sky; and potentially disturb wildlife. It may also affect human health and/or safety. The provisions seek to mitigate these effects.

### What it Means in Practice

The draft light chapter introduces provisions that manage the use of outdoor lighting across the District. Generally, illuminance levels at adjoining boundaries, on sensitive environments and the night sky will be reduced, especially during late evening, but are considered readily achievable with good design particularly with the use of LED lighting.