NATIONAL
Fire Ant
Eradication
PROGRAM

Quarterly Report 1 2021–2022

Report to: National Steering Committee: July to September 2021

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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 focuses on finding, containing and eradicating fire ants in South East Queensland.

Running from 2017 to 2027, the 10-year Eradication Plan's underpinning strategy is subject to verifiable eradication. It includes five phases and three checkpoints before proof of freedom from fire ants is declared (see Table 1 below). Using a staged, rolling treatment strategy from west to east, 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 eradication.

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 probability 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. This includes relevant key performance indicators for the period of July–September 2021.

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 2021

Yearly KPI completed | On track/progress as anticipated | Monitoring/minor issues | Off track/critical issues | Not required/not relevant

Stakeholder mobilisation					
Objectives		**KPI**	**KPI target (2021–22)**	**Progress against KPIs**	**Status**
1	Stakeholders within, and adjacent to, the fire ant biosecurity zones 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	95% of stakeholders report awareness in surveys by June 2022	The results of the first of two stakeholder surveys this financial year will be reported in Q2.	●
		b. Percentage of stakeholders aware of the risks posed by fire ants	95% of stakeholders report awareness in surveys by June 2022	The results of the first of two stakeholder surveys this financial year will be reported in Q2.	●
		c. Percentage of stakeholders aware of fire ant biosecurity zones	85% stakeholders report awareness in surveys by June 2022	The results of the first of two stakeholder surveys this financial year will be reported in Q2.	●
		d. Percentage of stakeholders aware of fire ant self-management options	50% of stakeholders report awareness in surveys by June 2022	The results of the first of two stakeholder surveys this financial year will be reported in Q2.	●
2	Stakeholders within the fire ant biosecurity zones support the Program and its activities to eradicate fire ants	**a.** Percentage of stakeholders opposing NFAEP operations	Less than 1% opposition annually	The Program received five refusals relating to six properties out of a total 3338 properties visited for treatment during the quarter. This equates to less than 1% opposition (0.2%). This equated to 143ha, with 19ha treated and 124ha remaining to be treated with assistance from Qld Police Service.	●
		b. Percentage stakeholder disclosing to be satisfied with NFAEP operations	80% satisfaction disclosed in surveys by 2022	The results of the first of two stakeholder surveys this financial year will be reported in Q2.	●
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 participating in fire ant self-treatment actions	90% stakeholders participating in fire ant self-treatment actions by June 2022	The results of the first of two stakeholder surveys this financial year will be reported in Q2.	●

Containment					
Objectives		**KPI**	**KPI target (2021–22)**	**Progress against KPIs**	**Status**
4	To mitigate the spread and establishment of fire ants by reducing the relative density and vigour of the fire ant infestation	**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	A report on the results of the first of two surveys this calendar year to determine relevant stakeholder awareness, participation and attitudes was received in late February 2021. There was no base line data prior to this report to use as a benchmark to measure an increase. However, 7% of people surveyed said they treat fire ants themselves.	●
		b. Percentage of fire ant infestations that are polygyne	Less than 1% of fire ant infestations are polygyne	• Of 2029 samples tested for social form 0 were polygyne. • In the previous financial year (2020–21),1.0% of the 6601 samples tested were polygyne while the number of sites with polygyne detections was slightly higher at 1.1% of the total number of sites tested. • Of the 3323 samples collected for genetic testing in Q1, none have yet been tested for social form due to the current backlog of samples from 2020–21. This backlog in genetic tests exists mainly due to an increase in samples, e.g., 3323 samples were collected in Q1 this year compared to 1587 samples in the same period the previous year. • While methods for increasing sample throughput are being investigated, methods for prioritising which samples should be collected/tested for social form will also be important to ensure that the program is able to rapidly detect polygyne detections and respond to prevent their spread.	●
		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	The number of distinct populations for 2020–21 will not be known until the annual analysis report is finalised in February 2022. The 2019–20 annual genetic analysis found 5 genetically distinct fire ant sub-populations. While this is an increase from 4 in 2018–2019, the new cluster was formed by two other clusters merging. All clusters are still in genetic bottleneck, indicating genetic fitness is still low.	●
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	95% of high-risk stakeholders are aware of movement restrictions/ requirements by June 2022	The results of the first of two stakeholder surveys this financial year will be reported in Q2.	●
		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	• 219 audits were undertaken in this quarter noting compliance staffing levels were not at full complement). • this is 13% of the 1698 (top 25% riskiest stakeholders) planned annual audit target.	●
		c. Number of significant detections linked to human-assisted movement	Zero significant detections linked to human-assisted movement	Genetic results indicate that human-assisted movement, or flight facilitated by human-assisted movement, may be the source of six infestations located outside of the Program's operational boundary, however no confirmed links have been made. More information can be found in appendix 5.	●

Objectives		KPI	KPI target (2021–22)	Progress against KPIs	Status
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 66% from 2019-2020 levels (5 710 ha) by June 2022	• The total ground surveillance completed in 2020–21 was 10 178ha, 78% above 2019-20 levels. In 2021–22 to date, it is 5 337 ha. • RSS was not undertaken in the 2020–21 year. RSS flights have been completed over a total of 21 840 ha in 2021–22. Of these 7 490ha have been validated by ground teams. • Total ground and RSS (validated) surveillance for 2021–22 at 30 September 2021 is 12 827ha or 125% above 2019-20 levels, and on track.	
		b. Percentage of stakeholders living near and beyond the Operational Boundary who look for and/or treat fire ants themselves	50% stakeholder participation by June 2022	The aforementioned February 2021 report showed 49% of those surveyed looked for and/or treated fire ants themselves.	
		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	• The prescribed treatment regime is currently underway for all detections that were confirmed near and beyond the boundary this quarter. • No fire ants were confirmed to be survivors from original nests.	
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	75% stakeholder participation by June 2022	The results of the first of two stakeholder surveys this financial year will be reported in Q2.	
		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	Treatment in the overlap buffer areas is scheduled to start in October 2021.	
		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	• There were 38 confirmed fire ant detections in the eastern and western overlap areas during the quarter. • Twenty-seven of the detections were made on previously infested sites, of which twelve did not receive the prescribed amount of treatment rounds or DNI, so the ants could be survivors. • The eastern overlap area is scheduled to receive two rounds of baiting with an IGR during 2021–22. • The western overlap detections were added to new treatment areas that were created to mitigate the risk of re-establishment in Area 2. These treatment areas will also receive an additional two rounds of baiting with an IGR during 2021–22.	
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	Assistance by the Program is limited due to movement controls between borders during the COVID-19 pandemic.	

Eradication

Objectives		KPI	KPI target (2021–22)	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 results of the first of two stakeholder surveys this financial year will be reported in Q2.	●
		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	There is no planned eradication treatment related to this KPI to report on in 2021–22.	●
		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 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 have adequate preliminary results until Q1, 2021–2022.	●
		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	• Eradication Area 2 consists of 8582 sites (or properties). • From June 2021 to September 2021 14.4% of the total number of sites in Area 2 have been surveyed with 0.8% confirmed to have fire ants.	●
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)	38% of the 2021–22 operational area by June 2022	• There is no planned eradication treatment related to this KPI to report on in the 2021–22 financial year, however this target was achieved by June 2021 (following the previous treatment season). The total area that has received treatment as a proportion of the total operational area is 33% (Total area of WB, EA1 and A2 = 211 580.65ha; Total area of operational boundary = 645 105.25ha).	●
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 33% from 2019–20 costs by June 2022	• The calculation for this KPI is being finalised and will be reported by June 2022. • Preliminary data indicates that the Program has achieved significant savings during 2020–21 with the average combined spend per hectare for all treatment and surveillance for Q1 in 2021–22 is $213. This compares to $314 per hectare for the Q1 period in 2020–21. • Further analysis will be reported in future reports.	●
		b. Average per hectare cost of the Program's fire ant monitoring and surveillance regimes to effectively eradicate fire ants	Average per hectare cost of monitoring and surveillance regime is reduced by 33% from 2019–20 costs by June 2022	The calculation for this KPI is being finalised and will be reported by June 2022. See 11a for preliminary combined surveillance and treatment spend per hectare.	●

Clearance

Objective		KPI	KPI target (2021–22)	Progress against KPIs	Status
12	To detect and destroy any residual fire ant infestations and gather evidence to support the	**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 2022	• On track to achieve this target by June 2022. • As of 30 September, 2983 ha of the required 5125 ha of clearance surveillance by ground teams has been completed (58% of riskiest locations by ground teams). Of these locations, 7 are within a 2021–22 treatment area so no further surveillance will be conducted there.	●

Objective	KPI	KPI target (2021–22)	Progress against KPIs	Status
demonstration of freedom from fire ants in clearance areas			• There are no Area 2 clearance zones that are within the top 10%. • RSS flights had been completed over 8419 ha in these locations and validation of predictions by ground teams had been completed over 2910 ha by September 31 (31% of riskiest locations by air).	
	b. Total area searched for the presence/absence of fire ants	Every clearance zone has at least 5% of the area[3] surveyed by June 2022	• Of the 101 Clearance Zones in the Western Boundary, Area 1, and Area 2, 101 have received a minimum 5% of the area surveyed (100%). • 64 clearance zones had received remote sensing surveillance over at least 5% of the area[1].	
	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. Nineteen (19) of the twenty-eight (28) detections made in the clearance area this quarter were outside the top 20% riskiest locations. • All but seven of the detections are in areas that were identified as re-infested during 2020–21 and are included in planned treatment for 2021–22.	

	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	• Twenty-eight (28) detections were made in the clearance area in the first quarter.
			• Four of the detections may remain from original nests:
			  ○ Three of the properties are science monitoring sites, for which all planned treatment was correctly applied during 2020–21, but no DNI occurred so it is possible the new detection of fire ants could be surviving ants.
			  ○ Another property was in the Program's toxicant treatment trial area for 2020–21 and received three rounds of correctly applied treatment, however DNI was not conducted during this period, so it is possible the new detection of fire ants could be surviving ants. DNI has been conducted to destroy the new detection and the Program plans to conduct two additional rounds of broadscale treatment this season.
			  ○ The rest of the detections received the prescribed treatment regime (baiting and DNI) and are therefore highly unlikely to be original nests.
			• Treatment will be undertaken to ensure zero fire ants remain from original nests 12 months after the prescribed treatment regime is completed.
				

[1] From a total 86 clearance zones in A1/WB viable for RSS this season

Summary of planned treatment and surveillance

Planned treatment in 2021–22 includes suppression and clearance treatment. The summer treatment season commenced in September 2021 and is scheduled to finish in early June 2022.

See Appendix 1 to view the map of planned treatment areas and progress.

Table 3: Planned treatment schedule at 30 September 2021

Treatment Area	Planned Ha	YTD Ha	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Area 1	99,690	16,917										
Significant Detections	51,660	12,216										
New Detections	25,000	0										
Overlap (East/West)	75,400	0										
Southern suppression	85,800	0										
Self-Treatment	5,000	0										
Totals	342,550	29,133										

On track Delayed - expect to complete on time Risk of not completing

Table 4: Planned treatment progress at 30 September 2021

Area	No. of hectares			
Treatment area	Planned year (Ha)	Actual YTD (Ha)	Planned YTD (Ha)	% YTD
Area 1	99 690	16 917	8 151	208
Significant detections	51 660	12 216	4 224	289
Contingency for new detections (A1 / SD / A2)	25 000	0	0	NA
Overlaps	75 400	0	0	NA
Southern suppression	85 800	0	0	NA
Self-treatment	5 000	0	0	NA
Total	342 550*	29 133	12 375	235

*excludes polygyne and responsive notional allocations of 10,100 ha.

