



Government of **Western Australia**
Department of **Health**

Consultation Summary Report

The Contiguous Local Authorities Group (CLAG) Mosquito Management Program

June 2023



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Introduction

Between 1 March 2023 and 18 April 2023, 32 local governments in Western Australia completed the Citizen Survey on the operation and administration of the CLAG Mosquito Management Program (the Program).

This report summarises the information the Department of Health (the Department) received in response to the online survey on the Program. Whilst it is not possible in a summary report to represent every view raised in submission, this report attempts to capture the main issues and themes raised by respondents.

The online survey was divided into three parts:

- **Part A:** emerging and changing health or social pressures impacting the mosquito management programs delivered by local governments in the last 5 years
- **Part B:** local government satisfaction with the aspects of the administration of the CLAG Mosquito Management Program
- **Part C:** questions for local governments that are not current members of the CLAG Mosquito Management Program.

The purpose of the consultation was to inform the Department on the effectiveness of the administration and operation of the Program to gain a better understanding of the views and opinions of local governments who deliver a range of strategies to manage the public health risks arising from mosquito borne disease.

From the 32 responses received, three local governments provided additional information and data on the mosquito management program.

Overall, there was strong support for the continuation of the Program with varying levels of support for:

- changes to how CLAG funding is administered
- changes to the timeline of funding applications
- the inclusion of additional services to be covered under CLAG funding
- amendments to the structure of CLAG funding.

The survey results provide useful information on the areas of the Program that are working well and identify those that require improvement or enhancement.

Methodology

The following methods were used to contact the local governments:

- by email via WALGA and Local Government Professionals (WA) distribution lists
- announcements made at the environmental health officer community of practice meeting held on 1 March 2023 and an online information forum held on 10 March 2023
- information published on the Environmental Health Directorate's newsletter
- information published on the Department's website at [Review of the CLAG Mosquito Management Program - Western Australia Department of Health - Citizen Space](#)
- by email to all existing CLAG members.

Local governments were provided a link to the Department's corporate website, [Review of the CLAG Mosquito Management Program - Western Australia Department of Health - Citizen Space](#), directing the respondent to provide feedback by one or more of the following three methods:

1. completing the questions on the online Citizen Space survey
2. uploading additional information and data through a link on the Citizen Space Survey
3. submitting their responses and additional information in writing addressed to the Environmental Health Directorate.

Free text responses or commentary from respondents (as they appeared in the survey) are cited below.

Consultation findings

A total of 32 responses were received from 32 local governments throughout Western Australia. These local governments presented perspectives across 15 individual CLAGs and five non-CLAG local governments. One response was received as a written response that provided commentary without answering the survey specific questions.

Based on the number of targeted stakeholders (137) the overall response rate was around 23.4 per cent which is considered high for an external online survey (the average response rate is usually 10 - 15 per cent).

Of the survey's respondents:

- 90.3 per cent reported that they implement a mosquito management program for their local district
- 16.1 per cent of the survey respondents indicated they were responding as the CEO or as a senior executive of their local government
- 6.5 per cent of survey respondents were CEOs of local government
- 83.9 per cent of survey respondents were employed by a local government with membership to a CLAG. Of these, 25.9 per cent of respondents are from CLAGs based in the northern parts of the state and 74.1 per cent based in the southern part of the state
- Responses were received from 75 per cent of all CLAGs
- 16.1 per cent of survey respondents were not current members of a CLAG
- 19.4 per cent indicated they were authorised to respond on behalf of their CLAG
- 61.3 per cent of the survey respondents identified as working in environmental health roles, including Environmental Health Coordinators, Managers, and Technicians
- 19.4 per cent identified as working in development or regulatory service roles
- 12.9 per cent identified as working in community health or health services roles
- three respondents provided additional information and data on their local government's mosquito management program.

It is noted that local governments located in the north half of the state may have had a reduced capacity to respond due to a focus on flood water clean up and solar eclipse events.

Part A Changing and emerging pressures

Questions in Part A relate to **changing and emerging pressures on mosquito management programs and variables that impact a local government’s capacity to deliver an effective program.**

Part A was open to all respondents who were currently working for a local government that is a current member of a CLAG.

Of respondents who answered Part A:

- 11.5 per cent identified as senior executives of their local government
- 76.9 per cent non-executive staff of local governments
- 65.4 per cent comprised of staff in environmental health roles
- 23.1 per cent comprised of staff working in regulatory and development services roles
- 23.1 per cent were authorised to respond on behalf of their CLAG
- 69.2 per cent of eligible respondents answered all of Part A
- 30.8 per cent of eligible respondents did not answer all of Part A.

Changing or Emerging Health and Social pressures

Respondents (answering question 7) were asked to determine which emerging or changing health or social pressures impacted their local governments mosquito management program in the last 5 years. These responses are demonstrated in Figure 1 below.

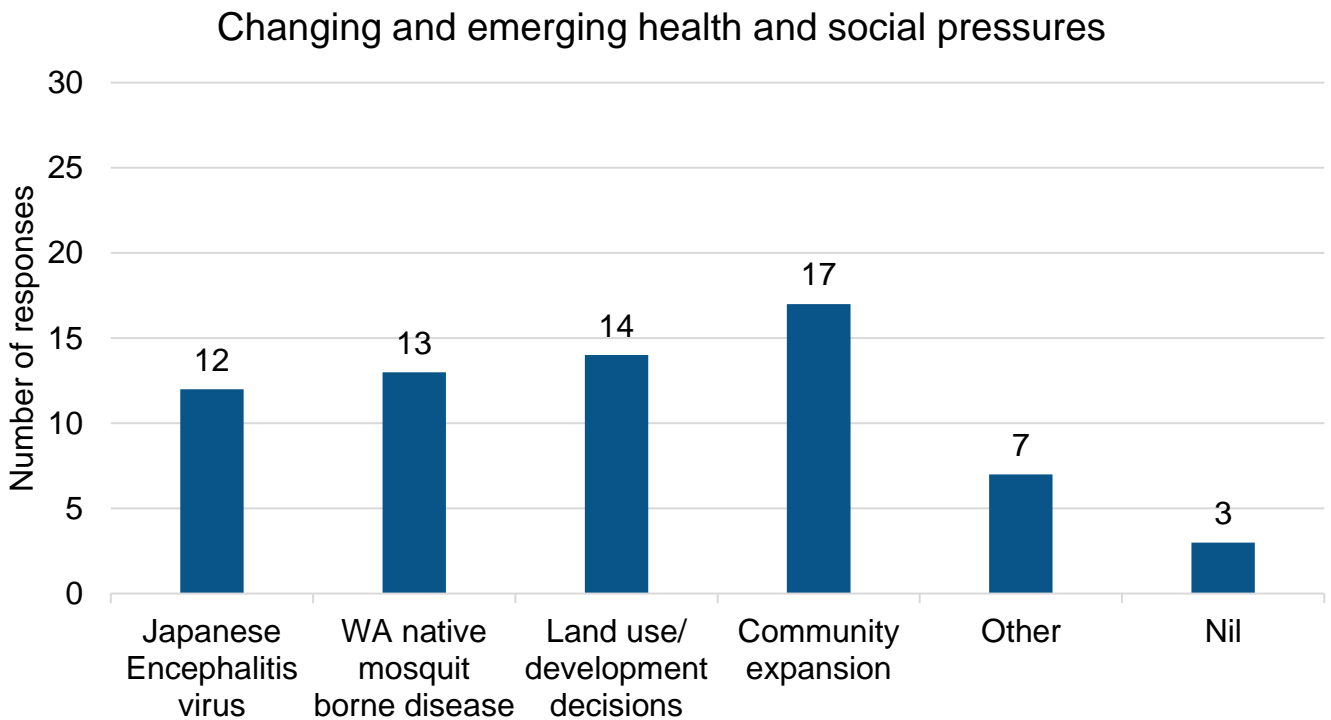


Figure 1 – Distribution of responses when asked to determine the changing and emerging health and social pressures impacting their local government mosquito management program in the last 5 years

- 46.2 per cent identified an emerging risk of Japanese Encephalitis virus (JEV).
- 50 per cent identified an increased risk of mosquito borne diseases native to WA in their region (Ross River virus, Barmah Forest virus, Murray Valley encephalitis or Kunjin virus).
- 53.8 per cent identified land use planning/ development decisions as impacting the need for increased mosquito management.
- 65.4 per cent identified increasing pressure from expanding communities to manage nuisance mosquitos due to lifestyle expectations.
- 19.4 per cent of respondents from across the state identified other factors impacting local government mosquito management programs in the last five years, including:
 - the impact of changing climate and weather events and patterns
 - higher average temperatures, i.e., related to climate change
 - accessibility to remote breeding grounds where ongoing management is difficult, including tourist visitation to remote locations
 - a greater understanding/knowledge of mosquito breeding grounds and management processes
 - public expectations of immediate response to mosquito complaints
 - extension of traditional mosquito seasons, resulting from environmental conditions
 - larvicide product availability and cost.
- 7.7 per cent of respondents from across the state indicated that there were no changing or emerging health or social pressures impacting their local governments mosquito management program in the last 5 years.

Changing or emerging mosquito management pressures

Respondents were asked to determine which changing or emerging mosquito management pressures/variables had an impact on their local government program in the last 5 years. These responses are demonstrated in Figure 2 below.

