Enhancing Biosecurity Collaboration and Capability in the Southern Gulf and Western Cape York Region, 2023-2025

Funded through the Enhancing Queensland's Local Government Biosecurity Capacity program, guided by the Regional Collaboration Framework

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Acknowledgments

UP North would like to thank the following organisations for their contributions to this strategy:

- Cook Shire Council
- Mareeba Shire Council
- Kowanyama Aboriginal Shire Council
- Far North Queensland Region of Councils
- Carpentaria Shire Council
- Pormpuraaw Aboriginal Shire Council
- Gulf Savannah NRM

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Acknowledgement of Country

We acknowledge the Traditional Owners of the lands, waterways and sea country from across Far North Queensland and pay respects to the Elders, past, present and emerging, for they hold the memories, traditions, culture and hopes of Aboriginal and Torres Strait Islander people throughout the region.

1.0 Executive Summary

The Enhancing Local Government Biosecurity Capability (ELGBC) project was initiated to assess and strengthen the biosecurity capacity of five local governments in South-Western Cape York: Mareeba, Cook, Carpentaria, Kowanyama, and Pormpuraaw.

With a shared objective to protect country, communities, and livelihoods from the threats posed by invasive species and biosecurity risks, this collaborative initiative has brought together councils, ranger teams, and regional stakeholders to identify operational strengths, gaps, and opportunities for greater coordination.

Over the course of five network meetings and associated field visits, the project has produced a detailed evaluation of biosecurity planning, operational readiness, resource inventories, and stakeholder engagement across the participating Councils. It became clear that while each Shire faces distinct challenges shaped by geography, governance, and available resources, many common themes have emerged:

- There is a strong local commitment to on-ground weed and pest management, despite staffing shortages and limited infrastructure.
- Biosecurity plans and strategic documents vary in currency and quality, with a need for regular review and integration of practical, locally driven insights and assistance provided to smaller, resource constrained shires.
- Councils operate in a context where the balance between education, relationship building, and enforcement must be carefully managed.
- Surveillance, monitoring, and data management practices are inconsistent but improving, with opportunities to adopt shared standards and platforms across the region.

The project also highlighted the crucial role of collaboration both between neighbouring Councils and with external agencies such as FNQROC, QDAF, and NRM groups. These relationships are critical in leveraging external expertise, securing funding, and ensuring cohesive responses to biosecurity threats that span local government boundaries.

Key recommendations emerging from the project include the development of a publicly accessible regional capability condition report, the formalisation of a shared mapping and data framework,

targeted training and mentoring for under-resourced Councils, and the continuation of annual regional knowledge exchanges.

This report summarises the project's scope, findings, and strategic directions. It is supported by mapping resources and inventory data that will be made available to each Council. It is intended as both a snapshot of current capabilities and a roadmap for future investment in biosecurity resilience across South Western Cape York.

1.1 Report purpose

The scope of this component of the broader Enhancing Local Government Biosecurity Capability (ELGBC) project was to produce a report that:

- Assessed operational biosecurity capabilities of each Shire;
- Compiles inventories of key staff, equipment, and other resources;
- Understands the local response mechanisms in the event of an outbreak;
- Identifies opportunities for regional collaboration; and
- Identifies mapping tools to visualise regional biosecurity threats and capabilities.

This report consolidates the collective insights and findings of the project. It serves as a strategic reference and planning document for councils, partners, and stakeholders aiming to strengthen local and regional biosecurity resilience.

Specifically, this report:

- Documents the current operational capabilities, resource inventories, and strategic approaches of participating councils.
- Identifies key strengths, gaps, and challenges affecting biosecurity delivery across diverse regional contexts.
- Highlights collaborative mechanisms and shared practices that can support improved coordination, training, and community engagement.
- Provides a foundation for future investment, policy development, and inter-agency collaboration to address emerging biosecurity threats.

By combining practical experience with structured analysis and regional mapping, the report aims to support informed decision-making, enhance preparedness, and promote sustainable land and pest management practices throughout the Western Cape York region.

This report presents the findings, observations, and preliminary recommendations from the ELGBC initiative across the five participating Councils: Mareeba, Cook, Carpentaria, Kowanyama, and Pormpuraaw.

1.2 Outcomes of Project

The outcomes of this project have been identified in direct response to feedback provided from the following parties:

- Local Government Officers
- Participating natural resource management groups and regional organisations of Councils.

The following findings have informed the conclusions and recommendations outlined in **Part 6** of this Report.

Project Findings:

1. **Variability in biosecurity capability:** The participating Shires exhibit a broad range of biosecurity capacities, reflecting differences in geographic coverage, population density, staffing, and resource availability. While Cook and Mareeba Shires demonstrate established programs and higher levels of integration with regional frameworks, others such as Carpentaria, Kowanyama, and Pormpuraaw bring strengths in community engagement and access to country but require support in strategic planning and infrastructure. Structured training programs for officers in this field should be offered statewide.

2. **Strategic planning and documentation gaps:** Across the network, biosecurity plans vary in quality, currency, and implementation. Some Councils operate under outdated or draft plans, while others are still developing plans. This creates uneven preparedness and hinders region-wide coordination. State Government support and funding is needed to ensure all Councils maintain current, practical, and regionally informed strategies

3. **Resource limitations and equipment gaps:** Most Councils operate with minimal staffing, often one or two officers, and rely heavily on Indigenous Ranger teams or contractors. Equipment inventories are inconsistent and, in some cases, insufficient to manage outbreaks effectively. Access to secure chemical storage, licensed operators, and dedicated vehicles varies significantly.

4. **Community engagement and awareness:** Kowanyama and Pormpuraaw have demonstrated success in engaging their communities through surveys and outreach, linking biosecurity concerns to local values such as bush tucker and cultural heritage. However, broader public awareness of biosecurity obligations remains limited. Expanding education and communication programs is a shared need. This is particularly important because significant areas of invasive species are found within freehold land tenure.

5. **Enforcement and compliance challenges:** Due to the close knit nature of remote communities, enforcement is politically and practically complex. Officers often favour collaboration over

prosecution, but this can limit the response to non-compliant landholders. Councils expressed a preference for the State to lead enforcement actions.

6. **Surveillance and monitoring practices:** Surveillance programs vary greatly between Shires. Cook Shire has developed robust mapping and monitoring systems using ESRI. QGIS and QField are being trialed at both Cook and Kowanyama, while others rely on *ad hoc* data collection. There is a clear need for standardised surveillance practices and tools that can support region-wide data analysis and trend tracking.

7. **Regional collaboration opportunities:** The project highlighted untapped potential for increased collaboration through mentoring arrangements, shared training events, joint response strategies, and integrated mapping tools. Councils expressed interest in formalising a knowledge sharing forum and strengthening links with FNQROC and NRM bodies.

8. **Mapping and visualisation:** The need for practical, accessible mapping tools was consistently identified. Councils require easy access to mapping that can visualise pest data, management activities, and risk zones across boundaries. The FNQ Regional Pest Distribution Mapping (2022/23) and Gulf Savannah NRM mapping provides a valuable baseline that should be expanded upon with local overlays and regular updates. It is acknowledged that ongoing funding and resourcing is

2.0 Legislative Framework

Biosecurity responsibilities for Local Governments in Queensland are primarily governed by the *Biosecurity Act 2014 (Qld)*, supported by the *Queensland Biosecurity Strategy 2024–2029*.

Together, these instruments provide the legislative and strategic direction for biosecurity risk management, surveillance, enforcement, and community engagement.

Biosecurity Act 2014 (Qld)

Application for managing biosecurity risks at the local government level, especially those involving:

- invasive plants and animals;
- prevention and surveillance measures;
- community compliance and public awareness initiatives.

Key provisions include:

- General Biosecurity Obligation: Requires all persons (including Councils) to take reasonable and practical steps to manage biosecurity risks.
- Section 48 – Local Government Responsibility: Each local government is responsible for managing invasive biosecurity matter in its area. In particular prohibited and restricted invasive plants and animals must be addressed within biosecurity plans.

- Section 53 – Local Government Biosecurity Plan: Each local government must prepare a plan to manage invasive biosecurity matter, based on local conditions and risks.
- Section 54 – Public Access to Plans: Plans must be publicly accessible, in written or electronic form, free of charge.
- Biosecurity Programs: Councils may authorise surveillance, prevention, or control programs within their jurisdiction.
- Authorised Officers: Councils may appoint individuals to monitor, investigate, and enforce biosecurity laws.

The *Biosecurity Act 2014* requires that the response to a biosecurity risk is reasonable and practical and risk-based decision-making is used to ensure that the response is proportionate to the level of risk. This allows flexibility in the application of the legislation and balances the interests of the community.

Queensland Biosecurity Strategy 2024–2029

Provides a state-wide roadmap for coordinated action by all stakeholders. Key objectives include:

- Shared Responsibility: Emphasises the collective role of government, community, and industry.
- Support for Local Government: Encourages alignment with regional biosecurity priorities and state legislative frameworks.
- Capacity Building: Supports local government with training, guidance, and tools to enhance biosecurity capability

The strategy is designed to determine priorities for investment in the Queensland biosecurity system through an agreed governance structure involving partners and stakeholders.

3.0 Enhancing Local Government biosecurity capability

This section outlines the current and emerging opportunities for regional collaboration across the South Western Cape York biosecurity network. Drawing on insights from council workshops, project engagement, and local experience, it describes how councils, rangers, and partner organisations can strengthen biosecurity planning and response through shared systems and governance models.

The collaboration potential builds on existing relationships with FNQROC, Gulf Savannah NRM, and Cape York NRM, and recognises the value of better-resourced councils such as Cairns Regional Council in providing mentoring and technical assistance. It also highlights the need for dedicated State Government support to formalise and fund coordinated regional approaches.

Regional collaboration is emerging as a key enabler of scalable and sustainable biosecurity capability. This section provides a practical summary of these collaboration opportunities and proposes a series of targeted recommendations to enhance their impact.

3.1 Operational biosecurity capabilities of each Shire

A core objective of this project was to assess the operational biosecurity capabilities of the participating Shires: Cook, Mareeba, Kowanyama, Pormpuraaw, and Carpentaria. The evaluation draws on workshop notes, interviews with council officers and rangers, and existing inventory and response documentation.

3.1.1 Cook Shire Council

Cook Shire delivers environmental and pest management services through a generalist team that must balance multiple responsibilities across a vast geography. Despite the challenges of limited staff and resource stretch, the Council has engaged in cross-boundary programs and has access to spatial tools. Further enhancement would require dedicated biosecurity focus and more consistent internal protocols.

Strengths:

- Environmental services team integrated with pest management duties
- Past involvement in cross-boundary pest control programs
- Cook Shire has high-level skills in data collection, management, and visualisation.

Challenges:

- Has two full time staff responsible for biosecurity. Key personnel risk.
- Limited capacity to complete surveillance programs. Inability to cover entire shire.
- Officers feel too close to landholders to enforce regulations, preferring the State to take on enforcement and remediation responsibilities.
- Tenure blind policy places unrealistic expectations on councils and park managers with limited funding, while private landholders have few incentives to meet their General Biosecurity Obligation.

Status of Local Government Biosecurity Plan

Cook Shire currently has the 2022-2026 Biosecurity Plan. It is a compliant plan.

Observations

Cook Shire runs a successful spray unit loan program, offering landholders free access to equipment and chemicals (with a refundable bond), encouraging private action on weed control. This program fosters collaboration and builds capacity on private land without heavy enforcement.

Cook Shire is a leader in local biosecurity strategy, particularly in terms of technical innovation, partnership development, and practical, community-oriented implementation.

3.1.2 Mareeba Shire Council

Mareeba is comparatively well placed to deliver biosecurity outcomes. Staff engage in weed control and data collection and participate in regional collaboration. However, like many councils in Queensland, biosecurity responsibilities are spread thinly across teams, and integration of tools and planning is often informal rather than strategic.

