Third Quarter Report 2018–19

National Red Imported Fire Ant Eradication Program

Queensland Government

This publication has been compiled by Biosecurity Queensland, Department of Agriculture and Fisheries.

Queensland Government

Contents

Summary

In the third quarter of 2018–19, the National Red Imported Fire Ant Eradication Program (the Program) focused primarily on finishing the first round of planned bait treatment and commencing the second round as outlined in the Work Plan 2018-19. The Program achieved 98% of planned treatment for the first round in Area 1 Eradication Treatment Area (Area 1), 95% in the Eastern Suppression Area, 53% in the Western Boundary Area and 40% in the Western Suppression Area. The second round of treatment also commenced and final results will be reported in the next quarter (refer to the planned treatment section for more information).

To assess treatment efficacy, the Program monitored nest presence and activity in Area 1. Thirty-five nests were identified across six sites for monitoring in July 2018. Data collected during this quarter showed that after three rounds of treatment there was 89% mortality of nests. Of the remaining four live nests, three nests showed signs of being bait-affected, such as low activity or low aggressiveness, sharing nests with other native ant species, or deformed fire ant individuals. This means that only one of the original 35 nests is alive and healthy after the third round of treatment. Further monitoring will occur in the fourth quarter to evaluate treatment efficacy after the fourth round of bait application.

New detections were also identified across the operational area, and responsive treatment was applied via direct nest injection (DNI), through the application of fipronil, over 1042 sites (4277 mounds), and insect grown regulator (IGR) bait treatment applied across 660 hectares to destroy the nests (refer to the responsive treatment section for further information). The Program obtained results from the 12-week trial that was undertaken to test the efficacy of responsive treatment, which focused on the application of DNI. The trial confirmed that DNI is effective at destroying fire ant nests, with zero activity recorded in fire ant mounds seven days after being treated with DNI.

Across the entire operational area, there were 37 new areas (one square kilometre grid cells) containing one or more fire ant detections, a slight decrease of new fire ant infestation since the last quarter (variance of six new areas), and a decrease in comparison to the 2017–18 third quarter (variance of 27 new areas) (refer to the distribution of new areas of infestation section for more information).

While new areas of infestation are to be expected within the suppression area (Areas 2–4), detections beyond the operational boundary are of particular significance. A single detection of this nature was made at Bromelton, south-west of the operational boundary, as a result of a public report by a business owner. Results of samples taken indicate the nests are very highly inbred, which means that determining where the infestation originated is not feasible. The nests were destroyed using DNI, and the Program has undertaken actions to ensure businesses in the area are implementing appropriate risk mitigation measures to any fire ant carriers moved off site. Regular communication and engagement activities also occurred with the community and local council.

The Program continued to communicate and engage with stakeholders through community forums, general awareness training, static displays, media releases and engagement with residents. Almost 2500 reports of suspect ants were made by the public. Of the samples received for diagnosis, 69% identified positively as red imported fire ants. A total of 887 industry personnel attended 23 general awareness training sessions that were delivered by the Program.

Scientific analysis occurred with 929 social form tests (undertaken to determine whether a detection is monogyne or polygyne), with 699 sites identified as monogyne colonies (99.15%) and six sites identified as polygyne (0.85%).

The Program facilitated three significant meetings during February, being the National Exotic Invasive Fire Ant Scientific Advisory Group meeting, the Steering Committee meeting, and the Risk Management Sub-Committee meeting.

As at 31 March 2019:

- there were 86 permanent employees, 25 temporary employees and 156 contractor personnel employed by the Program
- the Program tracked almost $2 million above the year-to-date budget (directly attributable to the additional cost of treating the Western Boundary Area).

  While agreement has been reached between the Commonwealth and Queensland governments to bring forward the required budget for the treatment of the Western Boundary Area from latter years, this is yet to be effected through the departmental system. The rephased budget will be reflected in the next quarter's budget report.

Contextual information on the Program's operations and activities is available at Appendix 1.

Treatment

Planned treatment

The Program concentrated on completing the first round of planned treatment throughout the third quarter, achieving 98% of treatment in Area 1, 91% in the Eastern Suppression Area and 36% in the Western Boundary Area. Treatment in the Western Suppression Area was deferred to focus efforts on treatment in the Western Boundary Area. Other delays occurred to the planned treatment schedule due to wet weather conditions and budgeting constraints that were later resolved.

Round two of treatment has commenced with more than 50% completed in Area 1 and the Eastern Suppression Area. Final results will be reported during the next quarter.

To assess treatment efficacy, the Program monitored nest presence and activity in Area 1. Thirty-five nests were identified across six sites for monitoring in July 2018. Data collected during this quarter showed that after three rounds of treatment, there was 89% mortality of nests. Of the remaining four live nests, three nests showed signs of being bait-affected, such as low activity or aggressiveness, sharing nests with other native ant species, or deformed fire ant individuals. This means that only one of the original 35 nests is alive and healthy after the third round of treatment. Further monitoring will occur in the fourth quarter to evaluate treatment efficacy after the fourth round of bait application.

Refer to Table 1 below for a breakdown of planned treatment activities undertaken during this quarter. A map is also available at Appendix 4 and 5.

Table 1: 2018–19 Third quarter planned treatment

AREA	TOTAL					
	Ha			Sites		
	Required	YTD complete	%	required	YTD Complete	%
Area 1 Eradication Treatment Area (Round 3)*	87,583	85, 839	98%#	14,235	14,000	98%
Area 1 Eradication Treatment Area (Round 4)*		53,870	61.51%		8,000	56.2%
Eastern Suppression (Round 2)*	13,577	12,337	91%#	14,056	13,406	95%
Eastern Suppression (Round 3)*		10,735	79.07%		10,391	73.92%
Western Suppression (Round 2)*	19,181	2020	11%	2,765	1,099	40%
Western Suppression (Round 3)*		0	0.0%		4	0.14%
Western Boundary (Round 1)*	77,713	28,303	36%	10,023	5,263	53%
Western Boundary (Round 2)*		6	0.01%		67	0.67%
Total for all areas	**198,054 ha**	**193,110 ha**		**41,078 sites**	**52,230 sites**	

Source: Fire Ant Management System (FAMS)

* Rounds stipulated are reflected in the Ten Year Plan, and equate to the first and second round of treatment outlined in the 2018–19 Work Plan.

Remaining percentage of treatment is attributed to accessibility issues and areas where the Program's Geographic Information System is unable to measure accurately.

Responsive treatment

In response to new detections during the third quarter 2018–19, 1042 sites (4277 mounds) received application of fipronil through DNI, and 660 hectares received IGR bait treatment to destroy the nests.

The Program obtained results from the 12-week trial that was undertaken to test the efficacy of responsive treatment, which focused on the application of DNI. The trial confirmed that DNI is effective at destroying fire ant nests, with zero activity recorded in fire ant mounds seven days after being treated with DNI. A new method was also evaluated during the trial, defined as 'trench and drench'[1], for use in situations with hard ground, around concrete surfaces or where spearing is deemed difficult. This method is recommended as an addition to the current 'spear and inject'[2] method for inclusion in the Program's treatment procedures.

Refer to Table 2 for a breakdown of responsive treatment per area. A map can be viewed at Appendix 6.

Table 2: DNI and bait responsive treatment

DNI treatment		
Areas	**Sites treated**	**Mounds treated**
Area 1 Eradication Treatment Area, Western Suppression Treatment Area and Western Boundary Treatment Area, including boundary management	41	59
Areas 2–4, including boundary management	931	4020
Gold Coast Development Corridor, including boundary management	70	198
TOTAL	**1042**	**4277**

Responsive bait treatment	
Area	**Area Treated (ha)**
Area 1 Eradication Treatment Area, Western Suppression Treatment Area and Western Boundary Treatment Area, including boundary management	15
Area 2–4, including boundary management	590
Gold Coast Development Corridor, including boundary management	55
TOTAL	**660**

Source: Fire Ant Management System (FAMS)

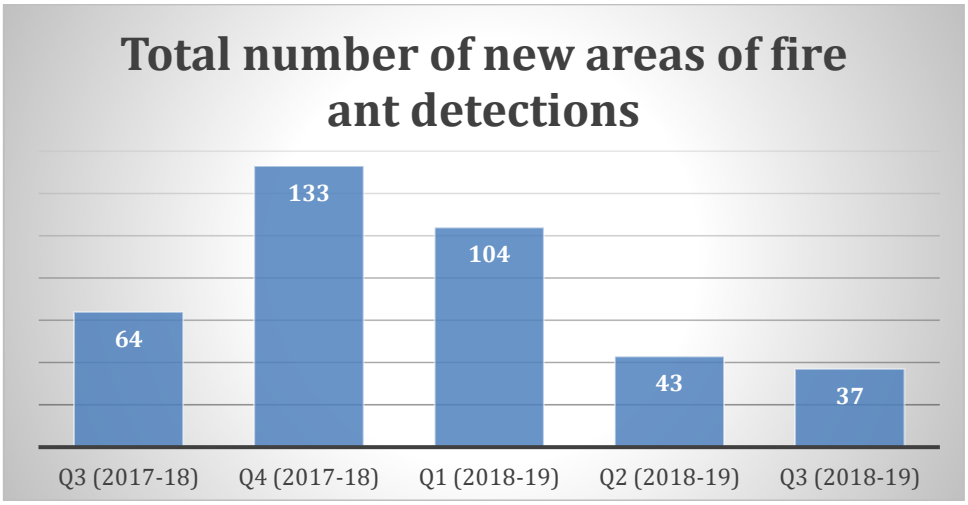
[1] Lifting the nest with a shovel and drenching the mound, as opposed to spearing the nest and surrounding soil.
[2] Nest is injected with a spear to deliver repeated injections of fipronil before the mound is sprayed.

Distribution of new areas of infestation

Infestation has been represented across the operational area in one square kilometre grid cells to clearly identify areas with new fire ant infestation (see Appendix 3).

During the third quarter, there were 37 new areas containing one or more fire ant detections, a slight decrease of areas with new fire ant infestation since the last quarter (variance of six new areas). This is also a decrease in comparison to the 2017–18 third quarter (variance of 27 new areas). These newly infested areas were located across the entire operational area, with a single significant detection at Bromelton.

Figure 1: New grid cells of fire ant detections



Source: Fire Ant Management System (FAMS)

Response rates

The Program aims to respond rapidly to detections that are considered high risk, which are categorised according to the type of risk they pose such as **all high-risk infestation** (including public safety, high spread risk, political risk or animal welfare) requiring a response within 10 days, and **public safety**[1] risks (including schools, parks and sporting grounds) requiring a response within two days. **All other detections** are not deemed high risk and are responded to appropriately (refer to Table 3 below for treatment response rates).

In **Areas 1, Western Boundary and Western Suppression**, 100% of detections that were deemed high risk to public safety were responded to within two days, 100% of other high-risk detections were treated within 10 business days, and 87% of all new detections not posing a high risk were treated within 15 business days.

In **Areas 2–4,** 42% of detections posing a high risk to public safety were treated within two days, and 85% of other high-risk detections were treated within 10 business days.

[1] Public safety is a subset of all high risks.

In the **Gold Coast Development Corridor**, 100% of detections posing a high risk to public safety were treated within two days, and 100% of all high-risk detections were treated within 10 business days.

Table 3: Treatment response rates

High risk to public safety[1] – treatment within 2 days		
Areas	**Detection**	**Percentage**
Area 1 Eradication Treatment Area, Western Suppression Treatment Area and Western Boundary Treatment Area	1	100%
Areas 2–4	53	42%[2]
Gold Coast Development Corridor	1	100%
TOTAL	**55**	
All high-risk – treatment within 10 days		
Areas	**Detection**	**Percentage**
Area 1 Eradication Treatment Area, Western Suppression Treatment Area and Western Boundary Treatment Area	4	100%
Areas 2–4	137	85%[2]
Gold Coast Development Corridor	1	100%
TOTAL	**142**	
All new detections – treatment within 15 days		
Areas	**Detection**	**Percentage**
Area 1 Eradication Treatment Area, Western Suppression Treatment Area and Western Boundary Treatment Area	23	87%[2]
TOTAL	**23**	

Source: Fire Ant Management System (FAMS)

[2] Remaining detections received immediate bait treatment where possible, and were reprioritised to a lower risk where treatment occurred within 15 days.

Surveillance

As the Program was focused on the treatment season this quarter, there was an associated reduction in surveillance activities. Surveillance was undertaken over 39 hectares, across 11 sites, with no new detections identified. Table 4 provides a breakdown of planned surveillance pertaining to each area. A map is also available at Appendix 7.

Table 4: Planned surveillance

Area	Number of sites	Hectares	Positive identifications
Area 1 Eradication Treatment Area, Western Suppression Treatment Area and Western Boundary Treatment Area	10	38	Nil
Areas 2–4	1	1	Nil
Gold Coast Development Corridor	Nil	Nil	Nil
Total for all areas	**11**	**39**	**Nil**

Source: Fire Ant Management System (FAMS)

Significant detections

During the third quarter, a single significant detection of fire ant outside the operational boundary was made on 13 February 2019, in the suburb of Bromelton. Bromelton is located in the central north of the Scenic Rim Regional Council local government area, approximately 7 kilometres west of the township of Beaudesert.

The detection is located approximately 1.8 kilometres south-west of the current operational boundary, 5.1 kilometres south of the nearest known infestation at Allenview, and 1.2 kilometres east of the boundary of fire ant biosecurity zone 2 (refer to Table 5 for information regarding significant detections found since July 2017).

