

6 December, 2019

Hon. Steven Miles MP  
Minister for Health and Minister for Ambulance Services  
1 William Street  
Brisbane 4001  
Email: [health@ministerial.qld.gov.au](mailto:health@ministerial.qld.gov.au)

## Dengue Fever Mosquito Eradication – Bordering SEQ

Dear Minister, *Steven,*

It is a pity that you did not have time in your busy schedule to meet with us when WBBROC members were all at Parliament House on 28 November. Therefore, on behalf of the WBBROC Mayors, Deputy Mayors and CEOs, I am writing to you to follow up on our deliberations.

WBBROC endorsed a Wide Bay Burnett Regional Mosquito Management Strategy (copy is attached for your information) that day, as well as the first of 3 Action Plans to implement that Strategy.

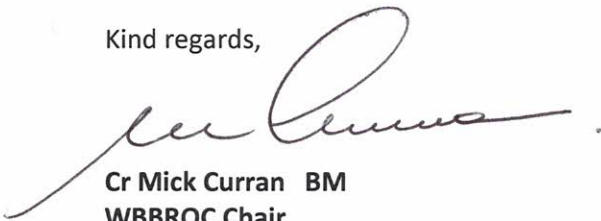
Minister, as Attachment A and B to this letter demonstrate, there is a strong case to suggest that we can eradicate the dengue fever mosquito from the Murgon/Wondai/Cherbourg/Goomeri area, with funding support from your Department and the regional Mosquito Group set up under WBBROC.

CSIRO research has shown that this particular cohort of mosquito is unique to the area. The mosquito population further North has quite separate and distinctive DNA. Eradication of this cohort would create a much bigger buffer between the densely populated South East Corner and the next cohort located near Biggenden and Gayndah.

The relatively modest sum of funding that we are seeking is only a small fraction of what it would cost if this dengue mosquito moved into SEQ, where their favourite habitat of rainwater tanks are again abundant and starting to age. I strongly urge you to seriously consider this funding proposal.

Please feel free to contact Joe Veraa, the WBBROC Executive Officer, on 0417 475 149 or email [info@wbbroc.org.au](mailto:info@wbbroc.org.au) for further inquiries.

Kind regards,



**Cr Mick Curran BM**  
**WBBROC Chair**

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**Member Councils:** Bundaberg Regional Council, Cherbourg Aboriginal Council, Fraser Coast Regional Council, Gympie Regional Council, North Burnett Regional Council, South Burnett Regional Council

## Attachment A:

### Funding proposal – Eradicating Dengue Mosquito

**Subject:** Project Proposal and Budget - WBBROC Mosquito Management Strategy and dengue mosquito action plan.

#### **Key Issues:**

WBBROC has developed a regional Mosquito Management Strategy 2019 -2023, which also includes an action plan for the elimination of the dengue fever mosquito (*Aedes aegypti*) for the protection of local communities.



Funding is being sought to assist local governments in implementing the action plan to eliminate the dengue mosquito from the towns of Goomeri, Murgon and Wondai and to investigate the presence of the dengue mosquito in Cherbourg Aboriginal Shire Council.

#### **Background:**

WBBROC and other central Queensland local governments remain the only areas of Queensland where dengue fever is still capable of spreading through communities.

Research suggests populations of the dengue fever mosquito are larger and more widespread than previously thought. The recent outbreak of dengue through the Rockhampton community for the first time in 60 years typifies the region's vulnerability.

The WBBROC Mosquito Borne Disease Management Sub-Group, with assistance from CSIRO has developed a strategy and action plan to enhance the management of mosquitoes in the region.

CSIRO and QIMR Berghofer have undertaken innovative research into the population genetics of the dengue mosquito, *Aedes aegypti*, in the Wide Bay Burnett region over two years. With the assistance of all local governments, mosquitoes were collected from eight towns to examine how genetically related each mosquito population was. Results suggest there is a clear divide between mosquito populations in the north and south of the WBBROC region. The southern mosquito population in Wondai, Goomeri and Murgon showed no mixing with the northern population of Gayndah, Mundubbera and Biggenden. As no recent mixing has occurred between north and south

mosquito populations, it is reasonable to conclude that the isolated southern population (the closest to south-east Queensland) would be an ideal candidate for an elimination program.