Strengths:

- Stronger resourcing base due to population and scale
- Active contributor to FNQROC and the development of regional weed management plans
- Use of mapping and inventory tools

Challenges:

- Biosecurity functions fragmented across departments
- No centralised strategy or point of accountability. Biosecurity reporting is not routine, and there is no structured way to assess its importance within council decision-making.
- Inconsistent application of procedures. Clear protocols for early detection, rapid response, or emergency biosecurity would be beneficial.

Status of Local Government Biosecurity Plan

Mareeba has an existing Biosecurity Plan aligned with the *Biosecurity Act 2014*. While the plan includes strategic priorities, there are opportunities to improve operational alignment and integrate digital reporting tools across departments.

Observations

Targeted investment in staff capacity, digital tools, and internal prioritisation could greatly improve the Shire's biosecurity capability and compliance with Queensland's biosecurity obligations.

3.1.3 Kowanyama Aboriginal Shire Council

Kowanyama's ranger team is central to local biosecurity action. The Rangers have high cultural and ecological knowledge and achieve strong community engagement. Nonetheless, the ability to formalise these efforts into a documented and resourced biosecurity system is limited by equipment constraints, operational funding, and gaps in formal training—issues common in remote communities.

Strengths:

- Highly knowledgeable Indigenous ranger workforce
- Deep cultural and ecological knowledge of Country
- Trusted by community for on-ground surveillance

Challenges:

- Limited equipment and storage facilities
- Absence of formal training and certifications
- No digital pest tracking or centralised reporting

Status of Local Government Biosecurity Plan

Kowanyama has a draft biosecurity plan which is awaiting council approval. Ranger activities are based on local knowledge and seasonal needs. Development of a simple, practical biosecurity strategy would support more consistent operations and funding applications.

3.1.4 Pormpuraaw Aboriginal Shire Council

Pormpuraaw's rangers undertake a vital role in pest animal control and other land management duties. These are respected programs but are not supported by a formal biosecurity plan or integrated data systems. In remote Aboriginal councils, where capacity is already stretched, efforts are sustained through commitment of officers rather than structural support.

Strengths:

- Pormpuraaw Shire has access to country, which allows for effective biosecurity responses without delays or disputes from private landholders.
- Longstanding ranger program focused on animal pest control
- Community supported initiatives with tangible outcomes
- Emerging collaboration with external agencies
- Some additional support/partnership has been received from QDAF to secure equipment

Challenges:

- No formalised biosecurity framework or strategic plan
- Ad hoc data collection and response activities
- High reliance on third party expertise and funding.

Status of Local Government Biosecurity Plan

Pormpuraaw does not have a documented biosecurity plan. Pest activities are reactive and informed by ranger knowledge. Formalising these activities into a plan would provide a stronger basis for inter-agency coordination and funding.

3.1.5 Carpentaria Shire Council

Carpentaria Shire maintains biosecurity functions within a broader environmental health framework and has a history of engagement with regional weed mapping. Like other rural councils, however, the full integration of biosecurity across departments and in response planning remains a work in progress, shaped by practical constraints.

Strengths:

- Active in regional weed mapping
- Identified pest management personnel
- History of participation in state and regional projects
- Collaborative approach with Carpentaria Land Council Aboriginal Corporation (CLCAC) Rangers for biosecurity surveillance, on ground management, and stakeholder engagement.

Challenges:

- Need for modernised standard operating procedures and internal alignment
- Biosecurity actions often secondary to other priorities
- Limited preparedness for rapid response

Status of Local Government Biosecurity Plan

Carpentaria has an existing Pest Management Plan which meets minimum legislative requirements. This could be expanded and updated to reflect a modern, risk-based biosecurity approach, consistent with the *Biosecurity Act 2014*. Carpentaria also utilises the North West Queensland Regional Biosecurity Plan 2022-2027 which was developed to enable coordinated and consistent management of invasive species across multiple land tenures and jurisdictions, address shared biosecurity risks, and strengthen collaboration between local councils, Traditional Owners, landholders, and state agencies recognising that effective biosecurity requires a landscape scale, cross boundary approach.

3.1.6 Summary and strategies for improvement

Across the five participating councils, a strong commitment to land stewardship, community-based engagement, and regional collaboration is evident. The presence of dedicated ranger teams and experienced environmental staff highlights the significant existing capacity that can be built upon.

Operational challenges such as resource constraints, fragmented responsibility, and underdeveloped digital systems have contributed to inconsistent biosecurity preparedness and response.

The absence or underdevelopment of formal biosecurity plans in three of the five councils is not a reflection of unwillingness, but rather the product of limited support, geographic isolation, and the scale of responsibilities faced by small teams. These realities highlight the need for structured, regional support mechanisms and shared tools that empower councils without duplicating effort.

To align the region with national best practice, the following strategies are recommended:

1. **Regional biosecurity support network:** Establish a formalised support network building from this project that continues knowledge exchange, coordinates training, and supports grant applications.

Use established networks such as ROC and NRM groups to convene or host this network and manage associated funding for the activity.

2. **Shared digital infrastructure:** Encourage a shared mapping data set that can be integrated within existing Council online mapping platforms to allow for improved internal Council access to mapped species. Consider a state-wide standardised reporting and data collection framework that is implemented within regional Councils with ongoing State resource commitments and funding to avoid the need for this to be developed by individual Councils.
3. **Annual regional capability review:** Maintain momentum by conducting an annual capability and needs review, to support public messaging on all participating council websites, reviewing the effectiveness of the ELGBC project and the progress of the implementation of key recommendations.
4. **Templated local biosecurity plans:** Provide a State led templated but flexible Biosecurity Plan framework that each council can adapt, focusing on risk prioritisation, seasonal preparedness, and clear escalation protocols.
5. **Joint training and equipment pools:** Seek pooled funding for shared resources like PPE, storage, and vehicles to increase purchase power and reduce pricing on equipment and use coordinated training events to boost qualifications across the network. This could benefit from State or Industry Peak Body led training platforms consistent with other areas such as water quality monitoring, erosion and sediment control, regional planning and vegetation management.

These recommendations build on the collaborative intent of the original ELGBC Western Cape York Network proposal and align with broader frameworks such as the Queensland Biosecurity Capability Implementation Program and the National Biosecurity Strategy. The strength of this region lies in its people - officers, rangers, and community partners and their willingness to work together. With structured support and shared investment, this network can serve as a leading example of remote, resilient, and regionally driven biosecurity governance.

3.2 Response mechanisms in the event of an outbreak

Outbreak readiness and the ability to mount a timely, coordinated response to biosecurity incidents vary considerably across the five councils. This section outlines existing capabilities and identifies barriers to best practice, while acknowledging the unique geographic, logistical, and organisational constraints that influence local capacity.

3.2.1 Cook Shire Council

Cook Shire has a general incident response framework that can be adapted to biosecurity events, however, no formal outbreak specific plan exists, and roles and responsibilities during such events are not clearly delineated. Responses are typically *ad hoc* and dependent on availability of staff or support from state agencies.

3.2.2 Mareeba Shire Council

Mareeba can draw upon emergency management governance structures used for disaster coordination, but specific protocols for biosecurity outbreaks are not yet embedded into Council's business continuity or emergency plans. Past outbreak responses have benefitted from regional partnerships but the response has not been formally reviewed to explore effectiveness and opportunities for improvement.

3.2.3 Kowanyama Aboriginal Shire Council

Ranger teams play a central role in biosecurity awareness and early detection but lack a formalised outbreak response plan or access to emergency decision making protocols. Limited resources further constrain rapid deployment, and coordination with external responders is often informal.

3.2.4 Pormpuraaw Aboriginal Shire Council

Pormpuraaw's ability to respond to outbreaks is heavily reliant on rangers and the Council Chief Executive Officer. Without a documented escalation pathway or incident command system, responses can be delayed or fragmented. Equipment shortages, distance, and accessibility pose further challenges.

3.2.5 Carpentaria Shire Council

Carpentaria's outbreak response capacity is tied to its broader disaster and environmental health functions. While some personnel have participated in pest control initiatives, formal links between these activities and outbreak specific planning are weak. Inter-agency and internal coordination is improving but remains informal.

3.2.6 Summary and strategies for improvement

Common strengths across the region:

- Strong local knowledge, dedicated officers, and rapid local awareness of potential pest or disease incursions
- Willingness to act and escalate when biosecurity issues are observed
- Emerging relationships with regional and state partners to support outbreak response

Common challenges across the region:

- Absence of documented outbreak response frameworks
- Lack of defined local roles and escalation protocols
- Limited access to equipment, transport, and communication tools
- Inconsistent engagement with disaster management or emergency operations centres

To align the region with national best practice, the following strategies are recommended:

1. **Develop local outbreak response plans:** Provide councils with adaptable outbreak response templates that define roles, reporting pathways, and communication protocols.
2. **Conduct tabletop exercises:** Coordinate mock scenarios (e.g., feral pig disease outbreak) involving council, rangers, NRM bodies, and QDAF to test response pathways. Similar to disaster preparedness exercises.
3. **Integrate biosecurity into LDMGs:** Ensure biosecurity considerations are formally recognised within Local Disaster Management Groups (LDMGs) and included in Local Disaster Management Plans.
4. **Create a shared rapid response toolkit:** Equip rangers and officers with mobile kits for surveillance and control, ensuring consistent tools across the region.

5. **Link to State-Level incident coordination:** Establish formal memorandums of understanding (MOUs) or escalation pathways to the Department of Primary Industries (DPI) to activate support when outbreaks exceed local capacity.

While the foundations for outbreak detection exist across the network, systematic planning and infrastructure for coordinated response is largely undeveloped. The integration of biosecurity into local emergency management structures, combined with scenario-based training and shared resources, will position the network to respond more effectively to future incursions.

3.3 Regional collaboration opportunities

3.3.1 Overview

A regionalised approach to biosecurity offers significant efficiencies and enhanced resilience, particularly in remote areas where staff, skills, and infrastructure are limited. Opportunities for collaboration are both practical and strategic, building on existing strengths and aligning with broader state and national initiatives.

Cairns Regional Council (CRC), as a well-resourced regional Council in terms of biosecurity management, developed a comprehensive Biosecurity Plan in collaboration with the FNQROC and local stakeholders. This plan provides strategic direction for managing invasive biosecurity matter and other priority pests across all land tenures within the Cairns region. CRC's proactive approach includes the implementation of surveillance programs, prevention and control initiatives for both pest animals and priority weeds, and active participation in the Reef Guardian Council program, which contributes to the delivery of the Reef 2050 Long-Term Sustainability Plan.

Gulf Savannah NRM and Cape York NRM both maintain strong land management networks and digital mapping expertise that could be leveraged for coordinated surveillance and threat response. Biosecurity is effectively embedded in NRM regional strategies which ensures alignment with natural asset protection priorities and increases access to external funding.

FNQROC has a well-established “working group” governance framework that can be adapted by non-member Councils for the specific purpose of biosecurity coordination. This inclusive approach could provide a platform for shared training, resourcing, and outbreak response planning.

Establishing formal cross-boundary working groups comprised of operational officers, rangers, and community representatives would enable continuous knowledge exchange and shared policy development. These should be supported by regular virtual meetings, joint funding applications, and shared data systems.

The Queensland Government has a critical role to play in supporting this collaborative approach and engagement from the State in Local Government response to biosecurity threats could be improved.

The Department of Primary Industries (DPI) and Biosecurity Queensland should actively participate in regional forums, provide formalised modular training, and contribute funding to shared capability development, as recommended in the Queensland Biosecurity Capability Implementation Program.

Regional collaboration is not just a strategic opportunity but a practical necessity. When approached with structure and supported by committed partners, it can deliver scalable, sustainable improvements in biosecurity outcomes across northern Queensland.

