Quarterly Report 1
2020–21

National Red Imported Fire Ant Eradication Program
South East Queensland

Report to: National Steering Committee

Period: July–September 2020

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1. Scope of report

The National Red Imported Fire Ant Eradication Program began its 10-year Eradication Plan in July 2017, which is focused on finding, containing and eradicating fire ants in South East Queensland.

Running from 2017–27, the 10-year Eradication Plan's underpinning strategy for each area subject to eradication is made up of five phases and three checkpoints before Proof of Freedom from fire ants is declared (see Table 1 below). The aim is to contain the extent of the fire ant infestation (Phase 1) and reduce the size of the infestation in South East Queensland until fire ants are eradicated in a staged, rolling treatment program from west to east.

Table 1: Overview of fire ant management strategy

Phase	What?	How long?
Phase 1: Containment	Establishing and containing fire ant infestation boundaries	Until area moves to Phase 2: Eradication in line with the program's *10-year Eradication Plan*
Phase 2: Eradication (treatment)	Treatment of large, targeted eradication areas	Over 1-3 years depending on eradication treatment approach
Checkpoint 1: Evaluation of eradication treatment completion to check success of treatment		
Phase 3: Clearance	Search eradication areas and treat any residual fire ants	Minimum 2 years
Checkpoint 2: Check probability of freedom from fire ant infestation for each clearance zone		
Phase 4: Clearance zone freedom	Conduct further surveillance in Clearance Zones to be confident no fire ants remain	Until risk of ceasing surveillance is acceptably low (1-5 years)
Checkpoint 3: All clearance zones have individually reached a low risk level of fire ants		
Phase 5: (Area) Freedom	Respond to any detections reported with active surveillance discontinued	When there is overall probably all of South East Queensland is free from fire ants (5+ years)
All clearance zones declared free = **Proof of Freedom declared of Queensland Infestation**		

This report outlines progress in delivering the 10-year Eradication Plan, and the program's annual work plan, including relevant key performance indicators for the period of July–September 2020.

2. Key insights

Progress against key performance indicators (KPIs)

Progress against program KPIs is summarised in Table 2. Most KPIs are reported on a yearly and/or three-yearly basis, however since they apply to activities scheduled at different times not all KPIs are reported in the quarterly reports.

Table 2: Progress against KPIs traffic light report as at 30 September 2020

track/progress as anticipated | Monitoring/minor issues | Off track/critical issues | Not required/not measurable at this time

Mobilisation				
Objectives	**KPI**	**KPI target (2020–21)**	**Progress against KPIs**	**Status**
1 Stakeholders within, and adjacent to, the fire ant biosecurity zone are aware of the presence of fire ants, risks, controls and options to manage them	**a.** Percentage of stakeholders aware of the presence of fire ants in South East Queensland	92% of stakeholders report awareness in surveys by June 2021	The procurement process to obtain market research is underway with a baseline report expected in December 2020 and follow up in June 2021.	●
	b. Percentage of stakeholders aware of the risks posed by fire ants	30% of stakeholders report awareness in surveys by June 2021	As above.	●
	c. Percentage of stakeholders aware of fire ant biosecurity zones	60% stakeholders report awareness in surveys by June 2021	As above.	●
	d. Percentage of stakeholder aware of fire ant self-management options	30% of stakeholders report awareness in surveys by June 2021	As above.	●
2 Stakeholders within the fire ant biosecurity zone support the program and its activities to eradicate fire ants	**a.** Percentage of stakeholders opposing NRIFAEP operations	Less than 1% opposition annually	The program received nine refusals to treatment which is 0.1% of the 7288 sites visited in total this quarter.	●
	b. Percentage stakeholder disclosing to be satisfied with NRIFAEP operations	90% stakeholders disclosing to be satisfied with NRIFAEP operations by June 2021	The procurement process to obtain market research is underway with a baseline report expected in December 2020 and follow up in June 2021.	●
3 Stakeholders within the fire ant biosecurity zone actively participate in fire ant self-management actions (i.e. checking yards, reporting fire ants and/or treating fire ants)	Percentage of stakeholders disclosing that they participate in fire ant self-management actions	20% stakeholders participating in fire ant self-management actions by June 2021	As above.	●

Containment				
Objectives	**KPI**	**KPI target (2020–21)**	**Progress against KPIs**	**Status**
4 To mitigate the spread and establishment of fire	**a.** Percentage of stakeholders who treat fire ants themselves (i.e. self-management)	10% increase annually in stakeholders surveyed disclosing that they treat fire ants themselves	The procurement process to obtain market research is underway with a baseline report expected in December 2020 and follow up in June 2021.	●

Objectives		KPI	KPI target (2020–21)	Progress against KPIs	Status
	ants by reducing the relative density and vigour of the fire ant infestation	**b.** Percentage of fire ant infestations that are polygyne	Less than 1% of fire ant infestations are polygyne	Due to issues with the purchase of laboratory consumables during COVID-19, only 50 (13.2%) of samples for Q1 were tested for social form. Of these, ~5.6% are polygyne; however, this value is likely inaccurate due to the large number of samples still to test and the fact suspect polygyne samples are prioritised ahead of other samples. The Q2 report will include an update.	
		c. Relative spread of fire ants within containment area as measured through population genetics	Maintain at 4 or increase the number of genetically distinct fire ant populations (i.e. family clusters) within South East Queensland	To be evaluated annually and provided in the Quarter 2 report. Genetic sampling on-going within area.	
5	To mitigate spread of fire ants by restricting the movement of fire ant carriers (materials) within, between and beyond the fire ant biosecurity zone	**a.** Percentage of high-risk stakeholders aware of fire ant movement controls	50% of high-risk stakeholders are aware of movement restrictions / requirements by June 2021	The procurement process to obtain market research is underway with a baseline report expected in December 2020 and follow up in June 2021.	
		b. Percentage of high-risk stakeholders checked for compliance with human-assisted fire ant movement controls	The top 25% riskiest stakeholders checked for compliance at least once annually	• 126 checks have been undertaken which is 7% of the 1698 (top 25% riskiest stakeholders) planned audits. • Less checks than planned were undertaken this quarter due to four vacancies in the compliance operational team. Recruitment is underway with additional officers expected next quarter.	
		c. Number of significant detections linked to human-assisted movement	Zero significant detections linked to human assisted movement	• None of the three significant detections, nor the additional four detections found outside of the Operational Area boundary this quarter have been linked to human assisted movement.	
6	To mitigate the establishment of fire ants near (within 5 km) and beyond the 2019–20 operational boundary.	**a.** Total area that is surveyed for fire ants near and beyond the operational boundary	Area surveyed in a surveillance season is increased by 25% (7136 ha) from 2019-2020 levels (5709 ha) by June 2021	• 4136 ha of surveillance has been completed including 2888 ha within 5 km of the operational boundary and 1248 ha outside the operational boundary.	
		b. Percentage of stakeholders living near and beyond operational boundary who look for and/or treat fire ants themselves	50% stakeholder participation by June 2021	The procurement process to obtain market research is underway with a baseline report expected in December 2020 and follow up in June 2021.	
		c. Presence/absence of fire ants following prescribed treatment regime at a site detection of fire ants near and beyond the 2019-20 operational boundary	Zero fire ants that are likely to be from original nests remaining alive 12 months after prescribed treatment regime	• Post-treatment validation surveillance was conducted on eight sites near and beyond the operational boundary with no remnant infestation found.	
7	To mitigate the re-establishment of fire ants in eradication and clearance areas from adjoining (within 2 km from; buffer areas) fire ant infested areas	**a.** Percentage stakeholders living in buffer areas who look for and/or treat fire ants themselves	10% stakeholder participation by June 2023	The procurement process to obtain market research is underway with a baseline report expected in December 2020 and follow up in June 2021.	
		b. Percentage of buffer area receiving the prescribed treatment regime for fire ant containment (i.e. 2x insecticide treatment)	Prescribed treatment regime applied to 99% of planned area	• The program is behind schedule but has capacity to still meet the target by 30 June 2021. Treatment in the Western Overlap commenced 1 September. Of the budgeted 20 013 ha planned to be treated during September 1731 ha (8.65%) has been completed. • Treatment delivered was less than planned due to aerial treatment being grounded. This was due to the need to develop a new Specific Task Analysis and Risk Assessment	

Objectives		KPI	KPI target (2020–21)	Progress against KPIs	Status
				(STARA) in consultation the Department of Agriculture and Fisheries (DAF) Aviation Committee prior to aerial treatment commencing.	
		c. Presence/absence of fire ants following application of prescribed treatment regime for fire ant containment at a site detection of fire ants within a buffer area	Zero fire ants remaining from original nests 12 months after prescribed treatment regime completed	• Post-treatment validation surveillance conducted on 18 sites found no remnant ants	
8	Assist with other (outside of SEQ) fire ant detection and eradication activities in Australia as requested	The reported level of stakeholder satisfaction of the program's response to requests for assistance with new fire ant incursions	100% satisfaction reported by stakeholders	The program will provide assistance to the Western Australian Government with clearance of their incursion, and communication and engagement. Assistance by the program will depend on the free movement between borders as a result of COVID-19.	

Eradication

Objectives		KPI	KPI target (2020–21)	Progress against KPIs	Status
9	To effectively eradicate fire ants from targeted areas within South East Queensland	**a.** Percentage of stakeholders who support NRIFAEP activities within eradication area	Less than 1% stakeholder opposition annually	The program received nine refusals to treatment which is 0.1% of the 7288 sites visited in total.	
		b. Total area receiving prescribed treatment regime for fire ant eradication (i.e. all planned insecticide treatment rounds)	Prescribed treatment regime applied to 99% of planned area	Treatment in Area 2 commenced 1 September. Of the budgeted 45 753 ha planned to be treated during September, 4948 ha (10.8%) was completed. See 7b above re the late start of aerial treatment.	
		c. Number of fire ant nest infestations in monitoring (positive control) sites following completion of prescribed treatment regime	Zero fire ants present in monitoring sites (Area 1/WB) within three months of completion of prescribed treatment regime	Area 1/WB monitoring was completed in early 2020 with no fire ants detected following the prescribed treatment regime. Eradication Area 2 monitoring was established but will not be finalised until after June 2021.	
		d. Percentage of eradication area within which fire ants are detected following prescribed treatment regime completion	Residual fire ant infestations are detected in less than 1% of the eradication area (Area 1/WB)	• The eradication area (A1/WB) consists of 23 950 sites (or properties) of which a sample number of sites is surveyed in line with the clearance surveillance priority map with higher risk zones surveyed first. • From June to September, 31 detections were found—representing detections in approximately 2.3% of all sites surveyed. • Surveillance is continuing into the lower risk zones, where it is anticipated significantly less remnant ants will be found. This will likely result in the expected overall KPI of less than 1% fire ants found across the Area 1/WB sample sites.	
10	To progressively decrease the fire ant infestation in South East Queensland through targeted eradication	Increase in the operational area that has effectively completed a prescribed treatment regime for fire ant eradication (as in obj 9)	33% of the 2019–2020 operational area by June 2021	• Treatment began in Area 2 and the Western Overlap area in September. • By June 2021 (following the current treatment season) the total area to have received treatment as a proportion of the total operational area will be 33% (Total area of WB, EA1 and A2 = 211 580.65ha; Total area of operational boundary = 645 105.25ha).	

