# Quarterly Report 3 2019–20

National Red Imported Fire Ant Eradication Program
South East Queensland

Report to: National Steering Committee

Period: January-March 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 31 March 2020 can be seen in <u>Table 1</u> below.

Table 1: Goals and deliverables traffic light

Goal	Deliverable	No.	Status
Eradication	One round of 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	
	Up to two rounds 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 <sup>1</sup>	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 <sup>1</sup>	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	
	Biosecurity zones realigned with operational areas.	21	
	Surveillance activities: sentinel surveillance; boundary detection surveillance; significant detection surveillance.	10	

<sup>&</sup>lt;sup>1</sup> Containment and Suppression are used interchangeably. National Red Imported Fire Ant Eradication Program

Goal	Deliverable	No.	Status
Freedom	A Proof-of-Freedom plan for endorsement by the Steering Committee.	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.	18	
Governance	A business improvement plan endorsed by the Steering Committee.	20	
	COMPLETED - A Program business plan endorsed by the Steering Committee.	22	
	A tool for self-assessment of risk and application of risk mitigation measures.	23	

On track as planned or completed

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**

Eradication treatment is behind schedule (see *Figure 1*) largely due to environmental factors (see *Table 8*) impacting the ability to use aerial baiting, a critical part of the treatment strategy. Eradication treatment in Area 1 and the Western Boundary was prioritised ahead of suppression treatment.

Planned suppression treatment (see *Figure 1*) also fell behind schedule during January and February as a result of the same environmental factors however, capacity still remains to complete planned treatment this season. The Program has successfully completed 89 percent of the first round of planned treatment in the Western Suppression area during the quarter. The overall eradication and suppression treatment progress for the quarter and year-to-date is outlined in *Table 2*.

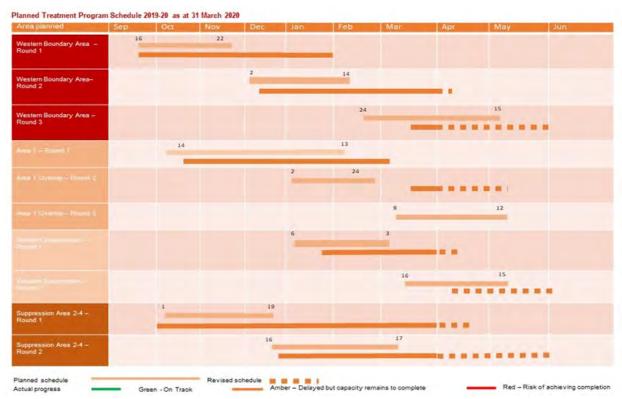


Figure 1: Planned treatment Program schedule 2019-20 as at 31 March 2020

## Responsive treatment

Table 2: Eradication and suppression treatment progress – Quarter 3 and Year to Date

	Quarter 3	YTD	% of annual target
Eradication treatment	110 504	275 161	81
Suppression treatment	37 413	51 027	40

*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

	Number of suspect ant reports	% positive for fire ants from samples received
Community reports	3853	80

## Self-management

During the third quarter, the process to transition the self-management initiative from a project into the Program's business-as-usual activities commenced. This involved defining the business rules that will guide future self-management activities as well as recruiting and appointing staff.

## Containment

Table 4 demonstrates the total number of significant detections and boundary detections in addition to compliance checks and non-compliance instances for the quarter. Detections, compliance checks and non-compliance instances are further discussed as part of *Detections of Importance* and *Human assisted movement* sections further below.

Table 4: Containment overview – Quarter 3

Containment Overview	Q3	YTD
Significant detections	2	3
Boundary detections	10	15
Compliance checks	197	507
Non-compliance instances	13	35

## Clearance and freedom

The first version of the clearance 'risk map' was completed in February 2020 and will be used to prioritise surveillance efforts and clearance activities in the next year. The development of a clearance risk map was recommended by the Scientific Advisory Group (SAG) during the October 2019 meeting.

The map combines two spatial and mathematical models to determine which areas within Area 1 and the Western Boundary eradication area have the highest probability of remnant infestation, if infestation remains. Using this map several areas within Area 1 and the Western Boundary that require surveillance have been identified for attention during the surveillance season.

## Mobilisation (Stakeholder engagement and communication)

COVID-19 has had a significant impact on the delivery of communications and engagement for the Program this quarter. The Queensland Government's reprioritisation of campaign efforts toward COVID-19 related, and other key campaigns, lead to a reduction of the Program's planned communications activities.

Delivery of face-to-face fire ant awareness training and Pest Management Technician training was put on hold due to social distancing requirements. As an alternative an online training package was developed that is scheduled to be introduced in April 2020.

A three-phase communication and engagement plan is also underway to mobilise high risk industries around the changes to biosecurity regulation and zone changes.

## Risks and current ratings

There are seven risks classified as 'high risk' being managed by the Program (see Table 5). The risk that the timing of national cost sharing funding does not align to the treatment strategy was upgraded from 'medium' to 'high'. No new risks were identified in Quarter 3.

Table 5: Strategic and Operational Risks – Quarter 3

Risk type	Low	Medium	High	Extreme	Total
Strategic	1	16	2	0	19
Operational	13	27	5	0	46

## Workplace health and safety

Table 6 outlines the number of hazards and injuries recorded during Quarter 3.

Table 6: Hazards and Injuries - Quarter 3

WHS Incident	Q1	Q2	Q3	YTD
Hazards	2	4	2	8
Injuries	12	23	26	61
Near misses	3	6	12	21
Property damage	4	12	17	33

## **Business improvement**

Key business improvement activities during Quarter 3 included:

- Governance development and implementation of a Training Register, Contract Register and Conflict of Interest Register for reporting and mandatory disclosure processes.
- **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 recruitment training, training regarding expected staff behaviours and code
  of conduct training to assist with staff management.

The business improvement register will be reviewed in mid-2020 to aid future reporting.

## 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 are currently the focus for fire ant eradication treatment (see *Figure 2*). The 2019-20 treatment season began at the end of Quarter 1 on 16 September 2019. The plan for 2019-20 season is to apply broad scale insect growth regulator (IGR) bait to Area 1 and the Western Boundary to eradicate fire ants from this area by the end of Quarter 4.

Following the final treatment round in Q4, the treatment area will be assessed for any remaining infestations and monitored for new detections with results expected in the next financial year.

#### Planned treatment

So far this treatment season, 95 percent of Round 1 planned eradication treatment has been achieved; 91 percent of Round 2; and 41 percent of Round 3 (see *Table 7*). The Program is currently identifying any gaps in treatment and will implement a strategy to treat these gaps before the end of the season where possible.

Treatment delays occurred in January and February 2020, with a total of 51 days of aerial treatment lost due to environmental factors. As a consequence, ground treatment which follows aerial treatment, also fell behind schedule. These challenges are discussed below in *Table 8*.

Figure 1: Planned treatment Program schedule 2019-20 as at 31 March 2020 outlines the planned treatment schedule versus actual treatment for the season to date. Forward planning shows that capacity remains for all aerial treatment to be achieved for the season. Resources have been diverted to enable ground treatment outcomes to also be achieved. Five weeks contingency remains in the time available for treatment, allowing some capacity to deliver the planned treatment by June 2020.

Table 7: Planned eradication treatment progress – Quarter 3 and Year to Date

Round 1		Hectare	S		Round 2		Hectare	es	
Location	Planned Year Total	Quarter Actual	YTD Actual	%	Location	Planned Year Total	Quarter Actual	YTD Actual	%
Area 1	87 589	9 212	85 679	97	Area 1 Overlap	15 168	12 573	12 573	82
Western Boundary	77 709	270	72 093	92	Western Boundary	77 709	56 320	72 687	93
Total	165 298	9 482	157 772	95	Total	92 877	68 893	85 260	91
Round 3		Hootoro	_						
		Hectare	S						
Location	Planned Year Total	Quarter Actual	YTD Actual	%					
	Year	Quarter	YTD	%		To be comp	oleted in 20-	21	
Location  Area 1	Year Total	Quarter Actual	YTD Actual			To be comp	oleted in 20-	21	

Appendix 1: NRIFAEP Q3—Planned and Completed Treatment Round 1, Appendix 2: NRIFAEP Q3—Planned and Completed Treatment Round 2 and Appendix 3: NRIFAEP Q3—Planned and Completed Treatment Round 3 provide a visual representation of eradication and suppression treatment.

Table 8: Challenges, solutions and next quarter

## **Challenges**

#### Planned aerial treatment

- Lost time has been a significant contributor to not achieving the daily average hectares for treatment, with a total of 51 days lost for the quarter. This was due to:
  - o Unsuitable weather conditions e.g. wet weather and excessive wind speed.
  - Mechanical breakdowns due to dust at helicopter landing sites has caused aircraft maintenance to increase.
  - o Reduction in aircraft availability due to the need to respond to bushfires.
  - o Reduction in aircraft availability due to council requirements for spraying of mosquitos.
  - The Program response and social distancing requirements to comply with the Health Directive for COVID-19 has also presented challenges. These have been mitigated where possible.

#### Planned ground treatment

• Ground treatment has been delayed due to aerial treatment being behind schedule. Ground treatment needs to follow the aerial baiting to ensure any gaps in treatment are completed.

#### **Solutions**

- Mobile helicopter-landing pads have mitigated the effect of the dust on aircraft engines and has allowed the Program to utilise remote landing sites.
- A minimum of four helicopters, seven days a week have been in operation to enable treatment to get back on projected schedule. This has resulted in treatment tripling from 24 000 hectares in February 2020 to approximately 78 000 hectares in March 2020.
- The crop treatment coordinator commenced in March to provide solutions to gaps in treatment areas as a result of cropping.
- Field teams based in Berrinba were deployed into the Western Boundary to assist with eradication treatment.

#### COVID-19 controls have included:

- the Program procuring additional leased vehicles and 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
- management updates provided and depot visits undertaken by the senior leaders.

