



Production Nursery Business Continuity & Preparation Decision Guide during a biosecurity incursion

Introduction

The Decision Guide provides an overlay of a business continuity framework to the production nursery industry to aid in the continuity of operations during a biosecurity incursion.

The intent of a business continuity management plan is to help identify priority risks, prepare for disruption, minimise operational impacts and downtime; and support social and economic recovery from the disruption to the supply of products or services.

The project NY18010 *Ensuring Business Continuity during biosecurity incursions; Social and Economic research learnings for the Production Nursery Industry*, has developed the Decision Guide for a nursery owner to assess their capacity to manage a disruption to the supply of products or services due to the threat of a biosecurity incursion.

The Decision Guide on the following pages applies lessons learned from the project's literature review, qualitative and quantitative research conducted by Australia's national science agency, CSIRO; and acknowledges the importance of the established industry's biosecurity program, BioSecure HACCP.

BioSecure HACCP

The Australian production nursery industry, under the delivery of Greenlife Industry Australia (GIA), has established Biosecure HACCP as the on-farm Biosecurity Program for management of biosecurity incursions.

Biosecure HACCP is the industry specific biosecurity program designed to assist growers in determining their current and future pest, disease and weed risks, as well as guide their businesses in the implementation of management strategies at critical control points. (*Managing Biosecurity*, BioSecure HACCP: Guidelines for Managing Biosecurity in Nursery Production 4th Edition, page 8).

Therefore, the production nursery industry is well equipped with a rigorous system that aims to identify internal and external biosecurity threats to the integrity of a nursery's biosecurity preparedness.

Investigations to develop this Framework for the project has revealed no need to reinvent a management action plan, because BioSecure HACCP provides this in its comprehensive set of protocols and procedures that provides growers with methods to manage both the endemic common pests confronted daily as well as confirming freedom of quarantine pests or the early detection of exotic plant pests.

As stated on the Australian Plant Production Standard website (APPS - <https://nurseryproductionfms.com.au/>) , BioSecure HACCP on-farm system content includes:

| | |
|--------------------------------------------|-------------------------------------------|
| Identification of pathways for plant pests | Control points within the cropping system |
| High health procedures to reducing risks | Recording process for managing risks |
| Electronic document management | Traceability processes in place |

Nurseries that follow the comprehensive guidelines, can meet their broader biosecurity obligations and improve their overall pest, disease and weed management systems. Biosecure HACCP is the Action Plan in a business continuity management plan.

During a biosecurity incursion, the Emergency Plant Pest Response Deed (EPPRD) provides the legislative and financial framework for managing specific pest and disease incursions. The EPPRD outlines how outbreaks will be managed, and how governments and industry will share the cost.

Robust internal management of nursery operational data and the tracing of stock can make the incursion impact somewhat and readily assist authorities in working with the nursery business to determine Owner Reimbursement Costs (ORC).

Encouraging continuous improvement

The project has applied the key findings from the *Supporting production nursery businesses during a biosecurity incursion; Social and economic research report* (The Report) to compile this Decision Guide.

Actions that production nursery businesses could take to mitigate the impacts of an incursion were reasonably clear: the main theme from interviews was ‘preparedness’. This referred to being prepared in terms of biosecurity generally (to reduce the risk of an incursion), but also being prepared specifically for the eventuality of an incursion affecting the business at some point in the future. (*Executive Summary*, p ix)

At a broader level, preparedness for an incursion was seen as part of a mature, professional approach to business management, that included business risk management and business continuity planning. (*Executive Summary*, p x)

With regards to the survey results on what nurseries could do themselves to prepare and respond to an incursion, participants felt that they could:

- Be aware of, and perform, biosecurity best practices in their nursery
- Keep staff educated, informed, and well trained
- Adhere to industry standards and government regulations
- Access expertise through their networks (*Executive Summary*, p x)

Specific activities for preparedness are described on pp 13 – 14 of the Report –

Biosecurity preparedness at the farm-level was seen to start with the basics of biosecurity planning and practice – having a biosecurity plan and undertaking good biosecurity practices as standard business operations. This began with biosecurity awareness and education of management and staff, and extended to the practices of biosecurity: ensuring propagation material was clean (whether seeds, tissue, cuttings, seedlings, etc.), strong surveillance regimes (systems of monitoring, inspection and record-keeping), actions to prevent infection (visitor management, operational hygiene, partitioned or zoned production arrangements, physical barriers e.g., netting), and rapid reporting of suspect pests and symptoms.

