

# LORD HOWE ISLAND BOARD

## BOARD MEETING AGENDA

| MEETING DATE:   | MEETING LOCATION: | MEETING TIME:                        |
|-----------------|-------------------|--------------------------------------|
| Mon 21 Nov 2016 | Community Hall    | Planning Session 9:00 am to 11:00 am |
| Mon 21 Nov 2016 | Community Hall    | Closed Session: 11:00 am to 4:30 pm  |
| Tue 22 Nov 2016 | Community Hall    | Open Session: 9:00 am to 12:30 pm    |

|     | ITEM   |  | OPEN<br>(O) | CLOSED<br>(C) | ACTION<br>Note / Decide /<br>Recommend |
|-----|--------|--|-------------|---------------|--|
| BP  | 1      | MINUTES OF PREVIOUS MEETING – NOTICE OF ADOPTION                 | O           |               | Note                                   |
|     |        |  |             |               |  |
| BP  | 2      | OUT OF SESSION MATTERS – STATUS REPORT                           | O           |               | Note                                   |
|     |        |  |             |               |  |
| BM  | 3      | ACTIONS FROM PREVIOUS MEETING – STATUS REPORT                    | O           |               | Note                                   |
|     |        |  |             |               |  |
| ALL | 4      | CHIEF EXECUTIVE OFFICER’S REPORT                                 | O           | C             | Note                                   |
|     |        |  |             |               |  |
| BP  | 5      | MOTOR VEHICLE IMPORTATION OR TRANSFER – STATUS REPORT            | O           |               | Note                                   |
|     |        |  |             |               |  |
|     | 6      | FINANCIAL IMPACT REPORT FOR PROPOSALS ON AGENDA                  |             | C             |  |
|     |        |  |             |               |  |
|     | 7      | DEVELOPMENT APPLICATIONS   |             |               |  |
| DK  | (i)    | DA2017-05 Renewable Energy Project: Stage 2 Wind Turbines (LHIB) | O           |               | Decide                                 |
| BP  | (ii)   | Owner Consent approved under Delegated Authority                 | O           |               | Note                                   |
| BP  | (iii)  | DAs Determined Under Delegated Authority                         | O           |               | Note                                   |
| DK  | (iv)   | DA2017-01: Nursery Redevelopment (Kentia Fresh)                  | O           |               | Decide                                 |
| DK  | (v)    | DA2017-02: WMF Waste Water Management System (LHIB)              | O           |               | Decide                                 |
| DK  | (vi)   | DA2017-04: Dolls House Waste Water Management System (LHIB)      | O           |               | Decide                                 |
| DK  | (vii)  | DA2017-06: Alterations & Additions to Capella Lodge (Baillie)    | O           |               | Decide                                 |
| DK  | (viii) | DA2017-07: Rebuild Airport Terminal Building (LHIB)              | O           |               | Decide                                 |
| DK  | (ix)   | DA2017-08: Pandanus Rebuild (Maxwell)                            | O           |               | Decide                                 |
| DK  | (x)    | Planning & Assessment Bi-annual Report                           | O           |               | Note                                   |
|     |        |  |             |               |  |
|     |        |  |             |               |  |
|     |        |  |             |               |  |
|     |        |  |             |               |  |

|           | <i>ITEM</i> |   | <i>OPEN<br/>(O)</i> | <i>CLOSED<br/>(C)</i> | <b>ACTION<br/>Note / Decide /<br/>Recommend</b> |
|-----------|-------------|---|---------------------|-----------------------|---|
|           | <b>8</b>    | <b>POLICY &amp; STRATEGY</b>                              |                     |                       |   |
| <b>BM</b> | (i)         | Transfer of Public Accommodation Licences Turk to Baillie | O                   |                       | Decide  |
| <b>DK</b> | (ii)        | Draft LHI Walking Track Strategy                          | O                   |                       | Decide  |
| <b>BM</b> | (iii)       | Annual Report   | O                   |                       | Note  |
| <b>AL</b> | (iv)        | Electricity Network Safety Management System              | O                   |                       | Recommend                                       |
| <b>AL</b> | (v)         | Electrical Network Upgrades – Developer Contributions     | O                   |                       | Decide  |
| <b>PH</b> | (vi)        | Lord Howe Island Land Allocation Review                   | O                   |                       | Decide  |
| <b>AW</b> | (vii)       | Closed Session  |                     | C                     | Decide  |
| <b>PH</b> | (viii)      | Draft Weed Management Strategy 2016                       | O                   |                       | Decide  |
|           |             |   |                     |                       |   |
|           | <b>9</b>    | <b>FINANCE AND BUSINESS MANAGEMENT</b>                    |                     | C                     |   |
|           |             |   |                     |                       |   |
|           | <b>10</b>   | <b>LEASING &amp; LAND ADMINISTRATION</b>                  |                     |                       |   |
| <b>DK</b> | (i)         | Estate of the Late Ysobel Heffernan                       | O                   |                       |   |
| <b>DK</b> | (ii)        | Estate of the Late Jann Garton                            | O                   |                       |   |
| <b>DK</b> | (iii)       | Estate of the Late Norma Whitfield                        | O                   |                       |   |
|           |             |   |                     |                       |   |
|           | <b>11</b>   | <b>GOVERNANCE</b>   |                     | C                     |   |
|           |             |   |                     |                       |   |
|           | <b>12</b>   | <b>OPERATIONS &amp; SERVICES</b>                          |                     |                       |   |
| <b>AW</b> | (i)         | Rodent Eradication Program Update                         | O                   |                       | Note  |
| <b>AL</b> | (ii)        | Renewable Energy Program                                  | O                   |                       | Note  |
| <b>DK</b> | (iii)       | Environmental Grants Progress Report                      | O                   |                       | Note  |
| <b>AL</b> | (iv)        | Island Clean-Up Progress Report                           | O                   |                       | Note / Decide                                   |
| <b>AL</b> | (v)         | Airport Terminal Upgrade Project Update                   | O                   |                       | Note  |
| <b>DK</b> | (vi)        | Detection, Containment and Eradication of Myrtle Rust     | O                   |                       | Note  |
| <b>DK</b> | (vii)       | Commercial Tour Operator Licensing System                 | O                   |                       | Decide  |
|           |             |   |                     |                       |   |
|           | <b>13</b>   | <b>WH&amp;S and PUBLIC RISK MANAGEMENT</b>                |                     |                       |   |
| <b>JS</b> | (i)         | WH&S and Public Risk Management Update                    | O                   |                       | Note  |
|           |             |   |                     |                       |   |
|           | <b>14</b>   | <b>INTERVIEWS</b>   |                     | C                     |   |
|           |             |   |                     |                       |   |
|           | <b>15</b>   | <b>GENERAL BUSINESS AND QUESTIONS ON NOTICE</b>           | O                   |                       |   |

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Adoption of Minutes of Previous Meeting

#### **RECOMMENDATION**

Submitted for the Board's information.

#### **BACKGROUND**

The adopted process for distributing Board minutes from the previous meeting is:

- Draft minutes will be produced within five working days of a Board meeting, and posted to Board members on the sixth working day, unless delayed for a valid reason agreed to between the Chief Executive Officer and the Chairperson.
- Board members are to return their endorsement, or otherwise, of minutes on a pro forma document provided by the Administration no later than seven working days after date of posting.
- Seven working days after date of posting, the Board will deem the minutes of the meeting to be endorsed, subject to any amendments which were received prior to that date, and agreed for inclusion by the Chairperson.

#### **CURRENT POSITION**

Minutes of the September 2016 meeting were distributed to each Board member and have been endorsed through the above process with amendments.

A copy of the endorsed Minutes is attached.

#### **RECOMMENDATION**

Submitted for the Board's information.

**Prepared** \_\_\_\_\_ Belinda Panckhurst Administration Officer

**Endorsed** \_\_\_\_\_ Penny Holloway Chief Executive Officer

|                                     |                         |                         |
|-------------------------------------|-------------------------|-------------------------|
| <b>Board Meeting:</b> November 2016 | <b>Agenda Number:</b> 2 | <b>File Ref:</b> AD0103 |
|-------------------------------------|-------------------------|-------------------------|

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Out of Session Papers – Results.

#### **RECOMMENDATION**

Submitted for the Board's information.

#### **BACKGROUND**

Since the last Board Meeting in September 2016, four matters were considered at an out of session meeting. All of the matters were held in open session.

#### **CURRENT POSITION**

Results of 'Out of Session' papers since the last Board meeting are shown on the attached tracking sheet.

#### **RECOMMENDATION**

Submitted for the Board's information.