The detection occurred as a result of a public report by a business owner. Further surveillance by the Program detected 12 nests, some of which were medium in size. The nests were destroyed using DNI with fipronil on 19 February 2019. Prior to their destruction, the nests were baited with IGR, along with the area immediately surrounding them to a distance of 100 metres. Surveillance to determine the extent of the infestation was undertaken in the following weeks, with an additional 19 nests being detected on this site. These were destroyed on 19 March 2019.

Genetic analysis of the samples from the 12 original nests showed that the nests at this site were monogyne social form and very highly inbred. This inbreeding means that determining where this infestation originated from is not feasible.

The business conducts a national intermodal transport and logistics operation from the site. The site itself was subject to development approximately two years ago. The business was provided with directions regarding management of materials leaving the site and a biosecurity order was issued to manage the risk of fire ant spread associated with the detection.

Investigations have identified that fire ant carrier materials have been transported to the site from several properties within the fire ant biosecurity zones that have previously been infested. All businesses have been verified as being compliant with the legislated movement controls. The Program will continue to work with businesses that deal with carrier materials located on sites both around the Bromelton detection, and between Bromelton and the nearest known infestations.

A significant detection map for all detections made during 2018–19 is available at Appendix 9. A full summary of significant detections identified since the commencement of the Ten Year Plan in July 2017 is available at Appendix 11.

Table 5: Significant detections made during the third quarter of 2018–19

Suburb	Date of detection	Date of destruction	Distance to nearest known infestation	Distance from operational boundary	Mounds	Social form
Bromelton	15/02/2019 28/02/2019 and 05/03/2019 19/03/2019	19/02/2019 19/03/2019 26/03/2019	5.1 km	1.8 km	31	Monogyne

Engagement

The Program's communication and stakeholder engagement activities continued to support treatment activities undertaken during the third quarter. This was delivered through community forums, general awareness training, static displays, media releases and engagement with residents, who also indicated their support for the Program.

Encouraging community surveillance

The public submitted 2496 reports of suspect ants. Of the samples received for diagnosis, 69% identified positively as red imported fire ants.

Industry collaboration and engagement

The Program continued to engage with a number of industries that are particularly at risk of spreading the pest through movement of fire ant carriers. The Program engaged with 50 civil construction companies, 14 farmers, 46 earth movers or haulage companies, 45 nurseries, 18 builders, 12 landscaping yards and four road construction companies.

Program officers met with representatives of eight of the largest residential development and civil construction companies in the Gold Coast Development Corridor and monitored large-scale development sites. Following a number of detections outside the fire ant biosecurity zones accompanying that area, the companies in the area were advised to apply risk mitigation measures and return any excess soil from their sites to waste facilities to the north.

The Program continues to work with nurseries to raise awareness of movement controls and to address any challenges to compliance.

A total of 887 industry personnel attended either six general awareness training sessions held at the Program's headquarters or 17 sessions held at the places of business of other organisations. 83% of training requests were made on the Program's online portal, a 59% increase since the last quarter.

Significant meetings

Three significant meetings were held during the quarter: the National Exotic Invasive Ant Scientific Advisory Group (SAG) meeting, the National Red Imported Fire Ant Eradication Program Steering Committee Meeting (Steering Committee), and the Risk Management Sub-Committee meeting (refer to the Risk Management section for further information).

The SAG met for the second time on 6 February 2019. The group discussed the following issues:

- the treatment plan, including the Western Boundary and treatment protocols — SAG endorsed the recommendations that treatment five kilometres beyond known infestation is appropriate and scientifically sound, noting that the Program has revised and amended procedures for any detections reported beyond that
- Treatment Protocol — SAG considered the scientific validity of the protocol. SAG noted three treatments per season were optimal, with the possibility of extending the treatment season into June if fire ants are still foraging during the middle of the day. It was also noted that, if necessary, suppression rounds could be reduced to ensure three rounds in eradication areas.
- scientific principles for movement controls — SAG considered current scientific principles to ascertain if further research requirements are needed, and for evaluation purposes. SAG identified that new principles should be added, including:
    - a queen-less monogyne colony fraction is non-viable
    - fire ants have polygyne and monogyne social forms that affect the method of colony reproduction due to difference in biology; the principles can differ between polygyne and monogyne social forms
    - fire ants disperse naturally by nuptial flights, queens can fly up to five kilometres, and following flight, queen establishment is not random
    - queens are known to be attracted to reflection, disturbance and white surfaces
    - defining where fire ants will establish, e.g. what is an impermeable surface, nuptial flights can occur at any time of the year
    - principles are based on knowledge at the time of development of that principle, and should be reviewed and adapted to reflect any new information
- movement controls and industries — nurseries — SAG considered current mitigation strategies for the nursery industry. Advice was sought on the efficacy of visual inspections as an appropriate, sole risk mitigation strategy for potted plants. SAG advised that visual inspections only are not adequate

- remote sensing — SAG was advised that initial work has been completed in developing a new algorithm for the automated analysis of imagery and detection of fire ant nests. The new algorithm is expected to significantly reduce the amount of manual analysis required in identifying fire ant nests in imagery.

The next SAG meeting will be held in September 2019.

The Steering Committee met for the seventh time on 21 February 2019 and participated in a workshop on 20 February 2019. An outcome of the workshop is for the Program to issue an addendum to the Ten Year Plan, and to incorporate all recommendations provided by the Steering Committee, including a modified operating model and forward budget proposals for consideration by the Steering Committee.

Items discussed at the Steering committee meeting included:

- remote sensing surveillance project — investment decision for remote sensing camera system
- Program's annual and quarterly reports
- proof of freedom
- biosecurity protocol
- negotiation of bait supplies
- treatment season update
- improving performance.

The next Steering Committee will be held in May 2019.

Risk management

The management of risk is a priority, and essential to ensure the Program is able to achieve its objectives. A sub-committee has been established, including Commonwealth and interstate biosecurity senior representatives, to guide and ascertain risk management efforts for the Program.

The Program's second risk sub-committee meeting was held in February 2019, with discussions pertaining to the progression of treatment, information and communications technology, preliminary findings of the procurement, governance and operational planning audit as well as consideration of the risk management plan and risk register. The sub-committee provided feedback to improve the plan, specifically on the scope and risk appetite statements and their articulation. Enhanced measures are to be developed, with indicators to demonstrate continuous improvement in risk management practices for the Program.

Preventing human-assisted movement

During the third quarter of 2018–19, the Program undertook 205 compliance verification checks (refer to Appendix 8: Map of compliance checks). 193 of these were against high-risk industries such as civil construction and principal contractors, hay producers, builders, earthmovers, nurseries and turf farms. There were 11 biosecurity instrument permit checks. These compliance verification checks revealed 27 non-compliant businesses, with further enforcement action being considered for two businesses. Apart from the five nurseries discussed below under 'Non-compliance by industry', non-compliant businesses rectified their practices to meet legislated requirements.

Following an allegation of soil being moved unlawfully from a Logan City Council work site, the Program made enquiries and recommendations to improve practices and management of contractors. Logan City Council continues to share information with the Program regarding new developments and soil movements in its local government area.

Further enforcement action

Mulch has moved from a site in Holmview without a permit or adequate risk mitigation. An investigation is underway.

Biosecurity orders

A number of turf farms within the fire ant biosecurity zones have been issued with biosecurity orders due to the risk of infested turf leaving the farms. The Program is working with the industry to apply bifenthrin as opposed to chlorpyrifos as standard practice, given the outcome of trials in relation to the efficacy of chlorpyrifos. It is proposed that a separate permit authorising the application of chlorpyrifos at a higher rate will be retained for emergency use only.

Biosecurity orders were also issued to:

- a freight logistics company to address the risk of fire ant spread via shipping container movement
- a non-compliant nursery requiring compliance with the Biosecurity Regulation 2016
- a major council to ensure actions were undertaken to protect public health at a sporting field.

Penalty infringement notices

Penalty infringement notice offences for specific biosecurity zone regulatory provisions came into effect in late 2018. The Program is participating in a pilot project to test the use of infringement notices. Initially notices will be issued for offences relating to unlawful soil and mulch movement, and for failing to carry a valid permit.

Non-compliance by industry

Soil

A major council reported that it had been moving soil associated with night works within the fire ant biosecurity zones to a location outside the fire ant biosecurity zones. Once this error was identified, this practice immediately ceased. Precautionary treatment has also been undertaken.

Mulch

There is a mulch movement from fire ant biosecurity zone 1 that is currently under investigation.

Nurseries

Of the 45 nurseries checked during the period, 20 were initially found to be non-compliant. The majority of these nurseries have changed their risk mitigation measures to become compliant, with the Program continuing to work with the five remaining nurseries to address compliance challenges.

Landscaping

Although lacking the relevant permits, these businesses were largely undertaking effective risk mitigation. Biosecurity instrument permits were subsequently issued.

Hay

Two hay producers were found to be storing hay incorrectly. The producers quickly changed practices to become compliant.

Gold Coast Development Corridor

The Gold Coast Compliance Strategy has been revised to ensure a coordinated compliance presence that effectively targets the risk of spread within and outside of the fire ant biosecurity zones.

Program officers continue to undertake compliance monitoring across large-scale development sites, and to work with high-risk industries on the Gold Coast. This is to ensure they are aware of the pest and the risk of human-assisted spread, movement restrictions and general biosecurity obligation. The high level of awareness within the area was demonstrated when a principal contractor proactively enquired about risk mitigation measures to be implemented for a movement that was outside the fire ant biosecurity zones, but in close proximity to a number of outliers, and hence posed a risk of spread.

Airport development

During the third quarter, the Program continued to build awareness and monitor compliance of major development activities in fire ant biosecurity zone 3. This includes liaising with Brisbane Airport Corporation and Skyway Joint Venture as the New Parallel Runway Project nears completion, and with Brisbane Port Authorities, Luggage Point International Cruise Terminal and Nudgee Golf Course. The Program has worked closely with one company that receives large quantities of soil to improve staff knowledge and practices with regard to risk mitigation measures.

Continuous improvement

Information systems

The focus this quarter was on investigating and improving the Program's reporting capabilities and visibility of Program information across both the Fire Ant Management System (FAMS) and the Client and Stakeholder Engagement Solution (CaSES).

FAMS was available for approximately 99.9% of the period, with a few minor unscheduled outages to rectify system issues. CaSES experienced a business availability of 99.2%, with loss of availability attributable to an issue processing suspect ant reports caused by the application of a Microsoft update. All systems achieved full functionality and business availability for greater than 95% of business hours, achieving the required target.

A mobile workforce focused review of the Program's ICT needs, including field mobility, and commenced with an examination of the Program's business processes and gaps in system capabilities. The Program is evaluating existing internal systems such as the Biosecurity Online Resources and Information Systems, and other external solutions to improve efficiency and effectiveness.

Remote sensing project

During the quarter, the remote sensing project completed a number of key activities including:

- obtaining the Steering Committee's approval for the recommended high-resolution fixed array seven-band prototype camera system
- finalisation of the associated Camera Hire Agreement on 13 March 2019, enabling the Program to purchase the seven-band prototype camera system.

Although these activities occurred, there was a delay in finalising the Camera Hire Agreement, which has impacted timeframes to commence the remote sensing field trials. These are expected to commence after the 2018–19 financial year.

The key deliverables for the next stage of the project (being the prototype camera system and the Remote Sensing Trials Report) are expected towards the end of September 2019.

Science

The Program's key achievements and activities in science from January to March 2019 include:

- routine diagnostics and genetic testing of samples for social form testing and population analysis
- publication of the paper 'Join the Ant Hunt: How accurately can the public recognise Red Imported Fire Ant Solenopsis invicta (Hymenoptera: Formicidae) in Australia?' in the January edition of *Austral Entomology*
- ongoing support for the fire ant and browsing ant odour detection dog teams, through production of odour-impregnated training and maintenance materials
- completion of an assessment of sentinel sites outside the operational boundary for planned surveillance by the Program during May–September 2019
- verifying the extent and undertaking eradication treatment of known high-priority polygyne populations
- continued discussion and planning of a science-based Proof of Freedom Plan
- continued discussion and trial planning with external organisations regarding alternative baits
- routine sampling of bait batches for independent testing of bait quality
- commencing a field trial on alternative baits and bait regimes, investigating indoxacarb, pyriproxyfen, hydramethylnon and combination products at typical and more intense applications.

Diagnostic services and genetic testing

A total of 1560 ant samples were submitted for diagnosis in the third quarter. Of these samples, 100% were identified and entered into the internal database within the Program target of two days of receipt by diagnostics. The percentage of samples confirmed as fire ants in the third quarter was 69%.

A total of 929 social form (monogyne or polygyne) tests from 705 sites were conducted, with 699 sites having monogyne colonies (99.15%) and six sites (0.85%) having polygyne.

