WORK PLAN 2021–22

SOUTH EAST QUEENSLAND

This publication has been produced by the National Red Imported Fire Ant Eradication Program, BIOSECURITY QUEENSLAND, DEPARTMENT OF AGRICULTURE AND FISHERIES.

REVISION HISTORY

Version no.	Approval date	Comments
1	2021	

CONTENTS

INTRODUCTION

This is the fifth annual work plan for the National Red Imported Fire Ant Eradication Program (the Program). The Program operates under a nationally endorsed Ten Year Eradication Plan (10-year Plan) that commenced on 1 July 2017.

This fifth Program year will be the first without the additional funding brought forward by Queensland and the Commonwealth Governments to enable treatment of the Western Boundary area. This funding, some $36 million, was brought forward from the last six years of the 10-year Plan following detections of red imported fire ant (RIFA) to the west of the original operations area, drawn up in 2015.

Notionally, the Program will revert to an annual budget of $33.4 million, a reduction of $25.9 million from expenditure of $59.3 million in 2020–21. Experience and knowledge gained over the past four years indicates that at least $60 million is required each year to achieve eradication in SEQ within the 10 years originally planned.

The National Biosecurity Committee agreed that the current Program effort should be maintained to ensure progress-to-date is not eroded while a revised eradication plan is developed and supported the Program seeking to bring $26.6 million forward from future financial years to deliver the Program in 2021–22. The Committee also supported the revision and re-profiling (including timing and costing) of the current eradication plan for endorsement by the Agriculture Senior Officers Committee prior to being provided to the Agriculture Ministers for consideration in early 2022.

Required expenditure for the Program in 2021-22 has subsequently been recalculated following reconciliation of the previous year's accounts and is now estimated at $66.7 million, requiring the bringing-forward of $33.3 million from future years.

The Agriculture Senior Officials' Committee has approved the continuation of the Program at current effort, until the results of an independent review can be considered. An independent review of the Program will be conducted early in the 2021–22 year, to examine the likelihood of the Program successfully meeting its objectives and to consider alternative strategies and funding requirements necessary to achieve those objectives. This review will be completed by the end of August 2021 and will inform a revised response plan that will be developed over the remainder of 2021. It is anticipated that approval of a revised strategy will be sought from Agriculture Ministers in each jurisdiction in early 2022.

This revised response plan will explain the Program's modified approach to combating RIFA and reflect the knowledge gained by the Program over the last four years, the changing geography of the future treatment areas and the anticipated future Program budget.

OVERVIEW

Program activities in 2021–22 will be focused on ensuring that the Program's progress to date is not reversed and preventing the spread of ants outside of the current infestation area. Accordingly, the top three priorities are:

1. Destroying remnant infestations in the areas where eradication treatment has been completed (clearance areas)
2. Protecting those areas from reinfestation

3. Preventing the infestation of areas to the west and south of the current biosecurity zones.

The remnant infestations within Area 1 and the Western Boundary area will receive up to three rounds of IGR treatment over approximately 33,200 hectares per round (99,700 hectares in total). The Program has reserved treatment for up to 10,000 hectares in the event that remnant infestations are found within Area 2.

Known significant detections outside of the operational area will receive up to three rounds of treatment covering around 52,000 hectares to prevent infestation of areas to the west and south of the current biosecurity zones.

The Eastern and Western Overlap areas will receive up to two rounds of treatment covering some 75,000 hectares to prevent reinfestation of those areas where eradication treatment has been completed.

The Program has notionally reserved treatment for up to 15,000 hectares in the event that new significant infestations are detected. When added to the 10,000 hectares nominally reserved for treatment of any remnant infestations within Area 2, this provides a contingency reserve of treatment for 25,000 hectares.

A summary of treatment areas and cost estimates is provided in Table 1. The planned treatment intervals for 2021–22 are shown in Table 2.

TABLE 1: INDICATIVE PROGRAM BUDGET

OBJECTIVE/ACTIVITY/AREA			**HA/COST**	
Objective	**Activity**	**Area**	**Ha**	**Cost (m)**
Containment	Responsive treatment	Non-treatment areas (FAB)	500	$0.16
		Non-treatment areas (IGR)	8,000	$1.59
		Polygyne	1,600	$0.52
		New Significant Detections	15,000	$1.54
	Planned treatment	Western Overlap	30,900[2]	$2.94
		Eastern Overlap	44,500[2]	$4.36
		Southern Suppression (Sth)	63,900[2]	$5.67
		Southern Suppression (Nth)	21,900[1]	$2.00
		Significant Detections (known)	51,660[3]	$4.83
	Sentinel surveillance		1,300	$0.33
	Targeted surveillance	Boundary Detections	2,300	$0.58
		Significant Detections	1,900	$0.48
	RSS – Significant Detections	Tarome and new sites	10,000	
	RSS – field verification	New Significant Detections	1,000	$0.25
	Responsive delineation		8,500	$2.13
Clearance	Treatment	Area 1/WB (known)	99,700[3]	$9.07
		Area 2 (new detections)	10,000[2]	$1.08

OBJECTIVE/ACTIVITY/AREA			HA/COST	
	Surveillance	Area 1/ WB (RSS - Aerial)	30,000	$3.93*
		Area 1/ WB (RSS - Field)	4,000	$1.00
		Area 2	4,500	$1.13
Stakeholder Mobilisation and Program Support			n/a	$19.33
Overspend 2020–21			n/a	$0.85
Gap treatment funding (5% of clearance treatment costs)			n/a	$0.68
Operational costs indexation (6.25%)[μ]			n/a	$2.26
			Total	**$66.70**

[(#)] – number of treatment rounds
* – includes all RSS
[μ] – two years of indexation applied to 2019–20 actual expenditure (including minor salary reimbursement)

TABLE 2: PLANNED TREATMENT AND SURVEILLANCE SEQUENCE

Treatment Area	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Western Overlap												
Eastern Overlap												
Southern Suppression (Sth)												
Southern Suppression (Nth)												
Clearance (Area 1/WB)												
Clearance (Area 2)												
Known Significant Detections												
New Significant Detections												
Responsive Treatment												
Self Management												
Surveillance												

STAKEHOLDER MOBILISATION

Fire ant eradication is possible with the ongoing support and participation of stakeholders; landholders, tenants, business owners, and elected government representatives. Recent social research has shown awareness around fire ants is very high (95%) and people are generally

supportive of the Program and are willing to help. The research shows that some stakeholders are unsure about which self-management options are suitable to them.

In this program year the Program will harness the support of stakeholders by making it easy for people to undertake the four key fire ant self-management behaviours needed to eradicate fire ants. Those behaviours are: looking for and reporting fire ants; self-treating fire ants; enabling access to properties for Program teams to treat fire ants; and not spreading fire ants.

Reducing barriers for stakeholders to adopt those behaviours will be a specific focus, contributing to a new model for the transition from Program-led responsive treatment to community-led treatment.

A clear, focused messaging approach and a stakeholder-centred design model will be used to build processes for fire ant management that are supported by critical stakeholder groups. Engagement will be transparent and inclusive, continuing to involve community and industry partners in key decision making.

OBJECTIVES

The objectives for stakeholder mobilisation for 2021–22 are to:

1. encourage stakeholders to look for and report fire ants.
2. build support among stakeholders for Program treatment and surveillance work.
3. encourage stakeholders within the fire ant biosecurity zones to self-treat fire ants.
4. reduce the likelihood of stakeholders spreading fire ants.

See Objectives 1–3 in the Key Performance Indicators table at the end of this document.

