

Quarterly Report 4

2019–20

National Red Imported Fire Ant Eradication Program South East Queensland

Report to: National Steering Committee

Period: April – June 2020



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1. Goals and deliverables overview

Goals and deliverables traffic light report









The status of the Program's goals and deliverables as at 30 June 2020 can be seen in *Table 1* below.




Table 1: Goals and deliverables traffic light report

| Goal | Deliverable | No. | Status |
|--------------------------|---|-----|---|
| Eradication | One round of insect growth regulator (IGR) bait applied throughout the area known as Area 1 —approx. 87 600 ha. A minimum of five rounds will be delivered to this area from the start of the 10 Year Plan. | 1 |  |
| | Up to three rounds of IGR bait applied throughout the area identified as the Western Boundary area — approximately 77 700 ha (233 100 ha in total). This area will receive a total of four to five rounds. | 1 |  |
| | One round ¹ of IGR bait applied throughout the area defined as Area 1 Overlap. This area will receive six rounds. | 1 |  |
| | The investigation, analysis and destruction of every new detection found in Area 1 and Western Boundary area. | 3 |  |
| | Odour detection dog clearance of colony points in the eradication areas. | 5 |  |
| | Surveillance activities: community surveillance; monitoring surveillance; post-treatment validation surveillance. | 4 |  |
| Suppression ² | Up to two rounds of IGR bait applied throughout the area defined as the Western Suppression area — approximately 26 800 ha per round. | 8 |  |
| | Two rounds of IGR bait applied to areas identified as having high-density or polygyne infestation — approximately 22 000 ha per round. | 8 |  |
| | Two rounds of treatment on waste facilities amounting to around 1600 ha. | 8 |  |
| | Community self-management arrangements endorsed by the Steering Committee and implemented. | 11 |  |
| Mobilisation | The provision of targeted treatment information, including property access and the general biosecurity obligation, to all the residents in the treatment areas before and during the treatment season. | 2 |  |
| Containment | COMPLETED - A compliance strategy addressing the highest risk activities. | 7 |  |
| | The provision of targeted information about movement controls and the general biosecurity obligation to high risk businesses and local government. | 6 |  |
| | Analysis and destruction of all new boundary detections and significant detections. | 9 |  |
| | All newly infested sites assessed as a high risk of product movement, high-density or polygyne infestation checked for compliance with the legislated movement controls within five business days. | 12 |  |
| | Compliance checks undertaken for half of all biosecurity instrument permits in effect during 2019–20. | 13 |  |
| | Preparation of compliance strategies that address high risk industries and locations. | 14 |  |
| | Penalty infringement notices issued for minor non-compliance with movement controls. | 15 |  |
| | COMPLETED - A management of detections of importance protocol. | 19 |  |

¹ NRIFAEP Steering Committee approved the alteration to this deliverable

² Containment and suppression are used interchangeably

| Goal | Deliverable | No. | Status |
|------------|---|-----|---|
| | COMPLETED - Biosecurity zones realigned with operational areas. | 21 |  |
| | Surveillance activities: sentinel surveillance; boundary detection surveillance; significant detection surveillance. | 10 |  |
| Freedom | Further development was made on the draft Clearance and Proof-of-Freedom Strategy with consultation with relevant groups. | 17 |  |
| Innovation | A digital data capture capability for operational field staff implemented before the start of the treatment season. | 16 |  |
| | COMPLETED - Field trials of an RSS prototype by the end of 2019. A new interim RSS project was initiated in quarter 4. | 18 |  |
| Governance | COMPLETED - A business improvement plan endorsed by the Steering Committee. | 20 |  |
| | COMPLETED - A Program business plan endorsed by the Steering Committee. | 22 |  |
| | COMPLETED - A web based self-assessment tool for application of risk mitigation measures. | 23 |  |

-  *On track as planned*
-  *Things are delayed but will be delivered within planned tolerances*
-  *Will not be achieved or will be substantially under-achieved*

2. Key insights

Snapshot of key Program outcomes for the quarter

Planned treatment

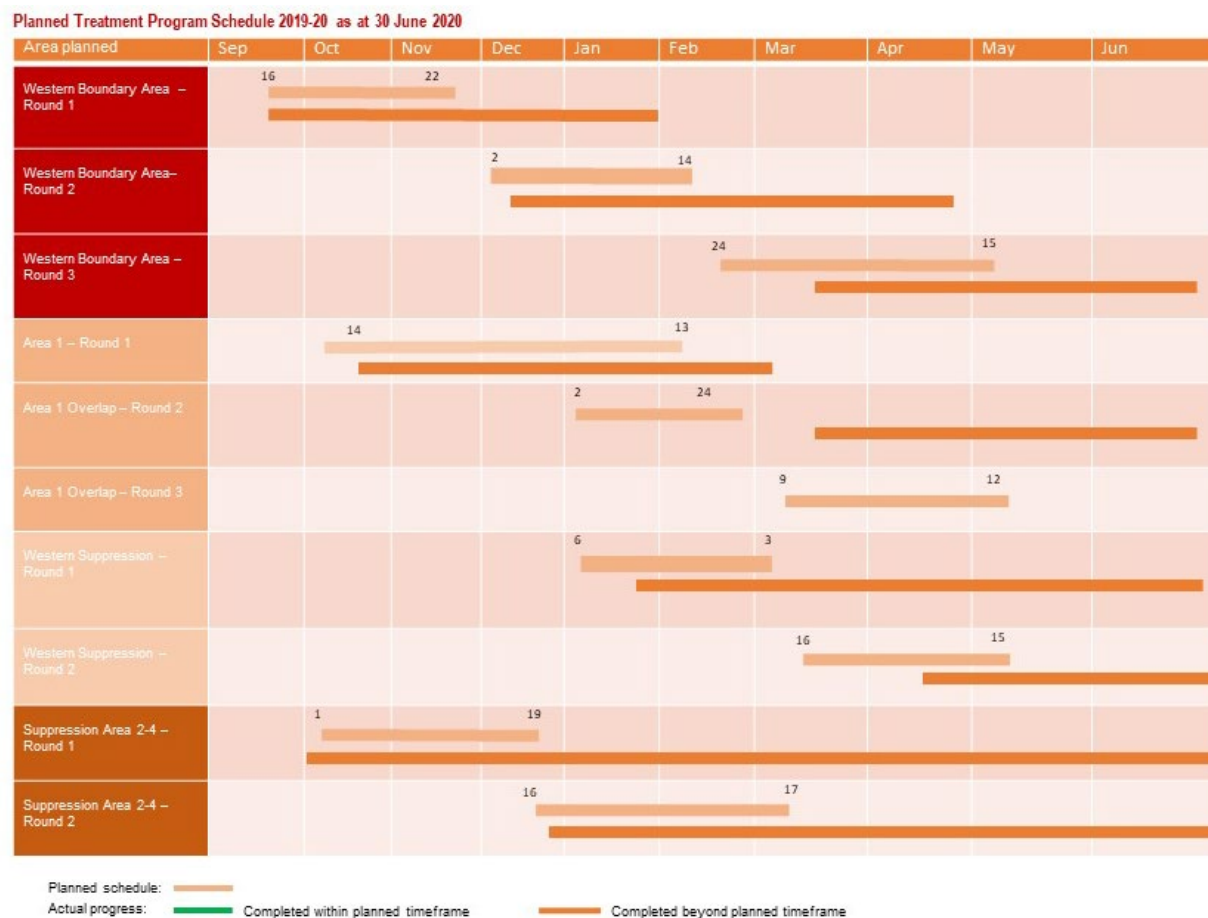


Figure 1: Planned treatment Program schedule 2019-20 as at 30 June 2020 outlines the planned treatment schedule versus actual treatment for the season to date

Aerial buffering was not completed for Rounds 1 and 2 in Area 2-4 (High Density) of the suppression treatment area, or for Round 2 in the Western Suppression treatment area.

As previously reported, the failure to complete the planned suppression treatment was predominantly the result of weather delays in Quarter 3 causing delays to Round 1 aerial buffering in these areas.

Resources were also diverted from these treatment activities at times to ensure delineation surveillance surrounding a detection in the boundary areas was completed.

Table 2: Eradication and suppression treatment progress – Quarter 4 and year to date

| | Quarter 4 | YTD | % of annual target |
|-----------------------|-----------|---------|--------------------|
| Eradication treatment | 83 884 | 342 832 | 95 |
| Suppression treatment | 46 916 | 96 913 | 93 |

Responsive treatment

Table 3 demonstrates the total number of suspect ant reports and the percentage of samples that tested positive as fire ants during the quarter. These statistics represent an increase in community reports from the last quarter.

Table 3: Total number of suspect ant reports and percentage of positive samples

| Quarter (2019-20) | Number of suspect ant reports* | % positive for fire ants from samples received |
|-------------------|--------------------------------|--|
| Q1 | 2068 | 88 |
| Q2 | 1337 | 80 |
| Q3 | 3078 | 84 |
| Q4 | 4998 | 87 |

*Includes samples submitted by the public and collected by the Program.

Self-management

The first self-management pilot commenced in June 2020. Eighteen sugarcane farmers in the Coomera region are participating in the pilot which involves applying bait supplied by the Program to 39 separate properties. Pre-treatment surveillance was carried out to collect baseline data on the fire ant infestation on these farms. Post-treatment surveillance will be undertaken in September, once the baiting program has finished, to determine the effectiveness of the project.

Containment

Table 4 depicts the total number of significant detections, boundary detections, compliance checks and instances of non-compliance for the quarter and the year to date. This information is further discussed as part of Detections of Importance and Human Assisted Movement sections.

Table 4: Containment overview - Quarter 4.

| Containment Overview | Q1 | Q2 | Q3 | Q4 | YTD |
|--------------------------|-----|-----|-----|-----|-----|
| Significant detections | 1 | 0 | 2 | 1 | 4 |
| Boundary detections | 31 | 2 | 10 | 17 | 60 |
| Compliance checks | 203 | 107 | 197 | 112 | 619 |
| Non-compliance instances | 11 | 11 | 13 | 21 | 56 |

Clearance and freedom

A draft Clearance and Proof of Freedom Strategy was provided to the Steering Committee in June. An updated strategy incorporating the advice received from the Steering Committee will be tabled at the next meeting of the National Exotic Invasive Ant Scientific Advisory Group (SAG) and provided to the Steering Committee in Quarter 1, 2020–21. It is anticipated that the strategy will be used to prioritise clearance surveillance activities in the winter 2020 surveillance season.

Mobilisation (stakeholder engagement and communication)

The main focus for stakeholder mobilisation during the quarter centred on the changes to the fire ant biosecurity zones and amendments to the Biosecurity Regulation 2016. Engagement included direct marketing to over 4000 industry stakeholders and their peak bodies, and to local councils. A digital engagement platform — Department of Agriculture and Fisheries eHub — was set up as a 'one-stop-

shop' for all information relating to the changes. A social media campaign ran for one month to extend the engagement further.

Finalisation of the mobilisation priorities in the Three Year Strategy, restructuring of the communications and engagement team, and additional resources added to support self-management have enabled a clear refocus for mobilisation.

Risks and current ratings

There are five risks classified as 'high risk' being managed by the Program (see Table 5 below). The Program identified 5 new risks in Quarter 4. These are discussed in detail later in this document.

Table 5: Strategic and operational risks – Quarter 4

| Risk Type | Low | | Medium | | High | | Extreme | | Total | |
|-------------|-----|----|--------|----|------|----|---------|----|-------|----|
| | Q3 | Q4 | Q3 | Q4 | Q3 | Q4 | Q3 | Q4 | Q3 | Q4 |
| Strategic | 1 | 2 | 16 | 16 | 2 | 1 | 0 | 0 | 19 | 19 |
| Operational | 13 | 13 | 27 | 28 | 5 | 4 | 0 | 0 | 46 | 45 |

Workplace health and safety

Table 6 outlines the number of hazards and injuries recorded during Quarter 4.

Table 6: Hazards and injuries - Quarter 4

| WHS Incident | Q1 | Q2 | Q3 | Q4 | YTD |
|-----------------|----|----|----|----|-----|
| Hazards | 2 | 4 | 2 | 3 | 11 |
| Injuries | 12 | 23 | 26 | 40 | 101 |
| Near misses | 3 | 6 | 12 | 5 | 26 |
| Property damage | 4 | 12 | 17 | 22 | 55 |

Business improvement

Key business improvement activities during Quarter 4 included:

1. **Governance** – In response to audit recommendations, the development and implementation of a contracts register for the Program is expected to roll out on 1 August 2020.
2. **Responsive treatment** – The implementation and refinement of a new response protocol to reduce time to respond to and treat community reports of suspected fire ants.
3. **People and culture** – Staff members across DAF have been encouraged to participate in online training during the COVID-19 period.

3. Eradication

Treatment to reduce to zero the number of fire ants within specific infested areas of SEQ



Figure 2: Operational area and activity map

In line with the Program’s 10-year Eradication Plan, Area 1 and the Western Boundary were the focus for fire ant eradication treatment (see Figure 2). The plan for 2019-20 season was to continue to apply broad scale insect growth regulator (IGR) bait to Area 1 and the Western Boundary with the eradication treatment program to be finalised in these areas by the end of Quarter 4. The 2019-20 treatment season began at the end of Quarter 1 on 16 September 2019.

Following the final treatment round in the fourth quarter, the treatment area will be assessed for any remaining infestations and monitored for new detections. Preliminary results of the eradication treatment effort is expected in the next financial year.

Planned treatment

At the completion of the treatment season, 96 percent of Round 1 planned eradication treatment was achieved; 97 percent of Round 2; 94 percent of Round 3; and 85 percent of Round 4 (see Table 7). Any gaps in treatment are being identified and a strategy to survey these gaps will be implemented in the coming surveillance season. An additional round of aerial treatment was undertaken in the Western Boundary targeting areas had previously only received four out of the five rounds of treatment.

Table 7: Planned eradication treatment progress – Quarter 4 and year to date³

| Round 1 | | | | | Round 2 | | | | |
|--------------------|--------------------|----------------|------------|----|--------------------|--------------------|----------------|------------|----|
| Number of hectares | | | | | Number of hectares | | | | |
| Location | Planned Year Total | Quarter Actual | YTD Actual | % | Location | Planned Year Total | Quarter Actual | YTD Actual | % |
| Area 1 | 87 589 | 112 | 85 892 | 98 | Area 1 Overlap | 15 168 | 2 992 | 15 565 | 98 |
| Western Boundary | 77 709 | 110 | 72 203 | 93 | Western Boundary | 77 709 | 17 812 | 74 132 | 95 |
| Total | 165 298 | 222 | 158 095 | 96 | Total | 92 877 | 20 804 | 89 697 | 97 |
| Round 3 | | | | | Round 4 | | | | |
| Number of Hectares | | | | | Number of hectares | | | | |
| Location | Planned Year Total | Quarter Actual | YTD Actual | % | Location | Planned Year Total | Quarter Actual | YTD Actual | % |
| Area 1 Overlap | 0 | 0 | 0 | 0 | Area 1 Overlap | 0 | 0 | 0 | 0 |
| Western Boundary | 77 709 | 41 017 | 73 199 | 94 | Western Boundary | 25 598 | 21 841 | 21 841 | 85 |
| Total | 77 709 | 41 017 | 73 199 | 94 | Total | 25 598 | 21 841 | 21 841 | 85 |

Table 8: Challenges encountered during the quarter and solutions

| Challenges |
|---|
| <ul style="list-style-type: none"> • Large increase in public reports received by the Program resulting in a backlog and putting pressure on achieving responsive timeframes. • Ground buffering of aerial sites was out of sync with aerial treatment, predominantly due aerial activities occurring seven days a week and extra aircraft being utilised to bring scheduled aerial treatment back on track after the Program experienced significant lost time earlier in the treatment season. • COVID-19 impacts on the continuing treatment/surveillance efforts. |
| Solutions |
| <ul style="list-style-type: none"> • Restructuring the operational delivery area has assisted with the coordination of responsive activities to maintain KPI's for responsive timeframes. Temporary resourcing increase to manage increased volume of calls. Dedicated supervisory resources have been allocated to provide more oversight on all responsive activities. • Program is looking to better align the ground buffering component of aerial treatment by assigning dedicated ground resources within the aerial team to enable aerial to actually manage the ground buffering component. • COVID-19 controls have included: <ul style="list-style-type: none"> ○ Additional leased vehicles ensuring staff travel two officers per car; ○ Split start times for field crews; ○ Social distancing arrangements; ○ Health and hygiene standards and supplies reviewed and restocked daily; and ○ Management updates provided and depot visits undertaken by the senior leaders. |

³Please note there may be slight inaccuracies due to data entry lag.

