3.6 Mosquito Management

3.6.1 Application

Applies to:	
Location/s:	All zones.
Development Type/s:	All development

Notes:

There may be development types not specifically mentioned in the development controls that may increase exposure of the community to nuisance mosquitoes. These may include developments including sporting fields, parklands, playing fields, or nature walks where the risk of mosquito exposure to the community may be high.

Alternative strategies may be required to mitigate these risks (e.g. permanent or temporary signage). This also includes developments where a change of use requires consent given the potential increased risk of exposure to nuisance mosquitoes (e.g. outdoor dining or recreational activities are created within previously approved developments).

3.6.2 Planning Objectives

a. Minimise nuisance and health risk associated with mosquitoes through minimising contact between humans and mosquitoes.

3.6.3 Development Controls

Screening Requirements

i. All windows, external doors and other openings in buildings for high risk development comprising **centre-based child care facility**, **residential accommodation**, **tourist and visitor accommodation**, **seniors housing, caravan parks** (including manufactured home estates) or a **respite day care centre,** throughout Ballina Shire, must have insect screening installed. These screens must be maintained in good working order to prevent entry of mosquitoes into buildings. Self-closing doors may be a suitable alternative to screening in high traffic areas in non-residential developments.

ii. Where a building in (i) includes large openings which are impractical to effectively screen (such as bi-fold doors), the following provisions apply:

- For the room/s containing the opening - when the opening is closed (as may be the case when mosquito activity is elevated) there is light and ventilation available to the room that meets the provisions of the BCA via other openings that are effectively screened as in 3.6.3i.

iii. **Tourist and visitor accommodation**, **centre-based child care facility**, **seniors housing**, **caravan parks** (including manufactured home estates) or **respite day care centres** (and residential developments where Council considers it necessary to minimise mosquito risk), on land identified as "Coastal Plains and Lowlands" or "High Risk Areas" on the Mosquito Management Map, must provide an effectively screened permanent (or with the capacity for effective temporary screening) outdoor area. This is unless a report from a consultant suitably qualified and experienced with mosquitoes and their management (or similar entomological experience) deems otherwise. Compliance with this requirement will enable nuisance-free outdoor activity in areas of either high risk mosquito activity or during periods of peak mosquito activity.

Notes:

Council strongly encourages the provision of screened indoor/outdoor areas for other development types so as to enable outdoor activity and ensure the quality of lifestyle can continue to be enjoyed during periods of elevated mosquito activity. An example of temporary screening are those that are retractable. The screened indoor/outdoor areas must be of an adequate size for the type of anticipated activities to be undertaken and number of people using the area.

Rainwater tanks

iv. Where rainwater tanks are installed, both the inlet and outlet (overflow) must be effectively screened with stainless steel or other durable materials to prevent entry to the tank by mosquitoes. Inlet filters must be readily removable for cleaning.

v. Rainwater tanks installed with a charged stormwater system an in ground first flush system must be installed to allow the charged stormwater system to fully drain. Where it is not possible to provide a first flush system that fully drains all openings must also be adequately screened to prevent mosquito entry.

vi. All screening and structures including tanks and pipes must be adequately maintained to prevent mosquito entry.

Development on Coastal Plains and Lowlands

vii. Development on land identified as "Coastal Plains and Lowlands" on the Mosquito Management Map that comprises one or more of the following:

- Residential subdivision involving the creation of more than 10 lots.
- High risk development types as identified in 3.6.3i. on land not presently zoned for urban development.
- ~~Development that includes~~ Stormwater management devices (for example, bioretention swales, raingardens, constructed wetlands, or drains) or other water features (for example

ornamental ponds or dams) designed to, or capable of holding water for a period in excess of 48 hours after inflows have ceased.

