

BIOSECURITY
NEW ZEALAND

Biosecurity New Zealand

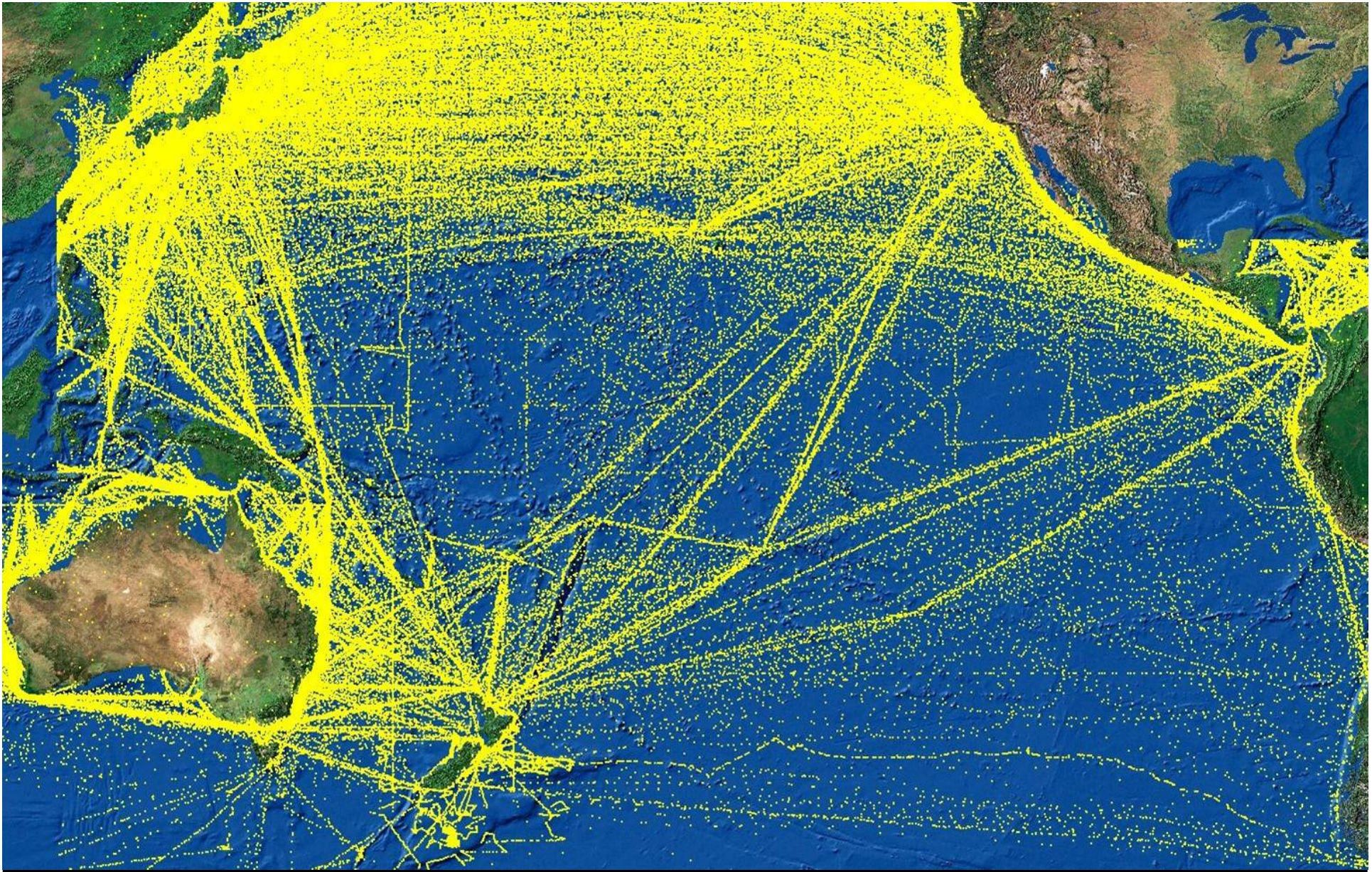
Responding to an Exotic Pest Incursion

Biosecurity Risk

- **Biosecurity has never been more important**
 - World events like SARS, bird flu, foot and mouth, and BSE have highlighted the risks
 - New Zealand stands to lose more than most other countries, particularly our economy and biodiversity
- **Increasing pressure on the biosecurity system**
 - Greater volume of trade and travellers from increasingly varied origins
 - Greater public and political expectations

NZ's dependency on trade

- Tourism is now our single biggest earner, \$7.4 B
- NZ Exports last year worth \$42 billion
 - Dairy \$5.9 billion
 - Agriculture exports \$20 billion or 50% of total exports
 - NZ exports 80-90% of the food it produces
- Agricultural accounts for 17% of NZ's GDP
- NZ one of few developed countries dependent on agriculture, and trade in agricultural products