Mobilising stakeholders in support of eradication treatment

Due to the impacts of COVID-19 and associated social distancing restrictions, operational teams experienced some negative responses from residents and resistance to Program officers entering properties to treat. A social media campaign was launched to inform the community that treatment would continue during the COVID-19 response and that social distancing and other health precautions would be adhered to. Residents were also encouraged to co-operate with Program staff to rid their properties of fire ants.

Planning for the communication and engagement of the upcoming treatment Season also commenced this quarter.

Effectiveness of treatment

The last round of evaluation of the Area 1 monitoring sites was conducted in February 2020, with no nests detected. This suggests that all 90 nests at the monitoring sites were dead, after 4-5 rounds of treatment.

Clearance of previously detected nests in Area 1

The odour detection dog team conducted post-treatment validation on 145 previously detected nests within Area 1 during the quarter. Of these, 141 nests were confirmed as destroyed and new nests were detected at Peak Crossing, Harrisville and Rosevale, see Detections of importance (page 14) for further detail.

DNI treatment

During the 2019–20 year, DNI treatment efficacy was evaluated with Program assessors accompanying operational pest management technicians to infestations that were to be treated with DNI as per standard procedure. These assessors also recorded a range of data at each site to determine if there was a link between ineffective DNI and particular site variables (e.g. compacted soil, under cement) or weather conditions. The assessor then returned to the site after 12 weeks to determine if any nests were still present, with genetic samples taken of any remaining nests to determine if it was the same nest as previously treated by DNI. Of the 173 nests evaluated on 36 sites, no persisting nests were recorded on return visit, indicating 100% mortality by current DNI operating procedures (see Table 9).

It is recommended that further quality assurance and efficacy evaluation of DNI treatment should be conducted in a 'blind manner', where DNI technicians are unaware of being evaluated at particular sites, to ensure the previous high effectiveness of treatment was not biased by being accompanied and observed by the assessors.

Table 9: Summary of human visual surveillance to determine the effectiveness of DNI treatment activities during 2019-2020

| Sites assessed | Nests assessed | Nests alive after DNI | Efficacy of DNI |
|----------------|----------------|-----------------------|-----------------|
| 36 | 173 | 1* | 100% |

*The single nest alive during assessments was confirmed to be of a different genetics to the initial treated nest, indicated reinfestation at this location and not persistence of the treated nest.

4. Suppression

Treatment undertaken to minimise fire ant infestation intensity and vigour before eradication in SEQ

Planned treatment

At the completion of the treatment season, 95 percent of Round 1 planned suppression treatment was achieved, 91 percent of Round 2, and 84 percent of Round 3. The ability to complete planned

suppression treatment was impacted by the prioritisation of the eradication treatment in Area 1 and the Western Boundary.

Table 10: Planned suppression treatment progress – Quarter 4 and year to date

| Round 1 | | | | | Round 2 | | | | |
|-------------------------|--------------------|----------------|------------|------|-------------------------|--------------------|----------------|------------|----|
| Number of hectares | | | | | Number of hectares | | | | |
| Area | Planned Year Total | Quarter Actual | YTD Actual | % | Area | Planned Year Total | Quarter Actual | YTD Actual | % |
| Western Suppression | 26 622 | 2 189 | 26 073 | 98 | Western Suppression | 26 622 | 25 237 | 25 237 | 98 |
| Area 2-4 (High Density) | 22 265 | 1 917 | 20 084 | 90 | Area 2-4 (High Density) | 23 210 | 11 238 | 20 118 | 87 |
| Waste Facilities | 1 600 | 1 934 | 2 030 | 1 27 | Waste Facilities | 1 600 | 1 399 | 1 399 | 87 |
| Total | 50 487 | 7 070 | 48 187 | 95 | Total | 51 432 | 37 874 | 46 754 | 91 |

| Round 3 | | | | |
|-------------------------|--------------------|----------------|------------|----|
| Number of hectares | | | | |
| Area | Planned Year Total | Quarter Actual | YTD Actual | % |
| Western Suppression | 0 | 0 | 0 | 0 |
| Area 2-4 (High Density) | 2 350 | 1 972 | 1 972 | 84 |
| Waste Facilities | 0 | 0 | 0 | 0 |
| Total | 2 350 | 1 972 | 1 972 | 84 |

Note: Waste Facilities Round 1 was higher than the planned hectares due to several facilities having entire properties treated as opposed to the smaller “operational” area that was planned for treatment.

Responsive treatment: community reports

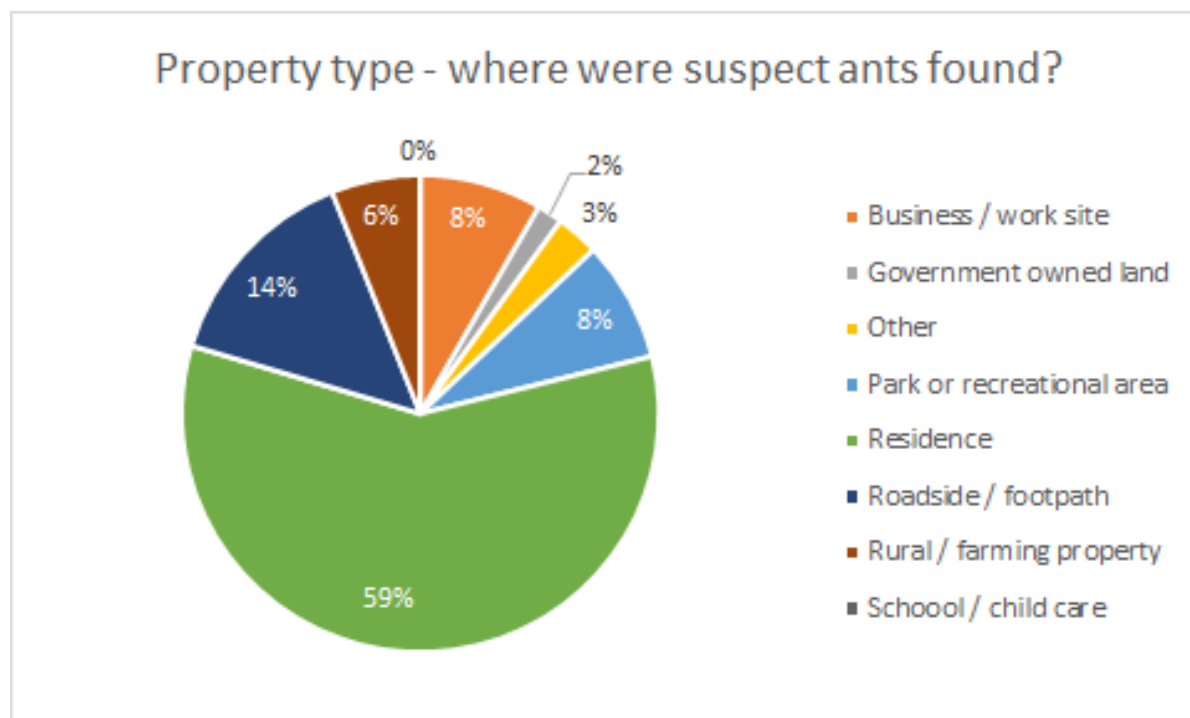


Figure 3: Property type – where were suspect ants found?

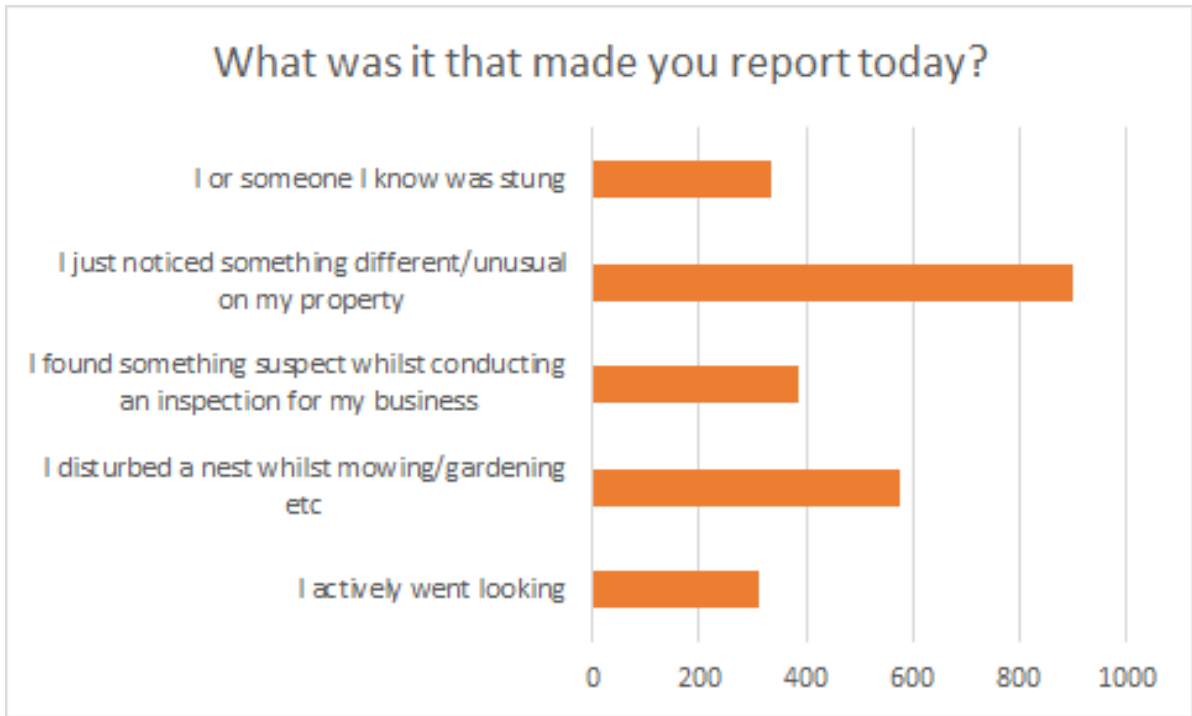


Figure 4: What made people report suspect ants in Quarter 4?

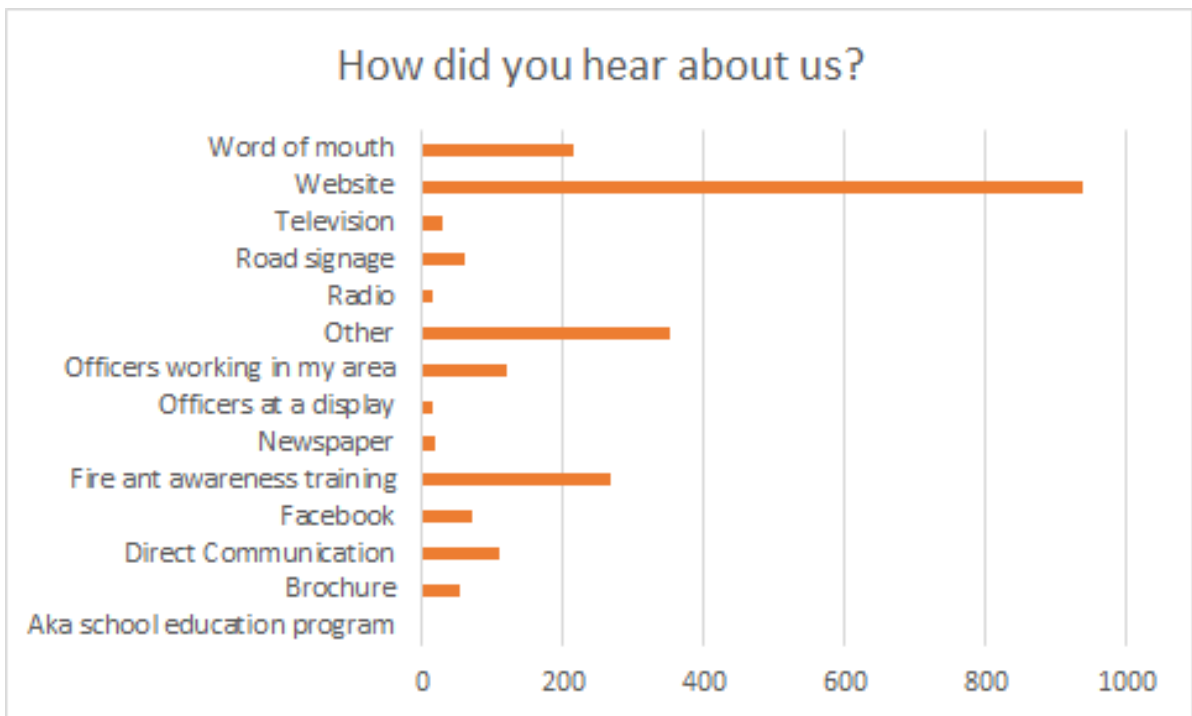


Figure 5: How did people that reported suspect ants in Quarter 4 hear about us?

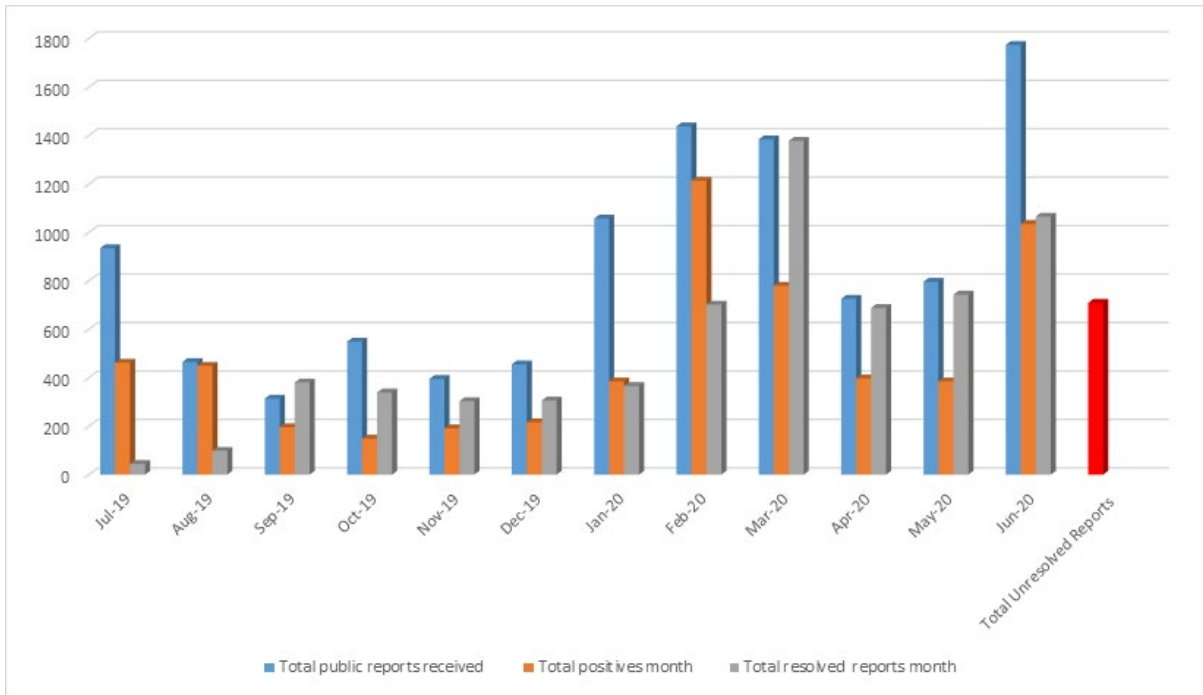


Figure 6: Total public reports, positives diagnosed and DNI/ toxicant completed July 2019-June 2020

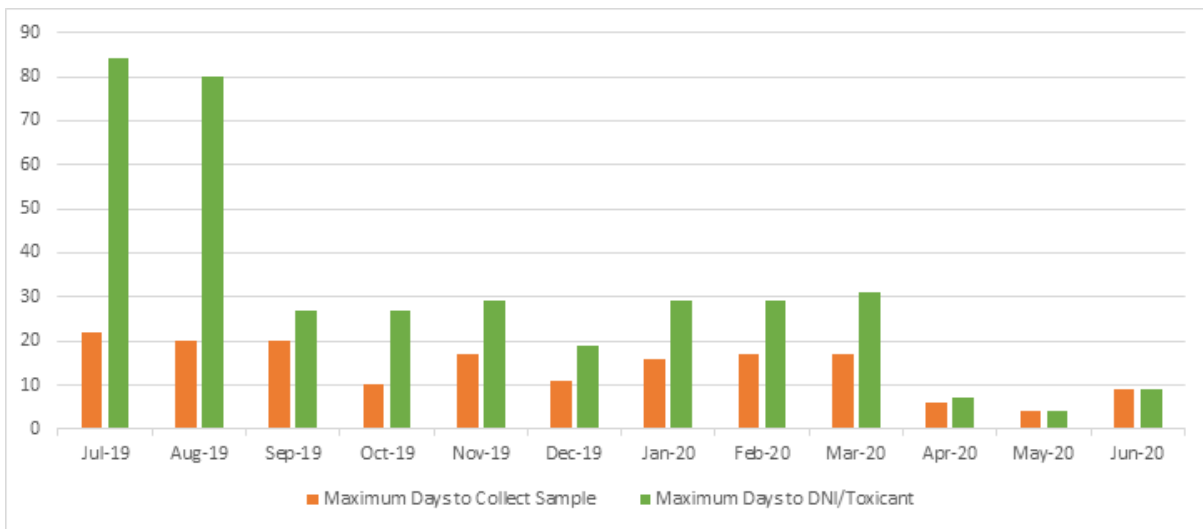


Figure 7: Maximum days to collect sample and to DNI/Toxicant: July 2019-June 2020

Genetic samples

Table 11 identifies the number of ant samples analysed and proportion of polygyne sites for each quarter. As at the end of July, only 9% of samples collected between April-June have been analysed for social form (polygyny or monogyny). Of this 9%, only 1.11% of sites with samples collected from either the public or during routine Program activities are of the polygyne social form. A backlog of 1011 samples are still to be analysed for social form (and 1546 for relatedness testing), which has accrued due to the large increase in samples in recent months, as well as difficulty obtaining required consumables during Covid-19. Processes and staffing are being assessed to try to alleviate this backlog, with corrects to the below values provided in future reports. Slight amendments in the values provided in the table for Q2 and Q3 are also due to the delay in samples being processed before previous quarterly reports were finalised.