**Prepared** \_\_\_\_\_ Belinda Panckhurst Administration Officer

**Endorsed** \_\_\_\_\_ Penny Holloway Chief Executive Officer



| OPEN SESSION   |            |  |  |                  |
|----------------|------------|--|--|------------------|
| No.            | Date       | Application  | Vote   | Comment          |
| September 2016 |            |  |  |                  |
| 1              | 20/09/2016 | Mr Gary Crombie<br>Administration of the Estate of the Late James Albert Lonergan – Perpetual Lease 1973/01. Mr Crombie as Executor hold the lease of 1973/01 until 13/05/2018 to complete the administration of the estate. | Approved: JK, LM, BN, RP, JR, CW<br>On Leave: SS | Result: Approved |
| October 2016   |            |  |  |                  |
| 1              | 11/10/2016 | Lord Howe Island Board<br>Approval of changes to draft financial statements 2015/16.   | Approved: JK, LM, BN, RP, JR, SS, CW             | Result: Approved |
| 2              | 13/10/2016 | Ms Valerie Turk<br>DA2017-03 Change of Use   | Approved: JK, LM, BN, RP, JR, SS, CW             | Result: Approved |
| 3              | 10/10/2016 | Mr James Baillie<br>OC2016-07 Alterations and additions to Capella Lodge   | Approved: JK, LM, BN, RP, JR, SS, CW             | Result: Approved |
| November 2016  |            |  |  |                  |
| Nil            |            |  |  |                  |

|                                     |                         |                         |
|-------------------------------------|-------------------------|-------------------------|
| <b>Board Meeting:</b> November 2016 | <b>Agenda Number:</b> 3 | <b>File Ref:</b> AD0096 |
|-------------------------------------|-------------------------|-------------------------|

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Actions from Previous Meetings – Status Report.

#### **RECOMMENDATION**

Submitted for the Board's information.

#### **BACKGROUND**

As a matter of process and procedure, a list of actions is prepared after each Board meeting to ensure that the Board's resolutions are systematically carried out by staff.

#### **CURRENT POSITION**

A list of actions from decisions of the September 2016 Board meeting, and previous meetings, is attached for the Board's information.

#### **RECOMMENDATION**

Submitted for the Board's information.

**Prepared** \_\_\_\_\_ Bill Monks      Manager Business & Corporate Services

**Endorsed** \_\_\_\_\_ Penny Holloway      Chief Executive Officer

## LORD HOWE ISLAND BOARD

### Action Sheet from September 2016 Board Meeting and Previous Meetings

| Agenda Item No.          | Item                             | Actions (refer to full minutes for detail)   | Estimated Completion Date | By Whom | Progress  | Actual Completion Date |
|--------------------------|----------------------------------|--|---------------------------|---------|---|------------------------|
| 10(iv)<br>September 2015 | Review of the LEP 2010           | <ol style="list-style-type: none"> <li>Review the Vegetation Rehabilitation Plan, and</li> <li>Seek funding from government programs to support the LEP review process.</li> </ol>   | November 2016             | MECS    | In progress. No funding available from DPE to support review of LEP |                        |
| 8(v) March 2016          | LHI Weed Management Strategy     | Amended draft Weed Management Strategy be placed on public display for 28 days   | November 2016             | CEO     | In progress   |                        |
| 12(v)<br>March 2016      | LHI PPP Five Year Audit          | Amended PPP POM – 5 year self audit be used for basis for revision of the plan.  | July 2017                 | MECS    | In progress   |                        |
| 12(vi)<br>March 2016     | LHI PPP Advisory Committee       | <ul style="list-style-type: none"> <li>Establish LHI PPP CAC</li> <li>Prepare CAC Terms of Reference</li> <li>Prepare paper on relationship and functions of stakeholders</li> </ul> | November 2016             | MECS    | In progress. First meeting scheduled for Nov 2016                   |                        |
| 12(viii)<br>March 2016   | WW Strategy Update               | <ul style="list-style-type: none"> <li>Extend deadline for High Risk Systems for one year to 30/04/2017</li> </ul>   | May 2016                  | MIES    | Completed   |                        |
|                          |                                  | <ul style="list-style-type: none"> <li>Implement Licence to Operate fees for High Risk Systems from 01/06/2017</li> </ul>  | June 2017                 |         | In progress   |                        |
| 12(ix)<br>March 2016     | Shipping Contract Tender Process | <ul style="list-style-type: none"> <li>Commence tendering for new contract before middle of 2016</li> <li>LHIB staff to manage procurement</li> </ul>                                | September 2016            | MIES    | In progress   |                        |

| Agenda Item No.       | Item  | Actions (refer to full minutes for detail)   | Estimated Completion Date | By Whom  | Progress  | Actual Completion Date |
|-----------------------|---|--|---------------------------|----------|---|------------------------|
| 1(i) April 2016       | Budget 2016/17                                    | Provide report in regard to community support options for Board consideration.   | November 2016             | CEO/MECS | To be addressed as part of the Community Strategy |                        |
| 7(ii) September 2016  | OC2016-30: Wade Renovations of Garage             | Organise site inspection by Board members at November meeting  | November 2016             | MECS     | Application withdrawn                             |                        |
| 7(iv) September 2016  | DA2016-31 Vessel Launching and Retrieval Facility | Deferred commencement conditions in Part 1 of the recommendation be considered out of session before proceeding to Part 2.   | November 2016             | MIES     | In progress                                       |                        |
| 7(v) September 2016   | OC2016-12 RMS Navigation Leads                    | Take further mitigating measures to reduce the visual impact.  | November 2016             | MECS     | Complete. RMS notified                            |                        |
| 8(i) September 2016   | Draft 2016/17 Operations Plan                     | <ul style="list-style-type: none"> <li>Add 4.3.2 relating to the identification and protection of additional heritage items.</li> <li>Include a key to abbreviations.</li> </ul> | October 2016              | CEO      | Completed   |                        |
| 8(vii) September 2016 | Biosecurity Procedures for Imported Vehicles      | Amend Section 2 in accordance with the recommendations in the Minutes.   | October 2016              | MECS     | Complete. On public exhibition                    |                        |
| 9(iii) September 2016 | Funding for the PPP                               | In clued this as part of a comprehensive funding proposal, including a detailed narrative, in the course of the normal budget cycle.   | November 2016             | MBCS     | In progress                                       |                        |
| 9(iv) September 2016  | Charges for Plant and Equipment Hire              | Put an effective system in place to collect the Environmental Levy from passengers arriving on non-QL aircraft who are staying more than one night.                              | October 2016              | MIES     | In progress                                       |                        |

| Agenda Item No.          | Item                                | Actions (refer to full minutes for detail)  | Estimated Completion Date | By Whom | Progress                          | Actual Completion Date |
|--------------------------|-------------------------------------|---|---------------------------|---------|-----------------------------------|------------------------|
| 12(iv)<br>September 2016 | Community Engagement Survey Results | <ul style="list-style-type: none"> <li>• Use results as the foundation for a Comms &amp; Community Engagement Strategy.</li> <li>• Communicate results through the Community Information Bulletin.</li> </ul> | November 2016             | MECS    | In progress                       |                        |
| 12(v)<br>September 2016  | Airport Terminal Upgrade            | Investigate placing a model at the terminal.  | October 2016              | MIES    | Images placed at airport terminal |                        |
| 15<br>September 2016     | General Business                    | Create dog-allowable serviced BBQ area on the foreshore south of the runway.  | November 2016             | MIES    | In progress                       |                        |

|                                     |                         |                         |
|-------------------------------------|-------------------------|-------------------------|
| <b>Board Meeting:</b> November 2016 | <b>Agenda Number:</b> 4 | <b>File Ref:</b> AD0100 |
|-------------------------------------|-------------------------|-------------------------|

# LORD HOWE ISLAND BOARD

## Business Paper

### OPEN SESSION

#### Chief Executive Officer's Report to November 2016 Meeting of the Board

The following briefing provides an overview of key issues managed by the Board during the reporting period, and their status. It is intended that this document be available to the public as part of the minutes of the meeting. Matters which are subject to confidentiality, business in confidence or legal action are shaded and are not included in the public copy of the report.

