

Quarterly Report 2

2019–20

National Red Imported Fire Ant Eradication Program

South East Queensland

Report to: National Steering Committee
Period: 1 October to 31 December 2019



Contents

1. Key insights	1
Planned treatment	1
Responsive treatment	2
Self-management	2
Containment	2
Clearance and freedom	2
Mobilisation (Stakeholder engagement and communication)	2
Risks and current ratings	3
Workplace health and safety	3
Business improvement	3
2. Eradication	4
Planned treatment	4
Effectiveness of treatment	6
3. Suppression	7
Planned treatment	7
Responsive treatment: community reports	7
Diagnostics and monitoring	10
Self-management	11
4. Containment	12
Monitoring and surveillance	12
Significant detections	12
Human assisted movement	12
Biosecurity zones realignment	14
5. Mobilisation (Stakeholder engagement and communication)	14
Treatment communication	14
Reputation and confidence	18
Sharing new knowledge	20
6. Research and innovation	20
New treatments and methods	20
Surveillance project	21
7. Scientific protocols and plans	21
Clearance and freedom	21
8. Governance and accountability	21
Business improvement	21
Efficiency and effectiveness audit	21
Risk management	22
Committee meetings	23
9. People and culture	23

Significant staff changes.....	23
Staff nos. 2019–20.....	24
Workplace health and safety.....	24
Learning and development.....	25
Volunteers.....	25
10. Finance.....	25
Expenditure to budget.....	25
Procurement.....	26
Budget Q2: 2019–20.....	27
11. Goals and deliverables overview.....	27
Goals and deliverables traffic light report.....	27

Table list

Table 1: Planned eradication treatment progress – Sept-Dec 2019.....	5
Table 2: Planned suppression treatment – September-December 2019.....	7
Table 3: Ant samples analysed.....	10
Table 4: Number of significant and boundary detections.....	12
Table 5: Paid advertising.....	15
Table 6: Community engagement.....	17
Table 7: Community newsletter.....	17
Table 8: Industry/council awareness training.....	18
Table 9: Industry newsletters response.....	18
Table 10: Risks and current ratings.....	22
Table 11: New risks identified in Q2 – 2019–20.....	22
Table 12: Staff training and development – Q2 – 2019-20.....	25
Table 13: Volunteer activities – Q2 – 2019-20.....	25

Figure list

Figure 1: Operational area and activity map	4
Figure 2: Treatment verification – Area 1	6
Figure 3: Treatment verification – Areas 2-4.....	6
Figure 4: Where were suspect ants found in Q2?	8
Figure 5: What made people report suspect ants in Q2?	8
Figure 6: How did people hear about the program in Q2? *	9
Figure 7: Community (public) reports by month Jul-Dec 2019*	9
Figure 8: Response to community (public) reports timelines Jul-Dec 2019.....	10
Figure 9: Non-compliance actions taken in Q2 – 2019-20	13
Figure 10: NRIFAEP unpaid traditional media	16
Figure 11: Complaints made by community – Q2 – 2019-20	19
Figure 12: Hazards, near misses and property damage – Q1 and Q2 – 2019-20	24
Figure 13: Injury mechanism – Q1 and Q2 – 2019-20	24
Figure 14: Expenditure to budget trend – 2019-20.....	26

Appendix list

Appendix 1: NRIFAEP Q2–Planned and completed treatment Round 1	29
Appendix 2: NRIFAEP Q2–Planned and completed treatment Round 2	30
Appendix 3: NRIFAEP Q2 – Responsive treatment.....	31
Appendix 4 – NRIFAEP Q2 - New detections	32
Appendix 5: NRIFAEP Q2 - Compliance	33

1. Key insights

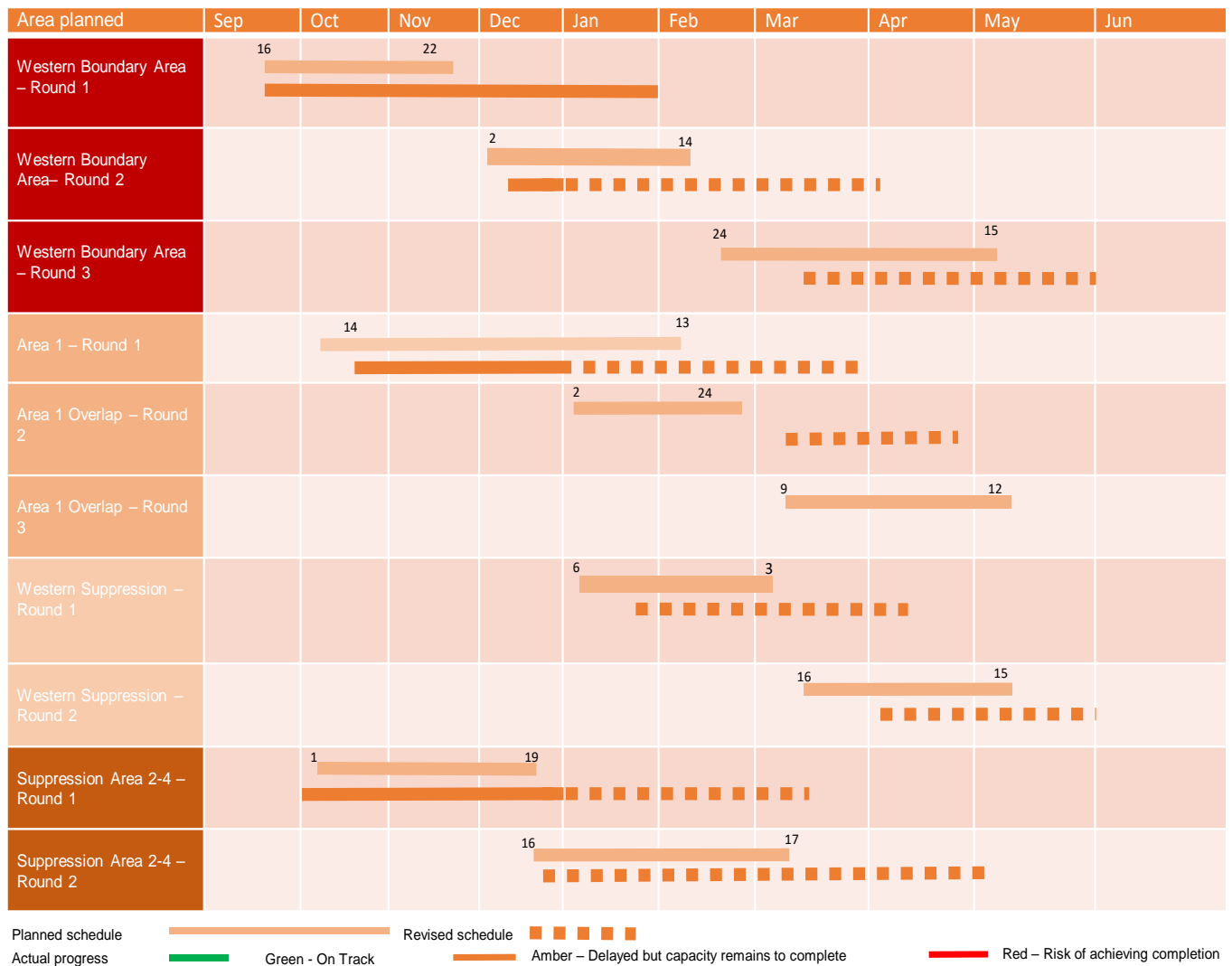
Snapshot of key program outcomes for the quarter.

Planned treatment

Eradication and suppression treatment is behind schedule, however, capacity still remains to complete planned treatment this season (see the treatment schedule below). The delay was largely due to environmental factors impacting the ability to use aerial baiting, a critical part of the treatment strategy.

Eradication treatment	Hectares treated	% YTD of annual target
	164 657	68
Suppression treatment	Hectares treated	% YTD of annual target
	13 614	32

Planned Treatment Program Schedule 2019-20 as at 31 December 2019



Responsive treatment

Community reports	No. suspect ant reports	% positive for fire ants
	1 409	39

Self-management

- Further development of the self-management initiative focused on increasing the number of trained pest managers to assist homeowners and businesses to engage pest managers to treat fire ants at their home or business.
- The Self-Management Project Board (first convened on 10 September 2019) identified the highly infested suburbs of Yarrabilba, Ripley and Oxley as potential sites for a ‘proof-of-concept’ project to test how communities would respond to self-management (see more p10).
- A market research project is being undertaken to better understand the target audience, their current levels of awareness, gauge responses to bait treatment products, and to identify the level of interest of residents to treat their own properties. This research, which concludes next quarter will help guide future communication and engagement activities around self-management.

Containment

Significant detections	0
Boundary detections	2
Compliance checks	107
Non-compliance instances	11

Clearance and freedom

A basic *Proof of Freedom* framework was presented at the Scientific Advisory Group (SAG) meeting in late October. SAG agreed that a bio-economic approach should be used to transition between eradication stages, which considers both the economic cost and estimated risk.

Mobilisation (Stakeholder engagement and communication)

The draft *Strategic Communications and Engagement Plan 2019-21* was delivered to the national Steering Committee for review and feedback in November 2019. A complementary Stakeholder Engagement Plan is also under development to complement this strategy, and will articulate the detailed engagement planned with stakeholders. In addition to industry and community training in Q2, engagement and communication this quarter to support treatment included:

Paid advertising

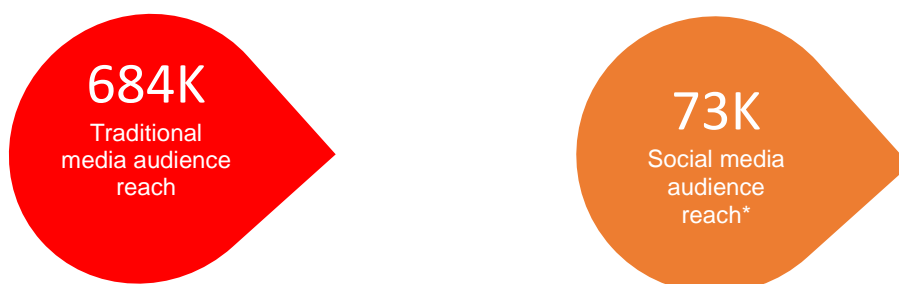
Eradication treatment support	Suppression treatment support	Self-management
Advertorials and display adverts: 3 Reach: 36 000*	Advertorials and display adverts: 5 Reach: 164 000	Third party advertising (Housing Industry Association (HIA)): 1 x theme— self-management
Radio adverts: 30 second advert played on two radio stations for three weeks, five times per day	Mailed 7 696 residents due to receive suppression treatment this treatment season	
Social media campaign (targeted at eradication area during treatment periods): Reach: 22 992* Impressions: 134 624*	Social media campaign (targeted at suppression areas during treatment periods): Reach: 8 222 Impressions: 20 177	

*Reach = potential unique audience; Impressions = content is delivered to social media feed but may not engage

Unpaid publicity

Five media releases were distributed to general and industry-specific media during Q2 to support treatment activities, respond to negative media and promote program objectives. This included profiling companies issued with newly introduced penalty infringement notices. Of the 33 mentions in traditional media (radio, print, online) during Q2, 22 were positive and eight were negative.

A dedicated social media staff member was appointed in December 2019 to maximise the use of the Biosecurity accounts with Facebook, Twitter, Instagram and LinkedIn to further amplify the program's key messages in the digital space.



