



NATIONAL

Fire Ant Eradication

PROGRAM

National Red Imported Fire Ant Eradication Program Work Plan

SOUTH EAST QUEENSLAND

FY 2022–23



Queensland
Government

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BACKGROUND

Red imported fire ants are rightly considered a super-pest globally, causing high long-term public health, agricultural, economic and environmental costs – including extinctions of species – in countries they invade. In Australia, an incursion in south-east Queensland (SEQ), probably present since 1992 but found in 2001, has been under attempted eradication ever since.

The National Red Imported Fire Ant Eradication Program (NRIFAEP) was formed in 2001 in response to the detection of fire ant in Brisbane, Australia. NRIFAEP is a national cost-shared program funded by all Australian state and territory governments, and the federal government, delivered by Biosecurity Queensland, which aims to eradicate Red Imported Fire Ants (fire ants) from SEQ.

In 2017, a cost-shared Ten-Year Plan was approved by all Australian governments, with \$411.4 million for the Queensland Government to eradicate fire ants from SEQ by 2027. This program has been governed by a national Steering Committee – which consists of representatives from the Program’s cost-sharing partners, with an independent chair – which advises the Queensland Government on fire ant eradication strategy and supplies oversight of Program performance and risk.

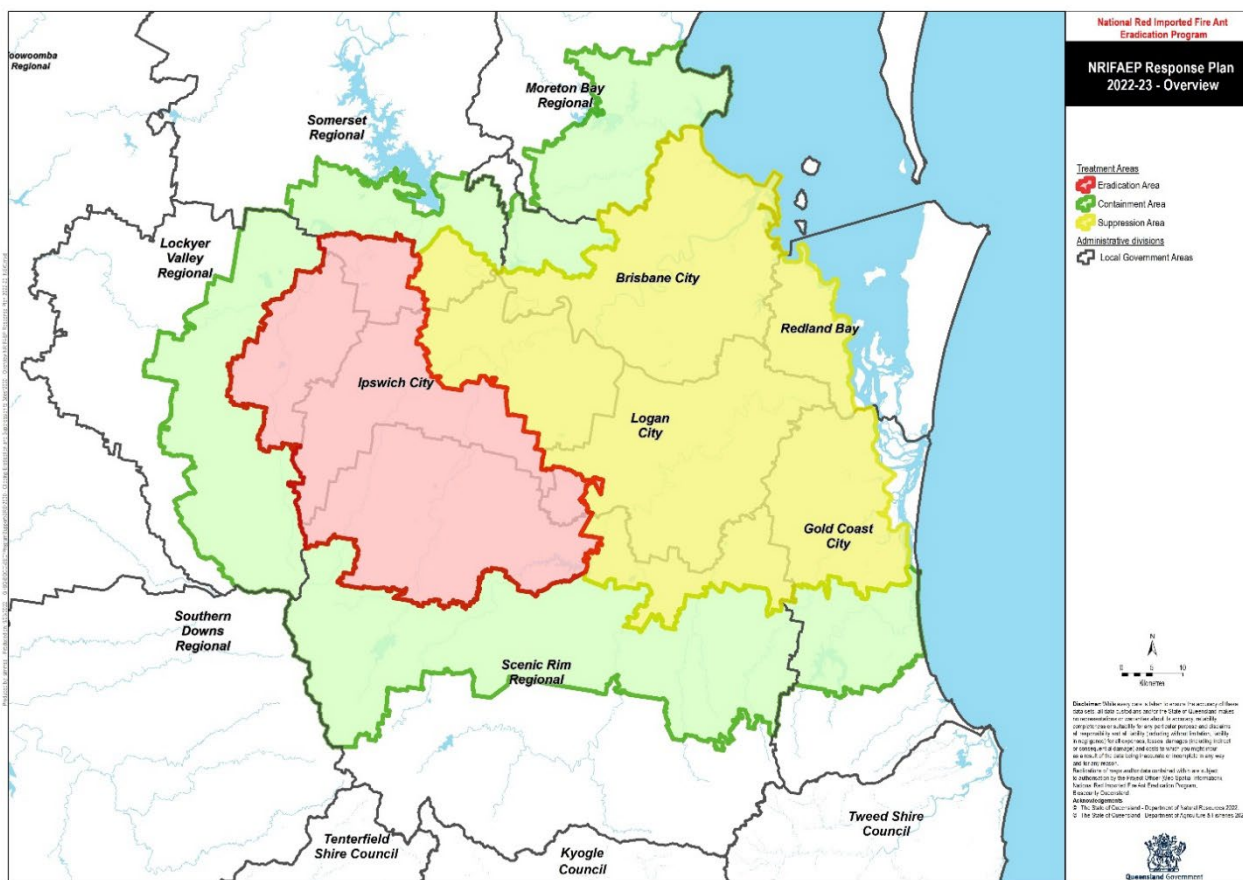
More information about fire ants, the program’s history and the national steering committee can be found at: <https://www.fireants.org.au/home/about-us>

On 3 September 2021, the Independent Review Panel delivered its strategic review 2021 of the NRIFAEP. On 9 December 2021, cost share partners agreed, through the Agricultural Senior Officials Committee (AGSOC), that responsibilities for eradication/containment should remain with the National Program and suppression should be a Queensland responsibility. Cost share partners also indicated, subject to budget approval, they will continue to support the Program, including the bring forward of \$95 million of existing approved funding for 2022-23, until the revised strategy and funding agreement can be considered.

From 2022 and in response to the NRIFAEP strategic review 2021, the Queensland Government has initiated the Fire Ant Suppression Taskforce (FAST). This task force is aiming to mobilise government (local, State and Commonwealth), community and private businesses to increase fire ant suppression activities. The taskforce is chaired by the Director General of the Queensland Department of Agriculture and Fisheries (QDAF). This taskforce is governed independently of but operates collaboratively with NRIFAEP to achieve strategic goals.

The National Red Imported Fire Ant Response Strategy (2022 – 2027) is also currently in development (in response to the NRIFAEP strategic Review 2021), which is defining the strategy to scale up fire ant eradication efforts in Australia. This workplan has been created with consideration of the draft strategy, but operates officially under the approval NRIFAEP Ten Year Plan and Governance Plan. This workplan presents the scope of work planned to be completed by NRIFAEP in the 2022 – 2023 financial year subjected to cost share partners bringing forward existing funding to allow the NRIFAEP to scale up eradication activities.

OPERATIONAL AREAS



From 2022, the program will work to scale up fire ant eradication and suppression operations in order to contain, suppress and eradicate fire ants from Southeast Queensland. The area of operations has been divided up into three areas: *Eradication Area*, *Containment Area* and the *Suppression Area* (Fig. 1).

Figure 1 Map of the operational areas for responding to fire ants in FY2022 – 2023

As per the 2021 NRIFAEP Strategic review, NRIFAEP will remain responsible for treatment and surveillance operations within the *Containment* and *Eradication Areas* and retain responsibility for broad-scale communications across the operational zone. Unless otherwise specified, operations within the *Suppression Area* will be planned and managed by the Queensland Fire Ant Suppression Taskforce.

TREATMENT

An area of approximately, 583 500 ha, has been identified for targeted broadscale treatment across the Containment and Eradication areas in 2022-23. These areas will receive between 1 and 3 rounds of treatment with the aim of maintaining a similar regime into the future until treatment monitoring, surveillance and modelling indicates that treatment has been effective and fire ants are no longer detected.

The purpose of eradication and containment treatment is to reduce the number of fire ants detected within these areas to zero, and to prevent the spread and establishment of fire ants beyond the current infestation.

NRIFAEP research into the optimal treatment regime indicates that repeated bait treatments utilising insect growth regulator (IGR) baits are effective at eradicating fire ants, but can potentially be enhanced by the

incorporation of toxicant (fast-acting) baits. Trials will continue over approximately 500 ha during the 2022-23 treatment season to determine benefits and cost-effectiveness of incorporating toxicant baits in comparison to treatment regimes comprising IGR baits only.