#### **Next quarter**

- Prioritisation of Western Boundary and Western Suppression treatment areas. High Density suppression treatment to begin.
- The ground treatment in Western Boundary and Western Suppression areas to continue.
- Contingent labour will be engaged to bring Laidley and Mutdapilly teams back up to budgeted staffing numbers.
- The expected completion of aerial component of Western Boundary and Western Suppression areas is 13 May 2020.

## Mobilising stakeholders in support of eradication treatment

A follow up advertising campaign was delivered within the eradication area involving 30-second advertisements played on two radio stations for two weeks, five times per day. The aim of this campaign was to inform the community of the upcoming treatment and to gain their co-operation.

## Effectiveness of treatment

The next round of evaluation of the Area 1 monitoring sites was conducted in February 2020, with no nests detected despite surveillance occurring in optimal weather following rain. This suggests that all 90 nests at the monitoring sites are dead, after 4-5 rounds of treatment (see *Figure 3*).

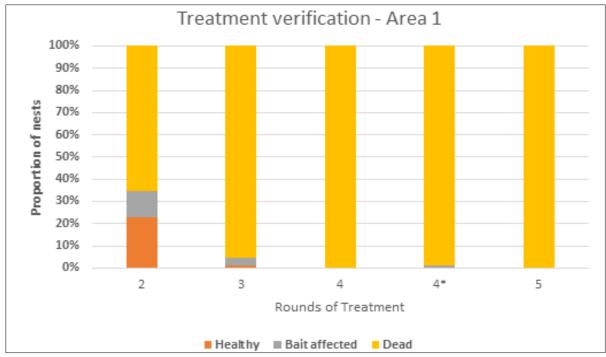


Figure 3: Treatment verification Area 1 - Quarter 3

\*an extra evaluation was conducted after the 4<sup>th</sup> round of treatment (4\*) after rain, because the previous evaluation (4) was undertaken during very hot, dry weather, which is not optimal for fire ant detection.

#### Clearance of previously detected nests in Area 1

The odour detection dog team conducted post-treatment validation on 141 previously detected nests within Area 1 during the quarter. Of these, 140 nests were confirmed as destroyed and one new nest was detected at Summerholm, see Detections of importance (page 14) for further detail.

#### **DNI** treatment

Forty-one nests over 10 sites that received DNI in November and December were revisited during Q3 (12 weeks after treatment) for human visual surveillance to determine the effectiveness of DNI treatment (see *Table 9*). No live nests were detected, which similar to previous quarterly reports, indicates that Program DNI efficacy is at 100%.

Table 9: Human visual surveillance to determine the effectiveness of DNI treatment activities

Sites assessed	Nests assessed	Nests alive after DNI	Efficacy of DNI
10	41	0	100%

## 4. Suppression

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

## Planned treatment

This treatment season, 83 percent of Round 1 planned suppression treatment has been achieved and 19 percent of Round 2. Like planned eradication treatment, the ability to complete planned suppression treatment during January and February was impacted by environmental factors limiting access to aerial baiting. Given the circumstances the eradication treatment in Area 1 and the Western Boundary was prioritised.

Once eradication treatment was back on track, treatment in the Western Suppression area commenced with 89 percent of the first round of planned treatment achieved in the quarter. In Areas 2–4 the first round of suppression treatment re-commenced in the high density areas on 18 March 2020. Capacity still remains to complete planned treatment this season.

The Program's planned suppression treatment progress can be observed in Table 10.

Table 10: Planned suppression treatment progress – Quarter 3 and Year to Date

Round 1	Number of hectares			Round 2	Number of hectares				
Area	Planned Year Total	Quarter Actual	YTD Actual	%	Area	Planned Year Total	Quarter Actual	YTD Actual	%
Western Suppression	26 622	23 884	23 884	89	Western Suppression	26 622	0	0	0
Area 2-4 (High Density)	22 265	4 928	18 167	81	Area 2-4 (High Density)	23 210	8 505	8 880	38
Waste Facilities	1 600	96	96	6	Waste Facilities	1 600	0	0	0
Total	50 487	28 908	42 147	83	Total	45 310	8 505	8 880	19

Appendix 1: NRIFAEP Q3—Planned and Completed Treatment Round 1 Appendix 2: NRIFAEP Q3—Planned and Completed Treatment Round 2 and Appendix 3: NRIFAEP Q3—Planned and Completed Treatment Round 3 provide a visual representation of eradication and suppression treatment.

#### Mobilising the community to support treatment

Approximately 447 people were engaged during events and displays (980 people indirectly engaged), see *Table 11*. Logan City Council invited the Program to set up an interactive display at the Conservation Incentives Program Celebration Day. The event was an excellent opportunity to engage with residents throughout Logan. Feedback from the day suggests that 216 people directly engaged.

Table 11: Events and displays Quarter 3

Number engaged	Change from last Quarter	Purpose of engagement	Location of engagement
447 (980* indirect)	-17%	Community engagements events and local gathering places to provide general fire ant awareness to residents	Treatment areas in SEQ

<sup>\*</sup> Estimated numbers only.

## Responsive treatment: community reports

The community continue to be a vital information source for the Program by identifying possible fire ants in their back yards and communities. There were 3853 reports from the community of suspect fire ants during this quarter with 2562 samples received and tested and 2057confirmed as fire ants. *Figure 4* identifies the property type in which suspect ants were identified, with place of residence the most common location where suspect ants were found. People primarily reported fire ants after noticing something different or unusual on their property, or after disturbing a nest whilst conducting mowing or gardening activities (see *Figure 5*).

Appendix 4: NRIFAEP Q3–Responsive Treatment also provides a visual representation of responsive treatment locations.

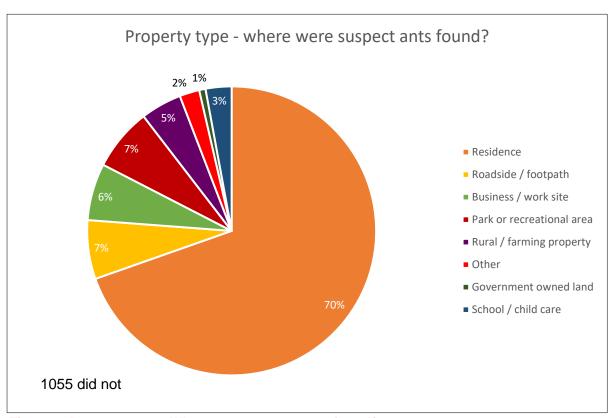


Figure 4: Property type – Where were suspect ants found?

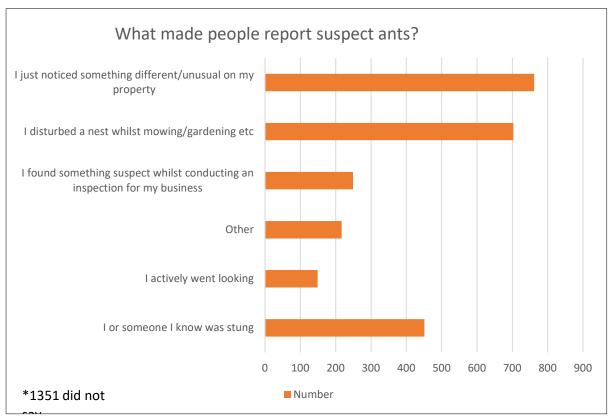


Figure 5: What made people report suspect ants in Quarter 3?

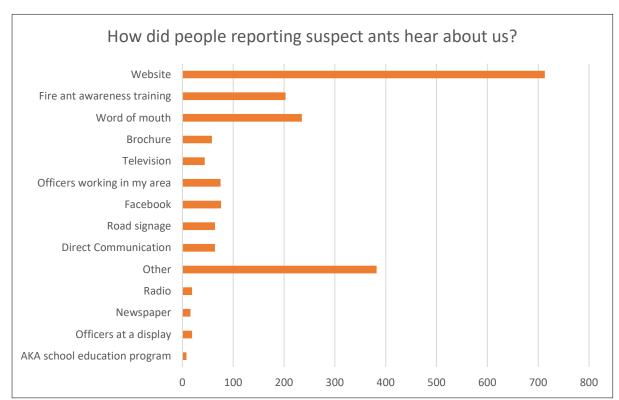


Figure 6: How did people that reported suspect ants in Quarter 3 hear about us?

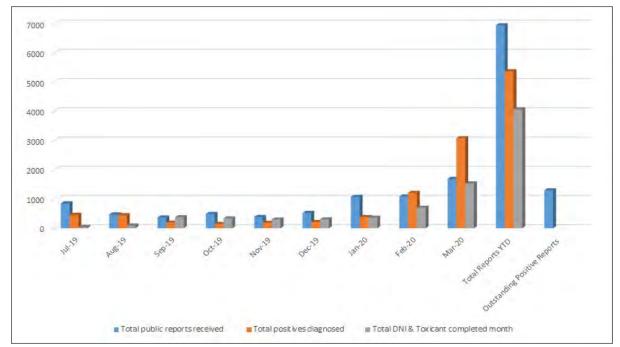


Figure 7: Total public reports, positives diagnosed and DNI/ toxicant completed: July 2019-March 2020

\*Total DNI and Toxicant completed during any given month may be in response to positive diagnosis from previous months. This may be due to a report, positive diagnosis or treatment occurring in a separate month. All public reports are addressed.

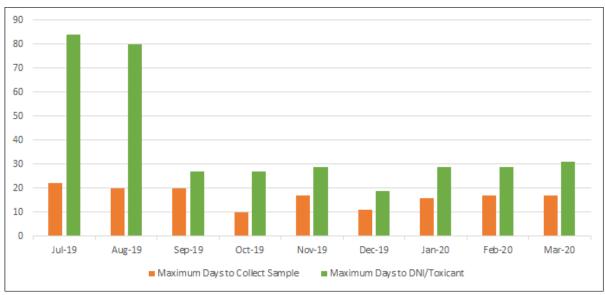


Figure 8: Maximum days to collect sample and to DNI/Toxicant: July 2019-March 2020

## **Genetic samples**

*Table 12* identifies the number of ant samples analysed and proportion of polygyne sites for each quarter.