**some reach was achieved through paid activities*

Events and displays:

No. engaged	Change from last quarter	Purpose of engagement
526	-19.5%	Community engagements events and local gathering places to provide general fire ant awareness to residents
710	-34%	Aka the Fire Ant Tracker P – 6 School education program
133 200	+38%*	Public static displays

** Estimated numbers only. The change from the last quarter comparison does not include the numbers that attended of the Royal Queensland Show in August as it was a non-typical event.*

Risks and current ratings

Risk type	Low	Medium	High	Extreme	TOTAL
Strategic	1	11	3	0	15
Operational	16	30	6	0	52

Five new risks were identified in Q2 related to reputation, capability, and clearance and proof of freedom.

Workplace health and safety

Hazards	21
Injuries	26

Most injuries reported related to hitting or being hit by an object/s e.g. animal bite, contact with stakes in long grass, contact with barbed wire and other incidences typical to working in a rural location etc. The injury review completion rate for Q1 and Q2 at the end of Q2 was 75 per cent.

Business improvement

Key business improvement activities during Q2 included:

- **Eradication** – purchase of fencing and helicopter landing pads to avoid further treatment delays and plan for future treatment landing sites
- **Responsive treatment** – introduction 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

- **Surveillance project** – final report for the remote sensing surveillance field trials was delivered showing the project was ready to go to the next stage i.e. the development of the machine learning algorithm.

2. Eradication

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



Figure 1: 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. 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 the fourth quarter (Q4).

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, 90 per cent of Round 1 planned eradication treatment has been achieved and 21 per cent of Round 2.

The program’s treatment planning was conservatively based on the achievement of aerial treatment of 2 500 hectares per day. The actual average aerial treatment achieved daily since the commencement of the treatment season is 1 920 hectares per day, resulting in the planned program of treatment running behind schedule. The delay was largely due to environmental factors impacting the ability to use aerial baiting, a critical part of the strategy (see Challenges below). Despite this, the average rate of effort for Foot/ATV treatment achieved was 40 per cent higher than the planned rate of 25 ha per/team daily (FAMS data).

The *Planned Treatment Program Schedule 2019-20* on p3 outlines the planned treatment schedule vs actual for the season to date. There currently remains five weeks contingency in the treatment window indicating there is still capacity to deliver the planned treatment by June 2020.

Despite this, the average rate of effort for Foot/ATV treatment achieved exceeded the planned rate, of 25 ha per/team daily across all areas, by 40 per cent (FAMS data).

Table 1: Planned eradication treatment progress – Sept-Dec 2019

Round 1	Hectares			Round 2	Hectares		
Area	Planned	Actual	%	Area	Planned	Actual	%
Area 1	87 589	76,467	87	Area 1	N/A	N/A	
Western Boundary	77 709	71 823	92	Western Boundary	77 709	16 367	21
TOTAL	165 298	148 290	90	TOTAL	77 709	16 367	21

Appendix 1 provides a visual representation of eradication treatment.

Challenges

Planned aerial treatment

- Lost time has been a significant contributor to not achieving the daily average hectares for treatment, with a total of 56 days lost since the commencement of the current treatment season. This was due to:
 - Unsuitable weather conditions e.g. wet weather and excessive wind speed.
Mechanical breakdowns due to dust at helicopter landing sites has caused aircraft
 - Reduction in aircraft availability due to the need to respond to bushfires.
 - Reduction in aircraft availability due to council requirements for spraying of mosquitos.
 - Reduced efficiency because of the aircraft having to divert from Wacol to Archerfield airbase due to a workplace safety issue of kangaroos encroaching on the landing area. This has caused increased ferrying time (estimated to be an additional 30 minutes per helicopter) due to an inability to load bait into helicopters at Archerfield. This resulted in increased cost and lost time in travel. The impact is estimated to be a loss of a minimum of 100 ha of treatment per aircraft, per day.

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

- A review of the program's aerial supplier is underway to ensure a minimum number of aircraft are supplied to service the program.
- The kangaroo safety issue has been resolved by erecting a fence at Wacol to prevent kangaroos from entering the landing area.
- Mobile helicopter-landing pads have been purchased to negate the effect of the dust on aircraft engines and allow the program to utilise remote landing sites.
- A minimum of four helicopters, seven days a week (preferably five) to be operated when available to increase efficiency and combat any ongoing delays or lost time.

A crop treatment coordinator will commence in March 2020 to investigate a long-term solution to delays in treatment for areas under crop at treatment time.

Next quarter

- Prioritisation of Western Boundary and Treatment Area 1 treatment. High Density suppression treatment is on hold until Area 1/WB treatment is back on schedule.
- The program will operate five helicopters and include treatment on weekends where possible. This will enable aerial treatment to get back on schedule.
- Ground treatment in Area 1 continues. The expected completion date for Area 1 is on track for mid-February 2020.

- Current estimated completion of round two of the Western Boundary is 15 February 2020 given optimal conditions.

Effectiveness of treatment

Monitoring nests in Q2 to verify the effectiveness of treatment found that after four rounds of IGR bait treatment only dead ants are found in nests. The assessment of 36 nests undertaken in Q1 of monitoring sites in Area 1 had shown no ant activity after three rounds of treatment. There was concern that these results may have been impacted by the drought given ant activity in the greater infestation area was reduced. For this reason an additional evaluation of these 36 nests was undertaken in Area 1 in Q2 (Treatment Round 4+ in Figure 2) after rain in the area i.e. fire ant activity is often increased after rain. This revealed one nest that still had a few worker ants remaining but showing signs of being bait affected (sluggish, low activity and numbers). However, a review of treatment records at this location revealed that six nests had only had three rounds of treatment instead of the planned four due to a gap between aerial treatment and the back-up ground treatment. All nests that had received four rounds of treatment in the monitoring area had been killed. A further 54 nests that are regularly monitored and have been observed as dead within the previous two years were not included in this analysis as they are evaluated annually in winter.

As the density of infestation in Area 1 was very low at time of treatment, to further test the effectiveness of treatment monitoring sites were established across 101 nests in Areas 2-4 where there are higher levels of ant activity. After three rounds of treatment the majority of nests had perished, with 85 per cent of ant nests dead and only 8 per cent healthy. Effectiveness of treatment will continue to be monitored.

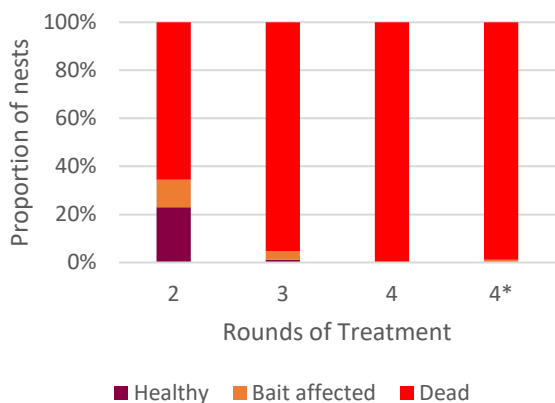


Figure 2: Treatment verification – Area 1

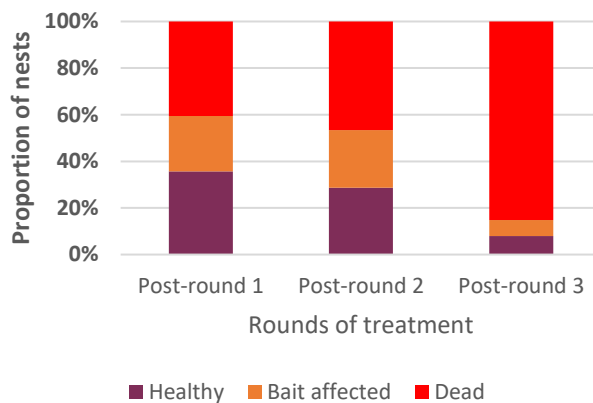


Figure 3: Treatment verification – Areas 2-4

DNI treatment

Quarterly verification of direct nest injection (DNI) treatment efficacy started in early 2019, with post treatment monitoring done in Q2 for injections done in the last two quarters (Q3 and Q4) of 2018-19. Over 26 sites, 132 nests were treated, with only a single nest found active at 12 weeks after DNI. Genetic analysis of the single remaining nest confirmed that it was not the same as the original sample, indicating that the original treatment was successful, and this nest was due to site reinfestation. This signifies that DNI efficacy is at 100%.

There has been continuing monitoring of a number of sites in the high-density suppression areas that received aerial broad scale baiting in June 2019. This is being evaluated in early winter to ensure treatment is still efficacious. This will continue in the following months, with the results reported in Q4 of 2019-2020.

3. Suppression

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

Planned treatment

This treatment season, 63 per cent of Round 1 planned suppression treatment has been achieved and close to two per cent of Round 2. Like planned eradication treatment, the ability to complete planned suppression treatment was impacted by environmental factors limiting access to aerial baiting. The decision was to prioritise the eradication treatment of Area 1 and the Western Boundary (see Figure 1 for operation area and Appendix 2).

Two rounds of treatment were planned for the Western Suppression Area this season (originally starting on 6 January), however it is at risk of not being completed. The Area 2-4 High Density suppression treatment is on hold until eradication treatment of Area 1 and the Western Boundary is back on schedule (See table in key insights).

Table 2: Planned suppression treatment – September-December 2019

Round 1	Hectares			Round 2	Hectares		
	Area	Planned	Actual		%	Area	Planned
Area 2-4 (High Density)	21 275	13 239	63	Area 2-4 (High Density)	21 275	375	1.7
Western Suppression	N/A	N/A		Western Suppression	N/A	N/A	
TOTAL		13 239	63	TOTAL		375	1.7

Appendix 2 provides a visual representation of suppression treatment.

Responsive treatment: community reports

The community continues to be a vital information source for the program by identifying possible fire ants in their back yards and communities. There were 1 409 reports from the community of suspect fire ants during this quarter with 556 confirmed positive as fire ants and treated.

The program's new treatment regime implemented in September has assisted in improving response rates to community reports and reduced the treatment backlog of direct nest injections to treat properties reported. Fast-acting toxicant bait is now applied on the first visit to a property if the field operators consider the infestation likely to be fire ants rather than confirming ants are fire ants through laboratory testing before treating. The program also updated its information systems to accommodate the change. As a result the program's maximum response timeframes have improved significantly (going from an average response of 120 days down to 8 days). Of those members of the public who reported suspect ants, most said they were at their residence (56 per cent) while seven per cent reported fire ants on roadsides or footpaths (Figure 4). *Appendix 3 shows responsive treatment locations.*

There have been 3 219 reports of suspected fire ants so far this financial year, with close to half (49 per cent) confirmed as positive by the program's science team.

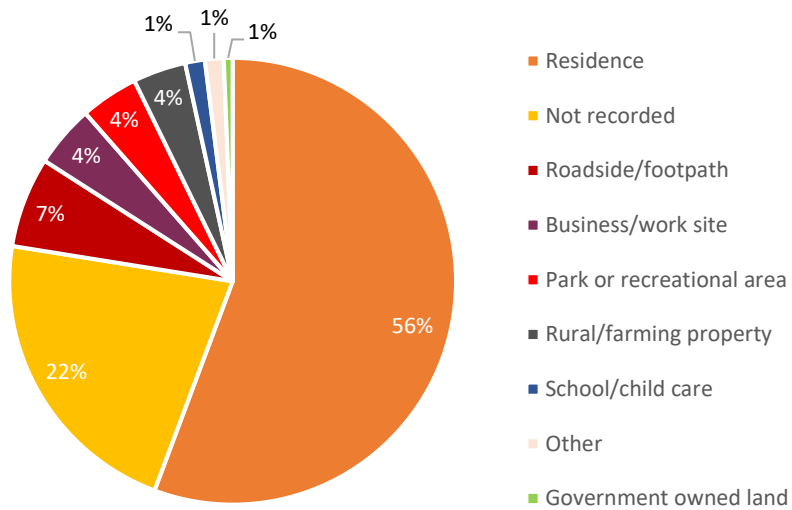


Figure 4: Where were suspect ants found in Q2?

