



# Mosquito Management Plan

2017 – 2024



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### VERSION HISTORY

Version	Author	Date	Status	Comments
2.0	Jessica Poole	August 2017	Final	Minor amendments to reflect current legislation, documents, programs and dates.
3.0	Jessica Poole	August 2019	Final	Reformatted to reflect Council's new branding, minor amendments to remove risk register references and dates aligned from 2017-2022 to 2017-2024 to align with Mosquito Management Action Plan.

## 1.0 Introduction

Redland City is characterised by a diverse range of environments including bushlands, freshwater/saltwater wetlands, and the South Moreton Bay Islands. These environments in combination provide a variety of ecosystems for rare and protected species of flora and fauna, including significant breeding sites for mosquitoes.

Mosquitoes transmit disease and are a potential nuisance to the Redlands community. This *Mosquito Management Plan* has been developed to provide a strategic framework to deliver Integrated Mosquito Management in the Redlands and guide the development of the *Redland City Council Mosquito Management Operational Plan*.

Local governments have a legislative obligation to undertake mosquito control activity and to prevent and control public health risks in relation to mosquitoes under Chapter 2 of the *Public Health Act 2005*.

Council is committed through POL 2710 - *Mosquito Management* to the delivery of year round mosquito management services to support a healthy natural environment, strong connected communities and is prepared to respond to emergencies such as flooding and other disasters that can significantly increase the community's exposure to mosquitoes.

These commitments are reflected in Councils Corporate Plan 2018-2023 under two key outcome areas:

- Healthy Natural Environment
- Strong and Connected Communities

When implementing the *Redland City Council Mosquito Management Operational Plan* consideration must be given to balancing the cost of mosquito management, the public health benefits for the Redlands community and the potential for environmental harm.

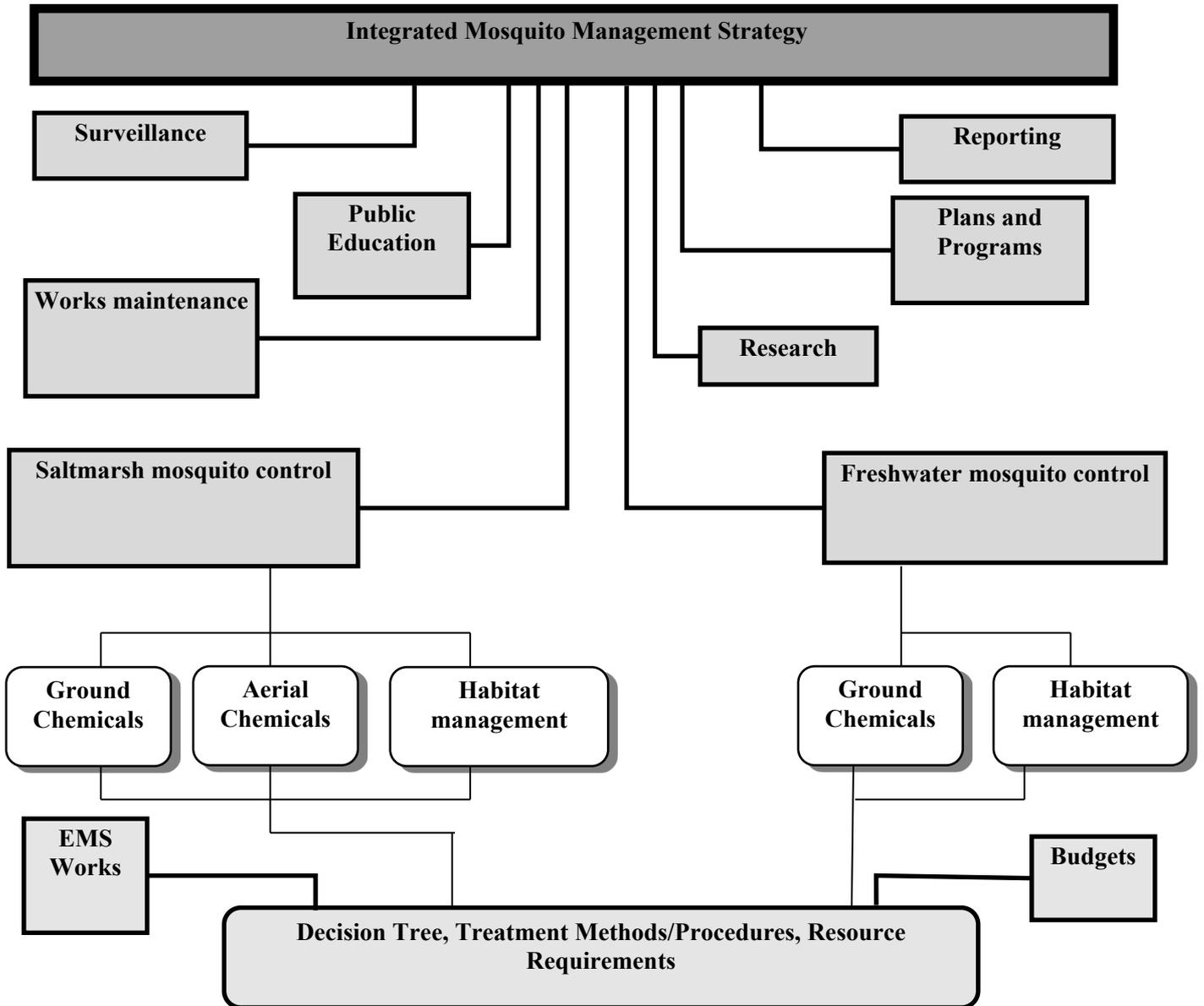
Council is committed to mosquito treatments that do not significantly affect the environment. To ensure that all reasonable and practicable measures are being taken to minimise environmental harm from selected mosquito management activities, this *Mosquito Management Plan* has been drafted in accordance with the *Mosquito Management Code of Practice*<sup>1</sup>. The Local Government Association of Queensland, Queensland Health and Department of Environment and Science (formerly known as Department of Heritage and Protection) worked in partnership to develop the *Mosquito Management Code of Practice*.