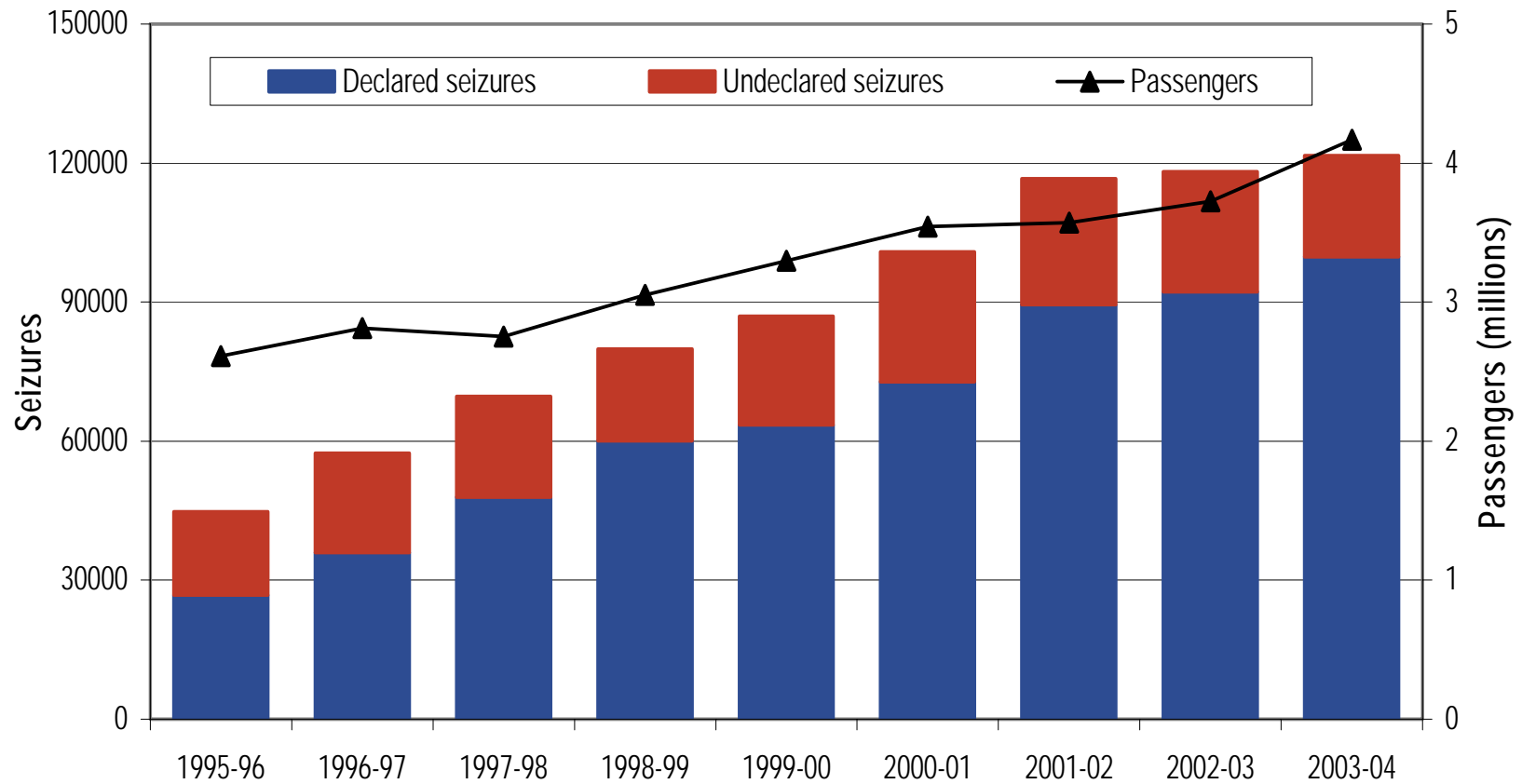


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Responding to an Exotic Pest Incursion



Increasing pressure from tourism



Sea container situation

	2002-03	2003-04%	change
Sea containers landed	467,512	527,942	13%
Full containers landed	284,754	335,892	18%
Empty containers landed	182,758	192,050	5%

Note nearly 200,000 empty containers arrived in NZ last year

New technology key to manage increasing risks

X-ray machines introduced due to fruit fly risks. Now expanded to enable all passenger bags to be x-rayed

- Last year 20,000 kg fruit and 8,000 kg meat and poultry products seized
- Slippage rates (undetected) for fruit with passengers have dropped from 22% (2.8 tonnes) to 0.5% (80kg)
- Slippage rates (undetected) for meat with passengers have dropped from 49% (6.3 tonnes) to 9% (800kg)

As passenger and container/cargo numbers and volumes increase, amount of risk goods they carry also increases

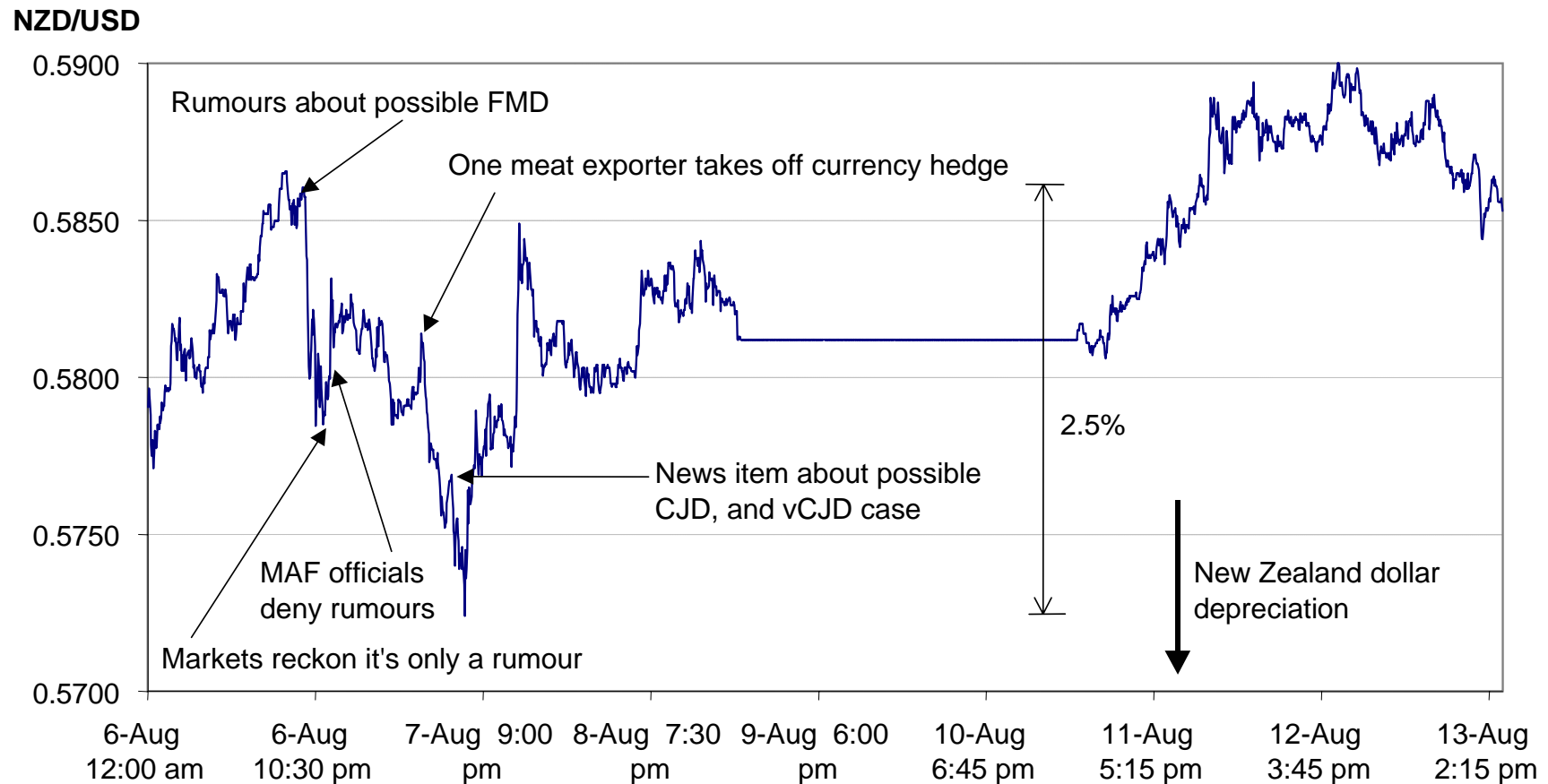
Major challenge to find some biosecurity risks!