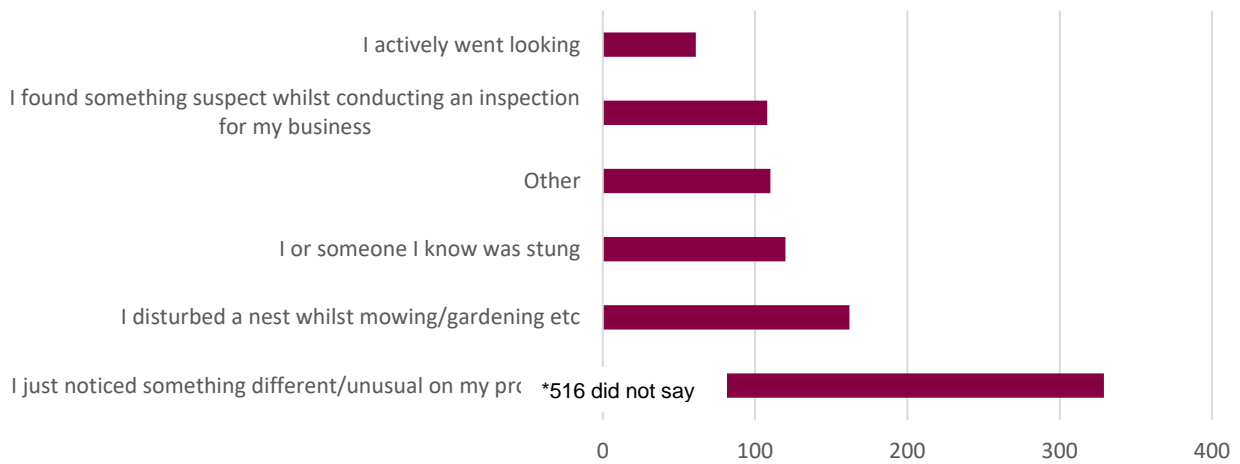


Figure 5: What made people report suspect ants in Q2?

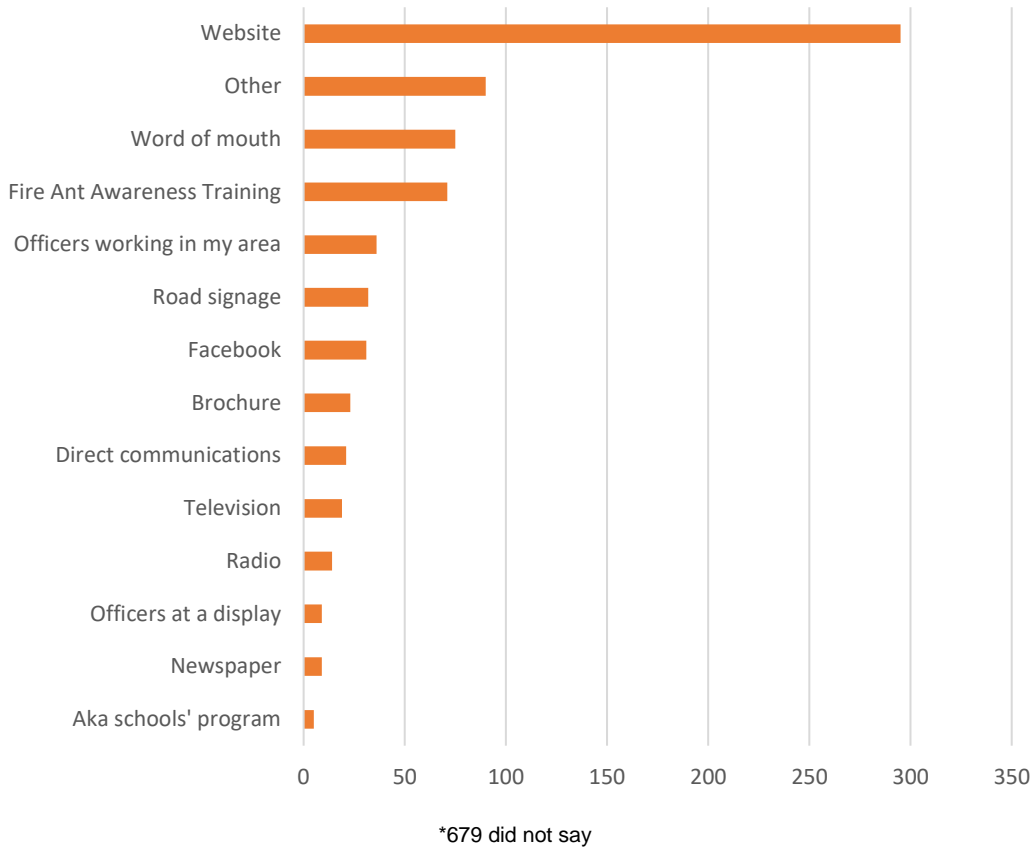
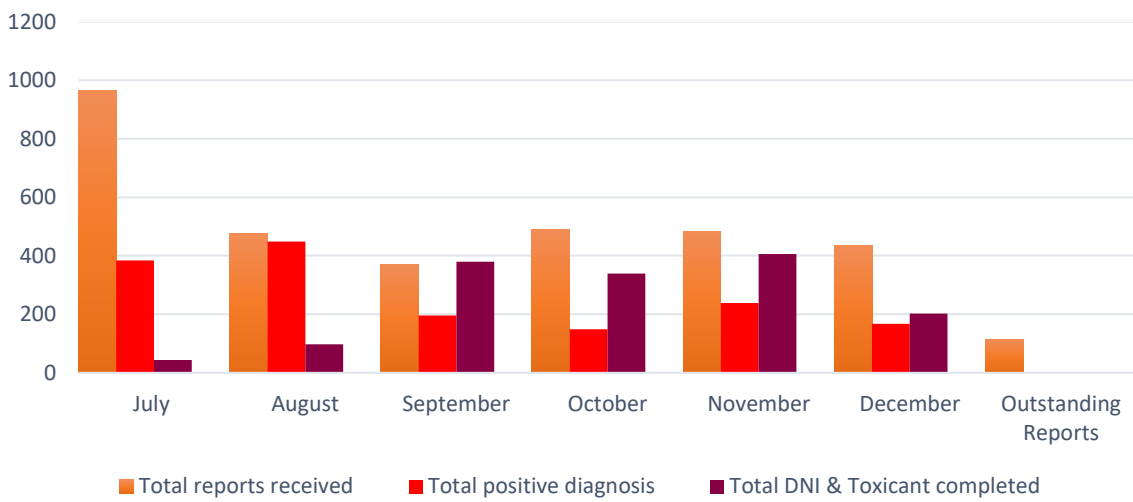


Figure 6: How did people hear about the program in Q2?*



**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.*

Figure 7: Community (public) reports by month Jul-Dec 2019*

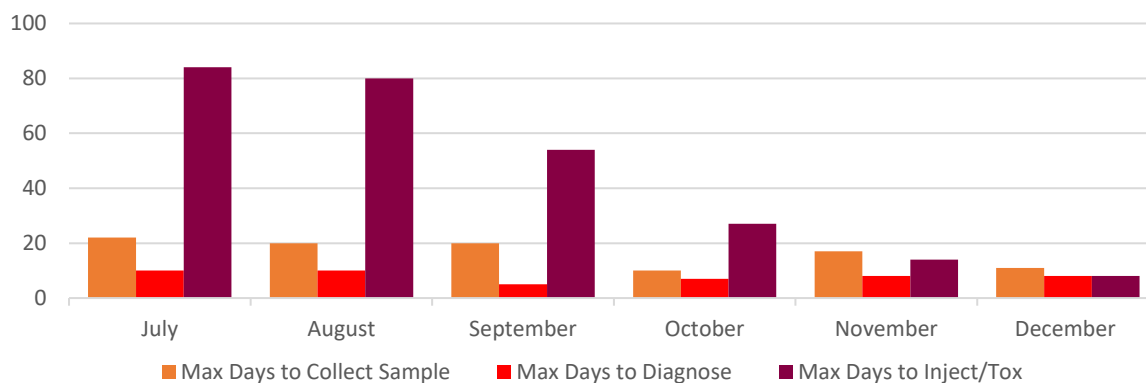


Figure 8: Response to community (public) reports timelines Jul-Dec 2019

Diagnostics and monitoring

Table 3: Ant samples analysed

Q	No. suspect ant samples analysed	% + or - from last Q	Proportion polygyne sites
1	3 268	+42%	1.11%
2	2 966	-9%	0.47%

There was a slight decrease in genetic tests in Q2 due to technical issues, as well as samples from the new incursion in Freemantle taking priority during this period.

Genetics

During Q2, only 0.47% of sites where fire ant samples were collected were found to be polygynous, which is a reduction from 1.11% last quarter. Social form (Gp-9) analysis is conducted to determine whether a nest is monogynous (single queen colony) or polygynous (multiple queen colony), to inform treatment strategy. More rounds of IGR bait treatment (5-6 rounds) are needed for polygyne nests compared to monogyne nests (3-4) due to the hierarchical way that queens are exposed to the bait. Polygyne nests also have a higher risk of spread due to the increased number of reproductively viable queens within a single nest.

The number of polygyne infestations detected can be influenced by the variation in the amount of surveillance conducted throughout the year. Therefore the proportion of polygyne sites should only be evaluated annually to remove seasonal bias.

The annual genetics report was finalised during Q2, which provides information from 2018-2019. Microsatellite analysis was done to track population origin and distribution trends, as well as relatedness testing between individual mounds for tracing purposes and to measure the impact the program's eradication activities are having on fire ant genetics. Population and genetic trend analyses showed that while genetic fitness is still generally very low in the entire infestation and all populations are still in genetic bottleneck (i.e. inbreeding), population clusters in the Areas 2-4 are showing signs of a slight increase in genetic fitness.

Throughout the year, there is a fluctuation in the number of tests undertaken due to a number of factors. The number of tests, associated resourcing and prioritisation is reviewed monthly, with adaptations incorporated where required. Analysis of polygyne alleles, as well as cluster analysis, suggests that some of the spread of genetic diversity is due to human-assisted movement. To address this issue waste facilities, where high risk products can be disposed of, will be encouraged to self-manage the possible fire ant infestation. Further, risk mitigation measures for movement of soil within the fire ant biosecurity zones will be clarified and communicated more broadly along with planned communication and engagement on proposed biosecurity zone changes and the need for high levels of vigilance on movement controls.

Self-management

A Self-management Project Board was established to facilitate the self-management initiative and convened for the first time on 10 September 2019. Initially meetings were held fortnightly, however these increased to weekly.

Industry and councils

Further development of the self-management initiative focussed on increasing the number of trained pest managers to assist homeowners and businesses to engage pest management technicians (PMTs) to treat fire ants at their home or business. Training was also offered to other industries and local Councils, who employ pest managers and other personnel, who could deliver baiting. In particular, organisations with a current Biosecurity Instrument Permits (BIPs) were targeted and invited to train in self-management. Training contractors from high risk industries was also seen as a way to help reduce the risk of human assisted movement and increase suppression activity in the sector.