Must provide either:

- A minimum 100m wide buffer in a form suitable for the management of mosquito risk between the source of mosquito hazard/breeding sites and proposed urban land uses.
- ~~the provision of~~ A "mosquito impact assessment" prepared by a consultant, suitably qualified and experienced with mosquitoes and their management (or similar entomological experience), that addresses the risk to humans associated with mosquitoes and associated management measures. The assessment must specifically address the potential to include a buffer zone between the source of mosquitoes and proposed land use and assess the potential for any proposed stormwater management devices or other water bodies to produce mosquitoes of nuisance or public health concerns.

Development on Elevated Lands

iv. Any development on land identified as "Elevated Lands" outside the areas designated as "High Risk" on the Mosquito Management Map that comprises one or more of the following:

- Residential subdivision involving the creation of more than 10 lots.
- High risk development types as identified in 3.6.3i on land not presently zoned for urban development and assessed by Council to represent a risk of exposure to mosquitoes of nuisance or public health concern.
- Stormwater management devices (for example, bioretention swales, raingardens, constructed wetlands, or drains) or other water features (for example ornamental ponds or dams) designed to or capable of holding water for a period in excess of 48 hours after inflows have ceased.

Must provide either:

- A minimum 100m wide buffer in a form suitable for the management of mosquito risk between the source of mosquito hazard/breeding sites and proposed urban land uses.
- A "mosquito impact assessment" prepared by a suitably qualified and experienced professional that assesses the potential for any proposed stormwater management devices or other water bodies to produce mosquitoes of nuisance or public health concern and, if required, addresses the risk to humans associated with mosquitoes and associated management measures.

Notes:

The Mosquito Management Map illustrates areas of Ballina Shire identified as having high mosquito risk associated with known and suspected breeding sites. The map divides the shire into two categories:

"Coastal Plains and Lowlands" includes all land below the RL 10 metre contour on the main north south escarpment in the shire as well as land to the south and west of the Blackwall Range extending to the Tuckean Swamp. These areas (and those immediately adjacent) are much more likely to be affected by mosquitoes of nuisance and public health significance (especially, but not limited to, *Aedes vigilax* and *Verrallina funerea*).

The balance of the shire, described as "Elevated Lands" is less likely to be significantly influenced by mosquitoes. In this situation local knowledge can be a very useful guide as to what areas are more likely to be affected. Generally, these could be expected to be where breeding sites on the coastal plain are in close proximity to the escarpment (e.g. there are small sections of the shire that are located within the areas designated as "Elevated Lands" but also within the zone highlighted as "Area of High Mosquito Risk" as indicated by Mosquito Management Map.) or where heavy vegetation provides shelter for resting adult mosquitoes. There may also be pockets where mosquitoes associated with localised water bodies have an influence.

Depending on environmental or climatic conditions, the areas affected may vary from year to year with the abundance and diversity of mosquito populations, and associated intensity of nuisance and public health risks, dependent on such factors as seasonal temperature fluctuations, rainfall, and drought.

Notes:

The requirements for development on land identified as "Coastal Plains and Lowlands" on the Mosquito Management Map may not be required if:

- The development does not have stormwater management devices or other water bodies that hold water in excess of 48 hours after inflows have ceased, and the proposal is an infill development, or
- The development is sufficiently removed from identified mosquito breeding or harbourage areas or Coastal Management SEPP wetlands where Council is of the opinion that the involvement of a consultant, suitably qualified and experienced with mosquitoes and their management (or similar entomological experience), is unlikely to result in benefit to the residents of the development or adjacent developments.

Similarly, the requirements for development on land identified as "Elevated Lands", outside the areas designated as "High Risk" on Mosquito Management Map, may not be required if the development does not have stormwater management devices or other water bodies that hold water in excess of 48 hours after inflows have ceased.