Table 11: Ant samples analysed

| Quarter | No. suspect ant samples analysed | Proportion polygyne sites |
|---------|----------------------------------|---------------------------|
| 1 | 3268 | 1.11% |
| 2 | 2966 | 0.57%* |
| 3 | 2151 | 0.90%* |
| 4 | 2651** | 1.11%*** |

*Due to delays in sample analysis at time of previous reporting, Quarter 2 and Quarter 3 polygyne proportions are slightly different to the previous quarter reports.

** The majority of the tests undertaken in Quarter 4 were from samples collected in previous quarters due to delays in testing.

*** Only 9% of samples for Quarter 4 have been analysed for social form at the timing of this report and may vary in future reports.

Self-management

Community

A targeted social media campaign encouraged residents to check their properties whilst in isolation and to self-manage any fire ant nests during the quarter.

In response to an increased number of reports of stings or infestation in some areas, flyers were distributed to encourage residents to self-manage fire ants on their properties.

The self-management research project completed last quarter for South East Queensland was expanded this quarter to focus in on the Gold Coast area. Consistent with the previous study, it was intended to determine Gold Coast community attitudes towards the fire ant Program overall, as well as self-management of fire ants on their property. This research will inform the development of the Gold Coast Community Self-Management Project planned for next treatment season (anticipated commencement February 2021).

Councils

Meetings were held with operational managers within City of Gold Coast Council, Somerset Regional Council, Scenic Rim Regional Council, Brisbane City Council and Lockyer Valley Regional Council during the quarter.

Primary producers

Canegrowers self-management pilot - The first self-management pilot commenced in June 2020. 18 cane farmers in the Coomera region are participating in a self-treatment project, using bait supplied by the Program to treat their 39 properties. Pre-treatment surveillance was carried out to collect baseline data on the fire ant infestation on these farms. Post-treatment surveillance will occur in September, once the baiting has ceased. This will determine the impact of the self-treatment activities.

If successful, this project will stand as an example of the viability of self-treatment on cropping properties. It has also helped shape internal processes and systems that support self-management.

Strategy for properties in “crop” - A self-management strategy is under development to engage with primary producers within Area 2 to enable self-management as an alternative when land is ‘in crop’.

Industry engagement

This fourth quarter saw the introduction of online general awareness training in response to COVID-19. All training sessions were hosted through an on-line platform and included a narrated PowerPoint presentation, videos and discussion.

The delay between the cancellation of face-to-face training sessions and the launch of the online substitute affected attendance and resulted in fewer training sessions being run for this quarter. The time taken for industry to adjust to the new format also likely affected attendance.

Although 'on-site' and 'off-site' training typically means sessions that are delivered 'on-site' at the Berrinba headquarters, or 'off-site' at an organisations chosen location; for this quarter 'on site' refers to regularly scheduled sessions that attendees can book into online, and 'off site' refers to ad hoc private sessions run for one organisation that were booked upon special request. Only one ad hoc 'off site' session was requested this quarter by Brisbane City Council.

Table 12: Industry/council awareness training

| | Number of people who attended training | Change from last Quarter |
|----------------------------|--|--------------------------|
| On site (scheduled ONLINE) | 85 | +33% increase |
| Off site (ad hoc ONLINE) | 29 | -80% decrease |

Self-management project development

During the fourth quarter, a Principal Engagement Officer was appointed to lead self-management projects and support the transition to business-as-usual. Additional human resources were recruited to commence on 1 July 2020, replacing the previously contracted project team.

The goals and priorities for the next 12 months were set and planning for specific priority market segments commenced, with the focus on schools, sporting clubs and facilities, waste management facilities and primary producers.

Fire ant management guides were developed for priority sectors of schools, sporting clubs, and waste management facilities to describe how self-management should be undertaken. These will be introduced next quarter.

Preparations are underway to further engage with chemical companies. At present, few affordable bait options are available for the community through retail outlets. An industry briefing is planned for next quarter to encourage industry to respond to this need for smaller, more cost-effective packaging of bait.

The Program has engaged with Bunnings, supplying a video for staff and sample shelf tags to assist consumers locate fire ant products. These are currently being considered by Bunnings management.

5. Containment

Surveillance and compliance activities to prevent the spread and establishment of fire ants outside the current SEQ infestation.

The Program's 2020 surveillance season commenced on 27 June with 380 ha of sentinel surveillance surveyed by 30 June. The objective of sentinel surveillance is early detection of fire ant spread in proximity to the operational boundary. This surveillance found one detection of fire ants in Mount Tarampa (more detail in the 'Significant detections' section, below).

Clearance surveillance, to collect data to determine the probability that areas are free of fire ants, was conducted in the Area 1 treatment area over 98 ha prior to 30 June 2020. This surveillance will help to detect remnant fire ant infestation after treatment. One detection of fire ants was made this quarter as a result of clearance surveillance, in Peak Crossing (more detail in the 'High Risk detections' section, below).

The Program has conducted responsive surveillance activities for boundary detections, significant detections and high risk detections identified during this quarter. The responsive work for these detections will continue throughout the surveillance season.

Detections of importance

The Program responded to 25 detections of importance (see *Table 13*) during the quarter. The significant detections, boundary detections and high risk detections are discussed in further detail below.

Table 13: Detections of importance for Quarter 4

| Detections | Number |
|---|--------|
| Significant Detections (detections outside the operational boundary) | 1 |
| Boundary Detections (detections within 5km inside the operational boundary) | 17 |
| High Risk Detections (detections that pose the greatest risk to the objective of eradication by virtue of location or density of infestation, or pose a risk to public safety and to human and animal health) | 7 |

Significant detections

Mount Tarampa

There was one new significant⁴ detection this quarter, on a farm in the suburb of Mount Tarampa in the Somerset Regional Council area (Refer to Appendix 5). Program officers made the detection while conducting planned sentinel surveillance on the property.

Tracing investigations revealed that the property had not been actively farmed in the past 12 months but poultry manure sourced from a Coominya property (outside of the biosecurity zones) had been brought on to the property previously. This property will be revisited as part of ongoing investigations.

The Program has determined that the Mount Tarampa property did not receive adequate broadcast baiting over the planned treatment seasons. This area of the Lockyer Valley is intensively cultivated during the treatment season, making site access difficult. It is possible that this area has undetected infestation. As a result the infestation at this Mount Tarampa property may be the result of natural spread.

Delineation and targeted surveillance will be undertaken at this location, in accordance with Program protocols and genetic analysis will be conducted to determine the origin of the fire ants.

Total number of significant detections

There have been 21 significant detections since the commencement of the Program's Ten Year Eradication Plan, as follows: 2017–18 (9); 2018–19 (8); 2019–20 (4).

Fifteen detections have received the required amount of surveillance and treatment, compliance tracing and communication activities to provide confidence and verification that the infestation has been cleared. Detections continue at three locations (Helensvale - 2 and Bromelton - 1), due largely to their proximity to nearby dense infestation and each area will be subject to suppression treatment until they are prioritised for eradication treatment.

The remaining three recent detections (Mount Nathan, Witheren and Mount Tarampa) will continue to receive the necessary treatment to provide confidence that the infestation has been contained.

In keeping with the containment strategy, all previous significant detections that are not currently undergoing treatment and surveillance, will be revisited in the 2020 surveillance season to ensure all areas remain free of infestation.

Boundary detections

Seventeen boundary detections were recorded during the quarter across locations within the Gold Coast City Council area (4); Scenic Rim Shire (10); the Lockyer Valley (1) and Brisbane City Council area (2) (Refer to Appendix 5). All nests were promptly destroyed. Whilst some surveillance activities have already been undertaken, further surveillance will be undertaken over the surveillance season. A brief overview of boundary detections is provided at Appendix 1.

High risk detections

The Program recorded eight high risk detections during the quarter in the suburbs of Harrisville (2); Peak Crossing (2); Rosevale (3) and Mulgowie (1). All nests were promptly destroyed. Whilst some

⁴ Detections outside the Operational Boundary

surveillance activities have already been undertaken, further surveillance will be undertaken over the surveillance season. The infestations will be evaluated as part of risk mapping being undertaken as part of the Clearance and Proof of Freedom Strategy and further actions may be recommended. A brief overview of the detections has been provided in Appendix 1.

Mobilising stakeholders on detections of Importance

The Program responded to three detections of importance in the fourth quarter at Upper Kedron, Witheren and Josephville.

A small-scale response was instigated in response to the Witheren detection. This included notification to all levels of government, direct engagement with key businesses and community groups in the area.

The response to the Upper Kedron detection included an unaddressed mail out to over 900 addresses. Businesses and community groups were also provided with information on the detection to distribute to their networks. Additional information also reached residents and businesses in the Upper Kedron area through the communications activity associated with the changes to the fire ant biosecurity zones.

The response to the Josephville detection involved a notification to all levels of government and an unaddressed mail out to over 5000 addresses in the area surrounding Josephville. Community groups and schools were provided with content to share through their networks. Businesses and key stakeholders were also made aware of the detection and encouraged to check their property and report any suspect ants or nests. A social media campaign was undertaken and temporary signage advising that fire ants were found in the area was installed at three prominent locations in the Josephville area to further raise awareness of the detection.

Human assisted movement

In response to the to the COVID-19 pandemic planned compliance activities for this quarter scaled back with a greater focus placed on responding to reported instances of non-compliance and high risk infestation.

There were 112 compliance checks carried out in the fourth quarter of which 21 identified an incidence of non-compliance (19% non-compliance). Twenty-six of the total number of compliance checks undertaken this quarter were conducted against Biosecurity Instrument Permit (BIP) holders. Of these 26, two were found to be non-compliant (approximately 5% non-compliance). These two instances of non-compliance are discussed further in the 'Landscaping Supplier' section below.

Non-compliance

Of the 21 instances of non-compliance identified during the quarter three remain under investigation. The other 18 were addressed through enforcement actions such as biosecurity orders and advisory notices.

One of the instances of non-compliance related to a movement of infested hay from property in fire ant biosecurity zone 2 to outside the fire ant biosecurity zones. It is likely that a penalty infringement notice will be issued for this alleged offence.

Of the other serious non-compliance found; one relates the movement of a large amount of manure and sawdust within fire ant biosecurity zone 2 without appropriate risk mitigation measures being applied. The other relates to an unlawful movement of soil between the two biosecurity zones. This is discussed further below under 'Earthmovers and haulage'.

Responsive compliance checks

By undertaking suburb monitoring and responding to allegations of non-compliant hay movements, compliance officers undertook 48 checks relating to hay over the quarter. Of these, nine were found to be non-compliant (19%). A significant proportion of this non-compliance was due the failure to produce hay in accordance with requirements for instance, hay remaining in paddocks for longer than the permitted 24-hour period or prescribed storage requirements not being followed. Where large amounts of hay were involved biosecurity orders were issued to ensure hay was not moved from the property. Otherwise advisory notices were issued.

Industry focused compliance activities

The following industry focused compliance activities were undertaken during Quarter 4

Earthmovers and haulage

Targeted checks of earthmovers and haulage companies were also undertaken during the quarter. Of 27 checks of the industry, one non-compliance was found, involving the movement of excess soil fire ant biosecurity zone 1 to zone 2. This investigation is ongoing.

Landscaping suppliers

Targeted checks of 11 landscaping suppliers were undertaken during the quarter. All but one of these were against biosecurity instrument permits and two were found to be non-compliant. One of these was later able to demonstrate compliance with the permit and the other had failed to apply perimeter treatment. This was considered as a minor non-compliance as these operators frequently disturb their product and move it off-site quickly.⁵

Fire ant biosecurity zone realignment

On 27 May 2020, changes to the fire ant biosecurity zones and supporting changes to the Biosecurity Regulation 2016 came into effect (see Figure 8). These changes restructured the fire ant biosecurity zones to provide additional protection to those areas in which the Program has undertaken eradication activities; and better align the biosecurity zones with the Program's operational boundary.

In addition to supporting the restructure of the fire ant biosecurity zones, the amendments to the Biosecurity Regulation 2016:

- provided greater clarity around the movement controls which apply to certain fire ant carriers; and
- reduced the regulatory burden on stakeholders by allowing 'disturbance' to be used as a risk mitigation strategy for relevant fire ant carriers without a biosecurity instrument permit.

Communication and engagement on biosecurity regulation and zone changes

An integrated communications and engagement campaign was implemented which aimed to inform and educate high risk industry and key stakeholders of the changes to the Biosecurity Regulation 2016 and fire ant biosecurity zones. This involved direct marketing to nearly 5000 known contacts in high risk industries to provide early notification ensuring the changes were understood.

The major communication campaign planned to support the launch was downgraded to a minor social media campaign due to COVID-19. To maximise the social media campaign's success a series of pre-launch and launch materials were developed. This included a boosted post and a series of nine video ads that guided users depending on their responses. Public notices were also placed in following newspapers – the Courier Mail, Queensland Times, Toowoomba Chronicle, Gatton Star and the Gold Coast Sun.

Central to this campaign was the online engagement platform (eHub) which provided an interactive one-stop-shop for all information in relation to the changes to the fire ant biosecurity zones and requirements. Businesses and industry representatives viewed the eHub content almost 10,000 times by the end of June. An estimated 6500 documents were also downloaded from the site including the new biosecurity map, suburb list and Managing Soil fact sheet.

Changes to the website were also implemented providing additional tools to assist industry. This included a compliance advice tool which aims to provide a greater understanding of the risk mitigation measures required for movement of specific fire ant carriers. An interactive map was also provided to aid in identifying suburbs within the new fire ant biosecurity zones.

Over 100 responses to a quick poll were received with 44% indicating they were not previously aware of biosecurity regulations and fire ant biosecurity zones.

⁵ The insertion of section 71A of the Biosecurity Regulation 2016 means that some of these operators are now likely to be compliant as this section authorises movement of product on the basis that 21-day disturbance is undertaken.

Sixty-five organisations (including peak bodies) were contacted by the Program, to confirm receipt of emails and offer additional information and further clarification. Content was provided for 29 industry publications including Master Builders, Housing Industry Association, Growcom and Turf Australia.

During this quarter, presentations were made to Queensland Rail, Bunnings, Scenic Rim Regional Council and Lockyer Valley Regional Council to explain the changes and requests for similar presentations were received from Brisbane City Council and Lockyer Valley Regional Council. A meeting between senior managers of the Program and Gold Coast City Council has been arranged for July 2020, to provide further clarification and discuss concerns associated with the changes made to the Biosecurity Regulation 2016 and fire ant biosecurity zones during the quarter.

Representatives from a range of industries and peak bodies interacted with the Program to seek further information or clarity on the changes to ensure they are compliant. In particular, Turf Queensland approached the Program to discuss the possibility of a third party accreditation for their members. The Civil Contractors Federation has requested a meeting in August 2020 with senior officers from the Program to discuss their feedback on the changes to the Biosecurity Regulation 2016.

The Program negotiated news articles which were published in both the Civil Contractors Federation and the Housing Industry Association regional newsletters to further reach industry. These messages had the potential to reach the 9000 members of these organisations.