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Responding to an Exotic Pest Incursion

Managing perceptions of risk is a major issue



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Responding to an Exotic Pest Incursion



Expectations

48. That there is **sufficient access to expertise** and enough **operational capacity** available to respond immediately to **high impact incursions**.
49. That **specific response plans** are in place and routinely updated for an agreed set of **high impact pests and diseases**.
50. That **generic response capability** is maintained for **all other incursions**.

Expectations

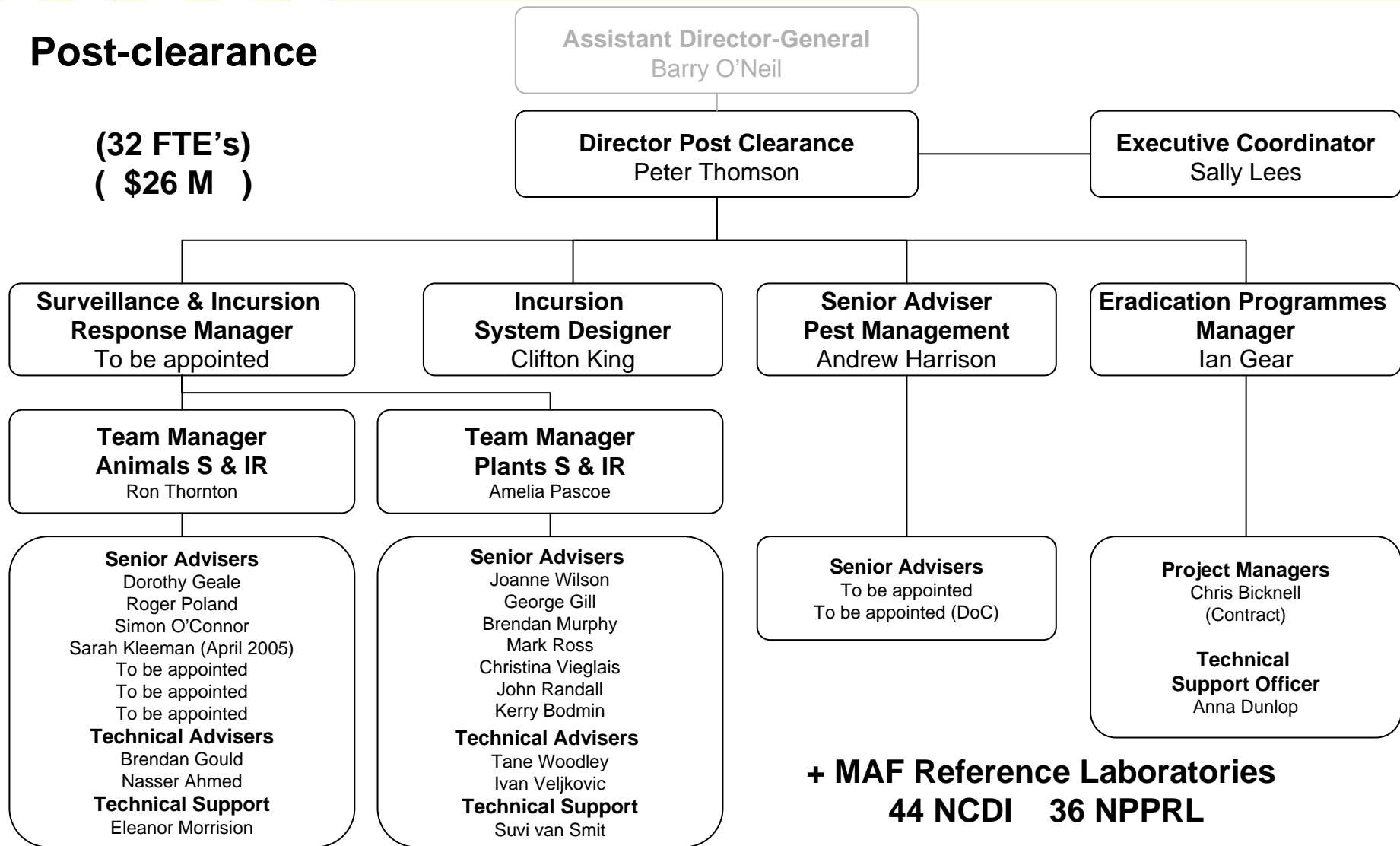
- 51. That **financial constraints do not delay** the implementation of rapid responses to high impact incursions
- 52. That all **initial incursions are controlled** until decisions about future actions can be made
- 54. That there is clear and effective **national leadership and coordination of pest management activities** within central government and the private sector