Changing or emerging mosquito management pressures

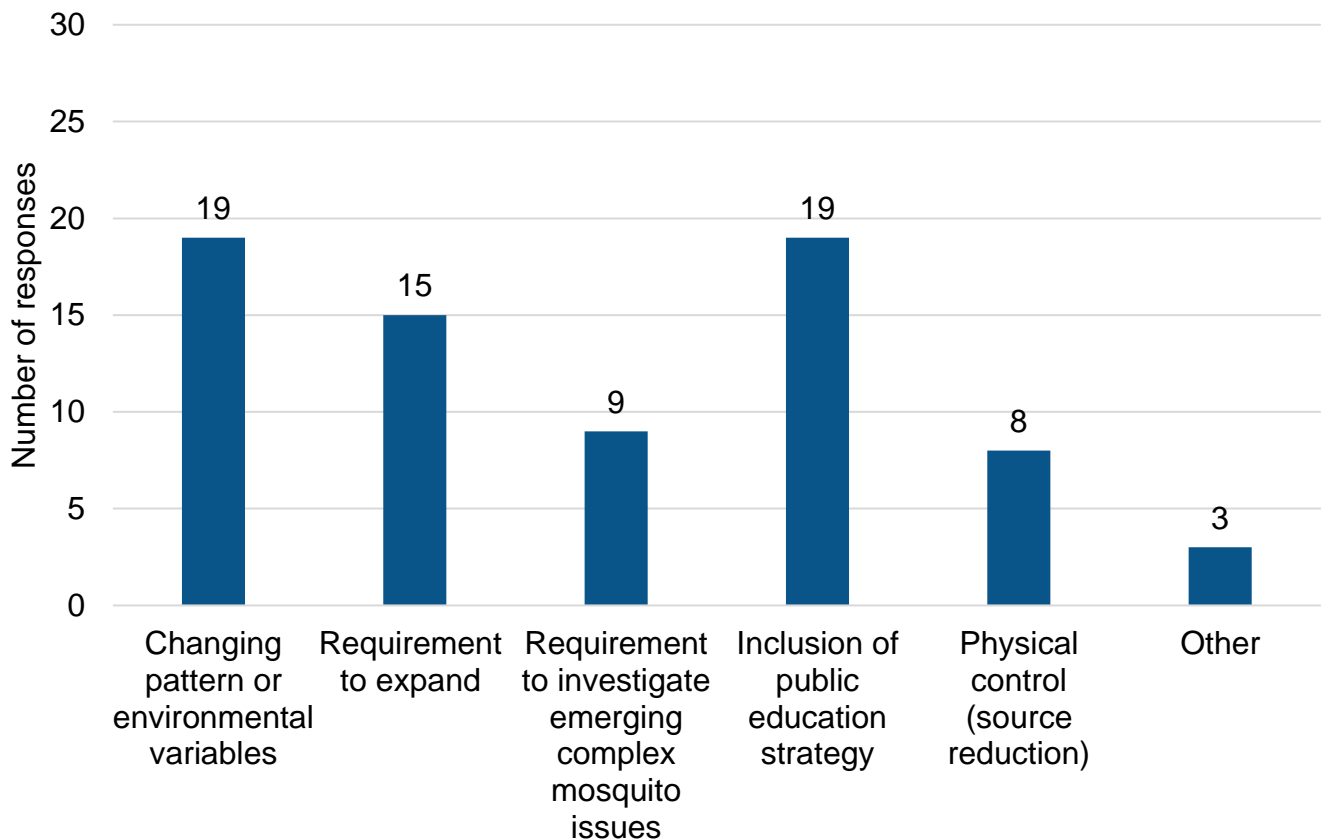


Figure 2 – Distribution of responses when asked to determine which changing or emerging mosquito management pressures/variables had an impact on their local government mosquito management program in the last 5 years

- 73.1 per cent identified changing pattern of environmental variables (e.g. tide, rainfall, flood, cyclone or temperature patterns) as influencing mosquito breeding. Respondents from across the state provided the following commentary:
 - *No two years are the same up here. Some are dry with low activity, and others are wet with significant spikes in activity. Although our course of action remains the same for most years, that can change at short notice (e.g. if a cyclone appears)*
 - *The past two years the officers have had to undertake more treatments at Lake Claremont due to the site holding more water during the warmer months of the year compared to previous years.*
 - *Further the City has been subject to adverse weather events such as high tides and flooding events which have resulted in large areas of the City requiring treatment at the same time which put pressure on staff resources.*
- 57.7 per cent identified the need to expand their existing mosquito management programs
- 34.6 per cent identified the requirement to identify/ investigate novel strategies to managing emerging complex mosquito issues (e.g., aerial treatment trials, drone trials, chemical treatment trials)
- 73.1 per cent identified expansion/inclusion of communication/public education strategy within their mosquito management program. Respondents across the State generally indicated that the expansion or inclusion of communication and/or public education strategies had a positive impact on their mosquito management program, providing comments such as:

- *Social media actions have reduced reactive social media commentary from the general population*
- *Some community members often commented on social media we should conduct adult larvicide and aerial larvicide treatments. This led to [a] focus on the education aspect of our MMP (Mosquito Management Plan) across a range of demographic and age groups with our media team. It had some positive effects as the community seem to be better educated in relation to the balance between health and environmental challenges*
- *Expansion of communications program to include more public awareness through online strategies. Has resulted in a series of adhoc communication projects being run by EHOs when time allows, Question whether a state-wide approach would be more effective and a more informed targeted approach*
- 30.8 per cent identified that they had embarked on a key physical control strategy to permanently solve mosquito breeding issue through source reduction.
- 11.5 per cent identified other issues, which included staffing challenges and pressures, public pressure and expectations, and challenges posed by management across large geographic areas. Local governments located in southern regions of the State provided the following commentary:
 - *The Shire is small with limited personnel and some of the mosquito management issues lie on land not controlled by the Shire they are either Mining or Pastoral leases and this requires sustained engagement*
 - *The City ceased employing an in-house pest control operator in 2019-2020. The pest control officer had significant experience and despite making a number of operational adjustments, the City's programme does not seem as effective at preventing breed outs*
 - *There is limited to no support from the organization in the space of environmental health, including mosquito management.*

Variables impacting local government capacity to deliver effective mosquito management programs

Respondents were provided with a list of variables and asked to select those that impacted their program.

The variables listed were:

- Resources (including staff availability and equipment)
- Appropriate skills and knowledge
- Challenges associated with environment (geography, weather)
- Ratepayer expectations / feedback that reflect differing priorities
- Other.

These responses are demonstrated in Figure 3 below.

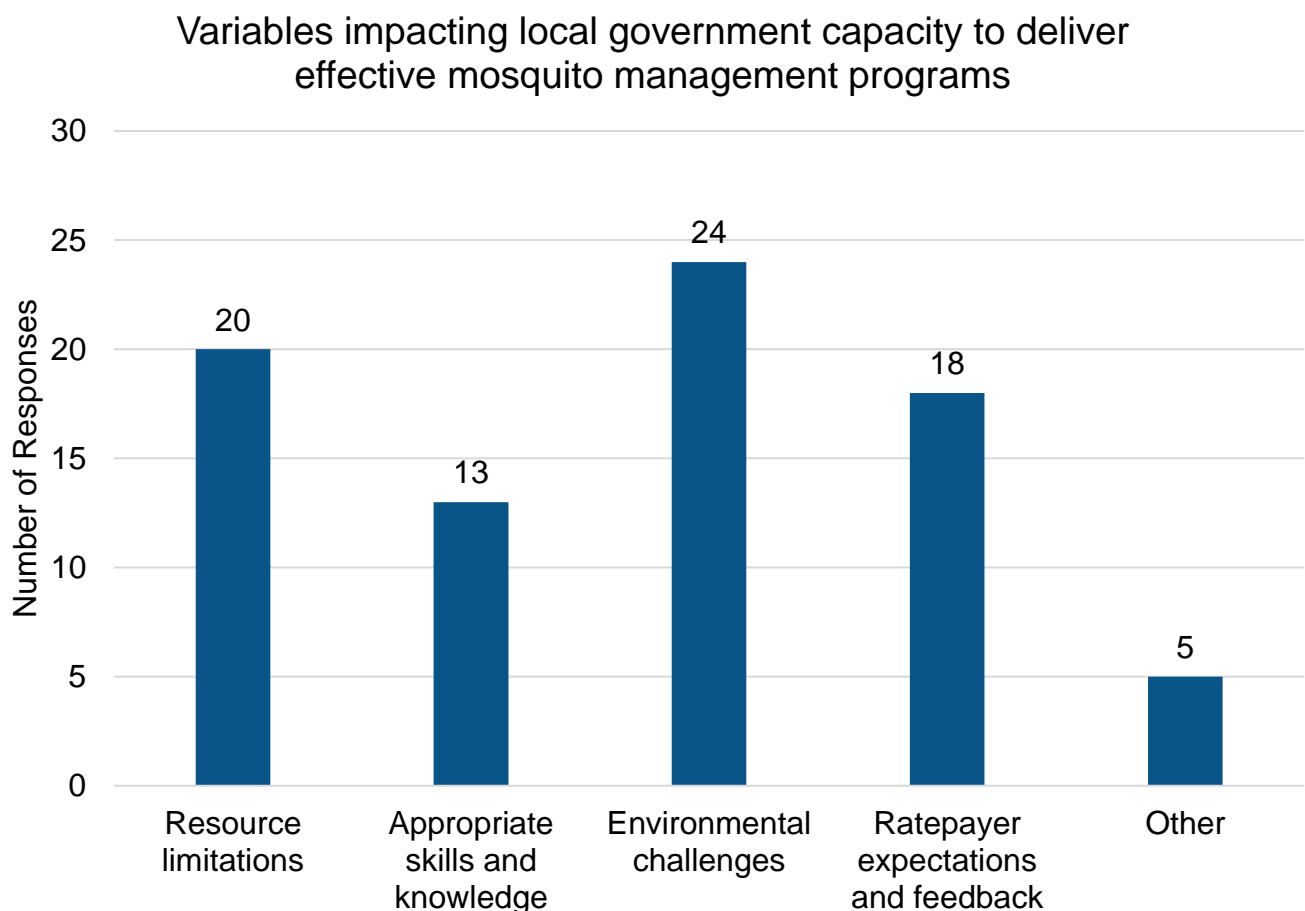


Figure 3 – Distribution of responses when asked to select the variables impacting their local government capacity to deliver effective mosquito management programs

- 76.9 per cent identified resources needing to be diverted to meet other urgent operational or Council priorities as a variable impacting their capacity to deliver an effective mosquito management program within their local government jurisdiction. Respondents from across the state provided the following commentary:
 - *An event like 2017-18 wet season would significantly tax the workforce now and limit its response*
 - *Being a seasonal program in Busselton there is no dedicated team to focus solely on mosquito management, leading to limited staff resources dedicated to the program and suitably trained*