3.3.2 Summary and strategies for improvement

To align the region with national best practice, the following strategies are recommended:

1. **Formalise NRM partnerships** - Biosecurity is successfully embedded as a strategic priority in the regional plans of Gulf Savannah NRM and Cape York NRM. There is an opportunity to focus on establishing memorandums of understanding to facilitate joint exercises and information sharing.
2. **Leverage Cairns Regional Council as a Regional Hub** – Establish a pilot support program that enables Cairns to provide technical, planning, and GIS mentorship across the network, building upon its existing biosecurity programs and expertise.
3. **Expand or create a regional biosecurity working group** – Formalise a multi-council and State working group for knowledge exchange, policy alignment, joint funding bids, and collective reporting.
4. **Establish shared regional tools and systems** – Develop and implement shared data sets to integrate into existing Council mapping and establish a state-wide tool for incident reporting and training coordination.
5. **Advocate for improved State Government involvement** – Engage the Queensland Department of Primary Industries and Biosecurity Queensland to support funding, technical guidance, formalised training, and escalation protocols across the region.

3.4 Mapping tools and data management

To provide further insight into existing capabilities and inform future investment, the following is a summary of the current online mapping systems and data management capacity for each participating Council:

3.4.1 Cook Shire Council

Cook has comprehensive internal mapping capacity. Detailed data is collected using handheld units during both treatment and surveillance activities using forms created in the ArcGIS Online environment. Digital maps can be produced on demand and are provided to agencies such as TMR on an annual basis. Cook also uses a remotely piloted aircraft to collect detailed, georeferenced orthomosaic imagery of designated sites when monitoring transition or the effects of new herbicides. There is no standalone digital mapping portal for pest management at this point.

3.4.2 Mareeba Shire Council

Mareeba has developed an internal biosecurity mapping tool used by staff for pest data recording. This includes location tagging and treatment notes but is not currently integrated with broader state platforms or accessible to external stakeholders. The tool represents a strong base for future regional alignment.

3.4.3 Kowanyama Aboriginal Shire Council

Kowanyama does not currently operate a formal mapping tool for pest management. Ranger teams collect data informally and spatial data is generally not digitised. A simplified mobile data collection tool would assist in creating consistent records and enable future mapping.

3.4.4 Pormpuraaw Aboriginal Shire Council

Mapping activities are informal and undertaken on an as needed basis by ranger staff. There is no digital system in place for tracking pest species or mapping treatment areas. Support to implement mobile data collection and integration with a shared platform would be beneficial.

3.4.5 Carpentaria Shire Council

Carpentaria utilises internal GIS systems for broader council planning purposes. Pest data exists and is mapped but it is not centrally mapped or visualised in real time. Standardising data entry and creating internal pest mapping layers would support improved coordination.

3.4.6 Other regional datasets and mapping

A summary of available mapping of current pest presence, as recorded across the region, is provided in **Appendix 1**, which includes the FNQROC Regional Pest Distribution Mapping (2022–23) and the Gulf Savannah NRM Mapping (Monitoring weed distribution for coordinated control in the remote Gulf Savannah). These maps, developed by the FNQROC- Natural Asset Management Advisory Committee (2023) and Gulf Savannah NRM, display key invasive species data and provide a shared evidence base for future planning.

The metadata associated with this mapping includes key pest species such as *Acacia glauca* (Redwood), *Andropogon gayanus* (Gamba grass), *Annona glabra* (Pond apple), and *Anredera cordifolia* (Madeira vine), each evaluated for coverage and data confidence.

For example, Redwood shows a coverage of 'Very Good' with a confidence rating of 95%, while Gamba grass and Pond apple both show 'Good to Fair' coverage with 80% confidence. These confidence ratings are critical in determining response priorities and validating field-based observations. Known data gaps are also noted, highlighting the need for consistent data contributions across all local government areas.

Effective mapping and data sharing are essential to understanding biosecurity risks, targeting interventions, and enabling coordinated responses. Across the South Western Cape York region, several councils and partners have made progress in developing geospatial tools, though integration and consistency remain challenges.

FNQROC's Regional Pest Distribution Mapping (2022–23) and the Gulf Savannah NRM (mapping provides a baseline dataset that identifies the presence and distribution of key pest species across member councils. This mapping is already informing regional planning and biosecurity discussions.

3.4.7 Summary and strategies for improvement

The Queensland Invasive Plants and Animals Strategy 2025–2030 identifies the need to support local governments with better access to shared data systems. It commits the State to enabling "improved tools and platforms for data collection and sharing across government and community partners."

There is now a clear opportunity to establish a regional biosecurity mapping and reporting platform built on open source software that can integrate with existing council systems. This would allow rangers and council officers to record sightings, map outbreaks, and plan treatment activities in real time, while also contributing to regional and state datasets.

To align with best practice and enable efficient local implementation, the following strategies are recommended:

1. **Develop a shared mapping and reporting framework** – Establish a standardised regional format for pest data collection that is compatible with state platforms (e.g. WeedScan, Biosecurity QLD).
2. **Integrate existing datasets** – Combine FNQROC and Gulf Savannah NRM mapping outputs with local council data into existing Council GIS platforms.
3. **Create centralised dashboards** – Enable regional partners and state agencies to view, analyse, and respond to biosecurity data in near-real-time through a shared visualisation portal.
4. **Support local capacity** – Provide training and templates for councils and ranger teams to contribute data consistently and securely.

4.0 Case studies

To demonstrate the practical benefits of coordinated biosecurity efforts, this section presents two case studies that highlight successful collaboration at both regional and cross-jurisdictional levels. These examples offer insights into how strategic partnerships, shared resources, and integrated planning can enhance local government capability and deliver measurable biosecurity outcomes.

The first case focuses on a locally led initiative in Cooktown targeting Gamba grass, while the second showcases a nationally recognised fruit fly management program in the Goulburn Murray Valley. Together, they illustrate the power of collaboration across council boundaries, government agencies, landholders, and communities and provide inspiration for scalable approaches within the South-Western Cape York context.

4.1 Case Study 1: Cooktown Gamba Grass Task Force

Cooktown Gamba Grass Task Force

The Gamba Grass Task Force is a regionally coordinated initiative led by Cook Shire Council, formed in 2021 using the FNQROC taskforce model to address the growing threat of Gamba grass (a highly invasive, high-biomass species) in Far North Queensland.

Key Objectives

- Map the distribution of Gamba grass, especially in the Annan-Endeavour catchment.
- Contain and reduce the existing footprint of infestations.
- Increase awareness among landholders, community members, and agencies.
- Support landholder engagement and collaboration across jurisdictions.

Participants

The task force includes:

- Local governments
- Traditional Owners (TOs)
- Biosecurity Queensland (BQ)
- Tropical Weeds Research Centre
- Queensland Parks and Wildlife Service (QPWS)
- Department of Resources (DOR)

Up to 10 teams working over three full days annually, equivalent to 42–60 FTE days per event.

Delimitation and Monitoring

- The team used GIS tools (Concave Hull) to define infestation boundaries.
- Buffer zones were surveyed and found infestation was contained within 70m of the mapped polygon.
- Site divided into 382 grid plots for detailed density analysis and monitoring change over time.

Treatment and Revegetation Strategy

- High-density zones require assisted revegetation; low-density areas may regenerate naturally.
- Trial plots were treated with glyphosate, followed by Grazon Extra, and seeded with Brachiaria spp.
- Positive results led to expanded treatment in 2024, with further grid assessments scheduled for July 2025.

Education and Landholder Support

- Ongoing school visits to Cooktown State School are an opportunity for student engagement in land management outside the immediate goals of the Taskforce.
- Two landholder spray units are available to residents, with initial chemical supply and refundable bond.

Conclusion

The Gamba Grass Task Force represents a well-coordinated, science-informed, multi-agency effort to manage one of the region's most aggressive invasive grasses. Benefits around networking and knowledge sharing are key and demonstrated the potential for success.

4.2 Case Study 2- Goulburn Murray Valley Fruit Fly Area Wide Management Project

Goulburn Murray Valley Fruit Fly Area Wide Management (GMVFFAWM) Project

The Goulburn Murray Valley Fruit Fly Area Wide Management (GMVFFAWM) Program is a distinguished example of cross-jurisdictional collaboration in Australia, effectively mitigating the impact of Queensland fruit fly (Qfly) across a significant horticultural region.It is estimated that horticulture in the GMV region generates $1.6 billion in gross regional product.

The program's success is attributed to the concerted efforts of a diverse group of stakeholders, including:

Local Government Areas (LGAs): Greater Shepparton City Council, Campaspe Shire Council, Moira Shire Council, Strathbogie Shire Council, and Berrigan Shire Council.

Industry Associations: Fruit Growers Victoria Ltd, Cobram and District Fruit Growers' Association, and Summerfruit Australia.

Government Agencies: Agriculture Victoria and Goulburn Murray Water.

Community Organizations: Lions International and various local community groups.

Research Institutions: Macquarie University and other academic partners.

This collaborative framework ensures a unified approach to fruit fly management across the region.

The project has established benchmarks in the innovative Fruit Fly Area Wide Management that have been acknowledged in Australia and overseas. Key achievements include:

- 14,241 education workshop participants
- Community and industry
- Schools Education Programs Community partnerships
- Links to existing regional events Service club support
- 2,500 active volunteers

Community education outcomes

Since the project's inception in 2017, the region has recorded a significant decrease in fruit fly trapped through the project's extensive trapping grid. To date the GMV fruit fly project has achieved:

- An 83% reduction of the fruit fly population in the township of Cobram.
- An 60% reduction in the fruit fly population across the Goulburn Murray Valley region.

Participating Councils:

- Greater Shepparton City Council (lead council) Moira Shire Council
- Campaspe Shire Council Strathbogie Shire Council Berrigan Shire Council (NSW)

Governance Structure

A Project Control Group was formed with representatives from each council, industry groups, and Agriculture Victoria. Councils worked under a shared governance and operational framework, formalised through agreements that defined roles, funding responsibilities, and decision-making protocols.

Shared Responsibilities

Co-funding of regional initiatives, including surveillance programs, community education, and waste removal campaigns.

Joint communications strategies to unify public messaging (e.g. "No Flies on Us!" campaign).

Coordinated fruit tree removal programs from public and private lands.

Supported community events, school programs, and workshops with shared branding and educational resources.

Worked together to implement sterile insect technique (SIT) trials in target areas such as Cobram.

Why It Worked

Councils recognised that fruit fly does not respect boundaries, so a fragmented response would be ineffective. By combining efforts, they achieved economies of scale, consistent management practices, and more significant biosecurity impact across the region.

Funding Sources

1. Victorian State Government

Provided core funding through Agriculture Victoria, including grants from the Better Biosecurity Outcomes program.

2. Horticulture Innovation Australia (Hort Innovation)

Funded key trials such as the Sterile Insect Technique (SIT) through its levy-funded R&D programs.

3. Local Government Contributions

Each participating council contributed both financial resources and in-kind support (e.g., staff time, facilities, local promotion). This local investment demonstrated commitment and enabled ongoing operational delivery.

4. Industry Support

Contributions from Fruit Growers Victoria, Summerfruit Australia, and other regional grower groups. In-kind support included industry-led trapping, monitoring, and distribution of educational materials.

5. Commonwealth Funding (Occasional)

Limited or project-specific federal funding was available through national biosecurity grants or innovation programs.

Impact of this Model

- Created a biosecurity partnership region involving councils, communities, and producers. Enabled data sharing across LGAs for real-time regional pest monitoring.
- Resulted in an 83% reduction in fruit fly populations in some hotspots (e.g., Cobram).
- Was recognised with multiple awards, including the Australian Biosecurity Award (2021) and the Hort Connections Visy Impact Award (2022).