Performance management

Policy, governance and reporting

To ensure Program activities align with the Program's Ten Year Plan and the 2018–19 Work Plan, policy development, advice, strategic planning and reporting activities continued to be undertaken throughout the third quarter, including:

- approval of two internal audit reports — procurement review, and governance and operational planning review
- development of the Program's 2019–20 Work Plan
- 2018–19 first quarter report approved by the Steering Committee
- development of the Program's 2018–19 second quarter report
- providing support services to the Steering Committee, including coordinating meetings and preparing meeting papers for the February 2019 meeting
- completing the review of the Ten Year Plan. At the request of the Steering Committee, a draft addendum to the Ten Year Plan was developed outlining the outcomes of the review and the key strategy adjustments required:
- The Steering Committee agreed that the key strategies and phased approach outlined in the Ten Year Plan remain the optimal strategies to achieve Program objectives within 10 years. However, in light of the detections found to the west of the current treatment area, it is prudent to extend Program treatment to the Western Boundary from 2018–19 to 2020–21. It is anticipated that cost savings will be achieved from 2021–22 until the end of the Program. These savings should be realised in part through a shift in strategy from broadscale eradication treatment to land holder self-treatment and targeted treatment. Seeking approval from Queensland Treasury and the Commonwealth Government to realign the Program's current year and forward budget estimates (within the approved 10-year budget of $411.4 million) to address the risk of further infestation to the west
- finalising the Brisbane Airport proof of freedom report and national biosecurity management group agenda paper
- reviewing fire ant risk mitigation measures for the turf industry, which will form a part of the development of a new Program policy on risk mitigation measures for movement of red imported fire ant carriers
- commencement of a self-treatment pilot project with Queensland Urban Utilities (QUU) in January 2019, when the first round of IGR bait treatment was applied. The Program met with QUU in March 2019 to discuss the progress of the pilot. Preliminary results appear positive, with the company indicating a decline in nests in the areas that have received treatment.

Procurement

All procurement activities undertaken in this quarter were within pre-approved expenditure limits. A number of procurement contracts were approved during the quarter including:

- the Program's headquarters cleaning contract
- bait supply
- Western Boundary labour hire
- Safety barriers
- handheld GPS and batteries for Western Boundary treatment
- professional development program for the Program's management team.

Staffing

During the third quarter, there was a decrease in the overall number of staff since the last quarter (refer to Table 6 for an outline of the number of personnel in the Program year-to-date). This is attributed to changes in staff contractual arrangements. For example, numerous staff temporarily performed higher duties and then returned to their substantive positions outside of the Program. Recruitment activities are underway to fill these vacant positions.

Table 6: Number of personnel in the Program

Personnel type	2018–19		Difference
	Q2	Q3	
Permanent	98	86	-12
Temporary	25	29	4
Contractor – office*	34	26	-8
Contractor – field*	122	102	-20
Total	**279**	**243**	**-36**

Source: Aurion and *internal database

Workplace health and safety

During the third quarter, there was a decrease in the overall number of workplace health and safety incidents (32) compared to the previous quarter (50). This is attributed to extra workplace health and safety training delivered to field staff, which included conducting risk assessments in a timely manner to find an improved solution, addressing concerns raised, and meeting frequently with team leaders to provide information. There were no major injuries with time lost or recurring/ongoing injuries recorded for the quarter. Refer to Figure 3 below for workplace health and safety incident categories and respective figures per incident.

Figure 3: Workplace health and safety Q3

Source: Fire Ant Management System (FAMS)

Budget and finance

The National Program's expenditure at 31 March 2019 was $32,672,035 (see Table 7). Expenditure was above the projected year-to-date budget. Material variances included:

- $86,000 in Policy, Governance & Compliance, which reflects timing for expenses associated with the risk management subcommittee, and the impact of vacancies
- $53,000 in Science, which reflects additional staffing expenses, and increased expenditure on lab consumables as a result of completion of a sampling backlog
- $132,000 in Planning & QA, which consists of increased contractor resourcing for operational planning, inclusive of resourcing associated with the Western Boundary Treatment Area
- $98,000 in IT Development, which consists of ITP discretionary charges relating to ongoing improvement work for the CRM and FAMS, and additional contractor resourcing. The variance also includes timing of expenses for a mobility solution
- $1.8M in operational treatment (Western Boundary, and planned and responsive), which reflects costs associated with treatment. Agreement was reached with the Commonwealth and Queensland to reprioritise funds by bringing forward the required budget for this area from latter years. The approved budget is being processed through the departmental system, and the rephased budget will be reflected in the next quarter.

Table 7: Financial expenditure as at 31 March 2019

Program area	Revised budget	YTD budget	YTD expenses	Variance
Directorate	425,151	297,620	296,059	1,561
Administration, procurement WH&S HR	3,152,599	2,335,935	2,334,613	1,321
Policy, governance & compliance	2,027,814	1,434,092	1,347,431	86,661
Communications & engagement	1,298,246	955,104	944,826	10,277
Science	1,604,524	1,201,947	1,255,506	(53,560)
Planning & QA	2,374,547	1,802,289	1,933,797	(131,508)
Planned and responsive eradication	24,383,487	19,530,176	20,003,377	(473,202)
Remote sensing surveillance R&D	1,059,212	744,428	723,225	21,203
IT development	2,578,186	1,711,698	1,809,416	(97,718)
Contingency	920,803	-	-	-
Western Boundary	2,600,846	653,319	2,023,784	(1,370,465)
Total	42,425,416	30,666,607	32,672,035	-2,005,428

Source: SAP

Appendices

- Appendix 1: Context
- Appendix 2: Overview map of the 2018–19 operational boundary
- Appendix 3: Map of new detections (third quarter 2018–19)
- Appendix 4: First round planned treatment (third quarter 2018–19)
- Appendix 5: Second round planned treatment (third quarter 2018–19)
- Appendix 6: Map of responsive treatment (third quarter 2018–19)
- Appendix 7: Map of planned surveillance (third quarter 2018–19)
- Appendix 8: Map of compliance checks (third quarter 2018–19)
- Appendix 9: Map of significant detections (year to date 2018–19)
- Appendix 10: Fire ant biosecurity zones
- Appendix 11: Significant detections (July 2017 to March 2019)
- Appendix 12: National Red Imported Fire Ant Eradication Program South East Queensland 2018–19 targets.

Glossary

Area 1	An area comprising parts of the Lockyer Valley and western Scenic Rim regional council areas and a portion of the Ipswich City Council area. This area is located at the outer western and south-western extent of the operational area.
Areas 2, 3 and 4	The area within the operational area from the eastern extent of Area 1 to Moreton Bay in the east, from the northern suburbs of Brisbane to the northern suburbs of the Gold Coast and Mount Tamborine in the south.
Biosecurity zones	Fire ant biosecurity zones have been established under the *Biosecurity Act 2014* in areas of SEQ where fire ants have been detected or where it is likely that fire ant infestation exists. Zone regulatory provisions restrict movement of fire ants and fire ant carriers to help prevent human-assisted spread.
Boundary detection	A new detection found up to 5 km inside the operational boundary.
Boundary management	Activities concerned with maintaining the integrity of the operational boundary, including surveillance and responses to outlier detections.
Broadcast bait	Broadcast baiting uses an insect growth regulator to destroy fire ant infestation.
Colony	A group of ants that are living together and depend on each other for reproduction and survival.
Community surveillance	Searching by the community, industry and other areas of government for fire ants. Also referred to as passive surveillance.
Delineation surveillance	Surveillance undertaken around new detections to confirm the extent of the infestation.
Detections of importance	See significant and outlier detections.
Direct nest injection (DNI)	Involves the injection of chemical directly into a nest or mound to destroy the nest.
Eradication treatment	The treatment regime, including chemicals, rates and methods of application specified by science and regulation, required to achieve eradication of fire ants from an area.
Fire ants	Red imported fire ant or *Solenopsis invicta* Buren 1972.
Fire ant carriers	Fire ant carriers include: • soil (e.g. fill, clay, scrapings, and any material removed from the ground at a site where earthworks are being carried out) • mulch • animal manure • baled hay or straw • potted plants • turf

	• other carriers including:
	  ○ composted material
	  ○ material that is a product or by-product of mining or quarrying (e.g. gravels, sands).

General biosecurity obligation (GBO)	Under the *Biosecurity Act 2014*, all Queenslanders have a legal obligation to manage biosecurity risks and threats that are under their control, they know about or they are expected to know about.
Genetic testing	Refers to a range of specific tests, and analyses of the results produced from these tests, to determine genetic traits that indicate the fitness of individuals in fire ant samples and the relatedness of colonies within the infestation, as well as the social form (monogyne vs polygyne) of a nest.
High-risk detection	Those detections that pose the greatest risk to the objective of eradication by virtue of location or density of infestation, or pose a risk to public safety and to human and animal health.
Infestation (infested areas)	Areas which have had fire ants confirmed.
Monogyne	A social form of fire ant where each colony consists of a single queen and her offspring.
Mound	An above-ground structure that ants use for survival or reproduction that is associated with one colony of ants.
Nest	A structure that ants form and use for reproduction and survival. A nest may not always take the form of an above-ground mound, but usually includes sub-terrain tunnels and chambers.
Pest	For the purpose of this report, 'pest' means red imported fire ant.
Planned surveillance sites	Areas of land used to monitor for the presence or absence of fire ants over time.
Planned treatment area	Areas which are targeted for eradication or suppression treatment.
Polygyne	A social form of fire ant where a colony may contain multiple queens and their offspring.
Positive identification	The point at which a suspect ant sample is determined to be fire ant.
Post-treatment surveillance	Surveillance undertaken following treatment to confirm or validate that all fire ants have been destroyed. This is also referred to as validation surveillance.
Priority area	Sub-areas within the operational area that will receive coordinated and focused eradication activity, in accordance with a staged approach. The boundaries of each area are indicative only and will be updated as a part of the biennial review of the Ten Year Plan.
Program	National Red Imported Fire Ant Eradication Program in South East Queensland

Progressive 'rolling' strategy	The west to east progression over the operational area of planned treatment and surveillance activities contributing to pest eradication.
Odour detection dogs	Dogs specifically trained for the purpose of searching for and positively identifying fire ants.
Operational area	Total area of known infestation confirmed by delimitation and adjusted for predicted infestation spread since completion of delimitation. The operational area will not remain static, possibly increasing initially as surveillance increases in Stage 1, and then decreasing as the areas with confirmed infestation reduce over the life of the Program.
Operational boundary	A 5 kilometre buffer around known infestations detected within a set timeframe. This boundary is reviewed on an annual basis.
Outlier detection	An infestation detected beyond the fire ant biosecurity zone.
Regulation	Biosecurity Regulation 2016, which prescribes procedures that must be followed when moving or storing a fire ant carrier.
Remote sensing surveillance (RSS)	Remote sensing surveillance involves airborne cameras mounted on helicopters which fly over broad areas to capture visible, near infrared and thermal images of possible fire ant mounds.
Scientific Advisory Group (SAG)	A group of eminent scientists brought together to identify and advise on key scientific principles, as well as on policy and compliance matters. This group may also include technical and analytical experts from time to time.
Search and clear activities	The treatment and surveillance required to identify and treat remnant fire ant infestation post eradication treatment, in order to clear an area of infestation.
Search and suppress	See 'Suppression activities'.
Sentinel sites	Term used to describe areas of land that will be used to monitor for the presence or absence of fire ants.
Significant detection	A new infestation discovered beyond the operational boundary.
Staged approach	Priority areas will receive coordinated and focused eradication activity in three phases. Underpinning this approach, each area will receive an optimal treatment regime of up to six treatments over two years during phase 2.
Steering Committee	A committee of nominated representatives from each Program cost-sharing partner, with an independent chair, tasked with providing oversight of performance and risk.
Suitable habitat	That part of an area to which treatment is being applied that would sustain a fire ant population, exclusive of 'hard stand' such as buildings, and of environs unable or highly unlikely to support a fire ant population such as bodies of water and very dense forest.
Suppression activities	The minimum required treatment and surveillance to contain and suppress spread, in accordance with the Program Treatment Protocol. Infestation in areas that are not in the current priority area receiving treatment will receive suppression treatment. The intent of suppression

	treatment will be to mitigate spread from and in the areas that have not yet undergone focused and coordination eradication activity.
Surveillance	An official process that collects and records data on pest occurrence or absence by survey, monitoring or other procedures.
Ten Year Eradication Plan (or Ten Year Plan)	Ten Year Eradication Plan for the National Red Imported Fire Ant Eradication Program South East Queensland 2017–18 to 2026–27.
Treatment	Means the application of chemical solution, or substance impregnated with a chemical solution, for the purposes of destroying an infestation of red imported fire ant.
Treatment season	Treatment is undertaken during the warmer months when fire ants are more likely to forage. The season is generally from September to May.
Work Plan	Detailed plan outlining the eradication activities that will be undertaken in the upcoming financial year.

Appendix 1: Context

The fire ant is a pest of national significance that has an impact on wildlife, the environment, agriculture, animal industries, infrastructure, business and human health, not to mention the Australian way of life. All Australian jurisdictions have a vested interest in eradicating the pest as the impacts are far-reaching across multiple sectors of the economy and community.

An eradication program in South East Queensland has been operational since 2001 in response to the discovery of fire ants in western Brisbane and Fisherman Island. It has prevented widespread environmental, social, health and economic impacts seen in other countries where fire ants have invaded. However, small pockets of high-density infestation have started to impact on human and animal health and wellbeing.

The eradication of fire ants continues under the nationally endorsed Ten Year Eradication Plan (Ten Year Plan) that commenced on 1 July 2017. This is the third quarter report for the second year of operations under the Ten Year Plan. The 2018–19 Work Plan was approved in December 2018 by the Steering Committee, and focuses on continuing planned eradication treatment in Area 1, and commencing eradication treatment in the Western Boundary Area. Planned targeted surveillance surrounding and beyond these areas is being conducted to limit the potential for undetected infestations to impact on this broadscale treatment regime. All other Program activities support this focus (refer to Appendix 12: National Red Imported Fire Ant Eradication Program South East Queensland 2018–19 targets).

Our areas of operation

The **operational area** is defined in the Ten Year Plan as the 'Total area of known infestation confirmed by delimitation and adjusted for known and predicted infestation spread since completion of delimitation' (five kilometres beyond all known infestation). The visual representation of the operational area, the **operational boundary**, was first drawn five kilometres around infestations detected from 1 July 2012 to 30 June 2017. This was amended for the 2018–19 work program to include infestations detected to 31 August 2018.