See Appendix 2 to view the map of responsive and planned surveillance areas and progress.

Table 5: Planned surveillance schedule at 30 September 2021

Surveillance Area	Planned Ha	YTD Ha	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Clearance	4,500	3,237												
Sentinel	1,300	684												
Targeted	4,200	3,717												
Responsive	8,500	6,004												
Totals	18,500	13,642												

On track → Delayed - expect to complete on time → Risk of not completing

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

Surveillance Area*	Planned Year (Ha)	Actual YTD (Ha)	Planned YTD (Ha)	% Ha Completed YTD	Year to date sites completed	Planned sites (year)	% Planned sites completed
Clearance	4 500	3 237	2 578	126	303	278	109
Sentinel	1 300	684	173	395	225	294	77
Targeted	4 200	3 717	2 740	136	4 720	4 755	99
Responsive	8 500	6 004	1 396	430	4 169	NA	NA
Total	**18 500**	**13 642**	**6 887**	**198**	**9 417**	**5 327**	**177**

*Sentinel surveillance—planned ground surveillance on sites outside and just inside the operational boundary; Clearance surveillance—planned ground surveillance on sites within previous eradication treatment areas: Area 2; Targeted surveillance—planned ground 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. See containment below for further information on surveillance.

A further 39 800 hectares were surveyed via Remote Sensing Surveillance technology. See p14 for more information.

The winter surveillance season commenced in late June 2021 and concluded during September 2021. The Program will continue surveillance in all areas for the remainder of the financial year.

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

Raising stakeholder awareness

Advertising creative material

Work is continuing with the Program's creative agency (Khemistry) to develop a suite of materials and key messaging to encourage industry and community stakeholders to undertake behaviours that will help eradicate fire ants from Australia. A request to change the creative concept and competing priorities mean the material will not hit the market until early 2022.

Treatment season

The Program's treatment campaign was approved by the Queensland Government Advertising and Communication Committee (GACC) and will go live in September 2021. The campaign will target business owners and residents in this season's treatment area through:

- a media release and email notifications to key stakeholders and local media
- multiple newspaper advertisements in key print publications
- multi-phase social media campaign.

Biosecurity zone changes — Tarome and Coulson

Communication used to raise awareness among residents and business owners of the addition of Tarome and Coulson to the fire ant biosecurity zones included:

- email notifications to more than 17,000 key stakeholders, including peak bodies and associations
- distribution of a flyer to 113 households in Tarome and Coulson
- a 3-week paid social media campaign that reached of 41 560 people (see Table 7: Social and digital media report)
- variable messaging signs in Aratula and Roadvale over a three-week period.

Community forums will be run in Tarome and Coulson to further discuss the zones changes and what they mean for the community in Quarter 2.

Digital communication

The Program's new website has been a focus this quarter with web content on existing Queensland Government website being migrated to the new website fireants.org.au.

The website received 12,589 page views in this quarter with the most popular pages being the homepage, the 'Look' landing page and the 'Program treatment regime' content page. A majority of our web traffic this quarter originated from social media (55%), with a further 38.4% of people finding their own way to the website either through a search engine or through a direct link. The majority (61.4%) of our users accessed the site using mobile and tablet device users and the remainder (38.6%) used desktop computers.

The Program continued its monthly stakeholder newsletter—Fire ant news—in Quarter 1, with three newsletters being opened by an average of 32.11% of the subscriber database. Despite a drop in subscriber numbers over the period (113), the open rate of our newsletter continues to climb with September's newsletter opened by 33.43% of people.

A range of paid and organic social media campaigns were delivered this quarter. Combined the Program's social media posts reach 923,828 people and attracted 81,978 engagements (see Table 7: Social and digital media report).

Table 7: Social and digital media report Quarter 1 2021–22

CAMPAIGN	REACH	IMPRESSIONS	ENGAGEMENT	VIDEO PLAYS (3-SEC OR MORE)	COST
Significant detections campaigns	58 317	121 357	2 301	N/A	$865
Community surveillance 2021	746 106	3 111 765	75 735	412 684	$18 000
Biosecurity zone changes – Tarome & Coulson	41 560	140 850	1 606	8 848	$750
Planned treatment 2021–22 (Phase 1)	77 845	278 488	2 336	101 167	$1 863
TOTAL	**923 828**	**3 652 460**	**81 978**	**522 699**	**$21 478**

Media

Engagement with media outlets remained steady this quarter with a range of stories about planned fire ant treatment, fire ant biosecurity zones and community treatment projects shared. The three media releases distributed to South East Queensland media and information or interview requests (8) received from media outlets resulted in 35 media mentions. A further 18 stories mentioned fire ants and Queensland's fight against the pest. Generic invasive pest stories in the media also highlighted the risks fire ants can cause.

Table 8: Traditional media activity Quarter 1 2021–22

Media mentions	53
Sentiment	Neutral
Audience reach	539 771

Training

The Program delivered fire ant awareness and treatment training to 687 stakeholders during Quarter 1. This quarter the Program has been working with Plant Health Australia (PHA) to design and develop a building and development industry training course that will sit on PHA's learning management system. This training will be a pilot to test the process of implementing self-driven online training courses. If successful, it will be followed by courses for other industry categories, including pest managers.

Councils

This quarter the City of the Gold Coast were engaged to support the planning of a scaled-up community suppression project on the Northern Gold Coast. A data transfer agreement is being arranged to accommodate planning for this project. In addition, the Program is working with Brisbane City Council Councillor, Angela Owen, to define how her ward office at Calamvale could support a community responsive treatment project.

Building stakeholder support

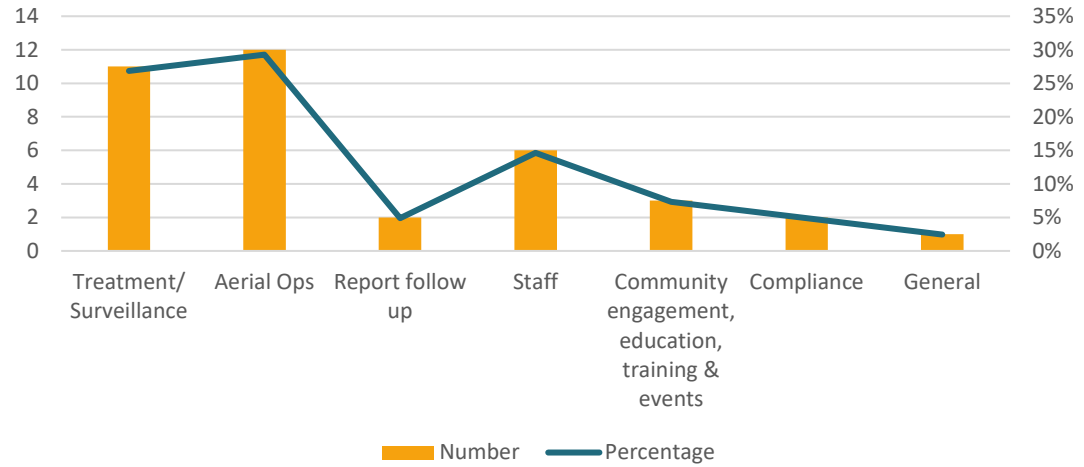
Complaints and feedback

In addition to reports of suspect fire ants, 996 contacts were received by the department's Customer Service Centre about fire ants this quarter. For 319 of those contacts, the centre referred the contact to the Program for action. Overall, there were 37 complaints (3.7%), 3 compliments (0.3%), and 956 enquiries (96%).

The majority of complaints were related to aerial operations (29%) followed by treatment and surveillance activities (27%) and staff (15%). Complaints about aerial operations were consistent with other quarters and were mainly about helicopter noise and bait treatment issues. Complaints about treatment and surveillance were varied, but included issues such as perceived lack of treatment, scheduling timeframes and notifications. Staff complaints focused on extended gatherings of fire ant staff and/or vehicles and various damage or inconvenience allegedly caused by staff. All complaints are addressed and responded to promptly by the relevant team within the Program.

To minimise ongoing angst towards the Program's operational activities, the community and stakeholder engagement team continue to include targeted messaging in a variety of communication materials. Regular meetings and toolbox talks are conducted by operational team leaders and managers to discuss any immediate or ongoing issues.

Figure 1: Complaints—number and percentage in Quarter 1 2021–22



Refusing treatment by the Program

Five landowners refused treatment on six properties this quarter. Two site owners refused entry by ground crews entering their properties after aerial baiting had been completed. Negotiations are continuing with landowners in an effort to treat these sites in Peak Crossing, Wilsons Plains, Clarendon and Kulgun.

Empowering stakeholder participation

Community surveillance

Launched on 8 July 2021, the community surveillance campaign encouraged both industry and residents in Area One, Area 2 and up to 10 km outside the operational boundary to look for and report fire ants. This message was communicated through:

- a tri-fold brochure delivered to 225 000 letterboxes
- email notifications to around 400 key stakeholders, including peak bodies and associations, schools and community groups

- multiple newspaper advertisements in four publications with a combined distribution of 100 000 each time
- 8-week paid social media campaign with reach of 746 106 (see Table 7: Social and digital media report).

Community treatment projects

Gold Coast

All communication and marketing material required for the Program's next community treatment project on the Gold Coast submitted to GACC for consideration late in September.

Scheduled to go live in late October, the largest campaign (Gold Coast) will use brochures, print and digital advertising and social media to encourage residents in Arundel, Parkwood, Pacific Pines, Maudsland, Molendinar and Gaven to work with the Program and treat their backyards for fire ants. Public spaces, schools and sports grounds in Ashmore, Nerang, Labrador and Southport will also be treated.

Tamborine Mountain—Phase 2

All communication and marketing material required for this project was finalised. Fliers were delivered to 3000-plus households in Eagle Heights, North Tamborine and Mount Tamborine and a media release sent to the three publications that cover the target area.

All eligible households will be able to collect two free fire ant treatment kits from the Tamborine Mountain Visitor Information Centre between October and May next year.

Calamvale Ward, Brisbane

All planning and operational communication material required to roll this project in the suburbs of Algester, Calamvale, Drewvale, Forest Lake, Heathwood, Karawatha, Larapinta, Pallara, Parkinson, Stretton and Willawong finalised. Third party social media content and media release developed to promote the project.

When the project commences in November, residents will have two options:

- Find and report fire ants — we will treat any nests and will provide households with a free treatment kit for follow up treatment
- Reduce the chance of fire ant moving in — collect a free treatment kit from the Calamvale Ward office or the Karawatha Forest Discovery Centre.

All eligible households will be able to collect two free fire ant treatment kits.

Detections of importance campaigns

The Program alerted industry and residents in the areas of Allenview, Mount Tarampa, Nerang, Roadvale and Nindooinbah to check their properties for fire ants and report any suspect ant nests. Activities included:

- **Direct notifications**: emailed to 1865 businesses and 33 local community groups and sporting clubs and flyers delivered to 7863 residents and businesses across four target suburbs (Mount Tarampa, Nerang, Roadvale and Nindooinbah) and surrounding areas.
- **Roadside signage**: placed in 10 locations across three target suburbs (Mount Tarampa, Nerang and Nindooinbah) and surrounding areas.
- **Social media**: ran two-week social media campaigns in Allenview, Nerang, Nindooinbah and surrounding suburbs advising residents to check their properties for signs of the pest (see Table 7: Social and digital media report).

