

The requirement for wildlife friendly lighting.

Lighting path and cycleways in coastal and inland waterways increases the safety and use of these areas although the artificial lighting used illuminate can have a detrimental effect on the ecosystem. It has been known for quite some time that artificial night lighting affects wildlife such as bats, frogs, many insects, and turtles by disorientating them away from their natural breeding habitats.

Sea turtle hatchlings use the illumination of the moon as the path to the ocean, bright incorrect spectrum lighting in adjacent locations disorientates the turtles leading to losses. Female sea turtles are known to have adapted to avoid illuminated beaches after fatal effects to their hatchlings. Studies have shown when coastal areas were over illuminated, nesting activity declined close to zero, when the illumination was decreased or eliminated, nesting activity resumed.

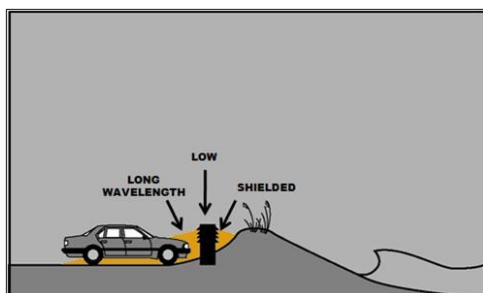
As it is not practical to eliminate artificial lighting completely near coastal and inland waterways the lighting that is present should be designed to limit the effects to wildlife by following these four criteria:

Keep it low to the ground: mount the fixture as low as possible

Keep it in the long wavelength: use Nanometer-Optimized LEDs (greater than 560 nm)

Keep it low Watt: use the lowest wattage necessary and a motion sensor to increase output

Keep it shielded or light directed downward: use fixtures that prevent incorrect spectrum LED's from being directly visible



The Halo, Wildlife Friendly, Vandal Resistant Solar Bollard was manufactured with these criteria in mind, the "Halo".

- Has an overall height of 950mm and is installed with no invasive trenching.
- Uses Nanometer-Optimized LEDs set to wavelengths exceeding 560 nm. See test report.
- Is low wattage and operates on a 360° radar system that increases LED output from 30% to 100% when movement is detected, returning to 30% when no movement is detected.
- Has LED's that are downward facing designed to illuminate walkways and the immediate area

The Halo, Wildlife Friendly Vandal Resistant Solar Bollard retains the features of the original model

- IK10+ rated. 2.5 times the impact resistance of standard IK10 testing
- Submersible flood rated (IP68, IPx6, IP6x)
- Optional 316/304 grade stainless steel stem
- AS/NZS 1158.3.1 Category PP5 compliant