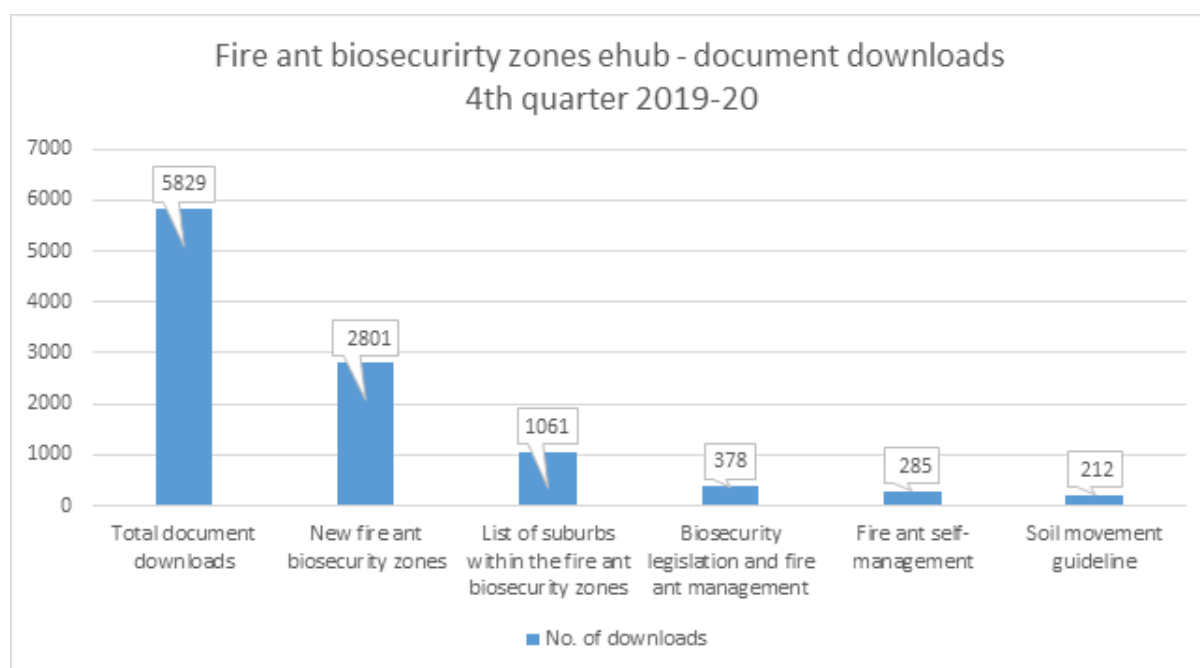


Figure 9: Fire ant biosecurity zones eHub – document downloads

Table 14: Summary of engagement with the changes to the fire ant biosecurity zones

| Campaign | People reached | Impressions | Engagement | Video plays (3secs or more) | Cost |
|---|----------------|-------------|------------|-----------------------------|----------|
| Biosecurity zone and requirement changes boosted post | 112 306 | 172 489 | 6504 | 86 152 | \$1100 |
| Biosecurity zone and requirement changes launch | 413 440 | 2 158 390 | 8555 | 875 597 | \$18 936 |

The feedback received on the biosecurity changes has been predominantly positive, particularly in relation to the communication package and follow-up engagement. Concerns raised by stakeholders

related largely to insufficient notice to make the changes to their business processes before changes came into effect.

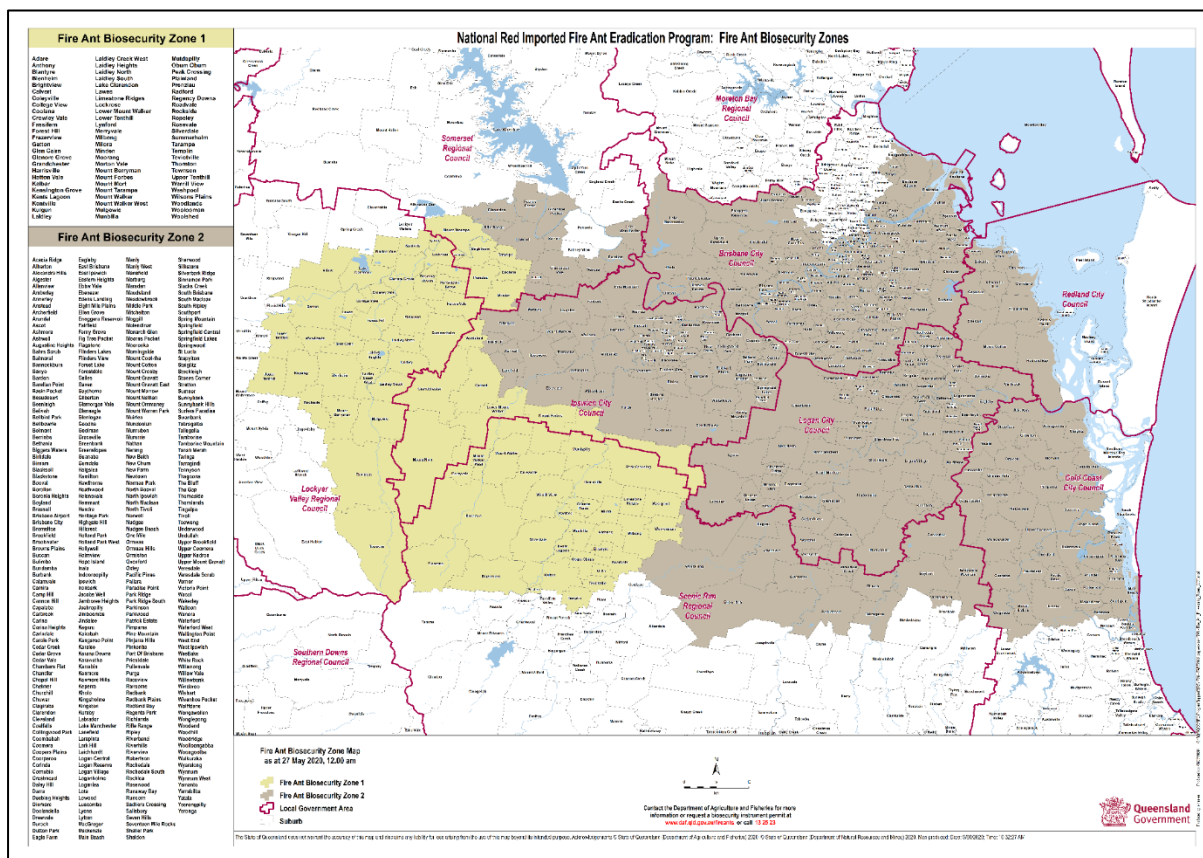


Figure 8: Fire ant biosecurity zones as of 27 May 2020

Movement control review project

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) was engaged on 29 May 2020, to review the existing suite of movement controls for fire ant carriers and the scientific principles upon which they are based. It is envisaged that the outcome of this review will facilitate a consistent approach to the risk mitigation of the movement of fire ant carriers across all jurisdictions. The review initially was taking place over a three month period however due to the complexity of the review CSIRO requested an extension in order to allow an adequate stakeholder consultation period which was approved by the Program. The review is due to be completed by the end of September 2020.

6. Mobilisation (stakeholder engagement and communication)

Communication and stakeholder engagement activities to generate and maintain community and stakeholder awareness, support and participation unrelated to specific treatment activities

Due to social distancing restrictions and the impacts of COVID-19, events and displays that would usually be conducted for awareness raising during this quarter were cancelled. No face-to-face events or displays were delivered.

E-newsletters

The Program distributed the electronic Fire Ant News — Under the Microscope to 3478 subscribers in April 2020. The open rate for this newsletter is 42.87% and click-thru rate 26.69% — well above the average government rates of 28.77% and 3.99%.

News stories

Of the 36 media mentions in traditional media (radio, print and online) achieved during Quarter 4, only one was negative. This level of media coverage and audience reach was an increase from that experienced in the previous quarter. This was attributed to a combination of the prompting by the Program for residents to self-manage during COVID-19, promotion of changes to the way industry should work with fire ants and erroneous media stories relating to the Efficiency and Effectiveness Review.

Advertising spend equivalent⁶ figures were also up significantly, a 503% increase, as was positive sentiment, up 2% on the previous quarter.

A large amount of media coverage (10 mentions) resulted from a Westside News story about a three-month treatment delay in Anstead in April 2018. The Program informed the journalist of changes to its treatment regime and current treatment times being within 11 days, however this information was not published.

A further five mentions were associated with stories from local media outlets urging residents to self-manage fire ants during COVID-19. Most of these stories were a straight copy of the Program's media release.

Figure 10 (below) shows graphically the achievements made for Quarter 4.

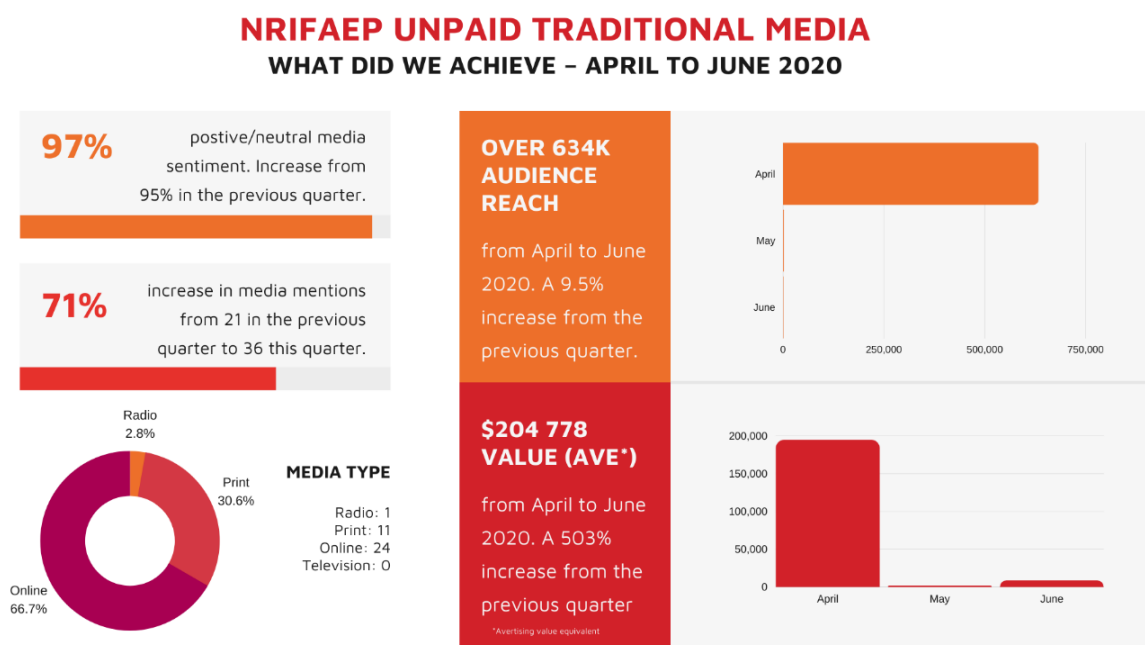


Figure 10: Traditional media achievements in Quarter 4

⁶ Advertising Spend Equivalent is a monetary measure used to place value on free editorial content achieved in the media, comparing it to the cost if the Program had paid for the equivalent advertising space and exposure.

Social media

Figure 11 (below) is a graphical representation of the achievements in social media made by the Program in Quarter 4.

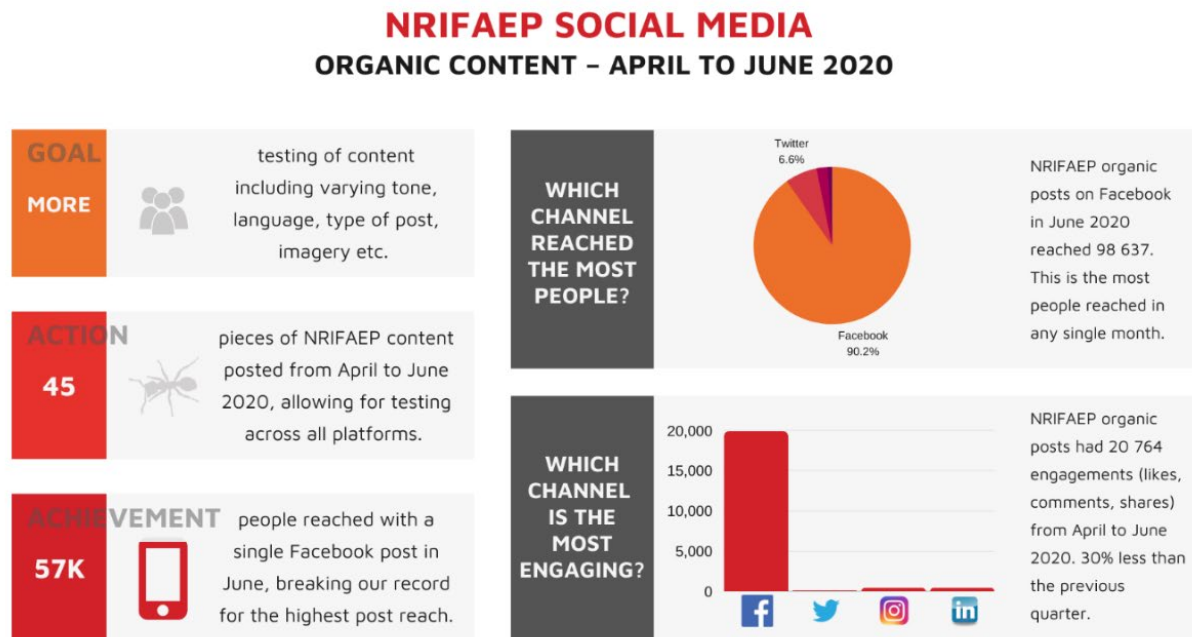


Figure 11: Social media achievements in Quarter 4

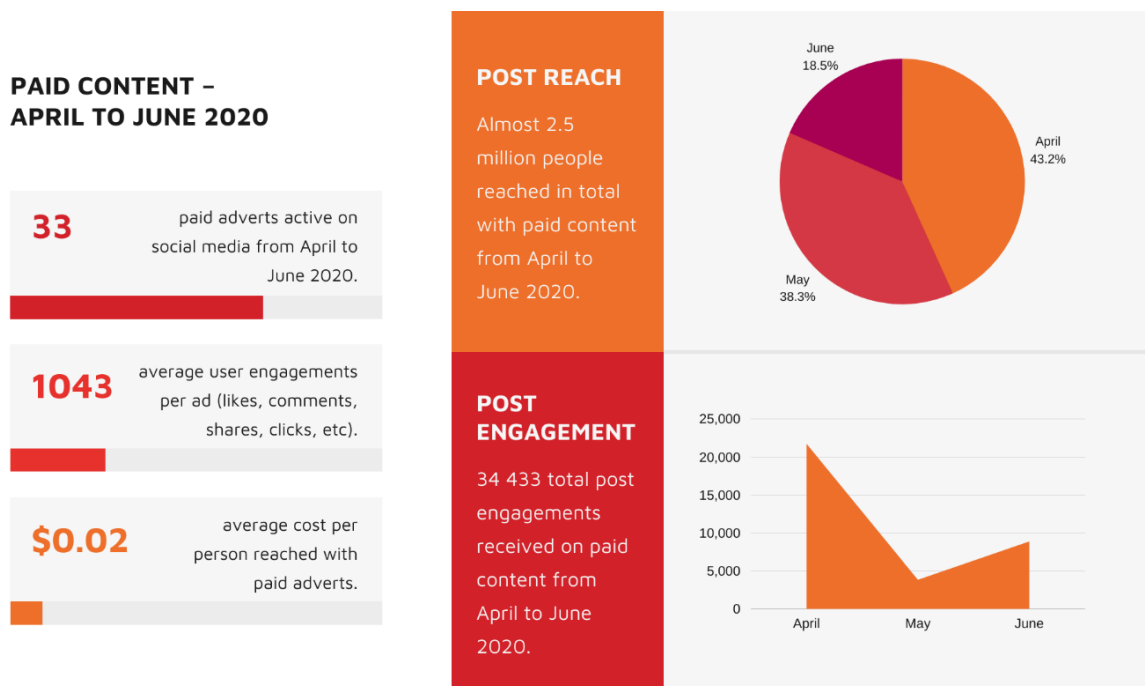


Figure 12: Social media – paid content April to June 2020

STRATEGY AND SENTIMENT – APRIL TO JUNE 2020

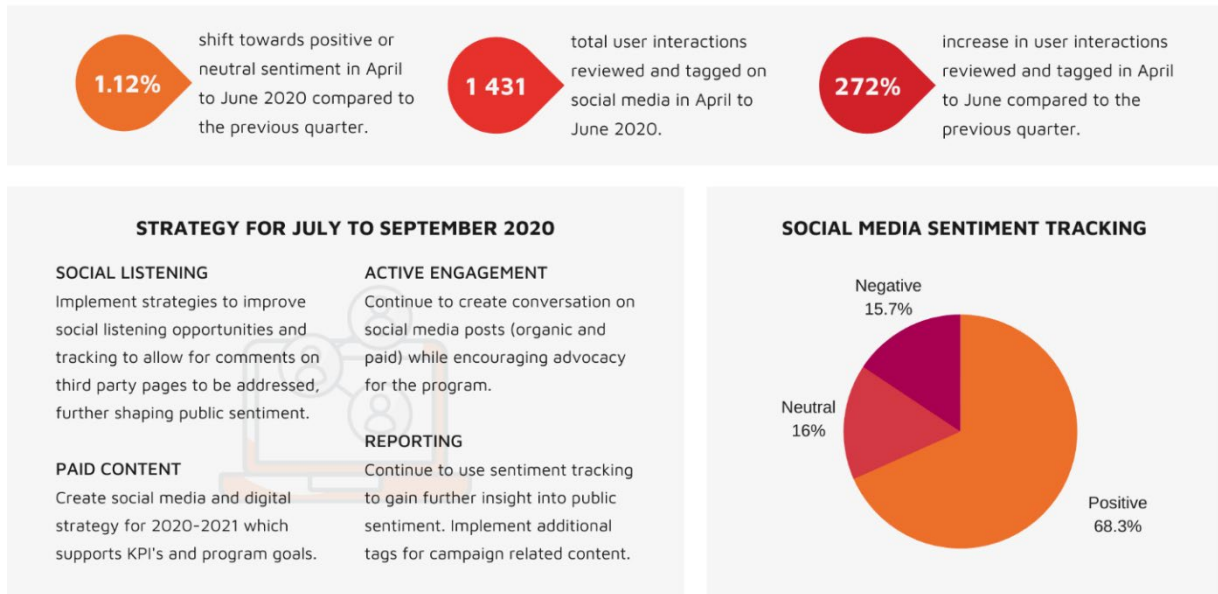


Figure 13: Social media – strategy and sentiment April to June 2020

Reputation and confidence

Complaints management

A total of 110 complaints were received in the fourth quarter of 2019-20, averaging 36 per month.