Table 12: Ant samples analysed

Quarter	No. suspect ant samples analysed Proportion polygyn	
1	3268	1.11%
2	2966	0.47%
3	2151	0.22%

Polygyne nests are of particular interest to the Program due to their difficulty to eradicate and increased risk of human-assisted movement, but remain of low proportion in south east Queensland. While there has been continued decrease in proportion of polygynes in the last three quarters, this is influenced by surveillance activities and should be compared annually.

## **Self-management**

During the third quarter, the process to transition the self-management initiative from a project into the Program's business-as-usual activities commenced. This involved defining the business rules that will guide future self-management activities.

Training of pest management technicians (PMTs) and other relevant stakeholders on best practice fire ant eradication techniques has been temporarily suspended in response to the COVID-19 social distancing requirements. The Program is continuing to explore alternate avenues through which such training can be provided in the future, and has established online booking and training platforms. This will allow the delivery of this training to stakeholders despite social distancing restrictions.

The recruitment and appointment of a Principal Engagement Officer (Industry and Self-management) as project lead for self-management was initiated this quarter as an initial step and further recruitment will be undertaken in the next quarter to ensure full resourcing of the initiative.

#### Market research

A self-management research project was completed this quarter to determine community attitudes towards biosecurity, fire ants and self-management of fire ants, particularly in relation to residents purchasing and applying bait on their property themselves. This research will inform future engagement and communications strategies relating to self-management. Qualitative research was conducted to further explore attitudes and perceptions of residents in the three potential pilot suburbs of Oxley, Yarrabilba and Ripley. In addition, focus groups tested a number of creative concepts.

#### Industry and councils

Proactive engagement with these sectors was placed on hold while a review of training content and delivery methods was undertaken.

Four PMT and other contractor training sessions were conducted in this quarter, with 81 industry representatives trained in self-management of fire ants (see *Table 13*). This brings the total number of PMTs and other contractors trained to 430. Online bookings are now available for this training which, when combined with the online training platform, will ensure this training continues to be delivered as usual.

Reports to the Program of responsive fire ant treatment undertaken by PMTs continues to increase. There were 38 reports made in the second quarter and 73 reports in this quarter, representing a 52% increase. Each report may include treatment of multiple nests at the same property.

Table 13: Industry/council awareness training

	Number of people who attended training	Change from last Quarter
On site	64	63% decrease
Off site	148	45% decrease

Community events and training have been affected by COVID-19 and the restrictions placed on public gatherings.

## Community

A self-management research project was completed this quarter to determine community attitudes towards the fire ant Program overall, as well as self-management of fire ants on their property. This research will inform future engagement and communications strategies relating to self-management. Qualitative research incorporated testing of a number of creative concepts to ascertain which concept resonated with the participants and the reasoning behind this, providing an insight into what kind of communications will best reach target audiences.

## **Bait supply**

The issue of bait is a critical one if the Program is to successfully introduce self-management to the broader community and industry. The Program continues to work with chemical companies to strengthen the bait supply chain. Three chemical companies are trialling products in collaboration with the Program. One chemical company is liaising with the Australian Pesticides and Veterinary Medicines Authority (APVMA) to have different packaging approved to make their products more attractive for the domestic market.

## 5. Containment

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

There has been no sentinel surveillance this quarter as the focus is on eradication treatment during the warmer months. Sentinel surveillance will occur in the winter months when ants are more likely to be foraging. The Program has conducted responsive surveillance activities in accordance with Program protocols for all boundary detections and significant detections that were discovered this quarter.

## **Detections of importance**

The Program responded to 13 detections of importance (see *Table 14*). The significant detections, boundary detections and high risk detections are discussed in further detail below.

Table 14: Detections of importance for Quarter 3

Detections	Number
Significant Detections (detections outside the operational boundary)	2
Boundary Detections (detections within 5km inside the operational boundary)	
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)	2

## Significant detections

The Program recorded two significant detections during the quarter in the suburbs of Mount Nathan, located in the Gold Coast City Council area, and Witheren, located in the Scenic Rim Shire (see *Appendix 6: NRIFAEP Q3–Significant and Boundary Detections*). A brief overview of these significant detections has been provided below:

*Witheren:* The detection was made at a private residential property along the banks of the Coomera River on 31 March 2020. A landholder was unloading sugar cane mulch bales, purchased from a property in Norwell (located in the eastern part of the containment zone). Upon identifying suspect ants the landowner promptly returned the mulch to the supplier and sprayed the storage area with liquid insecticide. On further surveillance by the odour detection dogs a nest was observed in the process of being built. The nest was promptly destroyed by DNI, with insect growth regulator spread up to 100 metres from the nest. To confirm the absence of fire ants on the property and surrounds, the area has been included in the 2020 winter surveillance plan.

In response to the detection, an investigation of the Norwell producer was also undertaken to address the possible breach of movement controls. A Biosecurity Order was issued to cease movement of sugar cane mulch from the property to mitigate any further risk. Investigations will be on-going and will include genetic testing to assess the relatedness of the Witheren sample.

**Mount Nathan 2:** A detection was made on 14 February 2020 when a member of the public was stung. The Program conducted delineation surveillance out to 500 metres from the detection in which

a subsequent nest (Mount Nathan 2) was detected and treated on 18 February 2020. Surveillance activities continued throughout the Quarter, with compliance and genetic tracing activities also underway in response to the detection. This will help the Program to further establish the level of risk associated with the infestations.

## Total number of significant detections

This brings the total number of significant detections found in 2019-20 to three (see *Appendix 7: NRIFAEP Q3—Significant and Boundary Detections 2019-20*). By the third quarter of the 2018-19 season there had been eight significant detections and in the 2017-18 season three detections had been found at this point. A further six detections were made in the fourth quarter of the 2017-18 season.

There have been 20 significant detections identified since the commencement of the Program's Ten Year Eradication Plan, three so far in 2019-20, eight during 2018-19 (see *Appendix 8: Significant Detections 2018-19*) and nine during 2017-18 (see *Appendix 9: Significant Detections 2017-18*). Of these, 15 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.

Three of the remaining five detections, in the suburbs of Helensvale (2) and Bromelton are situated in areas that are currently undergoing suppression treatment. These infestations have received two rounds of broadcast baiting using an insect growth regulator. Now that the treatment activities are finalised, post-treatment validation surveillance will be undertaken at the original infestation site to ensure no fire ants remain.

The remaining two detections, in the suburbs of Mount Nathan and Witheren, were only recently detected. The Program is still conducting the necessary activities to provide confidence that the infestation has been contained. Once these activities are finalised, post-treatment validation surveillance will be undertaken at the original infestation site to ensure no fire ants remain.

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

## **Boundary detections**

The Program recorded ten boundary detections (see *Appendix 6*) across locations within the Gold Coast City Council area (3 detections); Scenic Rim Shire (6 detections); and Moorang (1 detection). A brief overview of boundary detections has been provided in *Table 15*. Upon identification of the boundary detections, all nests were promptly destroyed via direct nest injection. Whilst some surveillance activities have already been undertaken, additional surveillance will be undertaken during the surveillance season.

Table 15: Boundary detections Q3

Suburb	Actions
Boyland	Detected 25 March 2020 in the southern part of the current containment area close to previous boundary detections. Treatment activities have been scheduled for mid-April 2020. Previous detections were due to be surveyed as part of planned activities; thus additional surveillance for this detection has been included within the scope of the winter surveillance plan.
Clagiraba	Detected 19 March 2020 in the southern part of the current containment area as a result of the surveillance conducted in response to the detection in Mount Nathan 1 (significant detection). Nest subsequently destroyed 20 March 2020.
Tamborine Mountain 1	Detected 26 February 2020 in the southern part of the current containment area. Nest subsequently destroyed on 27 February 2020, with initial delineation surveillance conducted up to 500m from the nest that identified Tambourine Mountain 2 detection.
Tamborine Mountain 2	Detected 26 February 2020 in the southern part of the current eradication area as a result of the surveillance conducted in response to the detection in Tambourine Mountain 1. Nest subsequently destroyed on 27 February 2020.
Bromelton 1	Detected 25 February 2020 in the southern part of the current containment area close to previous boundary detections. Location was identified within a high density infestation suppression area (2019-20) and the nest subsequently destroyed 3 March 2020. Previous detections were due to be surveyed as part of planned activities; thus additional surveillance for this detection has been included within the scope of the winter surveillance plan

Bromelton 2	Detected 10 March 2020 in the southern part of the current containment area. Location was identified within a high density infestation suppression area (2019-20) and the nest subsequently destroyed 17 March 2020.
Moorang	Detected 19 February 2020 in the southern part of the current eradication area — western boundary area. Nest subsequently destroyed 21 February 2020 and additionally included as a high risk detection. The Program is planning to increase the number of treatments on the property. Areas that were inaccessible at the time of surveillance (not surveyed), but deemed suitable habitat for fire ants, will also be scheduled for additional treatment.
Tamborine Mountain 3	Detected 14 March 2020 in the southern part of the current containment area. Nest was subsequently destroyed 24 March 2020, with surveillance scheduled for April 2020.
Mount Nathan 1	Detected 14 February 2020 in the southern part of the current containment area. As a result of the surveillance conducted for Mount Nathan 1, the significant detection was made in Mount Nathan 2.
Maudsland	Detected 9 January 2020 in the southern part of the current containment area close to previous boundary detections. Location was identified within close proximity to a high density infestation suppression area (2019-20). Nest subsequently destroyed on 9 January 2020. Previous detections were due to be surveyed as part of planned activities; thus additional surveillance for this detection has been included within the scope of the winter surveillance plan.

