

# LORD HOWE ISLAND BOARD

## Business Paper

### OPEN SESSION

#### ITEM

Resourcing requirements for a robust and sustainable biosecurity system on Lord Howe Island

#### RECOMMENDATION

1. That the following budget adjustments be made to the adopted Environment and Community Services budget:

<b>Transfer from:</b>	<b>Amount</b>	<b>Transfer to:</b>	<b>Amount</b>
<b>Strategic Planning – Contractors and Consultants</b>	\$40 000	Quarantine/Biosecurity – Salaries and On- costs	\$40 000

2. That the Environment and Community Services team prioritise the seeking of external funding to cover biosecurity costs for Lord Howe Island.

#### BACKGROUND

Biosecurity is a significant risks to the short term and long term sustainability of the environment and economy of the island. The island and particularly the World Heritage values must be adequately protected from biosecurity threats. This will not only protect many millions of dollars in previous and current investment in eradicating invasive species (i.e. rodents and weeds), but will prevent new biosecurity threats, therefore reducing future management costs.

Upon the completion of the operational phase of the Rodent Eradication Program increased resources are required for proactive Biosecurity surveillance to minimise the risk of reintroduction of rodents.

It is widely recognised that it is far more cost-effective to prevent the establishment of pest animals into new areas through prevention and incursion response than to have to fund eradication or ongoing management of established populations (see Figure 1).

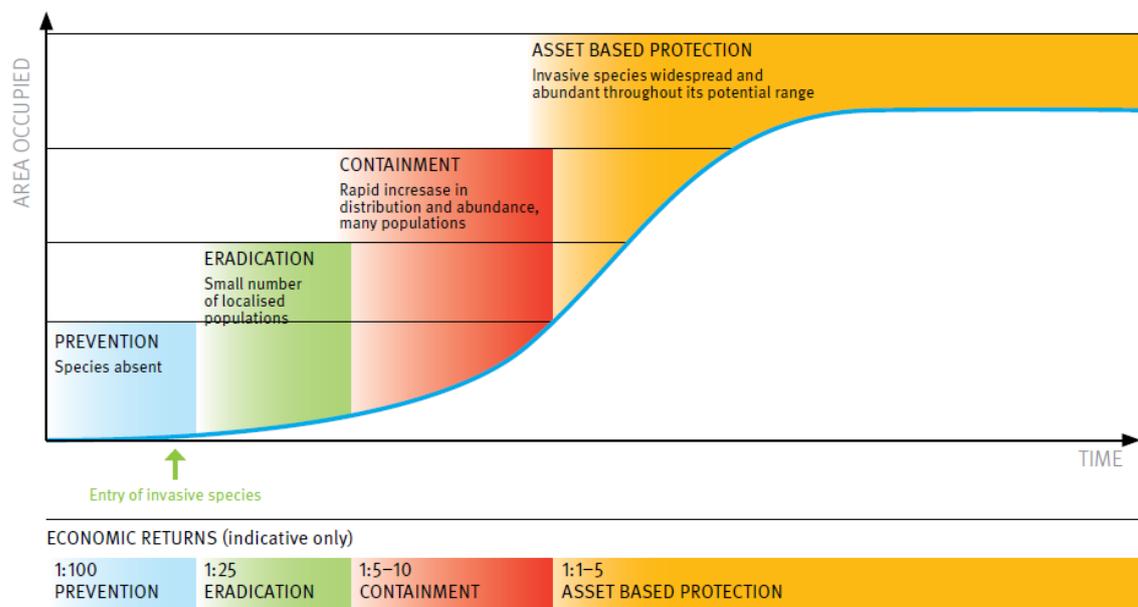


Figure A1. The 'Invasion Curve', showing the importance of allocating resources to prevent the establishment of new pests (Invasion Curve sourced from NSW Invasive Species Plan 2018-2021 and Department of Primary Industries, Victoria).

