

Proposed Aotea Great Barrier Dark Sky Sanctuary

Draft Guidelines for Outdoor Lighting

Great Barrier Local Board has been confirmed as an International Dark Sky Sanctuary. This recognises that the night sky above Great Barrier is among the clearest in the world. The level of light pollution from outdoor lighting and light spill from commercial and residential lighting is extremely low or non-existent over most of the island. The Local Board and Auckland Council are working to keep it that way so that we can preserve the clarity of the island's night skies for future generations. We're asking for everyone's help.

Simple principles

A few very common sense principles will help keep the island's skies at their outstanding best. Simply put: Limit the amount and brightness of outdoor lighting to the minimum necessary; shade and shield all outdoor lighting to reduce horizontal and vertical light spillage—point the lights down; and turn lights off when you don't actually need them. It's also important to keep a check on the colour of the light you use. Lights in the reddish-yellow range are better than lights in the blue range. This is determined by the color temperature of the light. The international standard we are working towards sets 500 Initial lumens as the illuminance standard for unshielded or unshaded lights, and 3000K as the standard for colour temperature.

The Great Barrier Local Board and Auckland Council encourage residents and landowners to adopt these guidelines for outdoor lighting on the island.

Guideline 1 : Limit outdoor lighting to what is absolutely necessary. Shield lighting fixtures and direct lights to reduce light spill and vertical light pollution.

Guideline 2: Ensure all outdoor lighting is fully shielded with light shades extending below the horizontal level of the bulb. This will reduce the amount of overspill of any lighting and prevent vertical light affecting the night sky. The island's target is to reduce lightspill from all outdoor light fixtures to between 0.05 lux and 0.1 lux at 1 metre (or higher) above ground level from the property boundary.

Guideline 3: Retrofitting and fixture replacement. Landowners and residents are encouraged to review all outdoor lighting and the move to light fixtures which are fully shielded wherever possible and practical. The Council can provide information of standard light fixtures which meet the accepted standards.

Guideline 4: Public land and reserves must have a standard of brightness of not greater than 500 Initial lumens and 3000K colour temperature unless fully shielded to IDA standards.

Guideline 5: Where sites are available for public use and public activities, for example clubs, the Board encourages development of site-specific light management plans to fully shield lighting to prevent light spill. The Board encourages the adoption of voluntary outdoor lighting curfews of 11:00pm for normal operations.

Guideline 6: The board encourages the adoption of an island-wide voluntary outdoor lighting curfew of 11:00pm.