Playgrounds and Recreational Facilities

v. Development comprising residential subdivision involving the creation of more than 10 lots on land identified as "Coastal Plains and Lowlands" or "High Risk Area" must consider the exposure to mosquitoes when designing and locating playgrounds and other recreational facilities such as exercise equipment and picnic areas. This is to include:

- Measures to be taken to ensure the facilities are not located close to mosquito habitat and suitability of surrounding areas for mosquitoes is minimised (such as ensuring areas are not immediately surrounded by dense vegetation).
- Minimising creation of opportunities for mosquitoes through shaded areas (artificial shade options may be preferable as an alternative to extensive tree cover depending on design).

Avoidance Program may be required

vi. For high risk development types as identified in 3.6.3i (except for residential subdivision) located on the "Coastal Plains and Lowlands" or "High Risk Area" a "Mosquito Awareness and Avoidance Program" is required to minimise mosquito risks. The mosquito awareness and avoidance program must inform existing and future users of the level of mosquito activity at the development.

The Program must include but not be limited to:

- Information distributed to interested purchasers/future and current residents/users, outlining known nuisance and health risks associated with local mosquitoes.
- Mosquito avoidance strategies.
- Recommended personal protective measures.
- Measures to reduce or eliminate onsite/backyard mosquito breeding.

The Program must be ongoing and be developed by a suitably qualified and experienced professional.

Mosquito Impact Assessment Requirements

vii. A "mosquito impact assessment" required under (vii) or (viii) must include:

- Documentation of the qualifications and experience of the person(s) undertaking the assessment.
- Details of the methodologies used.
- Evidence that fieldwork has been undertaken between November and April, or detailed explanation as to why fieldwork undertaken outside this period provides sufficient information to make an assessment on mosquito risk.
- Reference made to mosquito population data collected by Ballina Shire Council and available from the NSW Arbovirus Surveillance and Mosquito Monitoring Program.
- Reference to all relevant documents related to the proposed development (especially plans of

management for the site, stormwater, and vegetation including revegetation).

- Information detailing measures to minimise the potential impact on future residents or site users from mosquitoes originating within and external to the development site.
- All considerations in Appendix C: Checklist of Considerations When Developing a "Mosquito Impact Assessment" and Appendix D: Checklist for Mosquito Impact Assessment Report for Proposed Developments.

viii. Where a "mosquito impact assessment" was carried out in relation to the development site at rezoning stage, the proposal must implement the recommendations and obligations of the assessment as endorsed by Council at the rezoning stage.

Stormwater Management Device Design Requirements

ix. Stormwater management devices/infrastructure must be designed so they do not hold water for more than 48 hours after inflows have ceased to minimise the potential for the creation or enhancement of mosquito habitat while facilitating easy maintenance. Details of such devices/infrastructure must:

- Include designs accompanied by a hydrological report confirming infiltration rates/periods of water retention.
- Be developed in consultation with Council, to ensure the design facilitates easy maintenance.
- Include maintenance requirements that specifically relate to vegetation, sediment, and physical attribute management to prevent the provision of suitable mosquito habitat over time.

The design and maintenance plans must be assessed by a suitably qualified and experienced professional to confirm adequacy.

x. Other water features designed to retain water for more than 48 hours (e.g. dam/pond), these must:

- Be developed in consultation with a suitably qualified and experienced professional (mosquito consultant/entomologist).
- Provide specific design elements (e.g. depth, bank slope, macrophyte zone) in planning process for review.
- Provide a guide for any aquatic vegetation, including a species list of plants, and planting densities
- Be developed in consultation with Council, to ensure the design facilitates easy maintenance.
- Include details of maintenance requirements that specifically relate to preventing the provision of suitable mosquito habitats.

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Notes:

The mosquito consultant must be involved from the earliest stages of a development proposal to enable input to stormwater management system design, revegetation and vegetation plans, "mosquito hazard reduction" buffer zone design and to ensure that an integrated approach is achieved.

