

Council Policy

Council policy title:	Wildlife Friendly Lighting Policy 2021
Council policy sponsor:	Director Environment, Recreation and Infrastructure
Adopted by:	Bayside City Council
Date adopted:	21 December 2021
Scheduled review:	October 2026
Document Reference:	DOC/21/394556

([Council Policy](#) is a high level public statement formally resolved by Council, which clearly states Council's requirements, intent or position with regard to a particular matter or issue. It is not intended to be procedural in nature.)

1. Policy intent

The decline in Australia's biodiversity is one of the key environmental issues of our time. Bayside City Council is committed to protecting, enhancing, and increasing conservation efforts within its unique natural areas. Council adopted the *Bayside Biodiversity Action Plan 2018-2027* (BAP) in 2018. The BAP recommends that the impacts of lighting on wildlife around bushland reserves and foreshore areas be investigated further.

The Wildlife Friendly Lighting Policy (The Policy) expands that directive and is intended to reduce the potential impact of harm to native wildlife in Bayside from lighting in all areas of open space within or adjacent to Council owned or managed land.

Lighting at sportsgrounds and other sporting facilities within Council owned or managed open space is exempt from this Policy and will be governed by Australian Standards relevant to the installation and operation of sports lighting. Roads and Council managed car parking areas will also be exempt where *Road Management Act 2004* requirements take precedence.

2. Policy purpose

The impacts of artificial lighting on wildlife have been well documented, and there is increasing evidence from research throughout the world that artificial lighting causes considerable disturbances and disruptions to migration, breeding and feeding behaviours in many species and ecological communities.

Natural darkness has a fundamental conservation value that should be considered equal to the retention of indigenous vegetation, unpolluted water, fresh air, and clean soil.

Misdirected, excessive or obtrusive artificial light pollution not only wastes energy but can disrupt wildlife ecosystems, adversely affect human health, and reduce enjoyment of the night sky through artificial sky glow.

With the benefits of constantly improving technology around lighting design, control and hardware, Council should be investing in lighting to reduce light pollution and minimise the impact on wildlife when installing new lighting in open space.

The objectives of this policy are to:

- When appropriate, assess lighting in open space located on Council owned or managed land (with a priority for areas adjacent to bushland reserves and the foreshore); and replace lighting with wildlife friendly lights to reduce the impact to native wildlife in Bayside from lighting;
- Ensure any new lighting requests are assessed prior to installation to take into consideration recommendations outlined in the *National Light Pollution Guidelines for Wildlife - Including marine turtles, seabirds and migratory shorebirds* (Australia Government Department of Environment and Energy January 2020), incorporating the following design principles:

Best Practice Lighting Design

1. Start with natural darkness and only add light for specific purposes.
 2. Use adaptive light controls to manage light timing, intensity, and colour.
 3. Light only the object or area intended – keep lights close to the ground, directed, and shielded to avoid light spill.
 4. Use the lowest intensity lighting appropriate for the task.
 5. Use non-reflective, dark-coloured surfaces.
 6. Use lights with reduced or filtered blue, violet, and ultra-violet wavelengths;
- Ensure any new lighting requests are assessed prior to installation and comply with the recommended environmental zone lighting in all areas of open space per AS/NZS 4282:2019 (Obtrusive Spill Lighting Standard) as an A0 zone. An A0 zone is a completely dark area with no light during curfew times {AS/NZS 4282 curfew time guidance in standards is 11pm – 6am where environmental sensitivity is critical}, and a very low amount of light pre-curfew; and
 - Not install any new lighting in the future, without taking the impacts to native wildlife into consideration, except in rare and exceptional circumstances.

There will be exemptions to this policy in relation to pedestrian safety and road safety requirements and building security.

The implications of the Policy have been assessed and are not considered likely to breach or infringe upon, the human rights contained in the *Victorian Charter of Human Rights and Responsibilities Act 2006*.

3. Glossary - Definitions and Abbreviations

Term	Meaning
DELWP	Department of Environment, Land Water and Planning
BAP	Biodiversity Action Plan

4. Scope

This Policy is applicable to all Council-owned and managed open space and/or buildings in or adjacent to Council-owned and managed open space areas.

Sportsground and sporting facility lighting within Council owned or managed open space is exempt from this Policy. Roads and Council managed car parking areas will also be exempt where *Road Management Act 2004* requirements take precedence. Wildlife friendly lighting will not supersede public safety.

5. Policy statement

While the Policy is aimed at reducing the impact of excess lighting on native wildlife, it is also imperative to note that the Policy recognises the importance of community and personal safety as a priority that should not be compromised on.

Where appropriate and feasible, lighting may be replaced with wildlife friendly lights to reduce the impact to native wildlife in Bayside on Council owned or managed land.

As lighting reaches the ends of its useful life, or lighting is required as part of a wider upgrade project, wildlife friendly lighting will be considered for installation (with a priority for areas adjacent to bushland reserves and the foreshore).

Bayside will not install any new lighting in the future, without taking the impacts to native wildlife into consideration, except in rare and exceptional circumstances.