In 2003 the Board adopted its first Quarantine Strategy which was updated in 2016 in preparation for the proposed Rodent Eradication Program (REP). The 2016 Biosecurity Strategy identifies the movement of freight via the Island Trader as very high and aircraft as potentially high risk pathways (respectively) for biosecurity matter entering LHI. Very high to high risk biosecurity material includes exotic mammals (including rodents), reptiles, amphibians, tramp ants, invertebrates, plants and plant pathogens. The LHI Biosecurity Strategy 2016 recommends a range of mitigation measures to address the risk pathways including:

- Improved habitat modification and infrastructure at Port Macquarie
- Increased inspections of freight at Port Macquarie and at LHI
- Increased surveillance at LHI
- Preparedness for incursion response
- Training of staff, stevedores and suppliers
- Community education and visitor awareness

Section 9 of the LHI Biosecurity Strategy 2016 identifies the following legal obligations applicable to the Board in undertaking its biosecurity duty:

- World Heritage Convention - Australia has obligations under Article 5, including: to protect, conserve and present the World Heritage values of the property
- EPBC Act, the Commonwealth can among other things: List key threatening processes and recovery plans (i.e. LHI Biodiversity Management Plan 2007 which has numerous actions related to biosecurity).
- *The Lord Howe Island Act 1953* (the Act) makes provision for the care, control and management of LHI. In relation to Biosecurity it defines the LHIB charter, functions and regulations including:
  - to manage, protect, restore, enhance and conserve the Island's environment;
  - take all practicable measures to protect and conserve the fisheries, fauna and flora of the Island

- prohibiting the introduction of any species of fauna or flora to the Island or prescribing conditions in relation to the introduction of any species of fauna or flora
  - the destruction of plants declared by the regulations to be noxious
  - regulation, control or prohibition of exotic plants on the land
- NSW *Biosecurity Act 2015* – outlines the general biosecurity duty for people to be aware of their surroundings and take action to prevent the introduction and spread of pests, diseases, weeds and contaminants. For the LHIB, this translates to “if we are aware of risks we need to take reasonable steps to protect”.

As part of the REP, biosecurity detection dogs were purchased and trained, and dog handlers recruited, to enable improved biosecurity measures, specifically to detect remaining individual rodents post-REP baiting, as well as for ongoing island-wide rodent/pest surveillance and any subsequent incursion response. The Biosecurity detection dogs have also been trained to detect rodents (rat/mouse), reptiles (snake/lizard) and amphibians (frog/cane toad).

In June 2019 the Board engaged an expert independent biosecurity auditor to review the Board’s existing biosecurity measures on Island and review inspection operations pre- and post-border. This audit, along with recommendations from the REP team, LHIB biosecurity dog handlers and MEWH identified the need for increased resourcing for biosecurity staff to ensure:

- all voyages of the Island Trader are satisfactorily inspected pre-border at Port Macquarie and post-border at LHI, which requires a minimum of two staff to be present at the LHI jetty for each day of unloading;
- all freight flights are inspected and over 90% of passenger flights are inspected;
- inspection of incoming private sailing vessels;
- adequate staff provisions to have a handler and dog working daily to hunt rodents and undertake ongoing monitoring and maintenance of 155 surveillance and incursion response tools and devices;
- a dedicated Biosecurity Team Leader role is established and resourced to oversee development of contingency incursion planning, staff training, rostering and community consultation. This will ensure the Board has the resources, skills and community support to respond and intercept any pest incursions;
- increase biosecurity leadership, education and engagement; and to
- protect the investments made to date through Board, State and Commonwealth government funding totalling more than \$30 million. Over three decades these funds have allowed the implementation of a range of holistic island-wide ecological restoration & biodiversity conservation programs which have effectively maintained, restored and improved the resilience and protection of the island’s ecosystems and World Heritage values. (e.g. Rodent, Weed, ABhA, Myrtle Rust, Goat, Cat and Pig eradication programs).

In June 2019 the Board received funds from North Coast Local Land Services for improvements to Biosecurity measures for WH listed Island, which includes vermin proofing the Birdon Shed at Port Macquarie, rapid response kits and pallet inspection stands. Further external funding opportunities for improving biosecurity measures for Lord Howe Island are being explored.

Current biosecurity activities undertaken by the Board include:

- Use of two person crew to inspect the island trader on island each visit. A two person crew is required to allow for meal breaks, to inspect all priority freight and respond to incidents without gaps in detection.
- Biosecurity detection dogs inspecting 90% of freight flights and 50% passenger flights.

- Approvals and monitoring of imports for biosecurity risk.
- Pre-border (Port Macquarie) inspections with LHIB Biosecurity Officer and detection dog of Island Trader prior to and during loading. Also includes inspections of Eastern Air hangers and Birdon facilities, maintenance of baiting and monitoring devices, and education and awareness for stevedores, carriers and suppliers. This requires 4 days at Port Macquarie. Currently this includes:
  - o LHIB Biosecurity Officer and dog to fly return to Port,
  - o Accommodation for four nights
  - o Vehicle Hire
  - o Meal allowance.