## High risk detections

The Program recorded two high risk detections during the quarter in the suburbs of Summerholm and Moorang. A brief overview of both detections has been provided below.

**Summerholm – Eradication Area 1:** The detection was made on 30 March 2020 on a site previously infested during 2017. The property had received five full rounds of broadcast baiting with an insect growth regulator and was due to receive its sixth round of baiting when the ants were discovered.

In response to the detection, the Program promptly destroyed the infestation via direct nest injection and conducted delineation surveillance of up to 500m from the detection. It is anticipated that the property will receive a further two rounds of broadcast baiting during the next treatment season as part of the Area 1 Overlap treatment regime. Further analysis is being conducted to help the Program determine if the infestation was a remaining infestation or a reinfestation that occurred due to proximity of the nearby Western Suppression Boundary.

**Moorang – Eradication Area Western Boundary:** This detection was made by the Program on 19 February 2020 on a poultry farm during a follow-up aerial buffering (ground) treatment. The property had already received one full round of treatment via a combination of aerial and ground treatment. A second round of aerial baiting (40%) was also conducted prior to the detection.

Suitable habitat was surveyed onsite; however, some of the surveillance area was rendered inaccessible due to steep terrain and fallen tree debris. The property has received two further rounds of aerial baiting and is awaiting visits to complete the ground treatment which is challenging due to the inhospitable terrain.

## Mobilising stakeholders on detections of importance

The Program mailed a flyer to 4714 residents and businesses within Mount Nathan, Tamborine Mountain, Clagiraba, Guanaba, Boyland and Wonglepong, urging them to check their properties following recent detections in their area.

A social media campaign was also employed and targeted Mount Nathan, Tamborine Mountain and surrounding areas. The campaign reached almost 70 000 people.

## **Human assisted movement**

A crucial part of containing fire ant infestations and preventing reinfestation is reducing the risk of the human-assisted movement of fire ants through fire ant carriers like soil and mulch. There were 197 compliance checks carried out in the third quarter of which 12 were non-compliant (approximately six percent of the total number of checks). Twenty of these were checks of *biosecurity instrument permits*.

#### Non-compliance

Of the 12 instances of non-compliance found only two were of a more serious nature, resulting in infringement notices. The remaining ten were of a minor or administrative nature and in accordance National Red Imported Fire Ant Eradication Program Page 15

with the current dealing with non-compliance protocol, warranting responses such as revised permits, advice notices and biosecurity orders.

The two breaches that resulted in penalty infringement notices were as follows:

- A landscaping supply yard failed to comply with the conditions of their biosecurity instrument permit, they were issued with a biosecurity order. The infringement notice was subsequently issued when the business failed to comply with the conditions of the biosecurity order.
- A pool builder made an unlawful movement of a small amount of soil from fire ant biosecurity zone 2 to outside the zone.

## Industry focused compliance activities

The following industry focused compliance activities were undertaken during Quarter 3

#### Earthmovers and haulage

Targeted checks of earthmovers and haulage companies were a focus in the third quarter, in particular smaller operators that did not appear to have previous contact with the Program. Of 40 checks of the industry, only one minor non-compliance was found and was responded to with an advisory letter. More comprehensive checks and surveys of this industry are required to enable the industry's risk profile to be re-assessed.

#### Hay and mulch

Although not part of the planned compliance schedule, the movement of hay and mulch became an issue this quarter due to reports of unlawful movement and fire ant infestation in the area. The non-compliance predominantly involved incorrect storage conditions and was able to be resolved through biosecurity orders to ensure product was not moved and advice notices.

#### **Structural Landscapers**

Seventeen targeted checks of structural landscapers (i.e. people who carry out landscaping works) were undertaken with two of these found to have minor matters of non-compliance that were easily resolved. Given the small portion of the industry assessed, further checks will be needed to establish the industry's risk profile.

#### **Building Industry**

Forty-two targeted checks were carried out on the building industry. All builders were found to be compliant with fire ant movement controls. It appears that builders do not usually move fire ant carriers off site but rather move them directly to a waste management facility at the home owner's expense.

#### Local government and government entities

Local governments, government department and entities frequently undertake development works and deal with carriers. They also commission subcontractors to undertake these works on their behalf.

Compliance checks were undertaken at the Department of Transport and Main Roads and a number of Ipswich City Council sites all of which were found to be complying with the fire ant movement controls. Discussions were held with Scenic Rim Regional Council (SRRC) regarding risk mitigation and self-management of their waste facility at Bromelton. SRRC have agreed to implement the same risk mitigation as required within the fire ant biosecurity zones.

Ongoing engagement and communication are key factors in ensuring high levels of voluntary compliance and effective risk management within these organisations.

## Biosecurity zones realignment

During Quarter 3 criteria were developed to determine which suburbs would be incorporated into the next iteration of the fire ant biosecurity zones. The proposed changes to the fire ant biosecurity zones are intended to:

- better align with the Program's operational boundary
- provide greater protection to areas subjected to eradication activities undertaken by the Program.

The Program has continued to progress amendments to the Biosecurity Regulation 2016, to coincide with the impending changes to the fire ant biosecurity zones. The proposed amendments will:

- provide additional movement control options to individuals and businesses handling certain fire ant carriers
- prevent the movement of untreated fire ant carriers into areas that have been the subject of the Program's eradication activities
- provide greater clarity around the rules which apply to certain fire ant carriers.

The changes to the fire ant biosecurity zones and the associated regulatory amendments will take effect on 27 May 2020.

## Communications and engagement on biosecurity regulation and zone changes

To support the changes to the fire ant biosecurity zones and the associated regulatory amendments, a comprehensive communications and engagement plan was developed during this quarter. This plan focuses on informing stakeholders, particularly those in high risk industries, of the upcoming changes. The plan has three phases:

- Phase 1 Focus group research Movement of Soil complete
- Phase 2 Direct engagement with high risk industries commencing 27 April 2020
- Phase 3 Digital campaign to maximise reach to other high risk industries.

**Phase 1** of the plan is now complete. Market research company, Colmar Brunton conducted nine telephone interviews with key decision-makers within large companies and one online focus group with seven representatives of small operators (owner/operator) focussed on: the movement of soil; the amendments to the Biosecurity Regulation; and changes to the fire ant biosecurity zones. Colmar Brunton has presented the outcomes of this research to the Program.

**Phase 2** involves notifications being sent to key peak bodies, business associations and councils in early May 2020 to advise them that the proposed regulation and biosecurity zone changes will be implemented on 27 May 2020.

**Phase 3**, the digital campaign, is in the final stages of development and will launch on 27 May 2020. Phase 3 was originally a sizeable mass media campaign but was subsequently downsized to a smaller 'soft launch' campaign in recognition of: the negative impact of COVID-19 on businesses and their families; the State Government's campaign priorities; and the reduced business activity due to movement restrictions.

The communications and engagement plan will deliver upon the requirements under the *Biosecurity Act 2014* to notify stakeholders of the changes that will be made to the biosecurity zones on 27 May 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

## **News stories**

There were three media releases distributed to general and industry-specific media during Quarter 3 to support treatment activities, respond to negative media and promote Program objectives, including the soft introduction of self-management. Of the 21 mentions in traditional media (radio, print, online and television) achieved during Quarter 3, only one was negative.

This level of media coverage and audience reach was a decrease from that experienced in the previous quarter. This can be attributed to a combination of the Christmas/New Year holiday period, bushfires, extensive rain events in South East Queensland and the beginning of COVID-19. While audience reach and advertising spend equivalent figures were down, positive public sentiment was up 75 per cent on the previous quarter.

The single negative story aired during Quarter 3 was the result of a 9News story (17 seconds in length) about hundreds of fire ant nests being found at Yarrabilba State Secondary College in March 2020. The story was a copy of that written by the Albert and Logan News and 9News did not seek to verify the story with the Program prior to going to air. The secondary college had been previously infested in late February 2020, with three nests being reported and treated immediately. After March's wet weather more nests became visible and further treatment was conducted.

A total of seven media responses were prepared for local media seeking information and answers about treatment activities, treatment delays and the impact fire ants in public spaces. A further 13 media holding statements were prepared in the event the Program received a media request about everything from incidence of stings, fire ant detections and treatment activities.

The figure below shows graphically the achievements made for Quarter 3.

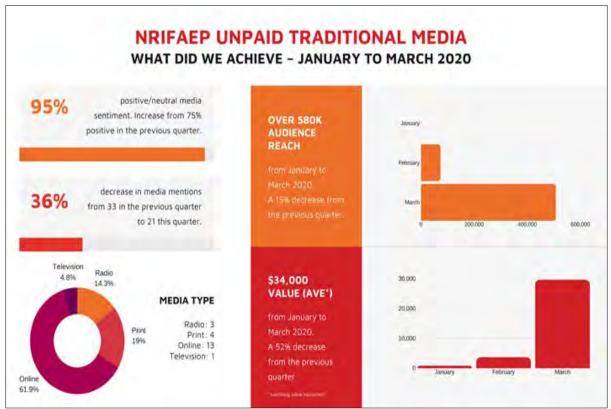


Figure 9: Traditional media achievements in Quarter 3

## Social media

Below is a graphical representation of the achievements in social media made by the Program in Quarter 3.

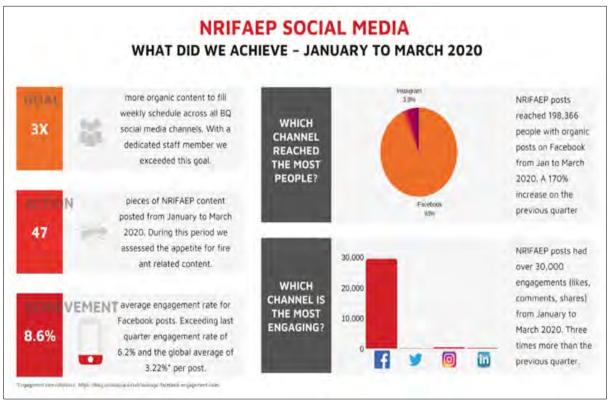


Figure 10: Social media achievements in Quarter 3

## Reputation and confidence

## Complaints management

A total of 105 complaints were made in Quarter 3 with the main areas of concern being lack of communication/response time, aerial treatment and bait toxicity concerns. The Program also received complaints related to COVID-19.