Pest management technician (PMT) training course number 19 was completed in December 2019. Including course number 19 the total number of people trained in self-management was 346 and comprised of 258 PMTs and 88 other contractors. These contractors are mostly facility and infrastructure managers, local government employees, utility employees, and developers and their contractors. Training courses were booked well into March 2020.

Sectors earmarked for training in 2020 include the vegetation management industry that specialises in 'after installation' care of turf for large projects, such as the Skyway JV parallel runway project. There are two or three key players in this sector with a number of smaller businesses involved. Ipswich City Council has nominated 64 parks and conservation staff to undertake training in the near future.

Engagement with individual property owners in industry and producers in rural areas was instigated to help property owners to better understand the options for baiting and how it could be applied on their properties. The project team demonstrated some of the equipment used by the program, such as hand spreaders and hoppers. This information has been gathered and will inform the development of this initiative as the program prepares to transition it to business-as-usual (BAU) in the next quarter.

Community

A self-management research project was instigated this quarter to pre-empt the suburban community 'proof-of-concept' projects to better understand community attitudes toward treating fire ants on their own properties. This will inform the communication strategy and provide a benchmark against which to measure results of the self-management communication and engagement program.

Further work was done to understand the best methodology for self-management in selected suburbs in the community. Yarrabilba, Ripley and Oxley were flagged by the project board as suburbs with high infestation that could benefit from a 'proof-of-concept' project to test how the communities responded.

Timeframes for the first 'proof-of-concept' at Yarrabilba were moved to Q2 2020/21 pending the development of mitigation strategies for potential risks that may be identified.

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. Early discussions were carried out with chemical suppliers to inform them of the current limitations of bait availability both in size, cost of baits and the need for a broader offering for community and industry.

Successful discussions with chemical supplier Sumitomo indicate a more affordable price structure for Councils who wish to purchase an insect growth regulator for self-treatment may be available soon. Further industry briefings are planned in the next quarter.

4. Containment

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

Monitoring and surveillance

The majority of planned monitoring in Q2 related to activities to test the effectiveness of treatment (see p7). More surveillance is planned for winter when ants build up nests and are more visibly active.

Significant detections

Table 4: Number of significant and boundary detections

Detections	Number
Significant Detections	0
Boundary Detections	2

There were no new **significant detections** (fire ant detections outside the Operational Area of the program) found in Q2. Of the 18 significant detections found since the start of the Ten Year Eradication Program in 2017, 14 of the detections have been finalised, meaning each detection has received the required amount of treatment and surveillance, all compliance, tracing and communications activities are complete and no further infestation has been discovered.

The remaining four detections, in the suburbs of Helensvale (2), Bromelton and Gleneagle, are situated in areas that are currently undergoing suppression treatment. These infestations have received one round of broadcast baiting using an insect growth regulator and are scheduled for a second round prior to the end of the treatment season. Once the treatment 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 program's containment strategy, all previous significant detections will be surveyed in the upcoming 2020 surveillance season to ensure all areas remain free of infestation.

There were two **boundary detections** discovered in Q2, both in the suburb of Arundel in the Gold Coast City Council area. The infested sites are located in Areas 2-4 and are also included in the 2019-20 planned suppression treatment. Both sites were treated as a priority during this quarter. In total, seven fire ant mounds were detected and all mounds were destroyed by direct nest injection and treated with a toxicant bait. Post-treatment validation surveillance will be scheduled once the already planned suppression treatment in Areas 2-4 is completed. *Appendix 4 shows all new detection locations in Q2.*

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 107 compliance checks carried out in Q2 with 21 of these Biosecurity Instrument Permit (BIP) checks. Ten per cent were found to be non-compliant. *Appendix 5 shows compliance check locations in Q2.*

Non-compliance

There were 11 instances of non-compliance where actions were taken under the *Biosecurity Act 2014* in Q2 (see Figure 9 below).

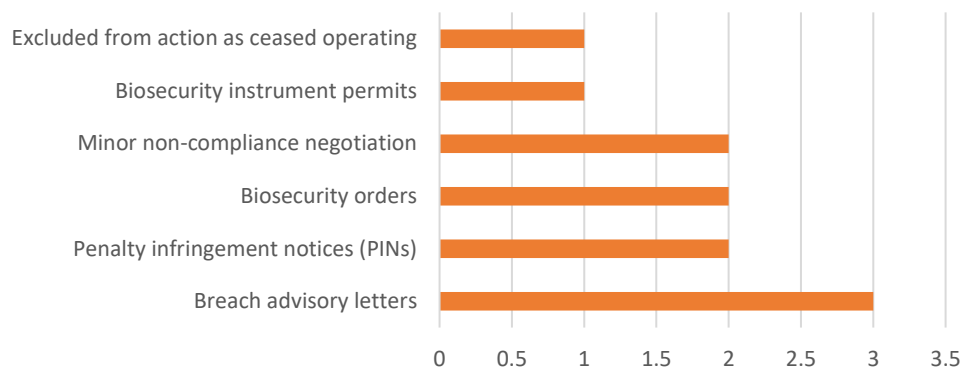


Figure 9: Non-compliance actions taken in Q2 – 2019-20

Introduction of penalty infringement notices (PINs)

As part of a Biosecurity Queensland initiative introducing penalty infringement notices (PINs), PINs were issued by the program for the first time this quarter. PINs enable the program to swiftly and decisively respond to non-serious breaches of the movement controls. Due to their financial impact on those receiving PINs, they are a strong deterrent and have been used to effectively emphasise the seriousness of non-compliance.

One penalty infringement notice (PIN) was issued in response to an unlawful movement of mulch from Coomera to Alberton in fire ant biosecurity zone 2. Another was issued for the unlawful movement of soil from zone 3 to 2. A further five PINs were issued for non-compliance movements that took place in previous quarters for the movement of mulch and soil.

Biosecurity orders

Two biosecurity orders to cease movement of carriers were issued in response to hay not being stored in accordance with section 71 of the *Biosecurity Regulation 2016* and where there was a risk of further non-compliance.

Industry focused compliance activities

Twenty-five compliance checks of pool builders found all were compliant, however, information about the industry is limited and compliance assessment challenging because of:

- mobility - pool builders are highly mobile hindering the ability to initiate compliance activities
- timing - pool related excavation activities are typically contracted out and completed within one week limiting onsite access while activity is occurring
- disposal source - as only small volumes of soil are involved, and informal disposal sites are relatively easy to source, operators may seek to avoid fees and risk non-compliance by using unknown sites.

The next stage will be to locate and engage with a larger section of the industry using notices to access information when unable to contact or access relevant records. Of high risk earthmovers who subcontract to larger companies, one penalty infringement notice was issued for the non-compliant movement of soil (see PINs above). The earthmover group will also be targeted in Q3 and Q4.

Location focused compliance activities

The risk of spread across the development corridor (from Logan to Gold Coast) is significant due to activities associated with large-scale clearing, soil disturbance and movements of soil and other carriers connected to the development of new residential estates. Activities that were undertaken during the quarter in this area, including south of the fire ant biosecurity zones include:

- risk rating suburbs within the Gold Coast development corridor

- communication about the general biosecurity obligation (GBO) throughout the area
- compliance checks throughout the region.

A penalty infringement notice was issued in this region in Q2. Further work in this region is scheduled for Q3.

Compliance activity in Q2 has also focused on high risk sites to the south-east of the fire ant biosecurity zones due to significant urban development taking place in suburbs within Bromelton and Beaudesert.

In Area 1, which is close to receiving its final round of eradication treatment, work is underway to safeguard the area from reinfestation by potentially infested carriers moving into the area. This includes identification of high risk businesses and communication of the GBO and risk mitigation in the area. This work will continue into Q3.

Biosecurity zones realignment

The fire ant biosecurity zones are the foundation for controlling the movement of materials which could potentially harbour fire ants. As zone boundaries no longer align with the programs operational area, a realignment was proposed to better protect areas which have previously been treated by the program. In Q2, the program's Steering Committee approved a proposal to restructure the fire ant biosecurity zone boundaries and improve the current suite of movement controls to better meet contemporary needs.

Planning for a three phase communication and engagement strategy with industry has begun to prepare stakeholders for the forthcoming biosecurity zone and regulation changes to be implemented in April/May 2020. Three phases are planned:

1. Focus group research with earthmoving and haulage companies
2. Pre-launch engagement with high risk industries to inform of forthcoming changes
3. Advertising campaign to reach the remaining high risk industry operators to launch the changes.

An advertising campaign of this size requires the approval of Queensland's Government Advertising and Communication Committee (GACC) which has a four stage approval process over 6-8 weeks. The Stage 1- Campaign Rationale was submitted for approval in December 2019.

5. Mobilisation (Stakeholder engagement and communication)

Activities to generate and maintain community and stakeholder awareness, support and participation.

Treatment communication

The targeted promotion of eradication and suppression treatment in Q2 included a mix of advertising (paid), publicity and organic posts (unpaid), and face-to-face direct community engagement to:

- provide the community with information about planned eradication and suppression treatment in their areas
- promote the activities of the program, and
- respond to negative media relating to treatment backlogs.

Paid advertising

Table 5: Paid advertising

Eradication treatment support	Suppression treatment support	Self-management
Advertorials and display adverts: 3 Reach: 36 000*	Advertorials and display adverts: 5 Reach: 164 000	Third party advertising (Housing Industry Association (HIA)): 1 x theme— self-management
Radio adverts: 30 second advert played on two radio stations for three weeks, five times per day	Mailed 7 696 residents due to receive suppression treatment this treatment season	
Social media campaign (targeted at eradication area during treatment periods): Reach: 22 992* Impressions: 134 624*	Social media campaign (targeted at suppression areas during treatment periods): Reach: 8 222 Impressions: 20 177	

*Reach = potential unique audience; Impressions = content is delivered to social media feed but may not engage

The program also uses electronic variable messaging signs positioned on major roads at strategic locations across treatment areas enabling short-form exposure to key messages as required.

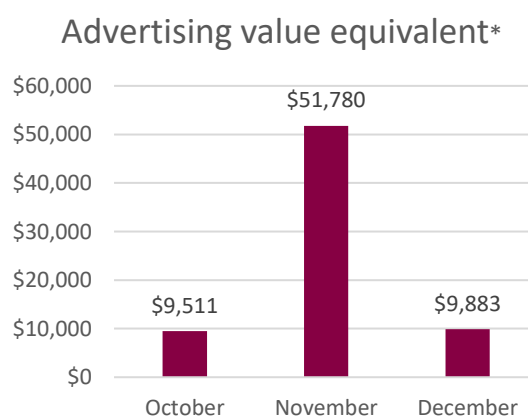
Publicity (unpaid)

There were five media releases distributed to general and industry-specific media during Q2 to support treatment activities, respond to negative media and promote program objectives, including the introduction of the use of penalty infringement notices. Of the 33 mentions in traditional media (radio, print, online) achieved during Q2, 22 were positive and eight were negative.

The negative media resulted from an ABC radio Toowoomba request about the number of suspect ant reports the program had received in a six month period. The program's response explained that the number included both negative and positive ant reports i.e. not all were confirmed as fire ants. The positive results of eradication treatment in the west was also provided. This media outcome suggested there is an increased level of public vigilance and understanding of the dangers of fire ants.