Based on the Report findings and discussions held during the project online workshop (available on the GIA YouTube Channel https://youtu.be/9iQVYYviJ_k) the Decision Guide is presented in three phases:

1. Preparation Decision Guide
2. Incursion Impact Decision Guide
3. Recovery and Review Decision Guide

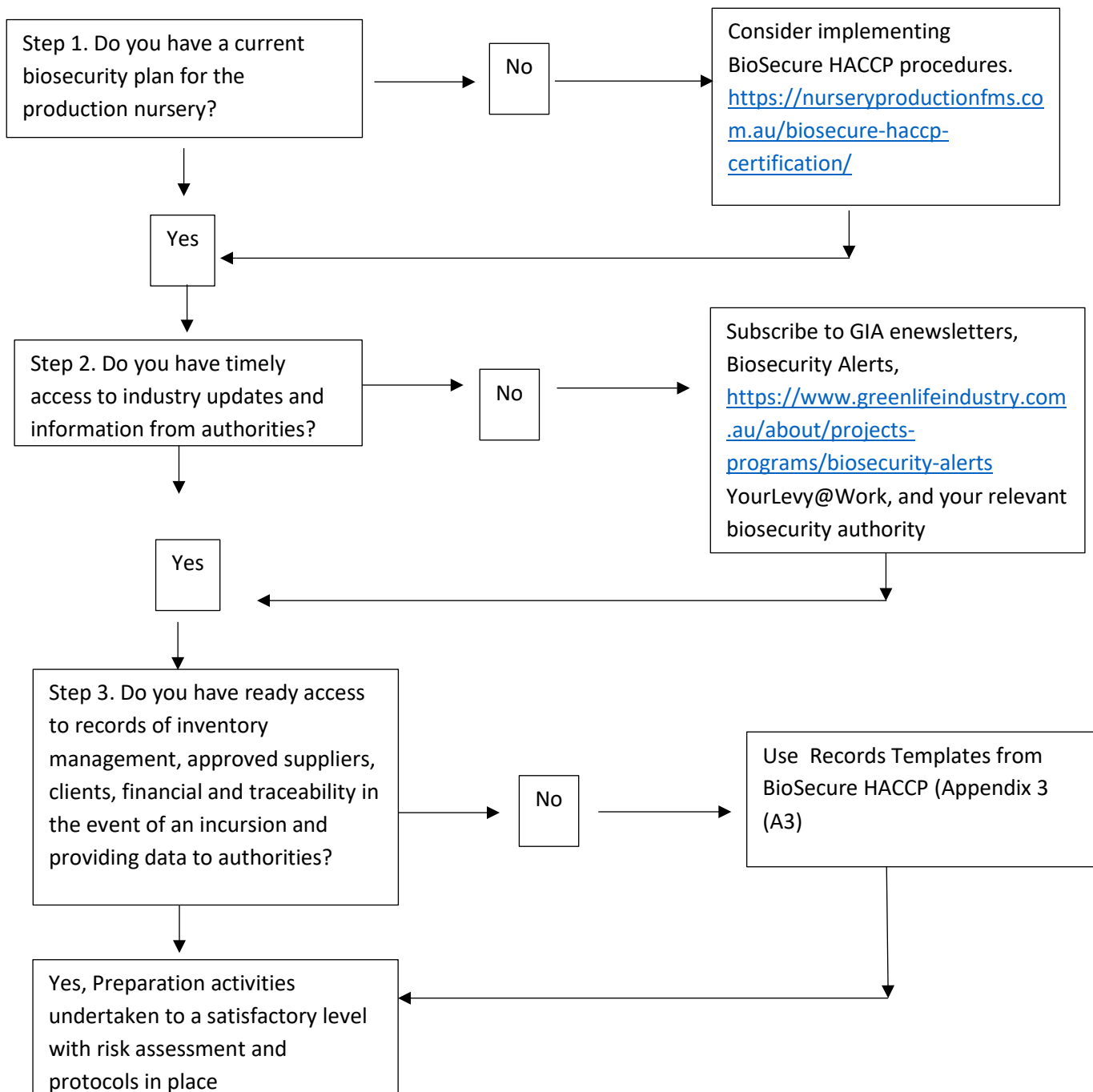
Each phase of the Decision Guide follows the basic framework already established by the Australian Plant Protection Standard (APPS) in delivering best management practices to the nursery industry. That is, each Guide presents a series of questions which lead the nursery owner to prepare, deal with and recover from a biosecurity incursion and promote continuous improvement in production and business continuity management.

