

Gladstone Regional Council

Mosquito Management Plan



Background

The Gladstone Region has a population of around 60,000 and includes the urban centres of Gladstone and Tannum Sands/Boyne Island, plus the smaller towns of Agnes Water, Ambrose, Baffle Creek, Benaraby, Bororen, Builyan, Calliope, Lowmead, Miriam Vale, Mount Larcom, Many Peaks, Nagoorin, Raglan, Rosedale, Seventeen Seventy, Turkey Beach, Ubobo and Yarwun. The region is 40 kilometers south of the Tropic of Capricorn with a sub tropical climate. Prevailing winds are predominately from the south east with northerly breezes from time to time coinciding with the peak mosquito season. The average annual rainfall is around 1080mm.

The coastal environment in Gladstone and the surrounding region includes offshore islands and large coastal areas of intertidal wetland. Following key environmental events large numbers of mosquitoes are able to breed and impact on residents in the area with a high prevalence around Gladstone City and the coastal townships.

Council has been developing over time mosquitoes management strategies aimed at reducing the incidence of arbovirus and nuisance within the community. Due to the extent and location of potential breeding sites it is not always possible to eliminate large adult mosquito populations from affecting residential areas.

The Mosquito Management Plan seeks to demonstrate how Council proposes to manage mosquitoes within the Gladstone region.

Program Objective

To maintain, develop and implement effective and efficient strategies to minimize the incidence of arboviruses and mosquito nuisance within the community.

Program Strategies

The following key strategies have been identified as paramount to the program

- 1. Plan Principles
- 2. Plan Management
- 3. Mapping and Identification of Mosquito Breeding Areas
- 4. Surveillance
- 5. Treatment Strategies
- 6. Training
- 7. Public Education/Promotion/Information
- 8. Review and Evaluation

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	Actions	Performance Outcomes	
Strategy 1: Plan Principles			
To ensure that the Mosquito Management Plan (MMP) continues to be based upon sound principles including extending & establishing the rural regional areas into the MMP.	1.1 Ensure that the MMP embrace the principles of Integrated Pest Management (IPM).	Review action plans to ensure the principles of Integrated Pest Management are relevant and current in the document	
	1.2 Ensure that the MMP operates in an environmentally sound, effective and cost efficient manner.	Continued monitoring of action plans under the MMP.	
	To participate and operate the MMP in a cooperative and partnership arrangement with key stakeholder organizations.	Hold two meetings per year of the Regional Mosquito Management Group Forum prior to main breeding season or following a significant mosquito event.	
Strategy 2: Plan Management			
To provide an efficient and effective framework to manage the MMP.	2.1 Ensure only environmentally safe bio-rational agents are used for larval control.	Within 12 months review the use of s-methoprene and Bti as the main larvicides.	
	2.2 Provide and maintain ongoing reporting of operational activities.	Provide reports for all operational activities upon request.	
	Implement a complaints monitoring system for all mosquito complaints.	Complaints are to be logged into "Pathways" with relevant fact sheet sent to originator if required.	
Strategy 3: Mapping and Identification of mosquito breeding areas			
To identify and record key mosquito breeding areas.	Maintain data recording systems identifying all key mosquito breeding areas utilising Councils mapping system.	Within 12 months review all maps indentifying all breeding areas including regional areas of significance.	
Strategy 4: Surveillance			
To establish a surveillance system to facilitate implementation of management strategies.	4.1 Conduct weekly light trapping during the main mosquito breeding system.	Conduct weekly light trapping subject to seasonal conditions within Gladstone. Trapping outside of Gladstone will occur as required.	
	4.2 Continue an inspection program of all key mosquito breeding areas.	Regular updating of breeding data sheets carried out.	
	4.3 Maintain arbovirus disease surveillance data.	Monitor and detail all arbovirus disease cases by location notified to Council from Queensland Health.	
	4.4 Maintain tidal benchmarks for inundation of key breeding areas.	Maintain benchmark tides for key breeding areas.	

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Strategy 5: Treatment Strategies			
To implement best practice treatment strategies.	5.1 Review treatment strategies and thresholds for key mosquito breeding area.	Within 24 months review treatment strategies and thresholds for key mosquito breeding areas.	
	5.2 Implement, where possible, source reduction strategies to eliminate breeding areas.	Within 24 months identify breeding areas suitable for source reduction.	
Strategy 6: Training			
To provide suitable training for staff	6.1 Continued identification of training needs and provision of suitable training for staff.	Maintain training needs for vector control staff and other staff as required.	
Strategy 7: Public awareness and i	information		
To provide and make available public awareness material and information relating to mosquito management.	7.1 Circulate brochures on mosquito control to better inform the public about mosquitoes, the action being undertaken by Council and the role of the public in managing mosquitoes.	Make available to the community, brochures on "Mosquito Control in the Gladstone Region". Maintain and promote the checklist for "Controlling Mosquitoes around the home".	
	7.2 Promote personal protection within the community.	Issue media releases promoting personal protection from mosquito bites prior and during the wet season.	
	7.3 Issue media alerts prior to and during the mosquito season to keep the public informed on key issues.	Issue a media alert regarding the forthcoming mosquito season.	
Strategy 8: Review and Evaluation			
To provide a process whereby the MMP is reviewed and evaluated.	8.1 Undertake a review and evaluation of the MMP.	Review every 3 years.	
	8.2 Undertake a review and evaluation of SOP.	Review yearly or more often if required.	
	8.3 Undertake a review and evaluation of Operational Guidelines.	Review every 3 years or following a MME.	

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