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

Containment through the suppression of the existing infestation in non-eradication areas and preventing further spread remains a high priority. This includes prioritising detections of importance (DoI) at or near the operational boundaries, work with high-risk material industries to ensure compliance and vigilance to prevent spread through the human-assisted movement of fire ants, and working with the community to suppress the pest in area with a of heavy ant population. Landowners and residents in South East Queensland also play a critical role in suppressing the pest by treating properties or land they own or manage. This helps reduce the size and scope of the eradication task and degrades the genetic integrity of fire ant colonies.

Boundary containment and eradication area protection

The Program uses a risk-based approach to surveying for and eradicating fire ants from near the operational 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 monitoring sites within previous planned eradication areas to detect any residual ants (refer to the clearance section). During 2021–22 planned surveillance in the containment areas will be undertaken using ground teams and remote sensing cameras mounted on helicopters.

Suppression treatment is also conducted protect the boundary and previous eradication areas.

Surveillance

The winter surveillance season commenced in late June 2021 and concluded during September 2021. The Program commenced sentinel surveillance during September 2021, as planned, and will continue clearance and sentinel surveillance during periods of unsuitable treatment weather. Targeted and responsive surveillance will continue throughout the season utilising responsive field teams. Clearance and targeted surveillance using remote sensing cameras mounted on helicopters began in the 2021–22 surveillance season to locate any residual infestation in Area 1 and the Western Boundary. Clearance surveillance by ground teams focused on Area 2.

See **key insights** above to view surveillance data for this quarter and **Appendix 2** to view the progress map.

Remote sensing surveillance

The Remote Sensing Surveillance (RSS) project began collecting imagery in July 2021, and the imagery provider Outline Global immediately began processing images and producing predictions validation, which is the process by which predictions are checked by field staff for actual presence of fire ant colonies. Field staff also began validating predictions. As of 30 September 2021, imagery was collected above 398 flight grid cells, incorporating approximately 39 800 hectares. Of those 398 grid cells, 96 (appr. 9 600 ha) have progressed through validation.

Imagery collection will continue through October 2021, and validation will continue through the summer months.

Analysis of the intelligence gathered, and therefore inference possible, on the infestation in surveyed areas is ongoing. Goals for the next 2 quarters will be to use validation data to refine estimate of RSS accuracy, and then to optimize the level of ground-based validation effort required in the RSS surveillance package, both for delineation purposes and for proof of freedom estimation.

Suppression treatment

The Program will conduct up to two rounds of western and eastern overlap treatment to prevent reinfestation of areas where eradication treatment has been completed in 2020–21. The western overlap area is a minimum two km buffer west from the eastern edge of Area two and the eastern overlap is a minimum two km buffer east from the eastern edge of Area 2. One to two rounds of treatment will also occur in southern suppression treatment zones: North—a minimum three km buffer inside the operational boundary, north of known detections and South—a minimum two km buffer outside the operational boundary to the south of known detections. Suppression treatment in the Overlap treatment areas is scheduled to commence in October whilst the Southern Suppression treatment areas is scheduled to commence in November 2021.

Responsive treatment

Responsive treatment is delivered when the community reports suspected fire ants 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** for more information).

Community reports of fire ants

There were 3815 public reports of potential fire ants this quarter. Only 12 of these reports were residents confirming that they checked their yards and found nothing.

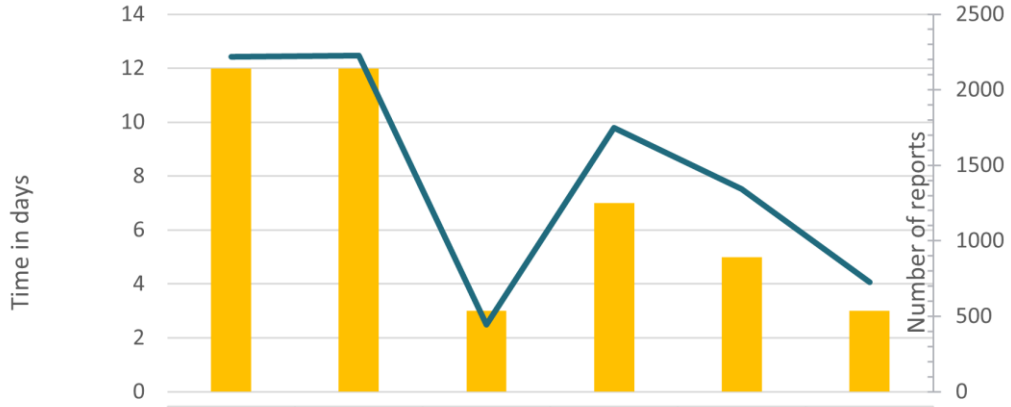
The top 10 suburbs to report fire ants were Jimboomba (Logan City), Greenbank (Logan City), Park Ridge (Logan City), Redbank Plains (Ipswich City), South Ripley (Ipswich City), Oxley (Brisbane City), Tamborine (Logan City), Logan Village (Logan City), Logan Reserve (Logan City), and Chambers Flats (Logan City). These 10 suburbs made up 22% of reports made this quarter.

Most suspect ant reports were located at a residence (60%), with roadsides or footpaths as the second most common location (13%) (figure 3). What made people report suspect ants (figure 4) was mainly 'just noticed something different' (26%). Noting that 'Other' accounted for 30% of responses, with the free text describing multiple reasons including 'walking / walking the dog', 'notified by neighbour/council/builder/gardeners' and a large portion labelled as a 'propel report' from an automated system process. Notably, 152 (4%) people reported that they, or someone they know was stung, and 562 (13%) people actively went looking for fire ants.

Of the responses received from people advising where they heard about the Program, there was a significant change in percentage distribution of some of the responses corresponding to Program activities. Notably, there was a 5% increase in those that responded 'brochure' which might indicate that the recent major campaigns mailing brochures to over 200,000 people has had an impact. Additionally, there was an 8% increase in 'other' which the text responses indicate are mainly people who have previously reported or been involved in the Program. A 12% decrease in 'website' responses may be a result of the new website changes that have been introduced this quarter transitioning from Queensland Government webpages to **fireants.org.au**. Despite the comparative decrease, 'website' remains the highest response at 28%, followed by 'other' at 17%, 'fire ant awareness training' at 14% and 'brochure' and 'word of mouth' both at 11%.

The maximum days for the Program to treat reported suspect fire ants this quarter was between seven and 7 days.

Figure 2: Public reports and maximum days to direct nest injection (DNI) treatment from April 2021–September 2021



	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21
Max. days to DNI	12	12	3	7	5	3
Total reports	2219	2227	443	1747	1344	724

Figure 3: Where suspect ants were found in Quarter 1 2021–22

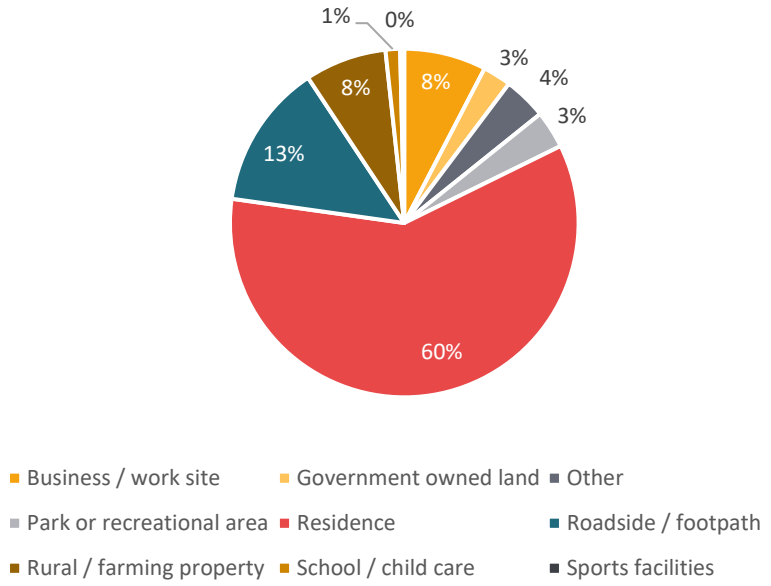


Figure 4: What made people report suspect ants in Quarter 1 2021–22

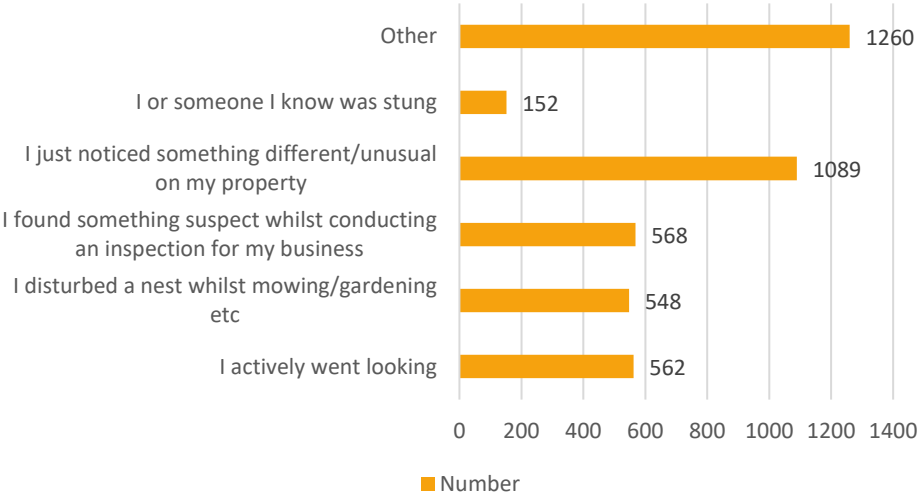
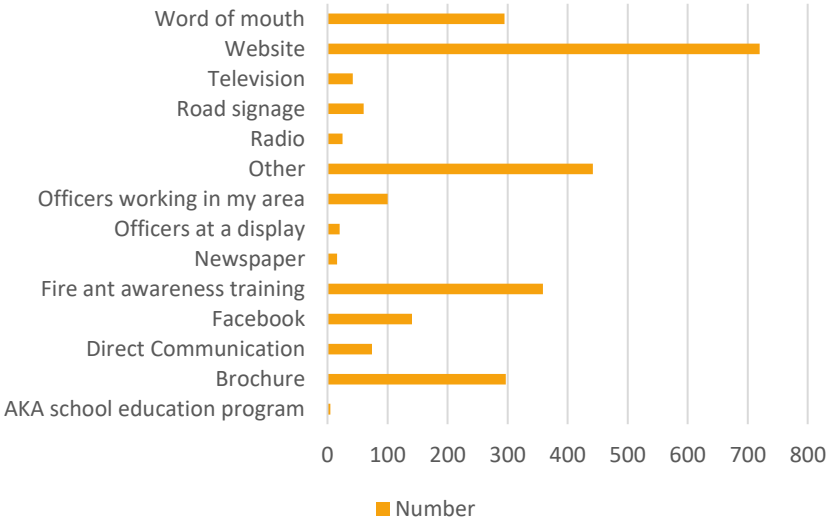


Figure 5: How people reporting suspect ants heard about the Program in Quarter 1 2021–22



Detections of importance

Detections of importance pose a heightened risk to the achievement of the Program objectives and overall success and receive urgent attention. They include detections outside the operational boundary, detections up to five kilometres inside the operational boundary in place at the time of detection and detections located within areas that are currently undergoing clearance and freedom activities.

During the first quarter there were 111 confirmed detections of importance, a breakdown of which can be found in table 9. More detailed information can be found at **Appendix 5**.