On 20<sup>th</sup> June 2019 approval was granted at a Special Board Meeting to set the establishment for the Board and to further approve changes specific to the 2019/20 Salaries & Wages Budget:

The following was approved:

- Recognition of Dog Handlers on a full-time basis (7 days per week) now expensed against the Board's recurrent Budget at 1.05 FTE in 2019/20 (previously under REP), and recognised as 1.40 FTE in future years.

From 21<sup>st</sup> August 2019, the contract for engaging the Biosecurity Dog Handler roles through the REP ended. At the September Board meeting approval was granted to resource an additional 0.4 FTE to meet increased biosecurity inspection and monitoring requirements (as outlined above). This was approved until November 2019 subject to providing further detail on biosecurity requirements and resource implications.

## **CURRENT POSITION**

Following completion of the baiting and initial success of monitoring components of the REP in late 2019, significant experience in biosecurity planning and incursion response will be lost from the island. Some capacity in rodent monitoring and incursion response has been developed locally through the REP, both within and external to the current LHIB structure.

Removing rodents from the island presents an ongoing obligation to keep the island rodent free. This has provided a saving from the annual rodent control baiting program of \$100,000. There is now an increased rodent biosecurity network in place to permanently protect the significant eradication investment. This includes contractual biosecurity arrangements with Birdon, physical detection dog checks of sea- and air-freight in Port Macquarie, and freight and passenger arrivals to Lord Howe Island. A network of permanent surveillance devices will be placed across the island and checked regularly as a last line of defence to pick-up and respond to any future rodent incursions before a population is established. These devices will need to be regularly checked, serviced, maintained and replaced in perpetuity; a commitment which to date has not been resourced. Additionally, in the event of an incursion, sufficient materials, expertise and capacity must be in place or be readily available to respond quickly and effectively.

To ensure that the LHI Biosecurity team is fully prepared in the event of an invasive species incursion, the following additional tasks that are not yet resourced will need to be completed:

- Installation and scheduled checking, replenishing and maintenance of the rodent surveillance network at identified vulnerable entry points.
- Active surveillance and monitoring for other species.

- Multi-species biosecurity planning.
- Preparing a response strategy in the event of an incursion by an alien pest species and leading the response when required.
- Community and stakeholder engagement and communications on island and through the off-island supply chain
- Training and development of staff including managing ongoing training and certification of detection dog teams handlers
- Annual biosecurity incursion response exercises
- Data collection, collation and analysis

These changes collectively place significant additional resource requirements (1 FTE) on the Environment and Community Services Unit. Under the REP budget, provision has been made as per table one.

It has been identified that there is currently a lack of capacity and capability to undertake additional tasks, a lack of biosecurity and incursion response expertise, lack of clarity in regards to individual roles and lack of command and control structure within existing LHIB resources.

In the current organisational structure for the LHIB, the Manager, Environment and World Heritage (MEWH) (Grade 7) has the following direct reports: Team Leader, Flora and Weeds (Grade 6); Field Supervisor (Grade 5), the Biosecurity Dog Handlers (3 x PT Grade 5) and Ranger (job shared Grade 5). Biosecurity and invasive species management is also included in a number of these positions, however there is a lack of coordination of biosecurity and incursion response tasks across these roles and insufficient organisational experience. Additionally, it is identified that the MEWH does not have sufficient capacity to undertake this hands on coordination role concurrent with their other duties.

Until Biosecurity is acknowledged as being a standalone discipline, the Board is under-prepared and under-resourced to deal with an incursion of rodents or other invasive species, creating a significant risk to the World Heritage values for which the Island was listed.

### **Biosecurity resources**

A draft Biosecurity Operations Plan covering Quarantine, Surveillance and Incursion Response has been prepared and recommends the installation of a permanent surveillance network, consisting of 132 rodent kill traps, 78 monitoring devices and 76 baited stations in perpetuity, to monitor and detect any incursions.

The proposed network extends across the entire Settlement area as well as North Bay and along the Little Island track. The network has been designed to ensure it is robust enough to detect any future incursions and requires regular servicing to maintain its effectiveness.