Number of items excluded from this public edition:

Business & Corporate Service Report

Reason: Business in Confidence

| <b>MATTER</b>                     | <b>STATUS</b>  | <b>ACTION<br/>REQUIRED<br/>BY BOARD<br/>AT THIS<br/>MEETING</b> |
|-----------------------------------|--|---|
| Annual Report                     | The 2015-2016 Annual Report has been completed and submitted to the Minister for the Environment in accordance with the statutory requirements   | See agenda item 8 (iii)   |
| Handley Review                    | The Handley Review has now been considered by Government and the report and the government response have been released. There is an opportunity for community comment with a closing date for submissions to the Department of Premier and Cabinet of 28 November. | See agenda item 8 (vi)  |
| Rodent Eradication Program        | Under Stage 2: Planning and Approvals, the Public Environment Report prepared as a requirement of the Federal EPBC Act is on public exhibition. The additional Human Health Risk Assessment is also underway.  | See agenda item 12 (i)  |
| Airport Terminal Upgrade Strategy | The development application for the airport terminal upgrade has been submitted and assessed.  | See agenda item 7 (iv)  |
| Renewable Energy Program          | The development application for the wind turbine component of the project has been submitted and assessed.   | See agenda item 7 (i)   |

|  |   |                          |
|--|---|--------------------------|
| Electricity Network Safety Management System | The Independent Pricing and Regulatory Tribunal (IPART), the safety and reliability regulator for NSW electricity networks, requires the Board to have an Electrical Network Safety Management System. This has been prepared for Board approval.         | See agenda item 8 (v).   |
| Draft Walking Track Strategy                 | A review has been completed of the 20 year old LHI Walking Track Strategy and a new strategy prepared. The Draft Strategy proposes a 10-year program of works aimed at establishing and maintaining a stabilised, safe and diverse walking track network. | See agenda item 8 (ii)   |
| Draft Weed Management Strategy 2016          | After a period of public exhibition and review, the Draft Weed Management Strategy 2016 is reported to the Board for approval.  | See agenda item 8 (viii) |
| Myrtle Rust outbreak                         | On 14 October 2016, myrtle rust was detected for the first time on Lord Howe Island on an exotic plant species (Rose Apple <i>Syzigium jambos</i> ). The rapid response plan was enacted.   | See agenda item 12 (iv)  |

Prepared \_\_\_\_\_ Penny Holloway Chief Executive Officer

## **ENVIRONMENT & COMMUNITY SERVICES UNIT**

**9 September - 9 November 2016**

### **General Policy and Planning**

- Contribute to Annual Report, and Risk policy framework, Bush Fire Risk Management Plan
- Commence review of LHIB Procedure for access to Perpetual Leases
- Commence review of LHIB Long-term Accommodation Licence Policy
- Complete review of Draft LHI Walking Track Strategy.

### **Biodiversity Management**

- Saving Our Species (SOS) funding agreement approved.
- Disturbed Sooty Terns from nesting within airstrip threshold as part of animal hazard management for aerodrome. Renewed licence to disturb Sooty Terns from Blinky Dune
- Assisted citizen science invertebrate survey in collaboration with Pinetrees Lodge, Australian Geographic and CSIRO.
- Submitted draft paper on the recovery of LHI Phasmid for the National Environment Science Program Threatened Species Hub.

### **Research & Volunteers**

The following persons were approved to stay in the Research Station during the reporting period.

| <b>Name</b>  | <b>No. People</b> | <b>No. Nights</b> | <b>Project</b>                                     | <b>Address</b>          |
|--|-------------------|-------------------|--|-------------------------|
| Tim Wright   | 1                 | 5 (Lab)           | Denture Clinic (Lab use only)                      | Forster                 |
| Di Brown   | 1                 | 5                 | SOS - OEH  | OEH Coffs Harbour       |
| Mick Jeffrey   | 1                 | 5                 | Weed Eradication Technical Panel                   | QLD Dept Ag & Fisheries |
| Kylie Brokes   | 1                 | 14                | Weed eradication volunteer                         | Urunga                  |
| Dean Portelli,<br>Terry O'Dwyer,<br>Nicholas Carlile | 3                 | 4-30              | Biodiversity Benefits – Rodent eradication - fauna | C/o OEH                 |
| Andrew Denham<br>Tony Auld<br>Mark Tozer             | 3                 | 14                | Biodiversity Benefits – Rodent eradication - flora | C/o OEH                 |
| Australian Museum                                    | 3                 | 7                 | Rodent eradication – Mollusc survey                | Sydney                  |

### **Pest Management**

- The Mallard x Pacific Hybrid duck control program recommenced on Monday 10<sup>th</sup> October.

### **Rodent Eradication**

- See Agenda Item - Rodent Eradication progress report.



**Quarantine**

- See Agenda item 12 (vi) Myrtle Rust Incursion
- Distributed Myrtle Rust awareness information.
- Applications to import plant, mulch/potting medium, dog, livestock and chicken have been assessed as required and inspections carried out of imports upon arrival.
- Maintenance of boot cleaning stations.
- Perimeter of phytophthora site flagged and boot scrub bays installed. Site treated with Medley fungicide quarterly as per Royal Botanical Gardens recommendations.
- Liaison with NSW Department of Primary Industries to make LHI a Biosecurity Zone under the NSW Biosecurity Act 2015.

**Weed Management**

- See Agenda Item - Environmental Grants progress report.

**Revegetation**

- Draft Revegetation Strategy being revised.
- Undertake maintenance of revegetation sites in accordance with Revegetation Work Schedule.
- Funding provided by North Coast Local Land Services for restoration of Sallywood Swamp Forest EEC at the Golf Club. Site planted, maintenance ongoing.

**Incident Management**

- Assist with response to house fire

**Community Programs & Education**

- Contribute to Signal and Community Information Bulletin

**Visitor Infrastructure**

- General maintenance of walking tracks;
- Geotechnical report submitted for Muttonbird Point Track land slip. Review of Environmental Effects drafted to guide remediation works.
- Assist with Island wide clean up including the Lagoon Foreshore
- See Agenda Item – Draft Walking Track Strategy
- See Agenda item - Commercial Tour Operator Licensing System.

**Marine Management / Moorings**

- LHIB monthly mooring inspections were completed for October (19) and will be re-inspected prior to the BBQ on the Beach event (12<sup>th</sup> Nov);
- Six yachts visited the Island and attached to LHIB public moorings during the reporting period.

**Human Resource Management**

- Damien Ball commenced duties as Field Officer with ECS unit.

**Training**

- Geographical Information System.

**Work Health & Safety**

- Knee injury to employee resulting in surgery and loss of work time

**Environmental Assessment**

- Ecological assessments for all OC / DAs
- Tree risk assessments completed.
- REF Muttonbird Point Walking Track remediation.

**Land Administration**

- See Agenda Item – Land Allocation Review
- Progress on a number of unresolved Estates,
- Progress several applications for road closures / easements / rights of carriageway

**Development Assessment**

- See Agenda Item – Biannual Planning & Assessment Report

**Community Health & Wellbeing**

- Issue 2016-17 Community Grants
- Develop calendar of events for 2016-17

## **INFRASTRUCTURE AND ENGINEERING SERVICES**

**5 September 2016 to 4 November 2016**

### **Airport**

- The Civil Aviation Safety Authority (CASA) undertook an audit of the Aerodrome on October 10, 11 and 12. This surveillance event was undertaken by Iain Lobegeier. This was Iain's first inspection of the Aerodrome due to the retirement of long term inspector Kevin Dyer. Overall Iain was happy with the physical components as well as the management systems, although Iain did raise a couple of non-compliance matters, mainly related around works from the reseal project last year. The ensuing report had not been received at the time of writing.
- For the year to date (Friday 4 November) there have been three (3) bird strikes recorded. One species of bird was unknown as it was struck on approach over the lagoon and the carcass was unable to be recovered. In this instance the aircraft was grounded until the following day when an engineer could inspect the aircraft. No damage was recorded. The second strike involved a pee wee with no disruption to the flight and the third strike was a sooty tern struck over the water, before Blinky Beach, again with no disruption to the flight. There has been 1,394 aircraft movements at the LHI Aerodrome from 1 January 2016 to 31 October 2016 (excluding RAAF Hercules). These strikes equate to approximately 2.15 bird strikes per 1,000 aircraft movements.

For the corresponding period in 2015 there were five (5) strikes recorded – 1 x Ruddy Turnstone, 3 x Sooty Terns and 1 x unknown species (struck over water and unable to retrieve the carcass). There were 1,270 aircraft movements at the LHI Aerodrome from 1 January 2015 to 31 October 2015. The strikes were equivalent to approximately 3.94 bird strikes per 1,000 aircraft movements.

- Trimming of vegetation was undertaken along the airport road to reduce the height of bully bush and hop wood in order to meet CASA regulations. Further trimming was also carried at the BOM offices fence line, along with re-fencing in front of the BOM office. An additional vehicle gate was installed to the north of the BOM office allowing vehicular access airside if required.
- Board staff are now responsible for daily aerodrome inspections.