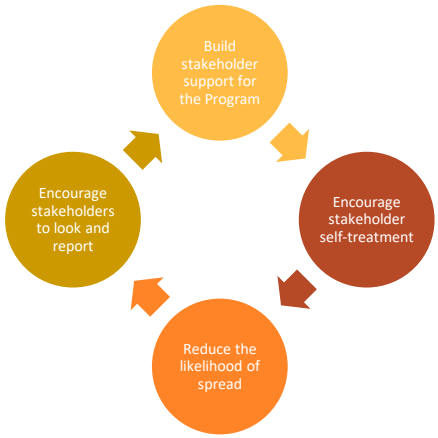


Figure 1 - Framework for stakeholder mobilisation

STRATEGIES

The mobilisation objectives will be achieved by implementing the following strategies:

RAISE STAKEHOLDER AWARENESS

A focused multi-channel campaign will be delivered across South East Queensland to raise stakeholder awareness around the four communication and engagement objectives:

Objective 1: Encourage stakeholders to look for and report fire ants.

- **Key message:** 'Look for and report fire ants'
- **Audience:** stakeholders in the surveillance area, clearance area, containment area and surrounding detections of importance.
- **Tactics:** social media advertising, local signage, industry notifications and industry publications.

Objective 2: Build support among stakeholders for Program treatment and surveillance work.

- **Key message:** 'Let our teams in'
- **Audience:** stakeholders in the treatment area, containment area and targeted treatment areas.
- **Tactics:** community mailbox drops, social media advertising, local signage, customer relations, industry meetings, access requests and case management.

Objective 3: Encourage stakeholders within the fire ant biosecurity zones to self-treat fire ants.

- **Key message:** 'Look for, report and treat fire ants'
- **Audience:** stakeholders in the western verge of the non-eradication area and suppression areas.
- **Tactics:** distribution of self-treat kits or vouchers to property owners for low risk detections, community and industry self-management projects, local council engagement, community mailbox drops and industry meetings.

Objective 4: Reduce the likelihood of stakeholders spreading fire ants.

- **Key message:** 'Don't spread fire ants'
- **Audience:** stakeholders in the biosecurity zone and in particular, stakeholders in areas newly added to the biosecurity zone. Emphasis will be placed on businesses in high-risk industries such as the building and development industry, nursery industry and hay farmers. Targeting in the community will focus on high-risk interest groups such as gardeners and backyard landscapers.
- **Tactics:** industry collaboration groups, compliance audits, promotion of prosecution outcomes, social media advertising, road signage and community group engagement.

BUILD STAKEHOLDER SUPPORT

Stakeholder support is essential to the success of the mobilisation objectives. Key stakeholders need to understand and believe that, as the national leader in the biosecurity response, the Program is working in the best interests and needs of communities and industries impacted by fire ants.
To enhance stakeholder support, the Program will focus on:

1. **Relationships:** developing, improving or strengthening relationships with critical stakeholder groups by actively engaging and listening to their perspectives; allowing other voices to be heard and sharing lessons learnt.
    - **Tactics:** engagement meetings and e-updates.
2. **Reputation:** building confidence in the Program and the whole-of-community approach to fire ant management by actively promoting Program progress and the support of community and industry leaders. We need to understand the customer experience with the Program and aim for continuous improvement.
    - **Tactics:** share good news stories and progress, improve front line staff interactions, engrain positivity into the campaign, communicate through community and industry advocates.
3. **Transparency:** sharing Program results openly and ensuring that stakeholders understand the challenges and strategies for overcoming them.
    - **Tactics:** publicly available reporting, publish outcomes.
4. **Inclusivity:** including stakeholders in the design and delivery of projects that directly impact them and building capability of stakeholders to contribute.

- **Tactics:** stakeholder collaborations, stakeholder-centric project design, public participation opportunities.

EMPOWER STAKEHOLDER PARTICIPATION

Ultimately, stakeholders will be empowered to participate in fire ant eradication activities and collaborate with the Program in eradicating fire ants. Stakeholders will be empowered through:

1. **Building capacity and capabilities:** making sure community and industry groups have on-demand access to training materials and instructive information about why, how and when they should undertake self-management activities.
2. **Making participation easy:** ensure systems, tools and products are available and simple to use, such as registration and reporting, access to templates and guidelines, and access to fire ant bait products.
3. **Partnering:** leverage groups with existing access into communities or industry groups and co-design and co-deliver public participation campaigns.
4. **Collaborative innovation:** allow opportunities for industries and communities to contribute to problem-solving, product development or enhancing the approaches to containment, suppression and eradication.

CONTINUOUS IMPROVEMENT

The Program will work to continuously improve tools and methodologies already employed to mobilise the community. These efforts will include:

1. Refinement and simplifying Program campaign strategy:
    a. Consolidation of existing Program campaigns into a single overarching campaign strategy tying all elements together.
    b. Revised messaging strategy focused on desired behaviours including greater emphasis on self-management.
    c. Refine processes to reduce red tape and improve speed of campaign delivery.
2. Work towards a new model to transition from Program lead responsive treatment to community lead self-treatment.
3. Building online systems to make it easy for stakeholders to adopt the behaviours needed to support the eradication work.
    a. Website development projects to support key behaviour goals (reporting, treating and not spreading fire ants)
    b. Establishment of dedicated Program campaign website.

CONTAINMENT

As noted above, containment of RIFA within the current infestation area will be a high priority for the Program in 2021–22. To continue to contain the SEQ fire ant infestation, a concerted effort must be made to mitigate both the natural and human-assisted spread of fire ants, and to eradicate fire ants detected outside of designated containment areas.