Response demand levels 2003-04

- 13,378 - freephone calls (0800 80 99 66)
- 238 - NCDI investigations / responses
- 19 - initial investigating vet call-outs
- 424,298 - veterinary laboratory tests
- 19,549 - suspect plant pest or other arthropod
- 29 - NPPRL investigations / responses
- 21,031 - NPPRL specimens examined

Post-clearance

**(32 FTE's)
(\$26 M)**



Generalised Structure of Response

Overview of Command and Control within the MAF Exotic Disease Response Programme

Minister for Biosecurity / (Proposed) Ad Hoc Cabinet Committee on Domestic and External Security Coordination (DESC) / Officials Group of DESC	
Functions	<ul style="list-style-type: none"> - Endorsement of technical policies through provision of financial support - Interdepartmental co-ordination in support of MAF's lead agency role - Media communications (as agreed with MAF) - Biosecurity Emergency Regulations in the event a Biosecurity Emergency is declared

Advice



Direction

National Co-ordination Centre (NCC)	
Supplier	- MAF Biosecurity Authority
Location	- (Proposed) Office for Exotic Emergency Operations Centre
Functions	<ul style="list-style-type: none"> - Determining technical policies - Decision-making in accordance with statutory authority under Biosecurity Act - Co-ordination across all government departments (central and local government) - International notification and trade negotiation - Media communications (as agreed with Minister / DESC) - Stakeholder liaison - Compensation processes



Exotic Disease Response Centre (EDRC)	
Supplier	- MAF National Centre for Disease Investigation
Location	- Wallaceford Agricultural Research Centre (Forest Hill)
Functions	<ul style="list-style-type: none"> - Day to day technical management of the response (directing disease investigation, tracing, movement control) - Reporting and analysis of response information, including predictive modelling and mapping - Reference diagnostic laboratory (New Zealand Animal Health Reference Laboratory) - Technical liaison with industry experts - Co-ordination of processing industries



Field Operations Response Team (FORT)	
Supplier	- AgriQuality NZ Ltd
Location	- Close to the outbreak - Potentially multiple locations
Functions	<ul style="list-style-type: none"> - Field operations (breeding, pest control and disposal, cleaning and disinfection) - Liaison and co-ordination with local support agencies and suppliers of peripheral services (Police, Regional Emergency Management Groups, Defence Forces) - Co-ordination of local media arrangements (i.e. field footage)

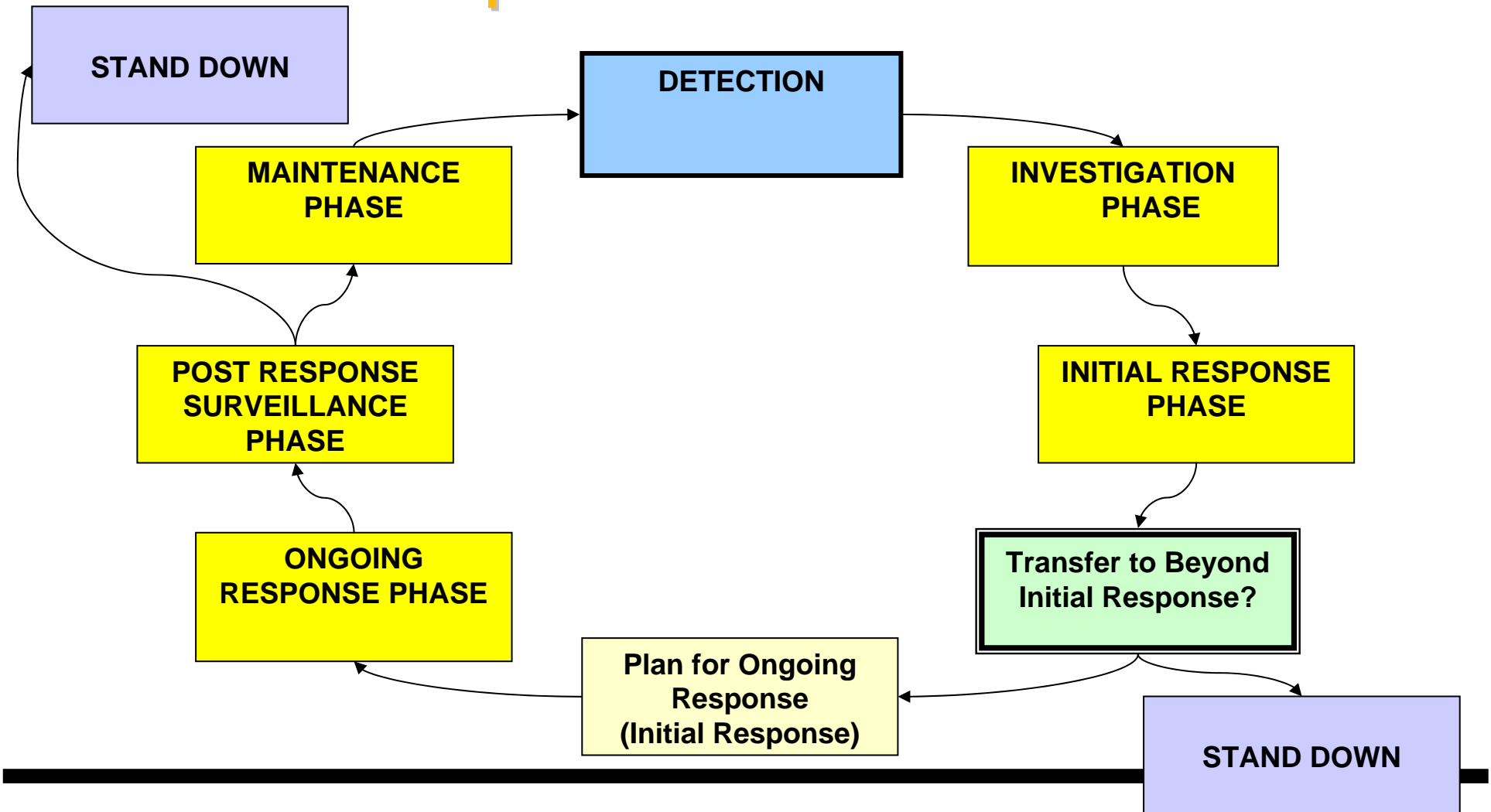
- ✓ Endorsement of policies through financing response
- ✓ Interdepartmental Coordination