- *The key limitation at present is the lack of staff resources as we only have one Health Tech Officer responsible for mosquito control and their duties include other tasks such as Aquatic Facility sampling.*
- 50 per cent identified the required skills and knowledge as a variable impacting their capacity to deliver their mosquito management program. Respondents from across the state provided the following commentary:
 - *The Shire has limited staff and in recent times attracting staff with skills and knowledge has been difficult. Training costs more for remote/rural locations as there are extra costs involved e.g. travel, accommodation, time away from core work in small Councils*
 - *Staffing of Environmental Health departments for mosquito control is a constant challenge given the limited pool of EHOs available*
 - *Turnover means that preservation of the necessary high level skills is not assured over time (from chicken bleeding to larvicide/adulticide use to mosquito and larva identification.*
- 92.3 per cent identified challenges associated with the environment as a variable impacting their capacity to deliver their mosquito management program. Respondents based in southern parts of the state provided the following commentary:
 - *The large areas we would need to treat would be making our MMP program very challenging. The effected (sic) areas include numerous large lakes that are RAMSAR protected. But we think if we could include some drone treatments it might contribute to some positive community perception*
 - *Some sites are difficult to access due to obstacles like fences, or terrain. This means that backpack application of larvicide is typically the only viable option. This comes with risks and limitations - e.g. staff wading around in unpredictable waters, and long grass; limitations of access to waters due to thick vegetation; and limitations in reach of treatment due to being on foot.*
- 69.2 per cent identified challenges involving ratepayer expectations and feedback that reflects differing priorities as a variable impacting their capacity to deliver their mosquito management program. Respondents located in northern parts of the state provided the following commentary:
 - *During a spike in numbers, the City often receives numerous requests for fogging. If trigger levels are not exceeded, fogging is not done and our efforts are directed at identifying possible sources and treating them. Often residents are unhappy with this outcome, whilst environmentalists are unhappy if we do carry out fogging operations. Regardless, our actions follow an assessment of the situation, understanding the scope of the problem and agreement on the best course of action.*
 - *There are ratepayers supportive of chemical control and others who are opposed, community education is key to provide awareness and confidence we know what we are doing.*
- 19.2 per cent identified other issues as variables impacting their capacity to deliver their mosquito management program. These variables included the lack of accessibility by foot to undertake mosquito treatments and a lack of efficient access to vehicles to be used for mosquito management purposes (such as drones and all-terrain vehicles). Respondents located in southern parts of the state provided the following commentary:

- Some areas of terrain within the City of ¹ and neighbouring jurisdictions are unable to be accessed on foot for the purposes of mosquito treatment. It is hoped that the use of drones will be able to assist in this area. It is noted that the Department fund 100% of helicopter treatments. It would be expected that this funding model is expanded for use of drones
- Some restrictions / impediments imposed by the Crown and other agencies who are the landowners of the mosquito breeding grounds are resulting in increased costs associated with delivering an effective mosquito management program. For example, the inability to use all-terrain vehicles, which the [CLAG]² own, is requiring the Town to consider the use of drones to treat [site]³.

Local government capacity assessments

Respondents (Question 10) were asked to indicate the level to which they agree with a number of statements. Respondents could choose from a rating of strongly disagree, disagree, neutral, agree or strongly agree.

I am confident that my local government environmental health teams have the appropriate resourcing, skills and a sound understanding of the operational requirements to effectively manage and reduce the public health risks associated with mosquitoes in my district

Figure 4 provides the distribution of responses to this statement

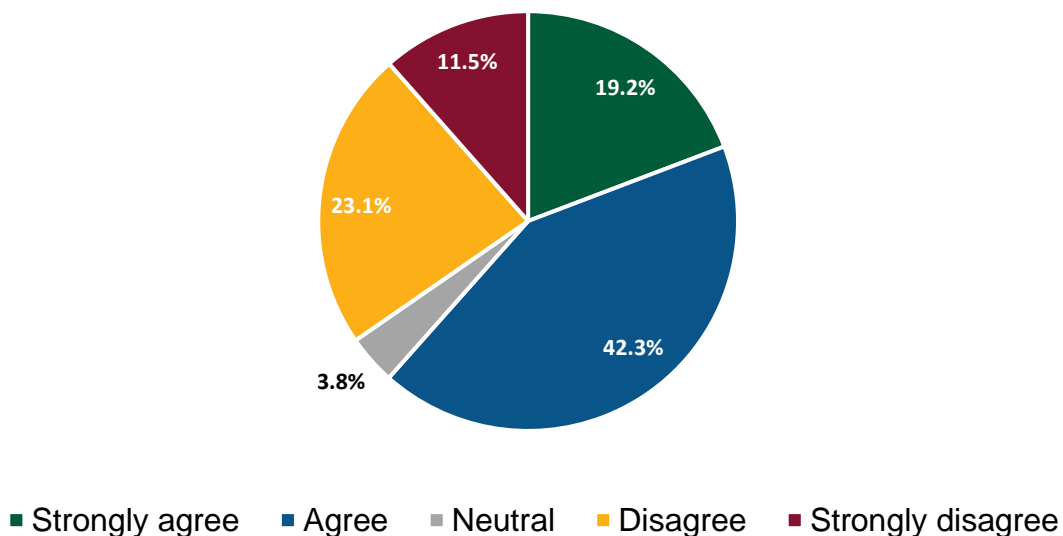


Figure 4 – Distribution of responses to the statement “I am confident that my local government environmental health teams have the appropriate resourcing, skills and a sound understanding of the operational requirements to effectively manage and reduce the public health risks associated with mosquitoes in my district”

Of those who disagreed or strongly disagreed 44.4 per cent were employed as Environmental Health staff.

¹ Name redacted
² CLAG redacted
³ Site redacted

I am confident that my local government (executives and Council) has a strong understanding of the mosquito management program and the resourcing operational requirements to effectively manage and reduce the public health risks

Figure 5 demonstrates the distribution of responses to this statement

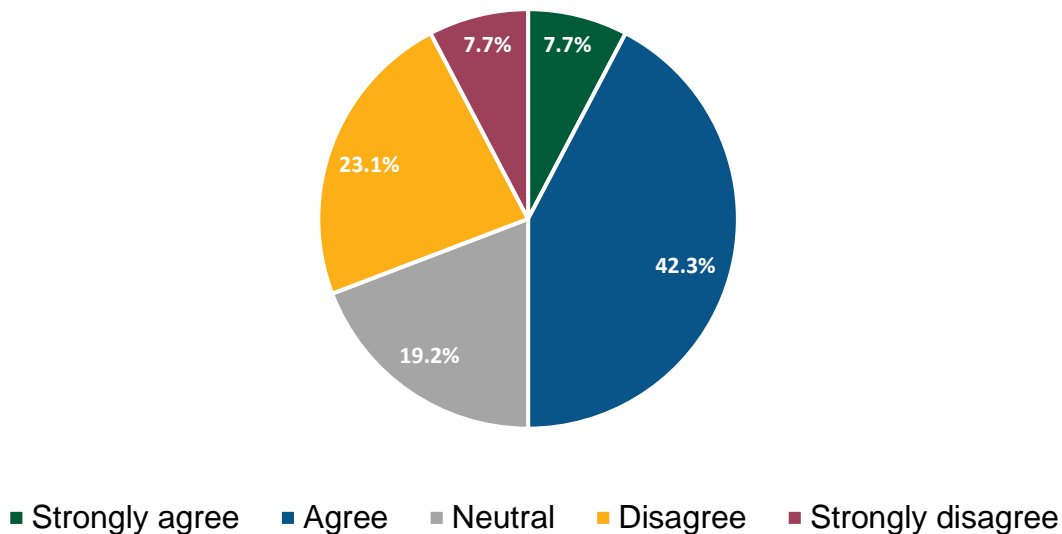


Figure 5 – Distribution of responses to the statement “I am confident that my local government (executives and Council) has a strong understanding of the mosquito management program and the resourcing operational requirements to effectively manage and reduce the public health risks”

Of those who disagreed or strongly disagreed 50 per cent were employed as Environmental Health staff.

My local government benefits from a collaborative relationship with the Medical Entomology team within the Department of Health to inform, support and assist them

Figure 6 demonstrates the distribution of responses to this statement

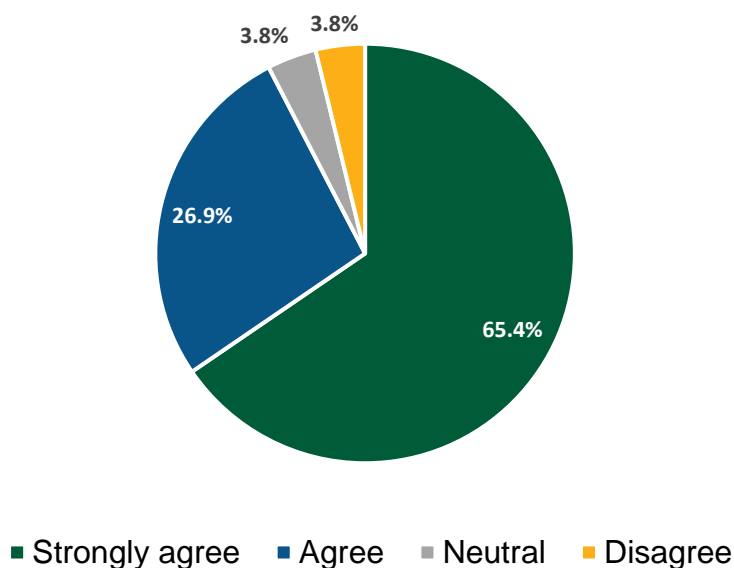


Figure 6 – Distribution of responses to the statement “my local government benefits from a collaborative relationship with the Medical Entomology team within the Department of Health to inform, support and assist them”

Of those who strongly agreed 70.6 per cent were employed as Environmental Health staff.

What has led to improvements to the CLAG Mosquito Management Program?

Question 11 provided an opportunity for respondents to identify how the CLAG Mosquito Management Program [has] led to improvements within their mosquito management program over the last 5 years.

100 per cent of respondents provided a commentary.

The following recurring themes were present across respondent statements:

- 34.6 per cent identified collaboration with neighbouring local governments and the Department subject matter experts as leading to improvements in their mosquito management program
- 23.1 per cent indicated the increased accessibility and funding support for training programs as having a positive improvement on their mosquito management program.

Question 12 sought feedback on any barriers that may have prevented improvement or progression.

The majority (92.3 per cent) of respondents provided a response (inclusive of responses advising of nil barriers), with 7.7 per cent not answering this question.

- 40 per cent of respondents identified limited resourcing, including funding and financial uncertainty, as a barrier.
- Staff retention and recruitment, including staff resourcing, was identified as the second most common barrier, as identified by 23.1 per cent of respondents.

Other barriers noted by respondents from across the state included:

- lack of staff training/capabilities
- lack of funding, particularly during bad mosquito seasons
- lack of support for the local government's mosquito management program, including competing with alternate priorities.

Part B Administration of the CLAG Mosquito Management Program

Part B was open to all respondents who were currently working for a local government that is a member of a CLAG.

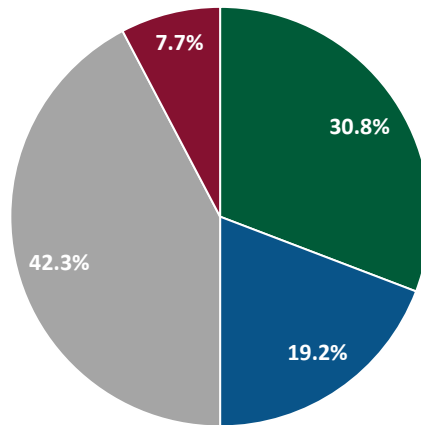
There were two questions to this section. Where available, respondent comments have been included.