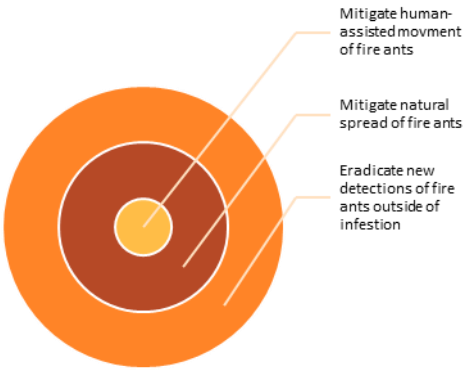


Figure 2 - Framework for fire ant containment

OBJECTIVES

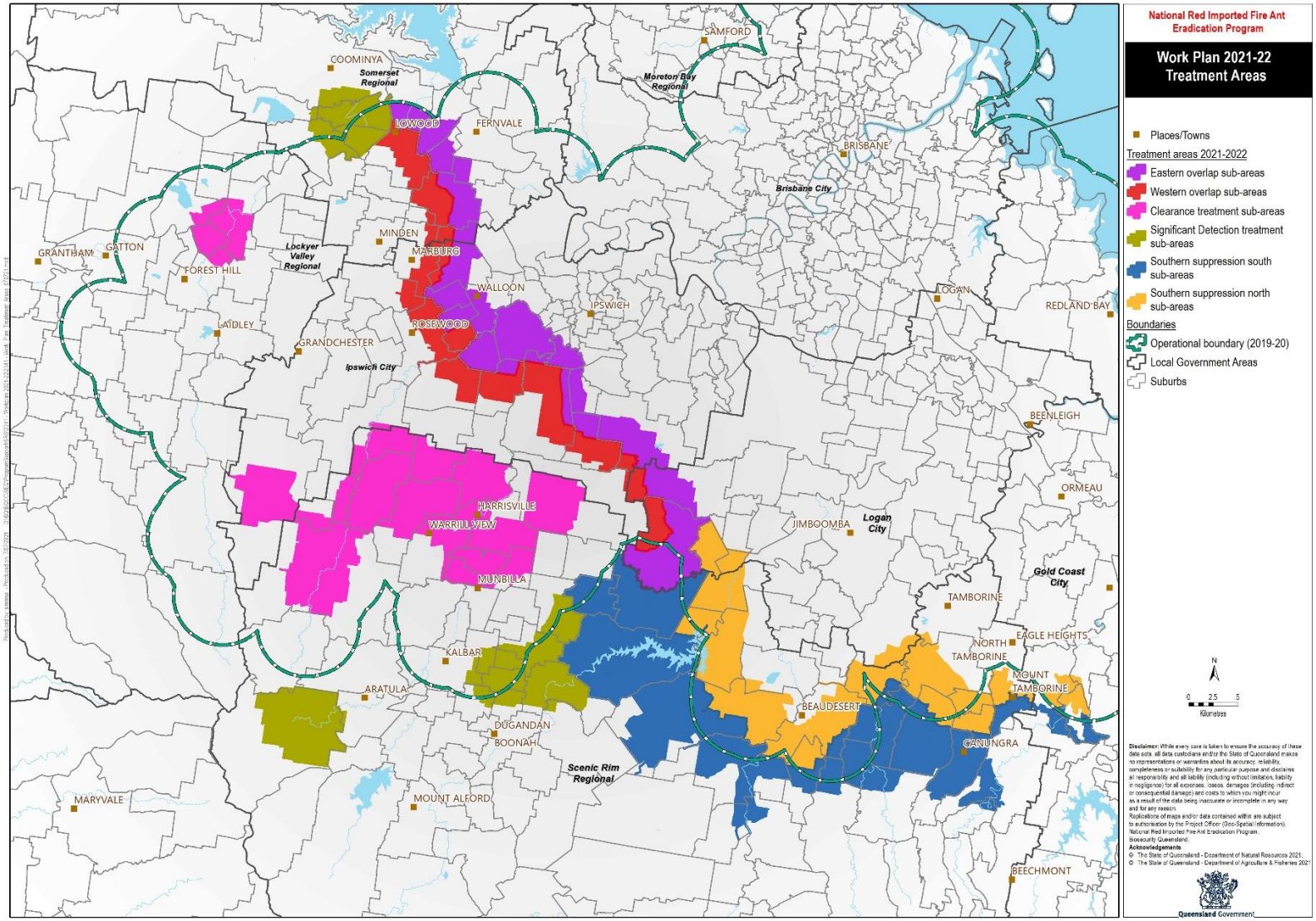
The objectives for fire ant containment over the remainder of 2021 are:

1. to prevent the spread and establishment of fire ants by reducing the intensity and vigour of the fire ant infestation
2. to prevent the spread of fire ants by restricting the movement of fire ant carriers (materials) within, between and beyond fire ant biosecurity zones
3. to prevent the establishment of fire ants near (within 5 km of) and beyond the most recent RIFA detection
4. to prevent the re-establishment of RIFA in eradication and clearance areas from fire ants in adjoining (within 2 km from—overlap areas) infested areas
5. assist with other (outside of SEQ) RIFA detection and eradication activities in Australia, if requested.

See Objectives 4–8 in the Key Performance Indicators table at the end of this document.

A map of the treatment areas is on the next page. This includes planned treatment areas outlined in the Containment and Clearance sections (pages 13 and 21).

MAP 1: TREATMENT AREAS



TREATMENT STRATEGIES

Strategies for containment treatment will be focused on the following treatment areas:

EASTERN OVERLAP AREA

Up to two treatment rounds comprising approximately 22,250 hectares per round will be applied to a 2 kilometre-wide strip along the eastern side of Area 2, from the suburb of Undullah in the south to the suburb of Patrick Estate in the north.

WESTERN OVERLAP AREA

The Program plans to conduct up to two additional treatment rounds of approximately 15,450 hectares along a 2 kilometre-wide strip on the western side of the Eastern Overlap from the suburb of Undullah in the south to the suburb of Rifle Range in the north. The majority of the Western Overlap received four treatment rounds during 2020-21.

When combining both the Eastern Overlap and Western Overlap together, the Program is treating a 4 kilometre-wide strip along the eastern side of Area 2.

SOUTHERN SUPPRESSION AREA

Up to two rounds of treatment are planned for the Southern Suppression (South) area, comprising approximately 31,950 hectares across a 2 kilometre-wide strip along the southern boundary of the operational area, adjoining the Eastern Overlap at Wyaralong and continuing eastwards to the suburb of Mount Nathan.

A 3 kilometre-wide strip of approximately 21,900 hectares along the northern boundary of the Southern Suppression (South), from the suburb of Flinders Lakes in the west and continuing eastwards to the suburbs of Benobble and Wonglepong, will receive up to one round of treatment.

RESPONSIVE TREATMENT

DETECTIONS OF IMPORTANCE

Detections of importance (detections outside the infestation area, up to five kilometres inside the infestation area, in clearance areas and eradication areas after three rounds of treatment) will receive immediate IGR bait and DNI treatment.

It is expected that up to 8,000 hectares will be treated to destroy detections of importance.

POLYGYNE DETECTIONS

Polygyne nests are more difficult to destroy and require additional rounds of IGR treatment. The Program has developed a polygyne strategy and maintains a polygyne register.

A notional allocation of up to four FAB applications on up to 400 hectares of polygyne infestations found within infestation area is included in the treatment plan. These applications would be in addition to the planned IGR rounds.

NON-TREATMENT AREAS

The Program will continue to respond appropriately to non-urgent new detections and treat visible nests with either FAB, DNI and/or IGR at time of sample collection. Treatment will be prioritised if there exists a high risk to public safety (e.g. schools, childcare centres, high-traffic areas, parks or sports fields).

Self-treatment will be encouraged for people reporting fire ants in the infestation area where there is no risk to public safety.

Depending on available funding, it is estimated that the Program will provide responsive bait treatment (FAB/IGR) over approximately 500 hectares to address new infestation throughout the year.

GENETIC ANALYSIS

A sample of fire ants will be collected from every site detection and subject to genetic analysis to test for:

1. the social form status of the fire ant infestation (monogyne or polygyne)
2. the genetic (microsatellite) marker pertaining to nest relatedness of each fire ant nest.

This information will allow analysis of the population genetics of the SEQ infestation and evaluate its spread and genetic health. Furthermore, with sufficient sampling and genetic analysis, the genetics of an individual fire ant detection can be used to evaluate whether a movement is through natural spread or human-assisted movement.

HUMAN-ASSISTED SPREAD MITIGATION

The spread of fire ants through human movement of fire ant carriers such as soil, gravels, mulch, compost, turf, hay and potted plants remains a major risk to the success of the Program. The high level of residential and commercial construction in SEQ, particularly on green-fields sites, amplifies this risk.

Several initiatives to manage these risks were identified in the 2020–21 Work Plan. In 2021–22 the Program will continue to progress the following projects:

- Risk profiling relevant industries
  - identifying the industries and operators whose work risks the movement of RIFA and assessing risk of spread with regard to the type of carrier, extent and frequency of carrier movement, location, size and compliance history
- Targeting the highest risk operators
  - through assessment of previous compliance history and in high risk sites such as those with high density or polygyne infestation
- Continuing to maximise deterrence
  - through using formal enforcement options (infringement notices, biosecurity orders and prosecution) and publicising enforcement action taken.

A new initiative around using modelling tools and intelligence to provide information on statistically likely human pathways is also being investigated.