Table 9: Fire ant detections of importance Quarter 1 2021–22

Type*	No.	Location/s
Significant	4	Nindooinbah, Roadvale, Mount Tarampa, Nerang
Outside Boundary	30	Boonah (2), Charlwood (1), Clarendon (4), Coulson (6), Mount Tarampa (2), Tamborine Mountain (2), Tarome (6), Wyaralong (7)
Boundary	40	Allenview (4), Arundel (1), Beaudesert (4), Boyland (8), Bromelton (1), Cryna (1), Josephville (2), Kagaru (1), Kerry (1), Kholo (5), Mundoolun (3), Tabraglaba (1), Tamborine Mountain (1), Veresdale (1), Veresdale Scrub (4), Wongawallan (1), Wonglepong (1)
Clearance area	37	Calvert (2), Coleyville (3), Harrisville (2), Hatton Vale (1), Mount Forbes (1), Mount Walker (6), Mutdapilly (9), Peak Crossing (3), Rosevale (1), Lowood (1), Rosewood (4), Tallegalla (4)

*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 residual ant search and destroy activities.

Significant/outside boundary detections

- Four new significant detections and 30 detections outside the Program operational area boundary were confirmed during the first quarter in the following local government areas: twenty-three in the Scenic Rim, six in Somerset, four in Ipswich and one in the Gold Coast.
- Thirty of the detections were found in areas known to have infestation and are defined as *outside boundary detections* (as they are related to previous detections).
- Twenty-seven of the detections were in the Program's planned treatment areas for 2021–22, so will receive three rounds of broadscale baiting with an IGR
- Four of the detections had high density, or high-risk infestation, which warrants the creation of additional treatment areas.
- A notional allocation had been set aside in this year's budget to account for additional treatment in high-risk detections of importance areas.
- Nests at all properties were immediately destroyed.
- Genetic analysis was conducted to determine if the nests are related to the existing SEQ population and the fire ant colony's social form (monogyne or polygyne). All the detections were from the current infestation and were monogyne.
- Further testing was also undertaken to identify relatedness to nearby colonies and investigations carried out into related fire ant carrier product movements. Six detections this quarter are potentially a result from human assisted movement, but not confirmed links have been made. Individual results, where available, have been provided in the table at appendix 5.

Boundary detections

- There were 40 boundary detections (detections made within 5 km of the operational boundary) during the first quarter in local government areas of Scenic Rim (29), Logan City (4), Gold Coast City (2), and Brisbane City (5).
- Eighty-five percent of the boundary detections were located at the southern edge of the operational boundary, which continues to pose a risk of spread in the direction of the New South Wales border and presents a significant risk to the Program's containment objectives.
- The Program's planned suppression areas were created to address the risk of spread.
- One round of broadcast baiting with an IGR was applied to the area during 2020–21 and additional rounds are scheduled during 2021–22.

- All nests were promptly destroyed with an insecticide by either applying direct nest injection or broadcast baiting, depending on risk. Scope of treatment ranged from a minimum of 100 m from the nest to 2 km beyond the infestation.

See Appendix 4 for more a map of detection locations and Appendix 5 for further detail on their circumstances and management.

Polygyne detections

Genetic analysis of the social form of fire ants is undertaken to guide treatment activities. Multi-queen colonies (polygynes) have an increased risk of spread via human-assisted movement and are more expensive and difficult to eradicate compared with single queen colonies (monogynes). As such, one of the KPIs of the program is to maintain the percentage of polygyne infested sites in southeast Queensland at or below ~1%. This is far less than the proportion of polygyne colonies seen in overseas infestations, which is often between 40% to 70% or higher.

Of the 2029 samples tested for social form in Q1, zero were polygyne (Table 10). In addition, of the 6601 samples tested in the previous financial year (2020-21), 1% were polygyne while the number of sites with polygyne detections was slightly higher at 1.1% of the total number of sites tested.

None of the 3323 samples collected in Q1 were able to be tested in Q1. All samples tested in Q1 had been collected in the previous financial year (2020-21). By end of Q1, about 50% of the total samples collected from 2020-21 had been tested for social form (Table 11), which gives an indication of the current testing backlog. While methods for increasing sample throughput are being investigated, methods for prioritising which samples should be collected/tested for social form will also be important to ensure that the program is able to rapidly detect polygyne detections and respond to prevent their spread.

Table 10: Fire ant samples tested for social form in Quarter 1 2021–22

Period	No. samples tested^	No. monogyne samples	No. polygyne samples	No. monogyne detections by site	No. polygyne detections by site	No. polygyne detections by suburb
Q1 2021–22	**2029**	2029	0	1608	0	0
Previous Year						
Q1 2020–21	1587	1571	16 (1.0%)	1400	16 (1.1%)	10
Quarterly average 2020-21	1650	1636	14	1271	10.5 (0.6%)	7.5 (30 total)

^Excludes samples found to have <15 ants, which are not suitable for analysis.

Table 11. Fire ant samples collected for social form testing in Quarter 1 2021–22

Period	No. samples collected	No. samples tested *^	No. monogyne samples	No. polygyne samples
Q1 2021–22	**3323**	**0**	**-**	**-**
Previous Year				
Q1 2020–21	912	801*	793	8 (0.1 %)
Quarterly average 2020-21	2 599	1 253 (48.2%)	1 235	18.5 (1.5 %)

*Data is accurate up to the end of Q1 2021 (30 September). Note the ants tested in a quarter are typically not able to be tested in the same quarter due to the large number of samples being collected and the resulting sample backlog. ^Excludes samples found to have <15 ants, which are not suitable for analysis.

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 above) and targets industries most likely to transfer fire ants through compliance audits. Changes to fire ant biosecurity zones in June 2021 introduced new suburbs within the zones and meant several 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, if found non-compliant this group has been made aware of the requirements and generally given two weeks to achieve compliance.

Compliance audits

The *Compliance Plan 2021–22 Human Assisted Spread Mitigation* (compliance plan) was developed to ensure 25% of 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. Through various processes (field inspections, compliance inspections, paying for business data etc) the Program captures businesses that work with fire ant carriers that operate within the fire ant biosecurity zones. Such businesses are landscaping services, hay producers, earthmovers, waste facilities, civil construction, builders and developers and quarries. To target the top 25% of these businesses (approximately 6792 businesses in the data base) equates to auditing approximately 1700 businesses annually, 424 audits a quarter which equates to an individual officer conducting approximately 70 audits a quarter, based on having a full complement of compliance officers employed (six). If the compliance team is down personnel they aim to maintain 70 audits per officer.

The compliance team prioritised industries based on their level of risk of potential movement of fire ants, factors they consider are the time of year (some industries are seasonal like hay producers), their proximity to high density infestation, if an area has recently been included into the fire ant biosecurity zone and the location a business is to the biosecurity zone boundaries, are all considered. For the first quarter of 2021/22 hay producing businesses in the areas along both the southern containment area and the north-west area of zone 1 were targeted due to recent significant detections and some suburbs had recently been included into the biosecurity zone. As well businesses in the civil construction industry were targeted that were close to the border of zone 1 and zone 2 as they had recently transitioned from zone 2 to zone 1.

During Quarter 1 the compliance team had approximately 3.8 operational officers, as a result the target for the first quarter audits based on personnel was 238 audits. Compliance conducted 219 audits during this period, of note the audits in the both hay producing areas took longer as considerable education of clients was needed as well a number of investigations were required for noncompliance resulting in compliance action to a number of businesses. Based on the current staffing levels (60% capacity) the number of audits completed 219 is 13% of the 1698 target.

Table 12: High risk industry audits—numbers compliant versus non-compliant Quarter 1 2021–22

High risk industry	No. audits	No. non-compliant	% non-compliant	Outcome
Hay	62	18	29%	13 Advisory Notices issued for minor storage breach. 5 Biosecurity Orders issued to cease any movement of non-compliant hay. All businesses are now compliant.
Earthmoving	81	4	5%	4 Advisory Notices issued for non-compliance with Soil Movement Guideline. All businesses are now compliant.
Civil construction and builders	53	0	0	
Pool builders	1	0	0	
Potted Plant	4	1	25%	1 Advisory notice issued to a resident to treat potted plants prior to moving from the property. Record of treatment received prior to movement.
Landscaping Supplier	2	0	0	
Quarry	7	0	0	

High risk industry	No. audits	No. non-compliant	% non-compliant	Outcome
Waste facilities	6	0	0	
Tree lopping and mulching	3	0	0	
Total	**219**	**23**	**10%**	

Continuing to extensively engage and communicate with industry in addition to audits will be key to improving compliance levels. See **Appendix 3** for the locations of compliance activities.

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

During 2020–21, the Program confirmed 216 detections of importance, 73 of which were located within the Program's previous eradication areas: Area 1 and the Western Boundary. This resulted in a decision to postpone treatment of Area 3. During 2021–22, the Program's strategy is to focus on treatment of residual infestation in the previous Area 1, Area 2, Western Boundary areas and high-risk areas outside boundary areas. The objective being to destroy remnant infestations in the clearance areas (where eradication treatment has been completed in previous years); prevent further spread outside the operational area; and protecting previous eradication areas from re-infestation.

Monitoring the efficacy of broadscale bait treatments in Area 2

In the 2020–21 treatment season, as the Program prepared to move into a new eradication area (Area 2), a more intensive methodology for broadscale eradication treatments was developed as part of an adaptive management approach. Under this approach, four bait rounds were applied in a single treatment season (September 2020–June 2021) and, in some sections of Area 2, a fast-acting bait (Advion®) was included in the treatment sequence to investigate if this could further accelerate eradication.

Before applying these eradication treatments, extensive surveillance was undertaken to locate live fire ant nests so their responses to baiting could be monitored. The number of fire ant nests detected and included in a monitoring strategy to measure the efficacy of the three eradication treatment strategies in Area 2 was:

- 323 nests (northern section: treatment strategy = 4 x IGR treatment rounds)
- 66 nests (central section: treatment strategy = 3 x IGR treatment rounds + late Advion® treatment in round 4)
- 91 nests (southern section: treatment strategy = 3 x IGR treatment rounds + early Advion® treatment in round 2).

All monitoring nests have been visited on a four-week/monthly schedule since September 2020 and assessed for the level of fire ant activity. In conjunction with this monitoring of treatment efficacy, pitfall trapping at six-week intervals occurred to monitor the potential impacts of broadscale baiting on non-target ant species.

By the end of September 2021, out of the original 480 monitoring nests across Area 2, fire ant activity was recorded at 11 nest locations across 3 monitoring sites, all within the 4 x IGR treatment area. Due to these observations of persisting fire ant nests, the Program is continuing broadscale eradication treatment in this northern 4 x IGR section area in the 2021-2022 treatment season, with a further 2 rounds of IGR bait planned.

For the two sections of Area 2 where toxicant baits were used in 2020–21, live fire ants (<10) were detected in August at a single monitoring nest location (central section: 3 x IGR + toxicant in Round 4). There had been no fire ant activity observed at this site for several months previously and as of September, no further activity has been detected at this nest location.

Apparent mortality of monitoring nests in Area 2 as of September 2021 (Summary):

- 96.6% (n=323) Northern section; 4 x IGR
- 100% (n=66) Central section; 3 x IGR + toxicant in Round 4
- 100% (n=91) Southern section; 3 x IGR + toxicant in Round 2

(Following a review of the data for final reporting, the above numbers of nests used to monitor and analyse treatment efficacy in Area 2 has been altered from those provided in earlier quarterly reports: i.e. from 322, 144 and 66 monitoring nests for the northern, central and southern sections respectively. This review of the data set has had no impact on the overall findings).