- ✓ Determining technical policies
- ✓ Decision-making under Biosecurity Act
- ✓ Media communications & stakeholder liaison
- ✓ Compensation processes

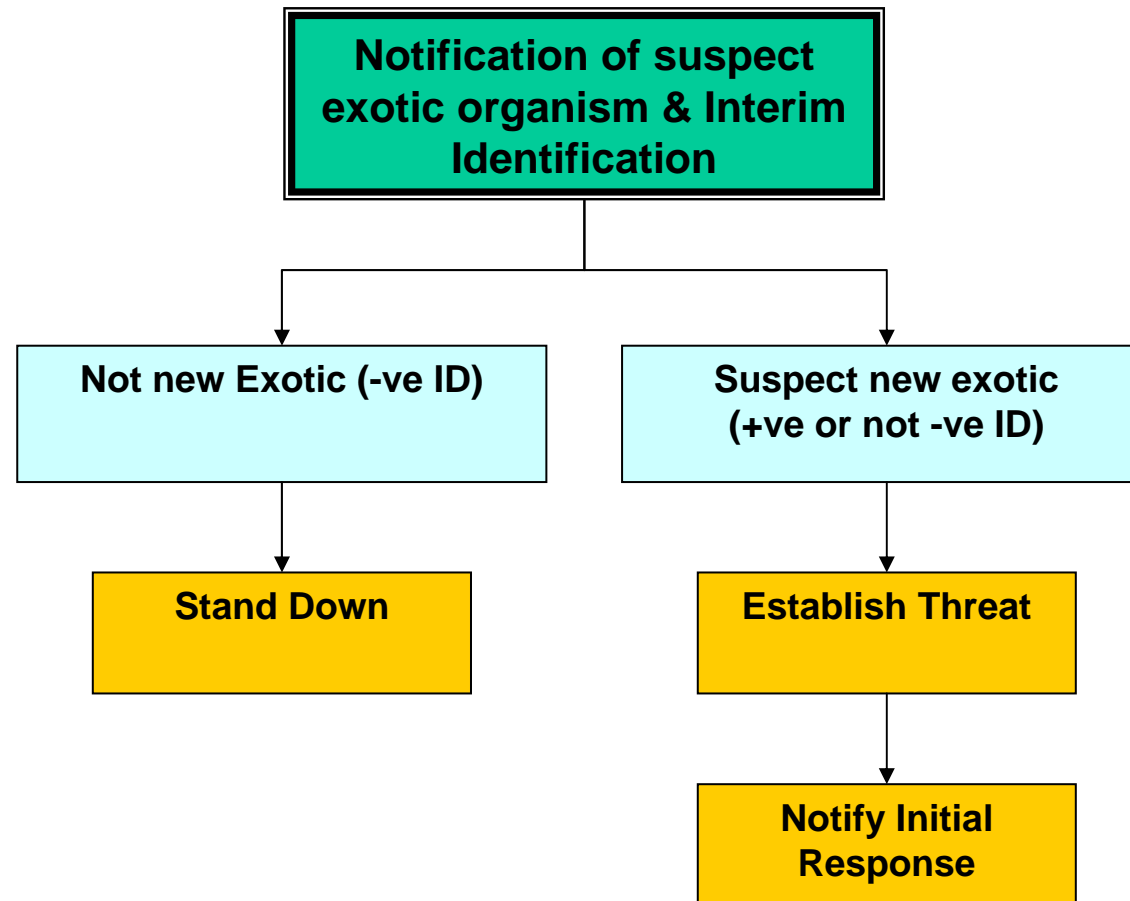
- ✓ Day to day technical management
- ✓ Reference laboratories
- ✓ Technical liaison

- ✓ Provision & management of field operations
- ✓ Coordination with local agencies and suppliers
- ✓ Coordination of local operational media eg. field footage