Objectives		KPI	KPI target (2020–21)	Progress against KPIs	Status
11	To reduce the cost of fire ant eradication treatment, monitoring and surveillance activities while meeting KPIs	**a.** Average per hectare cost of the program's prescribed treatment regime to effectively eradicate fire ants	Average per hectare cost of applying prescribed treatment regime for fire ant eradication is reduced by 10% from 2019-20 costs	The calculation for this KPI is being finalised.	●
		b. Average per hectare cost of the program's fire ant monitoring and surveillance regimes to effectively eradicate fire ants	By June 2023, average per hectare cost of monitoring and surveillance regime is reduced by 10% from 2019-20 costs	As above.	●

Clearance

Objective		KPI	KPI target (2020–21)	Progress against KPIs	Status
12	To detect and destroy any residual fire ant infestations and gather evidence to support the demonstration of freedom from fire ants in clearance areas	**a.** Searches of locations[2] deemed to be at highest risk of residual fire ants	The top 10% riskiest locations[3] have been searched by June 2021	• Planned clearance surveillance is on track; 1861 ha of the top 10% of riskiest locations has been surveyed by 30 September 2020. This is 37.22% of the planned target.	●
		b. Total area searched for the presence/absence of fire ants	Every clearance zone has at least 5% of the area[4] surveyed by June 2021	• As of 30 September, 89 of the 93 clearance zones had a minimum 5% of the planned area surveyed. • Two of the unsurveyed zones do not have safe viable habitat to survey and will not be surveyed.	●
		c. Presence/absence of fire ants in areas searched	Zero fire ant detections at locations **other than** the top 20% riskiest locations	• This target was not met. Fifteen (15) detections were outside the top 20% riskiest locations. • The program's response to clearance detections is summarised in the clearance section below.	●
		d. Presence/absence of fire ants following application of prescribed treatment regime for fire ant clearance at a site detection of importance	Zero fire ants remaining from original nests 12 months after prescribed treatment regime completed	• Thirty-one (31) detections were made in the clearance area this quarter. • Treatment will be undertaken to ensure zero fire ants remain from original nests 12 months after the prescribed treatment regime is completed.	●

1. Re Objective 10: The program Work Plan stated 38% instead of 33% and was a calculation error that will be corrected in a future update of the 2020–21 Work Plan. 2. Re Objective 12a: 'Sites' has been replaced by 'locations' for this KPI due to a change in terminology made after the 2020–21 Work Plan was completed. It will be corrected in a future update of the Plan. 3. Re Objective 12a Clearance zones are prioritised in line with the Clearance and Proof of Freedom Surveillance Optimisation Framework residual ant risk score based on the history of treatment in the zone. 4. Re Objective 12b: Areas with a viable habitat to survey only.

Summary of planned treatment and surveillance

Planned treatment includes eradication and suppression treatment.

Table 3: Planned treatment program schedule 2020–21 as at 30 September 2020

Task		Month	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Planned Treatment	Planned Season Ha	YTD Ha												
Area 2	185,689	4948												
Western Overlap	43,604	1712												
Eastern Overlap	40,060	0												
Southern Containment	46,422	0												

Planned — On track — Delayed but expected to complete — Risk of not achieving target

Table 4: Planned treatment as at 30 September 2020

Area	No. of hectares			
Location	Planned Year Total	Planned YTD Total[2]	YTD Actual	% YTD
Area 2	185 689	22 106	4 948	22.38
Western Overlap	43 604	4 237	1 731	40.85
Eastern Overlap[1]	40 060	0	0	0
Southern Containment[1]	46 422	0	0	0
Total	315 775	26 343	6 679	25.35

1. Scheduled to begin treatment from 10 November 2020. 2. The total planned treatment differs to that budgeted because treatment activity is responsive to the changing needs for each week/month of the treatment period. See Finance on p28 for further information.

See **Appendix 1** to view the progress map.

Table 5: Planned surveillance program schedule 2020–21 as at 30 September 2020

Task	Planned Season Ha	YTD Ha	Month: Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Planned Surveillance														
Clearance - High Priority	5000	1860												
Clearance - Low Priority	8250	3525												
Sentinel	1570	1637												
Targeted	2630	3203												
Responsive Surveillance														
Public Reports / Delineation	8960	8269												

Planned On track Delayed but expected to complete Risk of not achieving target

Each clearance zone is assigned a residual fire ant risk score—based on the history of treatment in this zone—and ranked by risk relative to each other. The 10 clearance zones with the highest relative risk are high priority and assigned to receive 125ha of clearance surveillance, while all other clearance zones are to receive 15 ha of clearance surveillance.

Table 6: Surveillance progress 2020–21 – planned and responsive

Surveillance Task*	Year to Date Completed Area (Ha)	Planned Area (Year to date Ha)	Year to Date Sites Completed	Planned sites (Year)
Sentinel	1 637	1 570	305	265
Clearance	5 385	5 000	932	1 560
Targeted	3 203	2 630	1 881	2 864
Responsive	8 269	1 620**	6 200	N/A
Total	**18 494**	**10 820**	**9 318**	**4 689**

*Sentinel surveillance – planned surveillance on sites outside and just inside the operational boundary; Clearance surveillance – planned surveillance on sites within previous eradication treatment areas: Area 1 and Western Boundary; Targeted surveillance – planned surveillance on sites within 5 km of the operational boundary which had previous infestation; '** This refers to a notional allocation for responsive surveillance around new detections based on previous years, for planning purposes only. FAMS = program's Fire Ant Management System (FAMS). See Containment below for further information on surveillance.

The surveillance season commenced in late June 2020 and concluded at the end of August 2020. The program will continue surveillance in the clearance areas for the remainder of the financial year as planned. See **Appendix 2** to view the progress map.

3. Mobilisation: Activities to generate and maintain stakeholder awareness, support and participation that enables fire ant elimination from South East Queensland.

This quarter marked the roll out of a considerable body of work to mobilise the South-East Queensland community and invite them to join the fight against fire ants. This involved raising stakeholder awareness in, and support and participation for the program's work in eradication as well as for a whole of community approach to managing fire ants. Major campaigns to support eradication treatment (Area 2) and surveillance (Area 1 and western boundary) have featured this quarter, while the work which commenced last quarter to prevent the spread of fire ants (Biosecurity Zones and Regulation changes) through human assisted movement has continued. In addition, for those areas not subject to the program's eradication treatment, the communication and engagement has focussed on raising awareness of the risks of fire ants and empowering the community to treat fire ants in their own backyard. Treating fire ants as they do any other pest (until eradication treatment comes to their area) will help keep residents safe and improve liveability of their home and community. These strategies received positive support from National Biosecurity Communication and Engagement Network (NBCEN) when presented this quarter.

After budgets were finalised, procurement commenced on several major projects including engagement of a research company to deliver baseline data supporting mobilisation key performance indicators. Appointment of a research agency is due in October 2020. Approval was also given to move forward on program rebranding along with a website review and upgrade in consultation with Department of Agriculture and Fisheries' online digital teams.

Raising stakeholder awareness

Major campaign—Surveillance Season in Area 1 and the western boundary

A different approach was taken this season in Area 1 and western boundary, recognising broad scale eradication was now complete and the area would move to eradication clearance. Past communication was simple and direct, advising surveillance had commenced and asking properties to search and report any sightings. Feedback from residents last year indicated an apathy to search when no evidence of fire ants existed on their property. Therefore, the new approach sought to reignite interest in reporting sightings after three years of intensive treatment, while at the same time educating the community on the process that leads to eradication. The education piece included key messages informing broadscale eradication was complete and marking considerable success in reducing fire ant populations in the area. The piece also pointed to the importance of residents' vigilance and reporting, while also educating them on the overarching timeframes of the eradication process and describing the next phase—eradication clearance.

Outcome: A direct mail education piece was delivered to 17 978 residents and businesses, supported by publicity and targeted social media (with video) with key messaging 'Fire ant program calls on public to help gauge success'. Articles for publication were provided to 32 industry peak bodies, 117 community groups and 29 schools. The first phase of the social media campaign reached 124 305 unique users and engaged 1982 people. The second phase reached 75 000 in western boundary and engaged 750 people. The video was viewed 20 760 times.

Above: Direct mail education piece – Area 1 & Western Boundary

Major campaign—Eradication treatment in Area 2

As residents in the new eradication area (Area 2) had not received any formal communication and engagement in around five many years, it was important to comprehensively cover these matters in preparation for eradication treatment commencing in the area. A second direct mail piece was produced to educate on fire ants and their risks, the program, its strategy and what the community could expect now eradication treatment was being conducted in their area. In particular it explained the program's preference for working with the community to treat, while also explaining program officers' right to enter properties and treat as prescribed under the *Biosecurity Act 2014*. Advertising and promotion through social and traditional media, and engagement with community networks and peak bodies has commenced and will continue during treatment season. Messaging will be displayed on motorway gantry in key locations from 24 September–30 November 2020. Static program displays and treatment activities were also placed in local council libraries in Rosewood and Lowood in September.

Outcome: The education piece was delivered to all letterboxed properties (more than 10 000) in eradication Area 2. Key messaging in support of eradication was 'Success in the west pushes fire ant eradication east'. As of 30 September the Facebook social media campaign had reached 15 123 people in the program's new treatment area with 784 conversations. The supporting video content was viewed more than 31 000 times suggesting the video had been shared.

Above: Direct mail education piece – Area 2

General awareness and training

In addition to these major campaigns, program key messaging has continued to be released through minor and micro social media campaigns and program updates. Sixty-one (61) social media posts resulted in 21 503 engagements. Results from these campaigns showed a shift in sentiment from negative to positive with 79.5 per cent of the 1116 comments on social media posts displayed positive sentiment, 8.5 per cent neutral and 12 per cent negative. Compared with Q4 2019–20, there was a significant shift towards positive/neutral sentiment with negative sentiment decreasing four percent from 16 per cent last quarter to 12 per cent this quarter. On Facebook—the program's highest performing platform—almost a quarter of a million people were reached with fire ant related messaging. Our web page **daf.qld.gov.au/ fire-ants** received 8701 page views during this quarter.

Community groups in Area 2 were contacted to discuss upcoming treatment season and to encourage distribution of newsletter content to their members.

A focus this quarter was the re-design of the program's external training to expand training opportunities across industry and the wider community. This means moving away from a reliance on the high-cost model of face-to-face training delivered at Berrinba pre-COVID-19, to a focus on self-driven, video-led, modular online training, tailored for specific audiences.

Media

Engagement with media outlets continued with a range of proactive stories on program success and innovations giving the program some positive exposure. The program was invited to work with ABC Landline over two days to deliver a fire ant story going to air on 11 October 2020.

Negative sentiment increased in the lead up to the Queensland election, with the program responding to these media enquiries and claims to ensure a factual representation was made to the South East Queensland community.

Councils

Briefings were provided to the City of Gold Coast and Brisbane City Council on program progress and on council's ability to treat the land they manage for fire ants in line with the *Biosecurity Act 2014*. Moreton Bay, Somerset and Scenic Rim councils were engaged to discuss and share information on significant detections in Griffin, Canungra, Lawnton, Mt Tarampa, Allenview, Wyaralong and Cyrna. Somerset, Ipswich, Lockyer Valley and Scenic Rim councils were engaged about the movement of eradication to Area 2 for the upcoming eradication treatment season.

Challenges

In this quarter the challenges of COVID-19 saw the program continue to adapt its engagement and training approaches to online tools and media.

In the Queensland State Election in October, the program made a submission to Queensland's Caretaker Advisory Board requesting approval to proceed with campaigns planned in October, specifically the lifestyle/self-management education piece. Approval was given for up to 50 000 to be distributed, well below the anticipated full distribution of 500 000.

At the request of Queensland's Department of Premier and Cabinet (DPC), the Department of Agriculture and Fisheries (DAF) consolidated its social media channels. Reduced access to the use of these social media platforms resulted in a decrease in engagement and reach for the program during August and September. To compensate, the program now pays to 'boost' the social media posts. DAF Communications advised the program could move to its own social media platforms, subject to approval by Queensland's Department of Premier and Cabinet. This will be dependent on sufficient resources to deliver effective moderation.

Communication campaigns continue to require significant lead times for the three-stage approval process through the Queensland's Government Advertising and Communication Committee. This is a requirement for all major community advertising managed by Queensland Government departments.

During this quarter Newscorp announced closures of a number of hardcopy newspapers in South East Queensland which means fewer media outlets for stakeholders, particularly those who do not access online publications. The current direct marketing approach for educational pieces aims to ensure relevant key information is received by stakeholders.