It will be expected that recommendations will be based on a sound knowledge of all the nearby habitats, together with reference to existing data collected by Ballina Shire Council on local mosquito populations (as part of the NSW Arbovirus Surveillance and Mosquito Monitoring Program) and their nuisance and public health threats that could be expected to significantly affect the development. This may require work over an extended period of time to satisfactorily meet the expectations of Council.

Fieldwork must be completed between November and April to provide the optimal opportunity for analysis of potential mosquito impacts. The onus is on the applicant to demonstrate mosquito surveys have been conducted using a sufficient methodology to reliably measure mosquito activity during this period and/or following suitable climatic/environmental conditions. The winter period is not considered a suitable period for accurately quantifying potential impacts unless sound justification is provided in the consultant report.

The onus is on the applicant to demonstrate that mosquito nuisance and/or associated disease problems are not unacceptably serious and/or that strategies that address those risks have been satisfactorily met.

The operation of adult mosquito traps as a means to mitigate nuisance and public health risks of mosquitoes is not an appropriate strategy. The operational constraints and burden associated with establishment, maintenance, and consumable expenses are considered unsustainable.

The use of mosquito control agents against adult mosquitoes to minimise mosquito risks is not considered an ecologically sustainable approach in Ballina Shire. While these products will kill flying or resting mosquitoes they can have an adverse impact on other insects, and subsequently wildlife, while also increasing the risk that resistance to these control agents may develop in mosquitoes. The financial and operational requirements in maintaining a development wide program of insecticide applications, is also considered an unsustainable approach to mitigate nuisance and public health risks of mosquitoes.

Design and Maintenance Plan Requirements

xi. To minimise the potential for water bodies, such as ponds, designed to retain water permanently, or in excess of 48 hours after inflows have ceased to create or enhance conditions for mosquitoes, the following features must be incorporated into the design and maintenance plans:

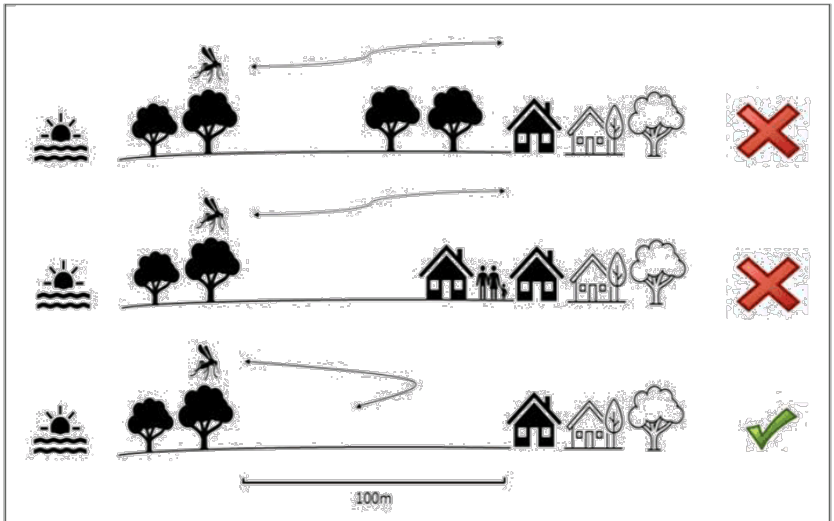
- The batter around the water body must be as steep as practical (within the design standards for public safety) to minimise areas of shallow water (<300mm). If fencing is not used for public safety, a batter must be no more than 1:6; batters greater than 1:6 must be fenced.
- Deep water areas should be incorporated (>600mm) where possible, except for the margins and/or specific macrophyte zones where required for water quality improvements.