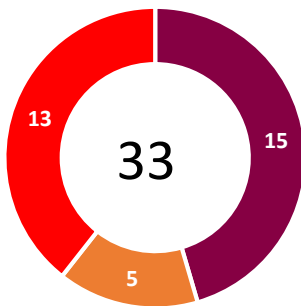
The program's proactive promotion of self-management to industries saw the supplied editorial content published in five industry publications.

What did we achieve – October-December 2019



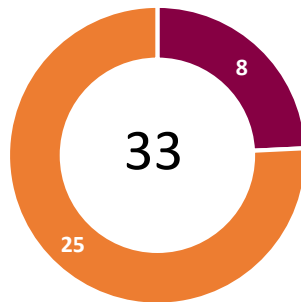
*Advertising value equivalent

Media type achieved



■ Radio ■ Print ■ Online

Media sentiment



■ Negative ■ Positive

Audience reach

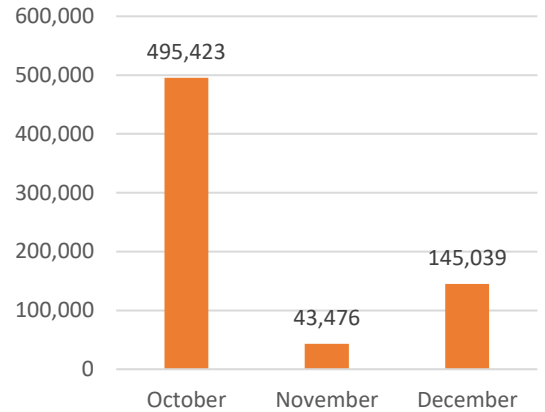


Figure 10: NRIFAEP unpaid traditional media

Social media

NRIFAEP SOCIAL MEDIA WHAT DID WE ACHIEVE - OCT TO DEC 2019

CHALLENGE
0

staff members dedicated to the creation & moderation of social media messaging. Despite limited resources we still...

ACTION
13

pieces of NRIFAEP content were posted across all channels from Oct to Dec 2019

ACHIEVEMENT
6.2%

average engagement rate for Facebook posts. Almost double the global average engagement rate per post of 3.22%*

Engagement rate reference: <https://blog.iconosquare.com/average-facebook-engagement-rate/>

WHICH CHANNEL REACHED THE MOST PEOPLE?

NRIFAEP posts reached 73,398 people on Facebook from Oct to Dec 2019.

WHICH CHANNEL IS THE MOST ENGAGING?

NRIFAEP posts had over 10,000 engagements (likes, comments, shares) across all channels from Oct to Dec 2019.

NRIFAEP SOCIAL MEDIA WHAT IS OUR STRATEGY MOVING FORWARD

JAN - MARCH 2020 WE WILL HAVE...

1

dedicated staff member started in Dec 2019 to create content, engage with users & develop strategies.

250%

increase in content. Minimum 1 weekly post on Facebook, Twitter & Instagram, and 1 fortnightly post on LinkedIn

300%

increase in the number of engagements on NRIFAEP posts. Our goal is to actively engage with our online community

STRATEGY

Increased content

By working with DAF comms to increase the timeslots available to NRIFAEP we will be able to reach more people with our messages.

Design & branding

Consistent colours, style and imagery will strengthening our branding and online presence.

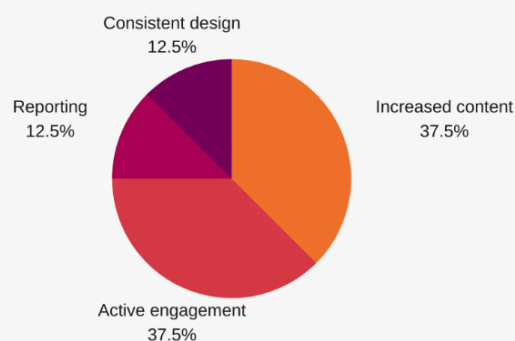
Active engagement

Content which creates conversation on the social media will provide insights into public perception while also encouraging advocacy for the program.

Reporting

Monthly results tracking will be used to influence content creation.

FOCUS AREAS



Community engagement and education

Education is key to preventing the spread of fire ants in Australian communities. Potentially 134 436 members of the community were exposed to the program's messaging at events and presentations in community spaces (Table 6). Activities included attending the Rosewood State Government Information Forum in October where fact sheets describing the positive indications in the eradication area were distributed, with feedback positive.

Table 6: Community engagement

No. engaged	Change from last Q	Purpose of engagement	Location of engagement
526	-19.5%	Community engagements events and local gathering places to provide general fire ant awareness to residents	Treatment areas in SEQ
710	-34%	Aka the Fire Ant Tracker P – 6 School education program	Public and private schools located in SEQ
133 200	+38%*	Public static displays	Libraries, Community and Cultural Centres located in SEQ

* Estimated numbers only. The change from the last quarter comparison does not include the numbers that attended the Royal Queensland Show in August as it was a non-typical event.

The *Fire Ant News* community newsletter was reintroduced in Q2 (December 2019) to existing subscribers. Subscriber contact details have been gathered at program training and public events and largely include industry representatives.

Table 7: Community newsletter

No. sent	Opened	Clicked	Unsubscribed
3 243	43%	14%	0.19%

Industry/council awareness education

Industry and local councils are key stakeholders and potential major contributors in the fight against fire ants due to their generally large landholdings and their potential contribution to human-assisted spread.

In Q2, 596 individuals from this group attended general awareness training sessions (Table 8). Training is conducted at the program's Berrinba site or at various off-site locations and covers topics such as:

- general fire ant information such as impacts, behaviour and identification
- legislation and compliance obligations
- treatment options
- importance of the eradication program and what is involved in the 10 year plan.

Table 8: Industry/council awareness training

	No. attended training	Change from last Q
On site:	323	+83%
Off site:	273	- 48%

The reduction in off-site training in Q2 is largely due to the closure of businesses over the Christmas/New Year holiday period. Some attending the general training also attend specialised pest management technician training (PMT) to prepare them for self-managed fire ant treatment.

In addition to general awareness training, there were 47 industry presentations and briefings during Q2. These briefings provide an update on the successes of the eradication efforts out west and reinforced the 10-year Eradication Plan. Presentations focused on introducing pest management training, self-management and clarifying the important role councils/industry play in treating fire ants and preventing human-assisted spread.

Increasing engagement with industry

In Q2, the program increased its communication with two key industries – pest management and building and development – after feedback from stakeholder forums indicated a need for better and more frequent communication from the program. Industry engagement will be increasingly important in the next quarter to manage human assist spread and convey information on proposed biosecurity zone changes. To assist with engagement two new digital newsletters were introduced to target:

- pest management industry representatives who have attended self-treatment training
- building and construction industries that move high risk fire ant carrier materials.

Table 9: Industry newsletters response

Industry	No. sent	Opened	Clicked	Unsubscribed
Pest management	213	73%	21%	0%
Building and construction	4 954	31%	21%	0.24%

Reputation and confidence

Selling the success story

Further work has been carried out to inform the community of the program's past successes in eradication and positive signs in the current western eradication area. This has included revision of all printed (fact sheets, media statements, letters, brochures) and electronic content (website and social) to ensure this track record is reflected. Development of a standard suite of media releases continued, including proactive media releases promoting changes to the treatment regime and preventing human assisted spread of fire ants. Development of a suite of positive case studies is underway.

Draft Strategic Communications and Engagement Plan 2019-2021

A draft *Strategic Communications and Engagement Plan 2019-21* aligned to the desired outcomes of the 10-year Eradication Plan was delivered to the program's National Steering Committee for review in November 2019. Feedback and discussion on the strategies is expected at the next Steering Committee meeting. A Stakeholder Engagement Plan is also under development to complement this strategy, and articulate the level of engagement with stakeholders.

Complaints management

A total of 49 complaints were made in Q2 with the main areas of concern being staff behaviour, aerial treatment and communication with the program.

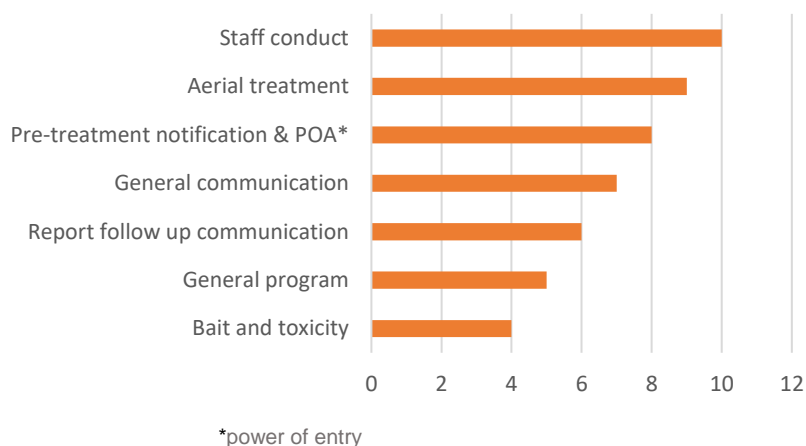


Figure 11: Complaints made by community – Q2 – 2019-20

Alleged staff behaviour included damage to property, taking extended breaks, inappropriate language or attitude, leaving gates open and/or animals escaping, and unsuitable interactions with pets or livestock. The program investigated staff complaints and addressed issues with the team or individuals involved. In Q2, relevant staff also attended specialist training about appropriate workplace behaviour and the Public Service Commission's framework for conduct and performance excellence. Recruitment and selection processes were also revisited.

Concerns relating to aerial treatment centred around its potential effect on livestock, particularly horses panicking and injuring themselves, and bait dropping onto roofs and entering water tanks. The aerial team responded to complaints, and sought a resolution.

Frustrations at a perceived lack of communication, limited or no notification prior to ground crews entering properties and delays between reporting fire ants and receiving treatment or follow up, were also complaints. Business improvements to the baiting regime made this quarter have vastly reduced the response time on suspect ant reports (see p9). The program is also examining ways to better manage residents' expectations and understanding of treatment activities, refining internal processes and leveraging existing communications networks to improve the frequency and accuracy of treatment notifications.

Customer relationship management (CRM) system

Work continued on CaSES, one of the two business systems used by the program, to provide improved functionality and a better customer experience. New functionality will assist pest managers to book into their preferred training module and receive confirmation and follow up communication, such as certificates of attendance commenced. Another important refinement planned is the development of categories for complaints, to assist with complaint management and reporting. To prepare for the introduction of self-management in communities, scripting for both the Department of Agriculture and Fisheries' central contact centre and the program's Customer Service team at Berrinba (CSB) has been completed.

Website review

A website review was instigated in October 2019 with the assistance of the Department of Agriculture and Fisheries (DAF) Communications Team and the DAF web team. The first meeting of digital engagement working group for the program was held with the objective of improving our

stakeholders' online experience. The disaggregated structure of the fire ant digital content was a particular focus of discussions, and alternative options were provided to the program. Discussions on a decision tree for industry and interactive mapping were also discussed. Further discussions are planned in the next quarter.

Sharing new knowledge

Conferences and presentations

In December, program scientists organised a symposium on Invasive Ants at the Australian Entomological Society conference in Brisbane. This brought together invasive ant experts from around Australia to discuss new frameworks, chemistry and methodology in research and eradication for a range of invasive species, including red imported fire ants, electric ants, yellow crazy ants and African big-headed ants. Five presentations were given by Program scientists on:

- Join the Ant Hunt: the power of passive surveillance in the search for red imported fire ants
- Using non-target 'citizen science' detections to infer absence of red imported fire ants
- Increasing border detection rates to mitigate risk of pest species establishment
- Utilising molecular techniques to aid eradication of red imported fire ants
- How invasive species further knowledge on understudied native species.