Building stakeholder support

Industry

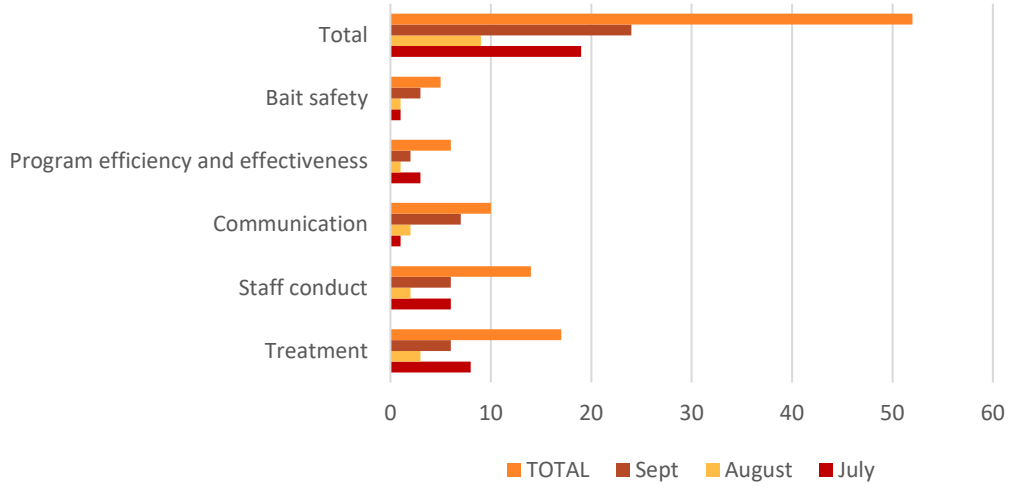
Pre-audit communications were finalised and distributed electronically to the poultry, landscaping and waste management industries this quarter in support of compliance teams checking that businesses are managing fire ant risks according to the regulations. Presentations were made to the Queensland Committee for the Australian Environmental Pest Management Association about the progress of the 10-year Eradication Plan and up-coming self-management initiatives that may shape the pest management market.

Stakeholder feedback indicated the majority of industry engaged on biosecurity zone changes were happy with how communications about the changes to the Biosecurity Regulation 2016 and zones were delivered. Some found the soil guidelines confusing. Companies continued to engage through the Fire Ant Biosecurity Zones (FABZ) eHub. Newsletters were sent to 4566 industry stakeholders about the program's online tools including industry starter kit, toolbox talk video, online Fire Ant Compliance Tool and interactive map. These were opened by 41 per cent of recipients, resulting in 1 727 visits to the FABZ eHub, with over 900 documents downloaded in July alone. 'Fire ants' was in Business Queensland's top 100 search terms in July. This was a big achievement given the focus of small business on grants and COVID-19.
Industry articles were published in the Master Builder magazine distributed by the Master Builders' Association, Queensland. The program met with the Civil Construction Federation's Queensland Committee to discuss changes to the fire ant biosecurity zones and movement control regulations. The peak body is asking for clearer directives for managing fire ant risks at new development sites.

Complaints

Treatment activity received the highest number of complaints each month and overall. These complaints were in relation to both eradication treatment and responsive DNI treatment. Staff conduct was the second highest cause of complaints and included issues relating to field officers congregating in parks and poor driving behaviour. Not surprisingly an increase in complaints coincided with treatment season activity commencing in September and the associated interactions with residents, particularly in new treatment areas where residents were not used to the presence of fire ant management activities. All complaints are managed and responded to in accordance with program procedures. Teams have been briefed regarding public perception around the use of parks etc. Where there are multiple teams working within close proximity to each other, they have been advised, if possible, to not all use the same facilities for lunch breaks. Often this does occur and with teams taking their lunch breaks at different times it can give the impression the same team has been present at the park for an extended period (i.e. same uniforms, vehicles etc). Staff have been reminded about driving behaviour expectations and that fire ant vehicles are easily recognisable. Any complaints regarding this behaviour are investigated and managed.

Figure 1: Complaints in Quarter 1 2020–21



Refusing treatment by the program

Nine landowners and residents refused treatment on their property in this quarter. While every effort is made to work with landholders for a mutually suitable time to access their properties, this is not always achieved. In the approach to treatment season, advice was provided to PoliceLink that program officers would use authorised powers under the legislation to enter properties throughout treatment season and the program may seek police assistance for those refusing entry. In most cases negotiations resulted in access to the property (see Table 7).

Table 7: Refusing treatment by the program in Quarter 1 2020–21

Month	Reason	Outcome
July	1 site in Prenzlau refused treatment in general	100% treatment was conducted by the program for this site
	1 site in Peak Crossing refused treatment due to medical condition	100% treatment was conducted by the program for this site
August	2 sites in Mt Marrow, owned by the same person refused treatment in general	100% treatment was conducted on these sites
	1 site in Rifle Range refused treatment due to chemical sensitivity, raising these concerns via the local MP.	96% treatment was conducted on this site 4% remainder of this site had ground crew surveillance conducted
	1 site refused treatment in general	100% treatment was conducted by the program for this site
September	1 site is an organic farmer in Clarendon who sells product to the USA, as a result we cannot treat this property with Engage.	No treatment was able to be conducted on the international organic site due to the need to meet international (USDA) dietary guidelines. Surveillance was undertaken on headlands around the cropping and the farmer has promised to be vigilant in surveying his land and will report fire ants if detected.
	1 site in Peak Crossing is a long-term refusal of the program	The program intends to conduct aerial and foot treatment during Q2 using enforced entry (legislated powers assigned to program field officers).
	1 site in The Bluff refused treatment in general	100% treatment was conducted by the program for this site

Empowering stakeholder support

Self-management initiative

This quarter saw the overarching strategy for the self-management initiative finalised, as well as project-specific strategies and accompanying plans for implementation. Strategies for the delivery of community-based pilots to test responses to a whole-of-community treatment program in Yarrabilba and the Gold Coast were completed. Implementation plans for educational facilities, the sport and recreation facility pilot, primary producers in Area 2, and the waste management facilities and primary producers in Area 2,were finalised and approved by the Self-management Project Board. Cane farmers taking part in the self-management pilot in Coomera were re-engaged in August to prepare them for the second round of fire ant treatment on their properties in September.

A chemical industry briefing was held to inform these important stakeholders about the challenges and barriers to residents treating fire ants and to improve efficiency of pest management treatment. The briefing covered program plans, particularly in relation to bait availability, packaging and cost implications for residents and industry. The meeting attracted over 70 attendees from chemical development, supply and pest management groups.

The ‘Lifestyle and self-treatment’ major campaign which was unable to proceed last financial year due to COVID-19 has been redesigned as a direct mail campaign targeting landowners and residents in non-eradication treatment areas 3 and 4. An initial distribution was approved through the Queensland Caretaker Advisory Committee in September. This direct mail piece aims to educate landholders in non-eradication areas about their part in the fight against fire ants. An editorial piece is being prepared for distribution across industry publications, peak bodies and associations.

4. Containment: Activities to prevent the spread of fire ants within and beyond the program Operational Area.

While eradication remains the primary focus of the program, containment of the existing infestation in non-eradication areas and preventing further spread remain a high priority. Prioritising Detections of Importance (DoI) at or near the boundaries, work with high risk industries to ensure compliance and vigilance to prevent spread through movement of fire ant carriers, and suppressing the pest in areas of high risk to humans and animals are primary tools which enable the program to contain the pest until these areas are subject to eradication. Landowners in South East Queensland are also critical in suppressing fire ant populations by treating properties or land they own or manage. This reduces the size and scope of the eradication task and degrades the genetic integrity of fire ant colonies.

Boundary containment

The program uses a risk-based approach to surveying for and eradicating fire ants from near the infestation boundary. This includes sentinel surveillance in high risk habitats and targeted surveillance around operational boundary areas to detect new or returning ant infestation. Clearance surveillance is also done using new monitoring sites within planned eradication areas (Areas 1 and the Western Boundary) to detect any residual ants.

Surveillance

The surveillance season commenced in late June 2020 and concluded at the end of August 2020. The program will continue surveillance in the clearance areas for the remainder of the financial year as planned. See **key insights** on p3 to view surveillance data for this quarter and **Appendix 2** to view the progress map.

Through proactive program surveillance and communications to encourage people to check their yards and report suspect fire ants, there was a total of 7 detections outside of the operational boundary and 62 detections within 5 km inside of the operational boundary (see **detections of importance** on page 16 for further information). The program acted immediately to destroy these infestations and ensure there were no further nests near the detections. The program will continue to carry out risk assessments on detections of importance and adapt responses to ensure risk is addressed.

Eradication area protection

Suppression

Suppression treatment in the Western Overlap commenced on 1 September with 40.85 per cent of the planned 4237 completed.

Table 8: Planned suppression in Quarter 1 2020–21

Area	No. of hectares			
Location	Planned Year Total	Planned YTD Total[2]	YTD Actual	% YTD
Western Overlap	43 604	4 237	1 731	40.85
Eastern Overlap[1]	40 060	0	0	0
Southern Containment[1]	46 422	0	0	0
Total	43 604	4 237	1 731	40.85

1. Scheduled to begin treatment from 10 November 2020. 2. The total planned treatment as budgeted to 4 October is 37 972 ha while actual planned treatment activity is subject to work schedules for each week of the treatment period. See Finance on p28 for information.

Treatment was less than planned due to the need to develop a new Specific Task Analysis and Risk Assessment (STARA) in consultation the Department of Agriculture and Fisheries (DAF) Aviation Committee prior to aerial treatment commencing (see Table 16).

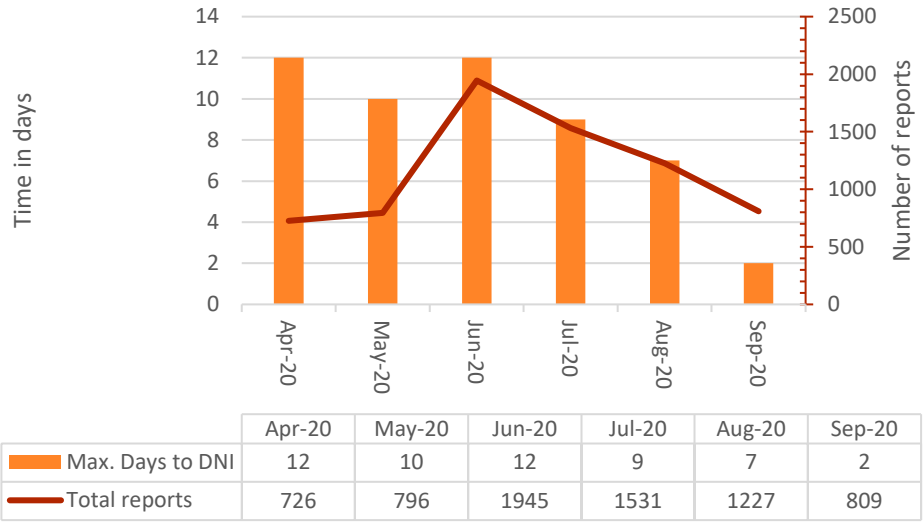
Responsive treatment

Responsive treatment is delivered when the community reports suspect fire ant sightings and they are identified as positive. It is also delivered when positive sightings are found by program field staff in the normal course of treatment and surveillance work. These are prioritised according to level of risk. Detections presenting a high risk to public safety (such as those in schools, parks and sporting grounds) are given the highest priority along with fire ant detections outside or near the program's operational boundary (see **detections of importance** on p16 and Appendix 2 outlining areas where responsive treatment occurred).

Community reports of fire ants

There were 3567 public reports of fire ants this quarter with the maximum days to treat reported fire ants between 2–12 days. The number of suspect ant reports for the Quarter 1 in 2019-20 was 1828. The increase in reports does not necessarily indicate that fire ant populations are increasing but due to a number of factors including increased fire ant activity following significant rainfall; increased time spent at home, and therefore potentially exposed to fire ants in the backyard, due to COVID-19 lockdown; and increased awareness following several significant communication campaigns.