### **Emergency Management**

- On Monday 5 September 2016 RFS volunteers and Board staff attended a house fire. The spread of fire was contained but the house was unable to be saved. The incident was investigated by two Detectives from the NSW Mid North Coast Local Area Command and a Rural Fire Services Investigator from the NSW North Coast District with the assistance of LHIB staff.
- The Local Emergency Management Committee (LEMC) met on 24 October 2016. Joining the meeting were Maria Frazer - NSW SES North Coast Regional Controller, Kam Baker – NSW RFS District Fire Control Officer for North Coast & Lord Howe Island and Steve Farrell – NSW RFS North Coast District Officer. Kam and Steve are working alongside Board staff to develop the LHI Bush Fire Risk Management Plan. It is anticipated that the Draft Plan will be available in the New Year.

- The Annual Oil Spill Training Exercise is now planned to be held on Monday 21 November 2016. Participants include Board staff, Marine Parks Authority staff, LHI Seafreight personnel, Roads & Maritime staff and NSW Police. As is the usual practice the exercise will be based on a fuel release during the unloading of the Island Trader. The exercise will be conducted by Shayne Wilde of Transport for NSW. During his visit Shayne will also be undertaking a National Competency Based Equipment Training Course with exercise participants.
- Air Ambulance patient retrievals year to date (Friday 4 November 2016) total fourteen (14), ten (10) of which were residents and four (4) visitors. Three (3) residents required treatment for injury and seven (7) for illness. Of the visitors, three (3) were for illness and one (1) for injury. Patient retrievals for the same period in 2015 totalled sixteen (16), eleven (11) of which were residents and five (5) visitors. All required treatment for illness.
- The installation and testing of the three emergency sirens was completed in November 2016. These will undergo further testing to confirm their effectiveness and then a regular weekly testing at 10am on Wednesdays will be instigated.

### **Building Construction, Maintenance and Management**

- Airport terminal picket fence has been re-screwed and repainted.
- A new drinking water fountain has been installed near the QantasLink check in desk.
- Painting of Sea Freight storage shed at jetty is scheduled to be completed by end of November 2016.

### **Maritime Facilities and Coastal Activities**

- High Density Polyethylene (HDPE) and Ultra-high-molecular-weight polyethylene (UHMWPE) fendering fitted to the timber and steel piles on the southern side of the jetty received general tightening and maintenance in September.
- In August the swimming pontoon was removed from the water for cleaning and service. The pontoon was out of the water for several weeks due to poor weather. The pontoon has since been relocated to its final location approximately 20 metres to the north.
- Manly Hydraulics Laboratory attended the island and recalibrated/serviced the on-line 'live' tide gauge at the jetty.
- Work on the geotextile sand bag wall at the Pinetrees Boatshed commenced on 16 October, and was completed on 9 November. Approximately 180 bags have been placed. The work was undertaken by All Island Services (Dar Nobbs) under contract, with support by Board and Pinetrees staff.
- A small geotextile sand bag groyne (12 bags) was placed on 9 November, approximately 20m north of the Pinetrees boatshed. The groyne will be monitored for its performance in capturing sand and its effects on the boating channel near the shore. It can be removed simply if there are any unintended consequences.

### **Roads, Parks and Visitor Facilities**

- Extensive road and pothole repairs were carried out during September/October.

- An 80 metre section of road leading through the nursery has been graded and prepared for sealing which is expected to be completed by Nov/Dec 2016.
- Some improvements to drainage were completed at the Ned's Beach Shed, and preliminary electrical work to improve the lighting has been completed.
- A new electric BBQ was installed and commissioned at the playground.
- Four (4) dangerous trees were removed from locations on the island within the road reserve and leases. The trees were removed without incident and with the assistance of local arborist Craig Wilson.
- Staff continue with road verge vegetation trimming.
- Spraying for clover and bindi commenced in early October. Over half the island's public areas were completed up to and including the playground working from the southern end of the island. Unfortunately due to unfavourable wind conditions the spraying program could not continue until November. This has resulted in several large patches of bindi and clover growing in public areas notably at Old Settlement BBQ areas and Ned's Beach. All areas are planned to be treated by mid-November.

### **Waste Management Facility**

- General maintenance and service on all equipment has been undertaken.
- Extra staff have been heavily utilised daily at the WMF in order to process the large amount of waste received by the island clean-up program.
- The tender for the new compost system at the WMF was advertised in September and October and is now being assessed. The Board was also successful in receiving \$255,000 of funding from the Environmental Trust under the Waste Less Recycle More Program, making the total budget available for the project \$847,000.
- Discussions have been held with the EPA regarding the implementation of the NSW Container Deposit Scheme (10c refund) from 1 July 2017. We are currently assessing the effort required to participate in the scheme, the costs of operating the scheme on the Island versus the benefits, and the consequences of not participating.

### **General items**

- Board staff undertook sampling and testing of the Island's wells during October 2016.
- Board staff continue to monitor drinking water quality for NSW Health compliance.
- Board staff continue to monitor mosquito larvae as per the Lord Howe Island Mosquito Surveillance & Vector Monitoring Program.
- Board staff continue to monitor wastewater at the WMF for EPA licence compliance.
- Board staff continue to assist residents and businesses with their onsite wastewater management system installations and/or upgrades.

- Board staff continue to conduct building certification for Construction Certificates as part of the Development Application process.

## **ELECTRICAL SERVICES UNIT**

Operation of the Powerhouse and Reticulation System for the reporting period 27<sup>th</sup> August to 8<sup>th</sup> November 2016

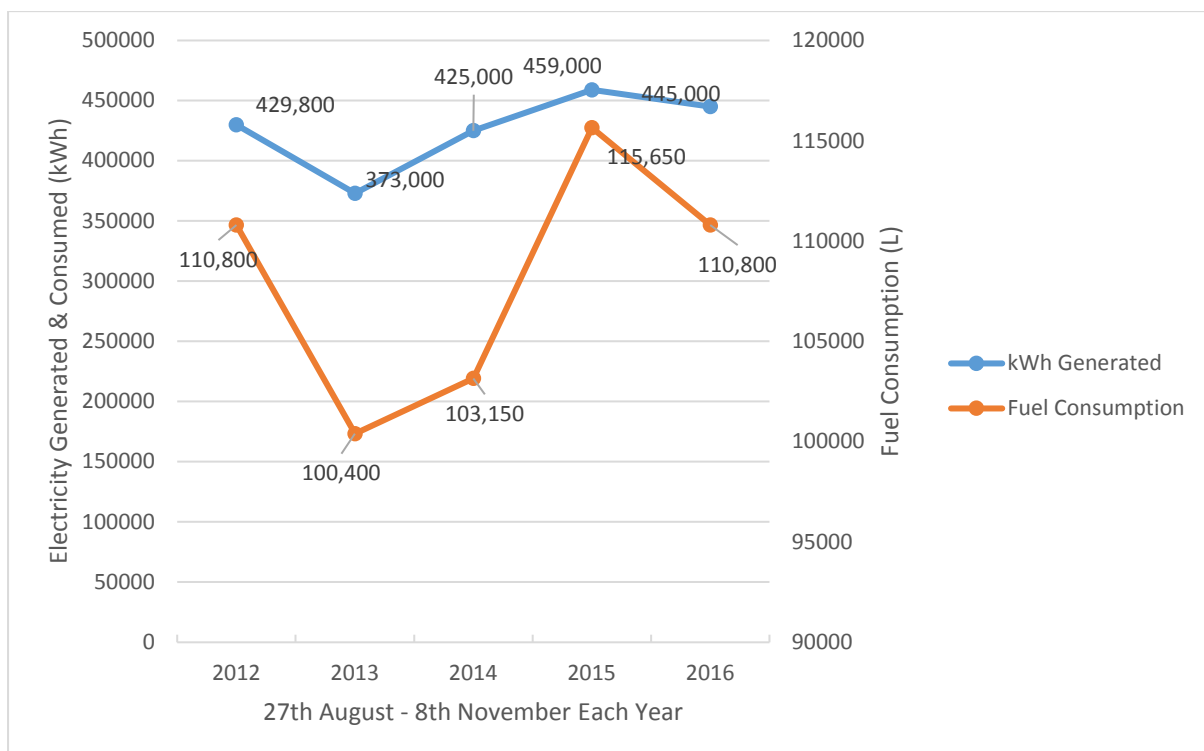
### **Overview of Activities**

- Routine maintenance on Generating Units 1, 2 and 3 was completed.
- Routine maintenance on Generator no.1, 2 and 3 battery banks was completed.
- Routine maintenance on Generator no.1 and 2 battery chargers was completed.
- Routine maintenance on Generator no.3 Air Circuit Breaker was completed.
- Routine maintenance on Generator no.2 and 3 day fuel tanks and pumping system was completed.
- Routine maintenance on Substation no.9 Oceanview and associated distribution pillars was completed.
- Routine maintenance on Substation no.10 Anderson Road and associated distribution pillars was completed.
- Routine maintenance on Ventilation fan no.2 was completed.
- Supply load surveys were carried out on Substations no.9 Oceanview and No.10 Anderson Road along with their associated distribution pillars. Distribution pillars were monitored for their voltage levels. Substations were monitored for maximum demand and voltage levels. All maximum demand and voltage levels in the surveyed areas were within acceptable limits.
- Supply load surveys were carried out on the Board's Substation and the distribution pillars supplying Pinetrees. Reports from Pinetrees of dimming lights, damaged electrical equipment and minor electrical shocks when touching taps, triggered the need for this survey to understand whether the issue is in the Board's distribution system or related to one of the customers on this line.