Question 13 provided an opportunity for respondents to rate the importance of specific CLAG Funded activities as "not important", "slightly important", "neutral", "important" and "essential".

All eligible respondents answered this question.

Biological mosquito management methods

Figure 7 demonstrates the distribution of responses when asked to rate the importance of biological mosquito management methods.



■ Essential ■ Important ■ Neutral ■ Not important

Figure 7 – Distribution of importance ratings given to biological mosquito management methods

- 30.8 per cent rated biological mosquito management methods as being **essential**
- 19.2 per cent rated biological mosquito management methods as **being important**
- 42.3 per cent rated biological mosquito management methods as **neutral**. Respondents from across the state provided the following reasons for rating biological management methods as **neutral**:
 - *Biological controls are a double edge sword. (There are numerous cases where these controls have caused other more significant problems)*
 - *the Shire does not use Biological mosquito management methods, and there maybe fewer areas where these would be suitable.*
- Nil per cent rated biological mosquito management methods as being **slightly important**.
- 7.7 per cent rated biological mosquito management methods as being **not important**.

Chemical mosquito management methods (including application equipment)

Figure 8 demonstrates the distribution of responses when asked to rate the importance of chemical mosquito management methods.

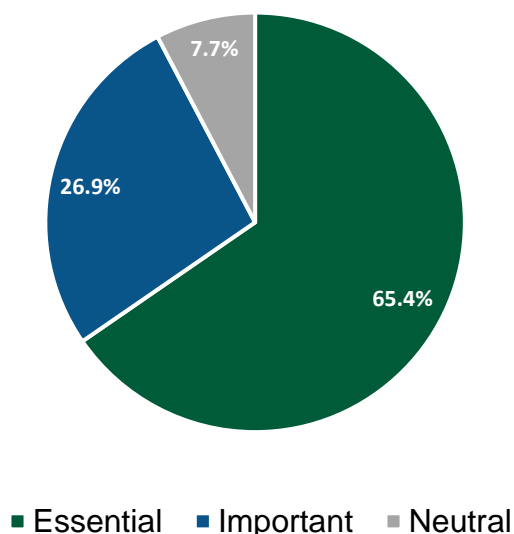


Figure 8 – Distribution of importance ratings given to chemical mosquito management methods

- 65.4 per cent rated chemical mosquito management methods as being **essential**. Respondents located in southern regions of the State provided the following reasons for rating chemical mosquito management methods as **essential**:
 - *Chemical controls are highly effective, and generally target specific without significant collateral damage to the environment or people*
 - *Our mosquito control program focuses on trapping, larviciding, complaint investigation and education. We simply do not have resources to consider larger scale projects such as physical controls and given a lot of our breeding areas are in tidal impacted areas along the river it is questionable whether we would get approval to make significant modification to the environment.*
- 26.9 per cent rated chemical mosquito management methods as being **important**. A respondent from the southern regions of the State provided the following reason for rating chemical mosquito management methods as **important**:
 - *Physical strategies would be preferred but due to the nature of breeding sites⁴ aerial larvicide application has been the main option to date. Have not carried out any biological management tools in the last 5 years.*
- 7.7 per cent rated chemical mosquito management methods as **neutral**.
- Nil per cent rated chemical mosquito management methods as being **slightly important** or **not important**.

⁴ Name redacted

Cultural mosquito management methods (including Fight the Bite, advertising and repellent items)

Figure 9 demonstrates the distribution of responses when asked to rate the importance of cultural physical mosquito management methods (including Fight the Bite, advertising and repellent items).

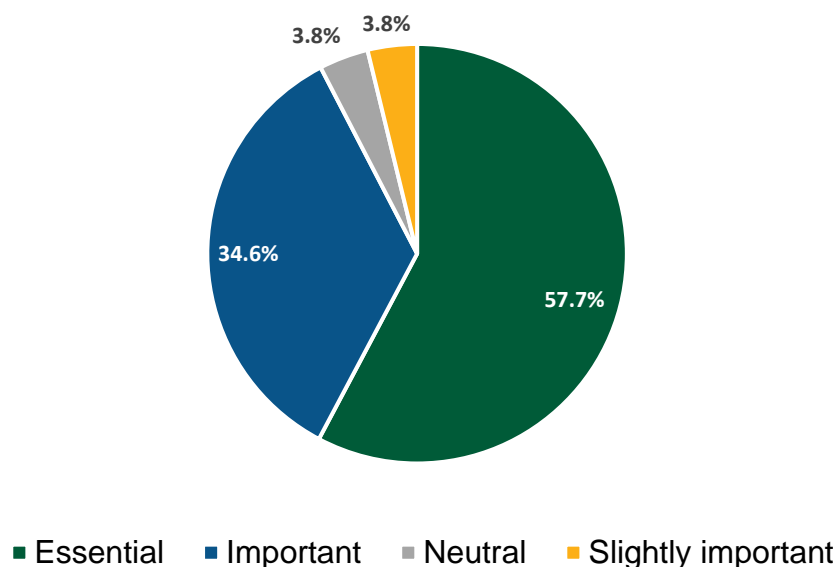


Figure 9 - Distribution of importance ratings given to cultural mosquito management methods

- 57.7 per cent rated chemical mosquito management methods as **essential**.
- 34.6 per cent rated cultural mosquito management methods as **important**. A respondent from the southern regions of the State provided the following reasons for rating cultural mosquito management methods as **important**:
 - *Communication activities essential to encourage FTB action although promotion give aways could be limited. Localised FTB programs are beneficial to informing of the current mosquito status and engaging with the community but state-wide initiatives such as the nine news and newspaper articles seen in 2020 appeared to achieve a broader reach in the community. A state approach may also be beneficial to capture intrastate tourists more effectively.*
- 3.8 per cent rated cultural mosquito management methods as **neutral**.
- 3.8 per cent rated cultural mosquito management methods as **slightly important**. A respondent from the northern regions of the State provided the following reasons for rating cultural mosquito management methods as **slightly important**:
 - *I also support more attention to direct mosquito management works versus merely the dissemination of information. Considering that most mosquito breeding occurs on common land, Shire land and Crown reserves, the local population/ratepayers want the Shire to focus directly on mosquito control efforts.*
- Nil respondents rated cultural mosquito management methods as **not important**.

Comments relating to cultural mosquito management methods from written submissions included:

- *It is suggested that although the fight the bite program is an essential addition some expenditure on items by local government are not value for money in the delivery of wide scale public awareness of mosquito borne disease risk. A review of the*

communication effectiveness of these various individual items should be undertaken with a value for money approach taken to state-wide mosquito management messaging. This may set some requirements about the use of social media by the local government and other cost-effective means of messaging to maximise coverage and promote community awareness.

Physical mosquito management methods

Figure 10 demonstrates the distribution of responses when asked to rate the importance of physical mosquito management methods.

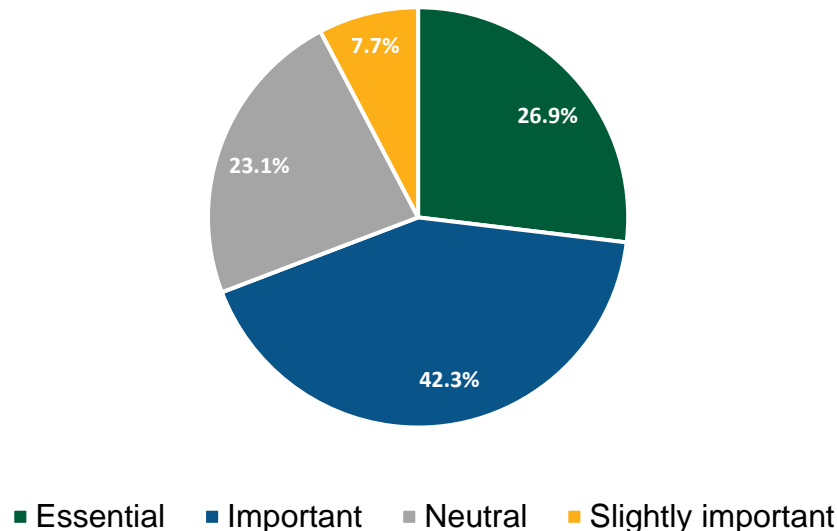


Figure 10 - Distribution of importance ratings given to physical mosquito management methods

- 26.9 per cent rated physical mosquito management methods as **essential**. Respondents from the northern regions of the State provided the following reasons for rating physical mosquito management methods as **essential** included:
 - *Generally I support more attention to long-term gains by suitable alteration of sites to reduce future mosquito breeding rather than relying solely on annual chemical applications. This includes consideration of nature's own biological controls and the recognition and support of aquatic biodiversity at mosquito breeding sites. In our area, most saltmarsh tidal habitat is interconnected which allows for fish to enter and eat mosquito larvae. Major mosquito reductions could be gained by minor works to allow a few isolated tidal areas to interconnect or drain better*
 - *Physical control could be more effective if we would have more case study/ examples of how to easily retrofit storm basin in high water table areas.*
- 42.3 per cent rated physical mosquito management methods as **important**. Respondent comments from across the State provided the following reasons for rating physical mosquito management methods as **important**:
 - *Physical management methods are only rated as important, because even if we do everything possible to ensure that there are no breeding habitats within residential areas, the reality is there will be huge volumes of ponding waters outside of our areas after heavy rainfall events, negating our efforts within*
 - *Physical control (removal of water for mosquitoes to breed in) is obvious the 'perfect' control. However, obviously it is not realistic or practical to apply for every body of water that mosquitoes may breed in.*

- 23.1 per cent rated physical mosquito management methods as **neutral**.
- 7.7 per cent rated physical mosquito management methods as **slightly important**.
- Nil respondents rated physical mosquito management methods as **not important**.

Surveillance of mosquitoes (including adult trapping, larval dipping and ID equipment)

Figure 11 demonstrates the distribution of responses when asked to rate the importance of surveillance of mosquitoes (including adult trapping, larval dipping and ID equipment).