In summary, the GMVFFAWM Program's success hinged on coordinated planning, pooled funding, aligned policies, and shared goals among councils, combined with strong partnerships with industry and government. It is now regarded as a best-practice template for managing biosecurity risks across regional boundaries

5.0 Strategic frameworks: Queensland and Global perspectives

5.1 Policy alignment and State support

The Queensland Invasive Plants and Animals Strategy 2025–2030 (QIPAS) sets a clear direction for managing biosecurity risks across the state. It reinforces the principle of shared responsibility while recognising the critical enabling role of the State Government in supporting Local Government capability development. This section outlines key alignments with the ELGBC strategy and specific areas

where the Queensland Government is expected to provide assistance.

Strategic Pillars of QIPAS 2025–2030

- Prevent – Promote early detection and local empowerment through awareness, surveillance networks, and shared data.
- Respond – Enable coordinated, risk-based, and timely responses to outbreaks, including clear escalation protocols.
- Recover and Adapt – Strengthen post-incident learning, integrate Traditional Owner knowledge, and build adaptive governance structures.

On review of the Strategy, the following are considered key obligations of the State Government in supporting Local Governments in their role in biosecurity:

- Planning and Policy Support:
    - Develop LGA biosecurity planning templates and technical guidance.
    - Support councils in aligning local plans with state-wide and national strategies.
- Investment and Capability Development:
    - Provide targeted funding for remote councils to maintain essential biosecurity operations.
    - Offer accredited training and technical support for local officers and ranger teams.
- Digital Systems and Mapping Tools:
    - Maintain centralised pest and disease data platforms.
    - Offer access and support for spatial data integration in local government mapping.
- Incident Response and Escalation:
    - Lead coordination of multi-jurisdictional outbreaks under the Biosecurity Emergency Response framework.
    - Formalise escalation pathways and council roles in regional response networks.
- Monitoring and Evaluation:
    - Conduct regular performance reviews of regional biosecurity systems.
    - Disseminate best practice case studies and encourage regional innovation.
- Community and Stakeholder Engagement:
    - Fund and co-host joint education and outreach campaigns with LGAs.
    - Encourage consistent community messaging and biosecurity literacy.

5.2 International best practice alignment

Globally, several jurisdictions have adopted innovative and effective models for biosecurity collaboration that reinforce the importance of state-level support for local government. These examples provide useful guidance for Far North Queensland in further developing its local biosecurity systems:

- New Zealand – Biosecurity New Zealand / Ko Tātou This Is Us New Zealand's approach is a standout model for cross-sectoral responsibility. The central government works closely with regional councils, Māori iwi, and industry. Local governments receive strategic support in planning, surveillance, and rapid response, reinforced by national public education campaigns. This model illustrates how strong state backing enhances local delivery.

- Canada – Plant and Animal Health Strategy Canada's strategy encourages federal-provincial collaboration and includes municipal engagement. Local governments are supported through mobile response units, shared data systems, and funded training programs. It highlights the importance of flexible, localised implementation within a coordinated national framework.

- European Union – One Health Surveillance. The EU's integrated One Health framework connects human, animal, and environmental biosecurity under standardised surveillance systems. Funding grants to municipalities and joint simulation exercises ensure preparedness and cohesive policy responses. The model demonstrates the benefits of consistent cross- border systems and regular state-local engagement.

These international practices align with the goals of the ELGBC strategy and support advocacy for a structured and proactive role for Queensland Government agencies in partnering with regional councils.

5.3 Opportunities

The five participating councils, Mareeba, Cook, Carpentaria, Kowanyama, and Pormpuraaw, alongside FNQROC and Gulf Savannah NRM, could jointly advocate by:

- Highlighting the regional collaboration already underway through the ELGBC project;
- Outlining specific resourcing and capability needs identified across the participating councils;
- Requesting targeted support in the form of funding, training, and digital infrastructure;
- Proposing a formal pilot partnership for regional outbreak planning and mapping integration;
- Seeking opportunities to run practical exercises using escalation protocols and response frameworks with State agencies to identify opportunities to improve applicability in a regional context.

This united regional request would not only demonstrate strong inter-council collaboration but also reinforce the shared responsibility model promoted in Queensland's strategic frameworks. It would establish the South Western Cape York Network as a proactive regional partner in strengthening Queensland's biosecurity system.

6.0 Conclusions and Recommendations

6.1 Project Findings

1. **Variability in biosecurity capability:** The participating Shires exhibit a broad range of biosecurity capacities, reflecting differences in geographic coverage, population density, staffing, and resource availability. While Cook and Mareeba Shires demonstrate established programs and higher levels of integration with regional frameworks, others such as Carpentaria, Kowanyama, and Pormpuraaw bring strengths in community engagement and access to country but require support in strategic planning and infrastructure. Structured training programs for officers in this field should be offered statewide.

2. **Strategic planning and documentation gaps:** Across the network, biosecurity plans vary in quality, currency, and implementation. Some Councils operate under outdated or draft plans, while others are still developing plans. This creates uneven preparedness and hinders region-wide coordination. State Government support and funding is needed to ensure all Councils maintain current, practical, and regionally informed strategies

3. **Resource limitations and equipment gaps:** Most Councils operate with minimal staffing, often one or two officers, and rely heavily on Indigenous Ranger teams or contractors. Equipment inventories are inconsistent and, in some cases, insufficient to manage outbreaks effectively. Access to secure chemical storage, licensed operators, and dedicated vehicles varies significantly.

4. **Community engagement and awareness:** Kowanyama and Pormpuraaw have demonstrated success in engaging their communities through surveys and outreach, linking biosecurity concerns to local values such as bush tucker and cultural heritage. However, broader public awareness of biosecurity obligations remains limited. Expanding education and communication programs is a shared need. This is particularly important because significant areas of invasive species are found within freehold land tenure.

5. **Enforcement and compliance challenges:** Due to the close knit nature of remote communities, enforcement is politically and practically complex. Officers often favour collaboration over prosecution, but this can limit the response to non-compliant landholders. Councils expressed a preference for the State to lead enforcement actions.

6. **Surveillance and monitoring practices:** Surveillance programs vary greatly between Shires. Cook Shire has developed robust mapping and monitoring systems using QGIS and QField, while others rely on *ad hoc* data collection. There is a clear need for standardised surveillance practices and tools that can support region-wide data analysis and trend tracking.

7. **Regional collaboration opportunities:** The project highlighted untapped potential for increased collaboration through mentoring arrangements, shared training events, joint response strategies, and integrated mapping tools. Councils expressed interest in formalising a knowledge sharing forum and strengthening links with FNQROC and NRM bodies.

8. **Mapping and visualisation:** The need for practical, accessible mapping tools was consistently identified. Councils require easy access to mapping that can visualise pest data, management activities, and risk zones across boundaries. The FNQ Regional Pest Distribution Mapping (2022/23) and Gulf Savannah NRM mapping provides a valuable baseline that should be expanded upon with local overlays and regular updates. It is acknowledged that ongoing funding and resourcing is required to ensure quality updated data input and integration into individual Council systems.

6.2 Recommendations

This report identifies a range of practical and strategic opportunities for Councils across the South Western Cape York region to enhance their biosecurity readiness and response.

It recognises the complex demands placed on Local Government, particularly in remote and resource-constrained settings where staff are required to deliver a broad suite of essential services across vast geographies.

Accordingly, the recommendations outlined in this report aim to balance ambition with feasibility. Some actions are designed to be low-cost and readily implementable within current structures, such as the adoption of consistent pest reporting templates or improved coordination through existing forums. Others will require additional investment and may necessitate partnerships, grant funding, or state government support to bring to fruition.

Together, these initiatives provide a roadmap for building a more resilient, coordinated, and locally empowered biosecurity network. A summary of the key recommendations is provided in Table 1.

Table 1: Summary of recommendations

Operational biosecurity capabilities of each Shire	
	Regional biosecurity support network: Establish a formalised support network building from this project that continues knowledge exchange, coordinates training, and supports grant applications. Use established networks such as ROC and NRM groups to convene or host this network and manage associated funding for the activity.
	Shared digital infrastructure: Encourage a shared mapping data set that can be integrated within existing Council online mapping platforms to allow for improved internal Council access to mapped species. Consider a state-wide standardised reporting and data collection framework that is implemented within regional Councils with ongoing State resource commitments and funding to avoid the need for this to be developed by individual Councils.
	Annual regional capability review: Maintain momentum by conducting an annual capability and needs review, to be inform public-facing comms produced by each Shire. Gives appropriate transparency to progress of the implementation of key recommendations.

	Templated local biosecurity plans: Provide a State led templated but flexible Biosecurity Plan framework that each council can adapt, focusing on risk prioritisation, seasonal preparedness, and clear escalation protocols.
	Joint training and equipment pools: Where cost-effective (given huge travel distances and difficult logistics) seek pooled funding for shared resources like PPE, storage, and vehicles to increase purchase power and reduce pricing on equipment and use coordinated training events to boost qualifications across the network. This could benefit from State or Industry Peak Body led training platforms consistent with other areas such as water quality monitoring, erosion and sediment control, regional planning and vegetation management.
Response mechanisms in the event of an outbreak	
	Develop local outbreak response plans: Provide councils with adaptable outbreak response templates that define roles, reporting pathways, and communication protocols.
	Conduct tabletop exercises: Coordinate mock scenarios (e.g., feral pig disease outbreak) involving council, rangers, NRM bodies, and QDAF to test response pathways. Similar to disaster preparedness exercises.
	Integrate biosecurity into LDMGs: Ensure biosecurity considerations are formally recognised within Local Disaster Management Groups (LDMGs) and included in Local Disaster Management Plans.
	Create a shared rapid response toolkit: Equip rangers and officers with mobile kits for surveillance and control, ensuring consistent tools across the region.
	Link to State-Level incident coordination: Establish formal memorandums of understanding (MOUs) or escalation pathways to the Department of Primary Industries (DPI) to activate support when outbreaks exceed local capacity.
Regional collaboration opportunities	
	Formalise NRM partnerships - Biosecurity is successfully embedded as a strategic priority in the regional plans of Gulf Savannah NRM and Cape York NRM. There is an opportunity to focus on establishing memorandums of understanding to facilitate joint exercises and information sharing.
	Leverage Cairns Regional Council as a Regional Hub – Establish a pilot support program that enables Cairns to provide technical, planning, and GIS mentorship across the network, building upon its existing biosecurity programs and expertise. .
	Expand or create a regional biosecurity working group – Formalise a multi-council and State working group for knowledge exchange, policy alignment, joint funding bids, and collective reporting.

	Establish shared regional tools and systems – Develop and implement shared data sets to integrate into existing Council mapping and establish a state-wide tool for incident reporting and training coordination.
	Advocate for improved State Government involvement – Engage the Queensland Department of Primary Industries and Biosecurity Queensland to support funding, technical guidance, formalised training, and escalation protocols across the region.
Mapping tools and data management	
	Develop a shared mapping and reporting framework – Establish a standardised regional format for pest data collection that is compatible with state platforms (e.g. WeedScan, Biosecurity QLD).
	Integrate existing datasets – Combine FNQROC and Gulf Savannah NRM mapping outputs with local council data into existing Council GIS platforms.
	Create centralised dashboards – Enable regional partners and state agencies to view, analyse, and respond to biosecurity data in near-real-time through a shared visualisation portal.
	Support local capacity – Provide training and templates for councils and ranger teams to contribute data consistently and securely
Strategic frameworks: Queensland and Global perspectives	
	Joint advocacy for • regional collaboration already underway through the ELGBC project; • resourcing and capability needs identified across the participating councils; • targeted support in the form of funding, training, and digital infrastructure; • a formal pilot partnership for regional outbreak planning and mapping integration; • opportunities to run practical exercises using escalation protocols and response frameworks with State agencies to identify opportunities to improve applicability in a regional context.

Appendix 1.

