

8.5 Development Control Plan Amendment - Mosquito Management

8.5 Development Control Plan Amendment - Mosquito Management

Section Environmental and Public Health

Objective To inform Council of the outcomes of a review of mosquito management provisions in Chapter 2 Part 3.6 of the Ballina Shire Council Development Control Plan 2012 and seek direction on the implementation of proposed amendments.

Background

Nuisance biting and public health risks associated with mosquitoes in Ballina Shire and Northern NSW region have been known for many years.

Ballina Shire contains extensive mosquito habitat including saline and brackish-water coastal wetland areas, freshwater environments, as well as opportunities for mosquitoes within and adjacent to urban areas.

Council has had planning provisions relating to mosquito management in place for many years.

At the December 2012 Ordinary meeting Council resolved to adopt the Ballina Shire Development Control Plan 2012 (DCP).

The DCP commenced operation in conjunction with the Ballina Local Environmental Plan 2012 (LEP) on 4 February 2013.

At that time, the DCP integrated mosquito management controls from Chapter 11 – Mosquito Management of the previous 2006 Ballina Shire Combined Development Control Plan.

The current DCP provisions relating to mosquito management have been reviewed and a new set of DCP provisions reflecting contemporary understandings of mosquito risk and mitigation has been prepared.

This review has had particular regard for the operation of the current provisions, ongoing development of new urban release areas, conservation of local wetland environments and other ecologically sensitive areas, and predicted climate change impacts.

The draft DCP provisions resulting from the review are contained in Attachment 1.

The purpose of this report is to seek direction on the public exhibition of the proposed DCP amendments.

Key Issues

- Implementation of planning provisions to reflect current understandings of mosquito risk and mitigation to minimise nuisance biting and public health risks

Discussion

The review of the DCP provisions has been undertaken in association with mosquito specialist Associate Professor Cameron Webb. Background information supporting the review prepared by Dr Webb is contained in Attachment 2.

Overall, the amendments provide for a greater level of detail in the requirements for development.

The key aspects of the proposed amendments include:

- Combining planning objectives
- Identification of additional development types captured by the provisions
- Making clear locations where buildings require screening and the need for maintenance of screening
- Clarifying controls for development located on Coastal Plains and Lowlands, Elevated Lands and High Risk Areas as identified on the Mosquito Management Maps
- Including the need for mosquito awareness and avoidance programs for high risk developments
- Requirements to consider mosquito exposure when designing and locating playgrounds and other recreational facilities
- Identification of requirements to minimise mosquito habitat when designing and constructing stormwater management devices/infrastructure and other water features such as dams and ponds
- Requiring consistent water holding times for stormwater management devices/infrastructure of 48 hours
- Identifying mosquito management options considered unacceptable such as the operation of an adult mosquito trapping program and the use of adult mosquito control agents (insecticides)
- Identification of permitted mosquito buffer locations and composition. This will help to ensure an unreasonable maintenance burden is not placed on Council
- Identifying considerations and composition of mosquito impact assessments.

Another particularly notable amendment is the identification of permitted mosquito buffer locations. Establishment of buffer areas and their form is often a key matter arising in relation to subdivision design where mosquito hazards are identified. Placing a buffer zone between proposed developments and mosquito habitats is a strategy used to reduce impacts of some mosquito species dispersing from adjacent habitats.

In the Ballina Shire buffer widths have typically been in the order of 25-30m.

Many mosquitoes do not travel far from breeding habitats. Dispersal from habitats is also influenced by prevailing climatic conditions (e.g. humidity, wind) and environmental conditions (e.g. vegetation). Connected areas of dense vegetation are more likely to facilitate movement of mosquitoes greater distances away from habitats than relatively open, sparsely vegetated areas.

8.5 Development Control Plan Amendment - Mosquito Management

Ideally mosquito buffers should be free of vegetation except for mowed grass but the maintenance burden of such areas can be challenging. If alternate vegetation is proposed, the vegetation types must be tall growing lightly foliated native trees with a high canopy that cast minimal shade over the ground around it, while airflow around the lower limbs and base is maximised.

Dense low shrubs, closely planted can provide refuge for mosquitoes. The extent of plantings should therefore be minimised or allowances made for open areas between plantings so they do not create connections between more substantial mosquito refuges and residential developments.

The denser the foliage and canopy of a tree or shrub, the greater likelihood is that it will provide suitable refuge for mosquitoes. High density plantings or built structures further contribute to the creation of suitable refuge areas.

The buffer concept is illustrated in Figure 1.

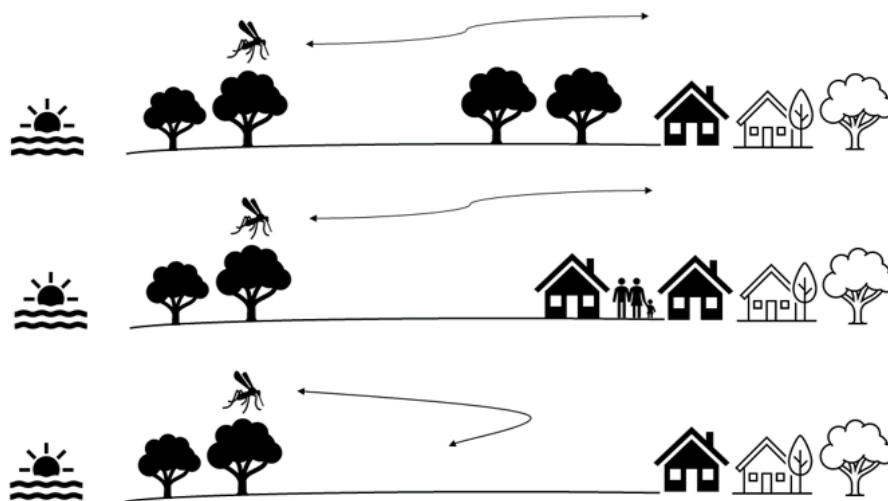


Figure 1: Open buffer zone between mosquito habitat and residential areas.