Figure 2: Public reports and maximum days to DNI treatment from April–September 2020



	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20
Max. Days to DNI	12	10	12	9	7	2
Total reports	726	796	1945	1531	1227	809

Figure 3: Where suspect ants were found in Quarter 1 2020–21

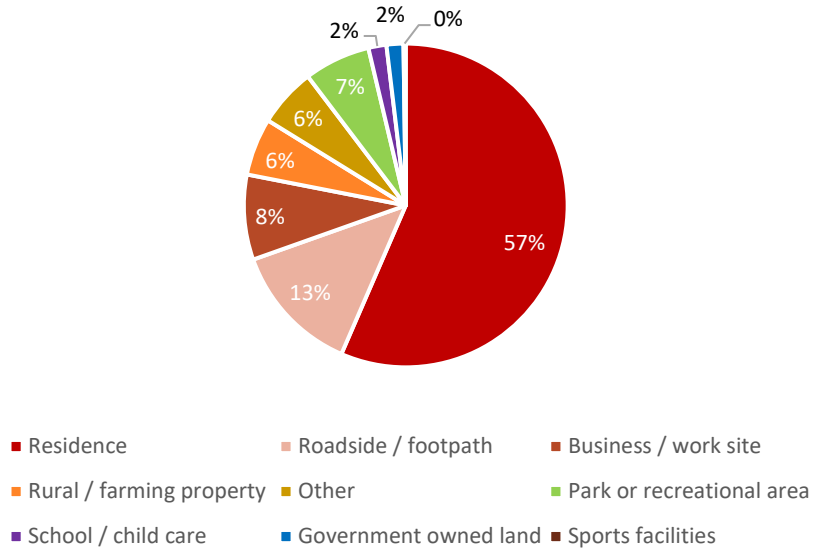


Figure 4: What made people report suspect ants in Quarter 1 2020–21

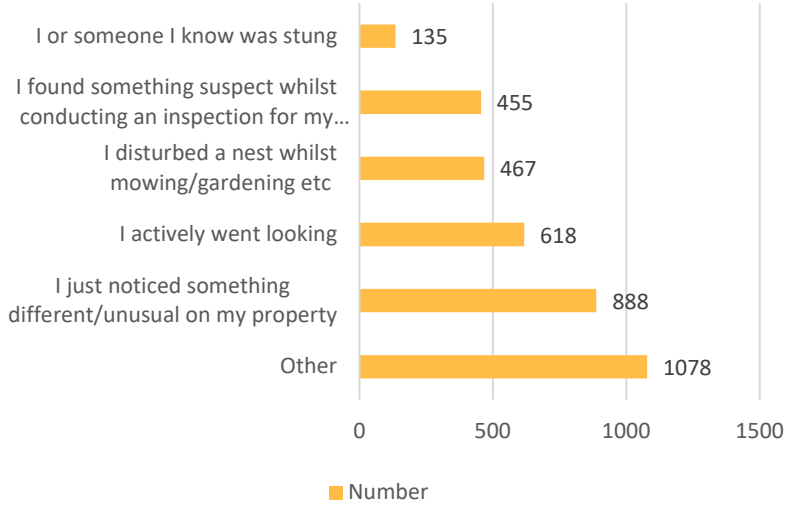
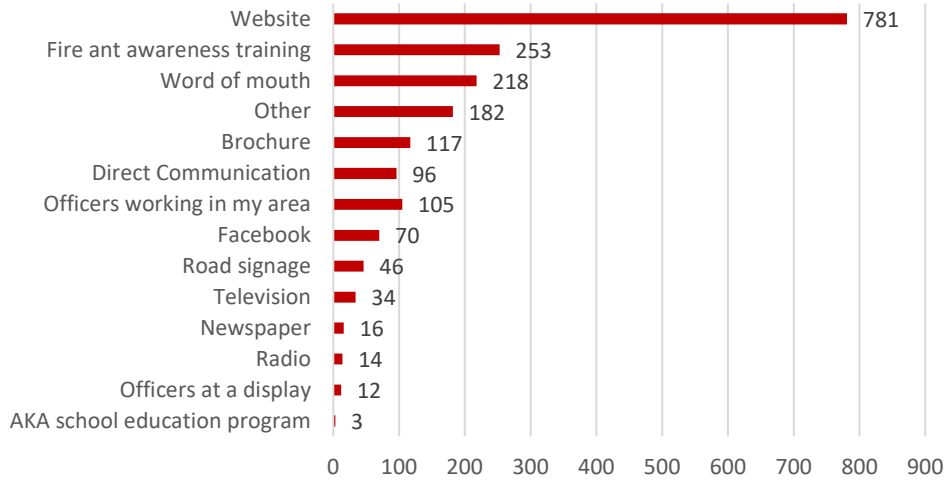


Figure 5: How people reporting suspect ants heard about the program in Quarter 1 2020–21



Detections of importance

Detections of importance pose a heightened risk to the achievement of the program objectives and the overall success of the program, and therefore require prioritisation and a more extensive response. Detections of importance include detections located outside the operational boundary, detections located up to five kilometres inside the operational boundary in place at the time of detection, detections located within an area that has received three or more rounds of eradication treatment and detections located within areas that are currently undergoing clearance and freedom activities.

These are a high priority for the program and received urgent attention by the program. During this quarter, surveillance activities commenced and, due to the end of intensive treatment in Area 1 and Western Boundary, were increased. This intensified surveillance increased the likelihood of identifying detections of importance over the winter months with 100 detections of importance found this quarter. This is a higher than anticipated number of detections of importance and the program is currently risk assessing these detections to determine whether further action is required. The locations of these detections are in Table 9 below and further detail on the circumstances and management of these detections is outlined below and in Appendix 5.

Table 9: Fire ant detections of importance Quarter 1 2020–21

Type*	No.	Location/s
Significant	3	Griffin (1), Canungra (1) and Wyaralong (1)
Outside boundary	4	Griffin (1), Canungra (1), Benobble (1) and Allenview (1)
Boundary	62	Allenview (3), Arundel (1), Beaudesert (5), Birnam (3), Boyland (10), Bracken Ridge (1), Brightview (1), Bromelton (2), Cryna (2), Gleneagle (1), Guanaba (2), Josephville (1), Kagaru (1), Kholo (4), Lawnton (1), Lowood (2), Lyons (1), Maudsland (3), Mount Nathan (5), Mundoolun (2), Pine Mountain (1), Tamborine Mountain (3), Undullah (1), Upper Kedron (2), Wongawallan (1) and Wonglepong (3)
Clearance area	31	Lockrose (2), Crowley Vale (2), Rosevale (9), Radford (1), Mount Walker (1), Mount Walker West (2), Harrisville (4), Peak Crossing (5), Laidley (1), Coleyville (1), Brightview (1), Grandchester (2)

*Significant = A new detection found outside the program Operational Area boundary. Outside boundary = A detection found outside the program Operational Area boundary that is an extension of a significant detection. Boundary = A new detection found up to 5 km inside the program Operational Area boundary. Clearance area = Former eradication area undergoing surveillance and residue ant search and destroy activities.

Further information on significant and boundary detections is outlined below. Go to **clearance** on p21 to find out more about clearance area detections and see Appendix 5 for additional detail on the circumstances and outcome of all detections of importance.

Significant detections

- Three **new** significant detections (detections outside the Operational Area boundary) were recorded during the first quarter: Griffin (1), Canungra (1) and Wyaralong (1). An additional four detections were made beyond the Operational Area boundary whilst program officers were undertaking surveillance in response to the **new** significant detections. While this is a higher number than desired, the program prioritises extended treatment and surveillance actions to ensure the infestation is destroyed.
- The program reports each **new** significant detection to the cost-shared partners and the Queensland Minister for Agricultural Industry Development and Fisheries. Additional detections found outside the Operational Area boundary, that are an extension of an original significant detection, are reported on and managed as part of the response to the original significant detection.
- The program's response to the detections was to destroy all nests immediately and undertake treatment and surveillance activities between a minimum of 500 metres and up to 2 km beyond the infestation.
- Investigations were undertaken regarding the movement of inbound and outbound fire ant carriers onto and from each site, specifically focussing on the last 12 months.
- If fire ant carriers needed to be removed from the site, co-operation was sought with the companies/landowner to implement measures prior to the movement
- Genetic analysis is being conducted to determine if the nests are related to the existing South East Queensland population and the fire ant colony's social form (monogyne or polygyne). All significant detections were from the current SEQ infestation.
- Further testing is also undertaken to identify relatedness to nearby colonies and investigations are carried out into related fire ant carrier movements. No direct linkages were found in genetic tracing activities to-date, however further testing is undertaken periodically as more samples come in.

Boundary detections

- There were 62 boundary detections (detections made within 5 km of the operational boundary) during the first quarter in local government areas of Scenic Rim (34), Gold Coast (13), Brisbane (8), Somerset (2), Lockyer Valley (2), Ipswich (1), Moreton Bay (1) and Logan (1).
- There was a concerning number of reproductively viable/mature nests detected in the Scenic Rim local government area.
- The program assessed the risk associated with each detection and responded in accordance with program protocols, as outlined in the significant detection section above.
- All nests were promptly destroyed with an insecticide by either applying direct nest injection broadcast baiting, depending on risk. Scope of treatment ranged from a minimum of 100 m from the nest in the warmer months (10 metres in the colder months when ants tend to forage less) up to 2 km beyond the infestation.
- The number of detections around the boundary presents a significant risk to the program's containment objectives. Further analysis is underway to determine whether a heightened response (including broadscale treatment) is required in order to ensure further spread does not occur, particularly to the south of the program's operational boundary.

Polygyne detections

Genetic analysis of the social form of fire ants is undertaken to determine treatment activities required. Multi-queen colonies (polygynes) have increased risk of spread from human-assisted movement and strengthen the colony by increasing the genetic diversity within the population, compared to single queen colonies. As such, one of the KPIs of the program is to maintain ~1% or less polygyne sites within the South East Queensland infestation.

Table 10: Ant samples analysed for social form

Quarter	No. ant samples collected	Proportion polygyne	No. untested
2019-2020 Quarterly average	1 967	0.96%	83 (4%)
1	911	5.6%	314 (34.5%)

Although the proportion of sites is well above the KPI of one per cent previous years have shown this figure can fluctuate throughout the year, hence the one per cent KPI is based on annual assessment and when all samples have been tested. Additionally, the ~11 per cent of samples from this quarter that have been tested are those that were prioritised as being suspected of being polygyne, which may have biased these preliminary results. The remaining 89 per cent of samples waiting to be tested did not look like polygyne infestation in the field and if these are all or mostly monogyne, the proportion of polygynes for this time period will be lower. Therefore, it is anticipated the proportion of polygyne sites is actually lower than the 5.6% of currently tested samples.

The majority of samples collected in this quarter are still waiting to be tested. This is predominantly due to challenges with procuring genetics laboratory consumables (requiring some processes to be undertaken manually), as well as increased samples being collected. To remedy this, an additional contractor was employed to assist the genetics laboratory undertake manual sample processing, as well as initial discussions on whether sample collection could be prioritised further to streamline testing. The latter solution is ongoing.

Some samples remain untested due to insufficient numbers of ants within a sample to conduct accurate analysis. Too few ants in samples can be due to multiple reasons, including high heat events reducing ability to observe/collect ants or new and small nests having too few individuals. The reduced number of samples in the quarter compared to the average in 2019–2020 is due in part to fluctuations in samples collected throughout the year. This included a six week period when low-risk samples (in Areas 3 and 4) were not collected while responses to a large number of public reports of suspect ants were prioritised.

Human-assisted spread mitigation

Human-assisted spread poses a significant risk to containment where fire ants are transported via fire ant carriers like soil, mulch, turf, hay and potted plants. To manage these risks the program promotes voluntary compliance through stakeholder education (see **mobilisation** on p9) and targets industries most likely to transfer fire ants, through compliance audits. Changes to fire ant biosecurity zones in May 2020 introduced new suburbs within the zones, and meant a number of businesses and individuals were subject to the Biosecurity Regulation 2016 for the first time. Given both their general limited knowledge and previous contact with the program, this group of people was made aware of the requirements and generally given two weeks to achieve compliance.

Compliance audits

The *Compliance Scheduled Activities Plan 2020–21* (compliance plan) was developed to ensure that the highest risk industries undergo compliance assessment over the fiscal year with the results of these assessments creating reliable inferences of overall industry compliance levels each year. These businesses fall into a number of broad industry types. These include landscaping services, hay producers, poultry farms, earthmovers, waste facilities, civil construction, builders and developers and quarries. Based on available information within the program's FAMS database and other on-line business advertising platforms such as Yellow Online, the total number of operators within these industries totals approximately 7000.

The industries that were selected this quarter were poultry, landscape suppliers, and waste management facilities. Industries were prioritised on factors such as compliance history, the nature of the carriers they typically move, past contact and volume of trade. All of these factors impact the risk of human-assisted spread. Businesses that were new the zones and subject to Biosecurity Regulation 2016 for the first time, as well as those operating in and around the southern and to the east of the eradication area as well as the program's northern boundary, were to receive particular focus.

In total 126 audits were conducted during the quarter, with 69 planned (59 per cent of the 117 target) and 57 unplanned. The planned audit schedule was adjusted to include nurseries following a change in market access requirements. To ensure affected nurseries were able to continue to trade, urgent audits of 50 nurseries were needed with 18 of these conducted during the quarter. In effect, this resulted in some of the nursery audits planned for later in the fiscal year being brought forward.

Of the 18 nursery audits, 11 (61%) assessed as non-compliant. Most of these non-compliances were quickly rectified through application of appropriate chemical product.