The operational area serves the important function of identifying the extent of Program planned activities and of indicating the area where infestation has been detected. A fire ant detection beyond the operational area is considered significant and elicits an immediate and thorough Program response.

To manage the eradication process under the Ten Year Plan, the operational area has been divided into four priority target areas (Areas 1–4). The plan focuses eradication activities in each area in turn, working from west to east.

Refer to Appendix 2 for a map of the 2018–19 operational area.

Area 1 is in the west of the operational area and is predominantly rural and agricultural land. Eradication treatment commenced within Area 1 in 2017–18 and continues in 2018–19. The treatment area, known as **Area 1 Eradication Treatment Area**, extends two kilometres beyond all known infestations detected between 2012 and May 2017 (a total of 84 025 hectares). In the 2018–19 treatment season, this area is scheduled to receive the third and fourth round of broadcast bait treatment.

Since the Eradication Treatment Area was determined, detections have been made further west. The distribution and characteristics of this infestation suggest the eradication effort needs to expand as protection against further spread. In response to this risk, in August 2018, the Steering Committee endorsed broadscale eradication treatment at key risk locations outside the current Eradication Treatment Area. It was noted that the option of proactively treating (by broadscale aerial baiting) an area five kilometres beyond the recorded infestations would be the primary response. It was then proposed that two rounds of broadcast baiting be applied five kilometres beyond all recorded infestation in this area to be known as the **Western Boundary Area**.

To protect the Eradication Treatment Area to the east, treatment is planned for the area defined as the **Western Suppression Area**. This area is situated in Area 2 and covers 19 484 hectares. **Areas 2, 3 and 4** are identified in the Ten Year Plan as areas to receive eradication treatment in later years of the Program, progressing from the west (Area 1) to the east (Area 4). It should be noted that the increase in high-density infestation in these areas and the impact this is having on humans and animals indicate there may be a need for suppression activity prior to the eradication activities commencing in these areas. The best way to do this is being investigated by the Program.

To protect the operational boundary to the south, activities have commenced in the **Gold Coast Development Corridor**. Major development in this corridor provides the ideal habitat for the establishment and spread of fire ant infestation. Activities include industry and community engagement, suppression treatment in the northern part of the Gold Coast (Area 4), a 13 579-hectare area that has experienced high-density infestation **(Eastern Suppression Area)**, and the treatment of major development sites including infrastructure development and waste facilities.

Our activities

Treatment

To destroy fire ant infestation, depending on the circumstances, either an area is baited with an **insect growth regulator (IGR)** or a nest is directly injected with a non-repellent pesticide. The injection of the chemical insecticide fipronil directly into a fire ant nest has proven effective at destroying fire ants in a one-off application.

Bait is applied by field staff either using a hand-held spreader, distributed by manned all-terrain vehicle, or broadcast aerially by helicopter. Baiting is ideally conducted when soil temperature is greater than 20 °C, and usually occurs between mid-September and May–June. Surveillance is undertaken to determine if fire ants are foraging, and therefore treatment could be efficacious, outside of these periods.

Targeted **monitoring** of planned treatment areas will occur following each treatment round to assess treatment efficacy.

To quickly address newly reported small levels of infestation, **responsive treatment** is undertaken involving **direct nest injection** (**DNI)** and baiting the surrounding area with IGR. DNI is undertaken in instances where there is a risk to human or animal health and safety, to allow the continuation of business activity, where there is a threat to Program objectives, or if DNI is the most cost-effective option. In recent times, the application of toxicants, such as Amdro, has begun to be investigated where nests are too numerous for DNI, and IGRs will take too long to be effective. Further trials are needed before the broadscale use of such toxicants can be increased.

Surveillance

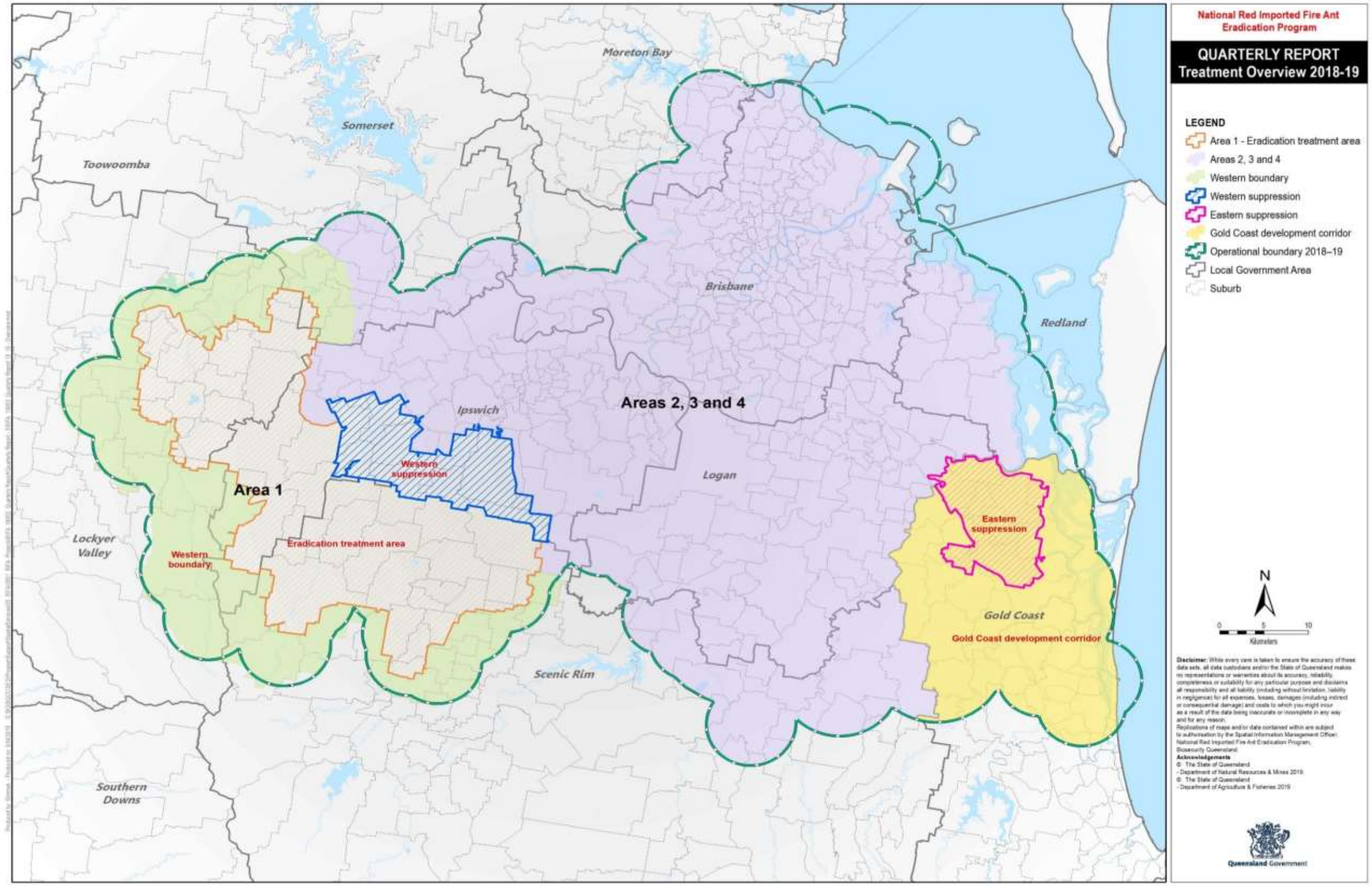
Surveillance is currently undertaken by field staff or by odour detection dogs. For field staff, surveillance is most effective in the cooler months when the ants build up their mounds. Odour detection dogs can work throughout the year. Remote sensing surveillance (RSS) is currently under development, with testing scheduled for 2019–20.

Surveillance is conducted for different purposes and with different aims. To protect the operational boundary and the Eradication Treatment Area, **planned targeted surveillance** is undertaken in this area to assess the level of infestation. To monitor the level of infestation beyond the operational area, **sentinel sites** have been established as early indicators of infestation that is further afield and needs to be addressed immediately. **Delineation surveillance** is conducted around any new detection to determine the extent of the infestation. Finally, to ensure treatment has successfully resulted in the destruction of infestation, **post-treatment validation surveillance** is undertaken. This is predominantly undertaken by odour detection dogs and priority is given to infestations that have been detected around the operational boundary.

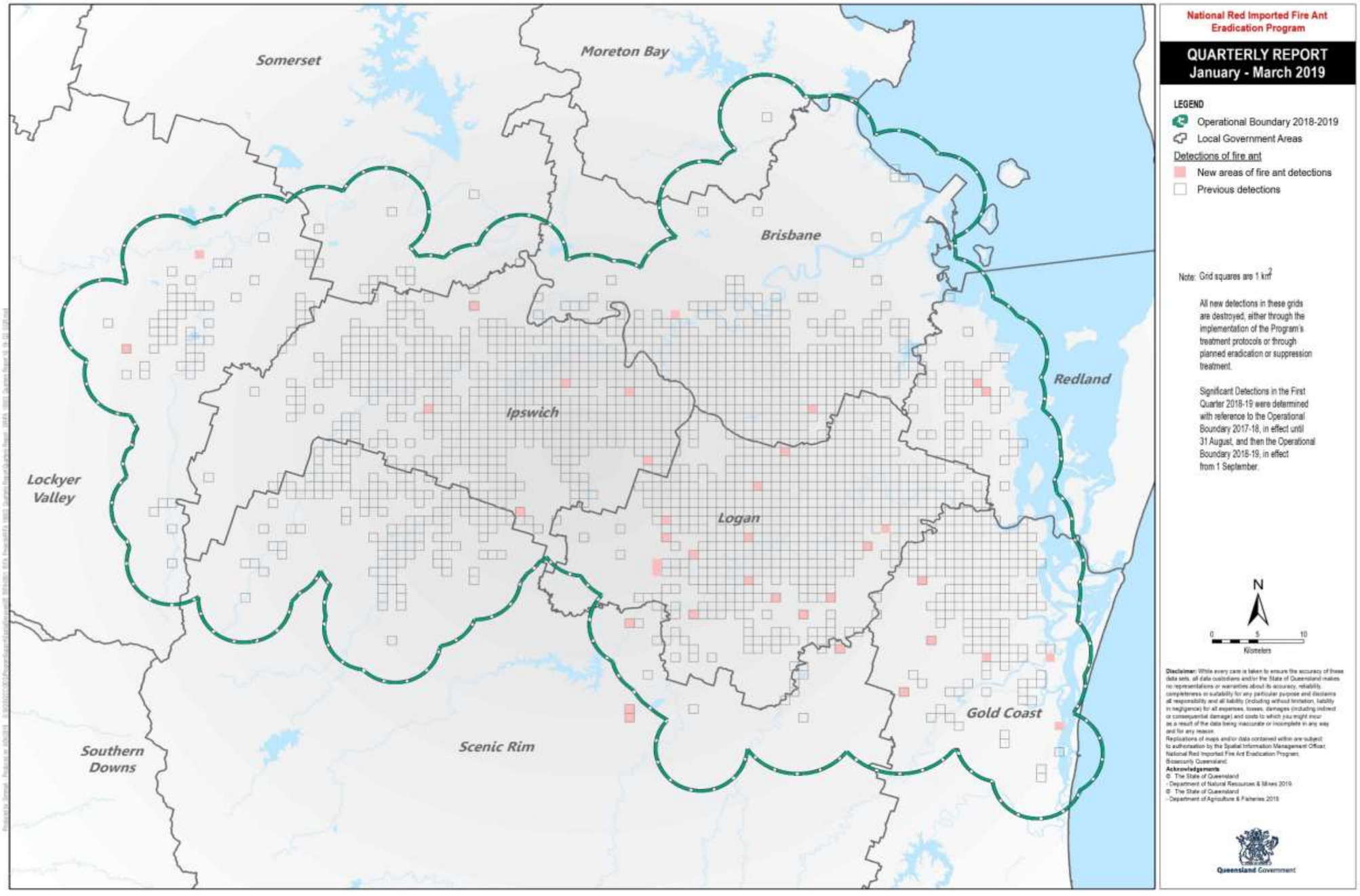
Fire ant biosecurity zones

Fire ant biosecurity zones are in place to control the movement of fire ant carriers from the known infested area. The zone requirements apply to all those who live and work in the zone and move fire ant carriers. In addition to the specific requirements for fire ant biosecurity zones, all Queenslanders have a general biosecurity obligation (GBO) under the *Biosecurity Act 2014* to manage biosecurity risks and threats that are under their control, they know about or are expected to know about. In terms of fire ants, a biosecurity risk exists when dealing with the movement of fire ant carriers, that is, anyone involved in the movement of fire ant carriers has a GBO to ensure they don't spread fire ants (refer to Appendix 10 to view a map of the fire ant biosecurity zones).