Lack of communication or follow up with customers after a suspect ant report was lodged or following treatment applications received the highest number of complaints in this quarter. More specifically, these complaints relate to the timeframe between reporting suspect ants and receiving further details of when sampling or treatment will be undertaken. Program officers not keeping to scheduled appointments with customers also resulted in complaints.

Complaints relating to aerial treatment peaked in April 2020. Of the 15 complaints received, noise-related complaints were the highest, followed closely by concerns for animal welfare.

Only a small number of complaints relating to continued treatment during the COVID-19 pandemic were received in this quarter.

Complaints relating to bait safety were minimal this quarter, with only 3 received. This may be due to the majority of residents in these areas having an understanding of the bait used due to receiving multiple rounds of treatment in the preceding quarter.

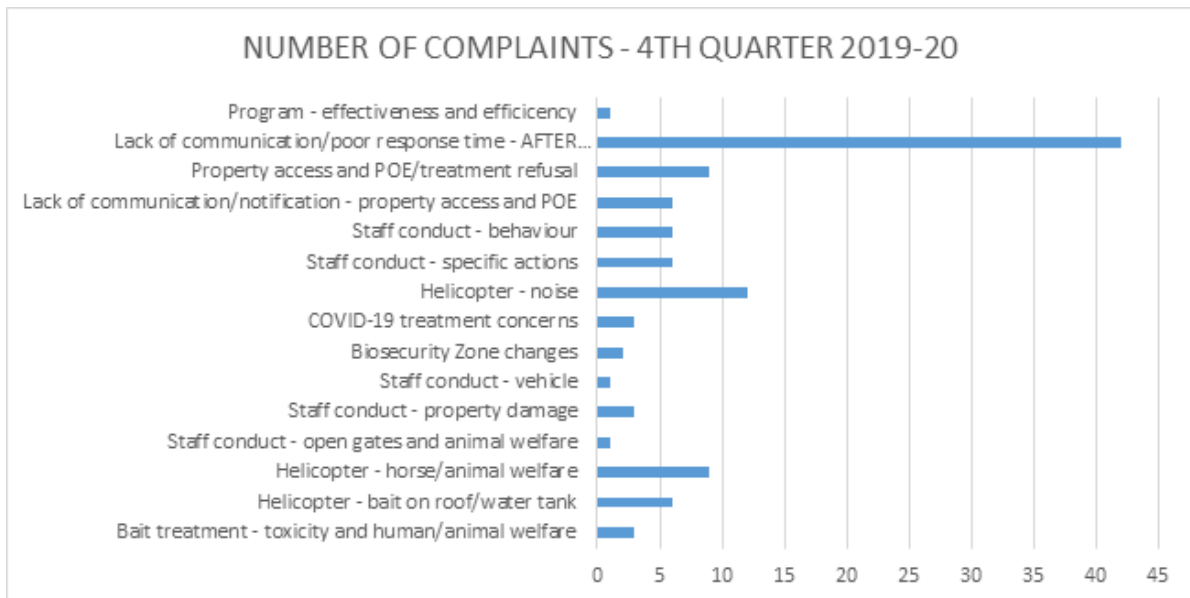


Figure 14: Complaints made by the community in Quarter 4 2020

Sharing new knowledge

Conferences and presentations

Program staff did not attend external conferences during this quarter.

Publications

Scientists, Ross Wylie and Melinda McNaught, from the Program have co-authored a scientific manuscript with Tash Cox and Gary Morton of the National Electric Ant Eradication Program, which has been submitted for consideration of publication. The paper entitled 'A novel re-usable canopy trap for sampling arboreal populations of electric ant, *Wasmannia auropunctata*' outlines the design and use of a trap developed by the electric ant team to specifically capture ants along tree trunks and other areas such as cliff faces, with the aim of sharing the trap with other researchers as a new way of sampling invasive ants and other insects in hard-to-access areas.

7. Research and innovation

Science and innovations to improve treatment, surveillance and diagnostic techniques domestically and internationally

New treatments and methods

Polygyne project

The polygyne social form of fire ant is of particular concern to the Program, due to the increased ease of moving a viable (reproductive) nest through the human assisted movement of carriers, as well as their ability to increase genetic diversity within the population. Surveillance is continuing on polygyne infestations detected within the last five years, with most of these in the current western suppression area. This surveillance is part of a project to help the Program better target treatments for polygyne infestations as the Program moves into new eradication areas from 2020. Over 365 ha have been surveyed to the end of April 2020, yielding in excess of 2204 fire ant mounds, though the number of mounds per search area ranged from 0 to >750 mounds. Genetic testing has been used to confirm the presence of the polygyne social form at each location.

Through this surveillance, the Program has also identified at least three heavily infested sites which are being used to test several different bait treatments and combinations over winter. The first bait applications in these trials were put down in May, with a further two rounds of bait applied to most plots over June. This research is designed to determine if the eradication of localised polygyne infestations

can be accelerated. The pilot trial will continue for at least three months with initial results available by September 2020. These results will be used to guide targeted polygyne treatments over the main 2020-2021 treatment season on other known polygyne infestations.

Winter broad-scale IGR bait treatment

The trial to evaluate the efficacy of bait treatment in late June 2019 was undertaken to evaluate the potential for expanding the treatment window for fire ants in South East Queensland into cooler months. Results of this study indicate that the late season IGR applications appeared to be successful, overall contributing to the mortality of up to 64% of the monitored nests across all sites within five months of treatment, and up to 93% within 8-9 months of treatment. These results support the tentative inclusion of late-season bait treatments outside the standard treatment window (between September-May), subject to temperatures being favourable for fire ant foraging. Opening up the window for effective treatments to be applied through more of the calendar year has the potential to dramatically re-shape the Program's operations, efficiency and effectiveness. Nevertheless, further research and monitoring are warranted to continue to develop the Program's understanding of the interactions between temperature, time of year, fire ant foraging and bait effectiveness in South East Queensland.

Self-treatment bait stations

Bait stations are being investigated for their viability as tools for the self-management project. These stations may provide the residential client base with a method to treat their properties without the concern of animals or children accessing bait products. In early June, preliminary trials began to assess whether fire ants would take bait from inside the stations. Initially, stations were deployed for several hours, with observations suggesting that the ants will enter the access tunnel of the stations. To better assess ant recruitment, stations were deployed for a week at the end of June, with a sticky trap at the entrance point to determine what types of ants were accessing the stations. Unfortunately, when the stations were collected, no ants were present in any traps. Although disappointing, this lack of recruitment may be due to the cold weather, which substantially reduces foraging activity. Further investigation will begin when the weather is warm enough and the ants are more inclined to forage.

Remote sensing surveillance research

The Remote Sensing Research and Development Project concluded on 30 April 2020. This stage of the remote sensing project culminated in the development of a custom image capture system and a very promising prototype deep learning algorithm. The imagery collected during the research and development project trial flights showed that the algorithm is quite precise at successfully identifying visible fire ant mounds in certain situations. There was, however, a lower precision when the imagery was taken in paddocks with highly disturbed soil where the nests were obscured or damaged. It was noted that the first round of trial flights was completed too late in the season where, due to the heat, ants had retreated further underground and nests were not as well formed or were hidden under logs and large rocks.

The next stage is a short-term project to improve the prototype algorithm through further field training and validation of the algorithm output. To achieve this up to 20 000 ha of imagery will be captured between June-September 2020, over Area 2 via the helicopter-mounted image capture pod, with thousands of additional nests digitised and used to train the algorithm. An update on the remote sensing project was provided at the SAG meeting in April 2020. The Program received positive feedback regarding the progress on image capture, algorithm development and potential future improvements.

In June, data collection preparation consisted of the proposal of a flight area and the selection of potential field sites based on historical infestation data and landscape attributes. These potential calibration sites were then refined based on nest abundance, with a minimum of 200-300 suitable nests required at each site. Field data collection commenced mid-June with the GPS locations of all nests at each site recorded to within three-centimetre accuracy. Nest attributes, including photographs, were also recorded. So far two calibration sites are near completion. The week of flights with the image pod commenced the week starting on 29 June 2020, with no issues so far.

8. Scientific protocols and plans

Clearance and freedom

Work continues on the development of a Clearance and Proof of Freedom Strategy. The strategy framework has four phases, and two decision points, before proving eventual Proof of Freedom:

| Phase | Time period | Area incorporated |
|--|--|--|
| Phase 1: Containment | Until area moves to Phase 2: Eradication | Large contiguous areas |
| Phase 2: Eradication (treatment) | 1-3 years depending on eradication treatment approach | Large contiguous areas |
| Decision Point 1: Evaluation of eradication treatment completion | | |
| Phase 3: Clearance | Minimum 2 years | Large contiguous areas initially: transitioning to clearance zones (2500 ha) |
| Decision Point 2: Probability of freedom | | |
| Phase 4: (Area) Freedom | 5+ years. Maintaining continual surveillance to ensure high probability that clearance zone is cleared | Clearance zones (2500 ha) |
| All clearance zones declared free = Proof of Freedom declared of Queensland Infestation | | |

Figure 15: Overview of draft Clearance and Proof of Freedom Strategy

The size of the smaller clearance zones (2500 ha) is based on fire ant biology and spread risk, and was determined to allow each zone to be treated as independent from other zones.

The strategy will be used to prioritise clearance surveillance activities in the winter 2020 surveillance season. In particular, the process of risk-based mapping and associated modelling will be used to identify sites in Area 1 and Western Boundary for clearance surveillance. Targeting surveillance in this manner will allow the Program to provide an estimate of whether infestation remains. This was presented to the SAG on 15 April 2020, and the overarching framework endorsed by SAG with recommendations that the technical aspects be reviewed by a modelling expert. The Program is identifying suitable experts to ensure this is undertaken shortly.

The draft strategy was also provided to the Steering Committee in June 2020 and an updated strategy which incorporates the Steering Committee's feedback will be tabled with SAG and the Steering Committee in August 2020.

9. Governance and accountability

Includes business improvement, significant meetings related to governance and risk management

Business improvement

Key business improvement activities during Quarter 4 included:

- **Governance** – In response to audit recommendations, the development and implementation of a RIFA Contracts Register is expected to roll out on 1 August 2020.
- **Responsive treatment** – The implementation and refinement of a new response protocol to reduce time to respond to and treat community reports of suspected fire ants.
- **People and culture** – Staff members across the Department have been encouraged to participate in online training during the COVID-19 period.

Risk management

The Program has five 'high' risks identified – shown in Table 13.

Table 15: High risks to the Program

| Risk Type | Risk Description/Risk Controls/Treatment |
|-------------|--|
| Strategic | <p>Risk Description: Risk to eradication and containment: Extreme wet weather events (e.g. flood, heavy rainfall) assist fire ant colonies to disperse over a greater geographical area.</p> |
| | <p>Risk Controls: 1. Contingency planning will be undertaken to ensure appropriate targeted surveillance/treatment is undertaken following a significant climatic event. 2. Pre-planning including infestation assessment, genetic tracing, spatial analysis of spread.</p> |
| | <p>Treatment: Reprioritisation of planned suppression treatment to limit the risk of spread along water courses. Flooding contingency fund. Flood modelling and responsive planning.</p> |
| Operational | <p>Risk Description: 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.</p> |
| | <p>Risk Controls: 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.</p> |
| | <p>Treatment: Information systems to undergo continual improvement. Review of existing systems technology and current business processes to ensure best fit solutions are implemented. Continually review performance and recommend upgrades accordingly.</p> |
| Operational | <p>Risk Description: Risk to eradication: Helicopter contractors are unavailable to deliver for a sustained period that results in targets not being met and program activities unable to be achieved.</p> |
| | <p>Risk Controls: Effective supply negotiations in place and appropriate planning and monitoring of activity in progress to ensure resource activity variation supply to meet program needs and deadlines. Resource requirements should be determined for an effective operations. Regular communication between Program and the helicopter company should be implemented to identify potential flight issues in advance.</p> |
| | <p>Treatment: Annual review of major contracts to be implemented to ensure continuity of supply.</p> |
| Operational | <p>Risk Description: Risk to Eradication: Inability to provide timely work to field teams.</p> |
| | <p>Risk Controls: Sufficient resourcing, communications between operations and planning.</p> |
| | <p>Treatment: Possible digital field solution. Re-engineer or improve job allocation processes. Monitoring progress against schedule.</p> |
| Operational | <p>Risk Description: Risk to capability: The Program failing to achieve needed cost savings due to a lack of the desired take-up by industry and the community of the various self-management initiatives.</p> |
| | <p>Risk Controls: The Self-Management program is divided into a number of sub-programs to better meet the needs of each target group.</p> |
| | <p>Treatment: Ongoing refinement and adjustment will be undertaken to meet the needs to consumers and industry sectors. Coordination with high-density suppression treatment will also be undertaken to ensure the self-management projects are effective as possible.</p> |

Significant issues

COVID-19 was a significant issue to the Program during the quarter. In order to address the risk and to ensure the safety of staff and the community, the Program implemented measures to comply with social distancing restrictions. These included:

- alternative working arrangements for staff with the capacity to work from home and social distancing practices and hygiene for staff working in the office
- securing and recording of additional equipment i.e. data sims, headsets, stands to enable staff to work from home
- due to unprecedented demand on certain products, sourcing and supplying alternative solutions to enable field operations to continue without interruption
- home garaging for vehicles, where appropriate, to avoid unnecessary visits to depots or buildings
- hiring of additional vehicles to ensure a limit of two staff per vehicle, with one officer travelling in the front seat and the other in the back seat on the opposite side of car with windows down and air conditioning off
- contacting customers in advance via telephone to avoid human contact when on-site
- practising extra vigilance with staff showing any symptoms of sickness, as well as immediate isolation of teams if a member is tested positive for COVID-19. No team members tested positive for COVID-19 during Quarter 4.

Committee meetings

Steering Committee

The NRIFAEP Steering Committee held a teleconference on 12 June 2020 to further consider the Three Year Strategy, the Work Plan and the Clearance Strategy. The Work Plan received in-principle approval and members agreed to provide approval of the Three Year Strategy and the Clearance Strategy out of session. The Steering Committee is scheduled to meet again on 20 August 2020 by teleconference, due to COVID-19.

Sub-committees

The Efficiency and Effectiveness Sub-Committee held their second meeting via teleconference in May. To date the Sub-Committee is pleased with the Program's progress in responding to each recommendation and also noted delays in progressing a number of action items due to the COVID-19 pandemic. The Sub-Committee will meet on 17 August 2020 and will provide a progress update to the Steering Committee at their quarterly meeting.

National Exotic Invasive Fire Ant Scientific Advisory Group (SAG)

Papers for the SAG meeting being held by teleconference on 14 July 2020 were provided on Program strategic plans including the Clearance Strategy, Area 2 Eradication design, southern boundary containment, and 2020–21 work plan.

Business systems and intelligence

Digital field capability implementation project

Progress this quarter in the Digital Field Capability Implementation Project was realised through enhancement to FAMS delivering the ability to allow focus areas to be created directly in FAMS. This enhancement is projected to decrease ARCmap annual licence costs and reduce mapping errors.

The first stage of development for this new mobile application, which has been named 'Forage', is scheduled for initial release on tablet devices on 31 July 2020. The first stage will support the Program's planned surveillance activities (specifically sentinel and targeted surveillance).