Table 11: High risk industry audits—planned number versus actual

High risk industry	Planned No.	Actual No.	Percentage achieved
Poultry	18	13	72%
Landscape suppliers	53	26	49%
Waste management	28	12	43%
Nurseries	18	18	100%
Other		57	N/A

Table 12: High risk industry audits—numbers compliant versus non-compliant

High risk industry	No. compliant	No. Non-compliant	Percentage non-compliant
Poultry	13	0	0%
Landscape suppliers	25	1	4%
Waste management	10	2	17%
Nurseries	7	11	61%

Non-compliance was relatively minor across landscape suppliers and the waste management industry (including soil recyclers and composters). This was due to incomplete treatment records, and resulted in advisory notices being issued. Landscaping yards and waste facilities new to the zones will continue to be closely monitored and made aware of the movement controls. As fire ant carriers are able to be moved directly to waste facilities, and in some instances processed and moved, the importance of undertaking frequent, vigorous and thorough turning of material, as well keeping records in accordance with section 71A will be highlighted.

With no instances of non-compliance in the 13 audits of poultry farms audited, there is confidence the poultry industry is undertaking effective risk mitigation as part of normal operations. In all cases regular rotary hoeing of litter contained in sheds is undertaken to ensure compliance with section 71A of the Regulation. Future audits of the poultry industry will include an assessment of outside storage conditions for manure. The program will also talk with industry on the importance of continuing to comply with storage and disturbance requirements until the manure leaves the property. Contact will be made with the poultry industry peak bodies and transport companies to better understand and manage risk pathways associated with movements of manure. Future audits of animal manure will broaden in scope to include other intensive livestock and equine related industries.

Investigations

Following four formal investigations, one infringement notice was issued as well as three biosecurity orders.

Table 13: Formal investigations of non-compliance

Type	Issue	Enforcement outcome
Carrier movement	Movement of soil from South Ripley in fire ant biosecurity zone 2 to Millbong in fire ant biosecurity zone 1 without a permit or appropriate risk mitigation	Biosecurity order issued for the treatment of destination site
Carrier movement	Movement of manure from Purga to Goolman, both sites in fire ant biosecurity zone 2 without a permit or application of appropriate risk mitigation. Polygyne infestation at source site	Biosecurity order issued for the treatment of destination site
Carrier storage	Failure to apply 30cm perimeter treatment around stored hay stored at Norwell in fire ant biosecurity zone 2.	Penalty infringement notice—individual
Carrier storage	Failure to apply 30cm perimeter treatment around hay stored at Allenview in fire ant biosecurity zone 2	Biosecurity order requiring hay be kept on property and application of perimeter treatment

5. Eradication: Activities to effectively eradicate fire ants from South East Queensland.

The planned eradication season began in September marking an important milestone for the program by moving from the Lockyer Valley, Scenic Rim and parts of Ipswich (Area 1 and the Western Boundary) east to new parts of greater Ipswich and western Logan (Area 2). Eradication treatment Area 1 and the Western Boundary moved to Eradication Clearance that involves targeted surveillance and spot treatment over several years, rather than broad scale treatment across the whole area.

Eradication treatment in Area 2 will use an alternative model to that used in Area 1 and Western Boundary in an attempt to find an expedited strategy to eradicate fire ants. Area 2 eradication treatment will involve four rounds of intensive treatment in one year, instead of two to three rounds of treatment per year for two to three years as applied to Area 1 and Western Boundary. In addition, the area has been sectioned into three distinct treatment areas, and different treatment regimes will be used in each. This is to identify the most effective way to deliver eradication more quickly. One of the three areas will receive four rounds of insect growth regulator (IGR) bait, which is intended to make the queen infertile and the nest to die out due to starvation. A second area will receive IGR bait for three rounds initially (targeting the queen), with a fast-acting bait used to target worker ants in the fourth round to expedite worker death and nest starvation. A third area will receive IGR bait initially to make the queen sterile, followed by a fast-acting bait in the second round to kill the worker ants, and a further two rounds of IGR to maintain the queen's sterility, if she has survived. Monitoring of the three eradication treatment regimes is undertaken monthly, with a review of the efficacy of the various treatments undertaken at the end of the treatment season in June 2021.

Of the 22 106 ha planned treatment for September 4 948 or 22.38% was completed. Treatment was not completed because the aerial treatment was grounded for several weeks while a new Specific Task Analysis and Risk Assessment (STARA) was developed in consultation the DAF Aviation Committee (see Table 15 challenges and solutions).

Table 14: Planned eradication treatment in Quarter 1 2020–21

Area	No. of hectares			
Location	Planned Year Total	Planned YTD Total	YTD Actual	% YTD
Area 2	185 689	22 106	4 948	22.38

Table includes daily and weekly adjustments. YTD = year to date.

Table 15: Challenges and solutions to eradication treatment in Quarter 1 2020–21

Challenges	Solutions
The commencement of the treatment season was delayed due to the need to develop a new STARA in consultation with the DAF Aviation Committee prior to aerial treatment commencing.	Treatment delivery was rescheduled to account for the delay while still allowing the program to remain on track to achieve treatment targets by the end of the treatment season. Program planning and resourcing estimates incorporated a 40 per cent contingency to account for lost time during the season. Contingency planning also factored in a nine-day fortnight for aerial treatment so aerial treatment on weekends and the 10th day could occur when required to meet treatment targets.

Further information about eradication treatment is outlined in the **key insights** on p3. Refusals to allow treatment on properties is outlined on p12 and see p22 for treatment innovations.

6. Clearance: Activities to ensure defined areas remain free from fire ants after eradication is complete.

The 2020–21 year saw the program move to Phase 3 search and clear (clearance) activities in Area 1 and Western Boundary; to locate and destroy any residual ants in these former intensive eradication treatment areas. Intensive eradication treatment will then progress east into parts of greater Ipswich and western Logan (Area 2).

Clearance surveillance activities are prioritised based on a 'risk map', which is developed from various biological and operational criteria. Specifically, the map combines two spatial and mathematical models to determine which areas within the Area 1 and Western Boundary eradication areas have the highest probability of infestation, if infestation remains. These areas were given priority. Following clearance surveillance (predominantly July-September), an assessment of the eradication treatment in Area 1 and Western Boundary will be undertaken, to evaluate treatment success.

Further information on clearance detections is outlined below and in Appendix 5.

Clearance area surveillance and protection

A total of 5385 ha of clearance surveillance was completed across all clearance zones. This is 92.84% of the planned year to date target.

- from June to September 2020, 5.7% of Area 1 and Western Boundary was surveyed and 31 detections of fire ants (in 17 clearance areas) were discovered—representing detections in approximately 2.3% of sites surveyed
- 16 out of the 31 detections were found in the top 20% riskiest clearance areas, which is an expected result because these areas were prioritised as they were high risk
- 15 out of the 31 detections were located outside the top 20% riskiest locations, which is a cause of some concern for the program as the aim was to confirm absence of fire ants within the next few years
- surveillance is continuing in the clearance area with a focus on the 80% lower risk zones, where the program hopes not to find remnant ants. This will improve the status of objective 9d, bringing it up to the expected KPI
- a risk assessment on the detections determined those with dense infestation and/or the increased ability to reproduce, making them a high spread risk, should be included in targeted broadscale treatment, out to 2 km beyond the nests
- the targeted treatment areas will receive three rounds of baiting during the 2020–21 treatment season
- the lower risk detections, those with fewer nests and no reproductive viability, will receive a minimum of 500m treatment and surveillance perimeter
- surveillance in the clearance area will continue into the 2021-22 season until such time as the program is satisfied no residual infestation remains and areas can progress to the next phase of the freedom framework (Phase 4–freedom)

Table 16: Challenges and solutions to clearance activities in Quarter 1 2020–21

Challenges	Solutions
Clearance surveillance requires considerable resources with the current surveillance tools available (predominantly ground teams, odour detection dogs). This means surveillance needs to occur all year round and during sub-optimal seasons (spring to autumn) when fire ants are more challenging to detect.	Remote sensing surveillance is scheduled to be operational from winter 2021, which will allow large areas to have clearance surveillance undertaken in optimal seasons. Field teams will still provide ground surveillance, with priority clearance zones constantly being updated with data from modelling.
The remnant infestation remaining in Area 1 while not extensive, was more than anticipated, causing reallocation of resources from other planned treatment to Area 1 and Western Boundary	Resources were diverted from the southern containment area to Area 1 and Western Boundary to further target these 'hot spots' this season

Clearance and proof of freedom strategy

On 14 July the program presented the National Exotic Invasive Fire Ant Scientific Advisory Group (SAG) with an updated draft Clearance and Proof of Freedom Framework. The SAG endorsed the plan, which was also provided to the Steering Committee for comment. In this quarter the program worked to incorporate the comments from the Steering Committee, as well as update and analyse our intelligence gained from Area 1 and Western Boundary clearance surveillance. The new information is being used to update the clearance area risk estimates, and to create guidelines for program responses as new remnant detections emerge.

Data from the winter surveillance season relating to clearance surveillance in Area 1 and Western Boundary was collated and will be assessed. An evaluation document is being prepared, which summarises the results from this year's clearance surveillance, as it relates to certainty in eradication. This will be taken to the SAG meeting in October.

Work was started for the clearance evaluation - Structured Expert Elicitation Program (STEEP). This is an important part of the program's quantitative proof of freedom and clearance process. This is a workshop aiming for 6–10 internal fire ant experts, who will review an information packet with relevant data on the eradication effort and known detections, and answering a short series of questions. However, due to the volume of detections found in Area 1 and Western Boundary, it was decided at the end of the quarter to postpone the STEEP until quarter 3 or 4 when more data and information will be available to accurately determine residual risk of infestations in the clearance areas.

7. Research and innovation: Science and innovations to improve treatment, surveillance and diagnostic techniques.

Polygyne research and eradication

The polygyne research pilot project is trialling several different bait treatments and combinations to determine if the eradication of localised polygyne infestations can be accelerated beyond the traditional two years. This is in conjunction with the expedited eradication treatment in Area 2, especially as polygyne infestations typically require more rounds of treatment compared to monogyne nests. Preliminary results from some of the bait regimes already trialled look initially positive and will be used to guide targeted polygyne treatments over the main 2020–21 treatment season. Specifically, field experiments have continued on three heavily infested polygyne sites in this quarter following the first application of baits in May 2020, and further rounds of baits have continued to be applied to most plots on a fortnightly basis through June–September.

The plots containing repeated fortnightly applications of fast-acting baits (Advion and Amdro in rotation) and fortnightly Amdro/Distance blends have started to show consistent and promising results compared to those plots receiving the standard treatment with Distance (IGR) bait every three months. These trials are continuing but these early results indicate that more intensive and localised bait treatments may accelerate the eradication of polygyne infestations.

Remote sensing surveillance project

The Remote Sensing Research and Development Project is critical for use in identifying fire ant nests in clearance areas, for delimiting the infestation and in identifying infestation in eradication areas, which enables the precise targeting of resources to sites of infestation.

The project's imagery collected during the trial flights in 2019 showed that the algorithm successfully identified visible fire ant nests in certain situations (e.g. nests in open areas or medium to large-mounded nests). There was, however, a lower precision when the imagery was taken in paddocks with highly disturbed soil. In 2020, further development focused on collecting additional training data for the artificial intelligence algorithm to increase the accuracy and reliability of nest detection.

Between June-September 2020, the project has captured ~13,000 ha of imagery and additional training data from nine sites with known infestations. The algorithm successfully detected its first new/unknown fire ant infestation (~2 ha) within the suburb of Ripley. Significant quantities of data were also collected for use in further training the algorithm. The algorithm also exhibited low level 'noise' associated with misclassifications of environmental features such as Gilgai (small ephemeral water bodies), bare soil and other organic matter.

The fourth and final flight week for the remote sensing project concluded the last week of September and the associated training data from ground surveillance is being finalised. In addition to data collection, results for imagery collected during previous flights is being processed and supplied. Work is continuing on validating these results in the field and feeding the incorrect results back into the model.

COVID-19 and travel restrictions from Victoria caused some alterations to the planned Remote Sensing Surveillance project, as the technical staff from the vendor are based in Melbourne. After discussions with the vendor, one of the technical staff was based in Brisbane for the duration of the flights for the project. Fortunately, no major technical issues arose during the flight data collection period.