The Decision Guide is currently being assessed by the GIA biosecurity team to assess its functionality and application within the broader industry response to biosecurity incursions.

Decision Guide #1 - Preparation

| | |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PREPARATION | <ul style="list-style-type: none">○ Recognising priority risks and assessing impact to plant stock, supply chain and business○ Preparation Action Plan○ Stay up to date with information and alerts from industry / authorities○ Communication to priority contacts – staff, suppliers, clients, external and industry contacts |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

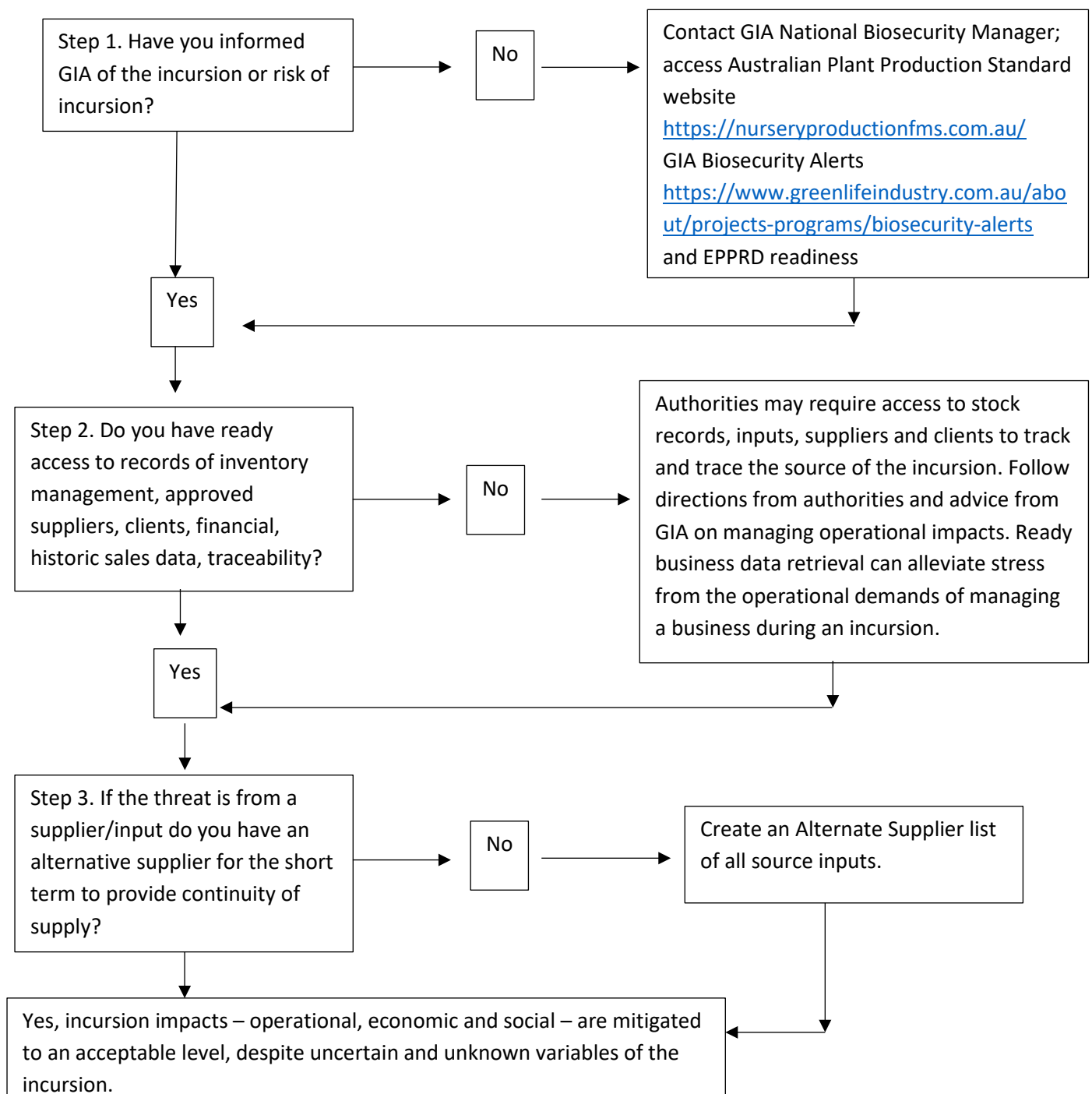
Preparation Decision Guide



Decision Guide #2 – Incursion Impacts

| | |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INCURSION IMPACTS | <ul style="list-style-type: none"> ○ Operational impacts - movement restrictions, surveillance, new or additional pest control or biosecurity procedures, additional administration tasks, isolation or quarantine of stock, disposal or destruction of stock ○ Economic impacts – tend to arise from operational impacts. Increased costs, increased workload requirements, stock destruction, restricted or reduced trade, or reduced value of stock ○ Social impacts - stress arising from the operational demands of managing a business during the incursion response; financial implications of the incursion for the business; conditions of high uncertainty; difficulties in social relations with government authorities; and reputation with clients and other nursery businesses |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