The 3 part-time Biosecurity Dog Handler positions, totalling 1.80 FTE expire on 31 December 2019 pending Board approval to amend the adopted budget to fund the increased budget for salaries. Their extension in perpetuity is likely to be required to ensure continued stringent inspections pre and post border and to assist with monitoring and surveillance.

A rodent monitoring & surveillance grid was recently established and resourcing requirements to service this have been estimated. It is identified that this needs to be serviced by staff skilled in the identification of rodent signs, which includes residents trained in this expertise during the REP. It is proposed that this be established as a contract for residents trained in rodent sign during the REP.

## Lord Howe contractors

As per the Biosecurity strategy, all of the devices within the surveillance network need to be checked and maintained on a monthly basis. A lower number of devices in high risk areas are proposed to be checked on a fortnightly basis. It is anticipated that it would be more efficient if this checking regime was contracted out to a local firm.

## Costs

Below are some indicative costs for maintaining the surveillance network:

- It will take 8 hours, 1 day a month, for a team of four to check 58 bait stations, 97 kill traps and 62 monitoring devices (excluding jetty and airport covered by LHIB Biosecurity Dog Handlers).
- Lord Howe Biosecurity contractors; 4 x 8hrs @ \$60/person/hour = \$1920 per day.
- It will take 8 hours, 1 day every two weeks, for a team of two to check 58 bait stations, 19 kill traps and 26 monitoring devices.
- Lord Howe Biosecurity contractors: 2 x 8hrs@ \$60/person/hr = \$960 per day

Total cost to maintain the biosecurity surveillance network with contractors= \$2,880 per calendar month on a rolling basis (\$13,440 per year).

Checking of the devices would be controlled by a cloud based data collection barcode system like the one use during the REP (Fulcrum). There would be an initial set-up cost of this system of \$4000, followed by a monthly subscription of \$30/person.

The Biosecurity Team Leader would have oversight on the delivery of this contract, which would include quality control.

The Lord Howe Biosecurity contractors would also be on standby to provide a coordinated response in the event of an active incursion, under the leadership of the Biosecurity team as per the Lord Howe Biosecurity strategy, if an active incursion was detected. This work would be carried out at \$60/person/day until the completion of the response period.

This could be from seven days up to 6 weeks, dependant on the level of response required

## Proposal

It is proposed to:

- amend the organisational structure to create a new role of Team Leader, Biosecurity reporting directly to the MEWH (first 12 months is a temporary appointment, is funded via REP and recruitment has commenced),
- extend the 3 part time Biosecurity Dog Handlers totalling 1.8 FTE. In addition to this a 0.2 FTE will be engaged on a casual basis to cover leave, illness and capacity to inspect as many incoming flights and vessels as possible (totalling 2.0 FTE) This is proposed to be initially funded through a variation outlined below in this report, and proposed to be considered for recurrent funding in the 2020/21 budget and through seeking support from other levels of government;
- allocate funds to engage local contractors to undertake monitoring and surveillance (funded from existing budget); and
- allocate funds for mainland biosecurity contractors to undertake external audits and mentoring 4 times per year (funded from existing budget).

The Team Leader, Biosecurity would provide supervision and mentoring to the 3 x PT Biosecurity Dog Handlers, oversee contractors and the biosecurity functions.

Initially it is proposed that the role be trialled temporarily for 12 months. This would allow the Board to trial the structure, person and tasks whilst allowing time to include the role in recurrent funding submissions.

*Benefits of the new structure:*

- The new role will provide additional expertise and capability that currently does not exist in the team
- The new role will also develop local capability and succession planning in line with Community Strategic Plan objectives
- The role will provide additional capacity to undertake the increased breadth and depth of increased biosecurity commitments now required
- The role will provide clarity and direction to the existing structure and will provide guidance, development and mentoring of direct reports
- The role will allow the MEWH to focus on securing long term resourcing to fund biosecurity operations on Lord Howe Island, reducing bottlenecks and allowing the MEWH to have effective oversight of the management of biosecurity in accordance with the responsibilities of his role.

It is recognised that as biosecurity is an ongoing commitment and requires significant community buy in, the mid-term strategy should be to have the position filled permanently by a local. It is considered possible that all of the skills and experience to undertake the role may not currently exist on island. If not filled locally initially in the first temporary appointment, this can potentially be developed over time through training and mentoring. This would allow expertise to be shared and developing of capability within the existing structure / island resources. Before the initial 12 month appointment expires, the role should be advertised for permanent appointment. It is noted that if the initial appointment is not filled locally, accommodation is likely to be required and it is considered that this is achievable from the Board’s existing dwellings.