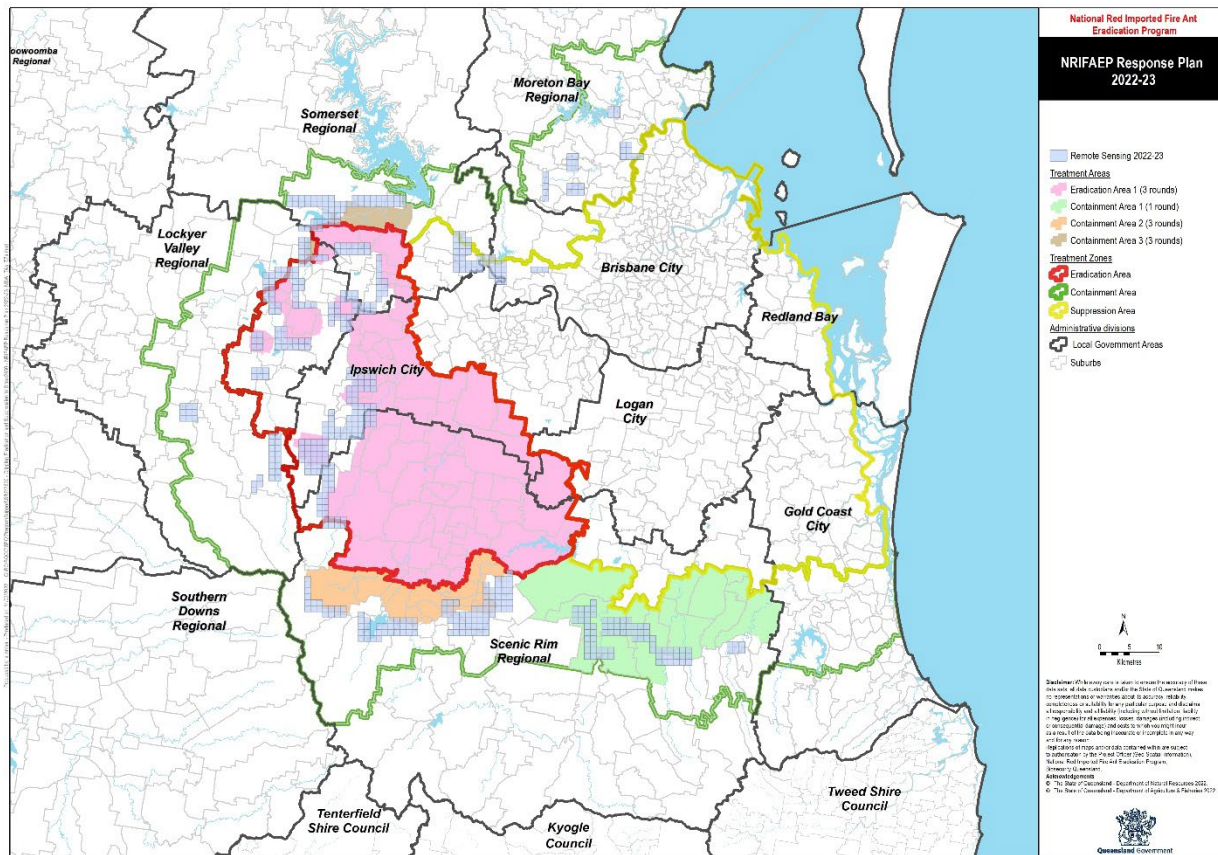


Figure 2 – Map showing Eradication and Containment areas with proposed 2022-23 treatment areas

Priority areas within the eradication and containment areas that pose a risk due to a recent detection of fire ants have been identified for treatment by NRIFAEP in 2022-23. This includes, up to three rounds for identified areas within both the eradication and containment areas during spring, summer and autumn. One round to be delivered in the southern part of the *Containment Area* during summer or autumn (Fig. 2).

Following the completion of the treatment season, surveillance (refer to surveillance section below) will be undertaken to provide information about whether any infestation remains in the treated areas. Following the surveillance season, NRIFAEP officers will analyse surveillance data to determine whether changes to the treatment plan are required.

TREATMENT AREA PLAN

Containment – Broadscale treatment of the Containment area (approximately 379 000 ha) will be undertaken over several years to prevent the spread of fire ants beyond their current extent. The NRIFAEP will scale up to apply three rounds of treatment annually in a ring at least 10 km outside and 2 km inside of all known fire ant detections. While doing so, the NRIFAEP will identify potential gaps and issues before treatment, while also engaging landowners as necessary. The outer boundary of the Containment area will form the new operational boundary.

In 2022-23 the NRIFAEP will focus on areas that pose the highest risk to containment breaches, as a result approximately 78,800 ha will be treated in the containment area. By the commencement of the 2023–24 treatment season, the NRIFAEP aims to scale up its capacity and capability to achieve additional rounds of treatment per annum across broader parts of the Containment area.

To protect the *Eradication Area* from re-infestation from the suppression area, in 2022-23 the NRIFAEP will apply broadscale treatment in a 5 km area along the eastern boundary of the eradication area (excluding land that is unsuitable for fire ants) with the aim that the area can transition to the proof of freedom stage in the future.

Suppression – The *Suppression Area* covers over 362 000 ha. Unless otherwise specified, operations within the *Suppression Area* will be planned and managed by the FAST.

Eradication – In 2022-23 eradication treatment will target risk areas (estimated to be between 150 000 and 175 000 ha), the NRIFAEP will apply up to three rounds of treatment. For areas in the eradication area not deemed high risk, broadscale treatment of these areas (approximately 205 000 ha) will be undertaken over several years. It is anticipated that in future years the target area requiring treatment will decrease progressively.

Furthermore, if detections occur outside of planned treatment areas, an outbreak response will be mounted to begin eradicating these infestations. Depending on the level of risk, an outbreak response may include extensions to the existing treatment areas to complete multiple, broadscale treatment rounds over the area. In 2022-23 a contingency of approximately 50 000 ha will be allocated for this purpose.

Final treatment areas and hectarages will be adjusted prior to treatment season commencement in September 2022, once analysis of the surveillance results and any identified infestation risks. Any proposed changes to the treatment schedule will be communicated to the Steering Committee.

AERIAL TREATMENT

- Aerial treatment is the preferred method of NRIFAEP treatment for cost effectiveness. During 2022-23 the NRIFAEP will aim to complete up to 500 000 ha or 88% aerially.

GROUND TREATMENT

- Areas that are unable to be treated aerially include residential areas and buffer areas around occupied dwellings. In these areas, the NRIFAEP will conduct ground treatment by field teams on foot or using Utility Terrain Vehicles (UTVs). Within the treatment area it is estimated that an area of up to 70 000 ha or 12% is not suitable for aerial treatment and will require ground treatment (including aerial buffer areas around occupied dwellings and other hazards).