The *Mosquito Management Code of Practice* advocates an Integrated Mosquito Management approach. Integrated Mosquito Management is the implementation of a number of mosquito management techniques to collectively contribute to the management of mosquitoes in a way that may reduce reliance on chemicals to decrease mosquito numbers and disease risk, taking into account environmental impact, sustainability and cost effectiveness.

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<sup>1</sup> Mosquito Management Code of Practice, 2014. Published by the Local Government Association of Queensland.

The Mosquito Control Association of Australia's Integrated Mosquito Management Strategy diagram<sup>2</sup> below summarises an integrated approach to mosquito management.



<sup>2</sup> Australian Mosquito Control Manual. 1998. Published by the Mosquito Control Association of Australia.

This *Mosquito Management Plan* outlines an Integrated Mosquito Management approach. It identifies the following seven outcome areas and discusses strategies and performance indicators for these:

- Governance
- Administration
- Community Engagement and Education
- Environment
- Treatment
- Emergency Response
- Research

## 2.0 Overview of Mosquito Management Plan Outcome Areas

### 2.1 Outcome Area: Governance

Objective	Strategies	Performance Indicators
To meet legislative requirements and Redland City Council commitments	<ul style="list-style-type: none"> <li>This <i>Mosquito Management Plan</i> contributes to <i>Redlands 2030</i>, the <i>Corporate Plan 2018-2023</i> and the <i>POL 2710 - Mosquito Management</i></li> <li>Council's mosquito control program complies with the <i>Public Health Act 2005</i> and the <i>Mosquito Management Code of Practice</i></li> <li>Council supports maintenance and resourcing of mosquito management program</li> </ul>	<ul style="list-style-type: none"> <li>Develop a <i>Mosquito Management Operational Plan</i> that complies with State and local government legislation and meets the outcomes of key strategic Council documents</li> <li>Endorsement of this <i>Mosquito Management Plan</i> by Council</li> <li>Participation in regional mosquito management groups such as RMMG and MARC</li> </ul>

### 2.2 Outcome Area: Administration

Objective	Strategies	Performance Indicators
To provide an administrative infrastructure that supports mosquito management	<ul style="list-style-type: none"> <li>Resource the mosquito management program with appropriate facilities, equipment, budget and staff to successfully implement this <i>Mosquito Management Plan</i></li> <li>Staff are trained and educated to implement the <i>Redland City Council Mosquito Management Operational Plan</i></li> <li>Monitoring, comparison and review of mosquito management activities to demonstrate necessity, effectiveness and ensure continued reduction of mosquito breeding</li> </ul>	<ul style="list-style-type: none"> <li>Ensure all Pest Management staff understand the <i>Redland City Council Mosquito Management Operational Plan</i></li> <li>All staff have been trained in application of standard operating procedures and work instructions</li> <li>Each staff member is provided with necessary protective equipment, training and education</li> <li>Documentation of all mosquito control activities</li> <li>Each staff member is provided with adequate equipment to conduct operations in a safe, efficient and effective manner</li> </ul>

### 2.3 Outcome Area: Community Engagement and Education

Objective	Strategies	Performance Indicators
The Redlands community is educated about how they as individuals can reduce their contact with mosquitoes	<ul style="list-style-type: none"> <li>Participate in community engagement activities and provide the community with education and information to increase awareness of protection against mosquitoes and reduction of mosquito breeding sites</li> <li>Integration of mosquito management information with other Council educational information</li> <li>Deliver educational activities that target high risk groups e.g. outdoor workers, communities living near mosquito breeding areas</li> <li>Utilisation of local media to deliver educational messages about mosquitoes</li> </ul>	<ul style="list-style-type: none"> <li>Development and implementation of a communication and marketing plan</li> <li>Development of a range of resources to educate the community about protecting themselves from mosquitoes</li> <li>Distribution of mosquito educational materials</li> <li>Engagement with community groups</li> <li>Keep a record of local media campaigns conducted</li> </ul>