Three members from Agriculture Victoria's biosecurity team visited the Program in November to further their knowledge on our activities and improve their preparedness to respond to a fire ant incursion.

The program was invited to present at the Australia-Korea Science Symposium in Canberra, aimed at increasing collaboration between the two countries on biosecurity issues. The presentation outlined the challenges and resulting scientific innovation of the eradication program and was well received.

Publications

The program's Science Leader Dr Ross Wylie was the lead author on a scientific paper published in the journal *Ecological Research* in December 2019. Titled '*Invader at the Gate: The status of red imported fire ant in Australia and Asia*', it describes the current and historic distribution and incursions of fire ants in the Asia-Pacific region, as well as lessons learned from invasion and eradication efforts.

A peer-reviewed scientific paper published in 2016 by Dr Wylie, Craig Jennings, Melinda K. McNaught, Jane Oakey and Evan J. Harris (*Eradication of two incursions of the Red Imported Fire Ant in Queensland, Australia*. *Ecological Management & Restoration*, 17:1, 22-32) was selected for the special 20th anniversary issue of the journal *Ecological Management and Restoration*. The special edition celebrates the best feature articles over the journal's 20 year history. A project update to the original paper was included with this edition.

6. Research and innovation

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

New treatments and methods

The final report for the collaboration with Davren Global Pty Ltd was received on their research using synthetic amorphous silica (SAS) to kill fire ants. This product is used successfully in agriculture to prevent insect damage to seed in grain silos. Research on its effectiveness for fire ants was conducted with a funding grant from Department of Agriculture and Water Resources. In 2019, laboratory trials were conducted to determine mortality rates of fire ants to the silica-based product. Results showed 100% mortality within 24 hours when fire ants were enclosed with SAS, and within three days when exposed to SAS for one minute. Fire ants also transferred SAS between worker ants, which ensures the whole nest would be exposed to the product. Despite these positive results, a variation in soil type and soil moisture content influenced the efficacy of SAS, which raises questions for its effectiveness in the field. Davren Global Pty Ltd are aiming to conduct a field evaluation of the product in 2020.

Other research is continuing on the use of toxicant baits for both mound treatments, as well as for broad scale baiting. Toxicant baits have rarely been used by the program and the Scientific Advisory Group (SAG) has recommended that their use be investigated. These trials are expected to be finalised in early 2020. Additionally, a proof-of-concept trial on a 'no-dig' method for fipronil treatment (used in direct nest injection) was undertaken in December. This is aimed at providing an alternative method to traditional DNI, which may be more time efficient and require less chemical. Results and findings will be discussed in the next quarter report.

Surveillance project

The final report for the remote sensing surveillance field trials was provided by the vendor, with preliminary analysis of the imagery showing high resolution and thermal identification of fire ant nests. The image capture prototype had a few minor technical difficulties during field trials, but these were rectified. The next stage is the development of the machine learning algorithm, using spatial data captured during the recent field trials. A workshop between the program, the vendor (Outline Global) and the subcontractor (IBM) was undertaken in December to discuss the algorithm development, as well as program requirements and expectations. The report regarding algorithm development is due in the Q3.

7. Scientific protocols and plans

Clearance and freedom

Further development of the Proof of Freedom framework and clearance strategy was undertaken. A basic framework was presented at the Scientific Advisory Group (SAG) meeting in late October. SAG agreed that a bio-economic framework should be used to transition between eradication stages, which considers both the economic cost and estimated risk. Additionally, SAG agreed that a risk 'hotspot' map based on number of treatments and application interval would be a valuable tool to prioritise areas for clearance surveillance. This is currently in development. Dr David Ramsey, from the Arthur Rylah Institute in Victoria, spent time with the program collaborating about the use of his invasive species eradication software that can be used to predict timelines for eradication, how to prioritise surveillance and clearance activities, and develop confidence around proving eradication.

8. Governance and accountability

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

Business improvement

Key business improvement activities during Q2 included:

- **Eradication** – purchase of fencing and helicopter landing pads to avoid further treatment delays and plan for future treatment landing sites
- **Responsive treatment** – introduction 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 Steering Committee commissioned Mr Bernard Wonder to review the efficiency and effectiveness of the Program. The review commenced in mid-August 2019 and was completed on 22 December 2019. The review contains 37 recommendations for improvements to program efficiency and effectiveness for the Steering Committee and the program to consider.

Mr Wonder also made a number of positive observations including:

- the 10-year plan is 'a methodical and sophisticated approach' to eradication and 'well-reasoned'
- positive trials of the new helicopter-mounted remote sensing equipment and self-management project could lead to significant cost savings

- the program has been building some important partnerships with industry and the community.

All recommendations provided by Mr Wonder have been acknowledged and will be considered and investigated further by the Steering Committee and the program to determine likely impact, the practicality and costs of implementation.

Risk management

There are 67 risks being managed by the program – 20 strategic and 47 operational. Five new risks were identified in Q2.

Table 10: Risks and current ratings

Risk type	Low	Medium	High	Extreme	Total
Strategic	1	11	3	0	15
Operational	16	30	6	0	52

Table 11: New risks identified in Q2 – 2019–20

Risk identified	Control	Treatment	Risk level
Risk to reputation: An inaccurate review report will be produced by the external reviewer	Adequate review points for managers and Steering Committee members at relevant points before and after a final report is provided.	<ul style="list-style-type: none"> Ensure the provision of accurate information and data during the review process 	Med
Risk to capability: The program not achieving objectives due to a lack of desired take-up by industry and the community of the various self-management strategies	The self-management program is divided into a number of subprograms to better meet the needs of each target group.	<ul style="list-style-type: none"> 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. 	High
Risk to reputation: Public reports are not being actioned in accordance with public expectations, leading to escalation to the Minister and media attention and complaints.	Re-engineer responsive treatment protocols and processes to ensure timely treatment, preferably on first response. Implement self-treatment options.	<ul style="list-style-type: none"> Previously there was a backlog of reports in system not actioned in relevant time. This has been resolved and moved from Issues to the Risk register. 	Low
Risk to capability: Delays in entering field data in information systems is affecting the efficient and effective planning and management of field staff, and analysis and reporting of program outcomes.	Implement digital field data capture solution, improve processes for capture of aerial data (e.g. tracks).	<ul style="list-style-type: none"> The digital field data capture solution is under development and stage 1 is expected to be launched in mid-2020. In the meantime, resources have been allocated to ensure data entry occurs within three working days of the receipt of the paperwork. 	Low
Area clearance and Proof on Freedom: Due to lack of communication and relevant data to confirm proof of concept.	Continued development of the Proof of Freedom strategy in consultation with the National Exotic Invasive Fire Ant Scientific Advisory Group (SAG).	<ul style="list-style-type: none"> Progress is ongoing. Draft framework went to SAG for review in Q2. 	Low

Committee meetings

Steering committee

The program's Steering Committee held its 10th meeting on 20 November 2019, in Brisbane. The meeting focused on recommendations provided in the Efficiency and Effectiveness review of the program. The Steering Committee also:

- reviewed the program's Business Improvement Plan along with the issues and risks documentation
- approved the indicative budget for 2019-2020
- noted progress made by the program on the proposed regulatory amendments, self-management project and treatment progress
- agreed the Steering Committee minutes will be published on the program website.

In addition, the program presented its proposed Communication and Engagement Plan for 2019-21.

The next meeting will be in February 2020.

Sub-committees

The Steering Committee is advised by two sub-committees. The *National Exotic Invasive Fire Ant Scientific Advisory Group (SAG)* met for the third time on 29 October 2019.

SAG was given an overview of the program's progress, risks and challenges by the program's General Manager and the Steering Committee Chair. SAG also considered the:

- requirements for proof of freedom
- statistical sample size necessary to have confidence that the treatments have worked
- decision process for transitioning from a planned broad-scale treatment strategy to the next stage in eradication
- surveillance and treatment of fire ants in drought conditions given the climatic conditions being experienced in SEQ
- self-management of fire ant infestation by the public
- scientific principles that underpin the movement controls for fire ant carriers, as well as for treatment and surveillance activities
- Guidelines for a Self-Assessment Tool for Fire Ant for use by the Nursery Industry.

SAG also discussed the terms of reference for a formal assessment that is to be undertaken of the relative levels of risk of spread posed by the human assisted movement of materials capable of harbouring fire ant. The *Risk Management Sub-Committee (RMSC)* did not meet in Q2.

9. People and culture

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

Significant staff changes

Commenced	Departed
<ul style="list-style-type: none">• Director (Strategy)• Manager Business Systems and Intelligence (Acting)• Business Support Officer (Procurement)• Compliance Officers x 4	<ul style="list-style-type: none">• Director (Operations)

Staff nos. 2019–20

Position	Q1	Q2
Permanent	97	77
Temporary	30	31
Contractor—office*	34	29
Contractor—field*	129	167

The increase in field staff for Q2 aligns with the start of the treatment season in September.

Workplace health and safety

There were 21 Hazards and 26 injuries during Q2 with most injuries reported hitting or being hit by an object/s. The increase in incidences in Q2 is consistent with the beginning of the treatment season and increased field activities. The injury review completion rate for Q1 and Q2 at the end of Q2 was 75 per cent.

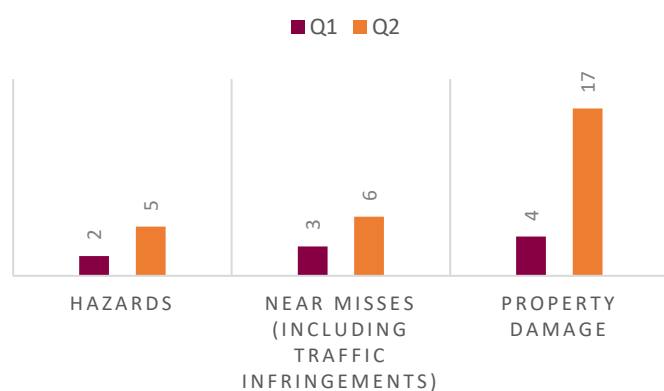


Figure 12: Hazards, near misses and property damage – Q1 and Q2 – 2019-20

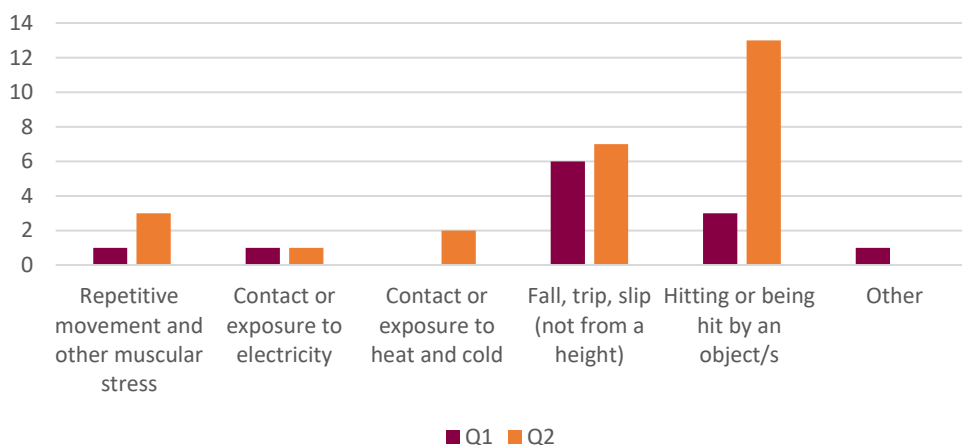


Figure 13: Injury mechanism – Q1 and Q2 – 2019-20

Learning and development

Table 12: Staff training and development – Q2 – 2019-20

Subject	Purpose
Public entities and the Queensland <i>Human Rights Act 2019</i>	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.
Recruitment and selection best practice	Recruitment and selection best practice strategies for leaders and others who recruit staff in the program.
Beyond Surviving to Thriving in a Changing Environment	Leadership training for program leaders aimed at creating change-capable individuals and teams.
Public Service Commission's framework <i>Conduct and Performance Excellence (CaPE)</i>	Meet the reporting obligations under the <i>Public Service Act 2008</i> and build the capability of managers regard their responsibilities under the Act.
<i>Appropriate workplace behaviour</i> pilot training session	Ensure productive stakeholder engagement and relationships with internal and external parties and establish and communicate expected standard of behaviour in interaction of staff with all stakeholders.