- Water bodies should be sited to maximise wind action over open water areas during summer months; water surface disturbance will contribute to less suitable conditions for immature mosquitoes and adult mosquito egg-laying.
- Macrophytes should not be planted in more than 60% of shallow water around the margin. Where planted, macrophytes must be clumped with separations of open water allowing wind disturbance on the water surface and predator access to immature mosquitoes.
- The margins of water bodies must not be densely planted with shrubs or trees to create refuge for adult mosquitoes, restrict wind disturbance of water surface, or create operational restrictions on access by machinery required for maintenance.
- Water bodies should be designed in such a way to maximise biodiversity, including the introduction of endemic fish species if appropriate.
- Be designed in consultation with a suitably qualified and experienced mosquito consultant/entomologist.

Mosquito Buffer Zone Requirements

xii. Where mosquito buffer zones are proposed between the development and mosquito habitat as a strategy to reduce mosquito impacts, the following design features must be incorporated:

- Provision of adequate width as supported by the "mosquito impact assessment".
- Free of dense vegetation or other structures which facilitate mosquito dispersal and provides harbourage for resting adult mosquitoes.
- Free of structures or features (e.g. waterbodies) that have the potential to act as mosquito breeding sites.
- Do not contain any type of dwelling or any part such as verandas or garages.
- Vegetation that is easily maintained.
- Incorporate roadways, bike and footpaths or other suitable open areas.
- Width calculated to the edge of the allotment. In some circumstances, a portion of the buffer may include privately owned land in developments facing constraints regarding the effective implementation of a suitable buffer. In such situations it is important the property owner clearly understand the restrictions on the use of this area. Such information must therefore be made available on a planning certificate under Section 10.7 of the Environmental Planning and Assessment Act 1979 and restriction placed on affected lots under the Conveyancing Act 1919.



"Buffer zones" that are free of substantial vegetation can assist in reducing the movement of some mosquitoes (e.g. *Verrallina funerea*) from wetlands into residential areas. The placement of vegetation or built structures within the nominated buffer zones may facilitate the movement of mosquitoes into residential areas.

Figure 1 Unsuitable and Suitable Buffer Zone Locations

Notes:

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 foliaged 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 adult 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 especially around recreational facilities (e.g. swimming pool, playgrounds, picnic areas) further contribute to the creation of suitable refuge areas.

If vegetation is proposed to be removed from the site in order to provide a mosquito buffer, the vegetation removal must form part of the development proposal and appropriate flora and fauna assessments are to be undertaken and submitted with the application. Council will generally not support the removal of vegetation, unless it comprises only minor tree removal, in order to provide a mosquito buffer.

Appendix C: Checklist of Considerations when Developing a Mosquito Impact Assessment for Proposed Developments

Consideration	Notes
1. Type of development	• Does the development hold potential for bringing the community (including. residents, visitors, workers) into greater contact with mosquitoes? • Does the development's intended purpose expose relatively vulnerable individuals to mosquitoes? For example, seniors housing (aged care facilities), child care centres, and respite day care centres. • Is the development likely to expose individuals to high mosquito risk where previous awareness of the health risks associated with mosquitoes, and adequate personal protection measures, may not exist? For example, tourist and visitor accommodation. • Does the proposed development include any stormwater treatment devices or other water features? For example, elements of water sensitive urban design or green infrastructure.
2. Location of proposed development	• Is the proposed development within the "Coastal Plains and Lowlands" or "High Mosquito Risk Area" as identified in the Ballina Shire Council Mosquito Management Map? • Is the proposed development within the "Elevated Lands" as identified in the Ballina Shire Council Mosquito Management Map confirmed not to be in close proximity to any known or potentially productive mosquito habitats? If in close proximity, mosquito impact assessment is required.
3. Local mosquito habitats and mosquito populations	• Are there known or suspected estuarine mosquito habitats (e.g. saltmarsh, mangroves) located in close proximity (approximately 1km) of the proposed development? • Are there known or suspected brackish-water mosquito habitats (e.g. coastal swamp forest, she-oak woodland) located in close proximity (approximately 100m) of the proposed development? • Are there known or suspected nuisance mosquito habitats (e.g. waterbodies) within the footprint of the proposed development? • Is there any available information on the abundance and diversity of mosquitoes found within the proposed development or habitats within close proximity (approximately 1km)? • Are there known abundant nuisance mosquito populations reported from within the proposed development as identified through Council records (i.e. resident complaints of nuisance mosquitoes or mosquito population data collected through trapping programs or projects)?
4. Local mosquito population investigations	• Has there been specific mosquito habitats and mosquito population sampling undertaken in the preparation of a mosquito risk assessment? Has trapping been carried out between April and November?