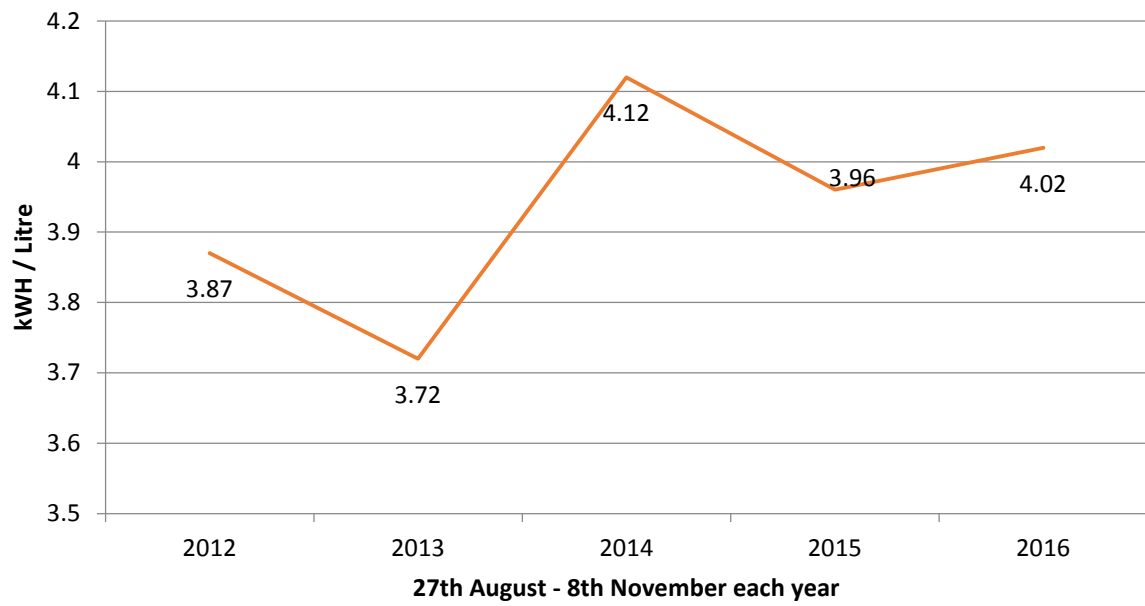
### **Information for Board Members**

- Energy demand for the reporting period was 445,000 kWh.
- Fuel consumption for the reporting period was 110,800 litres.
- Fuel energy efficiency for the reporting period was 4.02 kWh/L
- Presently there are 109 kW of privately owned solar panels connected to the electrical distribution system.
- Maximum demand for the period was 460 kW on the 31<sup>st</sup> October.

- There were no powerhouse supply interruptions during the reporting period. The last powerhouse supply interruption occurred on 30<sup>th</sup> June 2015.
- There were two distribution system supply interruptions during the reporting period. Both interruptions were the result of localised customer overloading.
- The specialist High Voltage cable jointers responsible for connecting the new 250 kVA padmount substation at the old powerhouse site were unable to visit the island during September to undertake this work. The connection work will now take place between 16<sup>th</sup> – 18<sup>th</sup> November. Once completed the existing HV switchyard can be demolished and the site fully reclaimed.
- Two new customers were connected to the electrical supply system during the reporting period. There are now 282 customers connected to the system.



## Fuel Efficiency (the higher the better)





|                                     |                         |                         |
|-------------------------------------|-------------------------|-------------------------|
| <b>Board Meeting:</b> November 2016 | <b>Agenda Number:</b> 5 | <b>File Ref:</b> CO0008 |
|-------------------------------------|-------------------------|-------------------------|

# LORD HOWE ISLAND BOARD

## Business Paper

### OPEN SESSION

#### **ITEM**

Motor vehicle importation or transfer status report.

#### **RECOMMENDATION**

The report is submitted to the Board for information.

#### **BACKGROUND**

Since the last Board meeting six applications to import or transfer motor vehicles were determined by the Chief Executive Officer under the 'Vehicle Importation, Transfer and Use Policy':

#### **CURRENT POSITION**

There will be an increase of four vehicles to the island since the last Board meeting.

| Applicant                               | Vehicle Type   | Preferred Vehicle | Use        | Variation | Comment   |
|---|----------------|-------------------|------------|-----------|---|
| David Chlumsky                          | Daihatsu Wagon | No                | Private    | 1         | Approved 9/09/2016<br>Transferred from Krick                  |
| Jack Shick                              | Box Trailer    | N/A               | Commercial | 1         | Approved 13/09/2016   |
| Blue Lagoon                             | Toyota Hiace   | No                | Commercial | 0         | Approved 27/09/2016<br>Replacement                            |
| NSW Rural Fire Service                  | Isuzu FY       | No                | Essential  | 0         | Approved 27/09/2016<br>Replacement                            |
| LHI Golf Club                           | Mazda B250     | No                | Commercial | 1         | Approved 28/09/2016   |
| Stephen Coram<br>SR Coram<br>Electrical | Suzuki APV     | No                | Commercial | 1         | Approved 25/10/2016<br>Temporary approval<br>until 31/12/2017 |

#### **As at November 2016**

| <b>Registered Road Vehicles</b> |            |         |      |                   |                           |       |
|---------------------------------|------------|---------|------|-------------------|---------------------------|-------|
| Essential                       | Commercial | Private | Hire | Plant & Equipment | Imported Without Approval | Total |
| 21                              | 84         | 140     | 9    | 26                | 75                        | 355   |

At the May 2010 meeting it was requested that further differentiation in the vehicle statistics to identify motor vehicles and motor cycles / scooters and trucks separately be presented. This information is presented below.

| <b>Registered Road Vehicles</b> |     |                      |       |                   |          |       |
|---------------------------------|-----|----------------------|-------|-------------------|----------|-------|
| Car/Utility                     | Bus | Motorcycle / Scooter | Truck | Plant & Equipment | Trailers | Total |
| 168                             | 30  | 49                   | 7     | 28                | 73       | 355   |

At the June 2016 meeting it was requested that future reports include trends in regards to vehicles imported without approval and clarification that these are vehicles which pre-date the Board approval and monitoring process.

The current Vehicle Importation, Transfer and Use Policy was adopted at the September 2015 Board meeting.

There have been 75 vehicles which have been imported without approval.

- 72 vehicles were imported without approval prior to 2014. The majority of these vehicles were trailers.
- One vehicle, a boat trailer, was imported without approval in 2015.
- Two vehicles, both trailers, have been imported without approval in 2016.

The following table shows further differentiation in the vehicle statistics to identify the types of vehicles that have been imported without written approval.

| <b>Vehicles Imported Without Approval – By Type</b> |     |                      |       |                   |          |       |
|---|-----|----------------------|-------|-------------------|----------|-------|
| Car/Utility   | Bus | Motorcycle / Scooter | Truck | Plant & Equipment | Trailers | Total |
| 13  | 2   | 11                   | 1     | 3                 | 45       | 75    |

## **RECOMMENDATION**

The report is submitted to the Board for information.

**Prepared** \_\_\_\_\_ Belinda Panckhurst Administration Officer

**Endorsed** \_\_\_\_\_ Penny Holloway Chief Executive Officer

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

List of Owner's Consents dealt with under Delegated Authority.

#### **RECOMMENDATION**

The report is submitted to the Board for information.

#### **BACKGROUND**

The Minister for the Environment has approved delegated authority regarding the issuing of owners consents by the CEO providing:

1. The development value is not more than \$2 million,
2. Does not relate to development for the purpose of a new dwelling, and
3. Complies with any planning instrument in force relating to the Island.