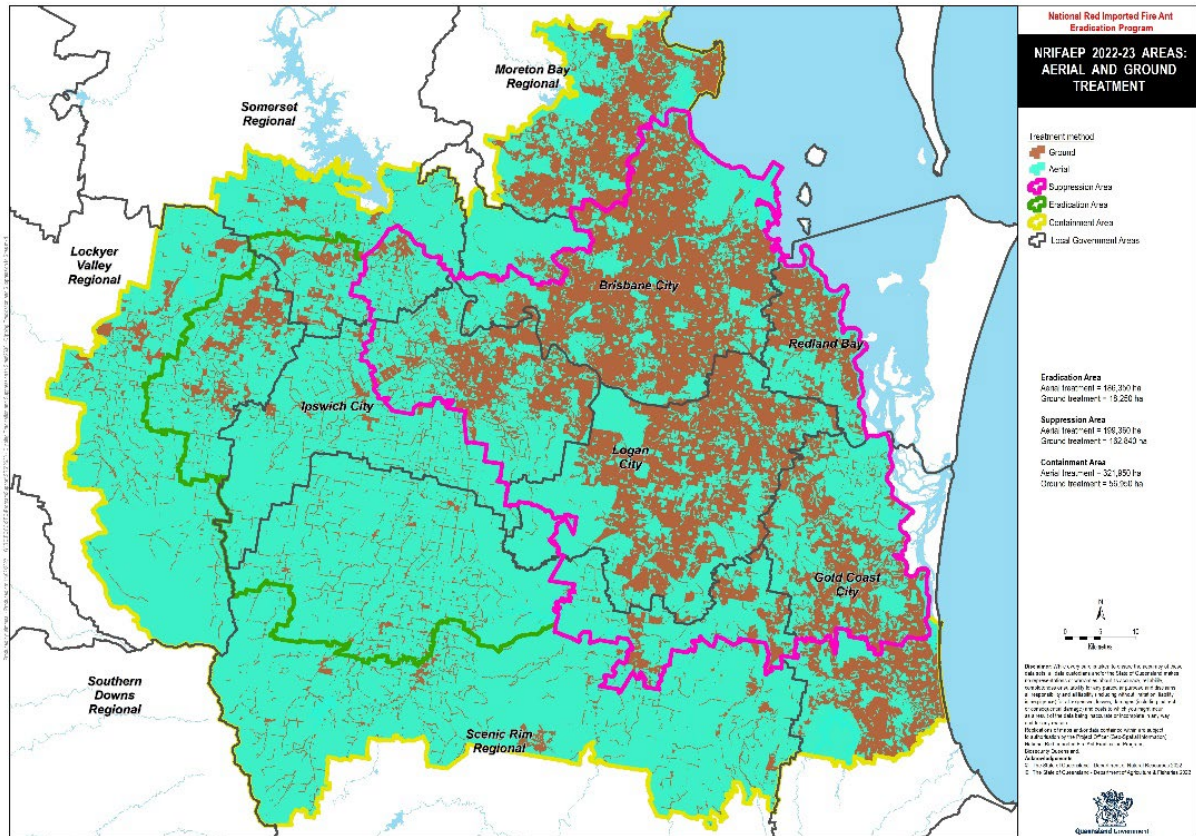


Figure 3 – Map showing land which can be treated aerially vs ground teams within the operational areas

Gaps in treatment coverage and failure to complete treatment rounds in a timely and continuous manner have prevented treatment success in the past. In previous years, 2-5% of planned treatment areas have received insufficient treatment, and it is imperative that these issues are addressed.

The reasons for treatment gaps in the past include landholder refusal due to the risk of damaging food crops, registered organic certifications, free-range poultry, skittish cattle or horses, or aggressive people. Other reasons include unsuitable terrain, insufficient resourcing of ground teams and issues accessing properties.

The NRIFAEP has established an internal working group to monitor issues and ensure they are addressed as they occur during the treatment season. Processes and practices regarding enforcing entry in instances where property owners refuse treatment or access to their properties have been established, and field staff are trained to implement them. Where a treatment solution is not possible, a risk analysis will be completed and alternative Program action will be undertaken (surveillance, subsequent gap treatment, or self-treatment).

In some cases, it has involved the NRIFAEP working with the Australian Pesticides and Veterinary Medicines Authority (APVMA) to amend permit conditions in line with scientific research and best practice. This work will continue as required to address treatment gaps related to APVMA permit conditions.

SURVEILLANCE

The purpose of surveillance is to delimit the extent of infestation and to provide information that will assist in determining absence of fire ants and clearance/proof of freedom. Broadscale surveillance in selected high-risk areas across the containment and eradication areas will be undertaken over successive years following the completion of each treatment season until proof of freedom from fire ant is confirmed. Surveillance is also undertaken in identified high-risk 'outbreak' areas. The surveillance season occurs in the cooler months between May and September each year as result it straddles two financial years. For ease in communication, we refer to the calendar year of the year surveillance is occurring.

In the 2022 surveillance season, surveillance around the edges of the Containment area and in any high-risk 'outbreak' areas will confirm if the infestation has been delimited. Two key objectives for the planned Program surveillance in 2022 are;

- Treatment support/delimiting: i.e. to ensure that the containment/eradication treatments are in the best possible placement with respect to known and/or suspected infestation. This includes surveillance in any high-risk 'outbreak' areas to confirm that the infestation has been delimited (refer to the outbreak control section).
- Clearance surveillance – to continue post-eradication/clearance surveillance in the Clearance and Eradication areas.

From 2023, surveillance will be undertaken to provide data that is critical for determining when parts of the eradication area can move to the proof of freedom phase. It is anticipated that the earliest that an area could move onto proof of freedom would be after the winter of 2024.

SURVEILLANCE PLAN

The following surveillance tools will be used to implement the NRIFAEP's surveillance strategy.

REMOTE SENSING SURVEILLANCE

Remote sensing surveillance (RSS) is critical to the success of the NRIFAEP. The cost benefit of undertaking RSS far outweighs traditional methods of surveillance by teams of people or by odour detection dogs as it can be deployed over large areas at a significantly lower cost. To effectively achieve eradication the NRIFAEP will conduct a larger deployment of RSS, with on-ground verification and response to any residual infestations into the future, to clear and provide proof of freedom from fire ants, allowing eventual eastwards shrinkage of the eradication area. This is based on current RSS in 2021 demonstrating that it is an effective surveillance tool (minimum 50% sensitivity, detecting nests which are at least one year old).

The NRIFAEP plans to scale up its remote sensing capability from one to between four and six camera pods. potentially increasing their capability to survey 350,000+ ha annually over the coming years. Two additional camera pods will be procured prior to the 2023 surveillance season and at least two additional camera pods under an optimum scenario during 2024.

For the 2022 surveillance season the NRIFAEP will use one camera pod. Based on what was achieved in 2021 surveillance season, a minimum of 45 000 ha is planned with a target of 65 000 ha. Whilst treatment is underway in the eradication and Containment areas the priority will be to undertake surveillance in areas around the edges of the Containment area and in any high risk 'outbreak' areas to confirm that the infestation has been successfully delimited.

In addition to the previously mentioned areas, RSS will be used to survey parts of the eradication area which received treatment during 2021–22, and western and south/northwestern parts of the Containment area.

Once the required rounds of eradication and containment treatment has been completed (ideally from 2024 onwards) RSS over 100% of areas suitable for RSS in the Containment area will be conducted during the cooler months to provide higher confidence of area-wide absence of fire ants. This surveillance will continue once annually for at least two years until a time when the NRIFAEP determines that there is sufficient evidence for the area to move into the proof of freedom phase. Remote sensing can be undertaken over more than 50% of the containment and eradication areas.

Continual improvement will be undertaken with a view to increasing the effectiveness and efficiency of RSS. This would include increasing efficacy of RSS fire ant detection over different land use types, and potentially its use mounted in planes for wider reach.

Following the completion of Phase 1 (rural eradication), the NRIFAEP plan to use RSS to conduct proof of freedom surveillance in the eradication and Containment areas from 2028 to 2032 if necessary. This may also require RSS depending on when there is sufficient surveillance and absence of fire ants to support proof of freedom from fire ants.

GROUND SURVEILLANCE

Field teams conducting ground surveillance find approximately 80% of nests in the area surveyed. Because of the high labor intensity and therefore cost, NRIFAEP ground surveillance will be conducted only across relatively small areas. Ground surveillance of up to 12 000 ha is planned during the 2022 and 2023 surveillance seasons for the following:

- Targeted areas for ground surveillance in both the containment and eradication areas will be selected based on risk mapping. This is required because under half of the containment and eradication areas is unsuitable for RSS. This surveillance will supply surveillance data that will aid decision-making about whether the area can move into the proof of freedom phase.
- Outbreak control - The NRIFAEP will revisit high-risk detections of importance twice for each of two consecutive years during the surveillance seasons. If this area is suitable for RSS this method of surveillance will be used if not suitable field teams will be used.
- Suppression area sentinel sites – the NRIFAEP (or other agencies in partnership with the NRIFAEP) will undertake systematic monitoring in the suppression area. This will involve the randomised selection of new sentinel sites (yet to be determined) to be surveyed each year and include baseline surveillance to monitor pre- and post-intervention of fire ant abundance. Target areas for such surveillance would include any community self-treatment/management areas (Gold Coast, Oxley and Ipswich), as well as key military bases and other high-risk government land, in the FAST *Suppression Area*. The results of such surveillance will provide useful information for stakeholders and decision-makers.

In addition to the planned surveillance in 2022 the NRIFAEP will also complete:

- RSS ground validation surveillance in the containment and eradication areas. Four ground teams have been allocated from June to November for this task.
- Outbreak control – the NRIFAEP will apply current surveillance protocols to delineate the extent of new high-risk detections outside the operational boundary, for polygyne detections and in the treatment areas. Protocols will be reviewed periodically and continually improved.

The NRIFAEP will not be undertaking any surveillance to delineate the extent of infestation around public reports in the suppression area.

In 2022 Sentinel surveillance beyond the Containment areas will not be undertaken. RSS will achieve the same core function of sentinel surveillance of checking beyond the planned treatment areas (in addition to partly inside their boundaries).