Volunteers

The program has 21 active volunteers who have been assisting the program for between one and 18 years. These volunteers contribute an estimated 575 unpaid hours annually, saving the Program over \$25,000 a year. During Q2, three regular volunteers contributed 104 hours of unpaid work to the Program.

Table 13: Volunteer activities – Q2 – 2019-20

No. volunteers engaged Q2	No. activities	Purpose of activities
3	13	<ul style="list-style-type: none"> Assist staff at interactive displays at events. Undertake administration activities such as producing sample kits, preparing resources for training, inputting feedback from training, updating field officers' folders.

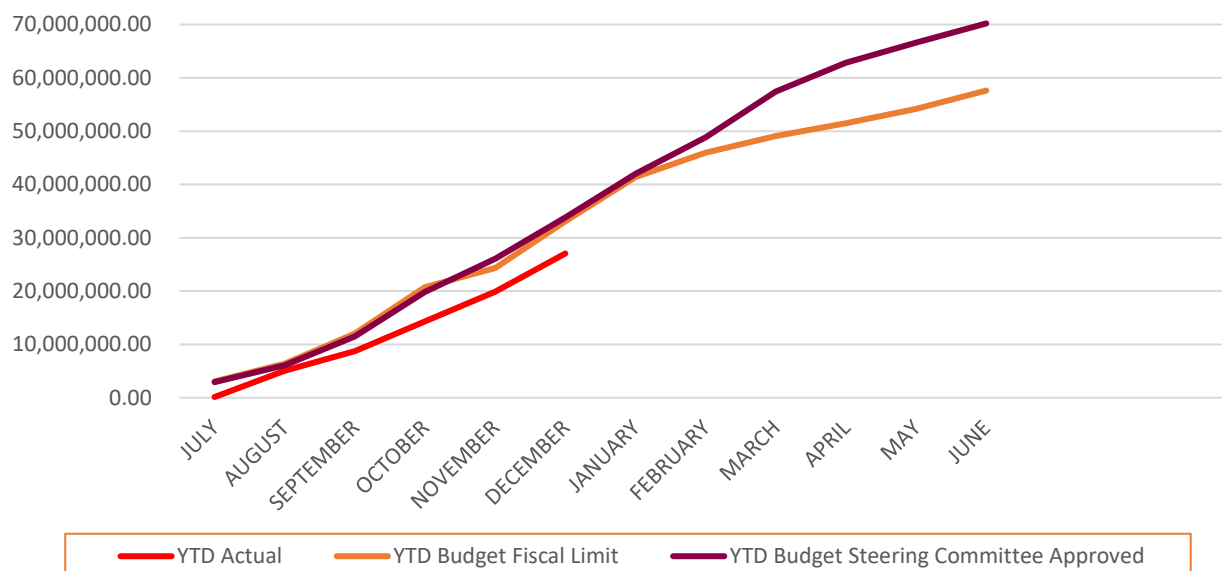
10. Finance

Expenditure to budget

To 31 December 2019, the program had an under-spend of \$6.1M. Material program variances include underspends relating to treatment costs including \$1.9M in labour hire contractors, \$1.6M in bait and \$1.4M in aircraft hire (total \$4.9M).

The variance in treatment costs reflects the inability to complete treatment primarily due to the impact of drought conditions on aerial treatment e.g. helicopters diverted to bush fires, excessive dust causing landing hazards for helicopters.

The budget to 31 December 2019 aligns with the program's treatment planning, which anticipated 237 056 ha of treatment completed. Actual reporting from FAMS shows completion of 178 271 ha - a gap of 58,785 ha.



* 2019-20 Budget was approved by the Programs National Steering Committee in November subject to successful funding resolution between Queensland and the Commonwealth. At 31 December 2019 funding approvals through Treasury were not finalised.

Figure 14: Expenditure to budget trend – 2019-20

Procurement

Extraordinary purchases during Q2 were to address barriers to aerial treatment and due to new software introduced across the Department of Agriculture and Fisheries that made existing AV equipment at Berrinba redundant. These were:

Supplier	Product	Cost \$
CGear	Heli-pads	60 800
Clipex	Fencing materials	13 000
FBF	Construction of fence	15 700
The AV King	AV equipment	21 200

Budget Q2: 2019–20

Program Area	Requested budget*	Current Budget	YTD Budget	YTD Actual	Variance
Program logistics and business support	4 242 886	4 309 697	1 893 096	1 597 644	295 452
Remote sensing surveillance (R&D)	1 217 189	1 217 189	747 047	679 826	67 222
Systems and technology innovation	3 404 353	2 254 352	996 107	767 028	229 079
Community and stakeholder engagement	1 932 503	1 972 503	758 875	726 675	32 200
Science services and eradication Assessment	2 137 997	2 097 998	948 278	865 366	82 912
Operations	52 548 009	42 309 213	25 993 108	20 611 200	5 381 907
Directorate	879 943	879 943	446 732	361 745	84 987
Self-management	1 459 961	150 965	143 867	342 986	-199 119*
Strategic policy performance and compliance	2 381 140	2 381 141	1 143 311	1 039 966	103 345
Total	70 203 982	57 573 001	33 070 421	26 992 436	6 077 985

* Variance reflects contractor hours for the project team. Expenses includes contractor payments, IT accounts, phones for the project team and minor catering for sessions delivered to pest technicians. The full budget for the self-management project will be recognised in the DAF financial system once 2019-20 funding arrangements are agreed between Queensland and the Commonwealth.

11. Goals and deliverables overview

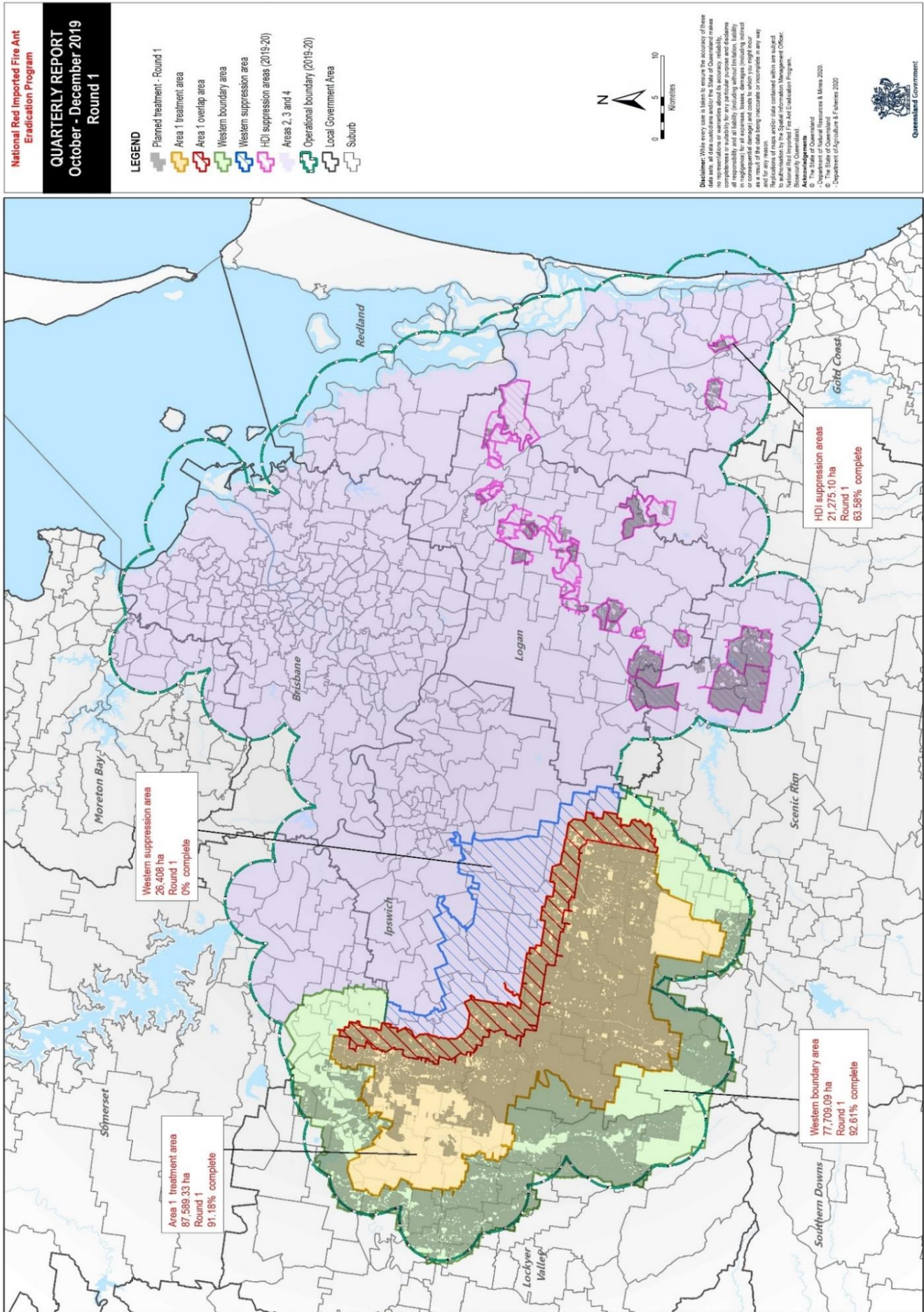
Goals and deliverables traffic light report

Goal	Deliverable	#	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	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 1 600 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	A compliance strategy addressing the highest risk activities.	7	