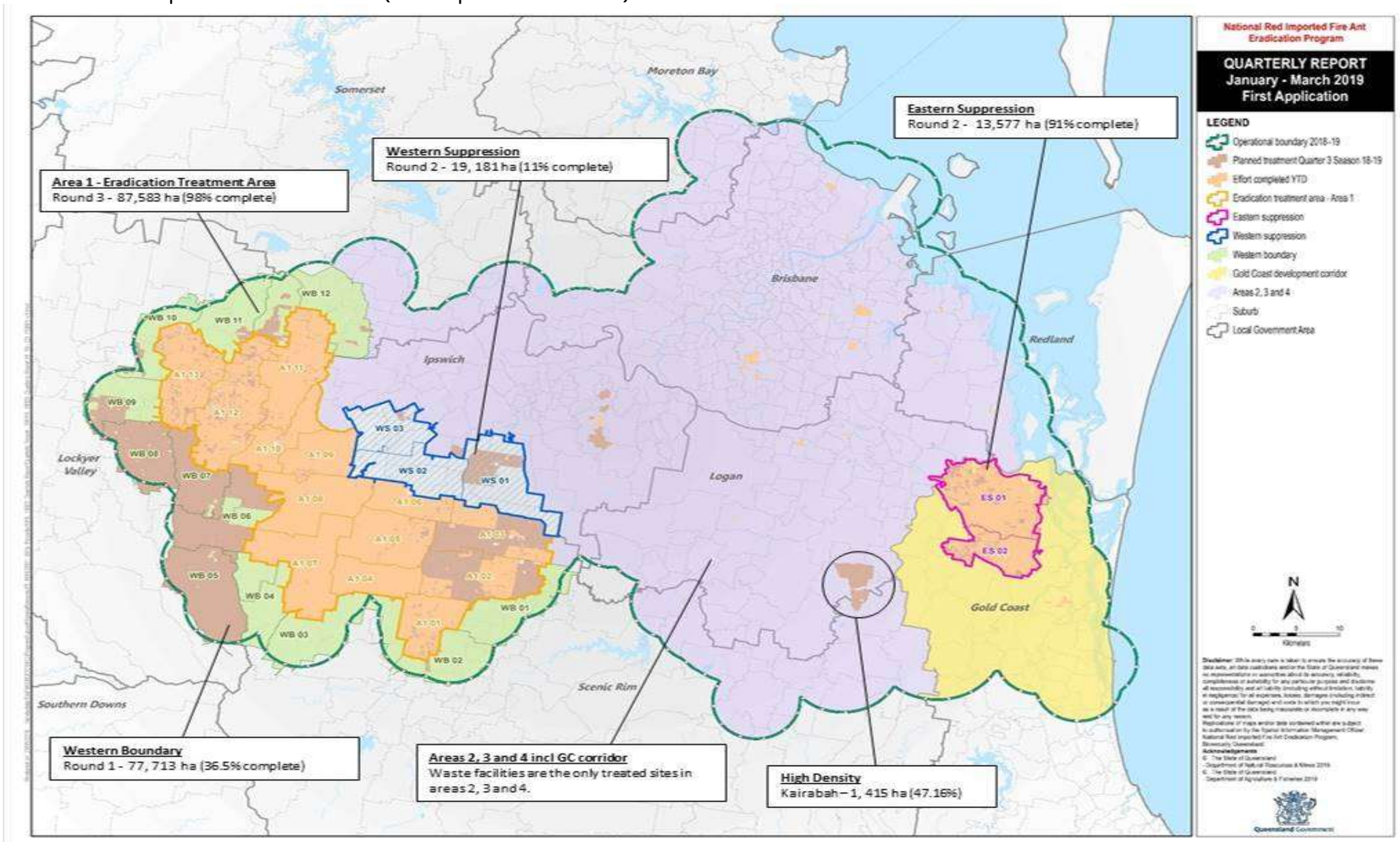
Appendix 2: Overview map of the 2018–19 operational boundary



Appendix 3: Map of new detections (third quarter 2018–19)

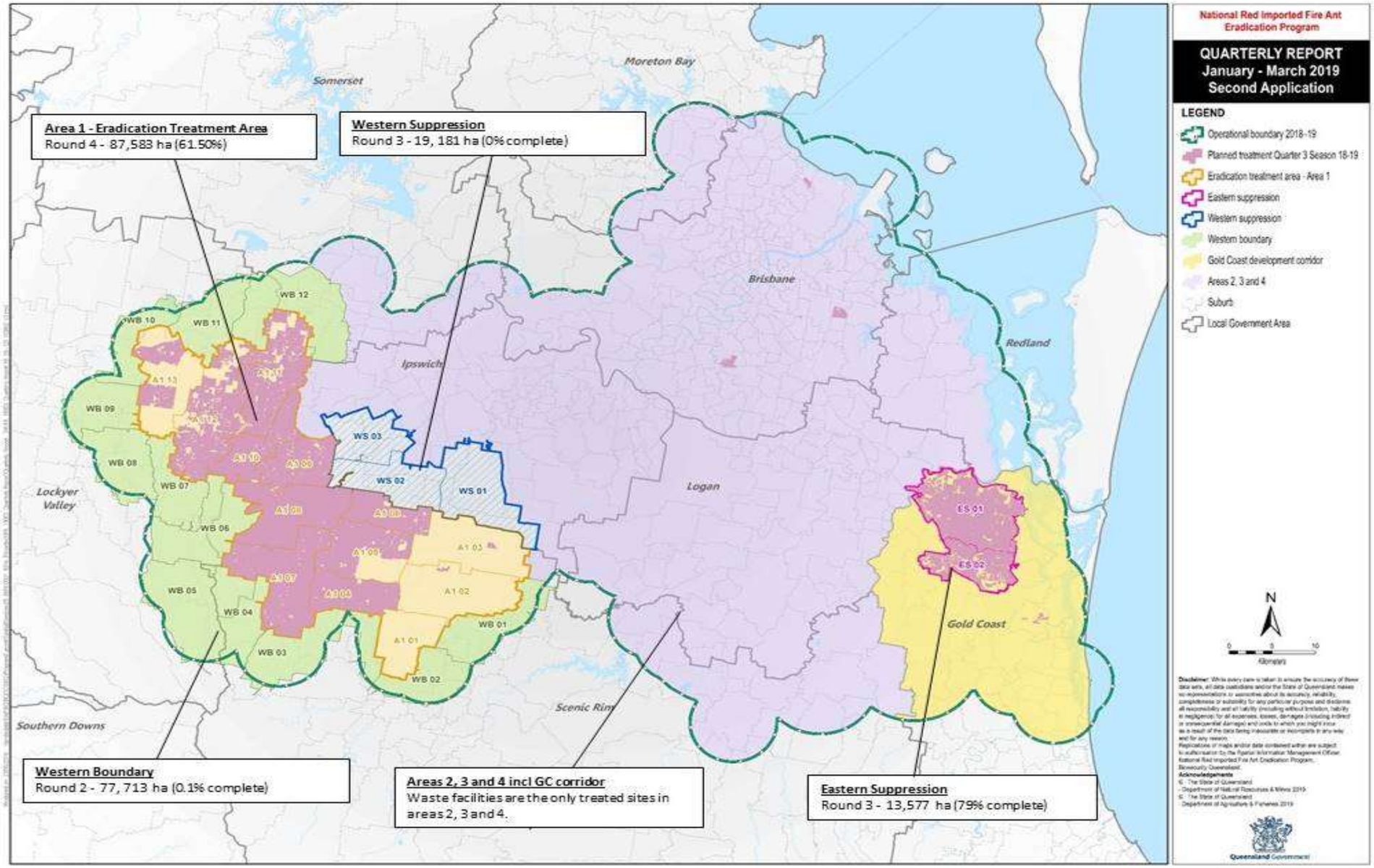


Appendix 4: First round planned treatment (third quarter 2018–19)



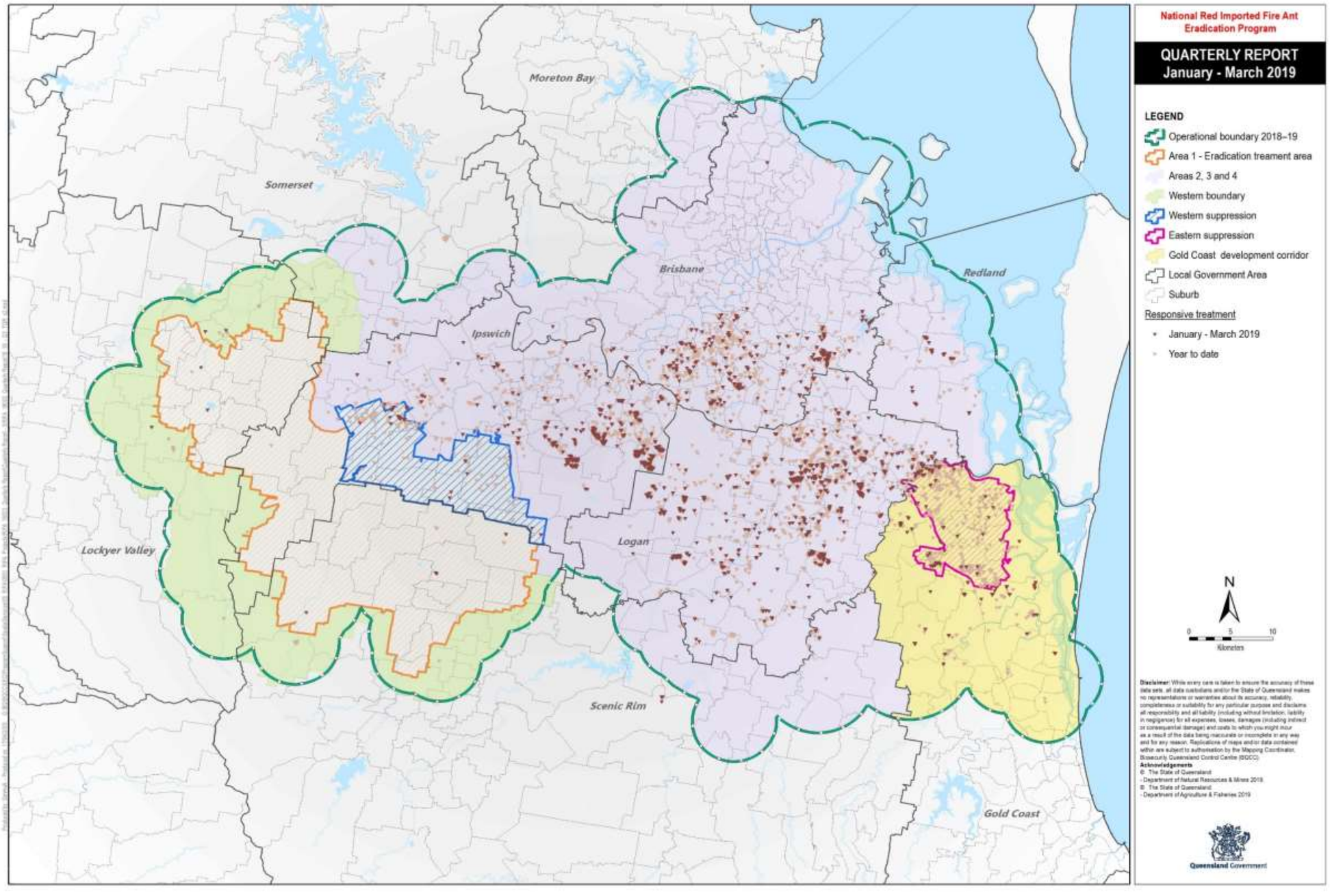
Treatment applied in Areas 2 – 4 were to waste facilities

Appendix 5: Second round planned treatment (third quarter 2018–19)