ODOUR DETECTION DOG SURVEILLANCE

Surveillance using odour detection dogs is the most effective surveillance method, with 95% accuracy and the ability to detect small nests and individual ants above and underground. In 2022-23 the NRIFAEP will retain six odour detection dogs but may increase if needed when there is sufficient confidence in robust treatment programs to institute proof of local freedom from fire ants in specific situations. Approximately 500 ha of detection dog surveillance has been budgeted for 2022-23 with a six-dog capacity.

Odour detection dogs will be deployed primarily to:

- support RSS ground validation where a single or low densities of nests are detected (to be confirmed).
- confirm post-treatment nest destruction in areas of highest risk, including detections of importance, polygyne detections and detections which present a risk to public safety. Dog surveillance on these sites will be conducted six months following nest destruction.

Odour detection dog teams will not normally be deployed to the FAST *Suppression Area* from July 2022 and beyond, unless required for a specific event (i.e. fire ant incursion at the Port of Brisbane, or special events or ceremonies).

TREATMENT MONITORING SURVEILLANCE

Pre- and post-treatment monitoring is essential to monitor the success of treatment in the eradication and Containment areas. This will involve surveillance to find monitoring sites with live fire ant nests before treatment begins and subsequent monitoring of these nests at monthly intervals to measure the effects of baiting on nest survival. In 2022-23 the NRIFAEP will aim to establish one monitoring site per 1000 ha. Treatment monitoring surveillance will be undertaken by a dedicated Science field team.

PASSIVE SURVEILLANCE

Communications and community engagement efforts will be used to encourage passive surveillance and reporting by the public. This is particularly important in residential areas where RSS is not possible and there is more likelihood of the public finding suspect fire ants.

OUTBREAK CONTROL

The ability to respond to outbreaks is a critical activity for containing and eradicating fire ants from SEQ. It is impossible to accurately predict how many outbreaks of fire ants will occur, but a contingency to respond to outbreaks within and beyond the *Eradication and Containment Area* has been accounted for in this plan.. *Note responses to fire ant detections in the suppression area are the responsibility of FAST.*

The NRIFAEP's detections of importance protocol is continually being revised in line with scientific advice to ensure the Program provides an immediate and comprehensive response. In accordance with the protocol the NRIFAEP will immediately destroy all nests detected outside the *Containment Area*, by applying bait and undertaking surveillance to delineate the infestation out to a minimum of 500 m. For 2022-23, a notional allocation of 2500 ha for initial responsive IGR treatment and 5000 ha for delineation surveillance has been budgeted to treat outbreaks in the eradication and Containment areas and outside the *Containment Area*. If the detection is assessed as high risk, multiple treatment rounds will be scheduled to achieve local eradication. A contingency of up to 50 000 ha is budgeted for this purpose.

Furthermore, high-risk detections within the Eradication and Containment area may warrant additional outbreak treatment. These may be infestations that are identified to be polygyne, or detections outside of the targeted areas within the Eradication area. Intelligence will be gathered for each detection in these areas and the detections of importance protocol may be activated if required.

In 2022-23 the NRIFAEP plans to treat up to 27 000 ha of polygyne infestation. This includes up to six rounds of treatment over selected polygyne infested areas with toxicant bait or a combination of toxicant and IGR baits.

IMMEDIATE NEST DESTRUCTION

The NRIFAEP will maintain several Direct Nest Injection (DNI) teams to respond to public reports, detections which are considered a high political or public safety risk and high-risk detections in the clearance, eradication treatment areas, and areas outside the Containment Area.

In 2022-23 the NRIFAEP will use approximately four DNI teams to treat in the above-mentioned areas as well as providing a fee for service (funded by FAST), to carry out DNI treatment in the suppression area. How FAST plan to administer public detections in the suppression area beyond 2022-23 is yet to be decided, for the NRIFAEP the plan is to continue with DNI capability but it is envisaged the number of teams will reduce as proof of freedom becomes a reality.

RESPONDING TO NOVEL INCURSIONS

Upon request the NRIFAEP will continue to assist relevant jurisdictions in responding to novel incursions of fire ant in Australia and where appropriate recover any costs incurred.

OPERATIONAL PLANNING, MONITORING AND DISPATCH

Comprehensive aerial and field team schedules are developed prior to each treatment and surveillance season and are continually adjusted throughout the season. Treatment and surveillance progress will continue to be monitored and reported to key stakeholders. Both internal and external reporting processes are in place to enable real-time monitoring of progress and expenditure, and timely rectification of issues. This will ensure that the NRIFAEP remains on track to achieve key targets and deliverables within the required timeframes.

The Program has reviewed how job packages are planned, created, allocated and finalised. A central job dispatch section has been established to streamline the allocation of jobs to field teams in line with the operational treatment and surveillance schedules, and other priorities such as responding to detections of importance and revisiting properties as soon as possible that have missed treatment.

Quality assurance and implementation of an effective quality management framework is critical to the long-term success of the Program. The NRIFAEP has a suite of approved controlled documents (policies, protocols, procedures and work instructions) which guide operational implementation. A schedule of audits has been developed and desktop and in-field audits are undertaken throughout the year to ensure the control documents are followed correctly. Non-compliances identified during the audits are recorded on a non-compliance register and responsible managers are assigned actions to rectify any identified non-compliances.

COMPLIANCE

Human-assisted spread poses a significant risk to containment and the achievement of the program's objectives. Fire ant carriers include soil, gravels, mulch, compost, turf, hay and potted plants. Both residents and a range of industries move these products on a daily basis (e.g. civil construction, farmers, quarries, earthmovers and haulage companies, landscaping suppliers etc.). The high level of residential and commercial development in SEQ, often occurring in areas near the outer limits of the fire ant infestation, increases the likelihood of the spread of the fire ants beyond their current limits.

In 2022-23 the NRIFAEP will continue to administer compliance in accordance with Chapter 5, Part 5 of the Queensland *Biosecurity Regulation 2016* regarding movements of fire ant carriers from within the fire ant biosecurity zones. Decisions regarding the recommendations in 2021 NRIFAEP strategic review regarding who

the appropriate area is to administer compliance activities beyond 2022-23 are yet to be decided. The Steering committee and FAST will need to determine this moving forward.

In 2022-23 the Program's compliance team will target high-risk industries that move fire ant carriers located within the fire ant biosecurity zones, as determined by the 2022-23 compliance plan.

The compliance program will address high risk operators and industries, identifying high risk areas, ensuring regulatory tools provide a suitable level of deterrence and the important role communication and engagement has in assisting voluntary compliance.

1. Risk profiling relevant industries - identifying the industries and operators whose work risks the movement of fire ants and assessing risk of spread with regard to the type of carrier, extent and frequency of carrier movement, location, size and compliance history.
2. Targeting the highest risk areas - through assessment of previous compliance history and in high-risk sites such as those with high density or polygyne infestation
3. Maximise deterrence - through using formal enforcement options (infringement notices, biosecurity orders and prosecution) and publicising enforcement action taken.
4. Promoting voluntary compliance through stakeholder education in preventing human-assisted spread.

Education is a key component of achieving compliance. The Program actively educates the community about movement controls within the fire ant biosecurity zones through a range of educational resources, online content, social media and targeted communication campaigns for specific issues. Good compliance is typically a balance between encouraging voluntary compliance and appropriate deterrence. This requires effective regulatory tools and resources with sufficient powers, particularly to combat high risk movements within or out of the biosecurity zones. High risk movements can affect the success of the eradication program by increasing the likelihood of spread of the fire ants beyond their current limits.

The Program is increasingly moving to intelligence-based compliance, which focuses on targeting non-compliant operators based on gathered intelligence, rather than randomly catching people breaking the rules. It also means that the highest risk areas of non-compliance are the focus and utilises limited resources as effectively as possible. This is still balanced with maintaining a regular presence in the field.

BUSINESS SERVICES

Business services functions are critical activities underpinning successful large-scale NRIFAEP operation. During 2022-23 these functions will be reviewed and actions to improve productivity and efficiencies implemented.

PROCUREMENT

A key focus for 2022-23 will be enhancing our strategic procurement capability to improve the efficiency of fire ant eradication. Increasing the scale of NRIFAEP operations will provide opportunities to reduce the unit-cost of products and services supplied to the program. Furthermore, tenders from the market will be sought to identify opportunities for further cost reductions and service delivery improvements. However, as much of the procurement for FY2022-23 is already underway, many of these potential savings will not be realised until the FY2023-24 surveillance and treatment seasons.