At times there may be conflict between optimising the conservation value of darkness and the perception of public safety. The Policy recognises that each location is unique and should be assessed on a site-by-site basis, with consideration also given to funding availability. In some instances, further external ecological advice may be required to determine the best outcome for wildlife and to provide recommendations to inform lighting requirements.

By default, all new lighting should take into consideration the parameters set out in the *National Light Pollution Guidelines for Wildlife - Including marine turtles, seabirds and migratory shorebirds January 2020* produced by the Australia Government Department of Environment and Energy.

The exemptions to the use of wildlife friendly lighting may include the following:

- Pedestrian safety or community thoroughfare locations
- Building security purposes
- *Road Management Act 2004* requirements (automatically exempt)
- Sportsground and sports facility lighting requirements (automatically exempt)

All requested exemptions should be thoroughly investigated to assess what wildlife may be present in the area and then work towards mitigating the potential impacts on wildlife as much as possible to prior to issuing an exemption.

All lighting alternatives to be explored as part of this process using the *Best Practice Lighting Design Guidelines*.

Due to wildlife sensitivities, the Policy recommends environmental zone lighting in all areas of open space per AS/NZS 4282:2019 (Obtrusive Spill Lighting Standard) as an A0 zone - which is a completely dark area with no light at curfew times (AS/NZS 4282 curfew time guidance in standards is 11pm – 6am) and a very low amount of light pre-curfew.

If A0 zone lighting is deemed to be insufficient due to reasons covered in exemptions, an increase to A1 or A2 zones to allow more light may be considered if determined to be appropriate pending further assessment of any potential impacts on wildlife from doing so.

Where lighting is considered appropriate, roads, footpaths and cycle paths will typically be lit, rather than the whole park, reserve, foreshore, or other areas set aside to protect the natural environment.

The use of innovative lighting technology (such as dimmers, timers, motion sensors, colour temperatures, as well as solar lighting) will be considered so that appropriate lighting levels are provided. This also enables lighting that can be altered at certain times of the year to allow for mating/breeding/nesting/migration patterns of wildlife as required.

Council will also seek to avoid excessive illumination, glare and spill, and the indiscriminate use of floodlighting. Council will also take responsible approach to energy consumption and environmental issues for example through use of timers or dimmers.

Residential amenity may also be a consideration when designing any new wildlife friendly lighting.

6. Monitoring, evaluation & review

- An audit of all lighting within Council managed open space is required to determine existing lighting in Bayside. This is underway.
- This policy should be reviewed on an annual basis or until all lighting in open space has been assessed and replaced with wildlife friendly lighting where applicable. Replacement of any lighting will be reliant on funding allocation via Councils capital works program.
- Evaluation measures will include:
 - The number of parks and reserves audited for lighting;
 - The number of conservation reserves with lighting completely removed;
 - The number of parks and reserves with lighting reduced and/or replaced with wildlife friendly lighting; and
 - A reduction in the number of parks and reserves with wildlife friendly lighting exemptions.

7. Roles & Responsibilities

The Manager Open Space, Recreation and Wellbeing is responsible for approving, reviewing, and providing advice on this Policy.

The Policy should apply to all new projects, lighting upgrades (retrofitting), any new requests for lighting in open space, and where there is evidence of wildlife being affected by existing artificial light.

Relevant Council staff will inform the Manager on best practices for wildlife friendly lighting to minimise impact to native wildlife in Council owned and managed open space, and to eliminate where possible any identified associated impacts from lighting.

All Victorian native wildlife is protected under the *Wildlife Act 1975*.

As a management authority for Crown Land and other public spaces, Council has a duty of care to ensure protected native wildlife is free from harm and to reduce or minimise known risks to these species where possible and practicable within Council managed land and open space.

8. Related documents

Legislation	<ul style="list-style-type: none"> • <i>Wildlife Act 1975</i> • <i>Victorian Flora and Fauna Guarantee Act 1988</i> • <i>Environment Protection and Biodiversity Conservation Act 1999</i> • <i>Local Government Act 2020</i> • <i>Road Management Act 2004</i> • <i>Public Lighting Code (Essential Services Commission) 2015</i>
Strategies/Plans	<ul style="list-style-type: none"> • <i>Environmental Sustainability Framework 2016-2025</i> • <i>Bayside Biodiversity Action Plan 2018-2027</i>
Procedures/Processes	<ul style="list-style-type: none"> • Australian/New Zealand Standard AS/NZS 1158: Road Lighting Standards • Australian/New Zealand Standard AS/NZS 1158: Sports lighting • Australian/New Zealand Standard AS/NZS 4282: Control of the obtrusive effects of outdoor lighting.
Other	<ul style="list-style-type: none"> • <i>National Light Pollution Guidelines for Wildlife - Including marine turtles, seabirds, and migratory shorebirds January 2020 - Australian Government Department of Environment and Energy</i>

Please note: This policy is current as at the date of approval. Refer to Council’s website (www.bayside.vic.gov.au) to ensure this is the latest version.