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

The second year of clearance surveillance is ongoing in Area 1 and Western Boundary, and the first year is underway in Area 2. Under the proposed Clearance and Proof of Freedom Strategy, clearance zones must have 2 consecutive years of clearance surveillance without any observed living fire ants before they can be declared 'clear'.

Ongoing clearance surveillance in Area 1 and Western Boundary is performed predominately through remote sensing surveillance (RSS).

- There were twenty-eight (28) detections in Clearance Area One this quarter: Calvert (2), Coleyville (3), Harrisville (2), Hatton Vale (1), Mount Forbes (1), Mount Walker (6), Mutdapilly (9), Peak Crossing (3), and Rosevale (1).
- Twenty-five of the detections are in areas that had confirmed infestation during 2020–21, as such they are included in the Program's planned clearance treatment areas for 2021–22, to receive three rounds of broadscale baiting with an IGR.
- To prevent the re-establishment of fire ants in Clearance Area One it is recommended that the three detections that were outside of existing treatment areas be scheduled for additional rounds of baiting with an IGR during 2021–22.
- There were nine confirmed (9) detections in Clearance Area Two this quarter: Lowood (1), Rosewood (4), and Tallegalla (4).
- Fire ant activity was also recorded at nest locations on monitoring sites in an area where four IGR treatments had been applied. Two additional rounds of baiting with an IGR will be applied during 2021–22.
- The nests will continue to be monitored after each round of bait is applied to assess mortality.

Table 13: Challenges and solutions to clearance activities Quarter 1 2021–22

Challenges	Solutions
Incorporating RSS into every aspect proof of freedom surveillance and treatment planning and strategy. Timely validation of remote sensing predictions is difficult due to limited field staff availability.	Analysis of RSS accuracy data, as well as costs. Build surveillance and detection simulations, as well as computer Programs to optimize expenditure or ground-based surveillance in RSS package towards statistical evidence of freedom. Validation will likely extend through the summer months and require support from our Odour Detection Dogs.

Clearance and proof of freedom strategy

Updates to the Clearance and Proof of Freedom Strategy await analysis of the remote sensing package for required coverage, estimated costs, and accuracy, which will become available in the 3rd Quarter. Program scientists have been developing simulation Programs to help in this analysis in advance of final estimates from the remote sensing Program, which will be critical in creating potential rules and procedures for transforming RSS into statistical evidence of freedom. The second year of clearance surveillance is ongoing in Area 1 and Western Boundary, and the first year is beginning in Area 2, and will be completed early in the second quarter. Final analysis of clearance surveillance will be completed early in the third quarter, at which time the Proof of Freedom Working Group will convene to discuss results, and to recommend a number of Clearance Zones for "clearance" declaration and progression into the next stage of the Clearance and Proof of Freedom strategy.

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

Polygyne research and eradication

Based on the results from a pilot trial conducted in 2020, three treatment regimes were selected for further evaluation and field application against known polygyne infestations in Area 2, with the goal of attempting to locally eradicate these within the 2020–21 treatment season. These three treatments were:

- Amdro 2.5 kg/ha + Distance 2 kg/ha blend
- Advion 1.7 kg/ha + Distance 2 kg/ha blend
- Advion 1.7 kg/ha only

Commencing from January 2021, all known polygyne sites in Area 2 (17 sites, approx. 650 ha total) started to receive targeted bait treatments with one of the above regimes (This was in addition to any broadscale bait treatments already scheduled as part of the eradication treatments in Area 2). The plan was to apply these additional bait treatments approximately every 4-8 weeks up to a total of 3-4 times before the end of the treatment season in June 2021.

Of these 17 sites, three already showed no fire ant activity by January 2021 indicating that the standard baiting regime may have been effective at eliminating polygyne fire ants from these sites (i.e., additional bait treatments were not required). Of the remaining 14 sites, all received at least two additional rounds of bait treatment, and all but four received the full complement of 3-4 additional bait rounds by June 2021. For those sites treated by ground-based methods (foot/UTV), over half of these (total area 93 ha) received the maximum of four additional treatment rounds. One large site (550 ha) requiring aerial treatment could only receive additional two polygyne treatments due to scheduling challenges related to completion of the main baiting rounds over Area 2.

From June-September 2021, all 17 targeted sites received full site surveillance with the exception of three sites where 100% surveillance was not possible (due to either long-term inundation/flooding, new housing developments or extreme size of the site combined with heavy vegetation growth). By the end of September, continued fire ant activity was detected on only two of these polygyne sites with very few mounds located per site. Additional polygyne treatments will therefore continue to be applied at these two sites, while the other 15 sites will continue to receive monitoring and surveillance over the 2021–22 season (and additional treatments if required) to confirm that polygyne ants have been eradicated from these known sites in Area 2.

During the June-September period, two new infestations of polygyne fire ants were detected in previously treated parts of Area 1/Western boundary (Harrisville and Coleyville; nests detected and sampled in June, polygyne diagnosis received from genetic testing in July and August respectively). Utilising research by the Program, a plan was developed and implemented to delimit these polygyne infestations and apply additional rounds of toxicant/fast-acting baits with the aim of eradicating them in the 2021–22 treatment season.

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

Risk management

Table 14: High risks to the Program Quarter 1 2021–22

High Risk information			
Type	**Description**	**Controls**	**Treatment**
Strategic	*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.*	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.	Reprioritisation of planned suppression treatment to limit the risk of spread along water courses. Flooding contingency fund. Flood modelling and responsive planning.
Strategic	*The timing of national cost sharing funding does not align to the treatment strategy*	Establishment of collaborative funding agreements with states and territories and National Partnership Agreement with Commonwealth. Review of budget occurs regularly.	Approach QLD and Commonwealth Treasury to secure drawdown of additional funds required in the early years. Ensure funding partners have a full understanding of the success, activities, and concerns of the program. Regular reporting arrangements in place. Review statement.
Operational	*Risk to capability:* Information systems are ineffective at supporting increased scope of National Program and demand for timely and accurate performance data, which can arise from poor functionality or data integrity due to data entry, programming, configuration errors, viruses or incorrect business logic.	1. Resources dedicated to developing the Program's existing information systems to improve efficiency and accuracy of data entry and reporting. 2. Server performance monitoring. Ability to upgrade if required.	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 to eradication:* If self-management does not have the desired take up by Industry the Program should focus on avoiding possible increasing costs of suppression, at the expense of eradication.	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.	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.

in routine to protect the health and safety of staff and the community include:

- Up to 50% attendance at Berrinba with numbers at other Program sites adjusted depending on the ability to maintain social distancing.
- When staff use one vehicle one person sits in the front seat and the other in the back seat on opposite sides 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 is 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 seventh meeting of the **Risk Management Sub-Committee (RMSC)** took place on 22 September 2021. High level discussion topics included:

- General update on Program status and strategic risks, including those associated with funding and Program continuity, the 2021–22 Work Plan, Self-treatment and the Future Options set out in the Strategic Review report
- Review of the Program's Risk and Issues registers, and the Business Improvement register

It has been identified that the cost of delivering the planned activities, both in 2021–22 and in the long term exceeds the proposed budget for delivering eradication. The RMSC noted that the National Biosecurity Committee (NBC) has been advised and an options proposal submitted for future funding, and that this will progress through AGSOC to the Agriculture Ministers for a decision on the future of the Program. The Program provided an overview of the Risk Register. The RMSC noted and discussed several higher-level risks arising in relation to the status of the Program and the Strategic Review:

Short-term bring-forward

- The agreed Program of work for the Work Plan in 2021–22 is for a budget of 66.7M. This requires a ‘bring forward’ from funding partners of $33.3M. Jurisdictional responses to the QDAF Minister’s request for bring forward are due by the end of September 2021. Not having funding brought forward will result in reductions in service delivery.
- The Program is currently having trouble backfilling exiting staff because only very short-term appointments can be made to remain within the currently allocated funding for 2021–22 of $33.4M. This has now affected service delivery with a range of resignations being received for key positions within the Program.

Longer term funding and Program continuity

- An independent review of the Program was recently completed, with a report provided to the Steering Committee.
- Combined with the issues created by shortfalls in 2021–22 funding, the review has created further uncertainty about viability of the future of employment within the Program.
- There are a range of new risks related to the discussions, negotiations and decisions of the cost sharing partners associated with the review, and the implementation of those decisions.

There are risks associated with proposed responsibility and governance changes proposed in the Strategic Review, the time to decide on and implement them and their future funding.

There is a particular risk related to the maintenance of the present achievements of the Program, and its capability, while new arrangements are agreed upon and implemented. Interim funding and operational arrangements may be required to cover 2021–22 and 2022–23.

Bait delivery

The Program forecasts that the quantity of chemical bait procured (300 000 kilograms) and inventory on hand will be exhausted by 31 December 2021. The Program's supplier has taken orders without certainty of funding – but the Program's funding situation and COVID remain risks for the actual supply of bait.

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

The Program engages with the approved recruitment agencies to increase the number of field contractors for the treatment season (which typically begins at the start of September) due to the increased number of resources required to deliver the treatment plan as opposed to surveillance.

Table 15: Staff numbers in 2021–22

Position	Q1
Permanent	90
Temporary	39
Contractor—office	29
Contractor—field	247
Total	**405**

Workplace health and safety

The Program received 36 incidents related to workplace health and safety during this quarter compared to 45 in the previous quarter. Workplace health and safety representatives maintain a focus across the Program to heighten awareness and identify workable solutions for all identified risks.

Table 16: Workplace health and safety incidents in 2021–22

Category	Jul	Aug	Sept	Q1
Hazards	7	6	6	19
Near miss	1	2	3	6
Property damage	2	1	8	11
Totals	10	9	17	36

10. Finance

The 2021–22 initial budget build for the Program was $33.3 million above the Program fiscal limit. Queensland requested from all cost share partners necessary funding to be brought forward from future years. Queensland has received letters to date indicating agreement from Northern Territory ($221K), Tasmania ($246K), Victoria ($4.51M), NSW ($5.78M) and the Commonwealth ($18.38M). This brings Program to have total budget of $62.581M comes from the agreed funding including additional bring forwards approved by cost share partners and an additional $31K from gains on sale of old asset. The Program will review treatment and other activities to ensure the spending is within agreed fiscal limit.

Expenditure to budget

The Program's national cost share funding incurred a $54K underspend as 30 September 2021. The overall variance includes material overspends in Operations ($1.4M) offset by underspends in Community & Stakeholder Engagement ($680K) and Remote Sensing ($485K). The overspend in Operations includes field contractor expenditure ($535K) which occurs because of lost time assumptions not occurring for bad weather. The Program increases field contractor numbers based on estimated lost time so that operational activity is not impacted in the event of poor treatment weather. Other material overspends in operations include bait usage ($668K) and aircraft hire ($247K) which is a timing impact of Significant Detection and Clearance treatment activities compared with original treatment plan. The underspend in Community & Stakeholder Engagement relates largely to timing of baiting expense for self-treatment ($211K). The underspend in Remote Sensing of $485K includes a timing issue for Aircraft Hire ($173K), delay in transfer of field staff hours from Operations (budget allowed up to $200K) and the Gate Review budget ($75K). Further underspend relates largely to timing of IT discretionary expenses allocated for system development ($132k).