#### **CURRENT POSITION**

The following Owner's Consent applications complied with the above requirements and have been processed by the CEO since the last Board meeting, as detailed below:

| OC        | Applicant               | Site        | Proposal                                      | Zone              | Decision            |
|-----------|-------------------------|-------------|---|-------------------|---------------------|
| OC2017-02 | Chris & Margaret Murray | Portion 354 | Installation of wastewater management system. | Zone 2 Settlement | Approved 29/09/2016 |
| OC2017-03 | Gary & Vivienne Crombie | Portion 352 | Installation of wastewater management system. | Zone 2 Settlement | Approved 29/09/2016 |

The above applications were forwarded to the Board's Planning Consultant who assessed the proposals and recommended support to the granting of owner's consent.

#### **RECOMMENDATION**

The report is submitted to the Board for information.

**Prepared** \_\_\_\_\_ Belinda Panckhurst Administration Officer

**Endorsed** \_\_\_\_\_ Penny Holloway Chief Executive Officer

**Board Meeting:** November 2016

**Agenda Number:** 7 (iii)

**File Ref:** PL0001

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

List of Development Applications dealt with under Delegated Authority.

#### **RECOMMENDATION**

The report is submitted to the Board for information.

#### **BACKGROUND**

The Minister for the Environment, under section 80(1) of the Environmental Planning & Assessment Act, issued authority to the CEO to determine development applications providing:

1. The development value is not more than \$150,000
2. No more than 3 written objections are received within the exhibition period; and
3. The application has not been called up for full Board determination by any Board Member. (All Lord Howe Island Board development applications are to be determined by the full Board)

#### **CURRENT POSITION**

The following development applications complied with the above requirements and have been determined by the CEO since the last Board meeting, as detailed below:

| DA        | Applicant   | Site        | Proposal   | Zone              | Decision                                  |
|-----------|-------------|-------------|--|-------------------|---|
| DA2016-30 | Chad Wilson | Portion 347 | Additions and alterations to existing dwelling and replacement of shed | Zone 2 Settlement | Approved 2/09/2016 subject to conditions. |

#### **RECOMMENDATION**

The report is submitted to the Board for information.

**Prepared** \_\_\_\_\_ Belinda Panckhurst Administration Officer

**Endorsed** \_\_\_\_\_ Penny Holloway Chief Executive Officer

|                                       |                             |                                  |
|---------------------------------------|-----------------------------|----------------------------------|
| <b>Board Meeting</b><br>November 2016 | <b>Agenda Item</b><br>7 (x) | <b>File Reference:</b><br>CN0021 |
|---------------------------------------|-----------------------------|----------------------------------|

# LORD HOWE ISLAND BOARD

**Item:** Bi-annual Planning Assessment and System Audit

## 1.0 Introduction

This bi-annual audit covers the half year period from May 2016 to November 2016 and analyses Owner Consent (OC), Development Application (DA) and s96 / Modified Development Consent (MDC) assessments as well as the planning system on Lord Howe Island (LHI).

This report is based on data obtained from the Planning Assessment and Advice Register maintained by RPS, the Consultant Town Planner (CTP), and supplemented as required from the Board's computer and file records. The report provides a summary of the total number of applications, determinations, the value of development and current application processing times.

## 2.0 Relevant Background

As part of the CTP contract with the LHIB (the 'Board'), an audit of planning and assessment systems and processes is to be reported to the Board in May and November each year. The audit aims to ensure that systems and procedures are up to date and compliant with legislative and procedural requirements and reflect best practice.

This is the seventh report submitted to the Board by the CTP since the commencement of the contract in April 2013. A number of actions have been previously recommended and implemented since May 2015. These actions are summarised in a table at **Appendix 1**.

## 3.0 Current Applications

### 3.1 Development Application Register

The CTP is required to maintain a Development Application Register. Key aspects of this register are detailed and considered below.

The following table provides the number of new applications and the value of development for the last six months.

**Table 1 Number of Applications and Value of Development**

|  | DA           | MDC | OC          | Total |
|--|--------------|-----|-------------|-------|
| <b>Number of New Applications Received 18 May 2016 to 10 November 2016</b> | 12           | 1   | 8           | 21    |
| <b>Value of Development</b>  | \$10,374,000 | NA  | \$1,412,880 |       |

At the time of writing this report:

- 4 x new DAs & 1 x MDC had been approved,

- 0 x DAs (were waiting on additional information that had been requested,
- 5 x DAs and 4 x OCs have been sent to the Board for determination,
- 3 x DAs were recently submitted and are currently being assessed,

**Appendix 2** provides a detailed breakdown of the applications that have been received by the Board during the bi-annual audit period.

## 3.2 Land Use Zones

The majority of the DA's and OC's were proposed in the Settlement zone. Notable exceptions include:

- DA2017-05 (Wind Turbines) which is zoned Zone 7 Environmental Protection and Zone 1 Rural;
- DA2017-07 (Airport Terminal) which is zoned Zone 5 Special Uses.

## 3.3 Planning Enquires

The Board's CTP deals with a number of pre-lodgement and post-lodgement planning enquiries as well as providing advice to various Board staff in respect of town planning matters as they arise.

The CTP and the Board's Manager Environment and Community Development speak at least once a fortnight to discuss relevant current issues along with regular phone and email communication.

# 4.0 Application Processing Times

## 4.1 Application processing times

| Application   | Response                 |
|---|--------------------------|
| <b>DAs</b>  |                          |
| Average DA processing time from lodgement to issue of Notice of Determination | 21 Days*                 |
| Number of additional information requests                                     | 4 out of 13 applications |
| <b>OCs</b>  |                          |
| Average OC processing time from lodgement to issue                            | 24 Days*                 |
| Number of additional information requests                                     | 2 out of 8 applications  |

\*average excludes 'stop the clock' time where the CTP was awaiting response to requested additional information

The *Environmental Planning and Assessment Regulation 2000* (EP&A Regs) states:

*...the application is taken to be refused if a consent authority has not determined the application within the deemed refusal period, being:*

- (a) 40 days, except in the case of development referred to in paragraph (b) or (c), or*
- (b) 60 days, in the case of:*
  - (i) designated development, or*

*(ii) integrated development (other than integrated development that, pursuant to State Environmental Planning Policy No 62—Sustainable Aquaculture, is Class 1 aquaculture development), or*

*(iii) development for which the concurrence of a concurrence authority is required, or*

*(c) 90 days, in the case of State significant development.*

The average time for all DA and OC applications complies with the statutory 40 day deemed refusal period for standard applications. It is noted the average time is about half of the expected time for determination.

In comparison to the State average, the days on average to process a DA across all Councils in NSW in the 2013/2014 financial year, excluding stop-the-clock provisions, was 45 days (Department of Planning and Environment, 2015). The average processing time since May has been 21 days, significantly under the State average.

## 4.2 Potential improvements for application processing time

Development applications often require internal referral to other units within the LHIB in order to seek expert opinion. Internal referrals are expected to be completed within 14 days of submission. Internal referrals have been provided in a more timely manner than reported in previous bi-annual audits which partly reflects the reduction in days for processing of applications.

## 4.3 Transferring Data

The external File Transfer Protocol (FTP) site established by RPS has been in operation since April 2013. The Board has notified the CTP for each application which is uploaded. This has allowed the CTP to begin the assessment process shortly after lodgement, helping improve the processing time. There have been several occasions in the last half year where documentation has been missing from the FTP or where the system has been temporarily unavailable. This has not caused delays with our assessment as the documents have been emailed directly to us upon request.

## 4.4 Advertising

Currently, all Development Applications are advertised, with the exception of minor developments that, in the opinion of the Board, are of minimal social and environmental impact. These applications are not publicly notified, however adjoining leaseholders are provided with written notice and given seven (7) days to comment. This exception has been applied to solar panel and wastewater installations.

It is recommended that the Board continue to apply the exemptions to advertising of development applications that involve minor development as appropriate.

Development applications are exhibited within the newsletter once per month or by way of a householder to residents.

# 5.0 Quality of Pre-lodgement Planning Advice

The CTP believes there is a high quality of pre-lodgement advice provided to the Board and applicants.

The quality of development applications, appear to have improved which is discussed in Section 7.0.

## 6.0 Quality and Quantity of Owners Consent Applications

The last bi-annual report recommended the Board require a small fee for OC Applications to discourage unconsidered proposals to be lodged, improving the quality and quantity of those that do not proceed.

It is recommended to review the effectiveness of this OC fee again at the next bi-annual meeting.

## 7.0 Quality of Development Applications

Though improvements have been made in the submission of DAs, the CTP still have concerns regarding the quality of DAs submitted to the Board. Some DAs require further information from the applicant.

For larger, more complex DAs, applicants should be advised to engage a professional town planner to assist in the DA process and preparation of the Statement of Environmental Effects to ensure that the applicant is satisfying the legislative requirements for lodging an application.

