

## 8.2.11 Sea turtle sensitive area overlay code

### 8.2.11.1 Application

This code applies to development:-

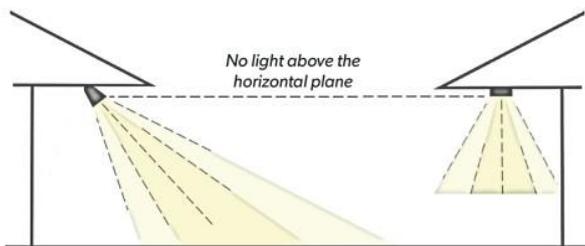
- (a) subject to the Sea turtle sensitive area in the Coastal protection overlay shown on the overlay maps contained within **Schedule 2 (Mapping)**; and
- (b) identified as requiring assessment against the Sea turtle sensitive area overlay code by the tables of assessment in **Part 5 (tables of assessment)**.

### 8.2.11.2 Purpose and overall outcomes

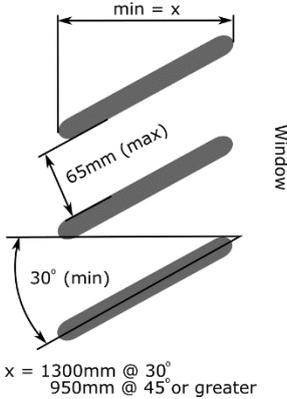
- (1) The purpose of the Sea turtle sensitive area overlay code is to ensure that development does not create harm to sea turtle nesting and sea turtle activity by avoiding adverse impacts generated from artificial lighting.
- (2) The purpose of the code will be achieved through the following overall outcomes:-
  - (a) development avoids artificial lighting that is directly visible from the beach or the ocean;
  - (b) development avoids ambient lighting that contributes to sky glow within the Sea turtle sensitive area.

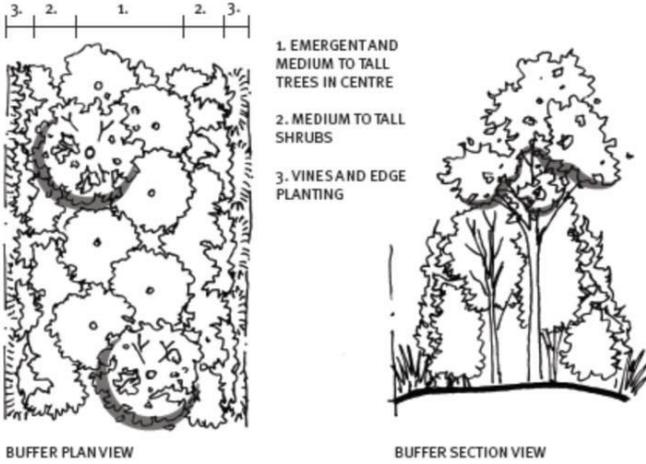
### 8.2.11.3 Specific benchmarks for assessment

**Table 8.2.11.3.1 Benchmarks for assessable development**

Performance outcomes	Acceptable outcomes
<b>Management of impacts of development in a Sea turtle sensitive area<sup>1</sup></b>	
<p><b>PO1</b> All outside lighting provided as part of the development avoids direct illumination of the beach, ocean, and sky at night.</p>	<p><b>AO1.1</b> Use outside lighting (inclusive of public and private) that is:-            (a) shielded by 25cm shields;            (b) mounted down low to avoid direct horizontal light or downwards glare onto the beach or ocean; and            (c) directed downwards and away from the coast.</p> <p>Note—<b>Figure 8.2.11A (Shielded outside light fittings)</b> demonstrates how outside lighting associated with a building is to be shielded and directed to avoid light spill.</p> <p><b>Figure 8.2.11A Shielded outside light fittings</b></p>  <p><b>AO1.2</b> All outside lights are fitted with light motion detection sensors and/or timers to ensure lighting is turned off when not required.</p>
<p><b>PO2</b> Development minimises the use and intensity (brightness/luminance) of outside lighting required to achieve the light's purpose to avoid reflection from the ground, buildings, and other surfaces.</p>	<p><b>AO2</b> No acceptable outcome provided</p>

<sup>1</sup> Editor's note—Sea turtle sensitive areas are identified on the Coastal Protection Overlay Maps in **Schedule 2 (Mapping)**.