COMMUNITY TREATMENT

Several Gold Coast suburbs may be targeted for self-management treatment or additional Program treatment should there be residual funding available toward the end of the treatment season.

If sufficient funding and partnership support is available, the initiatives listed in the following table may be implemented to encourage and facilitate treatment by residents, community groups and business.

Stakeholders	Projects
Community suppression	• Residents in suppression-treatment suburbs will receive bait from the Program to treat their own backyards, or part of the property that Program staff cannot easily access. This will complement treatment by Program officers in accessible areas of the properties (such as the front yard and verges).
Community groups treatment	• Management of the extension of Tamborine Mountain will be transferred to community groups.
Community responsive treatment pilot	• Residents, schools, sports grounds and recreational facilities that report nests will be offered bait to conduct routine treatment themselves, either proactively or responsively (after DNI has been applied by the Program).
Building and development training	• Developers with construction sites in suppression areas will be encouraged to undertake online training in fire ant treatment. • High priority developments (near containment or suppression areas) will be encouraged to have a fire ant management plan.

ASSISTANCE WITH NEW FIRE ANT INCURSIONS

The Program will continue to support responses to new incursions of RIFA outside of the current SEQ infestation. The Program will respond to any new fire ant infestations within Queensland and any request for assistance with eradication in any other Australian jurisdiction.

SURVEILLANCE STRATEGIES

Containment surveillance is aimed at mitigating the spread and establishment of fire ants outside of the current SEQ infestation.

SENTINEL SURVEILLANCE

The objective of sentinel surveillance is early detection of fire ant spread outside and within close proximity to the current infestation area / biosecurity zone. Sentinel sites are used to monitor for the presence or absence of fire ants in areas of highly suitable habitat for fire ants.

Sentinel sites will be placed approximately two kilometres apart,

- up to two kilometres inside and outside of the northern and western edges of the infestation area
- up to two kilometres inside and up to five kilometres outside the southern edge of the infestation area
- in and around waste facilities and turf farms

- on terrain that has been disturbed in the last 3 years
- at sites identified through waterway flow direction and flood height mapping analysis
- on terrain that is favourable to fire ant infestation (i.e. developments, cultivated land, roadside developments, waterway, commercial and industrial properties)
- in locations accessible to field teams
- in areas with less than 25% vegetation cover
- within proximity of known detections.

The total area planned for sentinel surveillance is up to 1,300 hectares, encompassing approximately 10 hectares of suitable habitat per site over 130 sites.

Infestation found on a sentinel site will trigger treatment, surveillance and tracing) for both the site and the surrounding area.

TARGETED SURVEILLANCE

The objective of targeted surveillance is to verify that detections within close proximity to the known infested area that present a high risk of spread beyond this area, exhibit no further spread or, for the early detection of further spread.

Site selection will be based on previous boundary and significant detections, previous surveillance, location and number of detections. The total area for planned targeted surveillance is approximately 4,200 hectares.

RESPONDING TO NEW DETECTIONS

The objective of responsive surveillance is to delineate the extent of the infestation to contain the spread in areas which have yet to undergo planned eradication treatment.

The estimated requirement for responsive surveillance is 8,500 hectares. This calculation is based on the delineation surveillance hectares surveyed during 2020-21.

Approximately 10,000 hectares of responsive remote sensing surveillance around new significant detections (including Tarome) will be undertaken and a corresponding 1,000 hectares is allocated for ground verification by field teams.

Clearance, significant and boundary detections will receive a minimum of 500 metre delineation surveillance and targeted surveillance of selected areas between 500 metres and 2 kilometres.
All new polygyne detections will receive delineation surveillance out to 100 metres around all nests.
All other new detections will receive delineation surveillance of around 10—100 metres depending on location, time of year and budget.

Some properties will be provided with fire ant bait to do on-going routine baiting of properties, after the Program's standard response activities are complete.

This is a year-round activity which is likely to change from week-to-week depending on the number of public reports received and on the level of infestation detected during planned surveillance.

ODOUR DETECTION DOGS

In addition to undertaking clearance surveillance, odour detection dogs may also be deployed to:

- undertake post treatment validation surveillance for detections of importance (in containment areas)
- assist with delineation surveillance for detections of importance deemed to be a high risk
- undertaking post treatment validation surveillance for high risk detections
- validating treatments of polygyne infestation.

For further information about odour detection dogs, see the description of 'Post-treatment validation surveillance' in the 'Clearance' section (below).

STRATEGIC PROGRAM IMPROVEMENTS

In addition to treating fire ants, there are several conditions necessary for the Program to achieve the objectives of the 10-year Plan, including an appropriate policy framework, an effective regulatory scheme and an actively engaged community. The following initiatives will progress the establishment of these necessary conditions.

NO MORE GAPS

The Program has recently undertaken analysis of the scope and scale of treatment gaps in areas where eradication treatment is in progress or has been completed. Understanding why the gaps exist is the first step in being able to rectify the source of the risk of reinfestation. Although landholder refusal of entry is a notable issue, more significant causes of gaps are difficult terrain and insufficient resourcing of ground teams. A specific allocation has been included in this year's Program budget to address the resourcing of ground teams.

The risk of damaging food crops is the chief constraint on delivering treatment and consequently the primary source of treatment gaps, accounting for around half of all gaps. This year, the Program will investigate the feasibility of economic approaches to dealing with crop-related gaps and the use of drones to access difficult terrain. The Program will also continue to work with the Australian Pesticides and Veterinary Medicines Authority (APVMA) to validate permit conditions associated with maximum residue levels in crops and post-treatment requirements.

LEVERAGING MULTI AGENCY CAPACITY

This year the Program will be examining the potential of multi-agency frameworks that could be used to leverage capacity and capability in pursuit of the Program's objectives. This could include collaborations with Queensland government agencies, local governments in SEQ, industry and regulators in other jurisdictions.

REGULATION ENHANCEMENT

The Program will be assessing the currency with respect to RIFA of the relevant sections of Queensland's biosecurity legislation. The controls associated with the movement of fire ant carriers in Queensland are currently under review and amendment of the Biosecurity Regulation 2016 to better reflect appropriate mitigation practises is likely to be required. It is also envisaged that the review will assist in the establishment of a standard for movement controls for fire ant carriers, supporting harmonisation of controls among market access regulators in other jurisdictions.

This assessment will be informed through consultation with industry stakeholders, relevant Queensland agencies and regulators in other jurisdictions.

REVIEW OF THE BIOSECURITY ZONES

The fire ant biosecurity zones are reviewed every six months or as required to align with the practices occurring within the Program e.g. the treatment and surveillance areas, the level of risk that requires attention and consideration for a suburb that may need to be included or excluded in the zone.

The regular review ensures the zones align with the Program's goals to eradicate RIFA. The zones will determine movement controls that are applicable to an individual or business moving or hosting fire ant carrier materials within or outside of the zone. As the Program moves its eradication strategy from the west to the east the number of suburbs will either increase or decrease, depending on key factors such as the level of risk, treatment and surveillance activity and compliance and communication engagement.

CONTINUOUS IMPROVEMENT

The Program will continue to invest in improving the containment efforts of the Program by:

1. investigating the revision of its existing modelling capacity and capability for scheduling refinement, strategic planning, scenario analysis and proof of freedom
2. conducting detailed analysis of all fire ant detections of importance
3. revising the risk profiles of fire ant carriers, locations and operators annually
4. reviewing operations management and response
5. ensuring that operational teams are performing to the level required
6. reviewing performance and reinforcing behaviour standards
7. reviewing resources (including equipment, vehicles and odour detection dogs) as required.