Table 17: Expenditure to budget as of 30 September 2021

Program Area	Requested Budget*	Current Budget	YTD Budget	YTD Actual	Variance	Note
Program Logistics and Business Support	4 138 114	4 138 114	1 013 279	971 729	41 550	1
Remote Sensing Surveillance (R&D)	3 842 267	3 842 267	2 404 408	1 919 634	484 774	2
Systems and Technology Innovation	2 756 251	2 756 251	687 033	564 330	122 703	3
Community and Stakeholder Engagement	3 417 242	3 417 242	1 074 770	349 312	680 458	4
Science Services and Eradication Assessment	2 963 197	2 963 197	687 746	670 616	16 131	5
Planning and Quality Assurance	2 786 626	2 786 626	660 169	626 026	34 144	6
Operations	43 069 151	43 069 151	5 925 115	7 318 455	-1 393 340	7
Directorate	1 462 522	1 462 522	485 432	469 707	15 725	8
Self-management	515 603	515 603	135 158	100 635	34 504	9
Strategic Policy and Performance	928 130	928 130	201 007	183 201	17 806	10
SEQ Program Balance	820 898	- 32 474 102	820 898	820 898	0	11
Total	**66 700 001**	**33 405 001**	**14 094 015**	**14 039 561**	54 454	

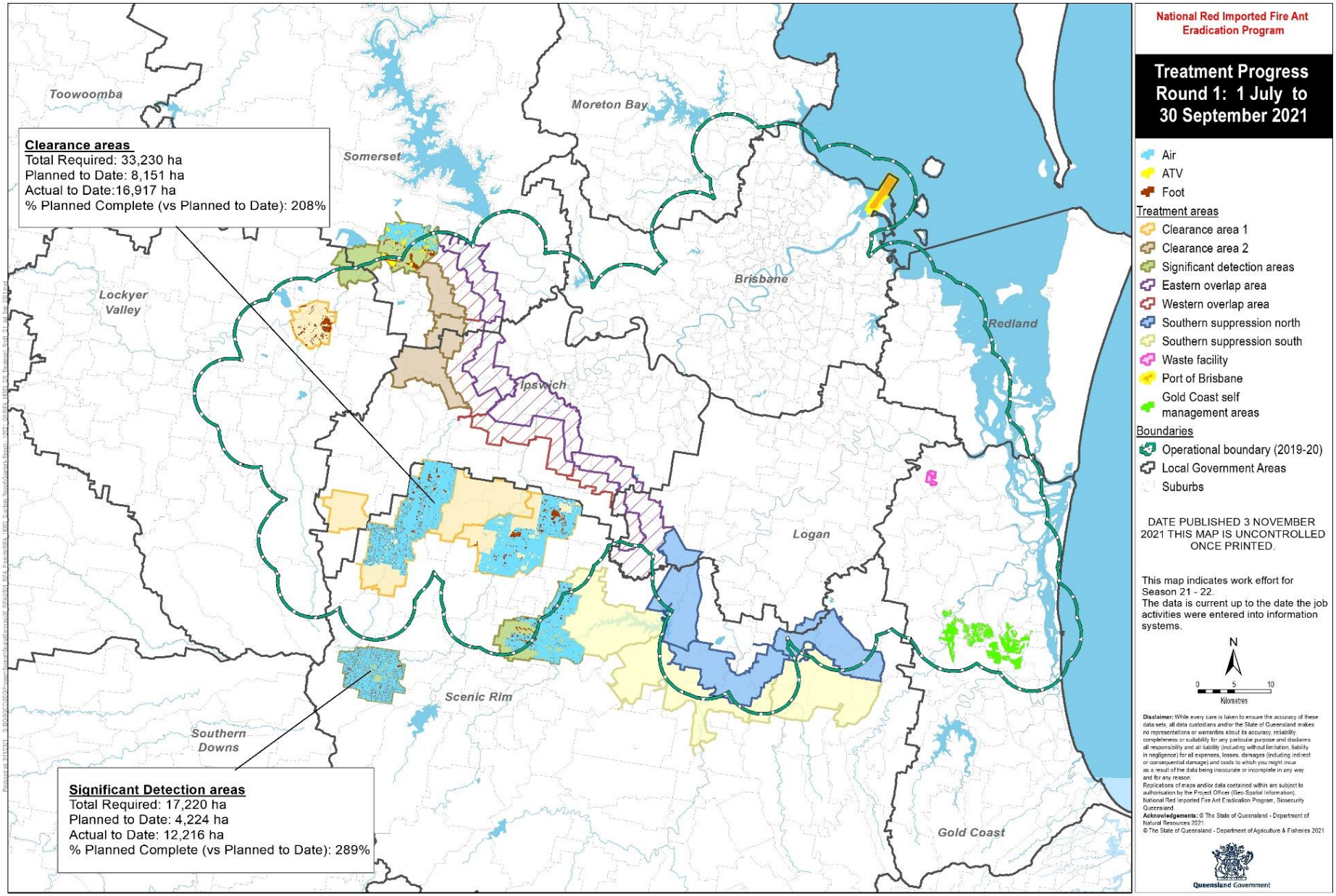
* 2021–22 Budget as approved by the Programs National Steering Committee at its August 2021 Meeting.

1. Favourable variance mainly due to reduced spend and timing issue across property facilities and building expense $48K, contractor expense $16K, timing issue for training expense $9K, PPE Expense $16K. This offset by unallocated credit card transactions $28K, 5% vacancy rate applied ($25K). In addition, a salary transfer related to an administration officer to Operations ($16K) will occur in Q2.

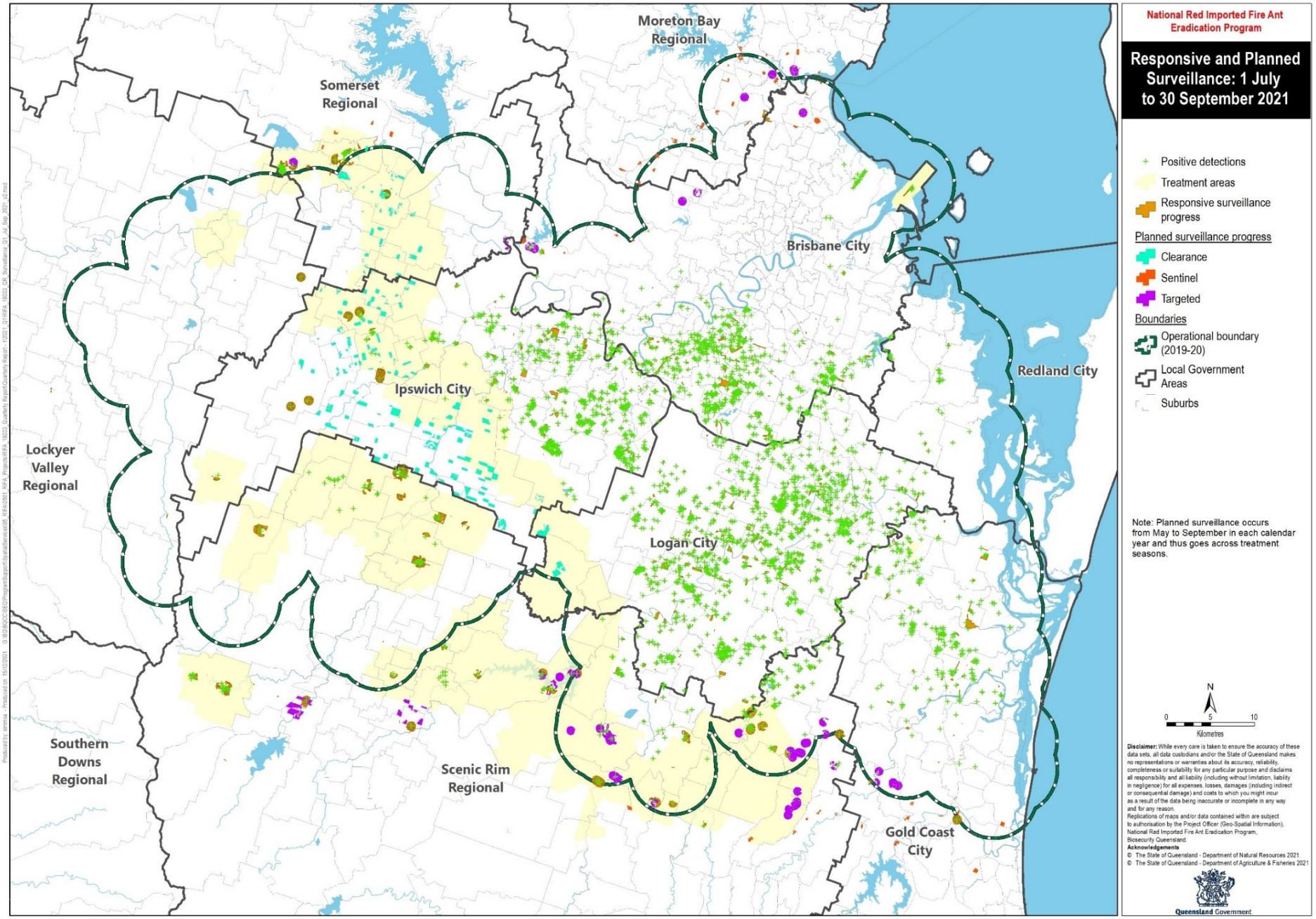
2. Favourable variance mainly due to timing issue on Aircraft Hire payment ($173K) and impact of delay transfer of remote sensing field staff cost from Operations ($200K), a timing issue for Data storage expense ($11K) and Gate Review expense $75K (gate review is planned to commence in January 2022).
3. Favourable variance mainly comes from timing issue on ITP discretionary services charges $132K.
4. Favourable variance due to timing of baiting expense for self-treatment ($272K), contractor expense (AO4 and AO5 vacant positions) ($44K), timing issue for Design and Production cost ($155K), campaign cost ($103K) and postage expenses ($20K) and savings from a vacant Engagement Officer (AO4) position ($18K).
5. Favourable variance due to a timing issue on final payment for Bioclay Project $10K (expected to be paid in November 2021) and delays in the Drone research ($25K), offset by an overspend in lab consumables expense ($15K) attributed to timing.
6. The favourable variance is mainly due to timing issue on ESRI GIS software charges ($43K), underspend in contractor expenses ($10K) offset by a timing issue on laptop replacement expenses ($12K).
7. The unfavourable variance of $1.4M consists of $535K relating to field contractors, $200K relating to timing of transfer for work on RSS field surveillance and $668K in baiting expense and $247K in aircraft hire as a result of significant detection treatment completed to date. Offsetting this is an underspend in office contractors ($110K), savings in motor vehicles related expense ($27K), a timing issue on new odour detection dog purchase ($30K) and vacant positions across Operations.
8. Favourable variance mainly due to timing issue for contractor expenses ($50K) and underspend in strategic review contractor ($13K). This offset by overspend in employee expense ($44K) due to 5% vacancy rate applied on budget and SO officer backpay.
9. Favourable variance mainly due to underspend in contractor expense as AO5 Engagement Officer position which has been vacant for 3 months ($34K).
10. Favourable variance mainly due to underspend in contractor expense ($17K) (delay in contractor recruitment for Principal Policy Officer AO7 and vacant Policy Officer (AO4)) and timing issue for training expense ($6K). This offset by an overspend in employee expense ($5K) as 5% vacancy rate applied on budget.
11. No Material Variance. No Funds held. SEQ Program Balance is to recognise the actual Program overspend in the 2020–21 financial year to be met from the 2021–22 Program budget as agreed by the National Steering Committee.