Biosecurity Mapping Resources

Biosecurity Mapping Resources

1. Department of Primary Industries Pest Distribution Survey Mapping (plants and animals)

https://www.dpi.qld.gov.au/business-priorities/biosecurity/invasive-plants-animals/pest-mapping/distribution-maps

2. FNQ Regional Pest Distribution Mapping – 2022/23. FNQROC-Natural Asset Management Advisory Committee (2023)

   https://www.fnqroc.qld.gov.au/regional-programs/natural-asset-management

3. Monitoring weed distribution for coordinated control in the remote Gulf Savannah produced by Gulf Savanah NRM

   https://gulfsavannahnrm.org/

   (Note: At the time of publication this data was not available for public distribution pending release approval)

4. Council Biosecurity Plans

   A link to Cook Shire Council's Biosecurity Plan is provided as an example of mapping

   https://www.cook.qld.gov.au/wp-content/uploads/2024/06/COOK-BIOSECURITY-PLAN-2022-draft-for-consultation_v1.1-002.pdf

Appendix 2.

Workshop Notes and Council Consultation

FileNote #1: Mareeba

Enhancing Biosecurity Collaboration and Capability in the Southern Gulf and Western Cape York Region

16 March 2024: Mareeba Shire Council Depot, Kowa St

Attending

Partners	Special Guests
1. Graham Wienert, Mareeba *Host* 2. Darryn Higgins, Cook 3. John Brisbin, Kowanyama *Secretariat* 4. Carl Casey, Carpentaria (via Teams) 5. Clinton Williams, Pormpuraaw (via Teams)	Kelly Reaston and Ben Carroll, UpNorth Group *Consultants*

Welcome and intros

Acknowledgment of the Muluridji people who are the traditional owners of the Mareeba area.

Graham welcomed the attendees and gave a quick orientation to the facilities.

The attendees introduced themselves and we had a chance to review the overview survey to get a better understanding of who we all are. The survey revealed that we have new officers as well as old. Some who are well-networked but most are not. We have a variety of contacts with key external stakeholders (like the TopWatch program, BioSecurity Queensland, and the relevant Regional Organisation of Councils like FNQROC and NWROC). And we have a variety of priorities amongst the weeds and ferals. Survey results are attached.

We also touched on the basic subject: what is meant by the term “biosecurity” in the context of this project? For example, the spread of pathogens and the development of biocontrol agents is all handled by other agencies with laboratories and specialists: Shire officers deal with issues on ground and can be directed by other agencies, but they don’t lead the biosecurity agenda. This was an important point to clarify.

Project admin

John provided an overview of the project and outlined the three main deliverables: (1) a series of 5 networking meetings, one to be hosted by each Shire; (2) a survey of capabilities to be undertaken by the Consultants; (3) the findings of this project to be made available on each of the 5 Shire websites.

There is $8,000 of funding budgeted for each Shire to help cover the expenses of the project. To receive this funding, each Shire needs to sign an MoU agreement with Kowanyama so that there is a documented agreement for everyone's audit requirements. Then each Shire can invoice Kowanyama for the $8,000.

That funding is to be used to offset costs that each Shire will incur while participating in the project. Managing expenses is the responsibility of each Shire and is intended to ensure that each Shire is able to meet the deliverables agreed in the MoU.

Kowanyama is acting as the Secretariat for the project, which means they are responsible to the funder for all project reporting and financials.

The participants were given a chance to clarify any of this and all seemed comfortable with the arrangements as outlined.

IBRA Subregions

John provided a map that shows Shire boundaries and property lines overlayed with the four IBRA Subregions. The map helps visualize where this project is intended to focus. The subregions are supposed to provide a biophysical profile that could have relevance to biosecurity management.

The subregions are variously shared across all the participants. It was informative to estimate the number of landholders in each subregion as this gives an indication of the level of management complexity that Officers are faced with. All Officers indicated that they are reasonably well-connected with these landholders. However, it was also noted that most of the Shire's work is limited to road reserves and council land. Private property, which dominates in Carpentaria, Cook, and Mareeba, is normally not accessed. Pormpuraaw and Kowanyama only deal with a single landholder (the prescribed body corporate).

	Karumba Plains	**Mitchell-Gilbert Fans**	**Northern Holroyd Plain**	**Coastal Plains**
Carpentaria	Yes (10)	Yes (20)		
Cook		Yes (5)	Yes (10)	
Kowanyama	Yes (1)	Yes (1)	Yes (1)	Yes (1)
Mareeba		Yes (10)		
Pormpuraaw			Yes (1)	Yes (1)

Table 1: IBRA Subregions by Shire, with approx number of landholders per subregion

More information needs to be sourced to better understand if/how the subregions will assist the project. Refer to the IBRA Subregion map attached.

Scoping the Capabilities Survey

Ben and Kelly opened up discussion of the Capabilities Survey. The intent is to produce a survey that is useful to both the Shires and to external agencies. This could take various forms, so this was an important opportunity to review what commitments we have under the funding, and to check if there are some specific things we're all interested in surveying.

The Survey will thus serve as a way to gauge relative capabilities among the Shires, identify any priority gaps, and serve as a reference for future funding justification.

Physical assets inventory

This seems straightforward. Collect a list of the equipment that is readily available to each Shire, like a typical asset inventory. An interesting question concerned how far to push the inventory. For example, it is easy enough to count the number of backpack sprayers a Council has. But what about the number of people with current AC/DC tickets? Does Council have a secure hazards storage facility? Is there a regular list of chemicals regularly updated and can expired materials be properly disposed?

So, it is important to record the gear, but also important to think about the supporting processes that keeps that gear ready for deployment.

Staff and ops budget

There's never enough staff and budget, but it might be useful to come up with some metrics that help compare the relative capacities of the 5 Shires. For example, for all the hectares that a Shire manages (ie, not all properties, but the area under management), how many staff are available? What is the annual ops budget per hectare?

Another angle would be to try to estimate where the money is being spent. Stakeholder engagement and reporting is a huge overhead. In the field, where is most of the money going? Pigs? Weeds?

Reporting: biosecurity as a Shire priority?

Since there is no mandated periodic reporting on biosecurity matters it falls to the Shires to maintain a proper level of focus on biosecurity matters. This "focus" might be best tested through the types and frequency of reports that Officers provide to their Exec and elected members.

A survey of these reports would be informative and may suggest some ways to raise the priority of biosecurity matters within each Shire.

Data collections

One of the more interesting opportunities is around data collection. Some of the Shires are not collecting any data for their own use, while other Shires have quite an advanced data collection process. Only Cook Shire has a long track record of data collection and management.

For clarity, we discussed the difference between data that seeks to evaluate land condition vs data that is directly related to specific threats. None of the Shires are collecting land condition data, although his was seen as more in scope for the Aboriginal Shires. It was also suggested that the NRM bodies have a role with this sort of assessment.

The data that Shires are collecting relate to specific threats. For example, the location, extent, and treatment history of weed infestations, or the area and methods of pig and wild dog control.

Another type of data is connected to specific stakeholder programs. For example, both Pormpuraaw and Kowanyama collect extensive data on turtle nesting, hatching, and predation. This data is collected on a purpose-built app and is collated through the Western Cape Turtle Threat Abatement Alliance. So, although the Shire Rangers "collect" the data, it doesn't form part of the Shire's data assets.

Area managed

An emerging question centred on the "area under management" for each of the Shires. For Pormpuraaw and Kowanyama, there is an Indigenous Ranger program which (theoretically) has access to all the traditional lands within the Shire. Carpentaria has utilised the CLCAC Rangers to deliver land management services within their Shire. Cook and Mareeba largely stick to public lands and road reserves unless a landholder has invited a collaboration with Shire staff.

It might be interesting to develop a sort of heatmap to indicate the density of biosecurity observation typically available to Officers across the landscapes within this project.

Local Laws and Biosecurity Plans

The project seeks to assess the condition and utility of Biosecurity Plans at each Shire. It could also be useful to test the number of enforcement actions (and outcomes) that have been undertaken in the last ~5years.

This may provide some insight to the degree of latent risk in each Shire. In some cases, Officers maintain a close connection with their landholders and are able to avoid enforcement via negotiated undertakings. In other cases, the lack of enforcement could indicate a lack of resourcing to drive higher compliance, or a lack of political support to challenge landholders who are failing to meet their General Biosecurity Obligations and specific local laws.

Facilities tour

Graham walked the group around his Depot facilities and pointed out some of the equipment and facilities managed under his program.

Aircon office with computers, maps, and GIS system

Big spray truck and portable washdown trailer in the back

New shed, old poison bait mixer, decommissioned canoes, and plenty of storage

No beer in the chem fridge!

Next steps

Networking meetings

After an excellent first meeting, it was agreed that we would aim to get two more meeting in 2024, leaving the last two meetings for the first half of 2025.

Provisional dates:

- **Cook**: late May. Darryn to circulate some potential dates soon as possible
- **Pormpuraaw**: early August looks good for Clinton. A couple of proposed dates to sent soon.

Capabilities Survey

Ben and Kelly will be in touch with each Shire individually to undertake the Survey

Media

All Shires to get a short news bit up in their Council newsletter or socials.

Admin

Pormpuraaw and Mareeba to get their MoUs signed and invoice sent in asap

FileNote #2: Cooktown

Enhancing Biosecurity Collaboration and Capability in the Southern Gulf and Western Cape York Region

Attending

Partners	Special Guests
1. Darryn Higgins, Cook *Host* 2. Graham Wienert, Mareeba 3. John Brisbin, Kowanyama *Secretariat*	Ben Carroll, UpNorth Group *Consultant*

Welcome

Confirming attendance, welcomes and housekeeping. Thanks to Darryn for hosting.

Subject matter

Competing duties

Officers reflected that their roles as Local Laws can be a major distraction from the on-ground work of survey and treatment related to weeds and ferals.

Cook and Mareeba Shires noted that the country in the shared IBRA subregions of this project are in the more remote areas with few roads. There is a largely valid assumption that this country is relatively intact and of lower interest from a biosecurity risk perspective.

The opportunity to survey these areas is very limited given budgets and resourcing. Officers depend on reports from land managers, but land managers themselves are often absent from these areas.

The group sees these areas as a "strategic gap" in the coverage.

Relationships and enforcement

How to manage relationships was a big topic. Officers noted that the relationship with land managers is absolutely essential. These relationships are necessary for everything from the free flow of reporting information to the basic logistics of how to operate and live in these remote regions. No one can afford to make enemies or be seen as an "enforcer" When it comes to the concept of a general biosecurity obligation, the theory is fine, but implementation is virtually impossible. It is very difficult to balance the need for collaborative engagement and the necessity of enforcement.

It was noted that "we are too close to our land managers to do enforcement." This is seen as an advantage in many respects because of the more genuine and collaborative relationships that result. The feeling was that the State needs to deliver the enforcement role, not local

government officers. “It is the State who can properly fund the necessary remediation actions as well as deliver the enforcement that is required.”

Discussion also covered the problems with the “tenure-blind” policy. In practical terms, institutions such as local government and parks do not have the rate base or grant funding required to manage the enormous stretches of country they are responsible for. And commercial land managers do not have effective incentives or penalties to force GBO compliance. As a result, most of the positive on-ground biosecurity impacts (feral culls/controls, weed management) are overwhelmed by the scale of the problems.

TMR collaboration

A lack of coordination with TMR was cited as a major issue for Shires with extensive road networks (Cook and Mareeba). TMR’s roadside slashing program is informally regarded as a “taxpayer-funded weed spreading program” due to the inability of TMR crews to manage the risk of propagating high biomass grasses along their work corridors.

It was also noted that TMR’s new (?) prioritisation algorithm appears prone to giving very bad direction to the local council crews. For example, being directed to intensively manage a specific patch of roadside weeds that is part of a much larger infestation stretching kilometres on either side of the identified “priority” treatment area, meaning that the work is essentially wasted effort. Local crews are in much better position to make prioritisation decisions, or at least should be able to recommend variations to the schedule of works that TMR issues.

Gamba and other weeds

Gamba grass was a big topic of discussion, noting that the extent of Gamba on the Cape seems to have been well-underestimated in years past. As more mapping effort is applied, it has become apparent that Gamba is a more serious threat than has been recognised.