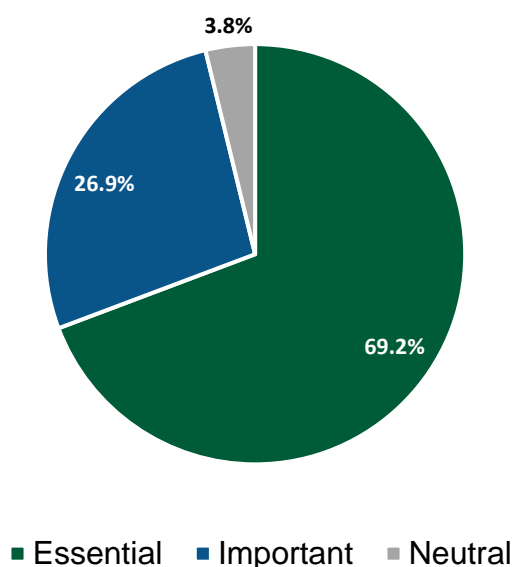


Figure 11 - Distribution of importance ratings given to surveillance of mosquitoes

- 69.2 per cent rated surveillance of mosquitos as **essential**.
- 26.9 per cent rated surveillance of mosquitos as **important**.
- 3.8 per cent rated the surveillance of mosquitos as **neutral**.
- Nil per cent rated the surveillance of mosquitos as **slightly important** or **not important**.

Training opportunities for officers involved in mosquito management

Figure 12 demonstrates the distribution of responses when asked to rate the importance of training opportunities for officers involved in mosquito management:

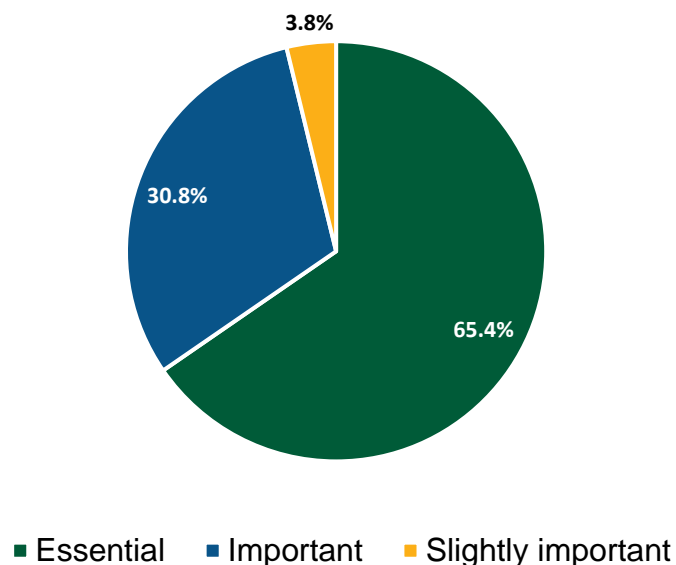


Figure 12 - Distribution of importance ratings given to training opportunities for officers involved in mosquito management

- 65.4 per cent rated training opportunities for officers as **essential**. Respondents from across the state provided the following reasons for rating training opportunities for officers as **essential**:
 - *Almost all the methods depend on officers being adequately skilled to use them efficiently, and thus the essential need for training opportunities. A combination of management methods will produce good outcomes if implemented by adequately skilled officers*
 - *Opportunity to undertake training through the mosquito management course provides valuable skills to assist in developing and carrying out MMP.*
- 30.8 per cent rated training opportunities for officers as **important**.
- Nil per cent rated training opportunities for officers as **neutral**.
- 3.8 per cent rated training opportunities for officers as **slightly important**.
- Nil per cent rated training opportunities for officers as **not important**.

Other comments relating to the importance of CLAG funded activities included:

- *The solutions need to be sustainable over the long term and have long term improvements as well as implement community awareness and protection*
- *Without this funding, there will be a substantial reduction in the skills required to effectively treat mosquitoes, as well as in the purchase of necessary chemicals and promotional materials*
- *This funding allows for the development of advanced treatment methods and the purchase of necessary equipment and materials. It also supports the training and education of personnel, which is essential in the effective control of mosquito populations.*

Question 14 sought feedback on how satisfied local governments were with the:

- administration of the Program
- the timing of the CLAG mosquito management program application process
- the requirement to submit a CLAG annual report with their funding application
- the list of items eligible for funding under the current CLAG funding guidelines
- requirement for local governments to contribute an additional 10 per cent in funding towards a Trust Account
- CLAG Mosquito Management Program overall.

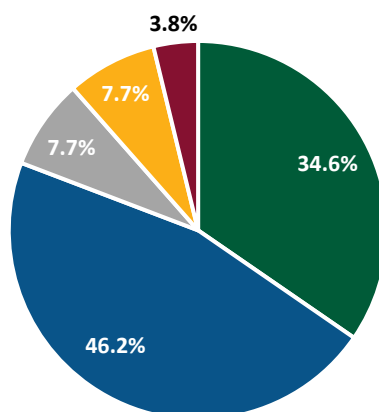
Respondents were asked to rate their satisfaction using the following rating:

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied.

100 per cent of eligible respondents answered this question.

Administration of the CLAG Mosquito Management Program

Figure 13 demonstrates the distribution of responses when asked to rate their satisfaction with the administration of the CLAG Mosquito Management Program.



■ Very satisfied ■ Somewhat satisfied ■ Neutral ■ Somewhat dissatisfied ■ Very dissatisfied

Figure 13 - Distribution of satisfaction ratings concerning the administration of the CLAG Mosquito Management Program

- 34.6 per cent indicated they were **very satisfied**
- 46.2 per cent indicated they were **somewhat satisfied**. Respondents from across the state who indicated they were **somewhat satisfied** provided the following commentary:
 - *CLAG funding allocation and reporting process takes up a significant amount of officer time, with the need to wait for information and receipts from other CLAG members*
 - *The present submission system is overly complicated with members not consistently compiling information in the format required by Medical Entomology.*

It would be beneficial if all members consistently used the Mosquito Management Atlas to compile treatment and trapping data. A more streamlined submission system is requested which will assist in the production of more consistent submission format.

- 7.7 per cent indicated a **neutral** rating
- 7.7 per cent indicated they were **somewhat dissatisfied**. A respondent from the northern regions of the State who indicated they were **somewhat dissatisfied** provided the following commentary:
 - *Application process has been improved but there is so much work involved for a small CLAG (only one Local Gov) as the funding application/ reporting / is completed for small Local Government generally by one person. But DOH in general has been quite accommodating.*
- 3.8 per cent indicated they were **very dissatisfied**. A respondent from the southern regions of the State who indicated they were **very dissatisfied** provided the following commentary:
 - *The CLAG funding process is an overly cumbersome process. It places a large responsibility on the chairperson and is a very time consuming difficult process. Delays in applications being approved can then result in delays in chemical orders being placed resulting in a lack of chemicals when the mosquito season starts... the time and effort required to be put in to obtain this amount in no way is justified by the amount received and we have on several occasions considered withdrawing from the CLAG... The actual process itself operates contrary to most grant processes in that you have to try and guess what you might use rather than having confirmed expenses.*

Timing of the CLAG Mosquito Management Program application process

Figure 14 demonstrates the distribution of responses when asked to rate their satisfaction with the timing of the CLAG Mosquito Management Program application process.

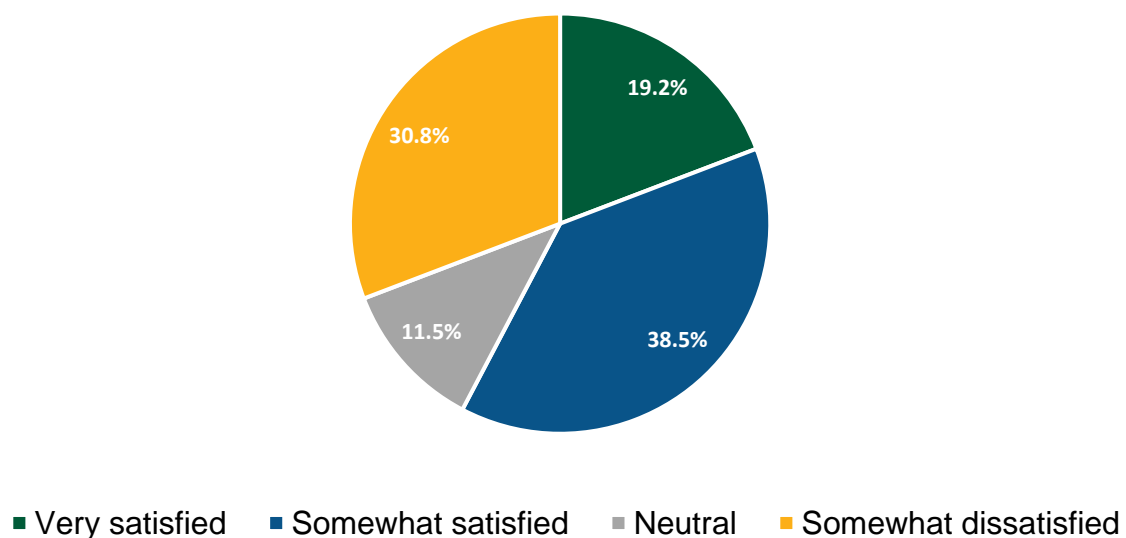
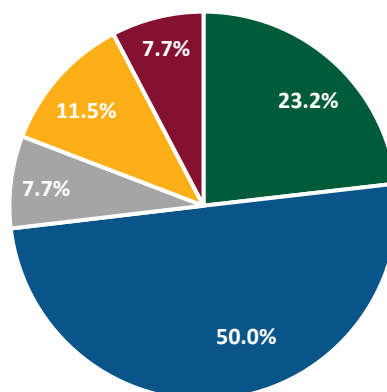


Figure 14 - Distribution of satisfaction ratings concerning the timing of the CLAG Mosquito Management Program application process

- 19.2 per cent indicated they were **very satisfied**.
- 38.5 per cent indicated they were **somewhat satisfied**.
- 11.5 per cent indicated a **neutral** rating. A respondent from the northern regions of the State who indicated a **neutral rating** provided the following commentary:
 - [the] Shire budget process begins in December of the preceding financial year for adoption by council in June. By the time the CLAG budgets are required the Shire budget is already locked in. This creates friction.
- 30.8 indicated they were **somewhat dissatisfied**. Respondents who indicated they were **somewhat dissatisfied** with the timing of the application process provided comments primarily concerning internal budgeting scheduling and receiving funding following the commencement of the mosquito season. Respondents located in the southern regions of the State included the following comments:
 - Budget templates could be supplied earlier to assist with preparation for submission and compiling the LG operational budget. Its [sic] noted the timing of funding approvals requires forecasting to the future season, if funding were to be declined it would be too late to submit a large budget request internally for the current financial year
 - Funding application does not coincide with LG budget process. Funding approval is received after our mosquito season begins
 - The present system relies on accurately predicting the quantities of larvicide that will be used for the next season. A revision of the system based on the submission of invoices to a set amount at the end of the season would simplify the submission process. The timing of the submission is poor given its proximity to the end of the financial year
 - Timing of funding does not allow us to budget according to the funding being provided (ie we can only budget in the LG budget for anticipated funding).
- Nil respondents indicated they were **very dissatisfied**.