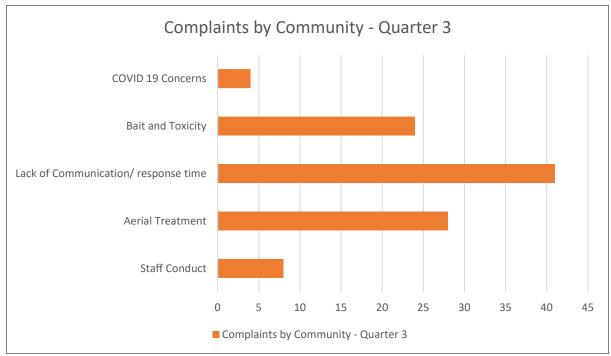


Figure 11: Complaints made by the community Q3 2020

The increase in complaints regarding times for responsive treatment was due to a backlog of up to 39 business days in this quarter, due to significant wet weather events. Typical complaints involved customers having to follow up several times after their initial report, as they had not been contacted by the Program or had their property treated. Many also reported that their fire ant situation worsened while waiting for treatment. In response to these specific complaints, operational changes were made to accelerate response times and call centre staff promoted other available treatment options to customers such as self-treatment or engaging a licenced pest manager.

Aerial treatment complaints continue to focus on the potential reaction of horses to the helicopter. There are also concerns about the bait and its potential effect on livestock or bait dropping onto roofs and entering water tanks. The aerial team responded to these complaints and sought appropriate resolutions.

Several complaints in March were related to COVID-19 with concerns around field officers entering properties. Several communication strategies have been implemented to assure the public of the Program's focus on the safety of the public and the staff as required under COVID-19 restrictions.

## Sharing new knowledge

## Conferences and presentations

An abstract has been submitted for the Australian Conservation Dog Network conference in August 2020. The talk is titled *Foundations for success: Developing a scientific foundation to support the success of detection dogs in the National Red Imported Fire Ant Eradication Program.* A poster abstract has also been submitted.

#### **Publications**

Nil publications to report for Quarter 3.

## 7. Research and innovation

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

## New treatments and methods

## Winter broad-scale IGR bait treatment

Results have been collated regarding field trials examining the efficacy of broad-scale IGR bait treatment in the cooler month of June. Historically, the treatment season for fire ants in SEQ runs between September to May, with specific commencement and cessation timing based on ground temperatures being at the optimal foraging time as per overseas research. However, the Program is trailing a longer treatment season as anecdotally, fire ants have been observed foraging even when ground temperatures are sub-optimal. This was raised at the October 2019 workshop of the National Exotic Invasive Ant Scientific Advisory Group, where it was suggested that this 'seasonal approach' may not be as relevant in the warmer climate of SEQ, and that as long as fire ants are observed foraging, bait treatment may still be effective.

To test this, a sample of fire ant nests on seven rural sites that received aerial treatment in mid-late June 2019 were monitored for eight months after treatment (see *Figure 11*). Observations at the time of baiting in June 2019 confirmed that ants were still actively collecting and ingesting bait.

The fire ant nests declined over time, with the average mortality over all sites at 93%. Of note, the two sites with under 90 percent mortality were either polygyne or high density monogyne infestations. This indicates that the baiting in the cooler month of June was still highly effective at killing fire ant nests at the study sites. However, as no control sites were monitored in this trial, no data is available to separate the effects of the bait treatment from natural nest mortality (due to weather, lack of food, inter-nest competition, etc.). As such, the mortality and survival rates reported in this study need to be understood as a combination of both environmental and treatment effects.

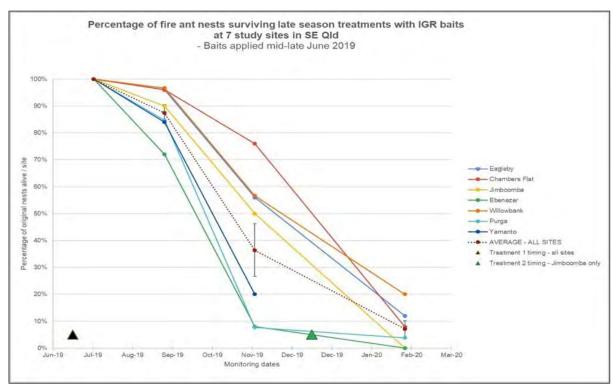


Figure 12: Increase in mortality of monitoring nests

(n=20-30 fire ant nests monitored per site) following late-season IGR treatments at seven sites of the observation period July 2019 - February 2020

#### Self-treatment bait stations

New research to test the use of bait stations for residential self-management of fire ants is in the planning phase. As per the Ten Year Plan, with an increased need for residents and land-managers to be involved in the treatment of fire ants, particularly in areas that are not under eradication treatment yet, providing an effective and user-friendly alternative to spreading bait by hand is desirable. Several refillable bait stations have been evaluated, with one deemed most suitable due to its robustness and protection from sun destabilisation. Options for research design are now being considered, to both assess the efficacy of these bait stations, but also to determine the density required in a standard backyard.



## Remote sensing surveillance research

The current artificial intelligence algorithm prototype development phase of the remote sensing project is now being finalised, with results from the prototype presented in a report and at the Remote Sensing Surveillance Project Board meeting on 13 March 2020 by the vendor (Outline Global). The project is using a novel application of a deep learning object detection algorithm, typically used for applications such as self-driving vehicles.

The base imagery is very high-resolution custom aerial imagery with a long-wave infrared (thermal LWIR) band. The algorithm detects the object primarily using the heat differential between the fire ant nest and the surrounding region within this imagery. Data from 800 hectares of aerial imagery collected over four sites was used to train the prototype model. The results were encouraging with the consistent detection of well-defined and visible nests demonstrated. In contrast, nests that were partially obstructed or degraded, and hence had a less well-defined thermal signature, were often missed. However, the field trials were undertaken in the sub-optimal month of September due to uncontrollable delays with acquiring the camera system. This may have influenced the ability of the image prototype and algorithm to detect these nests, which during the optimal winter months are likely to have more volume above ground. The final optimised model results were 78 percent precision and 61 percent recall. The next stage of the project is to improve the model performance by undertaking further training of the algorithm over 20 000 hectares in winter 2020. A contract extension to undertake this work is currently in development.

## 8. Scientific protocols and plans

## Clearance and freedom

A first version of the clearance 'risk map' was completed in February 2020 (see *Figure 13*), which will be used to prioritise surveillance efforts and clearance activities in the next year. The development of a clearance risk map was recommended by the Scientific Advisory Group during the October 2019 meeting.

The risk map combines two spatial and mathematical models to determine which areas within the Area 1 and Western Boundary eradication areas have the highest probability of infestation, if infestation remains. The first model calculates the risk of infestation in any/all particular locations, by combining data from known infestation, distance to known infestation, and negative public samples data. The second model calculates the 'effectiveness' of treatment at any particular location, using treatment history data including number of rounds of treatment, intervals between treatment and season of treatment (in relation to fire ant biology). The risk map will be finalised following completion of eradication treatment; however, the current version can be used to begin initial planning of winter surveillance activities.

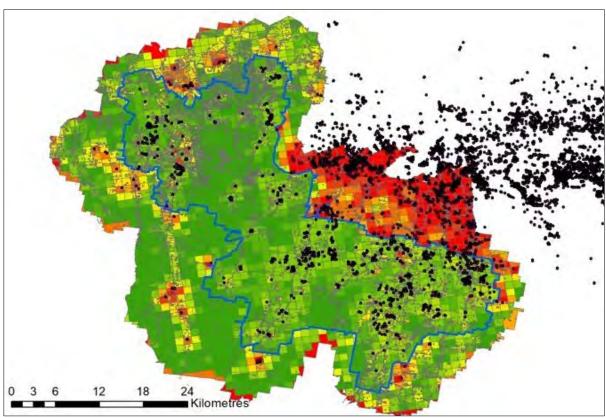


Figure 13: First draft of the treatment area 'risk map'

\*Showing areas of low risk (green) to high risk (red), as well as previous fire ant infestation (black circles). Note, the Western Suppression area to the north-east of Area 1 (blue line) is not under eradication treatment; thus the amount of red in this area is expected

Several areas that require surveillance within Area 1 and Western Boundary have been identified, based on treatment history and proximity to known previous infestation (see *Figure 14*). Since habitat is not a primary mitigating factor in risk of RIFA infestation throughout Area 1 and Western Boundary, any risk assessment based on treatment history needs to be performed as soon as possible, as existing undetected fire ant infestations cannot be expected to remain small. Therefore, about 14 000 hectares have been identified for immediate surveillance and those areas have been prioritized on a scale of 1-10 based on the intelligence value of searching a given area.

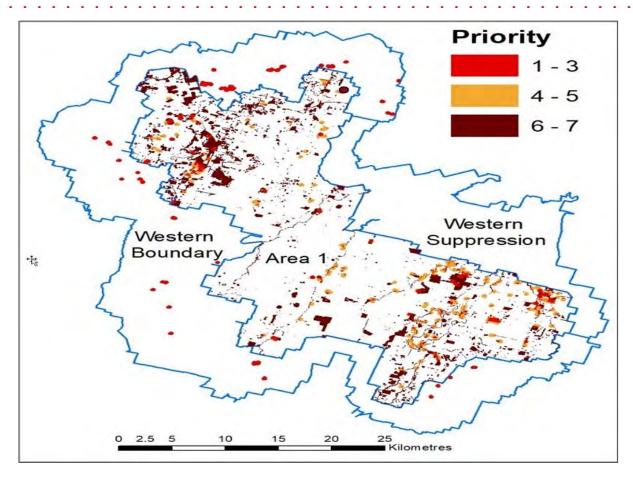


Figure 14: Areas for surveillance within eradication Area 1/Western Boundary that require surveillance

## Governance and accountability

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

## **Business improvement**

Key business improvement activities during Q3 included:

- **Governance** development and implementation of a Training Register, Contract Register and Conflict of Interest Register for reporting and mandatory disclosure processes.
- **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** recruitment training, training regarding expected staff behaviours and code of conduct training to assist with staff management

The business improvement register will be reviewed in 2020 to aid future reporting.