Effectiveness of treatment testing

In advance of the broad scale eradication treatments planned for Area 2 in the 2020–21 treatment season, surveillance is underway to find suitable monitoring sites and nests. The goal is to monitor 100-150 nests over 10 sites in each of the three eradication treatment strategy areas within Area 2. These nests will be critical for assessing the performance of three different bait regimes.

Up to the end of September, targeted surveillance has located and confirmed the following numbers of monitoring nests: 181 (northern treatment strategy), 96 (central) and 68 (southern). Despite a significant effort to locate the target number of nests, this has continued to prove challenging in the central and southern sections of Area 2, most likely due to the effectiveness of recent bait rounds applied in the 2019-20 treatment season when the area fell within the Western Suppression overlap. All 345 confirmed monitoring nests received their first formal pre-treatment assessment in this quarter. Some surveillance will continue into October to locate additional nests.

Digital Field Capability Implementation Project

The first stage of the release of the *Forage* application on tablet devices (enabling recording of and access to data in real time) to personnel in the field took place on 31 July 2020. This supported field staff in the program's planned surveillance activities (specifically sentinel and targeted surveillance). Stage 2 of the project is in development and will see the digitisation of functions supporting planned treatment activities. The digital recording of treatment and surveillance activities will provide for more 'real time' data availability for reporting and planning purposes. Initial feedback from field teams was very positive.

University of Queensland Bio Clay project

A collaboration with the Queensland Alliance for Agriculture and Food Innovation (QAAFI) at The University of Queensland (UQ) was established in early 2019, on the potential for BioClay nanoparticles to be used in the control of fire ants. Specifically, the project plan during 2019-2020 was to investigate whether nanoparticles, as a platform for delivering dsRNA–mediated gene silencing technology, caused mortality in fire ants. However, the project was significantly impacted by shutdowns (since March 2020) due to COVID-19, with the key experiments delayed as UQ moved to work from home with critical maintenance only onsite.

This quarter, a variation and extension was agreed between UQ and DAF for the bait and gene silencing project due to these impacts by COVID-19. This included an extension in time (from July 2020 to July 2021), variation in scope (to include two different rain-stable bait options instead of one) and funding (an additional $50 000 over the extra 12 months).

Confirming treatment efficacy for nurseries

Recent conversations regarding movement controls for nursery products resulted in several questions from interstate stakeholders regarding the efficacy of the application rate of cyfluthrin recommended on PER12073. The availability of this product was increasingly restricted due to the advent of new generation alternatives; therefore, a new permit application was submitted for beta-cyfluthrin in March 2020 to ensure an alternative product was available. In response to the questions

regarding efficacy on the original product, a short laboratory bioassay was run to confirm the application rate of beta-cyfluthrin, and the permit application was amended to allow a higher application rate. This will provide greater assurance of total queen mortality in treated nursery stock.

Improving industry options for treatment

A justification for the use of a single application of bifenthrin, with a substantially reduced embargo period, to improve fire ant control for commercial turf farms was drafted and will be discussed with the industry. A trial conducted to assess this treatment approach indicated it will provide high level protection against fire ants and better align with industry practices. A full report, detailing the outcomes of all other chemical options trialled, is being drafted and will be finalised by June 2021.

Other treatment innovation

A literature review investigating the biology of the fire ant was drafted and will be presented to SAG in October. The purpose of this review was to identify avenues of research to find new and improved methods of treating fire ants. Recommendations for future research were made, with several project areas already under investigation (e.g. UQ collaboration on gene silencing) or in the early stages of collaborative development. Further work will focus on documenting the recent progress in each identified project area and developing research proposals which will be used to build collaborative partnerships with research institutions and industry.

8. Governance and accountability: Includes business improvement, significant meetings related to governance, and risk management.

Business improvement

Information technology: Improvements to the Community and Stakeholder Engagement Solution (CaSES) and FAMS this month included the ability to allow focus areas to be created directly in FAMS, removing the requirement to perform this function in other systems. This enhancement is projected to decrease ARCmap annual licence costs and reduce mapping errors.

Risk management

The program has five high risks detailed in Table 17.

Table 17: High risks to the program in Quarter 1 2020–21

Risk type	Risk description, controls and treatment
Strategic	**Risk description:** Risk to eradication and containment: Extreme wet weather events (e.g. flood, heavy rainfall) assist fire ant colonies to disperse over a greater geographical area.
	Risk controls: 1. Contingency planning will be undertaken to ensure appropriate targeted surveillance/treatment is undertaken following a significant climatic event. 2. Pre-planning including infestation assessment, genetic tracing, spatial analysis of spread.
	Treatment: Reprioritisation of planned suppression treatment to limit the risk of spread along water courses. Flooding contingency fund. Flood modelling and responsive planning.
Operational	**Risk description:** Risk to capability: Information systems are ineffective at supporting increased scope of national program and demand for timely and accurate performance data; this arises from poor functionality or data integrity due to data entry, programming, configuration errors, viruses or incorrect business logic.
	Risk controls: 1. Resources dedicated to developing the program's existing information systems and how they interface to improve efficiency and accuracy of data entry and reporting. 2. Server performance monitoring. Ability to upgrade if required.
	Treatment: Information systems to undergo continual improvement. Review of existing systems technology and current business processes to ensure best fit solutions are implemented. Continually review performance and recommend upgrades accordingly.
Operational	**Risk description:** Risk to eradication: Helicopter contractors are unavailable to deliver treatment for a sustained period that results in targets not being met and program activities unable to be achieved.
	Risk controls: Effective supply negotiations in place and appropriate planning and monitoring of activity in progress to ensure resource activity variation supply to meet program needs and deadlines. Resource planning in partnership with helicopter contractor are being discussed in weekly meetings. Regular communication between program and the helicopter company should be implemented to identify potential flight issues in advance.
	Treatment: Annual review of major contracts has been implemented to ensure continuity of supply.
Operational	**Risk description:** Risk to Eradication: Inability to provide timely work to field teams.
	Risk controls: Sufficient resourcing and communications between operations and planning areas.
	Treatment: Possible digital field solution. Re-engineer or improve job allocation processes. Monitor progress against schedule.
Operational	**Risk description:** Risk to capability: If self-management does not have the desired take-up by industry and the community the program may need to divert resources to suppression areas at the expense of eradication work.
	Risk controls: The self-management program is divided into a number of sub-programs to better meet the needs of each target group; improvements to baiting options available to landowners and industry.
	Treatment: Ongoing refinement and adjustment will be undertaken to meet the needs to consumers and industry sectors. Coordination with high-density suppression treatment will also be undertaken to ensure the self-management projects are effective as possible.

COVID-19

There have been no reported cases of program staff contracting COVID-19. Changes in routine to protect the health and safety of staff and the community include:

- Up to 50 per cent attendance at Berrinba with numbers at other program sites adjusted depending on the ability to maintain social distancing.
- When staff use one vehicle one member will be in the front seat and the other in the back seat on the opposite side of the car with windows down and air conditioning off.
- If an operational team member tests positive to COVID-19, the entire team will be directed to self-isolate at home.
- Contact with customers will be made by phone, where possible, to avoid human contact.
- Staff have been provided with hygiene products, including hand sanitiser and alternative solutions where necessary.
- Additional weekday cleaning in all commons area including frequent touch points.

Meetings of importance

The **Steering Committee** held its quarterly meeting on 20 August 2020. Topics discussed included: Treatment – Year in Review, the biannual review of the 10-year Plan, the Stakeholder Mobilisation Plan, and Compliance activities. The Chair also provided an update on the progress of the Efficiency and Effectiveness recommendations. A report for publication on the progress of recommendations is under development.

The **National Exotic Invasive Fire Ant Scientific Advisory Group (SAG)** met on 16 July. Outcomes included:

- endorsing the approach of the treatment plan for Area 2 which entails applying four rounds of treatment in one year. Area 2 will be sectioned into three areas and there will be three planned treatment strategies of different sequences of IGR and/or toxicant. All three strategy areas contain low, medium and high-density infestations, so it will provide an opportunity to evaluate how the three strategies work at different densities of RIFA. It was noted that there will be opportunity the following year to complete the additional two rounds of treatment (total of six rounds overall) should the four rounds in one year not achieve a sufficient level of efficacy.
- agreed this evaluation of eradication approach is a form of adaptive management – refining strategies and maximising the learning opportunities from experience.
- noted the planned ‘step by step’ process for achieving clearance and demonstrating proof of freedom from fire ants and endorsed the concept of an annual expert elicitation workshop to look at data to determine if the program can move into clearance or freedom phase.
- agreed the program identify two independent experts to work with Dr Dave Ramsay, from Arthur Rylah Institute and expert in invasive pest eradication modelling, to review the Clearance Strategy.
- agreed to review the program’s three-year strategy and the work plan out-of-session and provide feedback.

The **Risk Management Sub-Committee** held its biannual meeting on 15 September 2020. The Sub-Committee approved the updated risk management policy and plan. Topics discussed included: major risks and challenges within the program; the status of the risk and issues registers; the 2020–21 treatment season; self-treatment; community attitudes, compliance and enforcement; reporting and communication; the update on the Efficiency and Effectiveness Review recommendations; proof of freedom; and the development of an audit program. The next meeting will be held in March 2021.

9. People and culture: Includes staff levels, workplace health and safety, and employee development, engagement and culture.

Table 18: Staff numbers in Quarter 1 2020–21

Position	Q1
Permanent	76
Temporary	54
Contractor—office	42
Contractor—field	247
Total	**419**

Workplace health and safety

The program received 45 reports related to workplace health and safety during this quarter which is a significant decrease compared to the 65 Incidents reported in the previous quarter. The major cause continues to be falls, trips, and slips (not from a height). Workplace health and safety representatives continue to work across the program to heighten awareness and identify possible solutions to common wellbeing issues.

Table 19: Injuries in Quarter 1 2020–21

Injury Classification	Q1
Repetitive movement and other muscular stress	3
Contact or exposure to electricity	0
Contact or exposure to heat and cold	1
Fall, trip, slip (not from a height)	10
Hitting or being hit by an object/s	1
Total	**15**

Table 20: Workplace health and safety incidents in Quarter 1 2020–21

Category	July	August	September	Totals
Hazards	2	0	1	3
Near miss	2	0	1	3
Property damage	9	2	13	24

Internal communication

Internal newsletters for program staff continued during the quarter to keep staff up-to-date on key activities in the program and responses to COVID-19.

- Topics included: COVID-19 requirements, surveillance activities and the supporting community awareness campaign, fire ant biosecurity zone and regulation amendments, and new online tools for the community
- Folders containing key fact sheets were updated and distributed to vehicles for use by field teams
- DAF Customer Service Centre was briefed on the program's treatment activities and provided with updated scripting, including upcoming self-management initiatives
- The program's engagement team met with field officers to understand the issues they face in the field and offer support and guidance on developing positive relationships with customers and related challenges
- Various toolbox sessions were held to enhance standard operating procedures and WHS procedures.

Volunteers

Due to the restrictions associated with COVID-19 volunteer activities were suspended.

10. Finance

The program began the year with ambitious but achievable treatment plans and some uncertainty in terms of how much fire ant infestation remained in Area 1 and Western Boundary as the program moved the area to clearance. Throughout this quarter, these matters were clarified as surveillance activities identified more and larger fire ant hot spot areas than anticipated, despite the significant reduction in infestation. However, significant below budget expenditure of $2 million was recorded for the program at the end of the first quarter of 2020/21 as a result of decreased treatment completed against the treatment plan, due to a 4 week delay in commencement of aerial treatment.

The 2020-21 initial budget build for the program, including treatment requirements, was $5.5 million above the program fiscal limit. The program is taking an agile approach to budget monitoring in 2020–21 with a view to prioritising treatment areas and utilisation of more efficient methods of delivering treatment and surveillance in order to remain with in the fiscal limit. When budgeted for the financial year, the total number of hectares to be treated for the year was distributed evenly across the months during the treatment season. However, actual treatment hectares planned for a month is adjusted weekly/monthly responsive to work scheduling, weather and identified priorities. The total planned treatment hectares for the year remains unchanged.