Requirement to submit a CLAG Annual Report with their funding application

Figure 15 demonstrates the distribution of responses when asked to rate their satisfaction with the requirement to submit a CLAG Annual Report with their funding application.



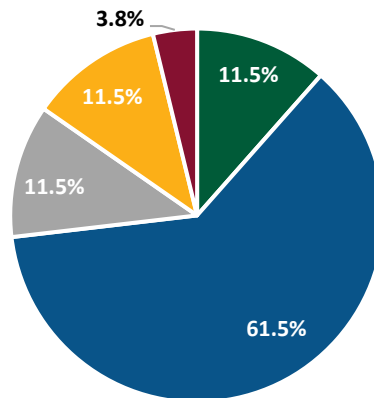
■ Very satisfied ■ Somewhat satisfied ■ Neutral ■ Somewhat dissatisfied ■ Very dissatisfied

Figure 15 - Distribution of satisfaction ratings concerning the requirement to submit a CLAG Annual Report with CLAG funding applications

- 23.1 per cent indicated they were **very satisfied**.
- 50.0 per cent indicated they were **somewhat satisfied**.
- 7.7 per cent indicated a **neutral** rating.
- 11.5 per cent indicated they were **somewhat dissatisfied**. Respondents from across the state who indicated they were **somewhat dissatisfied** provided the following commentary:
 - *The processes of applying for the funding have become more onerous in recent years. I would support a 1-2 page summary annual report*
 - *it should be up to each individual CLAG member to carry out their own reporting. This would ensure that each member has a clear understanding of their budget and how it should be allocated, as well as provide greater transparency and accountability.*
- 7.7 per cent indicated they were **very dissatisfied**.

List of items eligible for funding under the current CLAG funding guidelines

Figure 16 demonstrates the distribution of responses when asked to rate their satisfaction with the list of items eligible for funding under the current CLAG funding guidelines.



■ Very satisfied ■ Somewhat satisfied ■ Neutral ■ Somewhat dissatisfied ■ Very dissatisfied

Figure 16 - Distribution of satisfaction ratings concerning the timing of the CLAG Mosquito Management Program

- 11.5 per cent indicated they were **very satisfied**. A respondent from the south who indicated they were **very satisfied** provided the following commentary:
 - *LGs are all seeking quotes form (sic) the same chemical suppliers: would there be a way for DoH to have an annual rate quoted for all LGs in WA.*
- 61.5 per cent indicated they were **somewhat satisfied**. A respondent from the southern regions of the State who indicated they were **somewhat satisfied** provided the following commentary:
 - *Funding of established aerial larvicide program is subject to annual funding application, it would be better if this part of the program could be funded separately and not reliant on competitive funding... Priority given to larvicide treatment funding in problem years (La Nina), and acknowledge that this may be double the cost of mild years for the Peel region*
- 11.5 per cent indicated a **neutral** rating
- 11.5 per cent indicated they were **somewhat dissatisfied**. Respondents from across the state who indicated they were **somewhat dissatisfied** provided the following commentary:

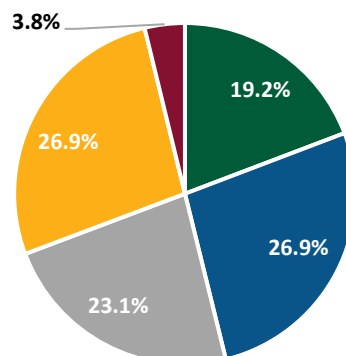
- *The CLAG funding guidelines give the impression that chemical and cultural control are the main preferences and that physical control is begrudgingly supported. I would support that priority of spending of public resources should be 1) long terms [sic] gains of appropriate physical modifications done in the most efficient manner possible, 2) shorter term gains of appropriate chemical control and equipment and 3) provision of appropriate advice which includes listening to the public. I find that 'cultural control' is a negative term and implies that public money is being used to control the people who ultimately earn the money*
- *Funding towards stormwater basin drainage design and drone purchase would be beneficial.*
- 3.8 per cent indicated they were **very dissatisfied**. A respondent from the southern regions of the State who indicated they were **very dissatisfied** provided the following commentary:
 - *The chemical cost for most Local governments with an ongoing mosquito control program is actually something very easy to manage ourselves as it is usually consistent from one year to the next and simply becomes a recurring budget item. What is more difficult to get approved from a budget perspective are the one off situations or irregular activities such as education campaigns in schools etc.*

Other comments received relating to the list of items included under the current CLAG funding guidelines included:

- *It is suggested that although the Fight the Bite program is an essential addition some expenditure on items by local government are not value for money in the delivery of broad scale public awareness of mosquito borne disease risk. A review of the communication effectiveness of these various individual items should be undertaken with a value for money approach taken to state wide mosquito management messaging.*

Requirement for local governments to contribute an additional 10 per cent in funding towards a Trust Account

Figure 17 demonstrates the distribution of responses when asked to rate their satisfaction with the requirement for local governments to contribute an additional 10 per cent in funding towards a Trust Account.



■ Very satisfied ■ Somewhat satisfied ■ Neutral ■ Somewhat dissatisfied ■ Very dissatisfied

Figure 17 - Distribution of satisfaction ratings concerning the requirement for local governments to contribute an additional 10 per cent in funding towards a Trust Account

- 19.2 per cent indicated they were **very satisfied**. A respondent from the northern regions of the State who indicated they were **very satisfied** provided the following commentary:

- *The support from the program is appreciated and it is noted that the program would like to ensure that Local Governments understand mosquito management as their responsibility. Full funding without the 10% contribution to trust funds may result in LG taking this as a Department of Health responsibility.*
- 26.9 per cent indicated they were **somewhat satisfied**.
- 23.1 per cent indicated a **neutral** rating.
- 26.9 per cent indicated they were **somewhat dissatisfied**. Respondents from southern regions of the State who indicated they were **somewhat dissatisfied** provided the following commentary:
 - *As a small Loc. Gov with no history of above average cases of mosquitoes, the 10 % in a Trust account is probably not necessary as our Shire would help in the case of an emergency anyway.*
 - *In regards to the LGA contributing an additional 10% in funding towards a Trust Account - we do put some monies aside, but during times of emergency or urgency we are typically always able to find financial resources.*
 - *Trust fund is not matched by DoH funding, and requires LG to have funding available for difficult years yet DoH does not necessarily have additional funding available for those difficult years. ie Dept of Health should have some kind of arrangement to be able to match 10% funding that local governments spend from their mosquito trust. In problem years when funding is needed the most, local governments are currently expected to access their trust without additional funds from DoH*
 - *The 10% trust funding model was discontinued following the City of Belmont assuming the Chair of the ESR CLAG in 2019.*
- 3.8 per cent indicated they were **very dissatisfied**.

Does the CLAG Mosquito Management Program adequately support your current local government mosquito management program?

Figure 18 demonstrates the distribution of responses when asked to rate their satisfaction with the CLAG Mosquito Management Program's capacity to support their current local government mosquito management program.

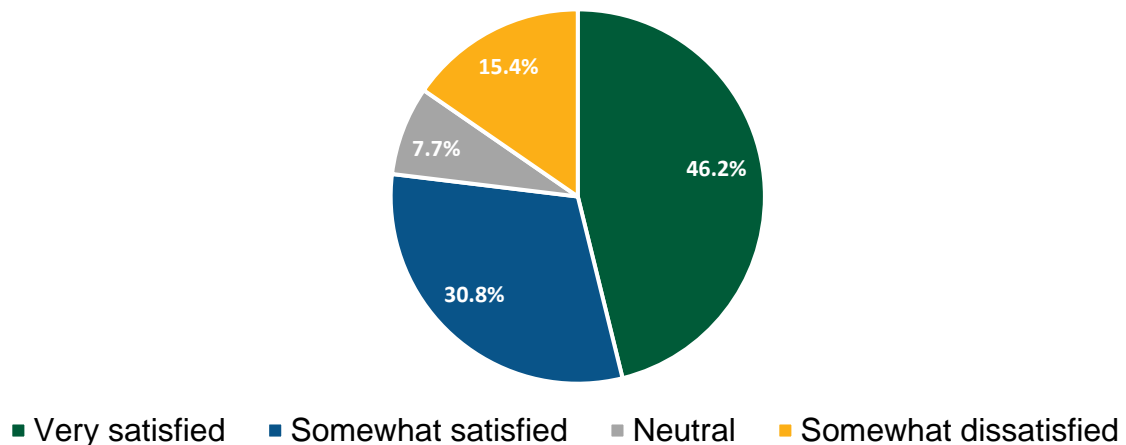


Figure 18 - Distribution of satisfaction ratings when asked whether the CLAG Mosquito Management Program adequately supports their current local government mosquito management program

- 46.2 per cent indicated they were **very satisfied**. These respondents from across the state provided the following commentary:
 - *We are happy with the program overall*
 - *A Local Government with limited resources will struggle to deliver effective mosquito management programs without CLAG program support*
 - *There are always areas of improvement. However I want to state that I am overall very satisfied with the program and the public health benefit that it brings to our district. This cannot be overstated.*
- 30.8 per cent indicated they were **somewhat satisfied**. A respondent from the northern regions of the State indicating a **somewhat satisfied** rating provided the following commentary:
 - *Generally, the CLAG program and mosquito management training opportunities are a credit to WA and the medical entomology personnel are a pleasure to deal with. These are the best people to deal with in the Department of Health and I think this is a direct result of their work being not focused on the "administration of regulations".*
- 7.7 per cent indicated a **neutral** rating. A respondent from the southern regions of the State who indicated a **neutral** rating provided the following commentary:
 - *as previous answers always more to do needed and we are a small Shire with small rate base but vast area so very limited resources to try and address wide scale issues.*
- 15.4 per cent indicated they were **somewhat dissatisfied**.
- Nil respondents indicated a **very dissatisfied** rating.

Other comments in response to these prompts included:

- *Climate variability and the somewhat variable nature of mosquito borne disease outbreaks create a situation where the shire could be technically overwhelmed. (For example in the 2017-18 wet season there were almost 80 notifications for mosquito borne viruses.) An emergency response protocol for such situations could be considered.*
- *In relation to funding and Crown controlled land, it is the Town's view that the relevant Crown agency should be responsible to financing or at a minimum, contributing towards the mosquito management program for its land. This would assist the Crown agencies to better understand the extent of mosquito activity, its impact on the community and also the understanding that some physical control strategies could assist with source reduction, with minimal to no effect on the environment. Furthermore, this would free up funding provided through the CLAG Funding, which can be used for other initiatives and improvements in mosquito management, particularly in cases where the local authority has limited financial resources. This would be similar to FIMMWA funding model.*

Part C Local governments who are not current members of the CLAG Mosquito Management Program

Questions were designed to elicit responses from local governments who may operate a mosquito management program but were not a current member of a CLAG. The purpose of this question was to gather information on the potential interest and needs of non-participating local governments.