Scaling our procurement of products and services may also present challenges of supply, particularly in context of COVID supply chain issues. The program will work with suppliers to mitigate these issues, which may include seeking alternative suppliers or products as required. To leverage existing technologies and workforces, opportunities to outsource some services currently delivered by NRIFAEP/QDAF will also be considered.

The major items procured annually which will be the focus of cost reductions - include:

- **Bait** – The NRIFAEP currently purchases several different bait and insecticide products to conduct treatment activities. The quantities vary each year in line with required treatment. From July 2022, the NRIFAEP will investigate opportunities to diversify its sole supplier arrangements for bait supply if this achieves cost reductions.
- **Helicopter services** – The NRIFAEP will require the services of up to ten helicopters in 2022-23 to conduct aerial treatment and surveillance. In 2022-23 the NRIFAEP will continue to investigate opportunities to diversify its sole supplier arrangements if this achieves cost reductions and increased productivity/efficiencies.
- **Vehicles leasing**– The NRIFAEP leases vehicles from several suppliers in line with operational requirements. The number of vehicles will increase proportionate to the number of required field staff. Sourcing of additional vehicles quickly will be a challenge.
- **Other field equipment** – Other equipment (e.g. Utility Terrain Vehicles, blower trucks, hand spreaders, Direct Nest Injection equipment) is purchased or leased also in line with operational requirements.

FACILITIES

For optimal efficiency the NRIFAEP will review the current depot locations in Laidley, Mutdapilly, Wacol and Berrinba in line with treatment and surveillance target locations and timing in this plan to minimise field staff travel times. The current premises will be reviewed before lease agreements expire with a view to exploring logistical efficiencies aligning to the new plan (i.e. depots to be located to maximise cost-benefits).

From July 2022 options to establish at least one additional depot will be investigated ideally in the more populous parts of the operational area. Any new depot will need to be established in proximity to the proposed eradication and containment treatment and surveillance areas. In particular investigation of a possible depot in the north-western part of the operational area will be a priority.

Helicopter landing and refueling sites will also be reviewed and established to reduce flight travel times and therefore cost of treatment.

HUMAN RESOURCES

In 2022–23, in line with the planned increase in budget, will see staffing levels scale up to approximately double current levels. The increase will predominantly be in field operations to complete the required increase in treatment. If future funding is approved, it is expected that staffing levels will need to increase again in 2024 - 2025 to meet proposed treatment targets.

The NRIFAEP will continue to employ a mix of permanent and temporary QDAF employees and contract staff for seasonal field work and short-term projects which support this plan. The recruitment of QDAF employees will be in accordance with QDAF policy. Recruitment of contracted staff will be through established QDAF procurement policies.

A significant issue in 2022–23 will be the sourcing of labor in small rural communities. It has been becoming increasingly difficult to source the required contingent contract labor force over the past year and it is unlikely that the NRIFAEP will be able to source the required levels of additional field staff from these western rural and semi-rural locations. Therefore, the NRIFAEP will need to explore options to establish additional depots (see facilities section above) ideally in the more populous parts of the operational area in proximity to the proposed eradication and containment treatment and surveillance areas. Furthermore, the program will explore the possibility of outsourcing work to capitalize on existing workforces. Strategies for overcoming these issues will be developed by a dedicated HR team within the next year.

Occupational health and safety (OHS) will remain a high priority for the NRIFAEP and we will continue work with DAF Corporate OH&S to ensure the Program follows all relevant policies and procedures in this area.

POLICY

POLICY FUNCTIONS

In 2022-23 the Program will continue to fund the following work, including:

- Development of annual workplans
- Development of new policies and processes for setting up and monitoring of progress in suppression areas (e.g. either through new monitoring sites or via any reporting mechanism etc.)
- Maintain the *Biosecurity Regulation 2016* to ensure movement controls are effective, and relevant in stopping the spread of fire ants outside the fire ant biosecurity zones.
- Development of program strategy and policy (e.g. R&D strategy)
- Monitoring and evaluation of treatment and surveillance (at a strategic level) and prescription of data standards for reporting (if any)
- Development of future strategies and plans as directed by the Steering Committee
- Ad hoc work for harmonization between Program and council approaches (e.g. clients with chemical sensitivity)
- APVMA Permit administration.

EVALUATION OF TRANSITIONAL POLICY FUNCTIONS (YEAR 1)

Throughout 2022-23 NRIFAEP with assistance from Biosecurity Queensland will evaluate the recommendations from the NRIFAEP strategic review 2021 with the aim of identifying where important policy functions should reside. Either remaining with the NRIFAEP policy team or possibly in conjunction with local government as part of the FAST activities.

ZONE EXPANSION

The review advocates for 'expansion' of the movement control zone out to somewhere near the containment boundary. From a policy perspective, it is not desirable for the zone to simply be an expansion of the Program's zone as that may lead to further movement. The relevant policy question to be dealt with is whether anything more than the current General Biosecurity Obligation (GBO) needs to be in place in that area. Further engagement for that zone would be undertaken (costed in the communications plan). Some work and policy thought is required to 'clip' zones to suburb boundaries or to LGA areas.

POLICY DEVELOPMENT IN CHANGING CATEGORIES TO THE BIOSECURITY ZONES

The review indicates that over time, with progressive shrinkage of the operational zone, there will come a time when the suppression areas can be moved to eradication. Policies will be needed to establish what will constitute effective surveillance for partial area freedom and what level of suppression will be needed to warrant an attempt at eradication in the suppression area (and how that would be dealt with).

REGULATORY FRAMEWORKS

A regulatory framework will need to be developed that reflects the agreed responsibilities of the Program and partner organisations, including local government and state government agencies and potentially, private business groups for combating RIFA, as well as the funding methods available to enable those responsibilities to be undertaken.

This framework will also clearly identify the obligations of all sectors of the community operating or residing within the biosecurity zones for combating RIFA, specified within the biosecurity legislation, potentially including an obligation to treat, or procure treatment of RIFA wherever it would be reasonable to suspect their presence.

The NRIFAEP policy team will work with FAST to work through the regulatory framework issues over the transitional period. Should any legislative amendments need to be put in place to reflect a desired framework, it is noted that the transitional period may need to be extended to progress an Act amendment if required. It is a core assumption that the framework created will ensure consistency of obligations for residents in the biosecurity zones.

REGULATORY REFORM

There are several regulatory reforms that have been identified to aid in the success of suppression activities. These need evaluation during the transition period, with the aim that significant reform measures would be in place by the end of the transition period (30 June 2023). Identified and justified regulatory reforms to progress in accordance with the Queensland Government regulatory reform process:

- examining if land development approval system could assist in combatting RIFA (e.g. State Interest process)
- amending or clarifying the general biosecurity obligation to require specific persons within the biosecurity zones to undertake or procure treatment of RIFA on land they control, regardless of whether RIFA have been detected or not
- examining the viability of certification/accreditation systems for relevant businesses
- requiring compulsory training for all businesses who deal with fire ant carrier/s
- requiring the display of compulsory signage by specific businesses to improve both customer and business fire ant awareness
- examining options for a movement sampling regime (see compliance section)

Any reforms that require primary legislation amendments are subjected to departmental time frames for implementation.

POLICY ASSOCIATED WITH MARKETS FOR BAIT

The expansion of the Program will significantly increase demand for bait (in both the Program and suppression areas and even Australia-wide in a worst-case scenario). This needs to be considered given there is currently only a single global manufacturer, combined with the fact that the Program already uses the same amount of bait as is currently used in all the USA.

While some bait is retailed at hardware outlets, it is relatively expensive compared with other ant baits at around \$96/500g, which is likely to be a major disincentive to residential householder and farm use.

Although it is noted that councils have their own 'local buy' arrangements to bolster the joint buying power of councils, questions will arise about whether the Program should supply bait to councils or instead try to foster a competitive market, more in line with the Queensland government policy around competitive neutrality policy. It is likely that a 6-month project around strategic procurement would be necessary to understand the market and the viability of scaling up bait supply in an environment with disrupted supply chains. It is noted that existing bait supply lead times are at least 5 months (at current scale). It is important to not jeopardize existing supply options while exploring alternative supply options.

It is assumed that this work can be done within the newly allocated policy resources of the Program and that other groups (e.g. DAF procurement team and council procurement specialists) would provide free in kind assistance. A notional amount has been allocated for market sounding work should it be needed.