**Implications**

The following budget implications are provided and recommended for adoption to provide adequate protection of investment of ecological restoration programs being implemented over the past three decades and protect the Islands World Heritage values.

Table 1. Additional biosecurity resources being implemented or proposed for the future.

Financial Year 2019-20	Funding Source
<p><b>Staff</b>  <b>Additional 0.6 FTE dog handlers including 4<sup>th</sup> handler 8 hrs/week - \$40,000 (December 2019 – June 2020). Recommended for approval as a budget variation at this meeting.</b></p>	<p>Strategic Planning – Contractors and Consultants. This funding was originally set aside to assist with reviewing of the housing strategy and other priorities identified in the Community Strategic Plan. The resource demands of the REP have significantly delayed the CSP as such the Environment and Community Services unit are not in a position to commence this in 2019/20. This is not all of the funds allocated to the CSP and work can proceed if \$40k is used as recommended.</p>

<b>Biosecurity Team Leader, Grade 6 (REP funded for initial 12 months) (\$88,074 plus 18.45% \$16,250 plus \$20,000 relocation allowance = \$124,324). Approved and being recruited.</b>	The REP will not be complete until the 2 yr monitoring period is finished. Biosecurity until then is a critical component of the project. Funding for 12 months for this role is included in the REP project funding and in the budget shortfall proposal to the NSW Government. This approach and engagement of this critical role to fill the gap when the REP team have departed is agreed with the REP steering committee and DPIE.
<b>Contractors local – service surveillance network - \$6,720 (December 2019 – June 2020)</b>	Funded from the existing Biosecurity budget.
<b>Contractors mainland – external audit, mentoring and inspection training - \$10,000 (December 2019 – June 2020)</b>	Funded from the existing Biosecurity budget.
<b>Expenses Fulcrum set up and maintenance - \$4,150</b>	Funded from the existing Biosecurity budget.
<b>Financial Year 2010-21 - ongoing</b>	<b>Funding Source</b>
<b>0.6 FTE dog handlers including 4<sup>th</sup> handler 8 hrs/week - \$80,000</b>	General Revenue, and where possible grant funding.
<b>Biosecurity Team Leader, Grade 6 (\$88,074 plus 18.45% \$16,250 = \$104,324).</b>	General Revenue, and where possible grant funding.
<b>Contractors local – service surveillance network - \$13,440</b>	Existing budget allocations for Biosecurity.
<b>Contractors mainland – external audit, mentoring and inspection training - \$20,000</b>	Existing budget allocations for Biosecurity.

In addition, there are a number of one off Biosecurity expenses identified in the Biosecurity strategy that have not been funded. These include:

- Rapid response kit - \$10K
- Inspection devices & tools - \$5K
- Quarantine inspection/isolation room at LHI jetty - \$100K
- Quarantine inspection/isolation room at Birdon wharf \$100K
- Wash down facility at Birdon - \$50K
- Hard stand at Birdon - \$80K
- Pallet stands for keeping all building materials off the ground \$15K

As these are one-off capital items they are more likely to attract one-off grant funding. The engagement of a Biosecurity team leader will allow the Manager of Environment and World Heritage to focus on identifying and applying for this grant funding. It is acknowledged that not all of these items will be funded in the short term. Prior to funding and implementation, this will result in an increased chance of biosecurity breach, and place a greater reliance on post border inspections. As these capital items are installed and commissioned the reliance on post border inspections will be reduced and in time may allow for a scaling back of staff resources dedicated to post border monitoring and inspections.

**RECOMMENDATION**

1. That the following budget adjustment be made to the adopted Environment and Community Services budget:

<b>Transfer from:</b>	<b>Amount</b>	<b>Transfer to:</b>	<b>Amount</b>
<b>Strategic Planning – Contractors and Consultants</b>	\$40 000	Quarantine/Biosecurity – Salaries and On- costs	\$40 000

2. That the Environment and Community Services team prioritise the seeking of external funding to cover biosecurity costs for Lord Howe Island.

**Prepared:** Hank Bower      Manager Environment & World Heritage

**Endorsed:** Peter Adams      Chief Executive Officer, Lord Howe Island Board