ERADICATION

Eradication treatment in 2021–22 will be focussed on destroying known and any new remnant infestations within Area 1, the Western Boundary area and Area 2. Further information is provided in the 'Clearance' section, below.

CLEARANCE

To justify concluding eradication treatment in SEQ, the Program must verify areas are clear of fire ants until all ants are eliminated. At the conclusion of eradication treatment, it is expected that some areas will have residual fire ant populations due to sites falling within the less than one percent of area that was untreated (i.e. due to community opposition or other operational issues), or because unknown polygyne fire ant nests exist that require extra treatment.

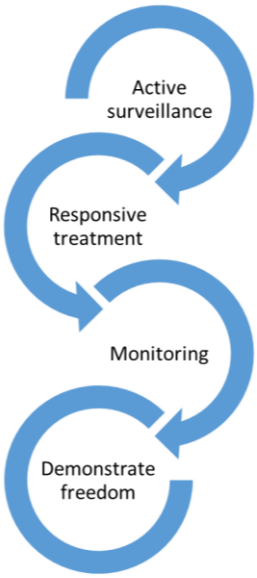


Figure 3 - Framework for fire ant Clearance and declaring area freedom

Consequently, the Program will adopt a standard Clearance strategy of:

1. surveillance of locations with highest risk of residual fire ants
2. treatment of any residual fire ants detected
3. ongoing monitoring (active and/or passive) to gather evidence for demonstrating freedom from RIFA.

In order to facilitate the progressive clearance of treated areas, the Program has adopted a system of 2500-hectare Clearance Zones. To be declared clear, each Clearance Zone must

a) receive a minimum 125 hectares of ground-based surveillance (or the equivalent in remote sensing surveillance) every year until:
    a. two consecutive years have passed without a fire ant detection or positive sample within 500 metres of the Clearance Zone
    b. one year has passed with no fire ant detections or positive samples from any neighbouring Clearance Zones
b) receive proper treatment to immediately destroy any known infestations detected within clearance activities.

Ongoing monitoring may be required for many years following the completion of eradication operations to demonstrate freedom from RIFA.

OBJECTIVE

To protect eradication areas from re-infestation and prove Area 1, the Western Boundary area and Area 2 are free from fire ants.

See Objective 12 in the Key Performance Indicators table at the end of this document.

TREATMENT STRATEGIES

Strategies for clearance treatment will be focused on the following treatment areas:

AREA 1 AND WESTERN BOUNDARY AREAS

Several remnant infestations were detected within Area 1 and the Western Boundary area during the previous Program year. These remnant infestations will receive up to 3 rounds of IGR treatment over approximately 33,200 hectares per round (99,700 hectares in total).

In the event that new significant remnant infestations are found within Area 1 and the Western Boundary area or outside of the biosecurity zones, the Program has notionally reserved treatment for up to 15,000 hectares for this purpose.

AREA 2

In the event that remnant infestations are found in Area 2, the Program has allowed for up to 10,000 hectares to be treated. The Program will assess the risk of new detections and revise planned treatment areas accordingly.

The Program will monitor new detections in Area 1, Western Boundary area and Area 2 and assess whether extended treatment is warranted. New treatment areas will be added where required and the Program has notional treatment allocations for this purpose. A four week contingency period is incorporated into each treatment round to accommodate delays associated with weather and resource scheduling.

SURVEILLANCE STRATEGIES

Clearance surveillance will be conducted with two aims and relevant methods:

1. surveying the 'riskiest' areas to identify remnant infestation
2. stratified surveillance over the entire eradication area to give an indication of eradication treatment effectiveness.

Map 2 (below) indicates the areas over which clearance surveillance will be undertaken.

AREA 1 AND WESTERN BOUNDARY AREAS

Up to 30,000 hectares of aerial remote sensing surveillance in Area 1 and Western Boundary area will be undertaken with a notional allocation of up to 4,000 hectares of ground surveillance to verify risk areas identified through remote sensing surveillance. Previous risk mapping and an analysis of detections in Area 1 and the Western Boundary area since 1 June 2020 will be used to select areas to be surveyed.

AREA 2

Surveillance will help detect remnant fire ant infestations in Area 2 post-treatment, with a focus on high-risk locations, and help evaluate the effectiveness of eradication treatments. Approximately 4,500 hectares over 36 clearance zones of ground surveillance will be undertaken by field teams in Area 2.

A risk map was developed summarising treatments in Area 2 based on length, continuity, and timing of treatment. The clearance zones were ranked according to risk – zones that have a larger area of high-risk properties will be ranked higher.

This surveillance will be scheduled for winter but if not completed in that period, will be conducted at other times during the year. In all clearance zones, at least 125 hectares from at least five sites will be surveyed. These surveys will be based on risk, but will also include areas of low risk.

POST-TREATMENT VALIDATION SURVEILLANCE

Odour detection dogs will be deployed to demonstrate the absence of fire ants at previously treated locations of infestation within Areas 1 and 2, the Western Boundary area and other detections of importance deemed to be high-risk.

Dogs are the most accurate and precise surveillance tool in the Program, capable of confirming presence or absence of ants in a clearly defined, discrete area. To achieve optimal results and high confidence from dog surveillance, dogs are tasked to search an area within a 30 by 30 metre search square centred around a given GPS point. This point is generally associated with a previously treated nest, or with a positive sample collection.

Tasking dogs in this manner allows them to thoroughly search the immediate surrounds of a previously identified nest in an 8-10 minute timeframe. This deployment approach supports the operational capacity of the dogs and ensures optimal engagement of dogs during searches. This deployment approach is also sensitive to the possibility of fire ant movement in response to nest disturbance during the treatment process, as colony movement is usually restricted to within 15 metres of the original nest site. Where sites have had a previously identified high density of mounds, dogs may be deployed strategically across the area to provide a high level of confidence that treatment has been successful.

A notional allocation of 500 hectares has been estimated for existing and forecasted odour detection dog surveillance. These teams will operate year-round.

PROOF OF FREEDOM

Following clearance, there is risk that fire ants remain undetected. Therefore, the Program has adopted a Freedom Surveillance Phase whereby optional further surveillance is used to mitigate risk of incorrectly declaring any place (i.e. Clearance Zone) free from fire ants.

The Program has crafted an economic analysis to account for the expected cost of further surveillance, and the risk of incorrectly declaring an area free from fire ants. As a rule, the analysis accepts that all additional surveillance mitigates risk posed by the possibility of undetected fire ants going untreated.