OTHER POLICY WORK TO FACILITATE CHANGES TO THE NATIONAL PROGRAM ONCE DECISIONS ON THE FUTURE DIRECTION OF THE PROGRAM HAVE BEEN CONFIRMED

There are several tasks that will need to be undertaken to facilitate the changes to the national program once decisions on the future direction of the Program have been decided and the establishment of the complementary suppression program that have not been mentioned above. These include:

- developing revised funding agreements
- preparing new program authorisations (as defined in the Biosecurity Act)
- preparing new KPIs and governance arrangements
- preparing service level agreements or delegated authorisations
- preparing collaborative treatment and asset sharing agreements (between the Program and other parties)
- reviewing existing policy and procedural guidance documents for the Program
- developing principles around the apportionment of 'transition costs'
- examining the viability and suitability of authorising local government staff to enforce compliance with the Biosecurity Act.

SCIENCE

In 2022-23 research and development are critical to improving detections and eradication of fire ants. The Program relies heavily on scientific and technical research, advice and expertise provided by its Science team and external Australian and international research partners. In 2022-23 the Science team will provide operational and strategic advice across the breadth of the Program which is critical to the success of eradication in SEQ and managing incursions of tramp ants nationwide. They will focus on shorter-term operational needs to speed up eradication and improve surveillance, and design and carry out field research to improve treatment and surveillance regimes.

Research and development

SURVEILLANCE OPTIMISATION AND INTERPRETATION

The science team will continue to look at how surveillance tools (RSS, ground and odour detection dog) could be improved individually and/or integrated in the most efficient and effective manner to increase the sensitivity and specificity of fire ant surveillance. This work involves analysis and modelling of surveillance results, to assist in major strategic decisions such as treatment and surveillance strategies, fire ant spread and proof of freedom modelling.

TREATMENT OPTIMISATION

In 2022-23 research will continue into new treatment methodologies exploring potential improvements into the efficiency and/or effectiveness of fire ant treatments. This includes identifying and evaluating new chemistry options that are available (e.g. toxicant and wettable baits) as well as how these treatments are applied best for eradication, containment and suppression efforts.

EXTERNAL COLLABORATIONS

Whilst the Program uses a variety 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. Developing and fostering external collaborations will leverage expertise from a range of agencies, including academia, government and the private sector. In 2022-23 three key themes will be prioritised, detection, containment (e.g. fire ant carrier risks and controls) and treatment innovation.

Current external collaborations to be maintained in 2022-23 include research into the use of RNA interference technology to silence genes essential for fire ant survival (e.g. those associated with foraging ability), eDNA to aid detection of fire ant nests in the environment, and the development of water-resistant baits.

SCIENTIFIC SERVICES

SCIENTIFIC ADVICE

Scientific knowledge underpins many decisions made within the Program and can influence operational strategies and policy decisions. With the devolving of some responsibilities for fire ant management in the suppression areas to Queensland Government, Councils, businesses and individual homeowners, it is anticipated that demand for scientific advice provided by the Program to these stakeholders will increase significantly in coming years.

GENETIC TESTING

The review has recommended an urgent refocusing of laboratory resources to prioritise polygyne detection and reduce the backlog of samples. These recommendations were made in recognition of the greater threat posed to the Program by the polygyne form of fire ants, and an acknowledgment of the resource limitations in clearing the current backlog of samples in a timely fashion while still maintaining the full range of genetic testing. This refocusing on polygyne will mean a reduction in the amount of microsatellite – repeated genetic sequences that are used like a genetic fingerprint – testing performed. This will mainly affect tracing ability and confidence in cluster analysis and genetic bottleneck.

The two other priority areas for genetic testing are detection of new incursions into Australia and differentiation between reinvasion and colony persistence. These should not be affected by the broader reduction in microsatellite analysis. A sampling framework needs to be developed for monitoring genetic trends in areas not receiving eradication treatment. A genetics testing service could be offered to Government, industry and the public to aid detection of polygyne in non-eradication areas.

LABORATORY SERVICES AND FIRE ANT COLONY MANAGEMENT

The Program's laboratory services are expected to continue in its current ability to supply expert ant identification both within the Program and to external organisations and stakeholders, including identification of other invasive ant specimens (e.g. Quarantine detections). A reference collection of both local ant specimens and known invasive species is required to be maintained to support accurate identification.

Live fire ant colonies are maintained within secure facilities at Berrinba. The Program requires the use of these colonies for several purposes, such as to produce odour material for use in detection dog training, live displays of fire ant workers at community events and training, and for use in laboratory trials. In addition to fire ants, the Program has the capacity to house and rear other invasive ant species where required.

SYSTEMS AND INTELLIGENCE

BUSINESS INTELLIGENCE

In 2022-23 an intelligence function will be setup to enhance the analytical capability of the Program. This group will focus on developing tools, technologies, applications, and practices that can be used to collect, integrate, analyse and present the program's data to create insightful and actionable business information.

SYSTEMS

PROGRAM SYSTEMS

The NRIFAEP has made significant investments into improving its data capture and reporting systems. Effective systems are necessary to plan, track progress and identify issues. The NRIFAEP uses the following systems to record and represent data, plan, schedule and dispatch work, and report on effort and progress:

- Operations Applications (Forage and FAMS)
- Customer Relationships applications (CaSES and CRM Apps)

In 2022-23 the NRIFAEP will continue to regularly review and improve its information systems to optimise:

- Performance, scalability integration, data searchability, cost and adaptability.
- Ability to interface with other systems and apps used by the public and councils.
- More effective and easier reporting in a timely manner to support decision making.
- Information capture to support reporting, analysis and operational work at local, state and national levels.

Data from FAMS and other sources are also mapped by Program staff using ArcGIS software. Mapping and spatial analysis is undertaken by GIS experts within the Program who work closely with program planners, job creation and data entry officers to ensure data accuracy.

In 2022–23 the NRIFAEP will continue to roll-out its in-field data capture capability for all Program in-field activities (Forage). As well implement a suite of system enhancements to enable more effective and easier reporting (against agreed KPIs) to occur promptly, and to automate operational inefficiencies due to the evolving business rules and processes. RSS operational activity will also be integrated into program systems (instead of the external systems currently used).

From July 2023 as Program actions and responsibilities are transitioned to other agencies, the systems priority will be to ensure information capture and integration with the operational work and systems of these agencies.

DIGITAL COLLABORATION WITH STAKEHOLDERS

With the enhanced role that stakeholders will play in fire ant control, there is need for the development and supply of products to integrate data across users. These systems may include:

- Integrated systems for community reporting of fire ants
- Tools for managing treatment and surveillance operations
- Tools for analyzing treatment and surveillance records across institutions

These tools need to be developed and optimised in collaboration with stakeholders to ensure they are fit for purpose.

COMMUNICATIONS AND ENGAGEMENT

The Program will accelerate the mobilisation of community and industry members to assist fire ant eradication and suppression. This will include scaling up broadscale advertising, enhancing localised engagement in treatment areas, strengthening relationships with key industry groups, and digital engagement enhancements to make it easier for stakeholders to contribute to fire ant management.

The goal of the communication and engagement strategy is to drive community and industry action, specifically the following objectives:

1. Increase community and industry motivation to adopt fire ant management practices

2. Encourage community fire ant surveillance and reporting
3. Build support among stakeholders for Program treatment and surveillance work
4. Reduce the likelihood of stakeholders spreading fire ants
5. Encourage community and industry members to contribute to fire ant suppression in non-eradication areas

SOCIAL AND BEHAVIOURAL RESEARCH

In 2022-23 the NRIFAEP will continue to undertake behavioural research to better understand the motivation and drivers of residents, businesses, and key industry and community groups.

This research will provide the NRIFAEP with an evidence-based understanding of target audience attitudes, beliefs and behaviours, allowing us to develop stakeholder-centered communications and engagement strategies which use informed interventions to drive behaviour change.

The data from the research will measure program key performance indicators (KPIs) and assess the effectiveness of the Program's communication and engagement activities across South East Queensland.

BROADSCALE COMMUNICATION AND MARKETING CAMPAIGN

In 2022-23 the NRIFAEP will deliver a focused mass-media fire ant campaign across the fire ant eradication and suppression areas.

The campaign will heighten awareness of the potential impacts of fire ants and build motivation among community and industry members to undertake key fire ant management behaviours.