## Efficiency and effectiveness audit

The Program has acknowledged Mr Bernard Wonder's recommendations outlined within the Efficiency and Effectiveness Review Report which was discussed in detail at the Steering Committee meeting in February 2020. As a result, the Steering Committee convened the Efficiency and Effectiveness Implementation Sub-Committee to ensure recommendations are actioned and implemented with consideration to the likely impact, practicality and costs of implementation. The subcommittee is due to hold its first meeting by teleconference on 9 April 2020, the first of quarterly meetings. The Program intends to highlight the key outcomes of the first Efficiency and Effectiveness Sub-Committee meeting in the upcoming April 2020 Monthly Report.

## Risk management

The Program has seven 'high' risks identified – shown in *Table 16*.

Table 16: High risks to the Program

Risk Type	Risk Description/Risk Controls/Treatment
Strategic	<b>Risk Description:</b> Risk to eradication: The timing of national cost sharing funding does not align to the treatment strategy. <sup>2</sup>
	<b>Risk Controls:</b> Establishment of collaborative funding agreements with states and territories and National Partnership Agreement with Commonwealth. Forward budget to be developed for Program activities out to eight years.
	<b>Treatment:</b> 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.
Strategic	Risk Description: Risk to eradication: Program credibility questioned and leadership faces criticism leading to funding withdrawal and/or non-participation by community
	Risk Controls: An approved Commonwealth Partnership Agreement will mitigate this risk. The National Program will provide full and complete information to funding partners to ensure full understanding of the activities, progress and any issues impeding the success of the National Program. Enhanced governance arrangements which include monthly reporting through the Steering Committee. Comprehensive community and stakeholder engagement program to ensure public and business are informed of fire ants and their impacts. Transparent public reporting of performance to build trust.
	<b>Treatment:</b> Collaborative Financial Agreement developed and executed. Ensure major agencies, industry organisations and businesses are identified and engaged. Regular communication with key stakeholders.
Operational	<b>Risk Description:</b> 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.
	<b>Risk Controls:</b> 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.
	Treatment: Annual review of major contracts to be implemented to ensure continuity of supply
Operational	Risk Description: Risk to capability: Information systems are ineffective at supporting increased scope of National Program and demand for timely and accurate performance data, which can arise from poor functionality or data integrity due to data entry, programming, configuration errors, viruses or incorrect business logic.
	<b>Risk Controls:</b> Resources dedicated to developing the Program's existing information systems to improve efficiency and accuracy of data entry and reporting. 1. Server performance monitoring. 2. Ability to upgrade if required.
	<b>Treatment:</b> 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.

<sup>&</sup>lt;sup>2</sup> Upgraded from 'medium' to 'high' risk. National Red Imported Fire Ant Eradication Program

Operational	Risk Description: Risk to Eradication: Inability to provide timely work to field teams.					
	Risk Controls: Sufficient resourcing, communications between operations and planning.					
	Treatment:      Possible digital field solution     Re-engineer or improve job allocation processes.     Monitoring progress against schedule					
Operational	Risk Description: Risk to eradication: Poor data quality in field captured information.					
	Risk Controls: Communication across teams need to take place, and update of procedures/protocols incorporating changes in practices and business rules need to be reviewed regularly.					
	<b>Treatment:</b> Periodic training should be implemented to ensure staff/teams that repeatedly submit incorrect data are re-trained about data capture and entry. Digital field data capture solutions.					
Operational	Risk Description: Risk to capability: The program failing to achieve needed cost savings due a lack of the desired take-up by industry and the community of the various self-management initiatives.					
	Risk Controls: The Self-Management program is divided into a number of sub-programs to better meet the needs of each target group					
	<b>Treatment:</b> 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					

#### 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
- home garaging for vehicles, where appropriate, to avoid unnecessary visits to depots or buildings
- hiring an additional 22 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.

## Committee meetings

## Steering committee

The NRIFAEP Steering Committee met on 19-29 February 2020. In response to COVID-19 the Steering Committee and Risk Management Sub-Committee (RMSC) also met via teleconference on 26 March 2020 to discuss COVID-19, the impacts on the Program and measures put in place to protect residents and field staff.

## **Sub-committees**

The Risk Management Sub-Committee met on 18 February 2020.

## Business systems and intelligence

## **Digital Field Capability Implementation Project**

The Digital Field Capability Implementation Project business case was endorsed by the Department of Agriculture and Fisheries' Information and Communications Technology (ICT) committee allowing the progression of the project. The business case allowed the:

- engagement of an ICT Project manager
- · establishment of a project board.

The project aims to deliver a robust, consistent and effective technology solution that meets the Program's current and emerging mobile data capture requirements. This will enable improved information quality and timeliness in support of the increased scale of treatment and surveillance activities under the Ten Year Plan. The desired long-term future state is to develop a digital tool for field and office staff that enables operational flexibility and agility. To achieve this, the Program needs to evolve the existing manual and 'offline', static systems to dynamic systems that enable real-time reporting and decision-making.

#### **Summary of Achievements to date:**

- Finalising business requirements for stage 1 for the project minimal viable product for stage 1 given the constraints
- Stage 1 draft screen designs and screen flows provided to operations staff for comment
- Benefits realisation document drafted for board review
- Technical development of core system progressed, with mapping screens and tools developed
- Received first delivery of tablets (33 tablets) and progressing the initial set up for these devices.

The next major milestone is the completion of the underlying infrastructure and set up to begin system testing of Stage 1 functionality.

#### Client and stakeholder engagement solution (CaSES)

The CaSES CRM system realised improved functionality through enhancements to support Pest Management Technician training and reporting. Additional enhancements were made to the external facing portal improving the public experience when accessing the portal and submitting reports.

# 10. People and culture

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

## Significant staff changes

Table 17: Identifies staff changes during Quarter 3

Commenced	Departed
Director (Operations)	Customer Service Agent
Manager Business Support (Acting)	Senior Information Systems Officer
Principal Business Services Officer x 2	
Principal Project Officer	
Business Services Officer (WH&S)	
Policy Officer	
Engagement Officer x 2	
Biosecurity Field Team Supervisor x 6	
Field Officer x 3	
Planning Officer	

## Staff nos. 2019-20

Table 18: Staff numbers 2019-2020

Position	Q1	Q2	Q3
Permanent	97	77	76
Temporary	30	31	50
Contractor—office*	34	29	22
Contractor—field*	129	167	190
Total	290	304	338

# Workplace health and safety

The Program received approximately 57 reports related to workplace health and safety during Quarter 3. *Figure 15* compares Q3 to previous quarters.

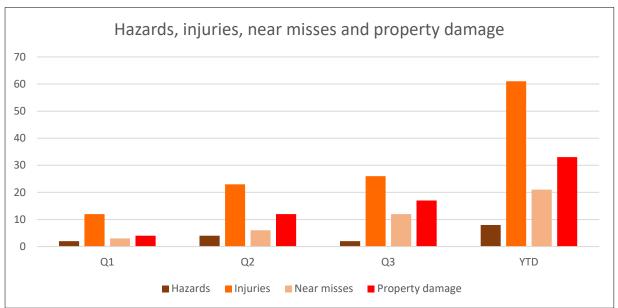


Figure 15: Hazards, injuries, near misses and property damage – Q1, Q2, Q3 (2019-20)

## Learning and development

Staff undertook training and development activities detailed in Table 19 during Quarter 3.

Table19: Staff training and development - Quarter 3

Subject	Purpose			
Public entities and the Queensland Human Rights Act 2019	An overview of the <i>Human Rights Act 2019</i> with particular focus on the responsibilities of and requirements of employee of public entities in relation to human rights.			
Public Service Commission's framework Conduct and Performance Excellence (CaPE)	Meet the reporting obligations under the <i>Public Service Act 2008</i> and build the capability of managers regard their responsibilities under the Act.			
Writing for Policy Results	Improve the ability of Policy Officers to influence policy decision-making and produce clear, well-formed policy documents.			

## **Volunteers**

Volunteers are a valuable resource for the Program, undertaking administration activities such as producing sample kits, preparing resources for training, entering feedback from training, and updating field officers' folders. Currently there are 21 active volunteers who have assisted the Program between one and 18 years. These volunteers contribute an estimated 575 unpaid hours annually, saving the Program over \$25 000 a year.

Events season is typically between March and September, however, March 2020 marked the beginning of restrictions due to COVID-19. As a result of this, all events were cancelled from mid-March until further notice, including the Brisbane Ekka and volunteers have not been required for events. During Q3, two regular volunteers contributed 22 hours of unpaid work to the Program.

## 11. Finance

## **Expenditure to budget**

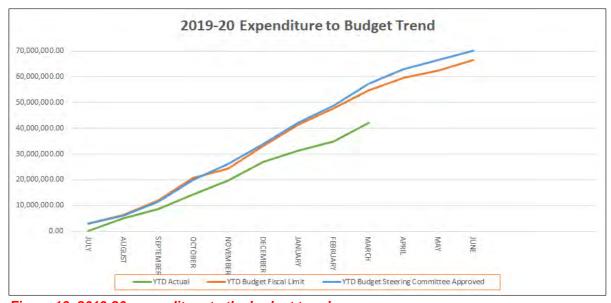


Figure 16: 2019-20 expenditure to the budget trend

\*2019-20 Budget was approved by the Program's National Steering Committee in November subject to successful funding resolution between Queensland and the Commonwealth. At 31 March 2020 funding approvals through Treasury are not finalised.