Cook demonstrated a test paddock where Gamba had been treated with very good results. Shows the benefit of a strategic and targeted program.

A major issue with Gamba is land manager ambivalence. On some roadsides Council crews have been repeatedly controlling the Gamba, but just over the fence the land manager indicates that “it’s good fodder.” It has been observed that Gamba is also used as a “green bulldozer”: by allowing Gamba to go rank through the bush, and then burning it hot in the late Dry, a land manager can clear land where it would otherwise not be possible to get a legal clearing permit.

Rubbervine was cited as a major environmental weed, but there are limited opportunities for Council to clear it other than from the roadsides. The seed viability is only about 9 months, so it should be possible to make good progress with control. However, without the compliance of land managers the seed drifts back across the landscape and the plant becomes re-established each season.

Grader grass is now endemic in many areas of the Cape. There was a cautionary story shared about how several years ago Council officers noticed the sudden and widespread appearance of grader grass across the Shire. After some investigation it was discovered that the quarry supplying Council with roadbase was heavily infested. The failure to spot and control this point source meant that all the Council works using that roadbase became new points of infestation.

Opportunities

On a more positive note, Cook Shire led a process in 2022 that resulted in an MoU between the FNR workforce. This was a good example of how networking and resource sharing can deliver positive outcomes.

Cook also shared their experience with getting proposals in to the State-run Land Protection Fund which all local governments contribute to (except for Aboriginal Shires). The research projects undertaken through that fund can have immediate and beneficial effects for the work of local officers.

Cook described their program of supporting land managers who wish to access the Council's spray units (600L twin reel QuikSpray). The loan is free and one tank of chemicals is provided. Land managers put up a $750 bond and agree to return the unit cleaned down. The program works well.

Dog baiting and BQ relationship

The meeting discussed complexities with dog baiting. Many land managers are still focussed on the amount of bait distributed. Research undertaken by Darryn Higgins and others has conclusively shown that baiting efficiency is highly correlated to bait placement: "unless bait is placed out of sight of birds, you're wasting your time."

When the Drugs & Poisons Regulation was changed (year?) the laws on 1080 were changed to allow private contractors to access and deploy 1080 into the environment. Unfortunately, the regulation of this activity has been lacking. Councils are supposed to know who is using 1080, but private operators are not compelled to register their activities. It was noted that this change also meant a change in the relationship with Queensland Biosecurity: "Since the 1080 regulations changed we don't have the same frequent level of contact with BQ, even though we are still operating in the same space."

Technical notes

Cook have a very high level of capabilities with data collection, management, and visualisation. The group shared discussion over how data gets collected and displayed in the various management reports that Cook is able to produce.

Cook advised that there is a field collection utility app that can interface with QGIS, called *QField*.

Mareeba is still working on getting their new ArcGIS tools set up and functioning well. Limited technical capacity inside Council makes it a slow process.

Next steps

Networking meetings

After an excellent second meeting, it was agreed that we would aim to get our last meeting in before the Wet arrives in late 2024.

Pormpuraaw: Any time is going to be busy time, but we agreed to aim for September. **Clinton to confirm.** Invites to FNQ ROC and TopWatch to see if they would like to attend and co-present.

FileNote #2: Cooktown

Capabilities Survey

Ben will be in touch with each Shire individually to undertake the Survey

Media

All Shires to get a short news bit up in their Council newsletter or socials.

Admin

Pormpuraaw to get their MoUs signed and invoice sent in asap

FileNote #3: Kowanyama

Enhancing Biosecurity Collaboration and Capability in the Southern Gulf and Western Cape York Region

Attending

Partners	Special Guests
1. John Brisbin, Kowanyama, *Host &Secretariat* 2. Clinton Holroyd, Pormpuraaw 3. Carl Casey, Carpentaria 4. Darryn Higgins, Cook 5. Graham Wienert, Mareeba	Kowanyama Ranger Team Pormpuraaw Ranger team

Welcome

Confirming attendance, welcomes and housekeeping.

Introductions and capabilities

The group went around the table for introductions and a comparison of how many people, vehicles and area of coverage they manage. Each of the main attendees are the key people responsible for their Shire's lands protection and biosecurity matters.

Mareeba

Graham has one offsider, two vehicles, and looks after a huge number of properties across 53,000km2 of country.

Carpentaria

Carl is by himself, one ute, 2 animal control officers, and looks after mainly the township areas of Normanton and Karumba. He uses contractors (Indigenous and non-Indigenous) to look after the rest of Carpentaria Shire (65,000km2)

Cook

Darryn has two offsiders and three utes to look after more than 5,000kms of roads across the 100,000km2 of Cook Shire with hundreds of property owners.

Pormpuraaw

Clinton and his team have three utes and a Ranger team of 10 to look after the 4,400km2 Shire

Kowanyama

There are 8 full-time Land & Sea Rangers with three utes to look after approx 3,000km2 of Kowanyama country and another 3,000km2 of Oriners-Seftonpastoral lease.

Biosecurity Plan: community priorities

Senior Ranger Darby Horace presented Kowanyama's work on a biosecurity priorities survey being undertaken across the community.

Survey

Kowanyama is currently developing its Biosecurity Plan. A key part of that Plan is an assessment of community priorities. To test these priorities, the Land & Sea Rangers have been running a short survey. The survey seeks to determine:

1 - **Where on country are people going?** Where do they spend their time, and how often do they go there? This helps define the community's geographical zones of awareness, and also suggests the intensity of observation in those areas.

2 - **What is the community's connection to bush tucker?** These questions help build a straightforward connection between the highly-valued bush tucker and the environment that is threatened by weeds and ferals. The responses to this question help us calibrate our public messaging about biosecurity issues.

3 – **What are you weeds and feral priorities?** This offered a chance to rank each of the 9 most probable biosecurity matters according to a simple scale, which included the option of

indicating a lack of knowledge.

4 – 6 – **About the respondee.** These questions gave us basic demographics: gender, age bracket, and degree of residency in Kowanyama.

Method

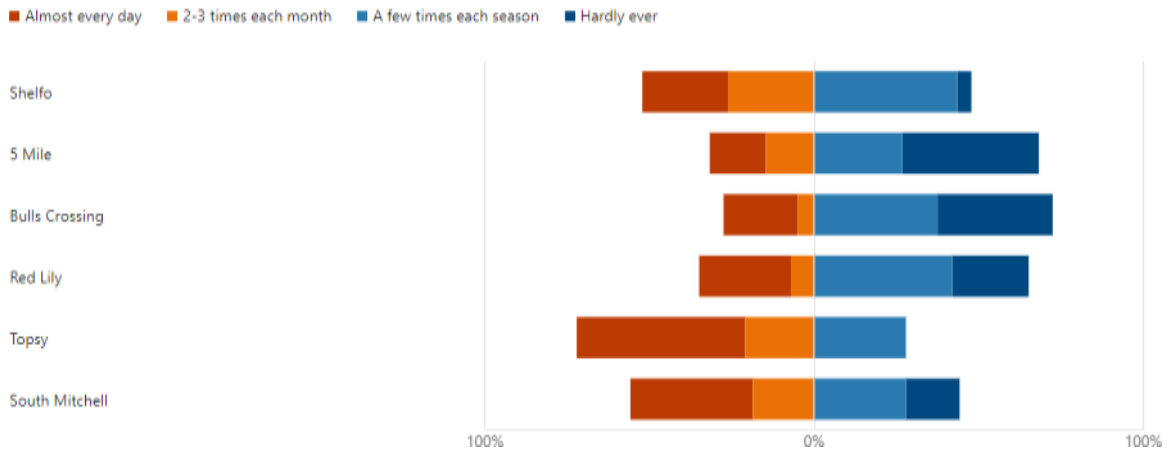
The surveys were printed and Rangers took them to workplaces and public spaces to collect interviews. The responses were then entered into the online form. The online form was also publicised via Council's social media and community Facebook.

Results

At the time of the ELGBC meeting, 46 responses had been collected and entered into the system with consolidated responses as follows:

1. Where do you go out bush? How often do you go?

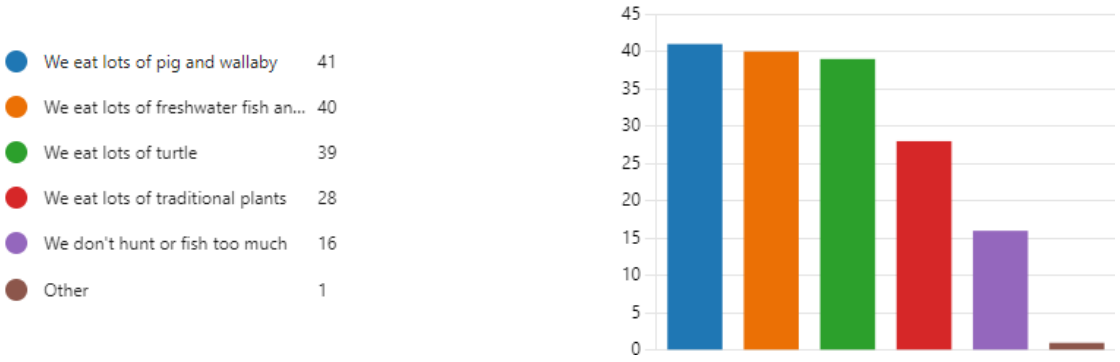
More Details



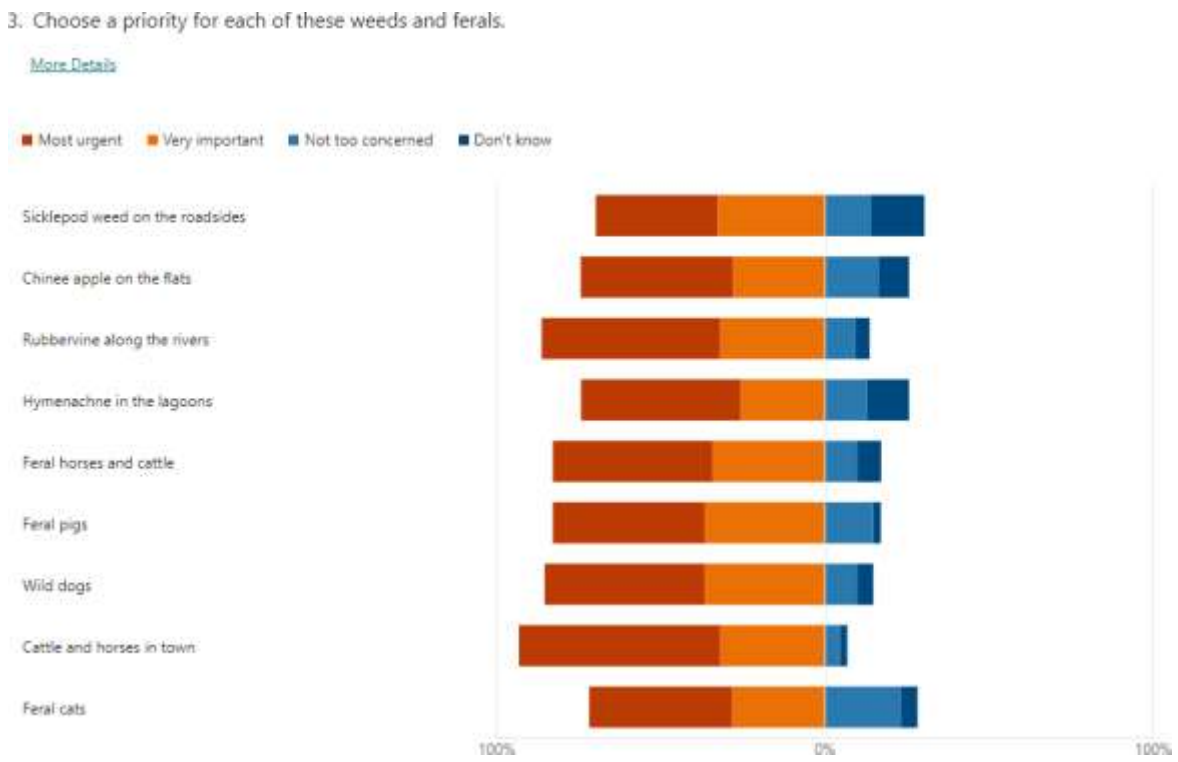
This result shows a clear preference for three locations and a relative absence from three others, although there are high-frequency visitors showing up in all 6 locations.