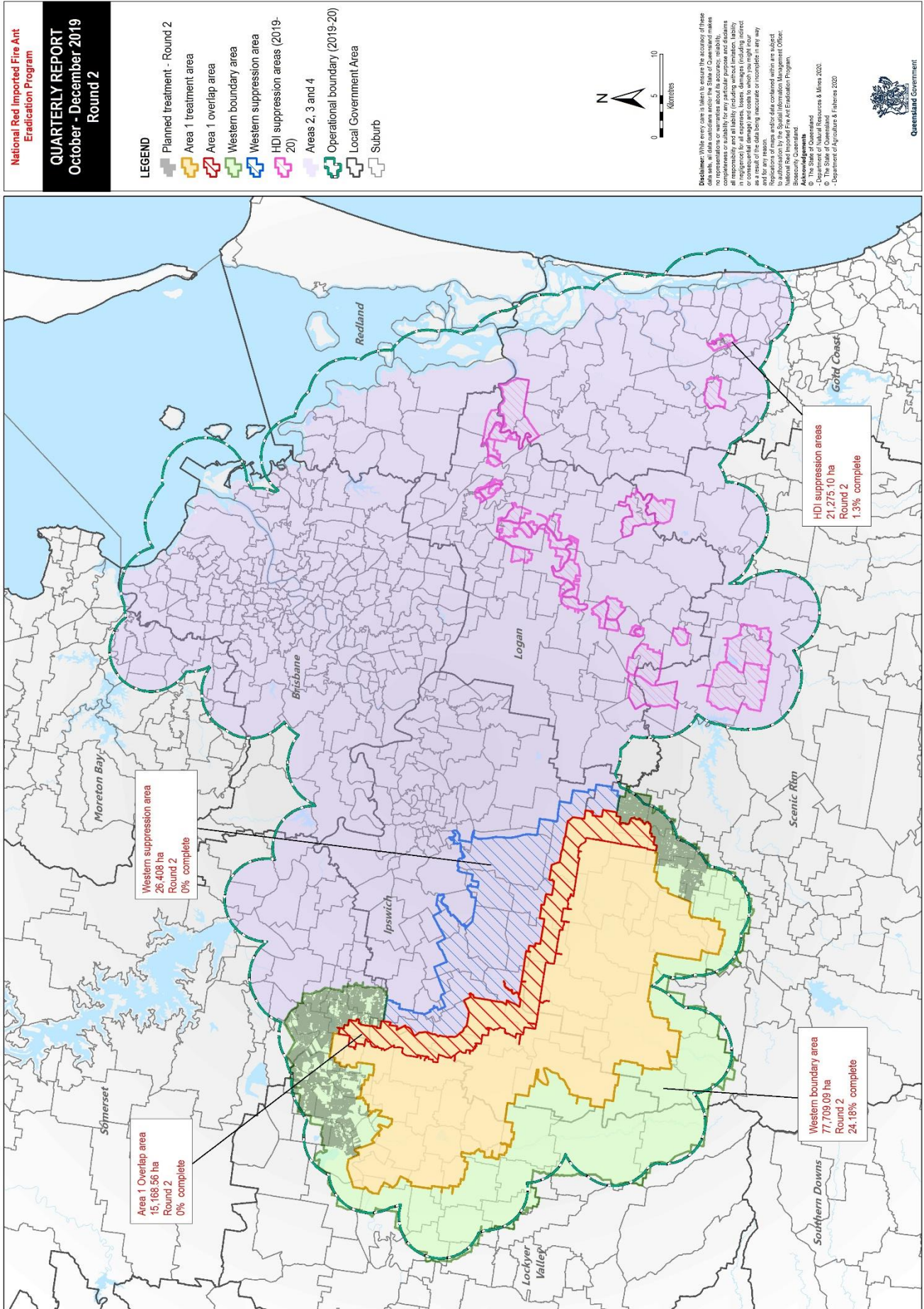
Goal	Deliverable	#	Status
	The provision of targeted information about movement controls and the general biosecurity obligation to high risk businesses and local government.	6	●
	Analysis and destruction of all new boundary detections and significant detections.	9	●
	All newly infested sites assessed 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	●
	A management of detections of importance protocol has been developed and approved.	19	●
	Biosecurity zones realigned with operational areas.	21	●
	Surveillance activities: sentinel surveillance; boundary detection surveillance; significant detection surveillance.	10	●
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	●
	A Program business plan endorsed by the Steering Committee.	22	●
	A tool for self-assessment of risk and application of risk mitigation measures has been drafted for industry (e.g. nurseries).	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

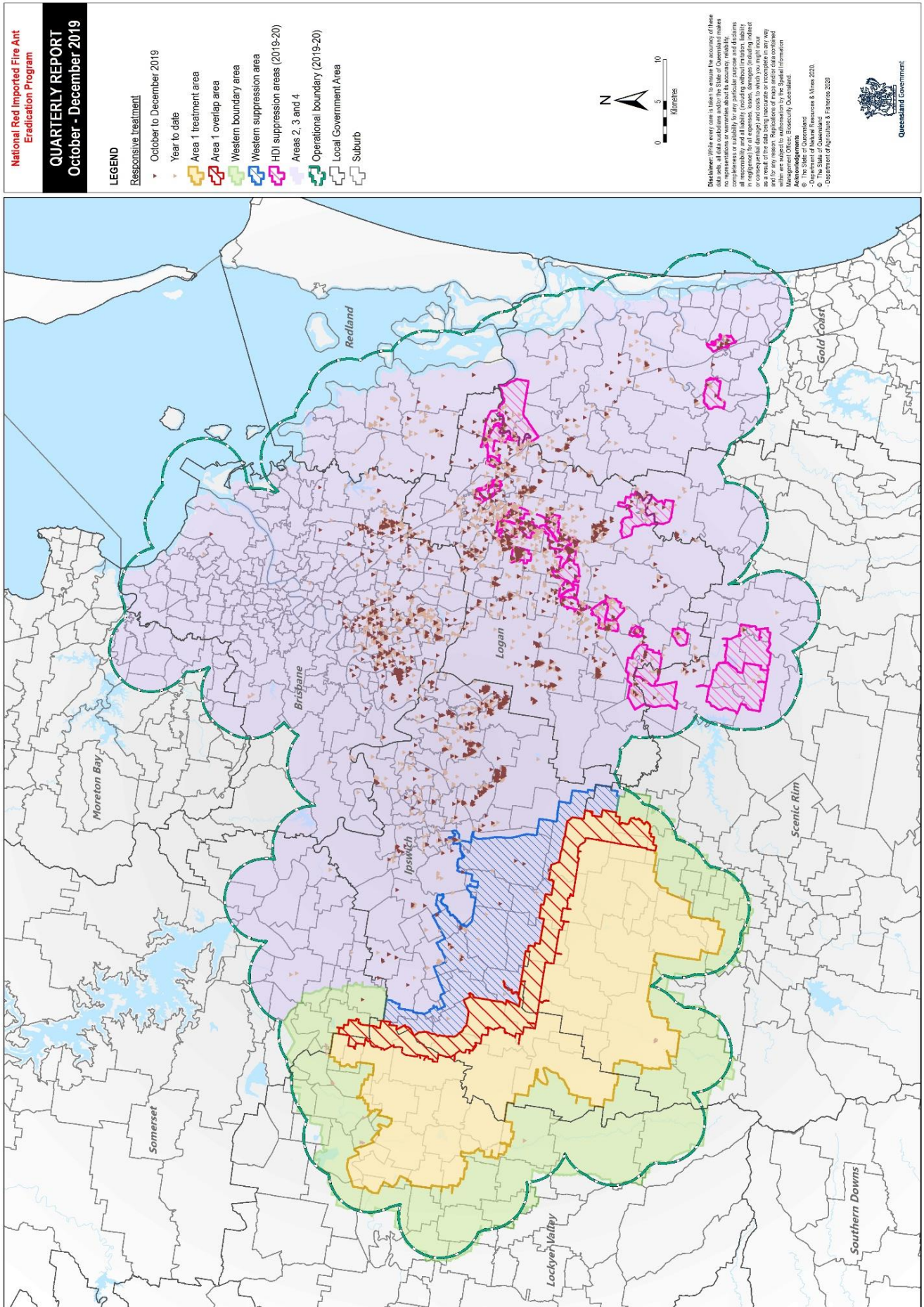
Appendix 1: NRIFAEP Q2-Planned and completed treatment Round 1



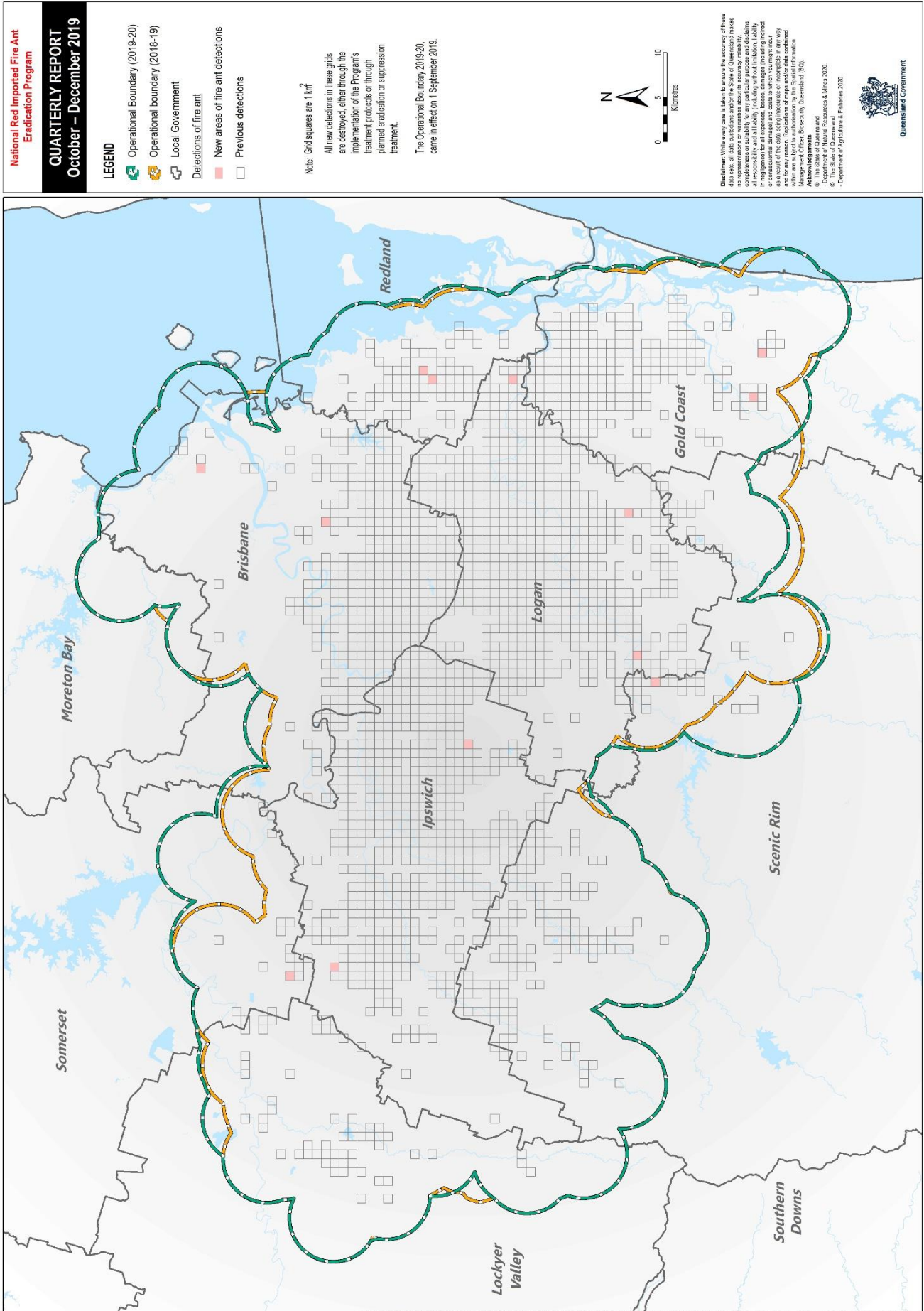
Appendix 2: NRIFAEP Q2-Planned and completed treatment Round 2



Appendix 3: NRIFAEP Q2 – Responsive treatment



Appendix 4 – NRIFAEP Q2 - New detections



Appendix 5: NRIFAEP Q2 - Compliance