At 31 March 2020 the Program was underspent by \$12.6 million (see *Table 20*). Material variances included an \$11.6 million underspend across operational activities. This includes \$3.8 million in labour hire, \$5.5 million in bait and \$1.9 million in aircraft. Additional variances occurred across the Program, as follows:

- Reduced treatment compared to the target as at 31 March 2020
- Timing of expenditure relating to site requirements for Wacol
- Rent and works requirements not yet incurred as negotiation of the lease is underway (Laidley)
   National Red Imported Fire Ant Eradication Program

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- Re-evaluation of campaign expenses in response to COVID-19 arrangements
- Decreased levels of contractor resourcing, year to date
- Timing of purchase of toxicant bait which has not been incurred.

Figure 16 highlight's the Program's 2019-20 expenditure to budget trend; in which the 2019-20 budget was approved by the Program's National Steering Committee subject to successful funding resolution between Queensland and the Commonwealth. As at 31 March 2020, funding approvals through Queensland Treasury are not finalised.

Budget Q3: 2019-2020

Table 20: 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	2 939 982	2 500 575	439 407
Remote sensing surveillance (R&D)	1 217 189	1 217 189	1 216 183	1 173 733	42 450
Systems and technology innovation	3 404 353	2 254 352	1 553 920	1 535 715	18 205
Community & stakeholder engagement	1 932 503	1 972 502	1 381 564	1 174 705	206 859
Science services & eradication assessment	2 137 997	2 097 997	1 492 489	1 365 777	126 712
Operations	52 548 009	51 242 214	43 539 402	31 743 985	11 795 417
Directorate	879 943	879 943	658 338	585 735	72 603
Self-management	1 459 961	150 965	147 461	402 880	-255 419
Strategic policy performance & compliance	2 381 140	2 381 140	1 750 940	1 611 408	139 532
Total	70 203 982	66 506 000	54 680 279	42 094 512	12 585 766

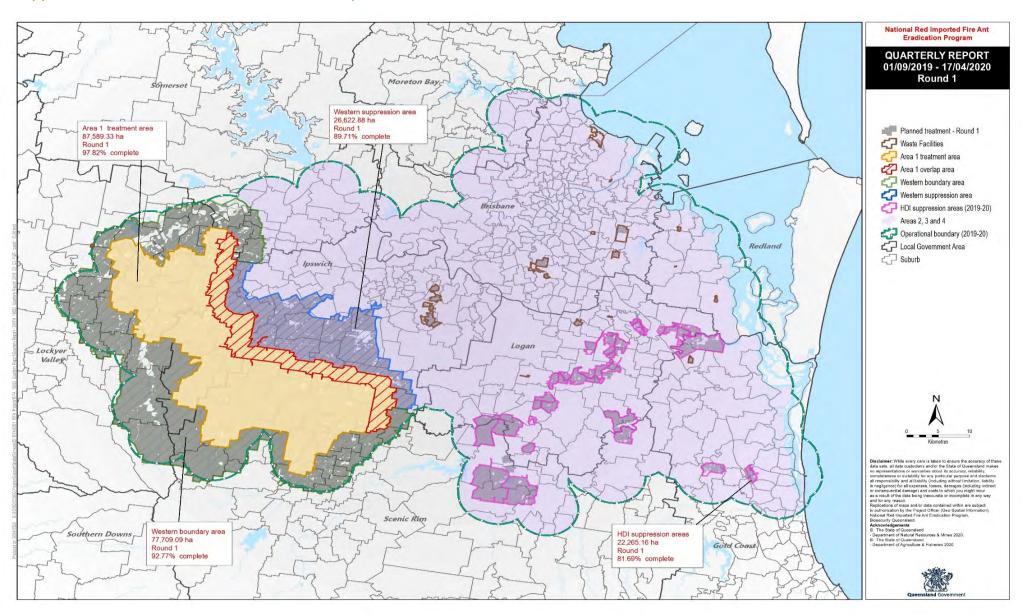
#### **Procurement**

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

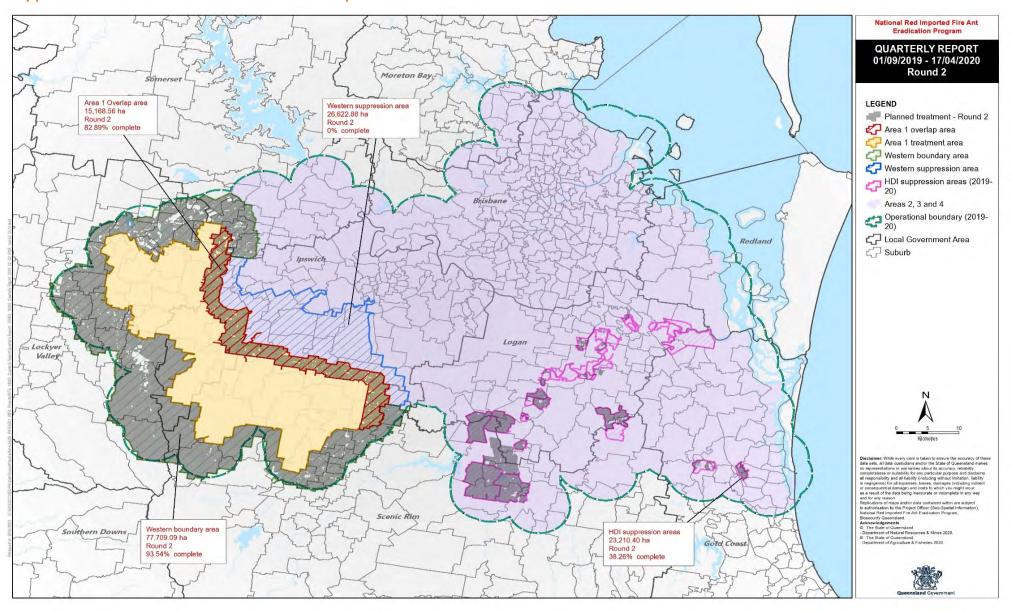
- Established a 24 month Standing Offer Arrangement (SOA) with 2 x 12 month extension options for the provision of odour detection dogs in order to meet business requirements
- Engaged a consultant to conduct an independent review of the movement controls for fire ant carriers. It is anticipated that the 3-month review will commence mid-to-late April 2020.

# **Appendices**

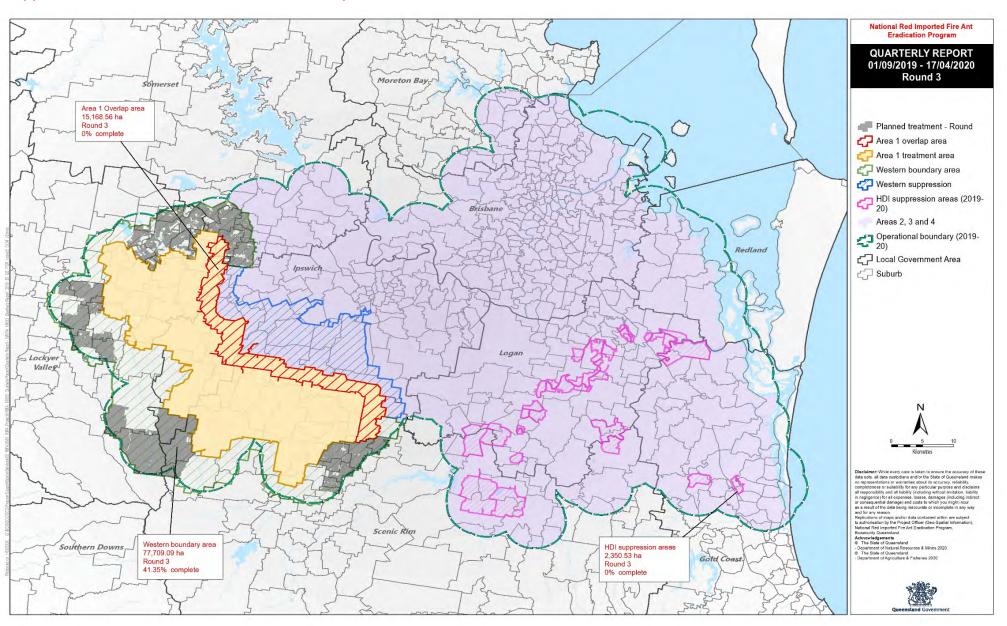
# Appendix 1: NRIFAEP Q3 – Planned and Completed Treatment Round 1



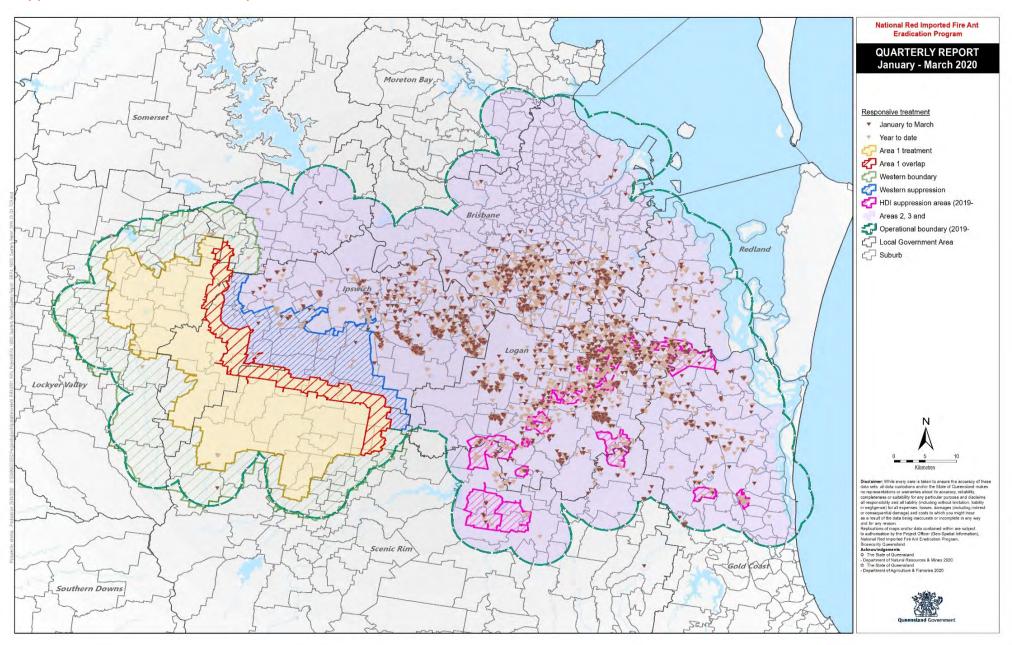
# Appendix 2: NRIFAEP Q3 – Planned and Completed Treatment Round 2