2. How important is bush tucker for you?

More Details



This result shows that virtually all of the respondents are enthusiastic consumers of bush tucker. Interestingly, about a third of the respondents indicated that they do not hunt or fish very much. This could mean that they are relying on the hunting and fishing activities of friends and relatives. Either way, there is clearly a strong connection between the respondents and their expectations for healthy and bountiful country.



Judging by the uniformity of responses, this question may not have been as effective as was hoped. It could be that respondents did not have the patience or attention to weight the different weeds/feral issues *in relation to each other*. However, it could also indicate a fundamental concern for the health of all country, in which case there is little point in trying to rank these threats: they are all “Most Urgent” and “Very Important”.

If this is the case, then there is a clear message that the community has a low tolerance for *any* biosecurity threat to the health of country. In this view, there is still something interesting (perhaps) to be seen in the matters that the community showed less concern of knowledge about, especially Feral Cats, Sicklepod, Chinee Apple and Hymenachne.

Sicklepod at Shelfo Crossing

5. Gender

More Details

Male	22
Female	25
Prefer not to say	0

6. Age

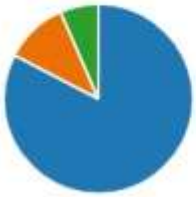
More Details Insights

10 - 20 yrs	6
21 - 30 yrs	10
31 - 50	16
51 +	15
Other	0

7. Where is home? How long have you lived in Kowanyama?

More Details

Most all of my life	38
About half my life	5
Less than half my life	3



These results show a good gender balance, an excellent representation across the age brackets, and a healthy weighting toward responses from long-term locals.

Next steps

The Land & Sea Rangers will continue to push the survey across the community with a target of at least 100 responses. The final results will be used to inform the Kowanyama Biosecurity Plan, currently in draft.

Rubbervine at Shelfo Crossing

Visitor and Contractor protocols

The group discussed the challenges of managing visitors and contractors who actively move weeds across the landscape. Although most of the Shires include performance clauses in their contracts which require contractors to maintain weed hygiene, there are few resources available for enforcement.

Contractors, and even Council road crews, are often negligent with respect to good washdown protocols. This goes a long way toward explaining why road crews are often seen as a weeds-spreading program.

A key focus for Cook is the containment of grader grass. Darryn is working with the roads crews to minimise the incidental spread of grader grass by simple measures such as changing the direction of work (eg, to push the grass back toward existing infestation instead of pushing it outwards to un-infested areas).

In the Kowanyama context, it was noted that grader grass appeared to be spread far more widely into the bush than in Cook or Mareeba Shires. In these Shires grader grass appears to (generally) stay more localised to the road network. The likely explanation seems to be that there are so many bush tracks around Kowanyama that locals become the vector for moving grader grass off the main roads and into the scrub.

Managing tourists is another challenge entirely, especially with the mixed feelings toward the effectiveness (or not) of washdown bays.

It was later noted that MSC have a high-end portable washdown rig that is apparently quite effective when deployed consistently.

Field visits

Magnificent Creek

The group walked along the Magnificent Creek toward the Ranger Shed for morning tea. The riparian habitat winds along one side of the Kowanyama township and is a central feature of the settlement. The big trees here are jammed full of fruit bats year-round. In the Dry, Kowanyama can be transformed to a roosting habitat for millions of Little Corellas.

Senior Ranger Darby Horace, crocodile spotting from the Council parking lot, looking across a raft of water hyacinth.

Red Lily

The group travelled to Red Lily lagoon where there are sacred sites and the impressive lagoon which was in bloom with red lilies. The lagoon was almost lost when pastoralists dredged the bottom to “improve” the lagoon for cattle. Once the integrity of the lagoon was destroyed, the water soaked away and the whole wetland began to dry up. Once the site was back in Aboriginal control the area began to improve. After decades of effort the lilies are re-establishing, despite continued pressure from pigs, horses, cattle, and various weeds such as candlebush, water hyacinth, hymenachne, and grader grass.

Red Lily Lagoon, with candlebush in foreground

This area near the lagoon is also being used as a propagation trial for the canegrass Phragmities. This once-abundant grass was the primary nutrition source of a totemic bird, the White-bellied Crimson Finch, or “little red bird.”

The Rangers built lightweight portable fence panels which exclude stock and allow test plantings to establish.

Ranger Brayden Collins explaining the Phragmities propagation nursery trial.

Kokoberra Swamp

The group proceeded west to Kokoberra Swamp. This huge area is part of a wetland system that is the last freshwater before transition to saltmarsh just a half a kilometre further west.

The swamp is a favoured hunting ground for geese and eggs. One person has been recorded as collecting over 700 eggs for the community in one day.

Over time, the swamp has been colonised by hymenachne and now supports a herd of feral horses and cattle. Together with the pigs, they keep the wetland soils compacted and hostile to native plants, allowing the tough hymenachne to out-compete everything.

It was noted that this time of year the swamp would normally be dry, but since the hyemnachne had taken over, it stays wetter longer. Perhaps this is because trhe dence mat of hyemnachne is more effective at retaining moisture, which is good, but the dense root mat keeps all other plants (and many animals) from being able to use the wetland.

The Kowanyama Rangers have had some success by burning the hymenachne at the peak of the Dry, but this practice has to be done regularly or else the grass simply re-establishes. It was also noted that when Hymencahne is poisoned at scale there is a risk of all the dead plant matter sinking into the wetland and, as it decays, pulling oxygen out of the water and killing the biology,

Graham Weinert, Anzac Frank, Julianne Maier, Darby Horace, Brayden Collins, Darryn Higgins, Taylor Edwards, Clinton Holroyd, Carl Casey. Background hymenachne, horses, and cattle horizon to horizon.

Shelfo Crossing

The group returned to Kowanyama, then travelled northeast to the crossing of the Mitchell River where the Alice River joins it to form the massive delta country at the coast. We were joined by Pormpuraaw Rangers who had come down to deliver a stack of turtle nest protection cages for use on Kowanyama beaches. More networking occurred over a nice lunch, followed by a demonstration of vehicle recovery strategies in soft sand.

Putting faces to the names: networking amongst regional neighbours

Next steps

Networking meetings

After an excellent third meeting, Clinton volunteered to put on Meeting #4 in Pormpuraaw in October, if it could be arranged.

Capabilities Survey

Ben will be in touch with each Shire individually to undertake the Survey

Media

All Shires to get a short news bit up in their Council newsletter or socials.

FileNote #4: Pormpuraaw

Enhancing Biosecurity Collaboration and Capability in the Southern Gulf and Western Cape York Region

Attending

Partners	Special Guests
1. Clinton Holroyd, Pormpuraaw, *Host* 2. John Brisbin, Kowanyama, *Secretariat* 3. Carl Casey, Carpentaria 4. Darryn Higgins, Cook 5. Graham Wienert, Mareeba	Kowanyama Ranger Team Pormpuraaw Ranger team **Rob Cobon**, Senior Principal Biosecurity Officer, Invasive Plants and Animals (IP&A) Biosecurity Queensland **Emma Atkins**, Director, Far Northern Biosecurity Initiative (Cape York and Torres Straits) QDAF

Welcome

Confirming attendance, welcomes and housekeeping.

Introductions

The meeting attracted another full round of participation by the partners with responsible officer representation from all 5 Shires. In addition, four members of the Kowanyama Ranger team and two members of the Pormpuraaw Ranger team joined in the proceedings.

In addition, we were fortunate to meet Emma Atkins and her colleague Rebecca Williams from the Far Northern Biosecurity Initiative (QDAF).

Introductions were made around the table and brief background was presented by each attendee.

Pormpuraaw operations

The host, Clinton Williams, gave an overview of operations at Pormpuraaw.

Clinton noted that every Shire is different, and there are similarities too. Pormpuraaw has a rolling 7-year Land & Sea Workplan and its authority comes from the Aboriginal Shire Council. In contrast to Carpentaria, Cook, and Mareeba, the local crew have full access to country and all permissions needed to take action on biosecurity problems like invasive weeds and animals. Since all land is managed cooperatively with the local Shire, there are no issues with uncooperative private landholders refusing to fulfill their General Biosecurity Obligation (GBO).

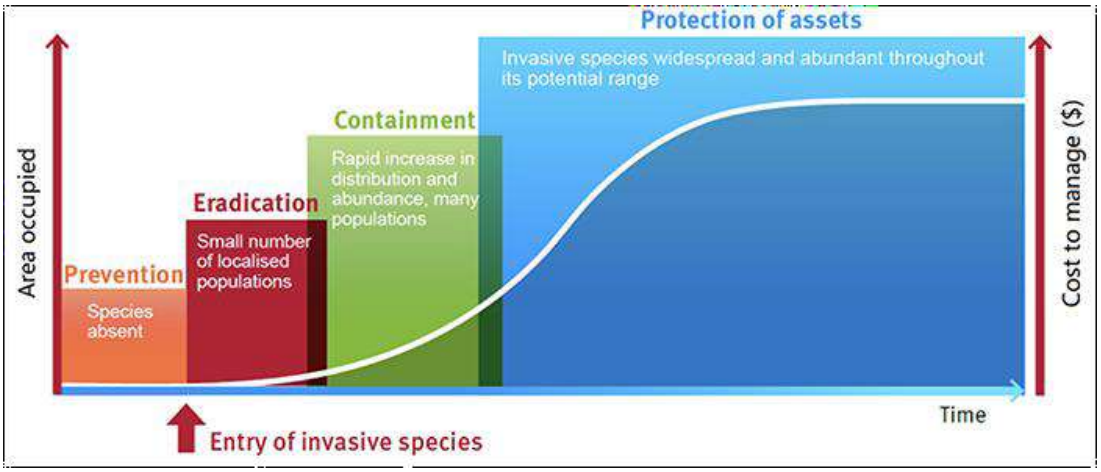
The Pormpuraaw operations include fee-for-service work through the TopWatch program as well as work funded through WCTTAA (West Coast Turtle Threat Abatement Alliance).

Clinton noted that there are lots of weeds in the Shire, including Parkinsonia, Giant Rats Tail, and grader grass. There are also plenty of feral pigs but far fewer feral horses than at Kowanyama. Clinton pointed out that the previous Coordinator, Robbie Morris, had done a good job of showcasing the damage that feral horses do. This was achieved through an ongoing communications. Senior Ranger Fitzroy Lawrence suggested that Kowanyama needs some sort of impact assessment to highlight the damage being done by feral horses. Emma Atkins said that she had access to relevant materials and could share them.

Clinton noted that the Rangers are involved in a major pig cull each year. This can sometimes trigger a bit of pushback from the community who are keen to ensure there are pigs for hunting. These concerns are partially addressed by keeping the community involved during the culls and ensuring that animals appropriate for consumption are made available to the community.

Biosecurity Queensland

Rob Cobon, Senior Principal Biosecurity Officer, Invasive Plants and Animals (IP&A) Biosecurity Queensland, gave a presentation to the group on the work that he is leading with Biosecurity Queensland. Robert explained the “invasion curve” which is a way of understanding how invasive species are treated from a policy and management perspective. He noted that the objective is to “stay on the left side of the curve.”