The campaign will run year-round, ensuring stakeholders are frequently reminded of the need to undertake appropriate fire ant management behaviours. The campaign messaging and creative elements will reinforce the importance of taking action and provide simple and easy to follow advice on what we need people to do.

The goal of the campaign is to drive community and industry member action:

Objective 1: Increase community and industry motivation to adopt fire ant management practices.

- **Key message:** Fire ants may be small, but they can have serious consequences.
- **Audience:** Community and industry members in eradication, containment and suppression areas.
- **Tactics:** Broadcast advertising raising awareness of fire ant impacts on our environment, economy, human health and way of life.
- **Channels:** Mailbox delivery, On-demand streaming services, radio and digital radio services, out-of-home advertising, including billboards, shopping centre signage and tonic media, digital advertising, search engine marketing and geo-targeted social media.

Objective 2: Encourage community fire ant surveillance

- **Key message:** Look for and report fire ants
- **Audience:** Community and industry members in eradication, containment and suppression areas.
- **Tactics:** Broadcast advertising to increase our stakeholders ability to find, identify and report fire ants.
- **Channels:** Radio and digital radio services, out-of-home advertising, including shopping centre signage, roadside signage, direct mail, print advertising, search engine optimisation, SMS and electronic notifications (using NRIFAEP databases) and geo-targeted social media.

Objective 3: Build support among stakeholders for NRIFAEP treatment and surveillance work

- **Key message:** Allow our teams to undertake fire ant work on your land
- **Audience:** Stakeholders in eradication and containment areas
- **Tactics:** Targeted engagement with impacted stakeholders and localised advertising to build community support for the program.
- **Channels:** Direct mail, print advertising, SMS and electronic notifications (using NRIFAEP databases), geo-targeted social media, radio and roadside signage.

Objective 4: Reduce the likelihood of stakeholders spreading fire ants

- **Key message:** Don't spread fire ants
- **Audience:** Stakeholders in biosecurity zones.
- **Tactics:** Broadcast advertising to increase stakeholders understanding of fire ant movement controls and tools to assist them to meet their obligations.
- **Channels:** Radio and digital radio services, out-of-home advertising, including at petrol stations and billboards and roadside signage in high development areas, industry advertising, electronic notifications (using NRIFAEP databases) and geo-targeted social media.

INDUSTRY ENGAGEMENT

Industry members play a key role supporting fire ant eradication and suppression. In 2022-23 the program will continue to strengthen relationships with peak industry bodies and individual industry members, where appropriate, to support program work. This includes;

- building industry support for program treatment work to reduce treatment gaps
- raising awareness of the importance of fire ant movement controls to reduce human-assisted spread
- increasing participation in fire ant self-treatment in strategically important areas.

Human-assisted spread of fire ants by high-risk industries continues to put eradication efforts at risk. Feedback from industry partners points to a number of reasons that movement controls are not working as well as they could:

1. Industry members are not aware of the movement controls
2. Industry members do not understand their requirements
3. Industry members do not feel there are repercussions for not adhering to movement controls.

A concerted effort is required to build awareness and understanding of the fire ant biosecurity zones across high-risk industries, emphasising the importance of adhering to movement controls and storage regulations. This will require a major acceleration of engagement activity with:

- hay producers and other primary producers
- building, development and civil construction peak bodies, associations and businesses
- landscaping, nursery and turf peak bodies, associations, producers and retailers
- waste and recycling facilities.

Industry engagement will make use of key consultation tools including e-engagement resource hub, industry-specific workshops and webinars, feedback surveys, industry publications and targeted fire ant training (see *Stakeholder Training* below). Industry representatives will be invited to provide advice on the development of information materials and fire ant management tools/templates, which industry can later adopt for self-regulation.

FIRE ANT SUPPRESSION

In 2022-23 the program will support the FAST to initiate and scale up fire ant suppression in non-eradication areas. This will include supporting engagement with major landholders in the suppression area including the ten local councils, Queensland and Federal Government departments and agencies, and peak industry bodies.

To maintain momentum, the Program will continue to lead community treatment initiatives until this work can transition to FAST from July 1 2022. Key projects underway include:

- Oxley Creek Transformation Project
- Gold Coast City Council self-treatment project
- Department of Education self-treatment project
- Waste facility self-treatment project

STAKEHOLDER TRAINING

To enable stakeholders to support fire ant eradication and suppression activities, it is important they are equipped with the relevant knowledge and skills. The Program will continue to offer fire ant training for community and industry members, including content that covers:

- fire ant identification
- biosecurity zones, movement controls and storage
- proactive and responsive treatment options.

With the increased emphasis on fire ant suppression activities in non-eradication areas this year, we anticipate we will see a significant increase in demand for fire ant training. To meet this demand efficiently we will transition to a new training model. The model will include:

1. Self-paced online fire ant training (for residents, workplaces and pest management technicians)
2. Regular webinar-style online training sessions for large industry and community groups
3. Train-the-trainer workshops for large organisations with dedicated training officers.

DIGITAL ENHANCEMENTS

The program will continue to build digital systems and processes that make it easier for community and industry members to support fire ant eradication and suppression work.

Following the launch of the fire ant program website (www.fireants.org.au) in 2021, a range of web-based tools are proposed to assist people to make decisions about fire ant management on their property. Tools include:

- Improved suspect ant reporting
- Live fire ant program mapping – biosecurity zones, fire ant detections, treatment, surveillance
- Refined movement control advice tools
- Streamlined Biosecurity Instrument Permit request process
- Chatbot or enquiry triage

Digital enhancement projects will adopt a customer experience (CX) approach and design thinking methodology to ensure tools, are fit for purpose.

DIRECTORATE

PROGRAM ADMINISTRATION

The Program will be administered following Queensland Government policies.

GOVERNANCE

The Program will be governed by the National Steering Committee and delivered by Biosecurity Queensland.

FINANCE

Table 3: Forecast NRIFAEP Budget FY2022 - 2023

| Unit | Activity | FY22-23 |
|------------------|--|---------------------|
| Operations | Treatment, Surveillance, Outbreak control and Compliance | \$72,346,495 |
| Business Service | Supply, Facilities and HR | \$7,687,844 |
| Strategy | Policy | \$1,289,205 |
| | Science | \$3,195,430 |
| | Systems and Intelligence | \$2,984,077 |
| | Communications & Engagement | \$5,065,372 |
| Directorate | Finance & Administration | \$1,674,687 |
| TOTAL | | \$94,243,110 |

2022 – 2023 KEY PERFORMANCE INDICATORS

As we are in the first year of scaling up the National program, the KPIs for 2022-23 (Table. 4) focus on the Program's treatment and surveillance activities whilst the long-term strategy and plan for fire ant eradication from South East Queensland is being developed.

Table 4: FY2022 – 2023 NRIFAEP key performance indicators

| STRATEGIC GOAL^ (BY 2027) | KPI FY2022 - 2023 | Target FY2022 - 2023 |
|--|---|--|
| Foster public engagement and participation in fire ant responses in all affected areas | An increase in percentage of households within the <i>Containment</i> and <i>Eradication Areas</i> that disclose they look for fire ants in targeted surveys. | 10% increase on FY2021-2022 survey results |
| Prevent the spread of fire ants beyond their current extent in Australia | Total number of unique hectares surveyed for fire ants in <i>Eradication</i> and <i>Containment Areas</i> (by RSS or ground surveillance) | Minimum of 45,000 hectares of land is surveyed |
| | Evidence* of a reproductively viable fire ant queen detected beyond of the outer limits of the <i>Containment Area</i> | Zero detections |

| | | |
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| | Response time to treat fire ants detected within the <i>Containment area</i> | All suitable habitat within 500m of a fire ant outbreak within the <i>Containment Area and outside the current treatment area</i> is treated within 31 days of a confirmed fire ant detection |
| | Awareness of biosecurity zones that restrict the movement of fire ant carriers. | At least 80% of industry is fully aware of biosecurity zones that restrict the movement of fire ant carriers. |
| Suppress fire ants in all infested areas | Total number of unique hectares of land receiving at least 1 round of treatment in the <i>Eradication Area</i> (379, 000ha). | One round of planned treatment completed across 150, 000 unique hectares of land |
| | Total number of unique hectares of land receiving at least 1 round of treatment in the <i>Containment Area</i> (205, 000ha). | One round of planned treatment completed across at least 36,000 unique hectares of land |
| Achieve and prove absence of fire ants from targeted areas through eradication treatment and clearance surveillance | Total number of unique hectares of land receiving 3 rounds of treatment in the <i>Eradication Area</i> | Three rounds of planned treatment across at least 150,000ha. |
| | Percent of suitable habitat that was planned, but not treated (i.e.. Treatment gaps) | Less than 2% gaps in suitable habitat that was planned to be treated |

^Strategic goals are those proposed in the draft National Red Imported Fire Ant Response Strategy (2022 - 2027). These are not goals necessarily to be achieved within the 2022 – 2023 financial year. These goals may also be updated should the National Red Imported Fire Ant Response Strategy (2022 – 2027) be amended and approved.