- 3.1 per cent of respondents of the survey were not members of a CLAG but still deliver a mosquito management program for their local areas. Descriptions of their mosquito management program included:
 - *During the mosquito breeding season (September-March) the City undertakes routine surveillance of mosquito activity including setting up adult traps and larvae dipping monthly at predetermined problematic locations (chosen as a result of previous annual report findings). Adhoc trapping and dipping is also conducted in response to customer service requests*
 - *For one of townsites (sic), [located in the northern region of the state – site redacted - site redacted], we have introduced a program of laying larvicide briquettes in particular waterways to help reduce mosquito numbers. The Shire employs the local Pest Control business to carry out this work. For the rest of the Shire and other townsites, there is no mosquito control program in place.*
- 9.7 per cent of respondents are not members of a CLAG and do not have a mosquito management program. Respondents indicated that they did not have a mosquito management program commented
 - *When treating for Midge it also treats mosquitos. City has a monitoring program.*

Of those who responded to the question - **Do you believe there is an identifiable need to have a mosquito management program in your local government:**

Figure 19 demonstrates the distribution of responses when respondents were asked if they believed there was an identifiable need to have a mosquito management program in their local government.

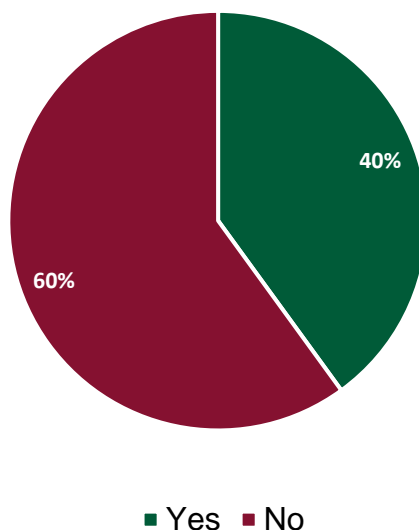


Figure 19 – Distribution of responses when asked to identify if there is an identifiable need to have a mosquito management program in their local government

- 40 per cent of respondents indicated **yes**. These local governments indicated that:
 - *Our Local Government has townsites located close to water sources including a coastal townsite close to a lake. This is creating current problems with mosquitoes and cases of Ross River Virus has been reported presently and in the past*
 - *Due to the City experiencing a period of population growth and development and given the proximity of development projects to bushland, wetlands and other water*

courses, residents are potentially at risk from potential disease-vector and nuisance mosquitoes. In 2014 and 2015 the City's mosquito monitoring program identified three species (Aedes notoscriptus, Culex annulirostris and Culex quinquefasciatus) as potential disease-vector and/or nuisance biting risk to residents which warranted the development of the City's targeted Mosquito Management Plan (MMP).

- 60.0 per cent indicated **no**, providing the following reasons:
 - *Do not get a lot of complaints. We would rely on DOH advising us if we needed one through the data they collect and the data we send from the monitoring program*
 - *The number of complaints or comments about mosquitoes or biting midges is quite small. Rainfall is limited and through a combination of sunny days and windy weather, most pools of water dry up quickly and do not pose a possible mosquito breeding point. Those water sources identified as being breeding sites we are treating.*

Of those who responded to the question – Has your local government ever considered joining the CLAG Mosquito Management Program:

Figure 20 demonstrates the distribution of responses when respondents were asked if their local government had ever considered joining the CLAG Mosquito Management Program.

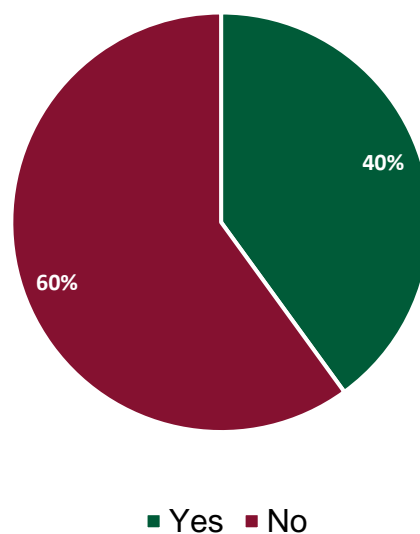


Figure 20 – Distribution of responses when asked whether their local government has ever considered joining the CLAG Mosquito Management Program

- 40.0 per cent of local governments indicated they had considered joining the CLAG Mosquito Management Program. These respondents provided the following reasons:
 - *Our LG have only one dedicated officer employed that is involved in Environmental Health Services and that officer also provides administrative duties for Planning Services and Building Services, including compliance reporting. Developing a mosquito management plan by them self at this stage is a huge task and it would have been beneficial to attend the Mosquito management course, but the extensive course is only provided bi-annually”*
 - *A report went to Council on 19 December 2022 in regard to the City's mosquito treatment and funding options for State Government owned land which included the option to join a CLAG. Consideration of the recommendation was deferred*

pending a response from the Local Member [name redacted] requesting State Government assistance with mosquito mitigation measures for State land in [sites redacted].

- 60.0 per cent of respondents indicated they had not considered joining the CLAG Mosquito Management Program. No comments were received from these respondents.

Of those who responded to the question – **Would your local government consider joining the CLAG Mosquito Management Program in the future:**

Figure 21 demonstrates the distribution of responses when respondents were asked if their local government would consider joining the CLAG Mosquito Management Program in the future.

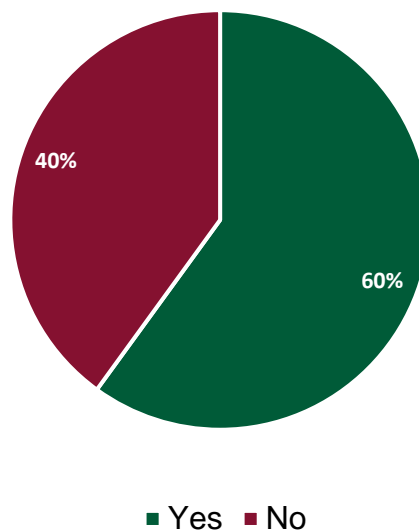


Figure 21 - Distribution of responses when asked whether their local government would consider joining the CLAG Mosquito Management Program in the future

- 60 per cent indicated they would consider joining the CLAG Mosquito Management Program in the future. These respondents provided the following reasons:
 - *Please note the City needs to consider the benefits and costs before considering to join a CLAG*
 - *We are unsure of how Department of Biodiversity, Conservation and Attractions who are owners or part owners of the wetland system are involved. They currently pay 50% of treatment costs for midge.*
- 40 per cent indicated they would not consider joining the CLAG Mosquito Management Program in the future. These respondents provided the following reasons:
 - *No idea what it does or whether it will actually help us or just create another body of work to do.*
 - *I do not know why not. What is the reason to join CLAG?*

Factors or considerations that would increase or decrease the likelihood that your local government would join the CLAG Mosquito Management Program:

When asked what factors or considerations would increase or decrease the likelihood that their local government would join the CLAG Mosquito Management program, the following responses were provided:

- *Information about that the CLAG Mosquito Management program is and how it could assist a group of small local governments (eg NEWROC)*
- *I do not know what the CLAG program entails and so I cannot comment on what would make the Shire join or not join CLAG*
- *More opportunities for officers to experience mosquito management courses. Especially the regional LG's have missed chances due to timing of courses and distance to these*
- *The following factors would decrease the likelihood of the City joining a CLAG:*
 1. *Excessive reporting outweighing the benefits of joining*
 2. *Reduction in funding or funding not being provided for essential or emerging items*
 3. *Reduction in assistance from the Department of Health*
 4. *The State Government should provide fairer contribution towards the management of mosquitoes on State Government land*
- *Lake ownership and who is responsible*
- *Funding amount*
- *Need due to complaints and notification numbers.*
- *There is an increasing amount of residential development around our wetland systems so may be a need in the future.*

Next steps

The Department will undertake analysis of survey responses to determine major issues raised and identify any additional themes that may be present with consideration for different geographical locations and factors.

Appendix 1 – Stakeholder engagement list

Submissions to this consultation were received from the following organisations (please note that some respondents elected to remain confidential and are therefore not included in this list):

Local Government	
Local Government	CLAG
City of Karratha	Karratha
Shire of Derby	Derby-West Kimberley
Shire of Ashburton	Ashburton
City of South Perth	Swan-Canning Rivers
City of Canning	Swan-Canning Rivers
Shire of Broome	Broome
Shire of Esperance	Esperance
Shire of Waroona	Peel
City of Busselton	Geographe
Shire of Capel	Geographe
Shire of Murray	Peel
Shire of Halls Creek	Halls Creek
Shire of Carnarvon	Carnarvon
City of Bunbury	Leschenault
Town of Claremont	WESROC
Shire of Wyndham	Wyndham East Kimberley
City of Bayswater	East Swan River
City of Swan	East Swan River
City of Melville	Swan-Canning Rivers
City of Mandurah	Peel
City of Perth	Swan-Canning Rivers
City of Albany	South Coast
City of Nedlands	WESROC
Shire of Dardanup	Leschenault
City of Belmont	East Swan River
Town of Bassendean	East Swan River
City of Rockingham	Peel
Shire of Trayning	N/A
Shire of Northampton	N/A
Shire of Ravensthorpe	N/A
City of Armadale	N/A
City of Wanneroo	N/A

Appendix 1 – Online Citizen Space Survey questions

Review of the CLAG Mosquito Management Program

Overview

Review of the Contiguous Local Authorities Group (CLAG) Mosquito Management Program

The Department of Health is conducting a review of the **Contiguous Local Authorities Group (CLAG) Mosquito Management Program (the Program)** (formerly known as the *CLAG Funding Scheme*). This involves surveying participating and prospective local governments considering membership, to better understand their views and expectations on the mosquito management program model, and the administration of the program.

What is the CLAG Mosquito Management Program?

The Department of Health is responsible for monitoring mosquito-borne diseases and coordinating the management of insects of public health significance across Western Australia. A key component of this state-wide program is to provide technical, advisory and funding support for local government mosquito management programs to reduce the risk of mosquito-borne diseases throughout WA.