Extending this logic, every effort should be made to halt and reverse invasive plants and animals as soon as they are detected in a particular area. While BQ has policies and strategies that take the whole state into account, it is also important for each regional area to regard itself as a controlled area. Thus, while a particular species might be common somewhere else in Queensland, its first appearance in a given region should be treated by local land managers as a fresh incursion. Unfortunately state and federal policies do not fit the needs of bioregional management. Once a species has been declared established, the funding for eradication stops across the whole country, even though every jurisdiction *could* still aim for eradication within their own area. This transfers full responsibility for control effort to the regional land managers, but does not provide a corresponding transfer of resources to actually deal with the problem.

Rob explained at some length the work his team does on detection (eg at ports) and on long-term monitoring (eg to verify eradication). He does not have capacity to assist with issues associated with enforcement at a local level. Virtually all of the Cape is managed via local relationships.

QDAF Northern Region

Emma Atkins, Director, Far Northern Biosecurity Initiative (Cape York and Torres Straits) QDAF, introduced herself and her colleague Bekky Williams, who made the big effort to drive down from Arukun to join the meeting and network with some of the land managers along the way.

Emma emphasised that her team is part of a new approach that focuses on the real-world challenges that Ranger teams, Councils, and land managers face on the Cape. In regards to local enforcement, she is keen to help keep staff safe and still get the job done. For example, she has suggestions about how to talk with contractors about their GBO.

Emma also noted how her office has assisted Queensland Indigenous Land & Sea Rangers to acquire spray rigs, and work more closely with NAQS.

There was a good reflection on the effectiveness of Robbie Morris who came to the Pormpuraaw Ranger Program with a clear strategy and stuck with it for almost 15years.

Emma noted that she has some research that is relevant to the damage that horses do to wetland country.

Emma concluded by noting that there is a distinction between the Invasive Plant & Animal agenda and the broader biosecurity agenda. Biosecurity encompasses all threats to country, community and livelihoods, not just those posed by “invasives”.

Bekky gave a description of her work across the Torres Strait where she has been responsible for fruit fly trapping amongst a wide range of duties. Her team have been leading the way on translation of biosecurity materials to Kriole to better engage with local communities.

Shed and Office visit

Attendees had a chance to look around the Pormpuraaw Ranger Shed. Clinton noted that every Friday was “clean-up day.” All vehicles and boasts get washed down and gear is serviced and put away so that it is ready in the coming week.

Field visit: Maatchank wetland

This wetland is considered a sacred place by traditional people as it is connected with the Rainbow Serpent's journey. Sadly, it had been heavily impacted by feral pigs for many years until the Ranger team secured funding to allow them to establish a pig-proof fence around the 7km perimeter of the wetland. It is now coming back to life and is a great illustration of what can happen when good land management practice and local knowledge is combined with the resources to take appropriate action.


Maatchank
Start of the Rainbow Serpent Story YUK NGAT
Note double/barb lower strands to prevent pigs lifting fence

Simple, delicious lunch, shade tree, and good stories...how good is this?

Next steps

Networking meetings

Our fifth and final meeting will be hosted in Carpentaria Shire by Carl and his colleagues. The idea is to aim for when road travel opens again after the Wet: late April or May. Carl will send out some possible dates soon as possible.

Capabilities Survey

Ben will be in touch with each Shire individually to undertake the Survey.

Media

All Shires to get a short news bit up in their Council newsletter or socials.

FileNote #5: Carpentaria

Enhancing Biosecurity Collaboration and Capability in the Southern Gulf and Western Cape York Region

Attending

Partners	Special Guests
1. Andrew Shaw, Carpentaria *Host* (Hollie Heikkinen , Lands Officer candidate) 2. John Brisbin, Kowanyama, *Secretariat* 3. Darryn Higgins, Cook 4. Graham Wienert, Mareeba	**Anne Andrews**, CEO of Carpentaria Shire Council **Kerrod Giles**, Chief Engineer, Carpentaria Shire Council

Welcome

Andrew Shaw, Carpentaria COO, welcomed the group and led the introductions.

Confirming attendance and housekeeping. Noting that Pormpuraaw were unable to attend. Carpentaria was in the process of recruiting a Lands Protection Officer (LPO / Rural Lands Officers) and the identified candidate, Hollie Heikkinen was introduced and attended the meeting through til lunch.

Project Review

John gave a brief summary of the aims of the project and an update on progress from the consultants. As this is the last meeting we reviewed the outcomes and the final effort needed to satisfy the funding contract.

The main items required are:

- Publication of the Survey report (and FileNotes) to each of the 5 Shire websites;
- Production of some supportive media/socials by each Shire;
- Provision of a zeroed P/L report from each Shire to acquit the funding they received for the project.

Biosecurity in an administrative context

Andrew led a general discussion around capabilities at each Shire. It was interesting to not the size of Council workforces, with Cook, Carpentaria, and Mareeba appearing to have smaller per-capita staffing (compared to the Shire's population) than Pormpuraaw or Kowanyama.

It was noted that the smaller Councils can have closer connection to their ratepayers and this can be both a benefit and an obstacle. On the one hand, land managers with close connections

to Council are more likely to work collaboratively to keep country healthy. On the other hand, these close connections make it difficult to undertake enforcement actions.

Even in larger Council like Mareeba this can be true since the country in our shared project region, while large in land area, is actually small in terms of social dimensions.

Andrew observed that the experience of preparing for the ELGBC meeting had been very informative. He suggested that there could be positive outcomes from inviting Shire Executives and office-based managers to ride along out bush and see what the LPOs actually do.

Hollie related her experience on properties and noted the need for LPOs to manage a wide range of duties, including management of weeds along extensive road networks, assisting land managers with1080 baiting, and monitoring/investigating problems with illegal dumping.

Andrew noted the cross-over of responsibilities between environmental health, local laws enforcement, and land protection responsibilities. These areas do not always operate as a synergistic system.

Biosecurity as a Strategic Focus

Carpentaria CEO Anne Andrews briefed the meeting on Carpentaria's commitment to making biosecurity a key focus. She is lobbying for a regional Biosecurity Officer to be stationed at Normanton to help lift biosecurity capabilities, particularly in relation to "the big three: FMD, lumpy-skin, and bird flu."

She noted that biosecurity issues can have significant impacts to the Shire. For example, avian influenza could decimate wild bird populations, and this would have negative consequences for regional tourism which is heavily weighted toward nature-based experiences.

Anne also noted the structural problem of where biosecurity fits within the Shire's organisation. Her recommendation was that biosecurity should be added to the terms of reference for Local Disaster Management Groups (LDMG) as this would efficiently connect with a range of relevant disaster-response agreements and protocols.

Anne recently attended a high-level meeting where it was announced that Qld would be installing 100 new Biosecurity Officers in locations around the state. No further details were available in relation to their duty statements, officing, or housing.

Biosecurity response issues were discussed by the group. For example, it was highlighted in a recent meeting that there is no practical approach for disposal of large numbers of diseased carcasses such as could result from a bird flu mass mortality event. One state department advised that Councils would need to excavate large burial sites while a different agency noted that this was not permissible as such a site would constitute an unlicensed contaminated waste dump.

Communications, regulation, and enforcement

Local laws arise from the powers in the Act, in section 28. Andrew outlined the essence of the legals, noting that they are framed around assuring quality of life. So, the themes include Public Health, Animals, Good Order, and Amenity. There is a "model local law" which is like a template for developing laws for specific purposes.

The group noted that regulations designed for urban centres apply equally to Shires with huge land areas and small townships that, despite their modest scale, are still expected to deal with the full suite of urban issues. This creates a rural-urban tension even in places like Pormpuraaw, Cooktown, Kowanyama, and Normanton. Mareeba was seen as big enough to manage urban issues, but it was noted the Shire still has “big city problems on a country town budget.”

Andrew noted how complex and negative most local government environmental regulation is. In contrast, the regulations in other sectors often focus on the positive, ie, indicating what people *can* do as opposed to what they can’t do.

Connecting the with community was seen as a major challenge. It was noted that the word “biosecurity” hardly appears on any of the 5 Shires’ websites, and there is no mention of it in any of the news feeds or socials.

It was suggested that biosecurity matters could be a subject for each Council’s newsletters, and that a landing page on the websites would also be a place to post any updates. This could tie back in to the connections with the LDMG processes that each Council maintains already.

Field visit: Noman River (Glenore) Weir

The group was joined by Carpentaria’s Chief Engineer, Kerrod Giles, to take a field trip to the Glenore Weir which provides the raw water supply for Normanton. It is located at the tidal transition point, and was recently raised from 2m to 3.6m to provide additional capacity.

As with many similar installations, the site of the weir serves both municipal and public purposes. On our visit to the intake pump structure we encountered a cadre of fishermen enjoying the morning and testing their hooks.

The structure creates a permanent water supply for human use. It is also an intervention in the natural flow and function of the Norman River. It creates a novel habitat and it is a point of concentrated controls, creating both systemic efficiencies as well as vulnerabilities.

High-performance fish ladder at Glenore Weir

Next Steps

This meeting concludes the round of 5 networking events scheduled for the project.

Concluding the MoU

Each Shire has signed an MoU to participate in the project. To conclude the entire program of works, we aim to:

1. Review the Consultant's Survey to ensure accuracy and completeness.
2. Once signed off, the Survey will be provided to all 5 Shires as a final report.
3. Each Shire has agreed to publish this report to their websites
4. Each Shire can then provide a zero-balance P/L report on their costs to participate
5. Each Shire has also agreed to post a promotional story to their socials so that there is a general public communication on the work of this group over the course of the project.

Future collaborations

There was collegial support for continuing this networking process. It is also recognised that the competition for scarce time and resources means that the most likely scenario is for Officers to make their own efforts to reach out and stay connected to one another. This approach to building and maintaining capability has been given a big boost through the experience of this modest networking exercise.

Appendix 3.

Inventory and Personnel Lists

Inventory	Cook Shire Council	Mareeba Shire Council	Kowanyama Aboriginal Shire Council	Pormpuraaw Aboriginal Shire Council	Carpentaria Shire Council
Personnel					
Ganger/Team Leader	0.5 FTE	1	3		
Land Protection/ Biosecurity Officer	2	1	1		1
Ranger Program			8	7	1
Firearms					
22 Rifle	1	1			
22 Magnum	1	1		2	
Shotgun 12G	2			2	1
308	2			2	
30-30	2				
Gas tranquiliser 32G	1				
				3	2
Vehicles				5	
Boat		1 (3hp)	2	3	1
Utes (4WD)	2	3	3	2	
ATV			1		
Quad Bike	1	1	4		
Wash down trailer		1			
Canoe		2			
Cargo punt			1		
Spray Units					1
Quick Spray 600L	2	1	2	2	
Quick Spray 200L	1	1			
Quik Spray 400L	1	1			
100L 12V Silvan	2	1			
Traps				2	10
Pig Trap	16	3		2	30
Dog Trap	3	2			
Cat Trap	4	1			
Foothold dog traps	4	4			
Chemicals/Baiting					
1080 and associated equipment	1	1	Y		N
Hoggone bait boxes	3	1	N		N
Licencing and Tickets					
1080 Licence	2	2			1
ACDC Ticket	3	2	8		
Chainsaw	2	1	8		
Authorised Officer	1	2	10	6	1
Cert 4 Investigations	1	1		6	
Humane Destruction		1	2		1
Firearms	2	2			1
Biosecurity Refreshers		1	10		
Biosecurity Emergency Response	1			3	
Miscellaneous equipment					
Boat winch		1	3		
Generator	1	1	2		
Pump	1	1	2		
Chainsaw	2	2			
Drones (DJI Matrix 3E)	1				
Drones (Phantom 4 Pro)	1			2	
Trail cameras	8	6			
Garmin GPS units	3	4			
Signage					
Software licences					
ESRI Basic	3				
ARCGIS		2			

UP NORTH

FNQROC

Cook Shire COUNCIL

PORMPURAAW ABORIGINAL SHIRE COUNCIL

Gulf Savannah NRM

ABORIGINAL SHIRE COUNCIL
o MAfUJ wafu!y

CARPENTARIA SHIRE
Outback by the Sea

Mareeba SHIRE COUNCIL