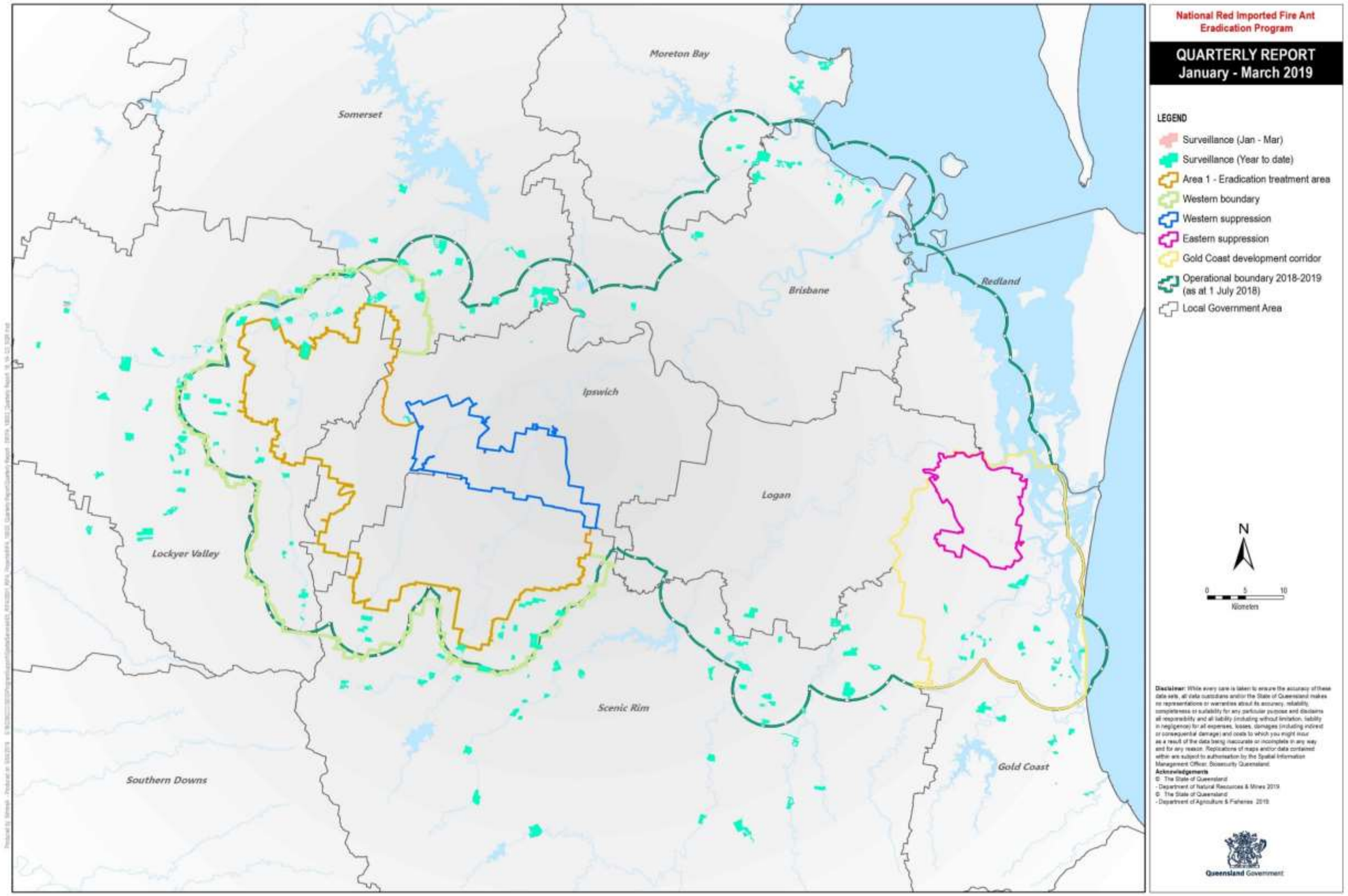


Treatment applied in Areas 2 – 4 were to waste facilities

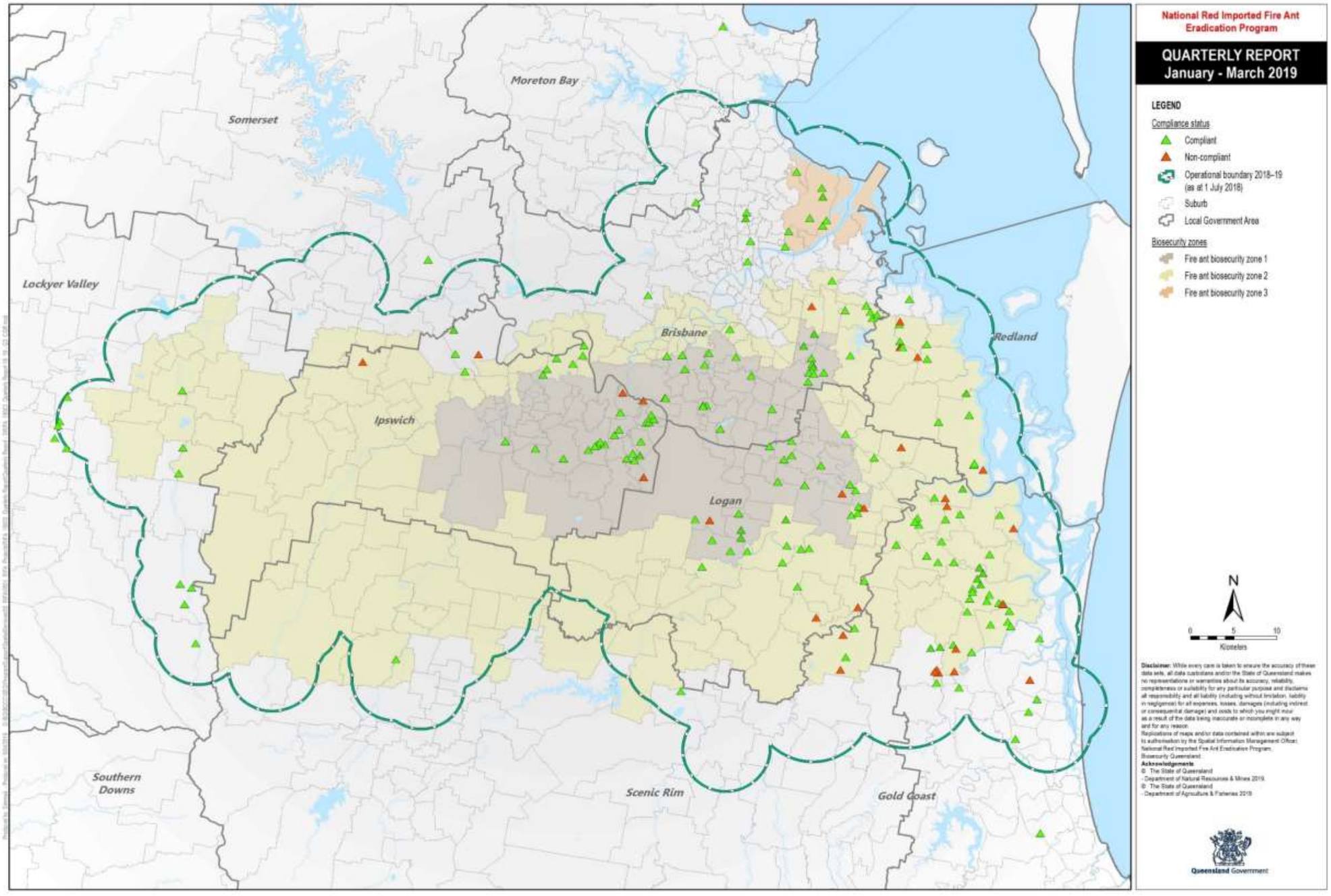
Appendix 6: Map of responsive treatment (third quarter 2018–19)



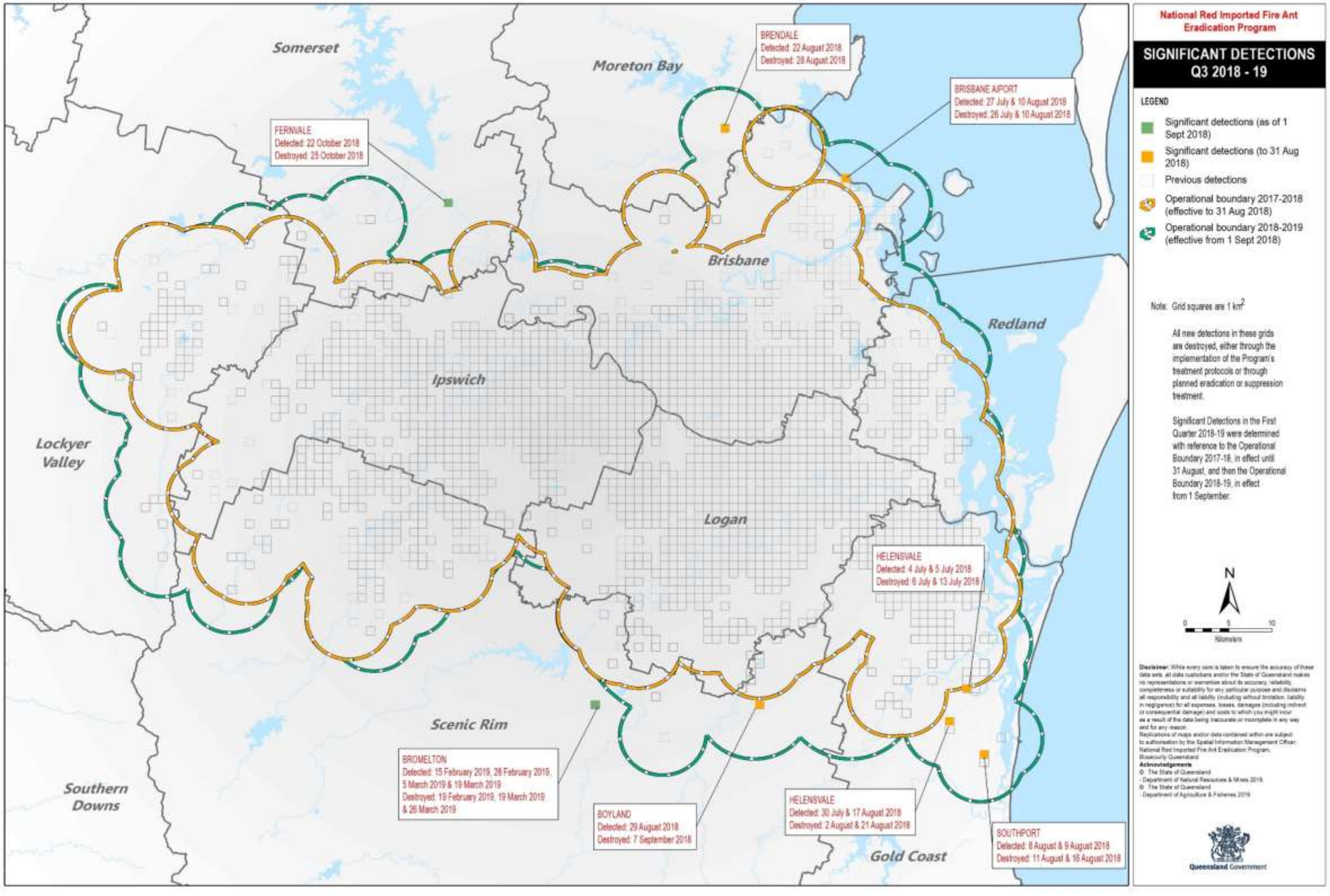
Appendix 7: Map of planned surveillance (third quarter 2018–19)



Appendix 8: Map of compliance checks (third quarter 2018–19)



Appendix 9: Map of significant detections year to date 2018–19



Appendix 10: Fire ant biosecurity zones

National Red Imported Fire Ant Eradication Program: Fire ant biosecurity zones

Fire ant biosecurity zone 1

Acacia Ridge	Forestdale	Raceview
Algester	Gailes	Redbank
Amberley	Goodna	Redbank Plains
Archerfield	Greenbank	Regents Park
Augustine Heights	Heathwood	Richlands
Basin Pocket	Heritage Park	Ripley
Bellbird Park	Hillcrest	Riverview
Berrinba	Holmview	Rochedale
Bethania	Inala	Rocklea
Blackstone	Ipswich	Runcorn
Booval	Karawatha	Sadliers Crossing
Boronia Heights	Kingston	Silkstone
Brookwater	Kuraby	Slacks Creek
Browns Plains	Larapinta	South Ripley
Buccan	Leichhardt	Spring Mountain
Bundamba	Logan Central	Springfield
Calamvale	Logan Reserve	Springfield Central
Camira	Loganlea	Springfield Lakes
Carole Park	Mackenzie	Stretton
Churchill	Mansfield	Sumner
Coalfalls	Marsden	Sunnybank
Collingwood Park	Meadowbrook	Sunnybank Hills
Coopers Plains	Moggill	Swanbank
Crestmead	Moores Pocket	Tivoli
Darra	Munruben	Underwood
Deebing Heights	New Chum	Wacol
Dinmore	Newtown	Waterford
Doolandella	North Booval	Waterford West
Drewvale	North Maclean	West Ipswich
Durack	North Tivoli	White Rock
East Ipswich	One Mile	Willawong
Eastern Heights	Oxley	Willowbank
Ebbw Vale	Pallara	Wishart
Eight Mile Plains	Park Ridge	Woodend
Ellen Grove	Park Ridge South	Woodridge
Flinders View	Parkinson	Wulkuraka
Forest Lake	Purga	Yamanto

Fire ant biosecurity zone 2

Alberton	Holland Park	Ormeau Hills
Alexandra Hills	Indooroopilly	Peak Crossing
Allenview	Jacobs Well	Pimpama
Anstead	Jamboree Heights	Pinjarra Hills
Ashwell	Jeebropilly	Plainland
Bahrs Scrub	Jimboomba	Priestdale
Bannockburn	Jindalee	Redford
Barellan Point	Kagaru	Redland Bay
Beerleigh	Kairabah	Riverhills
Belivah	Karalee	Robertson
Bellbowrie	Karana Downs	Rochedale South
Belmont	Karrabin	Rosevale
Blacksoil	Kenmore	Rosewood
Blenheim	Kents Lagoon	Salisbury
Brassall	Kingsholme	Seventeen Mile Rocks
Burbank	Laidley	Shailer Park
Calvert	Laidley Heights	Sheldon
Camp Hill	Laidley North	Sherwood
Capalaba	Laidley South	Silverbark Ridge
Carbrook	Lanefield	Silverdale
Carina	Lawes	Sinnamon Park
Carina Heights	Limestone Ridges	South Maclean
Carindale	Logan Village	Springwood
Cedar Creek	Loganholme	Stapylton
Cedar Grove	Lower Mount Walker	Steiglitz
Cedar Vale	Luscombe	Stockleigh
Chambers Flat	Lyons	Summerholm
Chandler	Macgregor	Tallegalla
Chapel Hill	Marburg	Tamborine
Chelmer	Merryvale	Tanah Merah
Chuwar	Middle Park	Tennyson
Cleveland	Milbong	Thagoona
Coleyville	Milora	The Bluff
College View	Minden	Thornlands
Coomera	Monarch Glen	Tingalpa
Coorparoo	Moorooka	Undullah
Corinda	Mount Cotton	Upper Coomera
Cornubia	Mount Crosby	Upper Mount Gravatt
Crowley Vale	Mount Forbes	Victoria Point
Daisy Hill	Mount Gravatt East	Walloon
Eagleby	Mount Marrow	Warril View
Ebenezer	Mount Mort	Washpool
Edens Landing	Mount Ommaney	Westlake
Fig Tree Pocket	Mount Walker	Willow Vale
Flagstone	Mount Walker West	Wilsons Plains
Flinders Lakes	Mount Warren Park	Windaroo
Forest Hill	Muirlea	Wolffdene
Gilberton	Mundoolun	Woodhill
Glen Cairn	Mutdapilly	Woodlands
Glenore Grove	Nathan	Woolshed
Goolman	New Beith	Woongoolba
Graceville	Norman Park	Yarrabilba
Grandchester	North Ipswich	Yatala
Gumdale	Norwell	Yeerongpilly
Haigslea	Ormeau	Yeronga
Harrisville		