11. Appendices

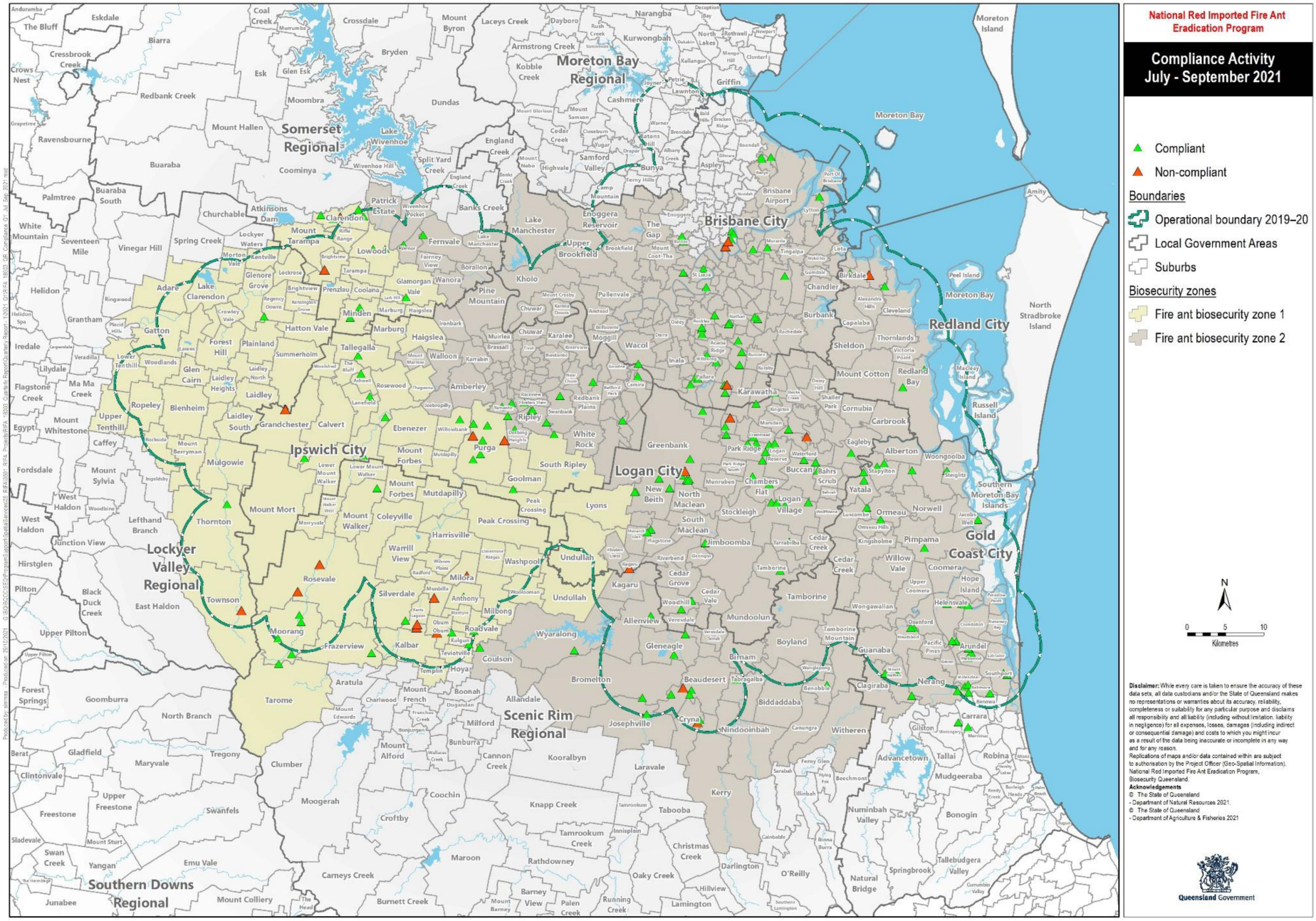
Appendix 1—Planned treatment progress as of 30 September 2021 (Round 1)



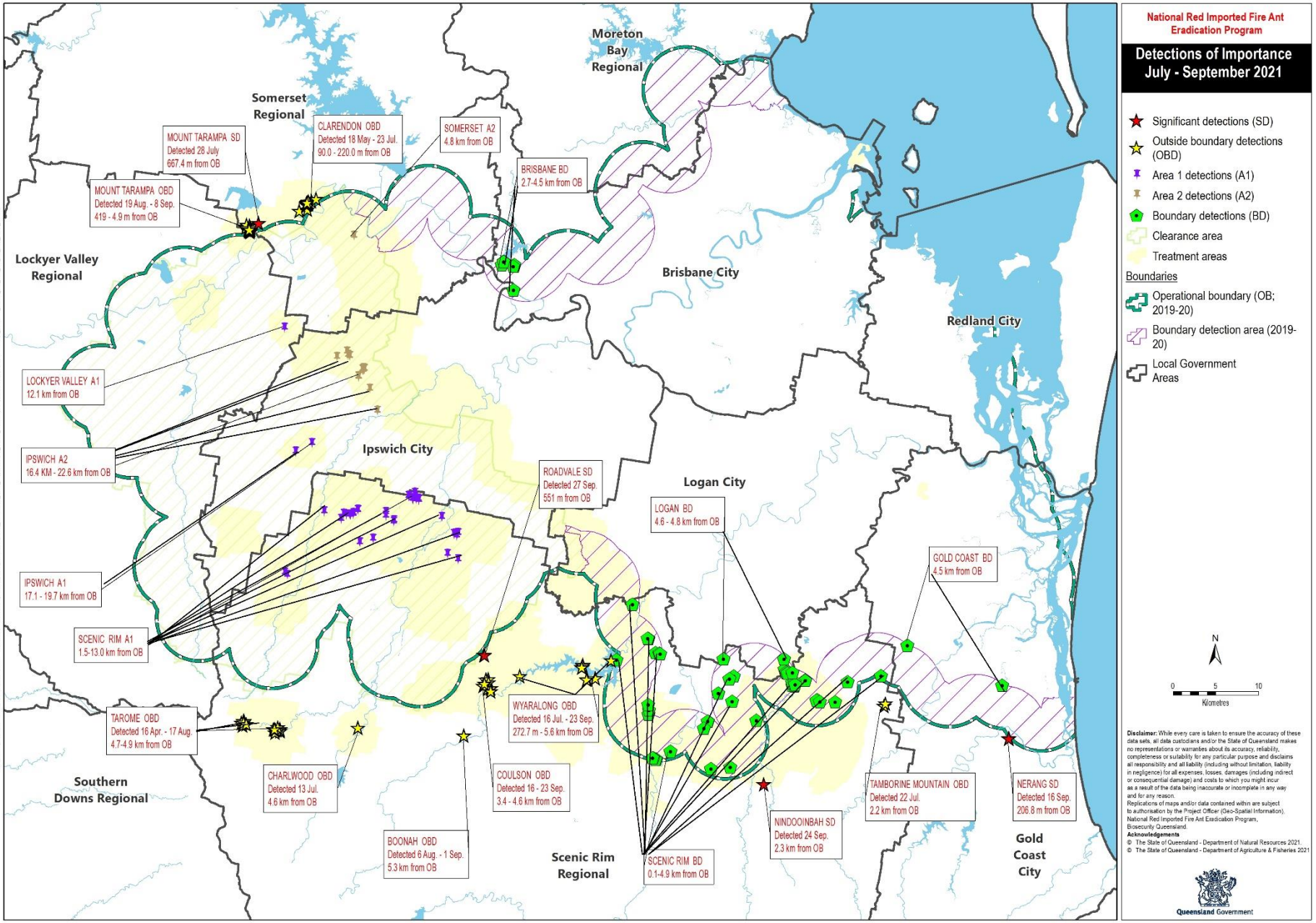
Appendix 2—Responsive and planned surveillance progress as of 30 September 2021



Appendix 3—Compliance activity in Quarter 1 2021–22



Appendix 4—Detections of importance in Quarter 1 2021–22



Appendix 5—Detections of importance circumstances and outcome in Quarter 1 2021–22

Location	Circumstances	Outcome
Significant detections and additional detections outside of the Operational Area boundary		
Nindooinbah	• One large reproductive nest confirmed on a large rural property operating as a chicken breeder farm • Nindoorinbah is within fire ant biosecurity zone 2; therefore, fire ant movement controls apply • Part of the suburb, including the infested site is outside the Operational Boundary	• The nest was destroyed by direct nest injection with a contact insecticide. • The property is in a planned suppression treatment area so will receive two rounds of broadscale baiting with an IGR during 2021–22. • As a precaution, because treatment was not due to commence immediately, the nest was treated with an IGR at time of detection. • 500 m surveillance and treatment has been undertaken and no additional nests were located. • Two nearby sites were surveyed as part of sentinel surveillance and no additional nests were located. • Additional surveillance beyond the planned treatment area will be undertaken to determine whether an extended treatment area is required. • Genetic testing has identified that the nest is related to detections in neighbouring suburbs of Cryna and Kerry and likely origin is within the east 2 sub-cluster, though the source has not yet been established. • It is likely there is undetected infestation nearby. • Investigations into the movement of fire ant carriers indicates that the only product brought onto the property is sawdust and the only material leaving the property is poultry manure, which is delivered to the neighbouring property and is composted prior to use.
Roadvale	• Nine reproductive nests confirmed on a rural grazing property • Roadvale is within fire ant biosecurity zone 1; therefore, fire ant movement controls apply • Part of the suburb, including the infested site is outside the Operational Boundary	• The nests were promptly destroyed by direct nest injection with a contact insecticide. • The property is in a planned treatment area and will receive three rounds of broadscale baiting with an IGR during 2021–22, the first round was being applied when the ants were discovered. • The area was surveyed by Remote Sensing Surveillance in early October. • Delineation surveillance out to 500 m from the nests was undertaken with no additional detections made. • Genetic testing has ruled out a relationship with nests in the neighbouring suburb of Coulson, but there are no strong leads regarding the source. It was confirmed that the origin of the nest is within the main SEQ cluster. • The property owner indicated to Program officers that 20 bales of mulch hay had been brought onsite from a location in Boonah, which is close to known infestation. No carriers leave the property. • The Program will investigate the movement to determine if the nests are a result of human assisted movement.
Mount Tarampa	• Forty-three reproductive nests in cultivation paddocks across two properties (three detections this quarter) • Mount Tarampa is within fire ant biosecurity zone 1; therefore, fire ant movement controls apply • Part of the suburb, including the infested sites are outside of the Operational Boundary	• The nests were destroyed by direct nest injection with a contact insecticide. • Delineation surveillance out to 500 m from the nests was undertaken with no additional detections made. • Genetic testing found a link to an infestation from a nearby suburb of Lockrose. • No carriers were imported to either property, suggesting that the infestation may be a result of natural flight and there may be undetected infestation close by. • Considering the risk of spread further beyond the boundary, a new treatment area was created and scheduled to receive two rounds of broadscale baiting with an IGR during 2021–22. • The only carrier leaving the properties is hay, but investigations revealed it is being produced and stored in accordance with the Regulation. Both property owners were found to be compliant during compliance checks.