During May there were several achievements in the development of the Forage application underling infrastructure and system design. Achievements include:

- the technical development of the system supporting planned surveillance

- first stage user acceptance testing and the training go-live strategy were developed and approved
- the application privacy impact assessment was drafted
- approximately 120 devices have been purchased and the setup of these devices is on target for delivery to operations staff following completion of user training.

These changes allow for user acceptance testing to commence for Stage 1 release of the Forage application.

In the last three weeks of the quarter, progress was made in development of the detailed requirements for Stage 2a, technical development time for this stage is yet to be confirmed.

Client and Stakeholder Engagement Solution (CaSES)

The CaSES CRM system realised improved functionality through redesign of the public and internal user interfaces. The enhancements have resulted in a simpler more intuitive experience when lodging and interaction online. Additionally, enhancements to the suspect ant report have been made allowing the collection and reporting of fire ant stings to be reported through the external facing public portal.

10. People and culture

Includes information on staff levels, workplace health and safety, and employee development, engagement and culture

Significant staff changes

Office staff

1. The whole-of-Government Standing Offer Arrangement (SOA), GGS0060 Temporary and Contracted Workers Preferred Supplier Panel (PSP) commenced on 30 May 2020 and a new procurement process was required to engage workers under the new SOA.
2. The Program received approval to recruit up to 45 office based contingent workers for 2020-21.
3. There is no FTE impact. The Program's management team will be regularly reviewing contractor requirements.

Table 16: Staff changes during Quarter 4

| Commenced | Departed |
|---|---|
| Principal Operations (Technical) Coordinator Senior Operations (Technical) Coordinator | Principal Operations (Technical) Coordinator Business Services Coordinator Policy Officer Senior Business Services Officer (Finance) |

Staff numbers 2019-20

Table 17: Staff numbers 2019-2020

| Position | Q1 | Q2 | Q3 | Q4 |
|--------------------|-----|-----|-----|-----|
| Permanent | 97 | 77 | 76 | 74 |
| Temporary | 30 | 31 | 50 | 56 |
| Contractor—office* | 34 | 29 | 22 | 27 |
| Contractor—field* | 129 | 167 | 190 | 188 |
| Total | 290 | 304 | 338 | 345 |

Workplace health and safety

The Program received approximately 40 reports related to workplace health and safety during Quarter 4. *Figure 16* compares quarter 4 to previous quarters. The Program's major workplace health and safety categories continue to include:

- Fall, Trip and Slip (not from a height) – 15 incidences; and
- Hitting or being hit by any object/s – 15 incidences.

Figure 17 provides the breakdown of injury classifications for quarter 4.

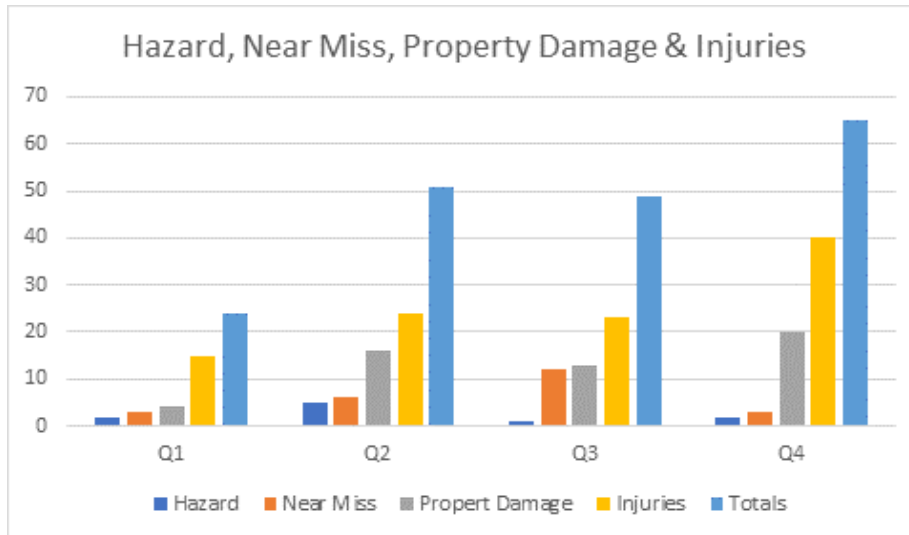


Figure 16: Hazards, near misses, property damage and injuries - Quarter 4 and year to date

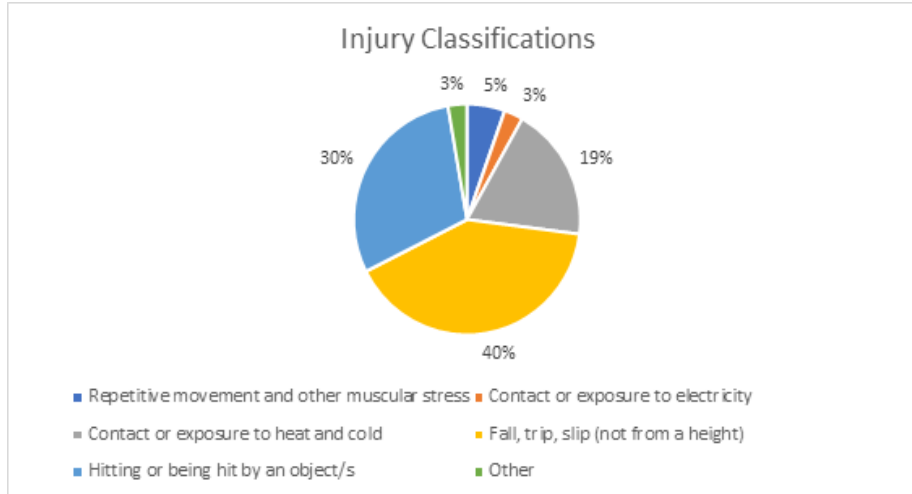


Figure 17: Injury Classifications - Quarter 4

The majority of field staff (80%) are tasked to walk across rural properties that are uneven which is the major contributor to the Fall, Trip and Slip category. The WHS representative is having discussions with field staff to address this risk. The Program is also transitioning from Quad Bikes to Side by Side UTV's to mitigate the identified risks associated with Quad Bike use. Measures have now been put in place to assist with isolating livestock wherever feasible.

Internal communication

Four dedicated internal newsletters for program staff were distributed during the fourth quarter. These were introduced to regularly update staff about COVID-19 requirements and activities and increase the

knowledge of teams about treatment success, major changes to policy, public campaigns, including the changes to biosecurity zones and biosecurity regulations, along with other news about the Program.

For staff with access to email and the digital version of the newsletter, engagement could be tracked. A number of field staff do not currently have access to the Program's email which limits the ability to engage with these staff digitally. While hard copies of newsletters are distributed to these team members engagement levels cannot be tracked.

Learning and development

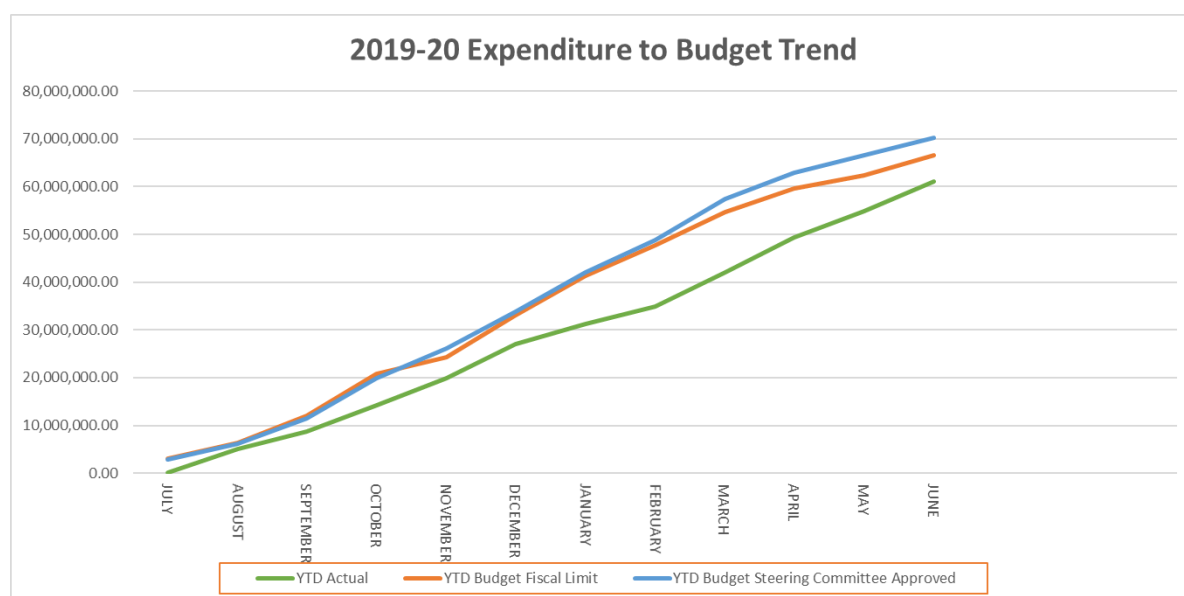
Staff members across the Department have been encouraged to participate in online training during the COVID-19 period.

Volunteers

Due to the restrictions associated with COVID-19, the arrangements for volunteers was suspended during the fourth quarter.

11. Finance

Expenditure to budget



To 30 June 2020, the National Red Imported Fire Ant Eradication Program is underspent by \$5.4 million. Material program variances include a \$4.3M underspend in operations, \$691K in Business Support related to vacancies and site expenses, \$339K in Community and Stakeholder Engagement, \$223K in Science and \$160K in Planning and Quality Assurance.

Material variances within Operations include an underspend of \$3.7M in field labour hire and bait \$467K offset against an overspend of \$379K in aircraft. The overall operational underspend is reflective of reduced treatment completed against the target to 30 June (439,684 ha treated of target 468,637 ha incl WB). Delays in treatment were impacted by availability of aircraft, safety of the Wacol site for aerial operations due to kangaroos on the aerial operations site and wet weather. The program's aerial contractor did not have the required aircraft available for treatment due to demands related to bushfires in Queensland in late 2019 but has provided additional aircraft since March 2020. The program engaged a fencing contractor to complete works on the Wacol Site to stop kangaroos approaching the aircraft, this work has been completed.

The variance in business support of \$691K occurs as a result of a number of vacancies (\$417K) and timing of expenditure relating to the site requirements for Wacol (\$113K) including water rates, fuel purchases for generators on site, cleaning and signage. Further variance relates to rent and works requirements for Laidley (\$145K) which have not been incurred whilst the program continues to

negotiate a lease. The underspend in the Science area includes \$130K in laboratory consumables and savings for SAG meetings as a result of decreased travel. The variance in Community and Stakeholder Engagement consists largely of campaign expenses, campaigns are being reconsidered in light of COVID arrangements and likelihood of approvals including possible alternative print-based delivery methods. The C&SE area underspend also includes the impact of a vacant position. The variance in Planning and Quality Assurance relates largely to decreased levels in contractor resourcing and associated spend.

Budget Q4: 2019-20

Table 18: Budget 2019-20

| Program Area | Requested budget | Current budget | YTD budget | YTD actual | Variance |
|---|------------------|----------------|------------|------------|-----------|
| Program logistics and business support | 4,242,886 | 4,309,697 | 4,309,697 | 3,618,810 | 690,887 |
| Remote sensing surveillance (R&D) | 1,217,189 | 1,217,189 | 1,217,189 | 1,560,036 | -342,847 |
| Systems and technology innovation | 3,404,353 | 2,254,352 | 2,254,352 | 2,130,149 | 124,203 |
| Community & stakeholder engagement | 1,932,503 | 1,972,502 | 1,972,502 | 1,633,149 | 339,353 |
| Science services & eradication assessment | 2,137,997 | 2,097,997 | 2,097,997 | 1,875,256 | 222,741 |
| Operations | 52,548,009 | 51,242,214 | 51,242,214 | 46,769,826 | 4,472,388 |
| Directorate | 879,943 | 879,943 | 879,943 | 792,956 | 86,988 |
| Self-management | 1,459,961 | 150,965 | 150,965 | 540,457 | -389,492 |
| Strategic policy performance & compliance | 2,381,140 | 2,381,140 | 2,381,140 | 2,127,715 | 253,426 |
| Total | 70,203,982 | 66,506,000 | 66,506,000 | 61,048,353 | 5,457,647 |

Procurement

The Program actively undertook the following procurement activities throughout the quarter:

- Established a Standing Offer Arrangement (SOA) for odour detection dogs in order to meet business requirements
- Recommendations are currently being prepared for the approval of the Executive Committee Council.
- The significant procurement of 30+ RIFA Office Based Contingent Workers was completed under the new whole-of-Government arrangement.
- The significant procurement of RIFA Field Based Contingent Workers was completed under the current TMR arrangement.