## 8.0 Feedback from Board regarding quality of planning services and reporting

Periodic feedback (anecdotal and by email) has been provided by the Board on the quality of planning services provided to the Board. Feedback received has been very constructive.

## 9.0 Changes to LHI LEP 2010

A Planning Proposal to amend the provisions under the LHI LEP 2010 to amend the mapping of Significant Native Vegetation across Lord Howe Island was submitted to DP&E on 20 April 2015. This proposal has now been finalised, and the new mapping of Significant Native Vegetation was formally published on 29 April 2016.

## 10.0 Recommendation

It is recommended that the Board:

- (a) Note the information regarding applications assessment for the period 18 May to 10 November 2016 in the Bi-annual Planning Assessment & System Audit.
- (b) Continue the \$100 fee payable by the applicant for the lodgement of an owner's consent application and review its effectiveness again at the next bi-annual meeting.
- (c) Continue to provide out-of-session Board meetings to facilitate the processing time for applications that require approval by the full board.
- (d) Reject DA applications which are lodged without a clear, concise application and Statement of Environmental Effects including all necessary information in accordance with EP&A Act 1979.



Report prepared by

Approved / Not approved

**Peter Laybutt**

Date: 11 November 2015

LHI Consultant Town Planner

**Penny Holloway**

Date:

Chief Executive Officer

Lord Howe Island Board

|                                       |                             |                                  |
|---------------------------------------|-----------------------------|----------------------------------|
| <b>Board Meeting</b><br>November 2016 | <b>Agenda Item</b><br>7 (x) | <b>File Reference:</b><br>CN0021 |
|---------------------------------------|-----------------------------|----------------------------------|

## Appendix 1

### Previous Resolutions

| Board Resolution   | Action         |
|--|----------------|
| Note the information regarding applications assessment for the period 11 November 2014 to 6 May 2015 in the Bi-annual Planning Assessment & System Audit.          | ✓              |
| Consider and adopt the revised Statement of Environmental Effects form.  | ✓              |
| Adopt a nominal \$100 fee payable by the applicant for the lodgement of an owner's consent application and review its effectiveness at the next bi-annual meeting. | ✓              |
| Continue to investigate opportunities to ensure internal referrals for applications are provided in a more timely manner.  | ✓              |
| Continue to provide out-of-session Board meetings to facilitate the processing time for applications that require approval by the full board.                      | None necessary |
| Continue to apply the exemptions to advertising of development applications that involve minor development as appropriate.   | ✓              |
| Reject DA applications which are lodged without a clear, concise application and Statement of Environmental Effects including all necessary information.           |                |

Appendix 2

Register of OCs/DAs

[illegible]

[illegible]

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Transfer of Public Accommodation Licences from Valerie Turk to James Baillie.

#### **RECOMMENDATION**

It is recommended that the Board approve one of the following options:

1. Approve the immediate transfer of four Public Accommodation Licences from Valerie Turk (Hideaway) to James Baillie (Capella), or
2. Approve the transfer of four Public Accommodation Licences from Valerie Turk (Hideaway) to James Baillie (Capella) on substantial commencement of works as per DA 2017-03, or
3. Approve the transfer of four Public Accommodation Licences from Valerie Turk (Hideaway) to James Baillie (Capella) on completion of works as per DA 2017-03.

#### **BACKGROUND**

The *Lord Howe Regulation 2014* states the following:

#### **49 Licensing of Public accommodation and other commercial undertakings**

(1) A person must not:

- (a) provide Public accommodation or carry on any other commercial undertaking on the Island, or
- (b) use premises for the provision of Public accommodation or for the carrying on of any other commercial undertaking,

except in accordance with a licence granted by the Board for that purpose.

#### **CURRENT POSITION**

Valerie Turk (Hideaway) wishes to transfer four of her Public Accommodation Licences to James Baillie (Capella).

In March 2016 the Board resolved to approve a previous Owner Consent application (OC2016-14) to Change of use of Apartment 5 from 'Public Accommodation' to 'Staff Accommodation'. In June 2016, clarification was sought from the Board as to whether the proposal would satisfy the requirements for the transfer of four accommodation licences. It was confirmed that further alterations/reconfiguration would be required for the Board to support the transfer of all four licences.

The further alterations/reconfiguration were reflected in the Hideaway DA2017-03. The Board recently approved this DA, which was for the change of use of Apartment 3 to a guest utility room and Apartment 5 to a transit room, both involving the removal of a kitchen and beds.

If the Board approves the transfer the reduction in the number of licences held by Hideaway Apartments will reduce from 13 to nine. Actual capacity once the works as approved in the DA are complete is as per the following table.

| Unit number                | Bed type               | Bed capacity (people) |
|----------------------------|------------------------|-----------------------|
| 1                          | 1 double               | 2                     |
| 2                          | 1 double               | 2                     |
| 3 (new guest utility room) | None                   | 0                     |
| 4                          | 1 double               | 2                     |
| 5 (new transit room)       | None                   | 0                     |
| 6 (Cottage)                | 1 double and 2 singles | 4                     |
| <b>TOTAL</b>               |                        | <b>10</b>             |

Valerie Turk has requested that approval be given for the transfer of the four licences immediately, prior to commencing the works as per the approved DA2017-03. Her concern is that, without this approval, she could be carrying out the works and reducing capacity to no end.

Valerie Turk has indicated that the works would commence in May 2017 (i.e. during low season).

### **RECOMMENDATION**

It is recommended that the Board approve one of the following options:

4. Approve the immediate transfer of four Public Accommodation Licences from Valerie Turk (Hideaway) to James Baillie (Capella), or
5. Approve the transfer of four Public Accommodation Licences from Valerie Turk (Hideaway) to James Baillie (Capella) on substantial commencement of works as per DA 2017-03, or
6. Approve the transfer of four Public Accommodation Licences from Valerie Turk (Hideaway) to James Baillie (Capella) on completion of works as per DA 2017-03.

Prepared \_\_\_\_\_ Bill Monks      Manager Business & Corporate Services

Endorsed \_\_\_\_\_ Penny Holloway      Chief Executive Officer

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Draft Lord Howe Island Walking Track Strategy

#### **RECOMMENDATION**

It is recommended that the Board:

- a) place the Draft Lord Howe Island Walking Track Strategy on public exhibition for a period of 28 days; and
- b) invite the Lord Howe Island Permanent Park Preserve Community Advisory Committee (CAC) to assist in the review of the submissions analysis report following public exhibition.

#### **BACKGROUND**

The current Lord Howe Island Walking Track Strategy completed by Gorrell (1997) is almost 20 years old and made various recommendations regarding track maintenance priorities, track upgrades/rerouting and unique design criteria adapted to Lord Howe Island (LHI) conditions.

Since the 1997 strategy was completed there have been updates to policy and standards relevant to walking tracks as well as upgrades to the walking track network.

Walking is one of the primary activities associated with nature based tourism on LHI. It provides a popular means for visitors and the local community to enjoy and gain an understanding of LHI's unique natural and cultural values.

The Lord Howe Island Tourism Association identifies the walking track network as major tourism infrastructure noting that ongoing maintenance and signage are two major issues (LHITA, 2014). The goals of LHI's Destination Management Plan include improving the range of product services for specialist interest groups (including walking) and identifying and correcting infrastructure gaps inhibiting destination growth (LHITA, 2014).

In August 2016 the Board invited a targeted group of regular LHI walking track users to complete a survey of the condition, signage, interpretation, infrastructure and alignment of all tracks on the island. Survey responses have been considered in preparation of the draft Strategy.



## **CURRENT POSITION**

The Lord Howe Island walking track network provides almost 24km of walking on 22 tracks. The walks range from well-graded nature tracks through the settlement area to relatively steep and uneven routes in the remote southern mountains.

This Draft Strategy proposes a 10-year program of works aimed at establishing and maintaining a stabilised, safe and diverse walking track network where walkers can learn about and appreciate Lord Howe Island's natural and cultural heritage values and enjoy a range of recreational and educational experiences.

The Lord Howe Island Board conducts regular audits of the walking track network and from this has compiled a database incorporating information on track and track infrastructure condition. This Draft Strategy also recommends an ongoing monitoring program and the systematic maintenance of the entire track system.

This Draft Strategy deals specifically with defined walking tracks and marked routes which are actively managed by the Lord Howe Island Board. The strategy provides guidance on associated infrastructure such as styles, boot scrubbing facilities, seats, and signage (directional and interpretation). The strategy provides recommendations on interpretation of the environment through which the track traverses or overlooks. This strategy does not focus on interpretation of all natural and cultural values of the Lord Howe Island Group.