The establishment of mosquito buffer locations in the past has been inconsistent.

To reduce the maintenance and regulatory burden and sustain effectiveness, mosquito buffers should incorporate roads, bike and footpaths or other suitable open space.

Ideally mosquito buffers should be located on Council managed and maintained land which will be maintained to the required buffer standard regardless of it being in a nominated buffer zone, but mindful of not creating unreasonable maintenance liabilities for Council (e.g. roads, bike and footpaths that are maintained for other purposes).

If mosquito buffers are located on Council managed land that would ordinarily only require minimal maintenance (e.g. planted with dense vegetation), the inclusion of a mosquito buffer would require more intensive and regular maintenance to sustain its effectiveness to minimise mosquito dispersal into nearby developments.

This would place additional obligations on Council resources to maintain such buffer areas in perpetuity.

In some instances where developments face constraints regarding the effective implementation of a suitable buffer, mosquito buffers have been approved on private residential lots. This then places limitations on the area affected by restricting the type and amount of vegetation and structures.

Such restrictions are placed on the title of affected lots under the Conveyancing Act 1919.

Allowing mosquito buffers on privately owned lots can alleviate the maintenance burden on Council. However, it can also substantially degrade effectiveness of the buffer if the property owner or occupier doesn't clearly understand the restrictions.

Regulating these requirements is also difficult and places further responsibilities and strain on Council resources.

Having regard for the above, the DCP provisions seek to provide clarity around the extent and form of buffers applied for mosquito management purposes.

Delivery Program Strategy / Operational Plan Activity

The DCP review has been undertaken in line with Delivery Program and Operational Plan Action HE3.1u – *Review Mosquito DCP requirements and mosquito presentation measures*.

The DCP review and proposed provisions also relate more broadly to the implementation of the following delivery program strategies:

CC1.2 - Ensure relevant public health and safety standards are being met

HE1.1 - Our planning considers past and predicted changes to the environment

HE3.1 - Implement plans that balance the built environment with the natural environment.

Community Consultation Policy

The DCP review has been undertaken by Associate Professor Cameron Webb in consultation with Council staff. As part of the review Dr Webb provided comprehensive background information which is included as Attachment 2.

The proposed DCP amendments resulted from direct feedback from internal and external sources following the commencement and operation of the DCP, whilst others are as a result of Dr Webb's recommendations.

Should Council be supportive of the draft DCP amendments presented in Attachment 1, they will be publically exhibited for at least 28 days in accordance with the requirements of the Environmental Planning and Assessment Act and associated Regulation.

Financial / Risk Considerations

The review of the DCP has been undertaken in accordance with the requirements of the z (EP & A Act) and associated Regulation.

The amendment can be completed within existing available staff and financial resources.

Options

Option 1 – Endorse draft amendment to Chapter 2 Part 3.6 of the DCP for public exhibition.

This approach is recommended as the comprehensive review and proposed amendments provides further direction for development outcomes to minimise nuisance biting and public health risks associated with mosquitoes.

Under this option staff will proceed to publicly exhibit the proposed amendments and then a further report will be provided to Council in relation to the adoption of the amendments.

Option 2 – Endorse Draft Amendment with Modifications to Chapter 2 Part 3.6 of the DCP for public exhibition.

Council may modify the draft amendments to the DCP as presented in Attachment 1 as considered appropriate.

Option 3 – Defer this matter to a Council briefing.

This option is available if Councillors would like to receive more information prior to the exhibition of the proposed amendments.

Option 1, to proceed with the public exhibition of the amendments is the recommended approach in order to invite public consideration of the changes before further reporting on the amendment to Council.

RECOMMENDATIONS

1. That Council undertake the public exhibition of the draft amendments to the Ballina Shire Development Control Plan 2012 relating to mosquito management (as contained in Attachment 1 to this report), in accordance with the terms of the Environmental Planning and Assessment Act 1979 and the associated Regulation.
2. That a further report be submitted to Council following the public exhibition of the draft amendments to the Ballina Shire Development Control Plan 2012.

Attachment(s)

1. Mosquito Management Provisions - Ballina Shire Development Control Plan Chapter 2 Part 3.6 (amended)
2. DCP Chapter 2 Part 3.6 Review - Background Information - Dr Webb

250221/10 RESOLVED

(Cr Eoin Johnston/Cr Keith Williams)

1. That Council undertake the public exhibition of the draft amendments to the Ballina Shire Development Control Plan 2012 relating to mosquito management (as contained in Attachment 1 to this report), in accordance with the terms of the Environmental Planning and Assessment Act 1979 and the associated Regulation.
2. That a further report be submitted to Council following the public exhibition of the draft amendments to the Ballina Shire Development Control Plan 2012.

FOR VOTE - All Councillors voted unanimously.

ABSENT. DID NOT VOTE - Cr Nathan Willis