Location	Circumstances	Outcome
		• RSS was undertaken around the immediate area and no further infestation was detected.
Nerang	• Three reproductive nests were confirmed in garden beds of a cemetery • Nerang is within fire ant biosecurity zone 2; therefore, fire ant movement controls apply • The infested property is dissected by the Operational Boundary	• The nests were destroyed by direct nest injection with a contact insecticide. • The area was treated with an IGR bait out to 100 m from the nests. • 500 m delineation and additional treatment has been conducted and no further infestation was located. • Additional targeted surveillance beyond the 500 m is underway and to date no further infestation has been located. • Genetic testing has not yet identified a source, however human assisted movement is likely given the carriers that have been brought onsite. • The site has been re-developed over the last few years and an enormous quantity of bulk soil was imported. Other carriers imported including turf, landscape soils and potted plants. • Investigations found that all the movements were compliant with the Regulations. • No carriers leave the site.
Tarome	• To date fifty-five nests have been confirmed across five rural properties (six confirmed detections this quarter) • Many nests were fully reproductive • Considering the density of the infestation and a high chance of carrier movement, the suburb was added to fire ant biosecurity zone 1; therefore, is now subject to movement controls • Tarome is outside the Operational Boundary	• The nests were destroyed by direct nest injection with a contact insecticide. • Due to the high number of nests, Tarome was included in the Program's planned treatment for 2021–22 so will receive three rounds of broadscale baiting with an IGR. • The first round of treatment was applied in September 2021. • RSS was conducted in the area with no further detections made. • Genetic analysis shows that nests in the Tarome detection cluster are related to the West or West2 clusters. Several groups of nests in the Tarome area are highly related to one another and could be considered 'family groups.' Presently, four distinct 'family groups' have been identified within a 1.5km radius, which is indicative of a human assisted movement. • A sibling relationship has been identified between a nest in Tarome and a nest sampled in Moorang in 2020. A genetic link between the Moorang nest and a nest located at the Willawong dump site was also identified, suggesting a possible transport pathway for infested materials between Willawong and Moorang. Investigations into this potential link are ongoing. • Tracing investigations has identified several potential carriers from Moorang and several other locations that may have facilitated the movement of viable nests to Tarome. • Concerns in relation to hay movement and storage led to compliance measures being implemented on some properties. • The Program conducted an information evening for Tarome residents to discuss the fire ant infestation in the suburb. The session was well received, resulting in full co-operation from the landowners.
Wyaralong	• To date twenty-nine nests have been confirmed across six properties (seven confirmed detections this quarter). • Some of the nests were reproductive • Wyaralong is within fire ant biosecurity zone 2; therefore, fire ant movement controls apply • Wyaralong is outside of the Operational Boundary	• The nests were destroyed by direct nest injection with a contact insecticide. • Wyaralong is in a planned suppression treatment area, so will receive two rounds of broadscale baiting with an IGR during 2021–22. • The nests are along the water's edge of the Wyaralong dam, which is controlled by SEQ Water. • Genetic analysis identified that some nests on the banks of the Wyaralong dam were likely the progeny of nests sampled from the Allenview rowing club on the east banks of the dam, with mother-daughter, or grandmother-granddaughter relationships detected. • The nests in Wyaralong are likely the result of natural fight, or rafting events from the rowing club site. • The genetic results from the Allenview rowing club indicated human assisted movement so the Wyaralong infestation was likely facilitated by natural flight secondary to the movement of infested materials. • No carriers have been imported or exported from the area recently.

Location	Circumstances	Outcome
Clarendon	• To date fifty-four nests have been confirmed across three rural properties (four confirmed detections this quarter). • Some of the nests were reproductive • Clarendon is within fire ant biosecurity zone 1; therefore, fire ant movement controls apply • Part of the suburb, including the infested sites are outside of the Operational Boundary	• The nests were destroyed by direct nest injection with a contact insecticide. • Due to the high number of nests, Clarendon was included in the Program's planned treatment for 2021–22 so will receive three rounds of broadscale baiting with an IGR. • The first round of treatment was applied in September 2021. • RSS was conducted in the immediate area with no further detections. • Genetic analysis of the detection at Clarendon, to date, suggests that this is likely the result of the transport of material containing multiple inbred nests, or an isolated population that has arisen from a low number of nests that have survived for several generations by mating with one another, resulting in an extremely inbred population. • Hay is the only carrier leaving some of the properties and a recent audit by the Program's Compliance team found some initial non-compliance with the Regulation. All non-compliance has since been rectified.
Charlwood	• To date two nests have been confirmed on a rural property with some small cultivation areas (one confirmed detection this quarter) • The property owner reported the suspect nests at the same time as targeted surveillance was being conducted in the area • Charlwood is outside of the fire ant biosecurity zones; therefore, fire ant movement controls do not apply. • Charlwood is outside of the Operational Boundary	• The nests were destroyed by direct nest injection with a contact insecticide. • The area was not in a planned treatment area at the time of detection, so an IGR treatment was applied in keeping with Program protocols. • RSS was conducted in the immediate area with no further detections. • Genetic analysis has identified that the Charlwood nest aligns with the West 18-19 cluster and is not related to any samples that have been tested from the Tarome or Boonah detections to date. Genetic analysis is ongoing. • Compliance investigations have identified several instances of hay movement from the property, but no carriers have been imported to the site. Hay has been imported to several neighbouring properties in the past two years. A Marburg based earthmoving/hay contractor company has been noted to have made deliveries to the neighbouring Charlwood property, so if that material was infested, it is possible this detection was facilitated by natural flight secondary to the movement of infested materials.
Tamborine Mountain	• During this quarter, two nests were located on a heavily forested rural residential property with a small area that has been cleared for a house build • A high-density infestation had already been confirmed on a neighbouring property earlier in the calendar year. • Tamborine Mountain is within fire ant biosecurity zone 2; therefore, fire ant movement controls apply. • Part of the suburb, including the infested property are outside of the Operational Boundary	• The property was waterlogged at the time of sample collection making treatment impossible. • As soon as the weather improved, and the land dried out the nests were destroyed, and an IGR bait was applied in keeping with Program protocols. • The residents of Tamborine Mountain have worked very closely with the Program's self-management team and have undertaken two rounds of baiting themselves. • A second self-management project will be undertaken during 2021–22. • Most nests in the Tamborine Mountain detection align with the eastern genetic cluster and there is a possibility that the detection is largely due to natural flight, however there is currently insufficient data to rule out product movement as the primary source of this detection. • A single nest from the Tamborine Mountain detection does appear to have been the result of product movement, and investigations into the potential source of this nest are ongoing.
Boonah	• To date three immature nests have been confirmed on two adjoining rural properties (two detections this quarter) • Boonah is outside of the fire ant biosecurity zones; therefore, fire ant movement controls do not apply • Boonah is outside of the Operational Boundary	• The nests were promptly destroyed by direct nest injection with a contact insecticide. • The area is not within a planned treatment area; therefore, it was treated with an IGR bait at the time of sample collection. • RSS was conducted in the immediate area with no further detections. • Some topsoil was brought onto one of the properties a few weeks prior to the detection, investigations are underway to determine if the soil movement was compliant with the Regulation. • Genetic testing is underway so no meaningful conclusions can yet be drawn regarding the source of the infestation.

Location	Circumstances	Outcome
Coulson	• To date fifteen nests have been confirmed on four rural properties (six confirmed detections this quarter). • Considering the risk of spread beyond the boundary and the number of nests, Coulson was added to fire ant biosecurity zone 2; therefore, fire ant movement controls apply. • Coulson is outside of the Operational Boundary	• The nests were destroyed by direct nest injection with a contact insecticide. • The property is in a planned treatment area and will receive three rounds of broadscale baiting with an IGR during 2021–22; the first round was applied in September 2021. • RSS was conducted over the area in August 2021 and some of the nests were detected because of this. • No carriers had recently been exported or imported to the infested properties, however during the 2019 drought, hay was imported to some of the properties. • The Program's compliance officers visited hay producers in the area to discuss the Regulation. All non-compliant practices were then rectified. • Genetic analysis of samples from Coulson are in the early stages, with several samples still requiring analysis. As such, no meaningful conclusions may be drawn regarding the source of these detections, until further analysis is completed.
Boundary		
Scenic Rim	Twenty-nine confirmed detections across thirteen suburbs: Allenview (4), Beaudesert (4), Boyland (8), Bromelton (1), Cryna (1), Josephville (2), Kagaru (1), Kerry (1), Tabragalba (1), Tamborine Mountain (1), Veresdale (1), Veresdale Scrub (3) and Wonglepong (1)	• These detections were made in an area that has previously been infested and can be managed using existing Program resources. • Some of the nests were destroyed by direct nest injection with a contact insecticide. • Some were treated with toxicant bait. • IGR was applied to 10 m or 100 m around some of the sites. • Most of the Scenic Rim detections fall within an existing planned suppression treatment area so will receive one to two rounds of IGR treatment in 2021–22. • Some surveillance was carried out.
Logan City	Four confirmed detections across two suburbs: Mundoolun (3) and Veresdale Scrub (1)	• These detections were made in an area that has previously been infested and can be managed using existing Program resources. • One site is being used as a science monitoring site; therefore, the nest was not destroyed by nest injection; bait trials are being undertaken. • The nests on the other sites were destroyed by direct nest injection with a contact insecticide. IGR was applied to 100m around the nests.
Gold Coast City	Two confirmed detections across two suburbs: Wongawallen (1), and Arundel (1)	• These detections were made in an area that has previously been infested and can be managed using existing Program resources. • All the nests were destroyed by direct nest injection with a contact insecticide and an IGR was applied at the time of sample collection.
Brisbane City	Five confirmed detections across five properties in Kholo.	• The nests were destroyed by direct nest injection with a contact insecticide. • An IGR treatment to 100m was also applied. • These detections were made in an area that has previously been infested and can be managed using existing Program resources.
Clearance		
Scenic Rim	Twenty-five detections across seven suburbs: Coleyville (3), Harrisville (2), Mount Forbes (1), Mount Walker (6), Mutdapilly (9), Peak Crossing (3), and Rosevale (1)	• The nests were promptly destroyed by direct nest injection with a contact insecticide • All detections were made in planned treatment areas, so will receive a minimum of three rounds of broadscale baiting with an IGR during 2021–22. • Detections in two suburbs were found to be polygyne, therefore an elevated treatment response is required • The polygyne sites and surrounds will receive three rounds of baiting with a toxicant in addition to the three rounds of IGR during 2021–22.
Lockyer Valley	One confirmed detection in Hattonvale	• The nest was destroyed by direct nest injection with a contact insecticide and the area around the nests was treated with IGR to 10 m, in keeping with winter protocols. • Delineation surveillance to 500 m was conducted with no additional nests detected.

Location	Circumstances	Outcome
		• The detection was risk assessed and despite no nests being detected during surveillance activities, it is assumed there must be undetected nests in areas not surveyed. • RSS was conducted in the area surrounding the infested property with no additional nests detected. • Additional broadscale treatment is recommended and will be considered by the Program as a precaution in Q2.
Ipswich City Council	Ten confirmed detections across three suburbs: Calvert (2), Rosewood (4), and Tallegalla (4)	• The nests were destroyed by direct nest injection with a contact insecticide. • The Calvert detections are in the Area 1 clearance area • Delineation surveillance to 500 m was conducted with no additional nests detected. • RSS was conducted in the area with no additional nests detected. • The detection was risk assessed and despite no nests being detected during surveillance activities, it was assumed there must be undetected nests in areas not surveyed, therefore some broadscale treatment is recommended and will be considered by the Program in Q2. • The Rosewood and Tallegalla detections are in the Area 2 clearance area. • These detections, coupled with the discovery of surviving nests on science monitoring sites, indicated that four rounds of IGR baiting had not been enough to destroy the infestation during 2020–21. • The area will receive an additional two rounds of baiting with an IGR during 2021–22 and the nests will be monitored after each round to assess mortality.
Somerset	One confirmed detection in Lowood	• The nest was promptly destroyed by direct nest injection with a liquid insecticide. • The detection is in the Area 2 clearance area. • The detections are in the western overlap (WOL) treatment area, therefore will receive two rounds of broadscale baiting with an IGR during 2021–22.