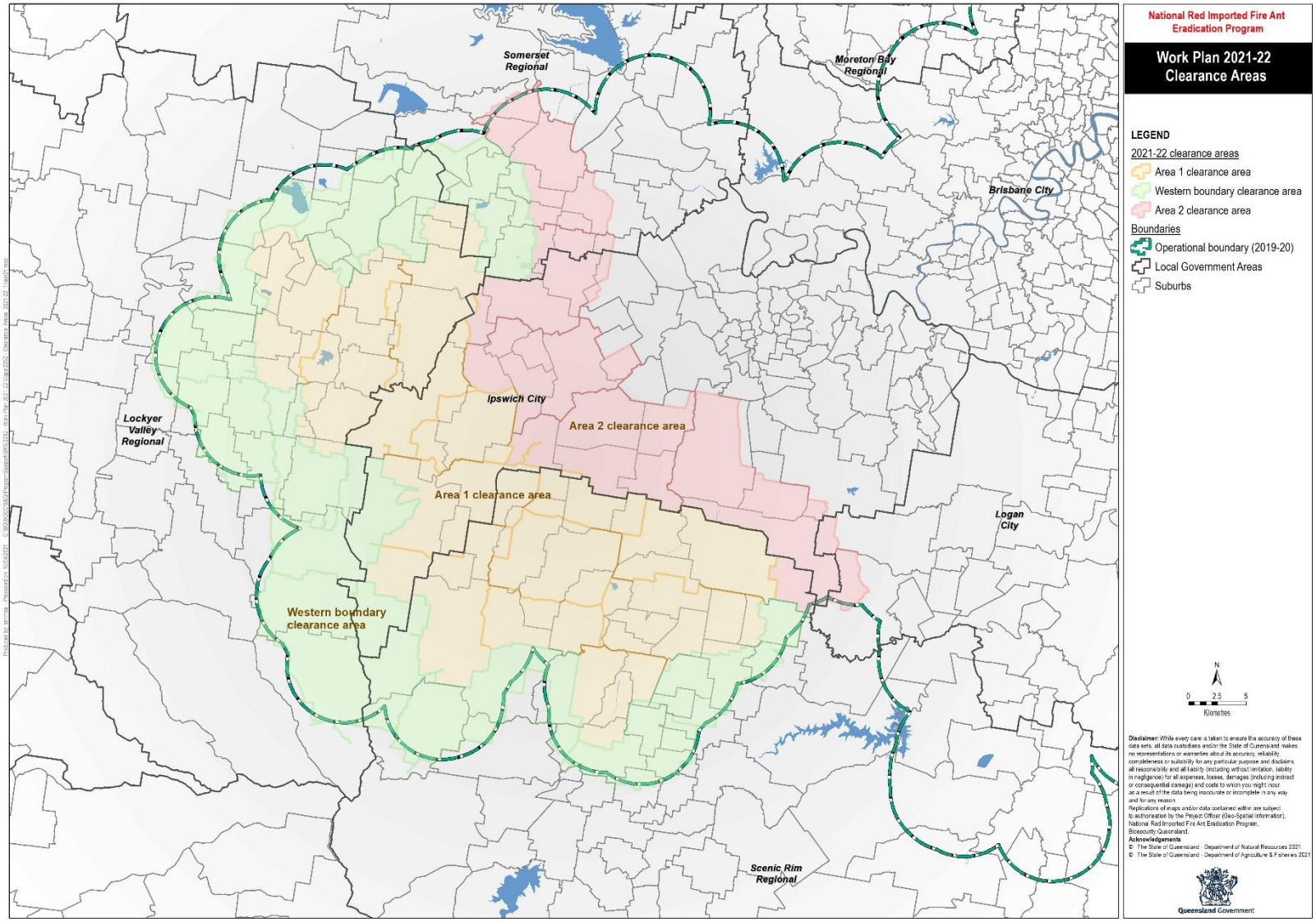
A feature of the economic analysis is a table of cost options that the Program can use to account for risk associated with a range of time / surveillance scenarios. Further modelling capabilities being investigated may be able to augment or replace these approaches.

CONTINUOUS IMPROVEMENT

The Program will continuously improve clearance activities by:

1. evaluating the efficiency and effectiveness of surveillance and treatment activities
2. rapidly adopting new surveillance and treatment technologies where appropriate.

MAP 2: CLEARANCE AREA



INNOVATION

ERADICATION TREATMENT, MONITORING AND SURVEILLANCE INNOVATION

Previous annual Work Plans and other documents have described several potential innovations to Program activities including:

a. artificial intelligence remote sensing technologies for RIFA

b. development of a wider range of RIFA bait products suitable for community self-treatment

c. real-time data and intelligence systems for the treatment and surveillance of RIFA

d. genetic tracing methodologies, to improve the Program's ability to trace spread (both natural and human-assisted) of RIFA

e. on-going research into novel control methodologies, including non-pesticide (RNAi) BioClay baits

f. participation in a national eDNA project around evaluation of Fire Ant assays for future eDNA base surveillance.

Subject to available funding, the Program will continue to progress these innovations, focussing particularly on the following:

REMOTE SENSING SURVEILLANCE

Further development of this technology in infested areas was completed in winter 2020, with further flights and training of the artificial intelligence algorithm increasing the sensitivity and precision of the prototype. In 2021, remote sensing surveillance will begin the transition to operational deployment in May at the beginning of the surveillance season. This next project is anticipated to cover 40,000 ha, focusing on clearance surveillance in Area 1 and the Western Boundary, as well as other targeted areas where large areas are required to have infestation delimited (e.g. Tarome significant detection).

INSECTICIDE TREATMENT INNOVATIONS

Further research in current and innovative insecticide treatments will occur in 2021–22, including:

a. **Wettable baits** – Current fire ant baits are ineffective if applied in wet weather, which results in significant days lost each season due to rain. This is due to the bait (rather than insecticide) denaturing in wet weather and becoming unappealing to RIFA. The Program is currently working with two collaborators (one chemical company, and one university research group) and will continue this collaboration into 2022.

b. **Combination insecticide treatments** – Further assessment of the new eradication treatment approach in Area 2 will be conducted in late 2021. Specifically, this new approach looked at applying four rounds of treatment (either all IGR bait or three IGR plus one FAB) in a single treatment season.

c. **Application of baits with drones** – Bait application by drones will be trialled during the 2021–22 treatment season. Preliminary trials indicate that baiting with drones is possible (i.e. drift and downwind issues can be managed). The next step in trials is looking at cost benefit for a variety of usage cases against alternative methods.

d. **Alternative insecticides and carriers** – The Program will be conducting some preliminary assessments on new baits and chemical products that have either been newly registered in

Australia, or have demonstrated efficacy against RIFA overseas. Additionally, water crystals will be investigated as an alternative carrier for current insecticides, to improve the application in adverse weather conditions (drought and rain) and provide a more accessible nutrient source.

RESEARCH AND COLLABORATION STRATEGY

Whilst the eradication Program uses a number of tools and technologies to undertake activities, it is recognised that further research and innovation would put the Program in the best position to achieve efficient eradication in a complex and challenging environment. A Research and Collaboration Strategy has been developed to extend current research activities and engage the community and stakeholders to leverage expertise from a range of agencies, including academia, government and the private sector. For example, one area of this strategy will be approaching universities and developing collaborative agreements where the Program will provide project topics and support for students undertaking priority research.

PROGRAM SUPPORT

BUSINESS INFORMATION SYSTEMS

The Program's two primary Business Information Systems are the Fire Ant Management System (FAMS) and Community and Stakeholder Engagement System (CaSES).

FAMS is used to manage the operational activities in relation to the treatment and surveillance of fire ants. The Digital Field Capability Implementation Project recently completed the implementation of the Forage application. Forage enables field staff to access FAMS data on mobile devices, replacing existing 'offline' static systems with dynamic systems that enable real-time reporting and decision-making.

CaSES is the Program's customer relationship management system and holds a record of the Program's interactions with external stakeholders. This system is a Microsoft D365 software tool that manages client contact information and supports engagement with the public and Industry.

The Program uses an agile approach in the management and eradication of fire ants. On-going evolutions in the Program's business processes, science and technologies require continuous improvements to its systems to capitalise on these potential efficiencies. The implementation of new initiatives such as self-management and remote sensing surveillance generates new requirements for the Program's systems.

The Program will continue to pursue enhancements to business information systems to further improve efficiency in the Program's field surveillance and treatment activities.