Incursion Response Process



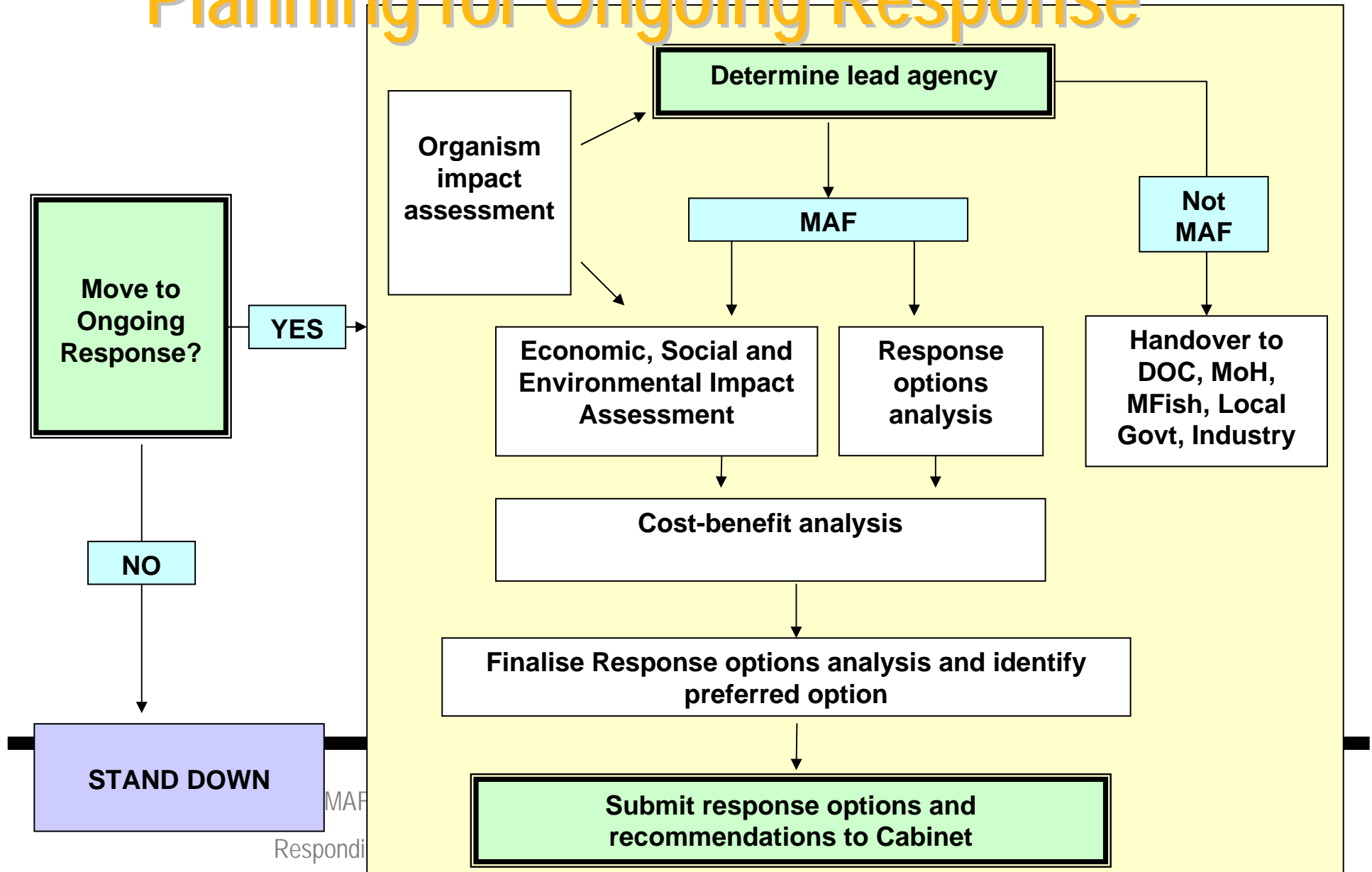
Investigation Phase



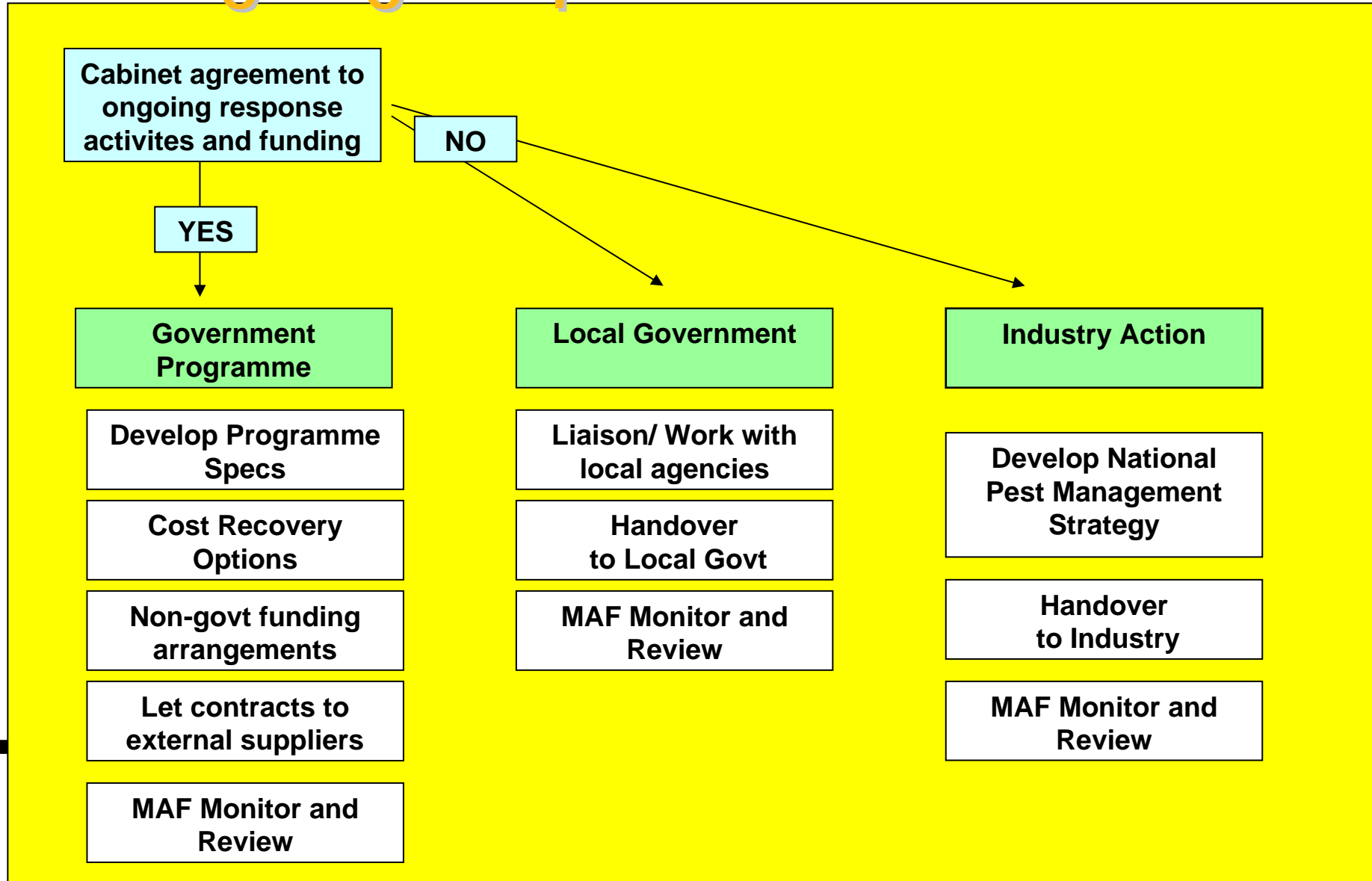
Initial Response Phase



Planning for Ongoing Response



Ongoing Response



System Improvements

- **Criteria for transition points**
 - Pest identification to initial investigation
 - Initial investigation to on-going response
 - On-going response to stand-down
 - Initial and on-going response to pest management
- **MAF's role to provide leadership and coordination for pest management.**
- **Industry and other stakeholder participation**
- **Prioritisation**



Integrated Risk Management Framework

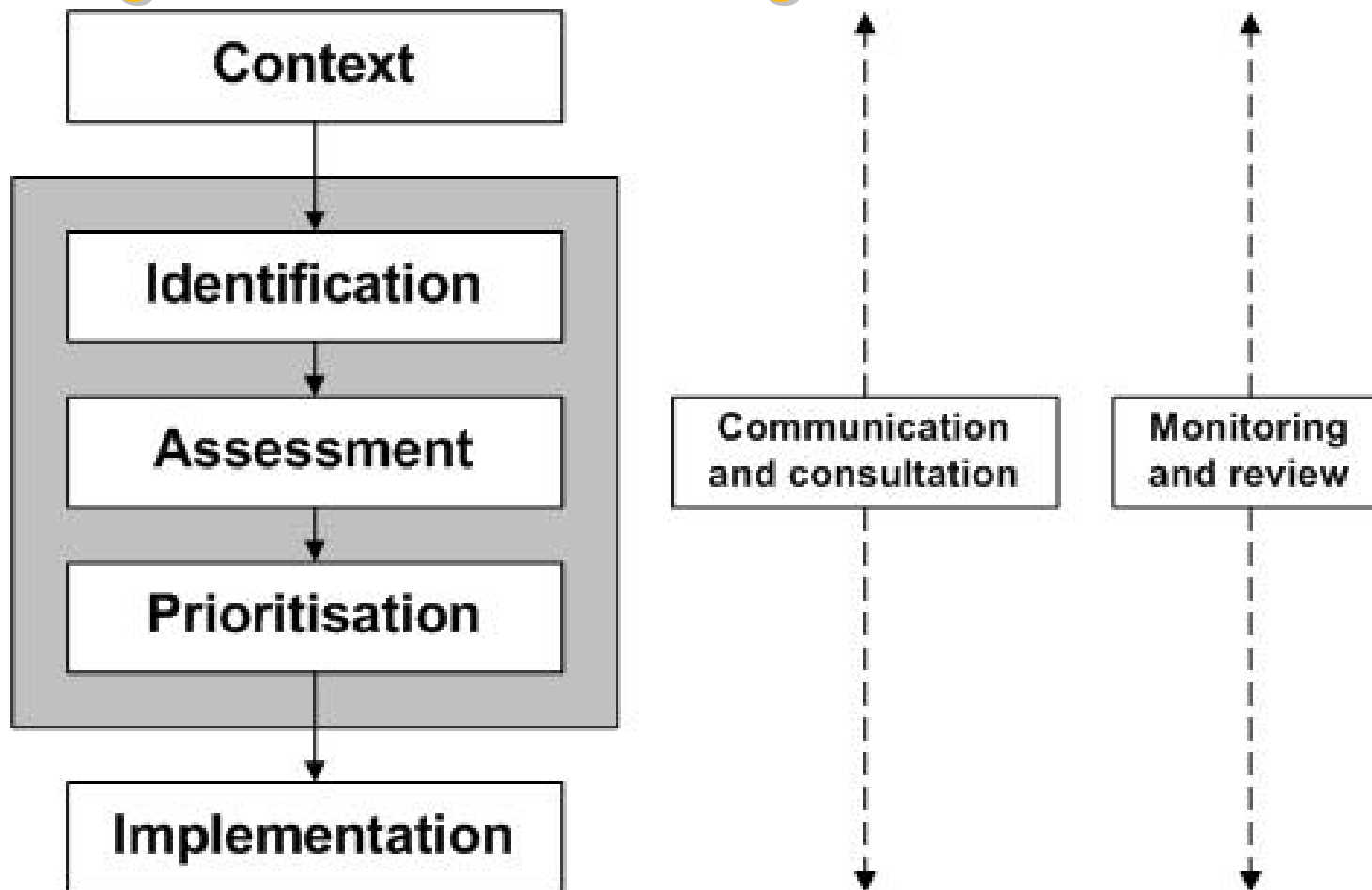
- Problem – given insufficient resources to do everything, need to ensure that **decisions** on where to expend resources, including which risks to manage to what levels:
 - **Are robust and consistent**
 - **Accurately reflect relative priorities**
 - **In aggregate, make effective and efficient use of available resources and achieve an appropriate balance in resource allocation across the biosecurity system**
- Requires ability to **assess and compare alternative** uses of resources, which requires common assessment criteria and methods

IRMF - Purpose

- Solution – a **simple mechanism** to guide resource allocation in **managing risks – consistently, transparently** and in the interests of the biosecurity system as a whole
- Not intended to dictate these decisions, but represents a **tool** to assist in making informed and robust decisions, more consistently and transparently