Fire ant biosecurity zone 3

Brisbane Airport	Nudgee	Port Of Brisbane
Eagle Farm	Nudgee Beach	
Lytton	Pinkenba	

Fire ant carrier movement restrictions

Fire ant biosecurity zone 1	Fire ant biosecurity zone 2	Fire ant biosecurity zone 3
Moving soil*? To move soil from a property within biosecurity zone 1 you must have a biosecurity instrument permit unless: - the soil remains within zone 1; or - the soil is moved to a waste facility within zone 1 or zone 2.	**Moving soil*?** To move soil from a property within biosecurity zone 2 you must have a biosecurity instrument permit unless: - the soil remains within zone 2 or is moved to zone 1; or - the soil is moved to a waste facility within zone 1 or 2.	**Moving soil*?** To move soil from a property within biosecurity zone 3 you must have a biosecurity instrument permit unless: - the soil remains within zone 3; or - the soil is moved to a waste facility within zone 3.
Moving mulch, manure, baled hay or straw, potted plants or turf? To move these fire ant carriers from a property within biosecurity zone 1 you must either : - follow procedures outlined in the Biosecurity Regulation 2016; or - move the material to a waste facility within zone 1 or 2; or - move the material within 24 hours of being on the property. If you are unable to fulfil the above conditions then you must request a biosecurity instrument permit from an inspector.	**Moving mulch, manure, baled hay or straw, potted plants or turf?** To move these fire ant carriers from a property within biosecurity zone 2 you must either : - follow procedures outlined in the Biosecurity Regulation 2016; or - move the material to a waste facility within zone 1 or 2; or - move the material within 24 hours of being on the property. If you are unable to fulfil the above conditions then you must request a biosecurity instrument permit from an inspector.	**Moving mulch, manure, baled hay or straw, potted plants or turf?** To move these fire ant carriers from a property within biosecurity zone 3 you must either : - follow procedures outlined in the Biosecurity Regulation 2016; or - move the material to a waste facility within zone 3; or - move the material within 24 hours of being on the property. If you are unable to fulfil the above conditions then you must request a biosecurity instrument permit from an inspector.
Moving other fire ant carriers i.e. mining/quarrying products or by-products; compost? To move these fire ant carriers from a property within biosecurity zone 1 you must either: - move the material to a waste facility within zone 1 or 2; or - move the material within 24 hours of being on the property; or - obtain a biosecurity instrument permit from an inspector.	**Moving other fire ant carriers** i.e. mining/quarrying products or by-products; compost? To move these fire ant carriers from a property within biosecurity zone 2 you must either: - move the material to a waste facility within zone 1 or 2; or - move the material within 24 hours of being on the property; or - obtain a biosecurity instrument permit from an inspector.	**Moving other fire ant carriers** i.e. mining/quarrying products or by-products; compost? To move these fire ant carriers from a property within biosecurity zone 3 you must either: - move the material to a waste facility within zone 3; or - move the material within 24 hours of being on the property; or - obtain a biosecurity instrument permit from an inspector.

For soil* movement within the zones you must meet the General Biosecurity Obligation, see www.daf.qld.gov.au/fireants for more information.
*soil includes fill, clay, scrapings and any material removed from the ground at a site where earthworks are being carried out

Fire Ant Biosecurity Zone Map – RIFA02
15 June 2018

- Fire ant biosecurity zone 1
- Fire ant biosecurity zone 2
- Fire ant biosecurity zone 3
- Suburb
- Local Government Area

Contact the Department of Agriculture and Fisheries for more information or request a biosecurity instrument permit at www.daf.qld.gov.au/fireants or call 13 25 23

Queensland Government

Appendix 11: Significant detections (July 2017 to March 2019)

Location		Discovery		Infestation			Distance (km)		Treatment	Surveillance*			Carrier movement		Genetics	Notification
Suburb	Priority Area	Detected	Source	Mounds	Alates	Brood	Op. boundary	Nearest nest	DNI	Delineation	Targeted*	Validation	Inbound	Outbound	Social form	Steering Committee
Lowood	1	3/08/2017	Sentinel	9	Yes	No	5	10	10/08/2017	Yes	Yes	Clear	Unconfirmed	Unconfirmed	Monogyne	4/08/2017
Beaudesert	2,3,4	20/09/2017	Sentinel	5	Yes	Yes	6	11	21/09/2017	Yes	Yes	Clear	Yes	No	Monogyne	25/09/2017
Bridgeman Downs	2,3,4	5/01/2018	Public	1	No	No	1.4	4	5/01/2018	Yes	Yes	Clear	Yes	No	Monogyne	9/01/2018
Thornton	1	4/04/2018	Targeted	7	Yes	No	1.1	1.45	6/04/2018	Yes	Yes	Clear	No	Yes	Monogyne	6/04/2018
Blenheim	1	5/04/2018	Public	1	Yes	Yes	0.37	1.7	24/04/2018	Yes	Yes	Clear	No	No	Monogyne	10/05/2018
Thornton	1	11/05/2018	Targeted	1	No	No	2.4	1.45	18/05/2018	Yes	Yes	Clear	Yes	No	Monogyne	18/05/2018
Thornton	1	11/06/2018	Public	5	Yes	No	1.7	3	12/06/2018	Yes	Yes	Not required	No	No	Monogyne	15/06/2018
Labrador	Gold Coast	28/06/2018	Public	1	Yes	No	7.5	8.6	29/06/2018	Yes	Yes	Clear	No	No	Monogyne	2/07/2018
Townson	1	29/06/2018	Targeted	5	Yes	No	3.6	3.8	4/07/2018	Yes	Yes	Not required	Yes	No	Monogyne	5/07/2018
Helensvale	Gold Coast	4/07/2018	Targeted	19	TBC	TBC	0.47	1.9	6/07/2018	Yes	Yes	Results to come	No	Yes	Monogyne	6/07/2018
Brisbane Airport	2,3,4	24/07/2018	Public	5	Yes	Yes	0.73	3.4	26/07/2018	Yes	Yes	Results to come	Yes	No	Monogyne	27/07/2018
Helensvale	Gold Coast	30/07/2018	Targeted	7	TBC	TBC	1.3	5.6	2/08/2018	No	No	Results to come	Yes	No	Monogyne	2/08/2018
Southport	Gold Coast	8/08/2018	Targeted	6	Yes	Yes	6.8	3.2	11/08/2018	Yes	No	Results to come	No	No	Monogyne	10/08/2018
Brendale	2,3,4	22/08/2018	Targeted	3	Yes	No	2.8	5.3	28/08/2018	Yes	No	Results to come	No	No	Monogyne	12/09/2018
Boyland	2,3,4	29/08/2018	Sentinel	2	No	No	0.84	6	7/09/2018	Yes	Yes	Results to come	Yes	Yes	Monogyne	12/09/2018
Fernvale	2,3,4	22/10/2018	Targeted	1	No	No	3.8	8.9	25/10/2018	Results to come	No	Results to come	Yes	No	Monogyne	26/10/2018
Bromelton	2,3,4	15/02/2019	Public	31	Yes	TBC	1.8	5.1	19/02/2019	Results to come	Yes	Results to come	Yes	No	Monogyne	22/05/2019

*Surveillance of high-risk sites out from the area subject to delineation surveillance to a minimum of two kilometres.

Appendix 12: National Red Imported Fire Ant Eradication Program South East Queensland 2018–19 targets

#	Activity	Output target	Result Q1		Result Q2		Result Q3	
Area 1 Eradication Treatment Area, Western Boundary Area and Western Suppression Area								
1.	Planned treatment	100% of suitable habitat within Area 1 receives up to two rounds of treatment in the 2018–19 treatment season.	Not applicable*		Round 3 – 83%		YTD Round 3 – 98% YTD Round 4 – 61.50%	
2.	Planned treatment	Eradication treatment applied over approximately 14 235 sites and 87 583 ha during 2018–19.	Not applicable*		Area 1 – Round 3 72 895 ha # Sites – 12 527		Area 1 Round 3 – 85 839 # Sites – 14 000 Round 4 – 53 870 ha # Sites – 8000	
3.	Planned treatment	100% of suitable habitat within the Western Boundary area receives up to two rounds of treatment in the 2018–19 treatment season.	Not applicable*		Round 1 – 0%		YTD Round 1 – 36.5% YTD Round 2 – 0.1%	
4.	Planned treatment	Eradication treatment applied over approximately 10 022 sites and 77 713 ha during 2018–19.	Not applicable*		Western Boundary Round 1 – 6 ha # Sites – 73		Western Boundary Round 1 – 28 303 ha # Sites – 5263 Round 2 – 6 ha # Sites – 67	
5.	Planned treatment	100% of suitable habitat within the area receives up to two rounds of treatment in the 2018–19 treatment season.	Not applicable*		Western Suppression Round 2 – 0%		Western Suppression YTD Round 2 – 11% YTD Round 3 – 0%	
6.	Planned treatment	Suppression treatment applied over approximately 2765 sites and 19 181 ha during 2018–19.	Not applicable*		Western Suppression Round 2 – 0 ha # Sites – 5		Western Suppression Round 2 – 2020 ha # Sites – 1099	
7.	Treatment communication and stakeholder engagement	41 000 residents within Area 1 Eradication Treatment, Western Boundary and Western Suppression areas are provided targeted treatment information, including property access and their general biosecurity obligations, via various channels prior to and during the treatment season.	222 500		276 045		621 614	
8.	Treatment communication and stakeholder engagement	100% of instances of denial of access resolved and access achieved by the end of the current treatment round.	Not applicable*		N/A None of the treatment rounds were completed during the period		Unable to verify data at this point in time to provide accurate reporting figures	
9.	Responding to new detections	100% of new detections posing a high risk to public safety are treated by direct nest injection within 2 business days of positive identification.	Detection 1	Percentage 100%**	Detection Nil	Percentage Nil**	Detection 1	Percentage 100%
10.	Responding to new detections	100% of new high-risk detections are treated within 10 business days of positive identification.	Detections 4	Percentage 50%**	Detection 2	Percentage 50%**	Detection 4	Percentage 100%
11.	Responding to new detections	100% of new detections are treated within 15 business days of positive identification.	Detections 43	Percentage 33%**	Detection 24	Percentage 33%**	Detection 23	Percentage 87%

#	Activity	Output target	Result Q1		Result Q2		Result Q3	
12.	Responding to new detections	100% of reports or sample submissions from the public that are positively identified as fire ant result in a communication outlining treatment expectations within 10 days of the date of positive identification.	Currently unavailable***					
13.	Boundary management	A minimum of 5500 ha of planned surveillance completed.	1864 ha # Sites – 344		269 ha # Sites – 176		38 ha # Sites – 10	
14.	Boundary management	A pilot program launched to recruit, train and support a limited number of landholders in undertaking surveillance on their own property as part of the planned surveillance program.	Not yet commenced				Under development	
15.	Boundary management	100% of all significant detections treated in accordance with the relevant protocol.	100%		100%		100%	
16.	Boundary management	100% of significant detections cleared as eradicated 12 weeks after treatment.	100%		100%		100%	
Areas 2–4								
17.	Responding to new detections	100% of new detections posing a high risk to public safety are treated by direct nest injection within 2 business days of positive identification.	Detections 46	Percentage 26%**	Detections 55	Percentage 44%**	Detections 53	Percentage 42%
18.	Responding to new detections	100% of new high-risk detections are treated within 10 business days of positive identification.	Detections 191	Percentage 51%**	Detections 182	Percentage 65%**	Detections 137	Percentage 85%
19.	Responding to new detections	100% of reports or sample submissions from the public that are positively identified result in a communication to the submitting entity outlining treatment expectations within 10 days of the date of positive identification.	Currently unavailable***					
20.	Development corridors	Suppression treatment applied over approximately 3800 ha of development corridors during 2018–19.	Not applicable		Treatment has not commenced			
21.	High density infestation	Suppression treatment applied over approximately 3000 ha of high-density infestation during 2018–19.	Not applicable		Treatment has not commenced		1415 ha # Sites – 49	
22.	Polygyne colonies	Three rounds of treatment applied over approximately 1470 ha infested by polygyne colonies during 2018–19.	Not applicable		Treatment has not commenced			
23.	Boundary management	Suppression treatment applied over approximately 24 250 ha near the operational boundary.	Not applicable*		33 ha # Sites – 62		3.75 ha # Sites – 2	
24.	Boundary management	A minimum of 4750 ha of planned surveillance completed.	2950 ha # Sites – 1873		164 ha # Sites – 57		0.8 ha # Sites – 1	
25.	Boundary management	100% of all significant detections treated in accordance with the relevant protocol.0	100%		100%		100%	
26.	Boundary management	100% of significant detections cleared as eradicated 12 weeks after treatment.	100%		100%		100%	
Gold Coast Development Corridor								