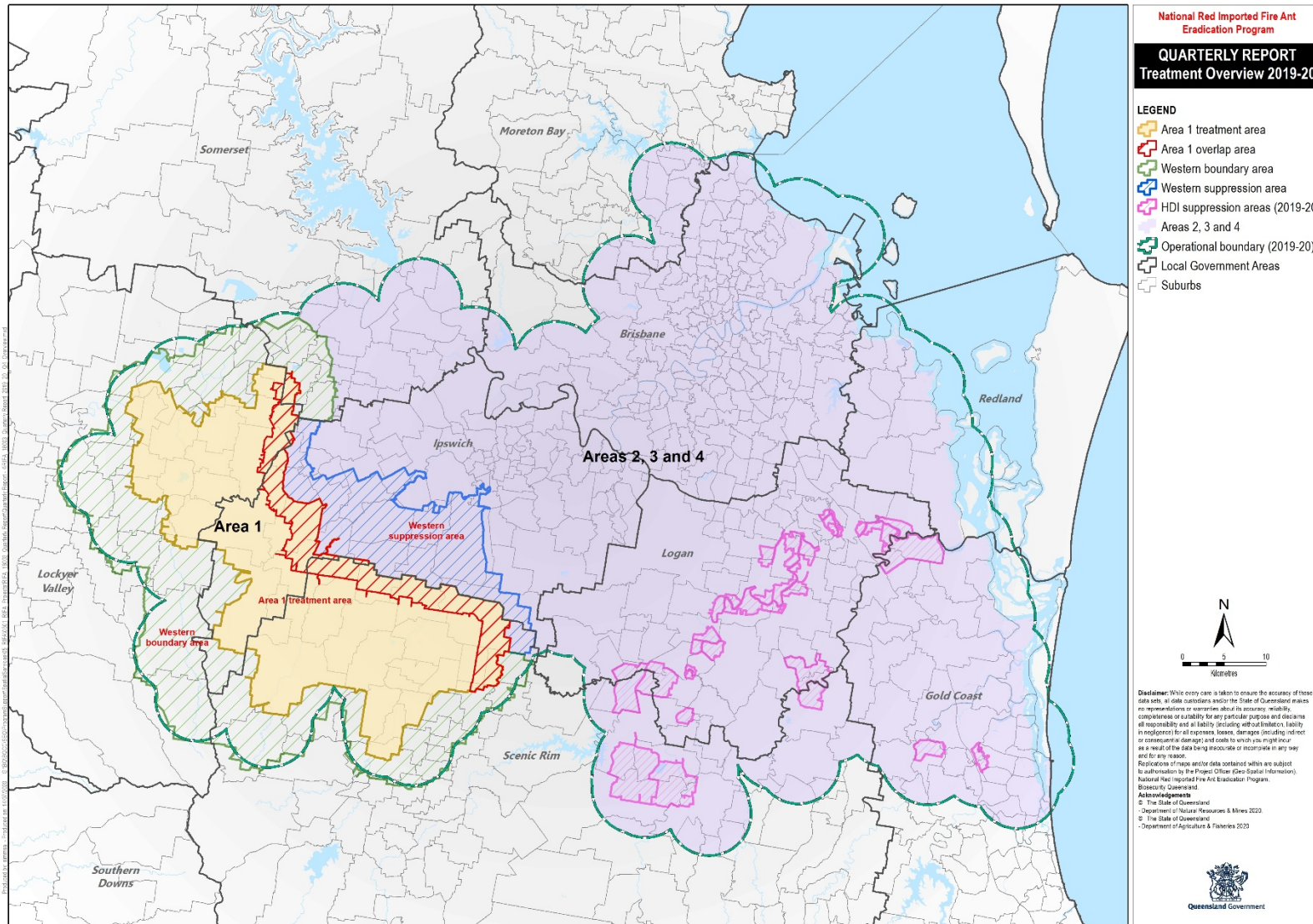
12. Appendices

Appendix 1: Boundary detections - Quarter 4 2019-2020

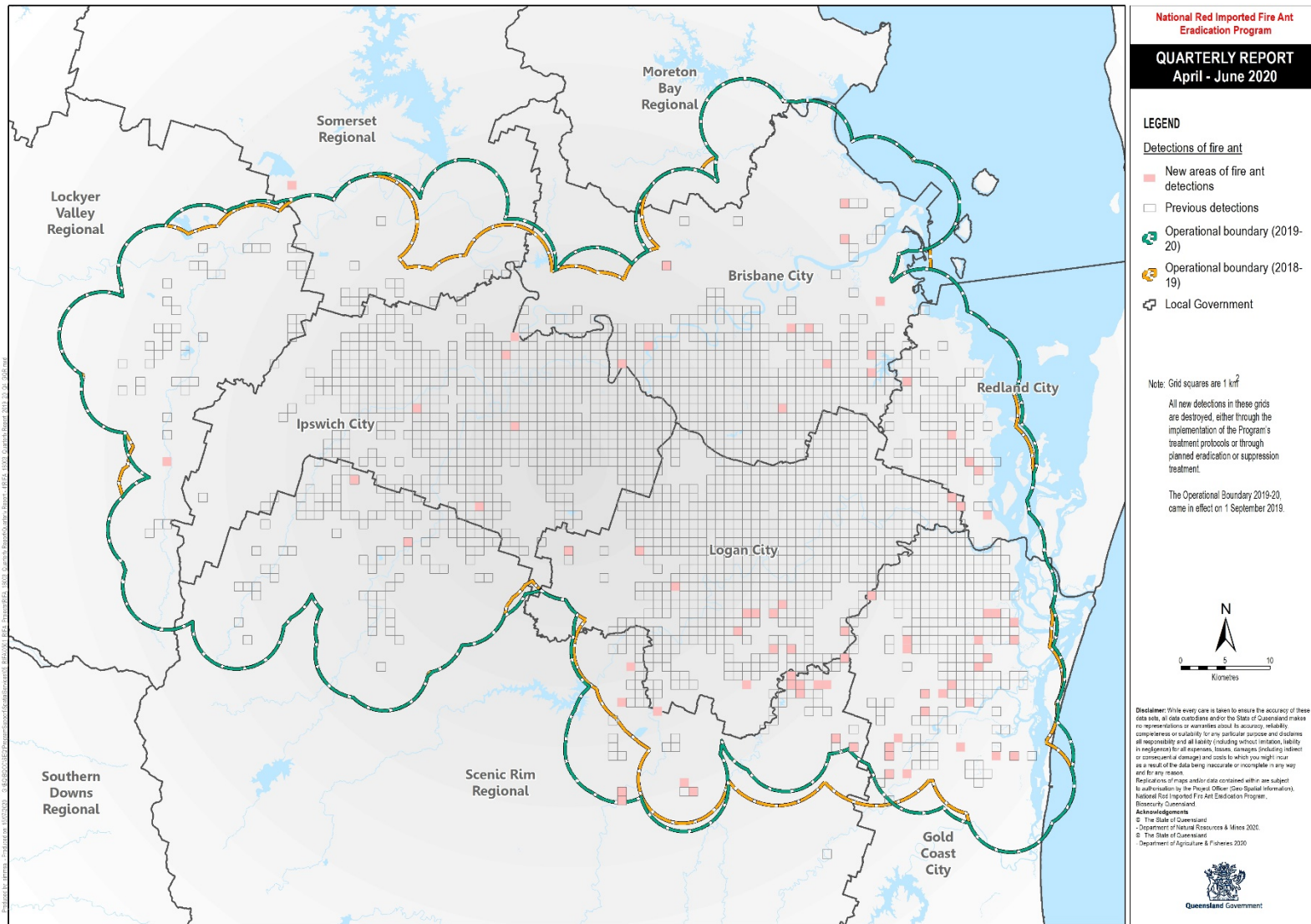
| Suburb | Details |
|----------------------|--|
| Guanaba 1 | Detected 2 April 2020 in the southern part of the containment area as a result of a public report. |
| Guanaba 2 | Detected 1 May 2020 in the southern part of the containment area as a result of a public report made by the homeowner. Six mounds were detected and destroyed the same day. |
| Upper Kedron | Detected 3 April 2020 in a children's playground by Odour Detection Dogs conducting post-treatment validation surveillance on previous detections made in the area. The area is being developed for residential housing and has had repeated low-density infestation since 2017. |
| Tamborine Mountain 3 | On 16 April 2020 four mounds were destroyed on a previously infested private residential property after the homeowner reported more mounds. |
| Tamborine Mountain 4 | Detected 24 April 2020 as a result of the surveillance conducted in response to an earlier boundary detection (Tamborine Mountain 1 from 26 February 2020). Fourteen mounds were found and destroyed the same day. On 1 May 2020 the homeowner reported more mounds onsite and subsequently a further fifty mounds were counted and destroyed. |
| Tamborine Mountain 5 | Detected 6 May 2020 as a result of surveillance conducted in response to an earlier boundary detection (Tamborine Mountain 3). |
| Tamborine Mountain 6 | Detected 6 May 2020 as a result of surveillance conducted in response to an earlier boundary detection (Tamborine Mountain 3). |
| Tamborine Mountain 7 | Detected 8 May 2020 in the southern containment area as a result of surveillance conducted in response to an earlier boundary detection (Tamborine Mountain 1 from 26 February 2020). |

| Suburb | Details |
|--------------|---|
| Josephville | Detected 14 May 2020 in the southern containment area as a result of a public report made by the homeowner. Three mounds were found and destroyed the same day. This detection was deemed high risk as it is situated on the very edge of the operational area. |
| Boyland 2 | Detected 20 May 2020 in the southern containment area as a result of surveillance conducted in response to an earlier detection on a neighbouring property (Boyland 1 from 25 March 2020). |
| Beaudesert 1 | Detected 21 May 2020 in the southern containment area as a result of surveillance conducted in response to an earlier boundary detection in Josephville. Three mounds were promptly destroyed. |
| Beaudesert 2 | Detected on 19 June 2020 in the southern containment area as a result of a public report. |
| Brookfield | Detected 27 May 2020 as a result of a public report made by the homeowner. Seven mounds were destroyed the same day. |
| Mulgowie | Detected 5 June 2020 in the eastern part of the Western Boundary as a result of a public report. Nest destroyed the same day and the detection has also been included as a high risk detection. |
| Maudsland | Detected 16 June 2020 in the southern containment area close to other previous boundary detections. Found as a result of a public report by the property owner. |
| Gleneagle | Detected on 24 June 2020 by Program officers whilst conducting treatment activities on the property. |
| Wongawallan | Detected on 26 June 2020 in the southern containment area as a result of a public report. |

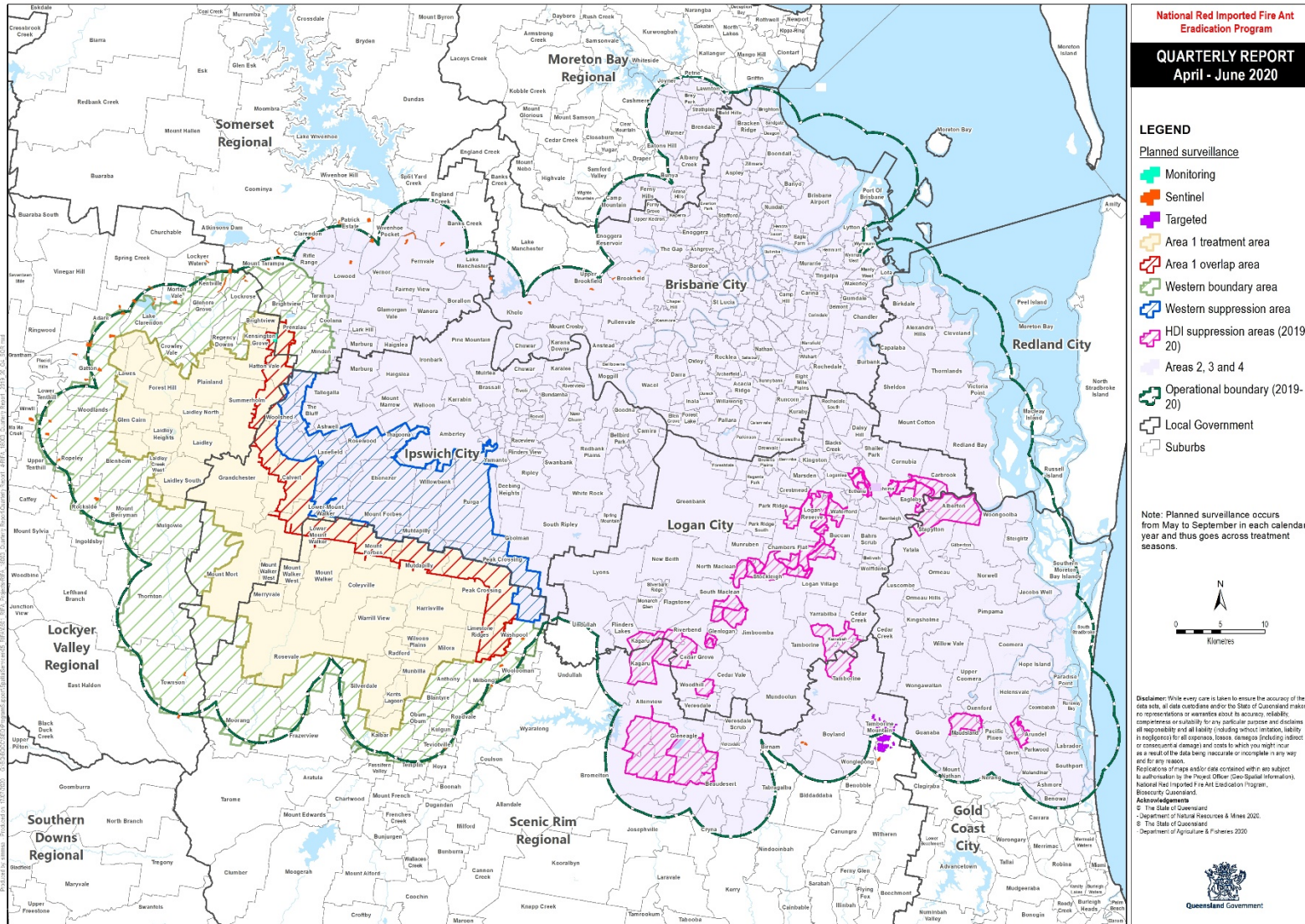
Appendix 2: Overview of treatment areas (April – June 2020)



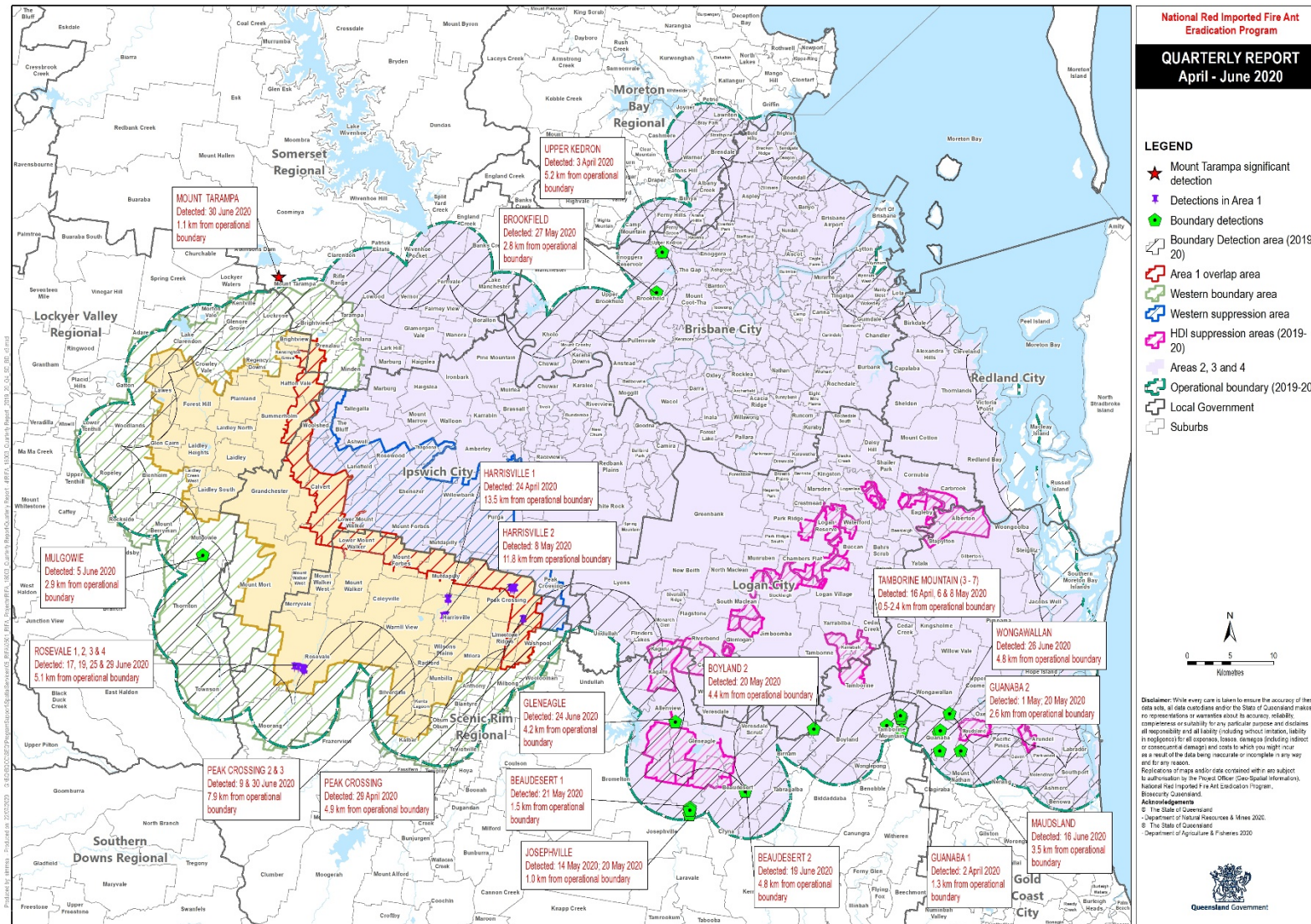
Appendix 3: New detections (April – June 2020)



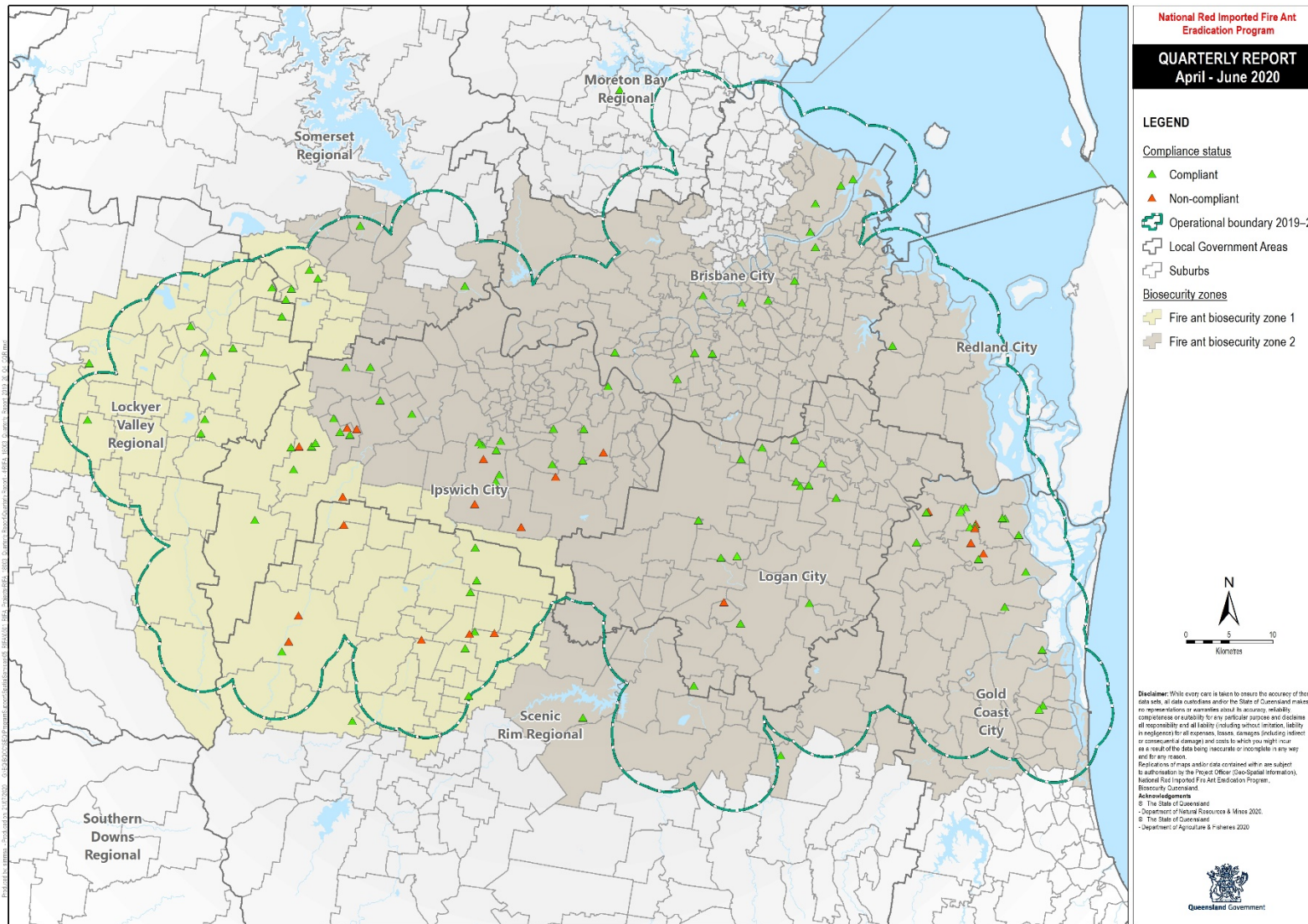
Appendix 4: Planned surveillance (April – June 2020)