Integrated Risk Management Framework



IRMF

Criteria	Option 1	Option 2	Option 3	Option 4	Option 5
Goal	Eradication	Eradication	Containment	Long-Term Management	Uncontrolled Spread
Technical	6	7	5	8	-
Practicality	3	9	4	8	-
Benefit-cost	6	8	2	4	1
Strategic	7	7	3	3	1
Acceptability	5	9	3	6	2
Total	27	40	17	29	4

Increasing certainty of eradication response

- Effective detection
- Robust impact assessments
- Clear response options
- Technical feasibility
- Material net benefit
- Public vs club benefit
- Stakeholder support/participation



Forest industry preparedness

- **Diagnostics**
 - Providers
 - Forest Research, NPPRL, International experts
 - Tools
 - Keys, collections, molecular tests
- **Surveillance**
 - Programmes
 - Pest specific gypsy moth
 - Wood Borers and Bark Beetles surveillance ceased 2003/04
 - FOA surveillance
 - High risk general surveillance

Forest industry preparedness

- **Response**
 - Standards
 - Generic response policy and process
 - Pitch Canker Standard (being developed)
 - Pitch Canker exercise (being held this year)
 - Defoliating moths (operational plans)
 - Capability
 - FORT contract (plants contract scope including forestry)
 - Service providers (Vigil, Forest Health Dynamics, others)
 - Industry staff and equipment?

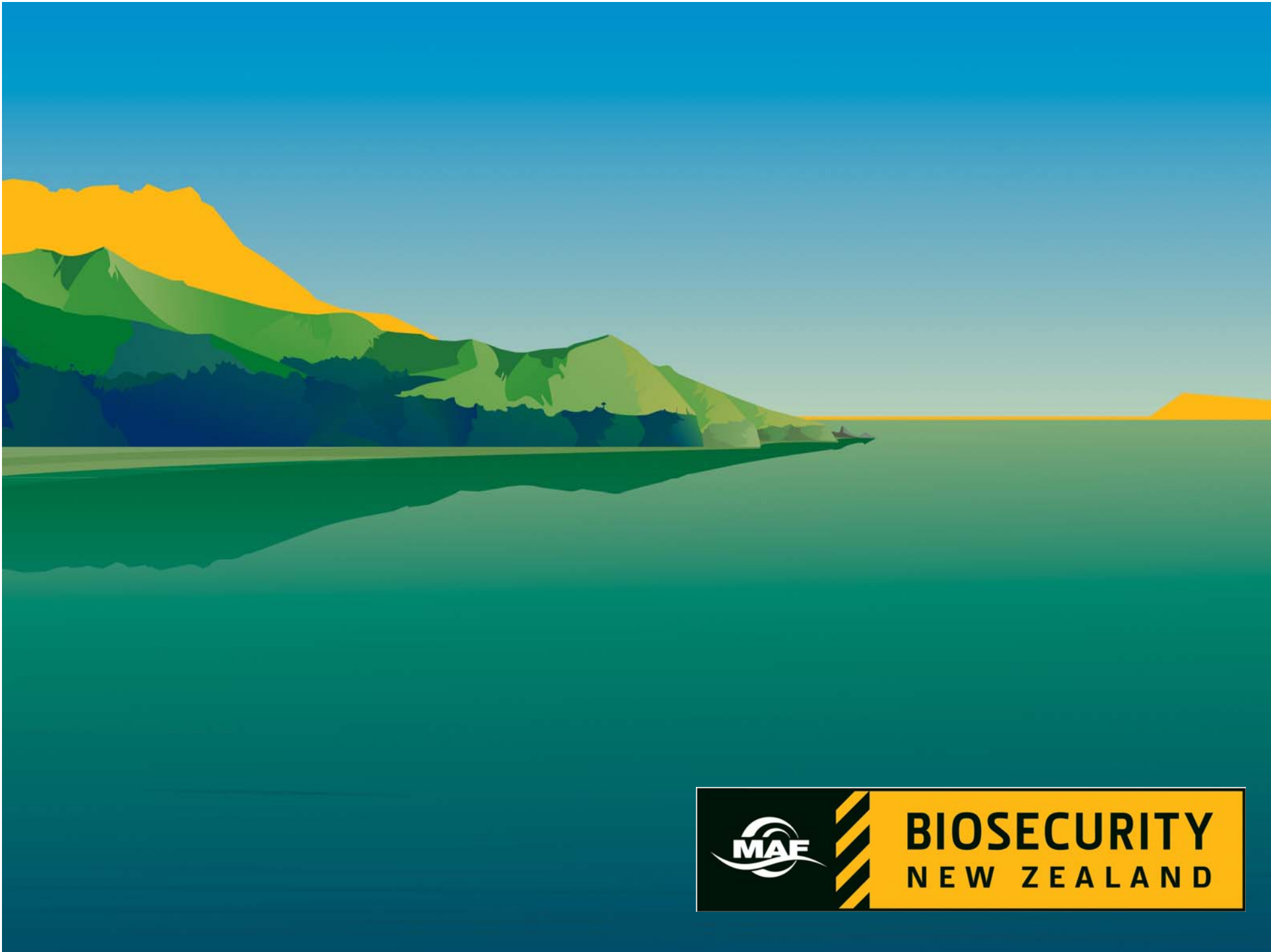
Summary

- Biosecurity risk is increasing
- Management of biosecurity risk is improving
- We have some early detection surveillance
- We have good systems that work to manage incursion responses
- System improvements are being made
- We have few pest specific response plans
- MAF will take a greater role in pest management

Questions

- How much preparation is enough?
- Balance generic with high impact pest specific?
- What high impact pests?
- Industry involvement?
 - Pest detection roles?
 - Response roles?
 - Decision-making?
 - Funding?
- What is your appetite for risk?
- What are your expectations?





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