The benefit of elimination would not only be for the towns involved but it would also lower the risk of incursion into the highly populated south east corner of Queensland.



**FIGURE 1.** DISTRIBUTION OF DENGUE MOSQUITO (*AE. AEGYPTI*) IN THE WBBROC REGION. **RED** CIRCLES REPRESENT TOWNS WITH DETECTION OF *AE. AEGYPTI* POPULATIONS SINCE 1980, AND **GREEN** CIRCLES TOWNS SURVEYED BUT WITH NO DETECTION. **DARK GREY** LINES REPRESENT MAJOR HIGHWAYS WITHIN THE REGION [3].

**Consultation:**

WBBROC’s Mosquito Borne Disease Management Sub-Group:

- North Burnett Regional Council
- South Burnett Regional Council
- Gympie Regional Council
- Bundaberg Regional Council
- Fraser Coast Regional Council
- Cherbourg Aboriginal Shire Council

With assistance from:

- CSIRO
- Wide Bay and Sunshine Coast Public Health Units

**Financial Implications:**

A 2-year funding proposal (Attachment A) has been developed to assist with the implementation of the dengue mosquito elimination plan and to complement existing mosquito management by local governments in the Wide Bay Burnett region.

**Legal Implications:**

There are no specific legal implications, however local governments do have legislative responsibility under the *Public Health Act 2005* to control designated pests, which includes mosquitoes, within their respective areas. This program would collectively assist these local governments meet their legislative obligations.

**Attachment B follows:**

## **Attachment B: Project Budget (2-year project)**

Implementation of Action Plan 2019-2023 Container Inhabiting Mosquitoes Including the Elimination of the Dengue Mosquito (*Aedes aegypti*) will begin in the towns of Goomeri, Wondai and Murgon including investigation of mosquito vectors in Cherbourg Aboriginal Shire Council. This is an important first step towards elimination of the dengue mosquito in the Wide Bay Burnett region.

### **Year 1**

<b>Item</b>	<b>Detail</b>	<b>Cost</b>
Salaries	1x Project Coordinator 2x Vector Control Officers	\$210,000
Training	Induction and gap training	\$3,000
Computers/Phones	2 laptops, 2 mobile phones including operating costs	\$7,000
Licenses	IT and Pest Technician	\$1,500
PPE	High/V cloths, sun protection, boots, respirators	\$1,000
Vehicles	2 x 2WD Dual Cab Utes	\$20,000
Equipment	Spray gear, larvicide applicators, ovi traps, water tanks, ladder	\$3,000
Pesticides/Chemicals	Larvicide, barrier spray	\$1,000
Laboratory Testing	eDNA 50 samples RSVP 70 samples	\$12,000
Laboratory Equipment	Larval rearing trays and equipment	\$1,000
Travel and Accommodation	10 overnight stays within region for 2 staff	\$2,500
Rainwater tank removal	Only where required provide support to remove bulky/difficult items harbouring mosquitoes	\$3,000

Miscellaneous	5% equipment, testing and consumables	\$1,500
<b>Total</b>		<b>\$265,500</b>

## Year 2

Item	Detail	Cost
Salaries	Project Coordinator 2x Vector Control Officers	\$210,000
Computers/Phones	2 laptops, 3 mobile phones including operating costs	\$1,000
Licenses	IT and Pest Technician	\$1,500
PPE	High/V cloths, boots, respirators	\$1,000
Vehicles	2 x 2WD Dual Cab Utes	\$20,000
Equipment	Spray gear, larvicide applicators, ovi traps, water tanks, ladder	\$1,000
Pesticides/Chemicals	Larvicide, barrier spray	\$1,000
Laboratory Testing	eDNA 50 samples RSVP 70 samples	\$12,000
Laboratory Equipment	Larval rearing trays and equipment	\$500
Travel and Accommodation	15 overnight stays within region for 2 staff	\$3,750
Rainwater tank removal	Only where required provide support to remove bulky/difficult items harbouring mosquitoes	\$5,000
Miscellaneous	5% equipment, testing and consumables	\$1,500
<b>Total</b>		<b>\$258,250</b>

As this is only a 2-year project the above budget is based on support from Local Governments within the Wide Bay Burnett Region in respect of access to GIS information, support staff, equipment storage, office space and access to some specialist equipment i.e. Microscopes, cameras or drones for house gutter and rainwater tank inspections (with owner consent).