*evidence of a reproductively viable fire ant Queen may include detection of the queen itself, evidence of fire ant nests and/or genetic evidence suggesting multi-generational reproduction of a novel colony

RISK MANAGEMENT

Table 5 – Risk assessment

| Risk | Description | Mitigation plan | Contingency plan |
|---|---|---|---|
| Quantum of funding is insufficient to implement plan | <p>The Program budget is insufficient due to issues such as:</p> <ul style="list-style-type: none"> • Errors or increases in input costs • Inflation rates beyond that planned • Detections of fire ants beyond the scope of the plan | <ol style="list-style-type: none"> 1. Invest in management and research that increases efficiency of operations 2. Plan for sufficient contingency budget each year 3. Execute plan on time | <ol style="list-style-type: none"> I. Prioritise containment over eradication II. Raise issues with Steering Committee for resolution |
| External approval of funding is too slow | <p>Funding for the strategy and plan is dependent on approvals FY2022/23. Any delays in committing to this funding may mean that it is impossible to procure resources in time for operations to start on schedule.</p> | <ol style="list-style-type: none"> 1. Develop funding documentation in a timely manner and seek feedback/approval as soon as possible 2. Where possible, seek exception permission to begin procurement documentation before final approval has been granted | <ol style="list-style-type: none"> I. Reduce scale of plan for FY22/23 II. Raise issue with Steering Committee for resolution III. Raise with QLD govt for consideration |
| Internal authorisation for major procurements is too slow | <p>The Program is unable to commence implementation of this plan on 1 July 2022 (operations doubled in first year). Specifically, the program is unable to obtain financial approvals, enter into contracts, procure services and supplies, source accommodation, vehicles and source additional staff for example.</p> | <ol style="list-style-type: none"> 1. Pre-engage corporate procurement team as to the situation of the program 2. Develop detailed procurement plan that identifies critical milestones to be met. 3. Dedicate resources to ramp up program in early 2022. | <ol style="list-style-type: none"> I. Prioritise containment over eradication II. Raise issue with Steering Committee for resolution |

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| | | 4. Begin procurement documentation and process ASAP, in preparation for final approvals | |
| Loss of community and political support for continuing fire ant eradication efforts | A lack of community support may lead to: <ol style="list-style-type: none"> 1. Community resistance to treatment and surveillance on land they control 2. Lack of political support for implementing legislation like movement control compliance and right of entry to treat 3. Reluctance to communicate risks of fire ants to the community 4. Loss of political support and funding for fire ant control | <ol style="list-style-type: none"> 1. Dedicate resources to raising fire ant awareness and support for eradication strategies 2. Conduct targeted engagement of stakeholders who are most important to fire ant eradication success 3. Conduct regular surveys of the community to measure community sentiment towards fire ant eradication | <ol style="list-style-type: none"> I. Review effectiveness of current communication and engagement strategies II. Raise issue with Steering Committee for resolution |
| Fire ant treatment not possible in 100% of fire-ant suitable habitat | Some land types may be suitable for fire ant habitation but not accessible for treatment due to (for example): <ul style="list-style-type: none"> - Growth of organic produce - OH&S issues (railways, highways) - Chemical sensitivity of residents - Chemical sensitivity of produce (crayfish farms etc.) - Community opposition | <ol style="list-style-type: none"> 1. Systematic identification of treatment gaps and reasons for their existence 2. Dedicated team to manage gaps 3. Research into alternative treatment methods where required | <ol style="list-style-type: none"> I. Prioritise containment over eradication II. Raise issues with Steering Committee for resolution |
| Fire ants area already beyond the planned limit and response capacity of the plan | It is possible that fire ants are detected in areas beyond the limit of the plan due to: <ol style="list-style-type: none"> 1. New importations from overseas 2. Long-distance movement of fire ants from current infestation | <ol style="list-style-type: none"> 1. Enhanced HAM controls and compliance to minimize HAM 2. Planning and budgeting for control of outbreaks beyond the suppression area 3. Provide assistance to Commonwealth and | <ol style="list-style-type: none"> I. Prioritise outbreak response to these detections II. Raise issue with Steering Committee for resolution |

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| | | interstate agencies to detect and respond to novel fire ant incursions outside of Queensland's jurisdiction | |
| Controls to restrict HAM of fire ants are ineffective | Controls on the human-assisted movement are ignored by the public and fire ants spread beyond their current limits in SEQ | <ol style="list-style-type: none"> 1. Enhanced HAM controls and compliance to minimize HAM 2. Planning and budgeting for control of outbreaks beyond the suppression area 3. Annual contingency budget to be applied in response to emergency situations as determined by the National SC | <ol style="list-style-type: none"> I. Prioritise containment over eradication II. Raise issues with Steering Committee for resolution |
| Fire ant treatment is ineffective | Planned fire ant treatment is insufficient to kill all ants in the targeted area | <ol style="list-style-type: none"> 1. Annual monitoring of eradication and containment areas to measure effectiveness 2. Dedicate project teams to address issues (i.e. Gaps in treatment) 3. On-going research and develop into treatment tools and strategies (i.e. Toxicant use) | <ol style="list-style-type: none"> I. Prioritise containment over eradication II. Raise issues with Steering Committee for resolution |
| Fire ant surveillance and monitoring is ineffective | Surveillance is ineffective at detecting fire ants | <ol style="list-style-type: none"> 1. Invest in management and research that increases effectiveness of surveillance 2. Conduct QA/QC on surveillance activities | <ol style="list-style-type: none"> I. Raise issues with Steering Committee for resolution |
| Fire ant surveillance and monitoring is not | Some areas of land are not conducive to surveillance. I.e.: | <ol style="list-style-type: none"> 1. Maximise the use of RSS | <ol style="list-style-type: none"> I. Raise issues with Steering Committee for resolution |

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| possible on 100% of land | <ul style="list-style-type: none"> - Contaminated land - Heavily forested land | <ol style="list-style-type: none"> 2. Survey multiple times over sequential years 3. Use clearance modelling to inform decision making | |
| Insufficient data collected to prove freedom from fire ants | Systematic collection of data is required to be able to prove proof of freedom. If systems are not in place, this data may not be collected. | <ol style="list-style-type: none"> 1. Plan surveillance to prove proof of freedom from start of plan 2. Invest in systems that integrate with all response partners | I. Raise issues with Steering Committee for resolution |
| Sufficient critical resources (independent of funding) are not available to execute plan | Current suppliers of critical resources are unable to supply quantity required within the timeframe available, including: <ul style="list-style-type: none"> - Fire ant baits - RSS equipment and services - Staff - Vehicles - Helicopters services - Electronic hardware (tablets etc.) | <ol style="list-style-type: none"> 1. Seek additional suppliers/products where possible 2. Prioritise procurement in ramp-up phase to allow sufficient time | <ol style="list-style-type: none"> I. Prioritise containment over eradication II. Raise issue with Steering Committee for resolution |
| Fire ant suppression (by FAST) is insufficient to prevent reinfestation of <i>Eradication</i> and <i>Containment Areas</i> | Suppression of fire ants in the <i>Suppression</i> area is insufficient, leading to reinfestation of <i>Containment</i> and <i>Eradication</i> areas, preventing the proving of area freedom from fire ants | <ol style="list-style-type: none"> 1. Ensure NRIFAEP provides input into prioritization of target areas 2. Continue fire ant movement control enforcement until FAST/industry are adequately prepared to adopt compliance themselves 3. Provide assistance to FAST wherever practical (i.e.. without otherwise compromising NRIFAEP objectives) | <ol style="list-style-type: none"> I. Raise issues with FAST for resolution II. Rise issues with Steering Committee for resolution |