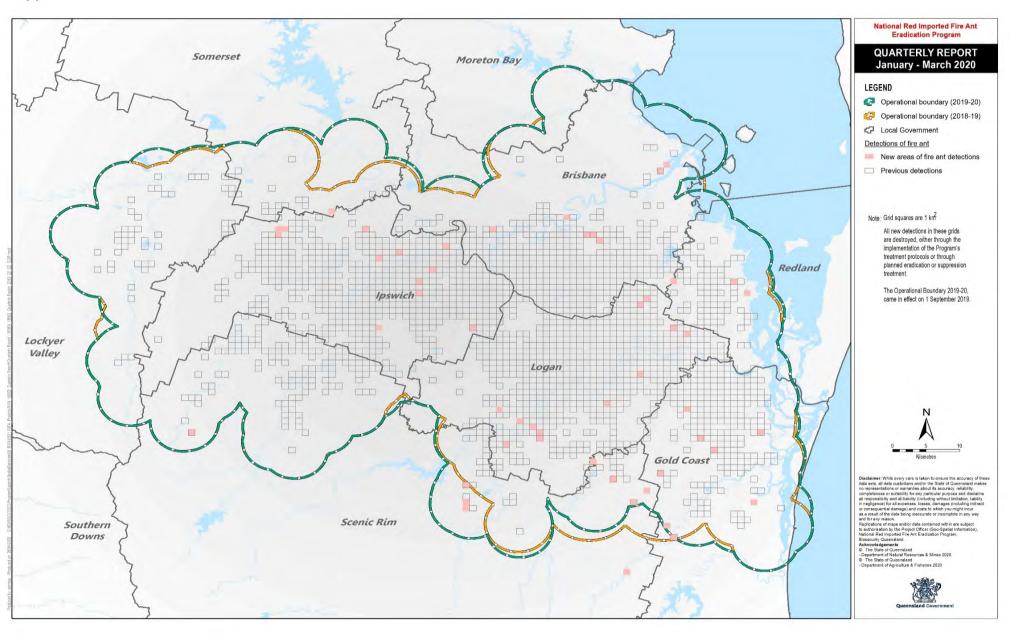
Appendix 3: NRIFAEP Q3 – Planned and Completed Treatment Round 3



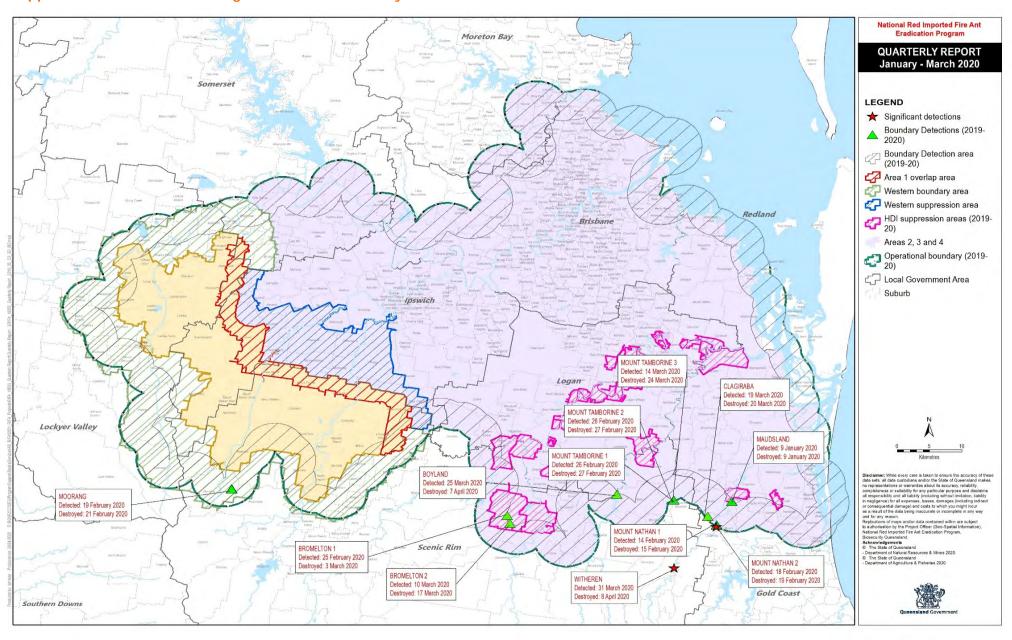
Appendix 4: NRIFAEP Q3 – Responsive Treatment



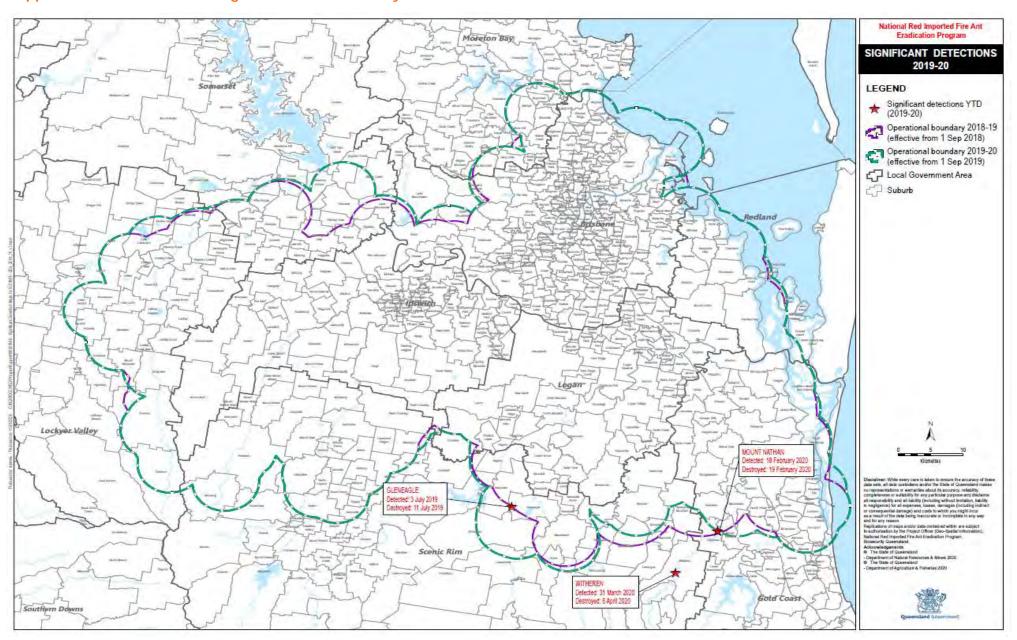
# Appendix 5: NRIFAEP Q3 – New Detections



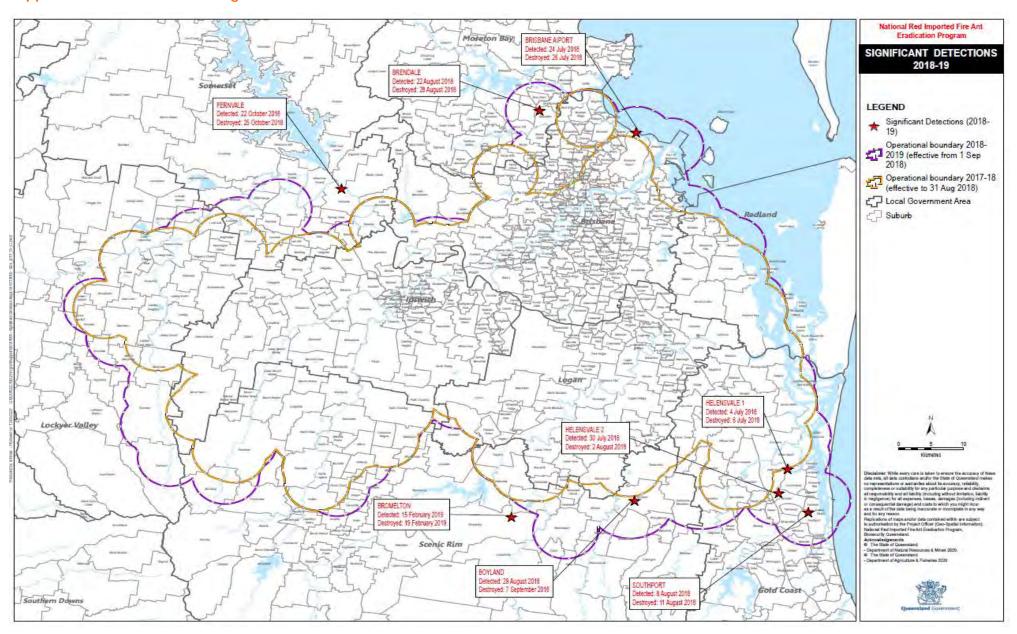
# Appendix 6: NRIFAEP Q3 – Significant and Boundary Detections



Appendix 7: NRIFAEP Q3 – Significant and Boundary Detections 2019-20



Appendix 8: NRIFAEP Q3 – Significant Detections 2018-19



Appendix 9: NRIFAEP Q3 – Significant Detections 2017-18



# Appendix 10: NRIFAEP Q3 – Compliance