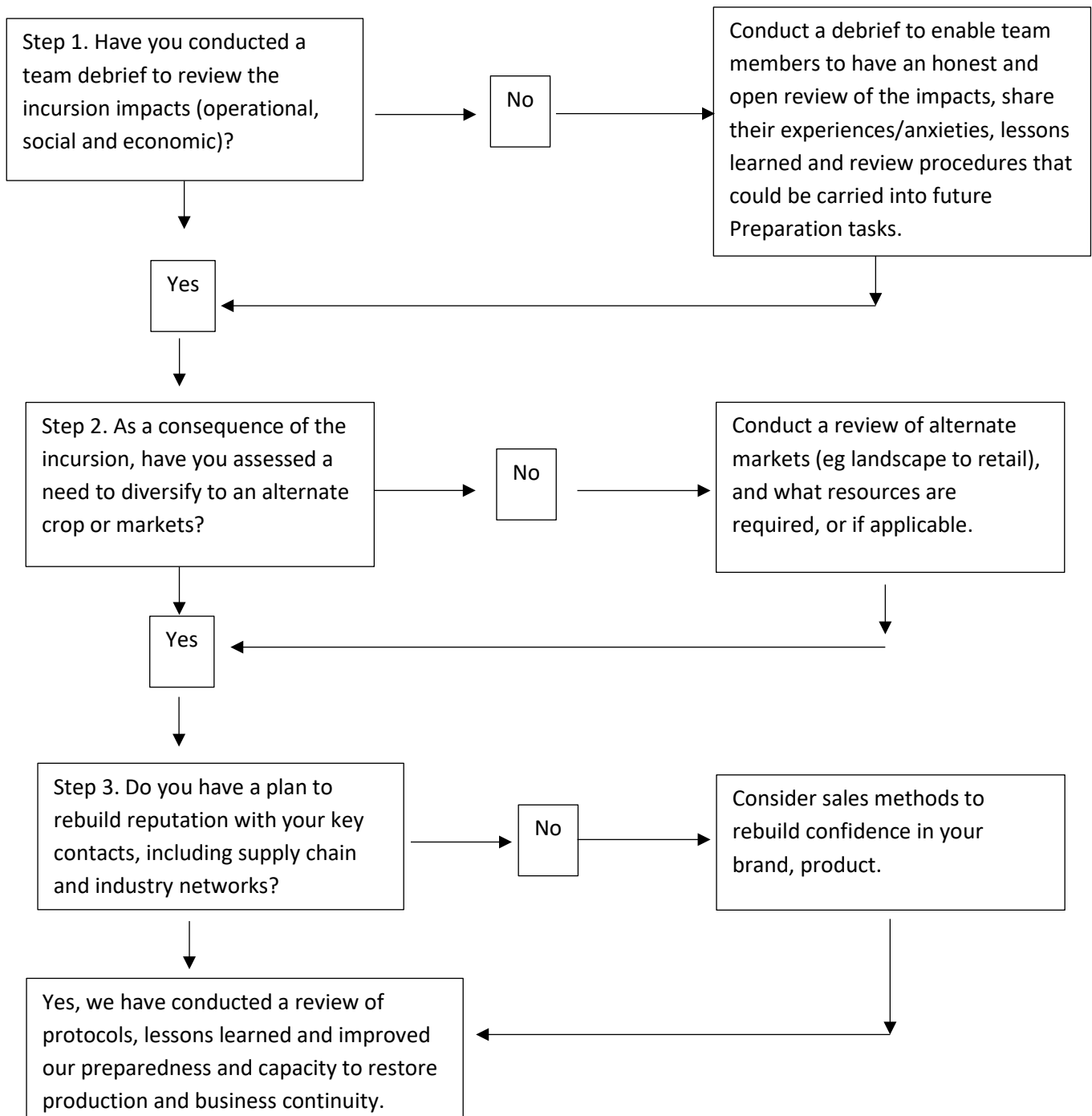
Incursion Impacts Decision Guide



Decision Guide #3 – Recovery & Review

| | |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RECOVERY & REVIEW | <ul style="list-style-type: none"> ○ Assess capacity to change practices to minimise operational impacts; review lessons learned from incursion impacts ○ Rebuild markets to restore economic recovery ○ Restore / assess supply chain ○ Restore reputation with key contacts ○ Review Preparation Decision Guide in light of lessons learned |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Recovery & Review Decision Guide



Summary

This Decision Guide encourages nursery operators to undertake risk assessment, review of practices, and continuous improvement as each stage of a biosecurity incursion:

1. Preparedness
2. Incursion Impact
3. Recovery and Review

The Decision Guide sets up basic priority questions at each stage; with an intention to identify weaknesses or vulnerabilities in the business or nursery production processes. Overall, the Decision Guide acknowledges comprehensive resources already exist for nursery operators to access to effectively prepare for and manage an incursion, in the format of BioSecure HACCP and the various communication Alerts distributed by industry.

The Decision Guide encourages good biosecurity practices, as expressed in the project's findings on interviews and survey conducted with growers:

Good biosecurity practices were seen not only as a means of reducing the risk that an incursion would occur, but also as assisting a rapid response by authorities when one did occur. In particular, good record-keeping in relation to the purchase and sale of plant material, was singled out as important for the tracing and tracking of infected plant stock. At a broader level, the ability to provide evidence of good biosecurity practices through an accreditation or certification scheme, was seen as having potential to provide a higher level of assurance to government authorities and industry, and thereby facilitate quicker return to trade. (pp 13 – 14)

References & Links:

BioSecure HACCP: Guidelines for Managing Biosecurity in Nursery Production 4th Edition, <https://nurseryproductionfms.com.au/biosecure-haccp-certification/>

Project Reports:

Loechel B and Hobman EV (2021) Supporting production nursery businesses during a biosecurity incursion: Social and economic research report. Report prepared for the Nursery & Garden Industry Queensland (NGIQ). CSIRO, Australia.

Loechel B (2020) Supporting production nursery businesses during a biosecurity incursion: Review of social and economic impacts and business continuity. CSIRO, Australia.

Project Reports are available on the NGIQ website - <https://www.ngiq.asn.au/resources/technical-information/biosecurity-pest-disease/?skw=&orderby=date&order=desc>

Online Webinar: https://youtu.be/9iQVYYvij_k