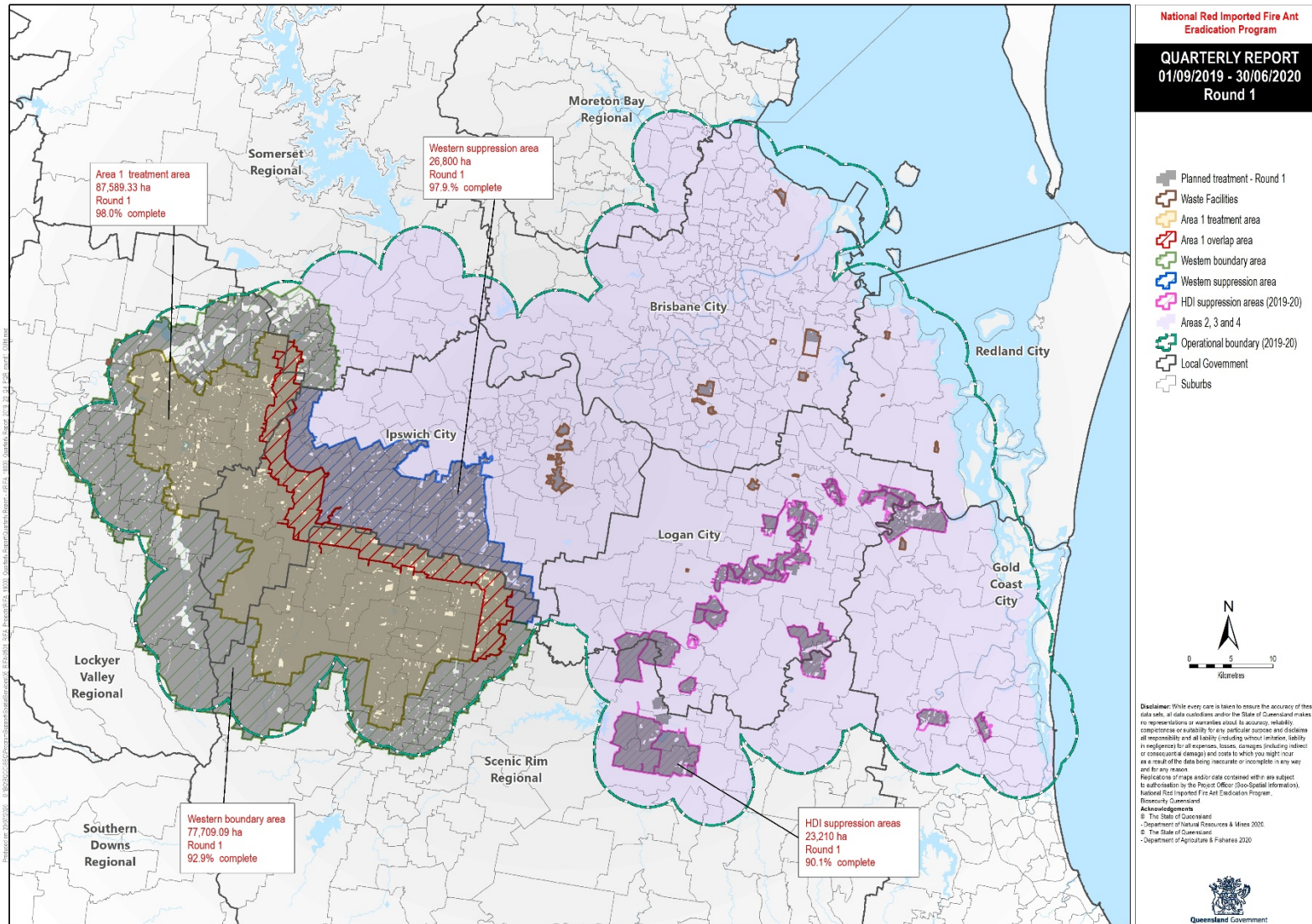
Appendix 5: Significant and boundary detections (April – June 2020)



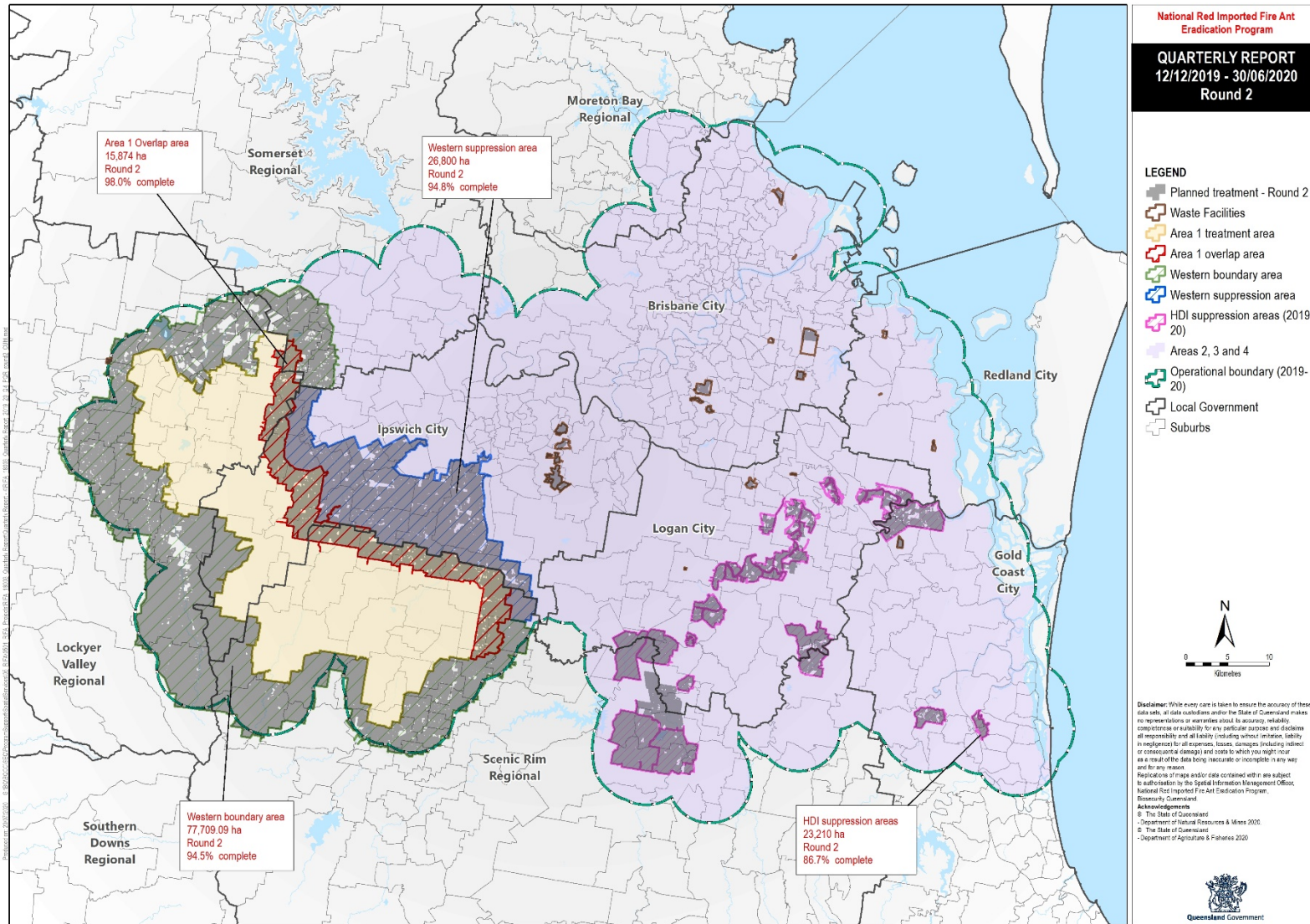
Appendix 6: Compliance check status (April – June 2020)



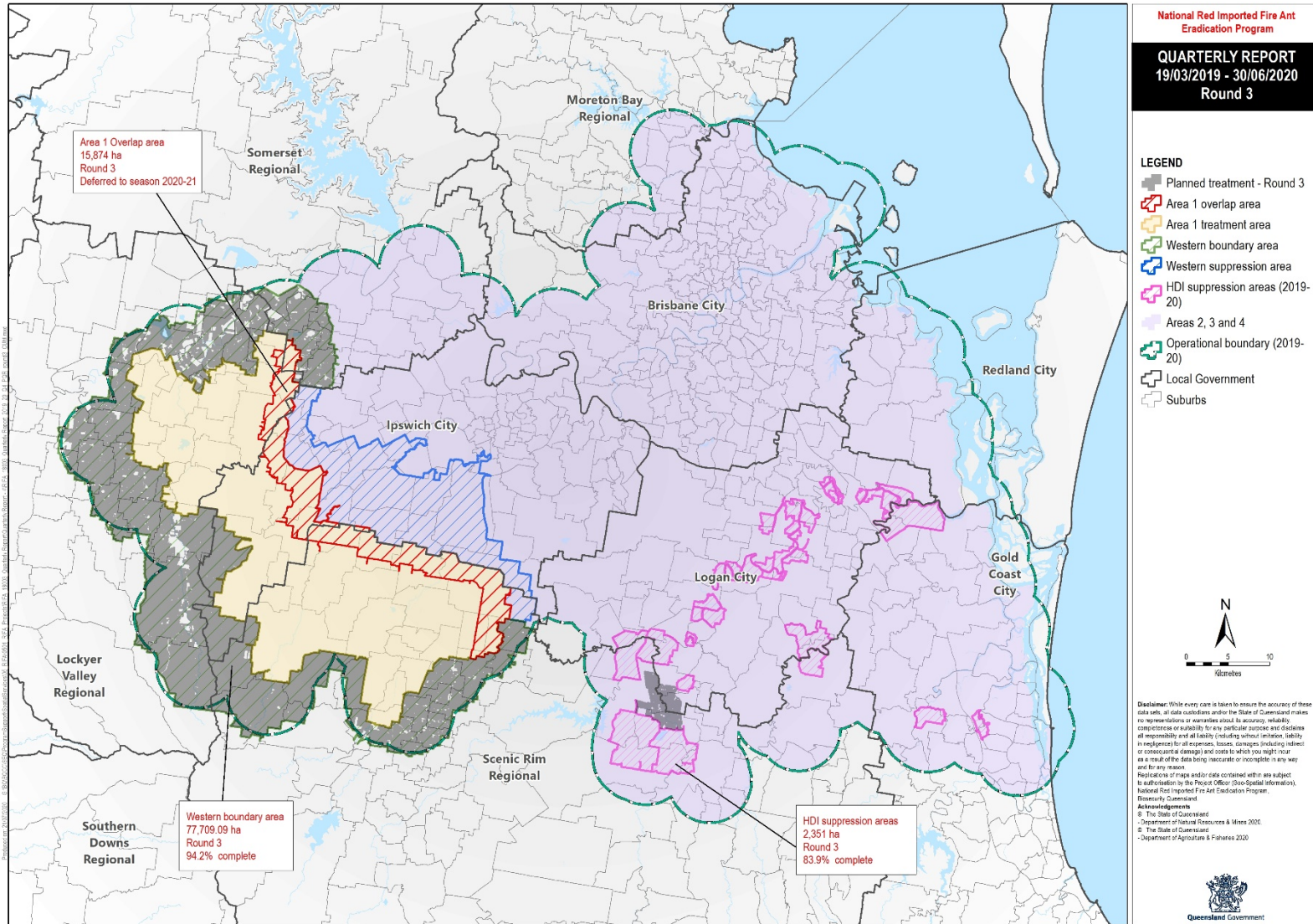
Appendix 7: Planned treatment – Round 1 (April – June 2020)



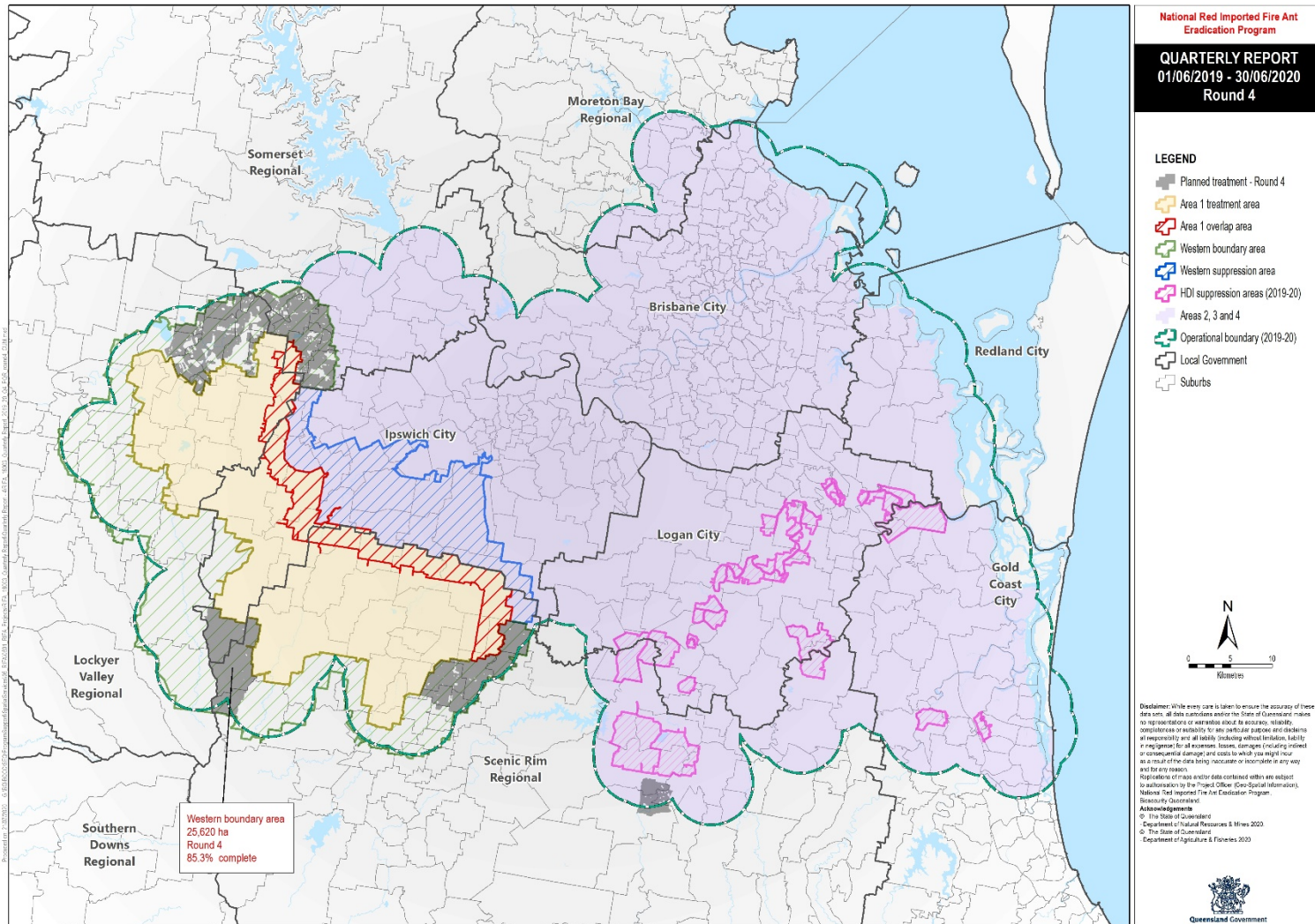
Appendix 8: Planned treatment – Round 2 (April – June 2020)



Appendix 9: Planned treatment – Round 3 (April – June 2020)



Appendix 10: Planned treatment – Round 4 (April – June 2020)



Appendix 11: Responsive treatment – (April – June 2020)