Performance outcomes	Acceptable outcomes
<p><b>PO3</b> Development minimises reflective glare that contributes to sky glow.</p>	<p><b>AO3.1</b> External building materials, colours, and finishes have low reflectivity.</p> <p><b>AO3.2</b> Impervious areas use coloured (non-reflective) concrete or other pavement materials.</p> <p><b>AO3.3</b> Building design, architectural elements or landscaping treatments block or reduce excessive reflective glare.</p>
<p><b>PO4</b> All interior lighting provided as part of the development avoids direct illumination of the beach, ocean and sky at night.</p>	<p><b>AO4.1</b> All windows and glass doors visible from the coast are:- (a) tinted with non-reflective tinting, or utilise smart glass technology, to block a minimum of 50% of light to reduce light transmission or spill from indoor lighting (i.e. allows a maximum of 50% of light to pass through); or (b) shielded by external screens to reduce light spill from indoor lighting.</p> <p><b>AO4.2</b> All windows are shielded with external fixed louvres, and are to be:- (a) solid (i.e. no holes); (b) directed downward from the window at a minimum angle of 30°; (c) in accordance with the dimensions identified within <b>Figure 8.2.11B (Fixed louvres detail)</b>.</p> <p><b>Figure 8.2.11B Fixed louvres detail</b></p>  <p><math>x = 1300\text{mm @ } 30^\circ</math> <math>950\text{mm @ } 45^\circ \text{ or greater}</math></p>
<b>Where development is located on land visible to the beach or ocean</b>	
<p><b>PO5</b> Development provides for landscape buffers that:- (a) protect the edges of existing native vegetation or any other areas of environmental significance; and (b) screen the development (including associated artificial light) to a level where it is not visible from the beach or ocean.</p>	<p><b>AO5</b> Landscape buffers are required to be designed, constructed, and maintained in accordance with the following:- (a) plant species selected are appropriate for the location, drainage and soil type, and require minimal ongoing maintenance; (b) plant selection includes a range of species to provide variation in form, colour and texture to contribute to the natural appearance of the buffer; (c) planting density results in the creation of upper, mid and understorey strata with:- (i) large trees planted at 6m centres; (ii) small trees planted at 2m centres; (iii) shrubs planted at 1m centres; (d) tufting plants, vines and groundcovers are planted at 0.5m to 1m centres; and</p>

Performance outcomes	Acceptable outcomes
	<p>(e) where adjoining the edge of native vegetation or watercourse understorey, shrubs and vines are used to bind the buffer edges against degradation and weed infestation.</p> <p>Note—planting density is such that is maximises the blocking of light spillage between development and the beach or ocean.</p> <p>Note—<b>Figure 8.2.11C (Design of landscape buffers)</b> demonstrates the preferred form and structure of landscape buffers.</p> <p><b>Figure 8.2.11C Design of landscape buffers</b></p>  <p>1. EMERGENT AND MEDIUM TO TALL TREES IN CENTRE</p> <p>2. MEDIUM TO TALL SHRUBS</p> <p>3. VINES AND EDGE PLANTING</p> <p>BUFFER PLAN VIEW</p> <p>BUFFER SECTION VIEW</p>
<p><b>PO6</b> Development involving sport and recreation activities avoids floodlighting.</p>	<p><b>AO6</b> No acceptable outcome provided</p>
<p><b>PO7</b> No new beach access points are established unless the beach access is designed to reduce interference on turtle nesting areas, and:- (a) is required to enhance public access to the beach; or (b) there is no increase in the number of beach access points, with any replaced beach accesses fenced off and revegetated.</p>	<p><b>AO7</b> No acceptable outcome provided</p>
<b>Additional criteria for building and operational work</b>	
<p><b>PO8</b> Effective measures are implemented during the construction and operation of development to avoid impacts from lighting, noise and vibration on sea turtle activity and sea turtle nesting beaches.</p>	<p><b>AO8</b> No acceptable outcome provided</p>