#	Activity	Output target	Result Q1	Result Q2	Result Q3
27.	Eastern suppression	100% of designated planned suppression treatment areas within the Gold Coast local government area receive up to two rounds of treatment.	Not applicable*	81%	YTD Round 1: 91% YTD Round 2: 79%
28.	Eastern suppression	Suppression treatment applied over approximately 15 583 sites and 13 643 ha during 2018–19.	Not applicable*	11 095 ha # Sites – 12 359	12 337 ha # Sites – 13406
29.	Eastern suppression	35 800 residents within Eastern Suppression Area are provided targeted treatment information, including property access and their general biosecurity obligations, via various channels prior to and during the treatment season.	120 000	95 911	56 631
30.	Eastern suppression	100% of instances of denial of access resolved and access achieved by the end of the current treatment round.	Due Q4		
31.	Industry engagement	Eight of the largest residential development and civil construction companies directly engaged on at least 4 occasions throughout 2018–19.	8 engaged	5 engaged	8 engaged
32.	Development treatment	100% of designated planned suppression treatment areas within the Gold Coast local government area receive up to two rounds of treatment.	Not applicable*	Treatment has not commenced	
33.	Development treatment	Suppression treatment applied over approximately 700 ha during 2018–19.	Not applicable*	78 ha	80 ha
34.	Boundary management	100% of designated suppression treatment areas within the Gold Coast local government area receive up to two rounds of treatment.	Not applicable	Treatment has not commenced	
35.	Boundary management	Suppression treatment applied over approximately 1500 ha during 2018–19.	Not applicable	0.4 ha # Sites – 7	19. 05 ha # Sites – 18
36.	Targeted surveillance	A minimum of 750 ha of planned surveillance completed during 2018–19.	816 ha # Sites – 393	76 ha # Sites – 31	Nil
37.	Compliance monitoring	100% of large-scale development sites undergo compliance monitoring at least once.	100%	100%	100%
38.	Responding to new detections	100% of new detections posing a high risk to public safety are treated by direct nest injection within 2 business days of positive identification.	Detections 8 / Percentage 63%**	Detections 3 / Percentage 67%**	Detections 1 / Percentage 100%
39.	Responding to new detections	100% of new high-risk detections are treated within 10 business days of positive identification.	Detections 34 / Percentage 56%**	Detections 14 / Percentage 79%**	Detections 1 / Percentage 100%
40.	Responding to new detections	100% of reports or sample submissions from the public that are positively identified result in a communication to the submitting entity outlining treatment expectations within 10 days of the date of positive identification.	Currently unavailable***		
Compliance					
41.	Preventing human-assisted spread	100% of sites assessed as at risk in relation to product movement, high-density or polygyne infestation will undergo compliance monitoring within 5 days of notification.	Due Q2	100%	100%

#	Activity	Output target	Result Q1	Result Q2	Result Q3
42.	Preventing human-assisted spread	Compliance checks conducted for half of biosecurity instrument permits in effect during 2018–19.	Annual Target – 87 21 BIPs conducted = 24%	Annual Target – 87 30 BIPs conducted = 34%	Annual Target – 87 11 BIPs conducted = 13%
43.	Preventing human-assisted spread	100% of cases of non-compliance are resolved within 1 month except where a formal investigation is required.	100%	73% (17 of 23 cases of non-compliance resolved within a month)	55% (15 of 27 cases of non-compliance resolved within a month)
44.	Preventing human-assisted spread	A compliance strategy is developed for major development corridors including Brisbane to Gold Coast and Brisbane Airport.	Gold Coast strategy developed and ongoing implementation Brisbane Airport strategy under development	Brisbane Airport strategy still under development. Will be completed in Q3.	Both Gold Coast and Airport strategies under implementation.
45.	Preventing human-assisted spread	The risk of human-assisted spread posed by at least 6 high-risk industries is reduced as a result of targeted engagement and compliance activities.	Annual target		
46.	Preventing human-assisted spread	A total of 500 high-risk businesses visited to communicate movement restrictions, assess compliance levels and identify barriers to compliance.	190 checks	232 checks	205 checks
47.	Preventing human-assisted spread	A total of 2000 communication activities, including correspondence sent to industry groups, regarding movement restrictions are undertaken with high-risk businesses.	Nil	488 communication activities	Nil
48.	Biosecurity zones	100% of new detections made outside biosecurity zones will undergo compliance monitoring within 5 business days of notification.	92%	93%	100%
Continuous improvement					
49.	Eradication planning	The 2019–20 Work Plan is completed by the end of May 2019 and the Surveillance Plan completed by the end of April 2019.	Due Q4		
50.	Information systems	Treatment and surveillance undertaken by the Program will be recorded through a mobile, digital solution by end of 2018–19.	Underway		The Program has been investigating existing, internal to the department, and external field mobility solution options.
51.	Information systems	All systems are fully functional for 95% of business hours.	99%	99.9%	99.9%
52.	Information systems	Future state systems solution based on recommendations of ICT systems review decided by the end of 2018–19.	Annual target		Work currently underway, evaluating Program business processes and system capabilities.
53.	Remote sensing surveillance	Field trials of a remote sensing surveillance prototype are complete by the end of 2018–19.	Annual target		
54.	Remote sensing surveillance	A remote sensing solution that identifies red imported fire ant mounds, with a confirmed true positive detection rate of at least 50%.	Annual target		
Science					
55.	Diagnostic services	All suspect fire ant samples submitted to the Program diagnosed and results communicated internally within 2 business days.	92%	100%	100%
56.	Diagnostic services	100% of ant samples are accurately identified and results reported.	99.9%	99.6%	99.6%

#	Activity	Output target	Result Q1	Result Q2	Result Q3
57.	Genetic testing	Social form testing to determine whether a colony is monogyne or polygyne undertaken within 30 working days of sample submission to the lab.	91%	94.5%	85%
58.	Genetic testing	100% of significant detection reports include sub-population assignment**** social form assessment, and where relevant, outcomes of relationship testing.	100%	100%****	NA
59.	Genetic testing	No increase in the proportion of the fire ant population confirmed as polygyne.	Nil	No increase	
60.	Genetic testing	No increase in the genetic fitness within the South East Queensland infestation, as measured by the number of sub-populations.	Biennial target		
61.	Genetic testing	No new, previously unknown populations identified.	Annual target		
62.	Genetic testing	No decrease in the percentage of males identified as sterile.	Annual target		
63.	Odour detection dog surveillance	All dogs demonstrate detection of more than 80% of fire ant nests in defined search areas.	Annual target		
64.	New product testing	Results of trials of new products for the eradication of fire ant, due to be completed by the end of 2018, are incorporated into treatment plans if successful.	Due Q3	Due Q3	NA No trials of new products were undertaken in 2018. A bait trial commenced in Q3 and will finish in Q2 2019–20
65.	Treatment efficacy monitoring	100% of bait randomly sampled for chemical residue testing, from 10% of bait supplied, meets minimum standards.	Due Q2	100%	100%
66.	Treatment efficacy monitoring	A total of 100 nests, from between 10 and 15 sites, monitored through the 2018–19 treatment season.	Due Q2	40–50 sites identified for ground-truthing and monitoring establishing in Q3	11 sites chosen and suitable for efficacy monitoring with 129 nests in total
67.	Treatment efficacy monitoring	Nests observed as in decline, with visible bait effects, at all treatment efficacy sample sites.	Due Q2	6 sites – 23% of the original nests were still healthy after 2 rounds of treatment	6 sites – 3% of the original nests still healthy after 3 rounds of treatment
68.	Science planning	Sites for planned surveillance have been selected by the end of December 2018.	Due Q2	>300 sites selected	The majority of sites have been visited and ground-truthed to verify their suitability based on initial desktop analysis. Additional sites will be identified to replace any sites that become deemed unsuitable for use
69.	Science strategy	The Program Science Plan 2019-2023 is completed by the end of 2018–19.	Annual target		
Engagement					
70.	New systems and approaches	Customer Relationship Management (CRM) software and processes successfully integrated within the Program by end of 2018–19.	Annual target		
71.	New systems and approaches	30% of the total suspect ant reports for 2018–19 submitted via the CRM online portal.	Result from Q2 onwards	35%	37%
72.	New systems and approaches	25% of training requests are self-booked by attendees via the CRM online portal.	Result from Q2 onwards	24%	83%
73.	Encouraging community surveillance	30 000 people directly engaged through one-on-one conversation and provision of supporting information during 2018–19.	16 437 people engaged	3988 people engaged	1791 people engaged
74.	Encouraging community surveillance	4 million people exposed to key messages through indirect methods such as broadcast or mass media methods during 2018–19.	4.8 million people	2 865 900 people	318 216 people

#	Activity	Output target	Result Q1	Result Q2	Result Q3
75.	Encouraging community surveillance	5000 total suspect ant reports received from the public in 2018–19.	1276 total suspect ant reports received from the public	2518 total suspect ant reports received from the public	2496 total suspect ant reports received from the public
76.	Encouraging community surveillance	100% of suspect ant reports from the public receive an acknowledgement of receipt within 2 business days.	Currently unavailable***		
77.	Encouraging community surveillance	50% of suspect ant samples submitted by the public positively identified as fire ant.	79%	56%	69%
78.	Industry engagement	2000 industry and local council personnel targeted through attendance at fire ant awareness training sessions.	515 personnel attended training	542 personnel attended training	887 personnel attended training
Performance management					
79.	Strategic policy and Program performance	A policy for self-treatment for fire ants by landowners, businesses and general pest management technicians is developed by April 2019.	On track	On track	Policy proposal developed
80.	Strategic policy and Program performance	An update to the fire ant biosecurity zones is completed by July 2019.	Due next financial year		
81.	Strategic policy and Program performance	A protocol for dealing with detections of importance and to define the operational boundary is completed by December 2018.	On track	Completed	
82.	Strategic policy and Program performance	A policy for treatment will be completed by January 2019.	On track	On track	Completed
83.	Strategic policy and Program performance	The Ten Year Eradication Plan is reviewed and updated by June 2019 for approval by the Steering Committee.	On track	On track	Addendum to the Ten Year Plan completed and with the Steering Committee for approval
84.	Strategic policy and Program performance	The Program Risk Management Plan is reviewed and updated by June 2019.	Due Q4		
85.	Strategic policy and Program performance	Quarterly reports are submitted to the Steering Committee for approval within 2 months at the end of each quarter.	Q1 report approved	Q2 submitted to Steering Committee for approval	Q3 submitted to Steering Committee for approval in May
86.	Budget and finance	Program expenditure does not exceed approved budget for 2018–19.	$0.7 million below YTD budget	$0.3 million above YTD budget	$2 million above YTD budget
87.	Budget and finance	All outstanding financial audit issues identified in the Chief Financial Officer assurance statement are actioned within 45 days of the internal controls self-assessment survey being signed off.	Not applicable	Due Q4	
88.	Budget and finance	Capital expenditure proposals for 2019–20 submitted to the Steering Committee for endorsement by 31 January 2019.	Due Q3	Due Q3	Not Required at this point in time
89.	Quality management	A plan for quality management is developed by the end of December 2018.	Due Q2	Under development	Plan has been developed is awaiting approval by management
90.	Quality management	External auditors appointed to undertake reviews of Program finances and efficiency by the end of June 2019.	Annual target		
91.	Quality management	All surveillance tools in use demonstrate detection of more than 80% of fire ant nests in defined search areas.	Annual target		
92.	Quality management	80% of all assessments of field staff adherence with Program protocols result in verification of compliance.	Annual target		

#	Activity	Output target	Result Q1	Result Q2	Result Q3
93.	Quality management	Desktop analysis of a statistically significant area per treatment round demonstrates bait coverage is consistent with the relevant protocol.	Annual target		96.94% treatment coverage
94.	Quality management	Field assessments of a statistically significant area per treatment round demonstrates 100% of bait application is consistent with the relevant protocol.	Annual target		
95.	Quality management	75% of high-risk sites undergo verification checks to ensure non-disturbance of bait applications and compliance with the treatment GBO.	Not applicable*	47% 46 treatment GBO checks of 97 high-risk sites	10% 10 treatment GBO checks of 97 high-risk sites
96.	Quality management	100% of sites in each treatment round are completely treated within 12 weeks.	Not applicable	Due Q3	Unable to verify data at this point in time to provide accurate reporting figures
97.	Quality management	Subsequent treatment rounds are completed within 10–14 week period from initial treatment round (only applicable in second round of 2018–19 treatment).	Not applicable		
98.	Accommodation	A plan for securing accommodation needs in 2019–20 complete by the end of April 2019.	Due Q4	Due Q4	Relocation to Berrinba was completed in November 2018 and as such, a plan to secure accommodation is not required for the rest of the financial year.
99.	Accommodation	100% of Program accommodation requirements secured 60 days prior to occupation.	100%	Not applicable	Not applicable see target 98
100.	Procurement	100% of major purchases (over $5000) are in full compliance with relevant procurement policies and procedures.	100%	100%	100%
101.	Procurement	100% of Program staff undertaking procurement activities receive professional advice or training to ensure their full compliance with policies and procedures.	100% of relevant Program staff	100%	100%
102.	Human Resources	At any point during 2018–19 the number of positions vacant in excess of 12 consecutive weeks be less than 5% of the current establishment.	Due Q2	11%	6%
103.	Human Resources	60% of staff express a sense of positive engagement with the Program.	Annual target	Due Q3	32%
104.	Human Resources	20% reduction in time lost to incidents.	Due Q2	33% reduction since last quarter (Q2 total – 1)	100% reduction No incidents occurred in the category of major injury with lost time
105.	Human Resources	5% reduction in workplace health and safety incidents.	10% increase since the last quarter (Q1 total – 64)	21% decrease since last quarter (Q2 total – 54)	36% reduction since last quarter (Q3 total – 32)

* Not applicable – this target relates to treatment season which will commence in the second quarter (October to December 2018).

** The Program is working to recalibrate work practices to meet these targets, it is expected that progress against this target will be incremental.

*** Currently unavailable – CaSES Reporting system not operational as yet.

**** Sub-population assignment only happens once per year.