CLAGs are comprised of one or more neighbouring (contiguous) local governments that share a common mosquito problem, usually in the form of natural or man-made habitat that breed mosquitoes which subsequently impact on surrounding communities. The Department of Health's CLAG Mosquito Management Program commenced in 1990 and was last reviewed in 2009. At that time the CLAG Mosquito Management Program provided advice, information, resources and assistance to 10 CLAGs, comprising 20 local governments.

Further detailed information on the CLAG Mosquito Management Program is [available on the Department of Health's website](https://www2.health.wa.gov.au/Imedia/Corp/Oocuments/Health-for/Mosquitoes/CLAG/CLAG-Funding-Guidelines-2020.pdf) <<https://www2.health.wa.gov.au/Imedia/Corp/Oocuments/Health-for/Mosquitoes/CLAG/CLAG-Funding-Guidelines-2020.pdf>>.

The surveillance, monitoring and treatment options applied in metropolitan and regional Western Australia through the Mosquito Management Program are specific to local needs. Different regions present different challenges at different times of the year and under differing environmental conditions. Councils throughout Western Australia have been highly responsive and proactive in their strategies to manage mosquitoes and reduce the risk of mosquito borne diseases impacting human health.

Why your views matter

Since the 2009 review of the CLAG Mosquito Management Program, the number of CLAGs supported by Department of Health with technical, advisory and financial support has risen to twenty (20) across the State, comprising a total of forty (40) local governments.

A changing climate, consecutive years of La Nina weather patterns, and more recently, the requirement for increased mosquito surveillance and response preparedness activities to mitigate the growing risk of Japanese encephalitis virus (JEV) has heightened the importance of providing a responsive and innovative mosquito management plan.

This review considers the administration and operation of the CLAG Mosquito Management Program to reduce the public health risks caused by mosquitoes across Western Australia.

What will the review involve?

Local governments are invited to answer an online survey to provide your views, requirements and expectations of both local governments within the CLAG Mosquito Management Program and prospective local governments who may wish to seek membership in the future. Your response will help the Department of Health consider how best to support mosquito management within the State and participating CLAGs in an equitable and sustainable way into the future.

If you have any queries about the survey please contact the Medical Entomology Team on (08) 9285 5500.

PDF evidence-based research or studies (no larger than 25mb) can be uploaded to the citizen survey site.

If you prefer you can download the survey and submit in hard copy, surveys can be sent by email to:

Medical Entomology Team at Medical.Entomology@health.wa.gov.au.

Or

Post to:

Review of the CLAG Mosquito Management Program

Environmental Health, Public and Aboriginal Health Division

Department of Health

PO Box 8172

Perth Business Centre WA 6849

Anonymous survey responses or submissions will not be accepted. Responses or submissions that address matters outside the scope of this Review will not be accepted.

CONSENT

By completing the online survey, you / your local government are consenting to participate in the survey. This means that your responses to the survey and any additional information or data you provide forms part of a public consultation process and may be quoted in any reports arising from the Review.

Individuals or organisations who wish their comments to be treated confidentially should indicate this on the survey and on any documentation sent through by email or post. Please note that the information and data provided through survey and/or submission may be subject to release under the *Freedom of Information Act 1992*

If you are responding on behalf of an organisation, please ensure the submission has your organisation's endorsement and authorisation at the Chief Executive Officer level. Please allow time for completing the approval process required by your local government before responding to the survey by the deadline.

What happens next?

At the close of the consultation period on **18 April 2023** citizen survey results will be analysed, and a consultation summary released at a later date.

Introduction

1 What is your name?

Name

2 What position do you hold?

What position do you hold? *(Required)*

3 What is your email address?

Email *(Required)*

4 What Local Government Authority do you represent?

Local Government Authority *(Required)*

5 Authority to respond

Please tick those that apply:

(Required)

Please select all that apply

- I am authorised to respond on behalf of my local government (non-executive position)
- I am responding as the CEO or other senior executive of my local government.
- I am authorised to respond on behalf of my CLAG.
- Other. Please specify.

(Required)

6 Are you employed at a local government that currently participates in CLAG?

(Required)

Please select only one item

- Yes
- No

If you are employed at a local government that currently participates in a CLAG, you will be taken to Part A, please answer **Part A and Part B**.

If you are employed at a local government that is **NOT** currently part of the CLAG Mosquito Management Program, you will be taken to **Part C to answer questions 9 onward**.

Part A: Emerging or Changing Pressures Impacting Mosquito Management

7 The following question aims to determine which emerging or changing health or social pressures have impacted your mosquito management program in the last 5 years. Please tick all that apply:

(Required)

Please select all that apply

- Emerging risk of Japanese encephalitis virus (JEV).
- Increased risk of mosquito-borne disease native to WA in your region (e.g. Ross River virus, Barmah Forest virus, Murray Valley encephalitis or Kunjin virus).
- Land use planning/development decisions impacting need for increased mosquito management.
- Increasing pressure from expanding communities to manage nuisance mosquitoes due to lifestyle expectations.
- Other.... Please describe below.

Please explain how the above emerging or changing health or social pressures have impacted your mosquito management program in the last 5 years. Please include any relevant data/information to support your answer

Please attach a copy of any documents you wish to include to this printout.

Relevant data/information to support your answer can be uploaded here. File size should be no more than 25MB.

8 The following question aims to determine which changing or emerging mosquito management pressures/variables have had an impact on your program in the last 5 years. Please tick all that apply:

(Required)

Please select all that apply

- Changing pattern of environmental variables (e.g. tide, rainfall, flood, cyclone or temperature patterns), influencing mosquito breeding.
- Requirement to expand existing mosquito management program.
- Requirement to identify/investigate novel strategies to manage emerging, complex mosquito issues (e.g. aerial treatment trials, drone trials, chemical treatment trials).
- Expansion/inclusion of communication/public education strategy within mosquito management program.
- Embarked on key physical control strategy to permanently solve mosquito breeding issue through source reduction.
- Other. Please describe below.

Were the effects positive or negative?

Please explain how the above changing or emerging mosquito management pressures/variables have impacted your program in the last 5 years. Please include any relevant data/information to support your answer.

9 Which of the following variables impact your capacity to deliver an effective mosquito management program within your local government jurisdiction?

(Required)

Please select all that apply

- Resources (i.e. staff availability, equipment) that need to be diverted to meet other urgent operational or Council priorities
- Appropriate skills and knowledge
- Challenges associated with environment (e.g. geography, weather etc)
- Ratepayer expectations/ feedback that reflect differing priorities
- Other (Please explain below)

10 Please indicate the level to which you agree with the following statements:

Please indicate the level to which you agree with the following statements:

<i>(Required)</i>	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I am confident that my local government environmental health team has the appropriate resourcing, skills and a sound understanding of the operational requirements to effectively manage and reduce the public health risks associated with mosquitoes in my district. <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that my local government (executives and council) has a strong understanding of the mosquito management program and the resourcing operational requirements to effectively manage and reduce the public health risks <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My local government benefits from a collaborative relationship with the Medical Entomology team within the Department of Health to inform, support and assist them. <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11 How has CLAG Mosquito Management Program led to improvements within your mosquito management program over the last 5 years?

Briefly describe:

12 What barriers (if any) have prevented improvement/progression?

Briefly describe:

Thank you, you have completed Part A of the survey. Please press continue and you will be taken to Part B to complete. There will be an opportunity at the end of Part B to upload any supporting information / data.

Part B: Administration of the CLAG Mosquito Management Program

Related information

The following questions relate to mosquito management activities provided by the Department of Health, through the CLAG Mosquito Management Program.

13 Please rate the importance of each of the following CLAG funded mosquito management activities

	Not important	Slightly important	Neutral	Important	Essential
Biological mosquito management methods <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chemical mosquito management methods (including application equipment) <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cultural mosquito management methods (including Fight the Bite, advertising and repellent items) <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical mosquito management methods <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Surveillance of mosquitoes (including adult trapping, larval dipping and ID equipment) <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training opportunities for officers involved in mosquito management <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please provide additional comments to explain any of your satisfaction ratings above.

14 Please rate your satisfaction level with each of the following statements related to the administration of the CLAG Mosquito Management Program How satisfied are you with the following?

	Very dissatisfied	Somewhat dissatisfied	Neutral	Somewhat satisfied	Very satisfied
Administration of the CLAG Mosquito Management Program application process (i.e. the ease involved in applying for funding each year)? <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Timing of CLAG Mosquito Management Program application process? (i.e. Funding templates provided after EOFY (1 July), applications close 31 July, assessed August, funding dispersed Aug/Sept to coincide with mosquito season)? <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Requirement to submit a CLAG Annual Report, along with your CLAG Funding application? <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
List of items eligible for funding under the current CLAG Funding Guidelines? <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Requirement for local government to contribute an additional 10% in funding towards a Trust Account (or with the agreed alternative arrangement you have with the Department of Health), to ensure sufficient funding is available for above average years of mosquito activity? <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CLAG Mosquito Management Program overall – does it adequately support your current local government mosquito management program? <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please provide additional comments to explain any of your satisfaction ratings above. Alternatively, provide suggestions on how you believe the administration of the CLAG Mosquito Management Program can be improved.

Please attach a copy of any documents you wish to include to this printout.

You may provide any additional data/ information to support your responses. File size is limited to 25MB

Thank you for completing this survey. Your responses will play an important role in the review of the CLAG Mosquito Management Program. Press continue and you will be directed to a new page to submit your responses. Please find a link below to submit an additional information / data.

Part C Questions for local governments who are not current members of the CLAG Mosquito Management Program.

15 Does your local government employer have a mosquito management program?

Please select only one item

- Yes
- No

If yes, please briefly describe the nature of your mosquito management program below

16 Do you believe there is an identifiable need to have a mosquito management program in your local government?

Please select only one item

- Yes
- No

Why do you think so?

17 Has your local government ever considered joining the CLAG Mosquito Management Program?

Please select only one item

- Yes
- No

If yes, what prevented your local government from progressing an application to join the CLAG Mosquito Management Program?

18 Would your local government consider joining the CLAG Mosquito Management Program in the future?

Please select only one item

- Yes
 No

If not why?

Please check if you wish to be contacted by the Department of Health to discuss joining the CLAG.

19 What factors or considerations would increase or decrease the likelihood that your local government would join the CLAG Mosquito Management Program?

Comment:

20 You have completed all the questions for Part C

Thank you for completing this survey. Your responses will play an important role in the review of the CLAG Mosquito Management Program. If you have further questions related to the Review, please contact Medical.Entomology@health.wa.gov.au or call 9285 5500.

This document can be made available in alternative formats on request for a person with a disability.

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