Expenditure to budget

As at 30 September 2020 the program is underspent by $2 million mainly as a result of:

- $289 000 underspend in remote sensing surveillance (R&D) of $132K due to differences between actual and budgeted cost for field workers which will be allocated from operations in Oct 2020. Other favourable variances include project contingency cost ($95K) and ITP discretionary cost ($70K) as a result of timing differences
- $126 000 underspend in systems and technology Innovation due to the delayed appointment of an AO8 contractor, $29 000 in IT discretionary charges, $67 000 for FAMS Mobility Project Tablets and $15 000 in other project cost as a result of a timing difference between budgeted and actual cost
- $145 000 underspend in community and stakeholder engagement mainly due to a timing difference of costs for Biosecurity Zone and Biosecurity Regulation 2016 changes, self-treatment and lifestyle campaigns amounting to $31 000, $21 000 and $102 000 respectively. This was partially offset by an overspend of $32 000 in contractor cost
- $1.47 million underspend in operations comprised of an underspend in bait cost ($1.9 million) and aircraft hire ($1.0 million) as a result of delayed aerial treatment. The underspend is offset by an overspend in contractors ($1.2 million) due to additional teams being employed during the treatment season to meet ground treatment requirements. Vehicle hire is in excess of budget by $306 000. The additional vehicles are required by field teams in response to the COVID-19 pandemic
- $44 000 underspend in strategic policy, performance and compliance as a result of budgeted cost for an AO5 (policy officer) for the full year with no actual YTD cost, a timing difference for the purchase of replacement computers ($5 000) and cost for the efficiency audit ($10 000).

Table 21: Expenditure to budget as of 30 September 2020

Program area	Requested budget	Current Budget	YTD Budget	YTD Actual	Variance
Program logistics and business support	3 464 063	3 464 063	833 550	827 186	6 364
Remote sensing surveillance (R&D)	1 593 003	1 592 828	1 094 505	804 564	289 942
Systems and technology innovation	2 128 193	2 128 193	619 713	492 889	126 824
Community and stakeholder engagement	2 622 417	2 622 417	589 899	444 080	145 819
Science services and eradication assessment	3 035 072	3 035 246	712 166	684 175	27 991
Planning and quality assurance	2 753 752	2 753 752	669 601	694 328	-24 726
Operations	39 165 284	39 165 284	7 607 416	6 134 061	1 473 355
Directorate	860 036	860 036	213 962	217 696	-3 734
Self-management	508 562	508 562	127 592	122 691	4 901

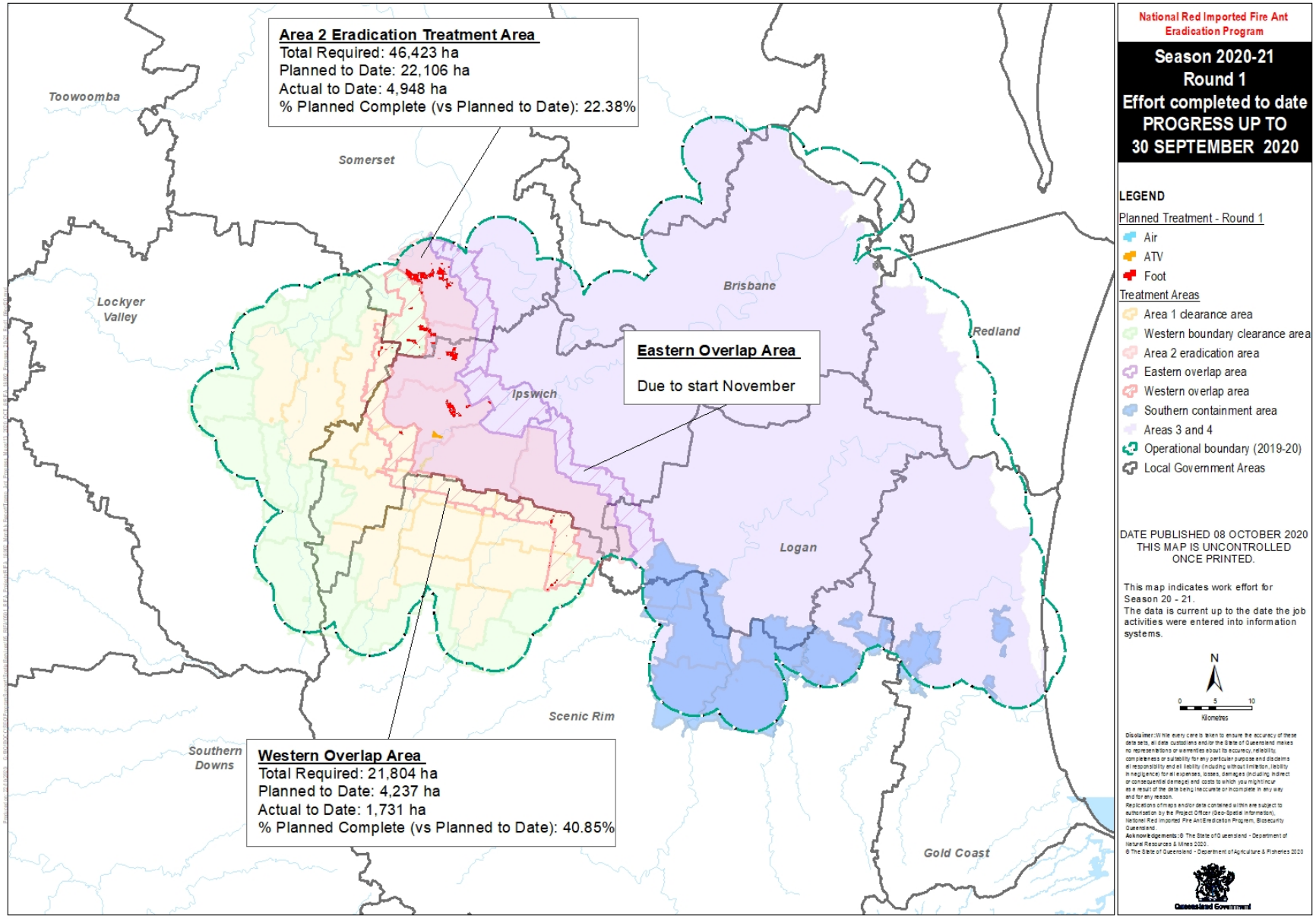
Program area	Requested budget	Current Budget	YTD Budget	YTD Actual	Variance
Strategic policy performance and compliance	2 363 619	2 363 619	633 668	589 388	44 280
Total	**58 494 001**	**58 494 000**	**13 102 073**	**11 011 059**	**2 091 015**

Significant procurement

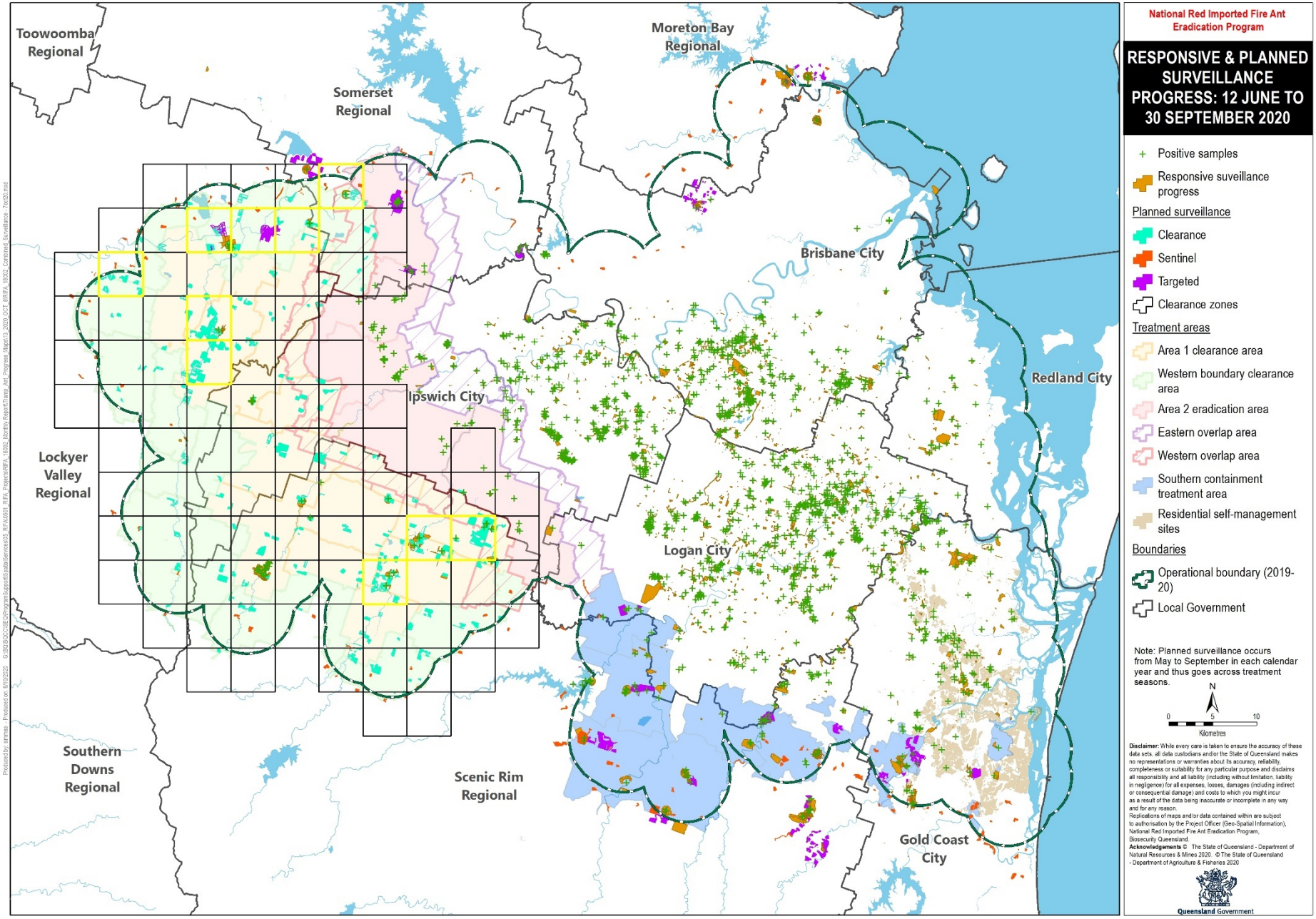
- A variation of the current toxicant bait contract for an additional 6.2 tonne Advion fire ant bait was conducted (contract variation value: $566 060 including GST), The revised contract value is $810 662.
- Extension of the program Steering Sub-Committee Risk Chair (Alan Mills) until 31 October 2022 (contract value: $98 495 including GST).
- University of Queensland and DAF Collaborative Research Agreement variation and extension of time until 30 November 2020 (Contract Value: $209 000 including GST).
- Fire Ant Movement Controls Review (CSIRO) extension of time until 31 July 2021 (contract value: $142 340 including GST).
- Aerial Services (McDermott's) contract extension option (contract extension value: $6 215 743 including GST). The revised contract value is $27.70 million.
- Significant procurement of 54T Advion Fire Ant Bait (contract value: $4 930 696).
- Steering Committee Chair (Dr Wendy Craik) contract finalisation (contract value: $135 971).
- Self-Management Industry treatment (shaker bottles) (contract value: $121 000 including GST).
- Finalised all office contingent workers (contract value: $3 064 631 including GST).
- Remote Sensing Stage 2 (contract value: $956 010 including GST).