GOVERNANCE

The Program will continue to be managed in accordance with public sector administration best practice. Processes and strategies are in place to ensure the appropriate expenditure of Program funding and the effective management of human and other resources and program risks. The Program is governed by a number of committees and advisory groups, as follows:

THE NATIONAL RED IMPORTED FIRE ANT ERADICATION PROGRAM STEERING COMMITTEE

The National Red Imported Fire Ant Eradication Program (SEQ) Steering Committee (the Steering Committee) provides guidance and support to the Program on all aspects of the Program's delivery to ensure that it has the best chance of achieving its objectives. The membership is made up of senior officials from the Australian, state and territory governments, with an independent chairperson. The Steering Committee meets quarterly and on an ad-hoc basis when necessary to assess the Program's progress and provides strategic advice on challenges faced by the Program. Secretariat support is provided by the Program.

NATIONAL EXOTIC INVASIVE FIRE ANT SCIENTIFIC ADVISORY GROUP

The Steering Committee established a National Exotic Invasive Fire Ant Scientific Advisory Group (SAG) to provide specialist scientific advice on exotic invasive fire ant eradication. The Group is funded through the Program and reports directly to the Steering Committee. Members of the SAG are nominated by the members of the Steering Committee. The SAG meets formally twice per year and has smaller working group meetings as required. Secretariat support is provided by the Program.

RISK MANAGEMENT SUB-COMMITTEE

The Risk Management Sub-Committee (RMSC) has been established to provide assurance to the Steering Committee and cost-share partners about the suitability and relevance of the Program's risk management structures and arrangements. Membership comprises the Steering Committee Chair, two or more members of the Steering Committee, one external non-government risk specialist and one external government risk specialist. The RMSC meets twice a year and secretariat support is provided by the Program.

It is noted that DAF's internal audit and risk committee also has a function in relation to the Program's risk to DAF as an organisation (as opposed to the operational risks faced by the Program itself).

PROGRAM REPORTING

A comprehensive reporting regime enables Program managers and the Steering Committee to continually monitor the Program's performance, ensuring resources and capabilities are utilised efficiently and effectively.

The Program will provide the Steering Committee with a weekly highlights report, a monthly exceptions (against KPIs) report, quarterly and annual reports on the activities undertaken in the preceding period and progress toward the objectives of the 10-year Plan. The Program executive will subsequently review the activities detailed in each report to identify impediments to the achievement of those objectives, possible solutions and opportunities for further Program improvement.

An annual work plan will also be provided to the Steering Committee for its endorsement, prior to the commencement of the new financial year.

TABLE 5: GOVERNANCE COMMITTEE MEETING AND REPORTING SCHEDULE 2021–22

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Meetings												
Steering Committee		19			18			17			19	
Scientific Advisory Group				tbc						tbc		
Risk Mgt. sub-committee		18						16				
Stakeholder Forum								TBC				
Reports												
Annual Report						31						
Quarterly Repot	31			31			31			31		
Monthly Report	17	14	18	16	13	18	15	19	19	16	14	18
Weekly reports												
Plans												
Annual Program Work Plan											19	

BUSINESS SERVICES

Business and administrative functions associated with office accommodation, operating depots, vehicle and asset management, procurement of services, expendables and capital equipment will continue to be undertaken within established operational guidelines, systems and processes. New approaches and procedures will be developed where required.

PROCUREMENT

The Program will support information sessions and training in procurement, contracts management and contract performance reviews for relevant staff and financial delegates. The Program will undertake a strategic review of the major contracts between the Program and suppliers of bait and aerial services including labour hire to undertake office and field work during the treatment season.

A forward schedule of procurement activities to be undertaken will be developed and will align with Program strategic and operational plans. It will establish a process to periodically assess contract management activities such as compliance with key processes and controls, assignment of contract management roles and responsibilities and completion of required documentation (e.g. contract management plans/checklists).

HUMAN RESOURCES AND FINANCE

The ‘workforce group’ comprising representatives of each business area will continue to raise and discuss issues directly with the General Manager.

The regular all-staff breakfast barbecues will continue, including the site visits enabling senior management to inform staff about Program progress and initiatives and provide a forum to address staff queries and concerns.

The Program will continue to work with the wider organisation to provide strategic advice and support in the implementation and application of relevant legislation, awards, directives, standards, policies and procedures. This will include managing the business resources and budget to facilitate delivery of services and/or products including regular reporting against agreed targets.

WORKPLACE HEALTH AND SAFETY

The Program will increase awareness of health and safety in the workplace through training sessions to improve the safety culture and encouraging staff and management to accurately report incidents in a timely manner. Measurable incident reporting targets will be defined which align with internal control measures.

The Program will report on the number and type of incidents including a trend analysis of current data to the previous quarter/years data, showing trends of seasons and types of incidents to allow a change in processes or procedures to reduce incidents over time.

Scheduled inspections for each work site will be undertaken and outcomes reported.

KEY PERFORMANCE INDICATORS

NOTE: these KPIs reflect an expected annual treatment and surveillance program developed in accordance with the strategy defined in the Program's Ten Year Eradication Plan. Variations between the treatment and surveillance activities defined in this Work Plan and those defined in an expected annual plan mean that some of these KPI targets may not be met in 2021–22. Relevant explanations will be provided in quarterly performance reports.

		Objective	KPI	KPI Target (2021–22)
Stakeholder mobilisation	1	Stakeholders within, and adjacent to, the fire ant biosecurity zone are aware of the presence of fire ant, risks, controls and options to manage them	a. Percentage of stakeholders reporting awareness of the presence of fire ants in SEQ	95% of stakeholders report awareness in surveys by June 2022
			b. Percentage of stakeholders aware of the risks posed by fire ants	95% of stakeholders report awareness in surveys by June 2022
			c. Percentage of stakeholders reporting awareness of fire ant biosecurity zones	85% stakeholders report awareness in surveys by June 2022
			d. Percentage of stakeholders reporting awareness of fire ant self-treatment options	50% of stakeholders report awareness in surveys by June 2022
	2	Stakeholders within the fire ant biosecurity zone support the Program and its activities to eradicate fire ants	a. Percentage of stakeholders opposing NRIFAEP operations	Less than 1% opposition annually
			b. Percentage of stakeholders disclosing satisfaction with NRIFAEP operations	80% satisfaction disclosed by stakeholders in surveys by 2022
	3	Stakeholders within the fire ant biosecurity zone actively participate in fire ant self-treatment actions (i.e. checking yards, reporting fire ants and/or treating fire ant)	Percentage of stakeholders participating in fire ant self-treatment actions	90% stakeholders participating in fire ant self-treatment actions by June 2022

		Objective	KPI	KPI Target (2021–22)
Containment	4	To mitigate the spread and establishment of fire ants by reducing the intensity and vigour of the fire ant infestation	a. Percentage of stakeholders who treat fire ants themselves (i.e. self-treatment)	10% increase annually in stakeholders who treat fire ants themselves
			b. Percentage of fire ant infestations that are polygyne	Less than 1% of fire ant infestations are polygyne
			c. Relative spread of fire ants within the containment area measured through population genetics	Maintain at 4 or increase the number of genetically distinct fire ant populations (i.e. family clusters) within SEQ
	5	To mitigate the spread of fire ants by restricting the movement of fire ant carriers (materials) within, between and beyond fire ant biosecurity zones	a. Percentage of high-risk stakeholders aware of fire ant movement controls	95% high-risk stakeholder awareness by June 2022
			b. Percentage of high-risk stakeholders checked for compliance with human-assisted fire ant movement controls	The top 25% riskiest stakeholders identified were checked for compliance at least once annually
			c. Number of significant detections linked to human-assisted movement	Zero significant detections linked to human assisted movement
	6	To mitigate the establishment of fire ants near (within 5 km) and beyond the 2020–21 operational boundary	a. Total area that is surveyed for fire ants near and beyond the operational boundary	Area surveyed in a surveillance season is increased by 66% from 2019–20 levels by June 2022
			b. Percentage of stakeholders living near and beyond the operational boundary who look for and/or treat fire ants themselves	50% stakeholder participation by June 2022
			c. Presence/absence of fire ants following prescribed treatment regime at a site detection of fire ants near and beyond the 2020–21 operational area	Zero fire ants that are likely to be from original nests remaining alive 12 months after prescribed treatment regime
	7	To mitigate the re-establishment of fire ants in eradication and clearance areas from adjoining	a. Percentage of stakeholders living in buffer areas who look for and/or treat fire ants themselves	75% stakeholder participation by June 2022