	• Has appropriate reference been made to existing mosquito and mosquito-borne disease data provided by Ballina Shire Council and/or the NSW Health Arbovirus Surveillance and Mosquito Monitoring Program?
5. Nuisance and public health risks	• Are there records of complaints to Ballina Shire Council prompted by nuisance-biting associated with mosquitoes within the proposed development area or those in moderate proximity (approximately 3km? • Is a mosquito awareness and avoidance program needed to minimise mosquito risks?
6. Changes to local mosquito habitats during and/or following development	• Are there known or suspected mosquito habitats within the footprint of the proposed development that will be removed, retained, or rehabilitated? • Does the proposed development include any stormwater treatment devices or other water features? • Are any stormwater treatment devices or other water features designed to retain water for more than 48 hours (e.g. gross pollutant traps, constructed wetlands, rainwater tanks) and have they been designed and assessed by a suitably qualified and experienced professional? • Is there expected to be substantial areas of terrestrial vegetation retained or revegetated within the footprint of the proposed development? • Has local mosquito risk been clearly identified in relevant plans of management for the proposed development? For example, terrestrial and aquatic vegetation, stormwater treatment devices and other water features • Has the impact of the proposed development on the suitability and productivity of surrounding habitats for mosquitoes been satisfactorily assessed? For example, do stormwater discharge points, surface flows, or other changes to local hydrology enhance conditions for the production of nuisance mosquitoes in surrounding habitats?
7. Proposed development layout and building design	• Does the layout of the proposed development allow for a "mosquito hazard reduction" buffer zone of at least 100m and containing sparse and low growing vegetation between residential allotments and known or suspected productive brackish-water mosquito habitats (e.g. coastal swamp forest, she-oak woodland)? • Is the "mosquito hazard reduction" buffer zone clearly indicated on the final plan of management for the proposed development, clearly differentiating this zone from other environmental protection and asset protection zones? • Does the building/dwelling design incorporate the appropriate requirements regarding provision of insect screens fitted to windows, doors and outdoor areas such as balconies, covered areas and other structures suitable for screening? Have other options, such as self-closing doors in high traffic areas of non-residential developments been investigated? • Are suitably screened outdoor areas provided for high risk development types? • Has the exposure to mosquitoes been considered in the design and location of playgrounds and other recreational facilities such as exercise equipment and picnic areas?
8. Reporting requirements	• Has a formal "mosquito impact assessment" report been produced for the proposed development by a suitably qualified entomologist? • Have all aspects of the proposed development and surrounding habitats been assessed with reference to current and future risks associated with nuisance and public health concerns of local mosquitoes?

	• Have all relevant plans (e.g. stormwater management plan, vegetation management plan) been cross checked and referenced in the final "mosquito impact assessment" report submitted with development application to Council? • Have any relevant documents supporting assessments and/or recommendations (e.g. justification of mosquito surveillance strategies, proposed mosquito impact mitigation strategies) within the "mosquito impact assessment", especially those not readily available, been included as appendices?

