



Mosquito Management Plan

2017 - 2022



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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.

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 2017-2020*.

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 strong healthy communities and is prepared to respond to emergencies such as flooding and other disasters that can significantly increase the community's exposure to mosquitoes.

This commitment is a reflection of Strategy 7- Strong and Connected Communities in Council's *Corporate Plan* which seeks to:

- Increase community safety, health and well-being by planning and delivering programs, services, partnerships, regulations and education.
- Minimise the impact of disasters by improving community preparedness and our capacity to respond effectively to support the community when disasters occur.

Through development of a Risk Register Council recognises that mosquitoes need to be considered for two issues: (1) harm to lifestyle and general well-being as a result of increased mosquito density and (2) as a threat to public safety because they have the potential to transmit infectious disease.

A medium risk rating has been given to harm to lifestyle and general wellbeing as a result of increased mosquito density. This risk is currently managed through mosquito control programs and ongoing State and Commonwealth arbovirus research. Future management of this risk involves ongoing mosquito management programs and the development of new mosquito management strategies and expansion of existing programs.

The Risk Register also identifies a threat to public safety due to pandemic or other diseases being contracted from the environment (e.g. Dengue Fever, Barmah Forest and Ross River Virus) as a medium risk. In response, Council currently delivers a mosquito management program and seeks to be prepared to manage this risk by investing in best practice research and educating the community about the risks to their health.

When implementing the *Redland City Council Mosquito Management Operational Plan 2017-2020* 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*¹. The Local Government Association of Queensland, Queensland Health and Department of Environment and Heritage Protection worked in partnership to develop the *Mosquito Management Code of Practice*.

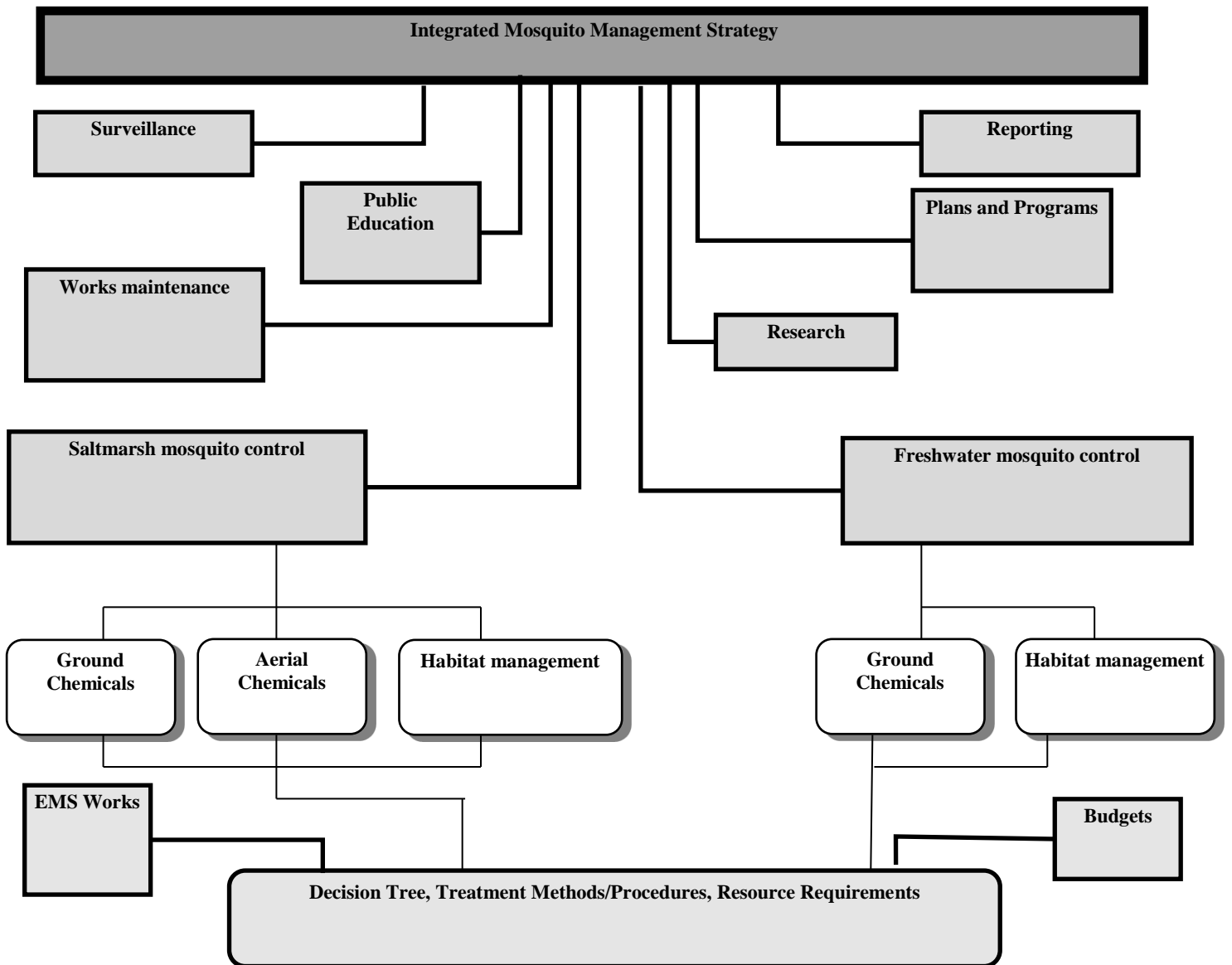
The *Mosquito Management Code of Practice* advocates an Integrated Mosquito Management approach. Integrated Mosquito Management is the implementation of a number of mosquito management techniques to collectively contribute to the management of mosquitoes in a way that may reduce reliance on chemicals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