### 2.4 Outcome Area: Environment

Objective	Strategies	Performance Indicators
To protect the community from mosquito transmitted disease and nuisance while limiting the impact on environment	<ul style="list-style-type: none"> <li>Council is committed to Integrated Mosquito Management – the implementation of a number of mosquito management techniques with the intent to reduce its reliance on chemicals, to reduce mosquito numbers and disease risk, taking into account environmental impact, sustainability and cost effectiveness</li> <li>Council seeks to reduce the potential risk of the Redlands community contracting mosquito-transmitted diseases</li> <li>Council provides a liveable environment where mosquito nuisance is managed</li> <li>When planning mosquito management treatments consideration will be given to potential environmental harm</li> </ul>	<ul style="list-style-type: none"> <li>Development of a <i>Redland City Council Mosquito Management Operational Plan</i> that: <ul style="list-style-type: none"> <li>Has an Integrated Mosquito Management focus</li> <li>Seeks to prevent environmental harm</li> <li>Complies with the <i>Mosquito Management Code of Practice for Queensland</i></li> <li>Maps treatment areas and identifies areas of sensitive environmental value</li> </ul> </li> <li>Monitor the incidence of mosquito-transmitted disease in the Redlands community</li> <li>Consideration of current and potential future mosquito breeding sites when planning development</li> <li>Monitor the number of requests for services and locations regarding mosquito nuisance</li> </ul>

## 2.4 Outcome Area: Treatment

Objective	Strategies	Performance Indicators
To apply effective and efficient treatment methods with minimal impacts on the environment	<ul style="list-style-type: none"> <li>Review the available treatment methods and best practice procedures to best inform mosquito control methods</li> <li>Give consideration to areas of sensitive environmental value when determining treatment methods</li> <li>Review treatment options effectiveness on annual basis and adjust preferred methods to reflect findings</li> <li>Ensure mosquito treatment options are effective, efficient and meet community needs</li> </ul>	<ul style="list-style-type: none"> <li>Documentation of advantages and disadvantages of biological, chemical and physical treatment options including identification of thresholds and treatment decision making tools</li> <li>Record all areas of sensitive environmental value that were treated, methods and cost</li> <li>Update mosquito management treatment areas to reflect possible new breeding sites or where urban development is encroaching</li> <li>Review the effectiveness of treatment options on an annual basis and adjust treatment decisions to reflect the findings</li> </ul>

## 2.5 Outcome Area: Emergency Response

Objective	Strategies	Performance Indicators
To be prepared to respond to disasters	<ul style="list-style-type: none"> <li>Council is prepared to respond to emergencies such as flooding and other disasters that can increase community exposure to mosquitoes</li> <li>All emergency response to mosquitoes is undertaken in alignment with State emergency plans and the <i>Redland City Council Disaster Management Plan</i></li> </ul>	<ul style="list-style-type: none"> <li>An emergency mosquito treatment and prevention plan in accordance with legislation</li> <li>Stakeholder list with emergency contact details</li> <li>Access to necessary equipment and procedures to enable an emergency response</li> <li>Adequate training for Pest Management staff</li> <li>Workplace health and safety issues are adequately addressed</li> </ul>

## 2.6 Outcome Area: Research

Objective	Strategies	Performance Indicators
<p>To implement best practice Integrated Mosquito Management methods</p>	<ul style="list-style-type: none"> <li>• Keep up to date with best practice and current research including international, national and local mosquito treatment methods and cost-effectiveness</li> <li>• Prepared to respond to emerging issues</li> <li>• Develop an ongoing comprehensive understanding of the mosquito habitats and species in Redland City</li> <li>• Monitor the incidence of mosquito-transmitted diseases in Redland City</li> <li>• Apply learnings to ongoing development of Council's mosquito management program</li> </ul>	<ul style="list-style-type: none"> <li>• Professional development of staff</li> <li>• Participation in regional working groups, such as MARC, Queensland Health and RMMG</li> <li>• Review mosquito-transmitted disease statistics to identify potential emerging issues</li> <li>• Accurate records of surveillance- trapping, monitoring and mapping of mosquito breeding areas</li> <li>• Conduct pro-active inspection programs</li> <li>• Contribute to the Queensland Institute of Medical Research database</li> <li>• Annual review of Council's mosquito management program</li> </ul>

### **3.0 Further Information**

Contact the Pest Management Team, Health and Environment Unit, Redland City Council.

## 4.0 References

1. Mosquito Management Code of Practice, 2014. Published by the Local Government Association of Queensland.
2. Australian Mosquito Control Manual, 1998. Published by Mosquito Control Association of Australia