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Appendix D: Checklist for Mosquito Impact Assessment Report for Proposed Developments

Mosquito Impact Assessment Report Component	Page no.
Property details, address, and description	
Description and location of proposed development relative to Mosquito Management Map and designated "Coastal Plains and Lowlands", "Elevated Lands", and/or "High Risk" mosquito zones.	
Existing mosquito populations and impacts	
Reference to known and suspected sources of nuisance mosquitoes (e.g. estuarine wetlands, coastal swamp forest, sedgelands, freshwater wetlands).	
Reference to mosquito population data available from Ballina Shire Council (e.g. NSW Arbovirus Surveillance and Mosquito Monitoring Program).	
Reference to documented nuisance-biting reports from within or adjacent to development.	
Assessment of actual and potential public health risks (e.g. human disease notification data; detections of mosquito-borne pathogens; abundance of known vector mosquitoes.	
Mosquito population investigation	
Provide details of mosquito survey methodology (e.g. number, type, and location of mosquito traps operated, dates of trapping, inclusion of reference locations).	
Presentation of mosquito data according to trap location and date..	
Reference to climatic/environmental factors influencing mosquito populations during survey period/s	
If not site-specific mosquito sampling undertake, justification provided as to why.	
Stormwater management	
Reference to latest stormwater management plan and identification of proposed water bodies or other infrastructure relevant to mosquito risk.	
Reference to plans of specific water bodies (e.g. wetlands, bioretention swales, drains) including depth, bank slope, and anticipated retention times of water following rainfall.	
Reference to planting guides (aquatic and terrestrial) associated with proposed wetlands and waterbodies (e.g. plant species, planting densities).	
Reference to proposed maintenance schedules and inspections including mosquito surveys.	
Vegetation management	
Reference to latest vegetation plan of management including layout of new and retained vegetation zones (e.g. location, plant species, planting densities).	
Reference to specific asset protection zones (including proposed "mosquito buffers") and proposed vegetation contained within. Any "mosquito buffer" should be specifically marked on site plan for proposed development with clear differentiation between areas designated as a mosquito buffer and those allocated to other asset or environmental protection zones.	
Reference to proposed maintenance schedules.	
Building design	
Reference to latest building and residential allotment design with reference to vegetation plantings, screening of openings, covered areas and rainwater tank.	
Mosquito awareness and avoidance program	

Proposed mosquito awareness and avoidance program with site specific information on nuisance mosquito risk and strategies to reduce mosquito contact.	
Proposed communication of mosquito awareness and avoidance information (e.g. 88b instrument, strata plan, body corporate by-laws, email, social media, letterbox drop, posters).	
Mosquito consultant qualifications	
Details of professional experience with mosquito management (e.g. preparation of previous mosquito impact assessment reports, membership of the Mosquito Control Association of Australia, evidence of formal mosquito management training).	

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4 May 2021

Kristy Bell
Environmental Health Officer
Ballina Shire Council

Dear Ms. Bell,

The Mosquito Control Association of Australia, Inc. (MCAA) is a recognised national professional body established in 1989 and includes Australia's leading mosquito researchers and experts among its members. The association aims to provide governments at all levels with information and support to foster and adopt policies for rational and responsible approaches to mosquito management. The association also aims to provide current advice to members on mosquito management protocols, practices, and training. The MCAA has strong links with local and state governments, research associations and institutions as well as industry bodies.

The need for mosquito issues to be included in local planning schemes and policies has been long-recognised, and the Ballina DCP revision of its Mosquito Management section (3.6) is commended as advancing a positive approach to managing mosquitoes in a planning framework.

We have read Section 3.6 of the revised Mosquito Management section of Chapter 2 of the Ballina Shire Development Control Plan and commend the Council for its proactive Mosquito Management Plan, putting human welfare (minimising nuisance and health risk and contact between mosquitoes and people) as key planning objectives.

The development controls listed in section 3.6 will help to reduce the risk of mosquito borne disease and nuisance. Moreover, they will alert developers to issues that they need to address when at the planning stage of a proposal. Bringing entomological expertise in at an early stage also should reduce the risk of inappropriate development designs.

We look forward to seeing successful outcome of the application of S3.6 of the DCP.

Sincerely,

Jonathan Darbro
President, Mosquito Control Association of Australia, Inc.