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

¹ 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 diagram² below summarises an integrated approach to mosquito management.



For more detailed information about the mosquito management program at Council refer to the *Redland City Council Mosquito Management Operational Plan 2017-2020*.

² Australian Mosquito Control Manual. 1998. Published by the Mosquito Control Association of Australia.

Governance

Objective: To meet legislative requirements and Redland City Council commitments

STRATEGIES

- This *Mosquito Management Plan* contributes to *Redlands 2030*, the *Corporate Plan 2015-2020* and the *POL 2710 - Mosquito Management*
- This *Mosquito Management Plan* supports Council's management of risks from mosquitoes identified in the *Risk Register*, including consideration of mosquitoes: (1) that cause harm to lifestyle and general wellbeing as a result of increased mosquito activity and (2) as a threat to public safety because they have the potential to transmit infectious disease.
- Council's mosquito control program complies with the *Public Health Act 2005* and the *Mosquito Management Code of Practice*
- Council supports maintenance and resourcing of mosquito control program
- Council has a regionally informed approach to mosquito management

PERFORMANCE INDICATORS

- Develop a *Mosquito Management Operational Plan 2017-2020* that complies with State and local government legislation and meets the outcomes of key strategic Council documents
- Endorsement of this *Mosquito Management Plan* by Council
- Participation in regional mosquito management groups such as RMMG and MARC

Administration

Objective: To provide an administrative infrastructure that supports mosquito management

STRATEGIES

- Resource the mosquito management program with appropriate facilities, equipment, budget and staff to successfully implement this *Mosquito Management Plan*
- Staff are trained and educated to implement the *Redland City Council Mosquito Management Operational Plan 2017-20*
- Monitoring, comparison and review of mosquito management activities to demonstrate necessity, effectiveness and ensure continued reduction of mosquito breeding

PERFORMANCE INDICATORS

- Ensure all Pest Management staff understand the *Redland City Council Mosquito Management Operational Plan 2017-2020*
- All staff have been trained in application of standard operating procedures and work instructions
- Each staff member is provided with necessary protective equipment, training and education
- Documentation of all mosquito control activities
- Each staff member is provided with adequate equipment to conduct operations in a safe, efficient and effective manner