	(within 2 km from—buffer areas) fire ant infested areas	b. Percentage of buffer area receiving the prescribed treatment regime for fire ant containment (i.e. 2x insecticide treatment)	Prescribed treatment regime applied to 99% of planned area
		c. Presence/absence of fire ants following application prescribed treatment regime for fire ant containment at a site detection of fire ants within a buffer area	Zero fire ants remaining from original nests 12 months after prescribed treatment regime completed
8	Assist with other (outside of SEQ) fire ant detection and eradication activities in Australia as requested	The reported level of stakeholder satisfaction with the Program's response to requests for assistance with new fire ant incursions	100% satisfaction reported by stakeholders

		Objective	KPI	KPI Target (2021–22)
Eradication	9	To effectively eradicate fire ants from targeted areas within SEQ	a. Percentage of stakeholders who support NRIFAEP activities within the eradication area	Less than 1% of stakeholder opposition annually
			b. Total area receiving prescribed treatment regime for fire ant eradication (i.e. all planned insecticide treatment rounds)	Prescribed treatment regime applied to 99% of planned area
			c. Number of fire nests infestations in monitoring (positive control) sites following completion of prescribed treatment regime	Zero fire ants present in monitoring sites within three months of completion of prescribed treatment regime
			d. Percentage of eradication area within which fire ants are detected following prescribed treatment regime completion	Residual fire ant infestations are detected in less than 1% of the total eradication area
	10	To progressively decrease the fire ant infestation in SEQ through targeted eradication	Increase in the operational area that has effectively completed a prescribed treatment regime for fire ant eradication (as in #9)	38% of the 2021–22 operational area by June 2022
	11	To reduce the cost of fire ant eradication treatment, monitoring and surveillance activities while meeting KPIs	a. Average per hectare cost of the Program's prescribed treatment regime to effectively eradicate fire ant	Average per hectare cost of applying prescribed treatment regime for fire ant eradication is reduced by 33% from 2019–20 costs by June 2022
			b. Average per hectare cost of the Program's fire ant monitoring and surveillance regimes to effectively eradicate fire ant	Average per hectare cost of monitoring and surveillance regime is reduced by 33% from 2019–20 costs by June 2022

		Objective	KPI	KPI Target (2021–22)
Clearance	12	To detect and destroy any residual fire ant infestations and gather evidence to support the demonstration of freedom from fire ants in clearance areas	a. Searches of locations deemed to be at highest risk of residual fire ant	The top 10% riskiest sites have been searched by June 2022
			b. Total area searched for the presence/absence of fire ant	Area searched enough to have at least 50% probability that 95% of clearance zones are cleared of fire ants within three years
			c. Presence/absence of fire ants in areas searched	Zero fire ant detections at sites other than the top 20% riskiest locations
			d. Presence/absence of fire ants following application of prescribed treatment regime for fire ant clearance at a site detection of importance	Zero fire ants remaining from original nests 12 months after prescribed treatment regime completed

GLOSSARY

TERM	DEFINITION
Biosecurity zones	Fire ant biosecurity zones (zones) have been established in areas of South East Queensland where fire ants have been detected or where it is likely that fire ant infestation exists. Movement controls restrict movement of fire ants and fire ant carriers within and out of the zones to help prevent human-assisted spread.
Boundary detection	A new detection found up to 5km inside the Infestation area boundary.
Carrier materials	Materials that are capable of moving fire ants such as soil, mulch, animal manure, baled hay or straw, potted plants and turf.
Community surveillance	Searching by the community, industry and other areas of government for fire ants.
Clearance	Searching for and destroying any remaining or new infestations of fire ants in an area, and ongoing monitoring of sites in that area until enough evidence is gathered to declare the area free from fire ants.
Containment	The prevention of the spread of fire ant infestation through either suppression activities (see below) or actions to prevent fire ants travelling such as movement controls within biosecurity zones.
Delineation surveillance	Surveillance undertaken around new detections to confirm the extent of the infestation.
Direct nest injection (or DNI)	The injection of contact insecticide directly into a nest or mound to kill the colony which destroys the nest within an approximate five day time period.
Eradication treatment	The treatment regime, including chemicals, rates and methods of application specified by science and regulation, required to achieve eradication of fire ants from an area.
FAB	Fast-acting bait
Genetic testing	Refers to a range of specific tests, and analyses of the results produced from these tests, to determine genetic traits, that indicate the fitness of individuals in fire ant samples and the relatedness of colonies within the infestation.
High density infestation	An infestation of more than 40 fire ant nests per hectare.
High risk detection	Those detections that pose the greatest risk to eradication through location or density of infestation, or pose a risk to public safety and to human and animal health.

TERM	DEFINITION
Monogyne	A colony where all the progeny are produced from a single queen.
Movement controls	Movement controls reference biosecurity zones and apply to individuals and commercial operators, and restrict the movement of materials that could carry fire ants.
Odour detection dog	Dogs specifically trained for the purpose of searching for and positively identifying fire ants.
Infestation area	Total area of known infestation confirmed by delimitation and adjusted for predicted infestation spread since completion of delimitation. The Infestation area for 2020–21 is defined as 5 km from all known infestation detected from 1 July 2013 to 31 August 2019.
Infestation area boundary	The line drawn around the Infestation area.
Penalty infringement notice (PIN)	A fine, under the Biosecurity Act 2014, available for a range of offences, including moving a fire ant carrier within or out of a fire ant biosecurity zone without following movement controls.
PMTs	Pest Management Technicians (also known as 'pest controllers').
Polygyne	A colony where the progeny are produced by a number of queens. Polygyne colonies tend to have higher nest/mound densities and reproductive rates than Monogyne colonies. Polygyne infestation is generally more difficult to eradicate due to the need to treat multiple queens with bait; and their increased ability to found new colonies if they become dispersed (i.e. if some queens in a nest are killed, the workers will move the remaining queens to safety in a new location).
Remote sensing surveillance (RSS)	Remote sensing surveillance involves the collection and analysis of aerially captured imagery to survey for the presence of fire ant mounds.
Sentinel surveillance	Specific sites (sentinels) that are monitored for the presence or absence of fire ants.
Significant Detection	A new detection found outside the Infestation area boundary.
Steering Committee	A committee of nominated representatives from the Program's cost-sharing partners, with an independent chair, tasked with providing oversight of performance and risk.
Suppression activities	The minimum required treatment and surveillance required to contain and suppress the spread the spread of fire ant infestation.

TERM	DEFINITION
Treatment season	Treatment is undertaken during the warmer months when fire ants are more likely to forage. The season extends approximately from September to May, however this may be extended depending upon continuing evidence of ant foraging.