11. Appendices

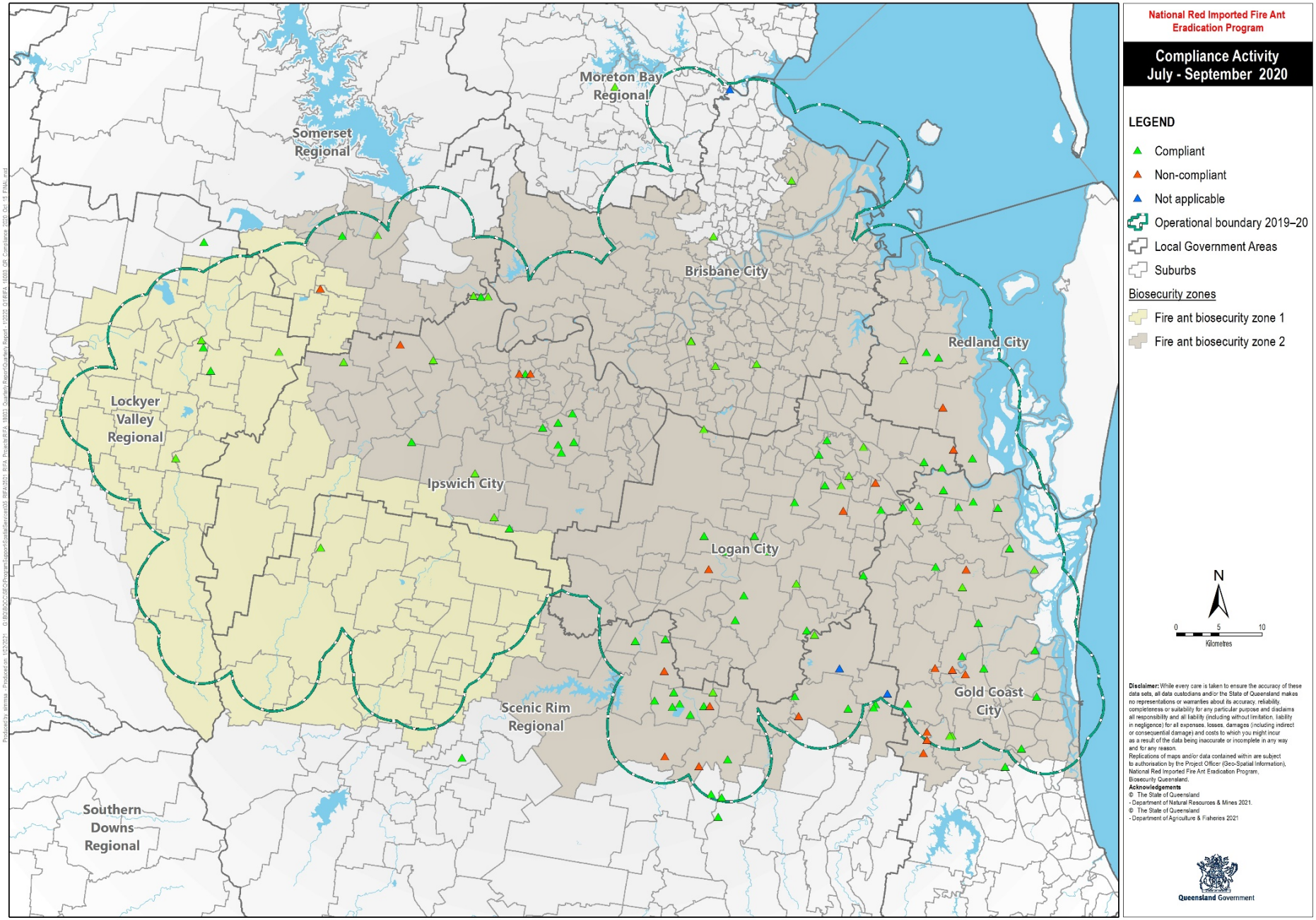
Appendix 1—Planned treatment progress as of 30 September 2020



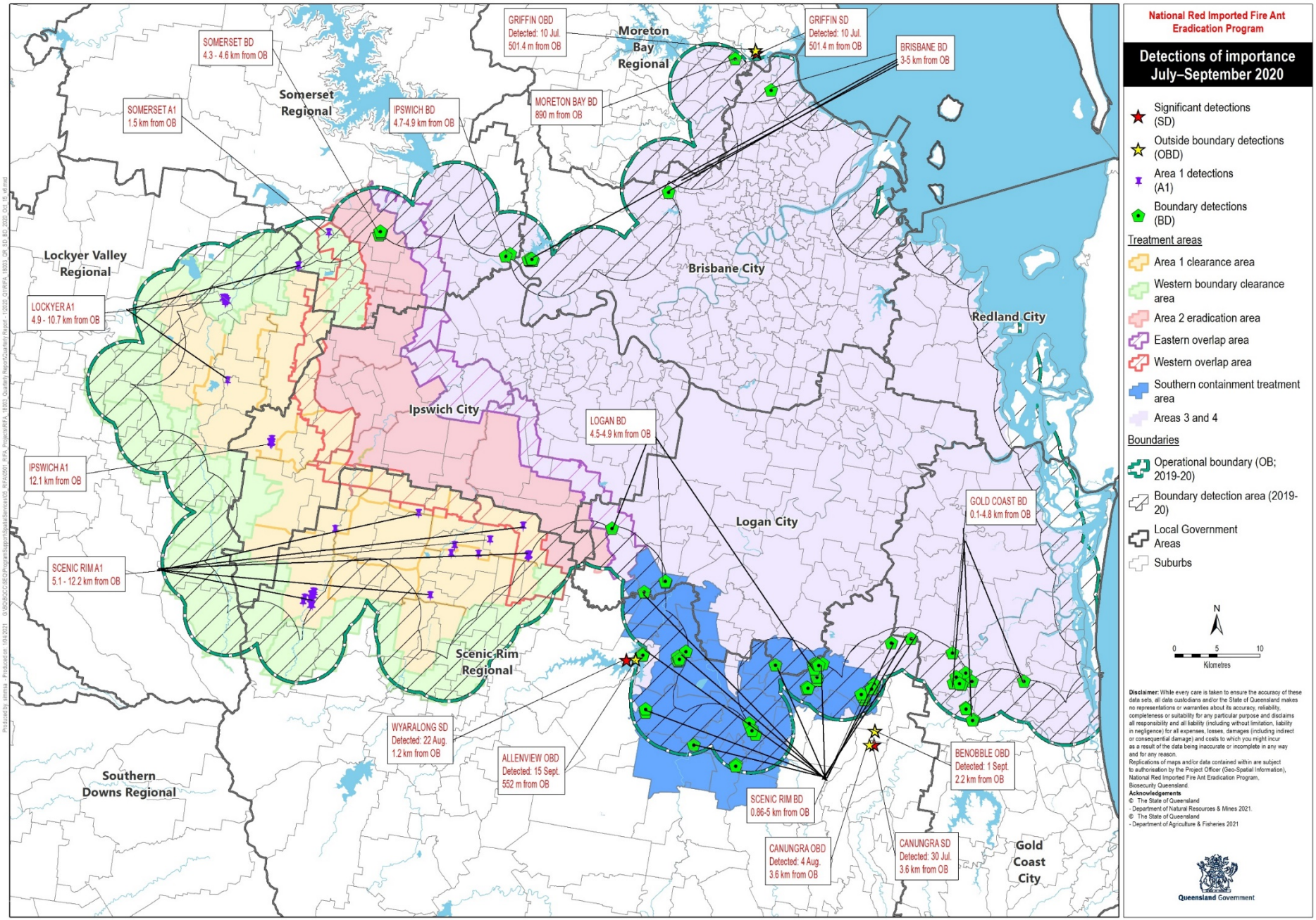
Appendix 2—Responsive and planned surveillance progress as of 30 September 2020



Appendix 3—Compliance activity in Quarter 1 2020–21



Appendix 4—Detections of importance in Quarter 1 2020–21



Appendix 5—Detections of importance circumstances and outcome in Quarter 1 2020–21

Location	Circumstances	Outcome
Significant detections and additional detections outside of the Operational Area boundary		
Griffin	• Initial detection made on 10 July 2020 • A nest containing female alates discovered in a new housing development in the Moreton Bay Council area • Additional nest discovered during delineation surveillance • A large quantity of bulk fill was brought onsite during the civil works stage in 2015, but no carriers were exported	• Treatment with an IGR was applied out to 10 m, as per program procedure • Surveillance out to 2 km from the nests found no further infestation • Too much time had elapsed between the bulk fill being brought onsite and when the detection was made (five years) to enable effective tracing • Genetic testing found a sister relationship between the two nests i.e. from the same parental nest, but the source (parental) nest has not yet been found • This infestation is not related to any other known northern outlier samples • Assumption is one nest came into the area by some means and then spread to the other • Results cannot determine whether the infestation is as a result of human-assisted movement or natural spread • It is believed the infestation comes from the South East Queensland population; cluster analysis indicates it was from other samples in the south-east (Redlands, Gold Coast area) • Further testing is underway, but genetic testing has been delayed due to COVID-19
Canungra and Benobble	• Initial detection made on 30 July • Fourteen nests discovered in a new housing development that spans two suburb boundaries in the Scenic Rim Shire: Canungra and Benobble • Some of the nests contained reproductive brood and alates • The nests appeared to have been in place for some time • Additional nests discovered during August and September	• Surveillance out to 2 km found several more nests north of the initial detection • Broadcast baiting out to 2 km from the infestation was planned • The developer has indicated they are willing to self-manage the development site • No carrier materials were brought onto or taken off the property • Genetic testing has not yet identified a source nest • No relationship could be established between the Canungra nests; results indicated samples came from different areas of the South East Queensland infestation, so multiple source populations • With so many unrelated nests in a small area, product movement of infested material is likely • Further genetic testing on the Benobble samples is underway, results are expected within a few weeks
Wyaralong and Allenview	• Initial detection made on 22 August • Four nests containing reproductive brood and alates discovered on the banks of the Wyaralong Dam in the Scenic Rim Shire. Nests appear to have been in place for more than six months. • Another detection made on 16 September	• Infestation may be a result of a nuptial flight from a dense infestation on the opposite bank of the dam in Allenview • Genetic testing for the Allenview detection returned unexpected results that indicate human assisted movement • A tracing report for the Wyaralong samples was provided to the genetics team for analysis, however this case is quite complex, so results may take a bit longer than usual • Surveillance on suitable habitat out to 2 km was undertaken • Broadcast baiting out to 2 km from the infestation will be applied during the 2020–21 treatment season
Boundary		
Scenic Rim	A high number of nests discovered across 11 suburbs with the densest concentration in the suburbs of Allenview, Birnam and Boyland.	• Extremely elevated risk of spread further south beyond the operational boundary • May be source of spread to the Wyaralong and Canungra detections (genetics may confirm) • May be links to human assisted movement • Surveillance and treatment out to 500 m was conducted/applied following detection • One round of broadcast baiting will be applied in the Southern Containment Treatment Area during the 2020–21 treatment season
Gold Coast	Across five suburbs	• Fairly manageable risk following program treatment and surveillance protocols • Broadcast baiting, out to 2 km from the infestation, will be applied in the suburb of Mount Nathan during the 2020–21 treatment season
Brisbane	8 detections Across three suburbs	• Program protocols applied for most of the detections as deemed minimal risk • An elevated response was implemented for detections in the suburb of Upper Kedron due to the persistence of the infestation

Location	Circumstances	Outcome
		• Surveillance was undertaken out to 2 km from the nests in Upper Kedron and treatment is planned for clear areas and high-risk areas
Somerset	2 detections in the suburb of Lowood	• Located within the Area 2 eradication treatment area so will receive four rounds of broadcast baiting with an IGR during the 2020–21 treatment season
Ipswich	One detection in the suburb of Pine Mountain	• Program protocols applied as deemed minimal risk
Lockyer Valley	Two detections in the suburb of Lockrose (also a clearance detection)	• Refer to the clearance section for a summary of actions
Moreton Bay	One detection in the suburb of Lawnton	• This detection was of interest to the program due to its proximity to the Griffin significant detection • No links were made between the Griffin and Lawnton colonies • May be links to human-assisted movement, although investigations revealed no movement onto or off the site
Logan	One detection in the Logan city council area	• Reasonable spread risk south beyond the operational boundary • May be source of spread to detections found further south • Surveillance and treatment occurred in keeping with program protocols • One round of broadcast baiting will be applied in the Southern Containment Treatment Area during the 2020–21 treatment season
Clearance		
Lockyer Valley	5 detections across three suburbs	• Two high risk detections in Crowley Vale were included in targeted treatment area out to 2 km from the nests, to receive three rounds of broadcast baiting in the 2020–21 treatment season • Three lower risk detections will be responded to in keeping with program protocols
Scenic Rim	23 detections across seven suburbs	• Nineteen high risk detections across six suburbs have been included in targeted treatment area out to 2 km from the nests, to receive three rounds of broadcast baiting in the 2020–21 treatment season • Four lower risk detections will be responded to in keeping with program protocols
Somerset	One detection in the suburb of Brightview	• The lower risk detection in the suburb of Brightview is included in the program's Western Overlap treatment area, therefore it will receive one round of broadcast baiting during the 2020–21 treatment season
Ipswich	Two detections in the suburb of Grandchester	• Whilst there were only two detections reported in Grandchester the number of nests (32) was concerning, therefore a treatment area was created, out to 2 km beyond the nests, to be treated three times by broadcast baiting in the 2020–21 treatment season