Community Engagement and Education

Objective: The Redlands community is educated about how they as individuals can reduce their contact with mosquitoes

STRATEGIES

- 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
- Integration of mosquito management information with other Council educational information
- Deliver educational activities that target high risk groups e.g. outdoor workers, communities living near mosquito breeding areas
- Utilisation of local media to deliver educational messages about mosquitoes

PERFORMANCE INDICATORS

- Development and implementation of a communication and marketing strategy
- Development of a range of resources to educate the community about protecting themselves from mosquitoes
- Distribution of mosquito educational materials
- Engagement with community groups
- Keep a record of local media campaigns conducted

Environment

Objective: To protect the community from mosquito transmitted disease and nuisance while limiting the impact on the environment

STRATEGIES

- 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
- Council seeks to reduce the potential risk of the Redlands community contracting mosquito-transmitted diseases
- Council provides a liveable environment where mosquito nuisance is managed
- When planning mosquito management treatments consideration will be given to potential environmental harm
- This *Mosquito Management Plan* aligns with the *Mosquito Management Code of Practice*, demonstrates due diligence and meets its general environmental duties under the *Environmental Protection Act 1994*

PERFORMANCE INDICATORS

- Development of a *Redland City Council Mosquito Management Operational Plan 2017-2020* that:
 - Has an Integrated Mosquito Management focus
 - Seeks to prevent environmental harm
 - Complies with the *Mosquito Management Code of Practice for Queensland*
 - Maps treatment areas and identifies areas of sensitive environmental value
- Monitor the incidence of mosquito-transmitted disease in the Redlands community
- Consideration of current and potential future mosquito breeding sites when planning development
- Monitor the number of requests for services and locations regarding mosquito nuisance

Treatment

Objective: To apply effective and efficient treatment methods with minimal impact on the environment.

STRATEGIES

- Review the available treatment methods and best practice procedures to best inform mosquito control methods
- Give consideration to areas of sensitive environmental value when determining treatment methods
- Review treatment options effectiveness on annual basis and adjust preferred methods to reflect findings
- Ensure mosquito treatment options are effective, efficient and meet community needs

PERFORMANCE INDICATORS

- Documentation of advantages and disadvantages of biological, chemical and physical treatment options including identification of thresholds and treatment decision making tools
- Record all areas of sensitive environmental value that were treated, methods and cost
- Update mosquito management treatment areas to reflect possible new breeding sites or where urban development is encroaching
- Review the effectiveness of treatment options on an annual basis and adjust treatment decisions to reflect the findings

Emergency Response

Objective: To be prepared to respond to disasters

STRATEGIES

- Council is prepared to respond to emergencies such as flooding and other disasters that can increase community exposure to mosquitoes
- All emergency response to mosquitoes is undertaken in alignment with State emergency plans and the *Redland City Council Disaster Management Plan*

PERFORMANCE INDICATORS

- An emergency mosquito treatment and prevention plan in accordance with legislation
- Stakeholder list with emergency contact details
- Access to necessary equipment and procedures to enable an emergency response
- Adequate training for Pest Management staff
- Workplace health and safety issues are adequately addressed

Research

Objective: To implement best practice Integrated Mosquito Management methods.

STRATEGIES

- Keep up to date with best practice and current research including international, national and local mosquito treatment methods and cost-effectiveness
- Prepared to respond to emerging issues
- Develop an ongoing comprehensive understanding of the mosquito habitats and species in Redland City
- Monitor the incidence of mosquito-transmitted diseases in Redland City
- Apply learnings to ongoing development of Council's mosquito management program

PERFORMANCE INDICATORS

- Professional development of staff
- Participation in regional working groups, such as MARC, Queensland Health and RMMG
- Review mosquito-transmitted disease statistics to identify potential emerging issues
- Accurate records of surveillance- trapping, monitoring and mapping of mosquito breeding areas
- Conduct pro-active inspection programs
- Contribute to the Queensland Institute of Medical Research database
- Annual review of Council's mosquito management program



Further information

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

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.