The principal objectives of this Draft Strategy are to:

- Create a coordinated management process and policy framework for the development and management of walking tracks on Lord Howe Island;
- Provide a network of diverse walking experiences, and unobtrusive interpretative information catering for the range of interests, capabilities and needs of the local community and visitors;
- Ensure all walks meet appropriate safety standards
- Incorporate quarantine and pest species infrastructure at key track head locations to reduce the risk of introducing pests and diseases e.g. boot scrubbing stations and quarantine information;
- Provide walkers with high quality, easily accessible information about the diversity of walks
- Establish a comprehensive asset management approach to the management of walking infrastructure which specifies maintenance or upgrading requirements
- Identify the capital and recurrent financial resources needed to maintain a high quality network of walking experiences
- Identify the human resources, skills and capacity required to maintain a high quality walking track network
- Maximise and promote the social and economic benefits of walking
- Minimise any adverse environmental impacts of the walking track system and walking track maintenance and construction
- Ensure coordinated monitoring and research into the sustainable use of walking tracks, walker satisfaction and demand for diverse walking opportunities.

Public comment on the Draft Strategy's objectives and recommendations are required. Completing the walking track survey may assist the public providing detailed and specific comment on the Draft Strategy. The survey responses together with submissions on the exhibited Draft Strategy will be considered in combination to finalise the strategy.

## **RECOMMENDATION**

It is recommended that the Board:

- a) place the Draft Lord Howe Island Walking Track Strategy on public exhibition for a period of 28 days;
- b) make the Walking Track survey available during the Draft Lord Howe Island Walking Track Strategy public exhibition period; and
- c) invite the Lord Howe Island Permanent Park Preserve Community Advisory Committee (CAC) to assist in the review of the submissions analysis report and survey responses following public exhibition.

**Prepared** \_\_\_\_\_ Dave Kelly      Manager Environment & Community Services

**Endorsed** \_\_\_\_\_ Penny Holloway      Chief Executive Officer



# **LORD HOWE ISLAND WALKING TRACK STRATEGY**

**Draft for Comment**



**November 2016**

© Lord Howe Island Board 2016

With the exception of photographs, the Lord Howe Island Board and State of New South Wales are pleased to allow this material to be reproduced in whole or in part for educational and non-commercial use, provided the meaning is unchanged and its source, publisher and authorship are acknowledged. Specific permission is required for the reproduction of photographs.

**Disclaimer:** This publication is for discussion and comment only. Publication indicates the proposals are under consideration and are open for public discussion. Any statements made in this draft publication are made in good faith and do not render the LHIB liable for any loss or damage. Provisions in the final strategy may differ from those in this draft.

**Lord Howe Island Board**

PO Box 5 / Bowker Avenue

Lord Howe Island NSW 2898

Phone: +61 2 6563 2066

Fax: +61 2 6563 2127

Email: [administration@lhib.nsw.gov.au](mailto:administration@lhib.nsw.gov.au)

Website: <http://www.lhib.nsw.gov.au/>

For additional information or any enquiries regarding the Lord Howe Island Walking Track Strategy please contact the Lord Howe Island Board Administration Office at the above address.

ISBN

This document should be cited as follows: Lord Howe Island Board, 2016, *Draft Lord Howe Island Walking Track Strategy 2016*. Lord Howe Island Board, Lord Howe Island, NSW.

Revision history

| Revision | Revision Date | Details   | Authorised   |
|----------|---------------|---|--|
| 00       | December 1997 | Final   | S Gorrel/Architect                                 |
| 01       | 9 - 11 - 2016 | Draft for Lord Howe Island Board's consideration for public comment | D Kelly/Manager Environment and Community Services |

**Photographs:** LHIB (unless otherwise stated)

**NOVEMBER 2016**

## Table of Contents

|       |  |    |
|-------|--|----|
| 1     | Executive Summary.....                   | 4  |
| 2     | Vision, objectives and outcomes .....    | 5  |
| 2.1   | Vision.....                              | 5  |
| 2.2   | Objectives.....                          | 5  |
| 2.3   | Outcomes.....                            | 6  |
| 2.4   | Scope of the Strategy.....               | 6  |
| 2.5   | Interaction with other documents.....    | 6  |
| 3     | Background .....                         | 7  |
| 3.1   | Management Context .....                 | 7  |
| 3.2   | Legislative, policy and standards .....  | 7  |
| 3.3   | Recommendations from 1997 strategy ..... | 8  |
| 3.4   | Developments since 1997.....             | 9  |
| 3.5   | Walking track network.....               | 10 |
| 3.6   | Demand for walking.....                  | 15 |
| 4     | Strategies .....                         | 19 |
| 4.1   | Risk Management .....                    | 19 |
| 4.2   | Asset Management .....                   | 20 |
| 4.3   | Track standards.....                     | 22 |
| 4.3.1 | Inspection and maintenance.....          | 22 |
| 4.3.2 | Infrastructure .....                     | 23 |
| 4.3.3 | Information signs .....                  | 23 |
| 4.3.4 | Facilities.....                          | 23 |
| 4.3.5 | Classification .....                     | 24 |
| 4.4   | Environmental Assessment.....            | 30 |
| 4.5   | Design approach .....                    | 30 |
| 4.6   | Information, Education, Promotion.....   | 32 |
| 5     | Managing individual tracks .....         | 39 |
| 6     | References .....                         | 44 |
| 7     | Appendices.....                          | 45 |

## 1 Executive Summary

The Lord Howe Island walking track network provides almost 24 km of walking on 23 tracks. The walks range from well-graded nature tracks through the settlement area to relatively steep and uneven routes in the remote southern mountains.

This Strategy proposes a 20-year program of works aimed at establishing and maintaining a stabilised, safe and diverse walking track network where walkers can learn about and appreciate Lord Howe Island's natural and cultural heritage values and enjoy a range of recreational and educational experiences.

The Lord Howe Island Board conducts regular audits of the walking track network and from this has compiled a database incorporating information on track and track infrastructure condition. This Strategy also recommends an ongoing monitoring program and the systematic maintenance of the entire track system.

## 2 Vision, objectives and outcomes

### 2.1 Vision

This walking track strategy proposes to create a high quality walking network where walkers can appreciate the Island's natural and cultural heritage values and enjoy a range of recreational and educational experiences.

### 2.2 Objectives

The principal objectives of the Walking Track Strategy are to:

- Create a coordinated management process and policy framework for the development and management of walking tracks on Lord Howe Island.
- Provide a network of diverse walking experiences, and unobtrusive interpretative information catering for the range of interests, capabilities and needs of the local community and visitors.
- Ensure all walks meet appropriate safety standards.
- Incorporate quarantine and pest species infrastructure at key track head locations to reduce the risk of introducing pests and diseases e.g. boot scrubbing stations and quarantine information.
- Provide walkers with high quality, easily accessible information about the diversity of walks.
- Establish a comprehensive asset management approach to the management of walking infrastructure which specifies maintenance or upgrading requirements.
- Identify the capital and recurrent financial resources needed to maintain a high quality network of walking experiences.
- Identify the human resources, skills and capacity required to maintain a high quality walking track network.
- Maximise and promote the social and economic benefits of walking.
- Minimise any adverse environmental impacts of the walking track system and walking track maintenance and construction.
- Ensure coordinated monitoring and research into the sustainable use of walking tracks, walker satisfaction and demand for diverse walking opportunities.

## 2.3 Outcomes

The outcomes prescribed for this Strategy were:

1. To review the recommendations of the previous Walking Track Strategy for Lord Howe Island (Gorrell, 1997).
2. To establish a database linked to GIS to capture and report information on the description, condition and maintenance needs of the walking track network.
3. To inform the Lord Howe Island Board's Strategic Asset Management Plan and Strategy.
4. To describe the methodology for assessing the condition of the walking track network.
5. To define the environmental impact assessment requirements for walking track works.
6. To define walking track network directional and interpretative signage standards.
7. To recommend works and other actions necessary for the long-term sustainable management of the walking track network.

## 2.4 Scope of the Strategy

The Walking Track Strategy deals specifically with defined tracks, marked and guided routes which are actively managed by the Lord Howe Island Board.

The strategy provides guidance on associated infrastructure such as styles, boot scrubbing facilities, seats, and signage (directional and interpretation).

The strategy provides recommendations on interpretation of the environment through which the track traverses or overlooks. This strategy does not focus on interpretation of all natural and cultural values of the Lord Howe Island Group.

## 2.5 Interaction with other documents

This strategy:

- Is consistent with the Lord Howe Island Permanent Park Preserve Plan of Management, Lord Howe Island World Heritage Strategic Plan for Management and the Lord Howe Island Biodiversity Management Plan.
- Informs the Lord Howe Island Board's Strategic Asset Management Plan and Strategy and associated financial cycle.
- Is consistent with the Lord Howe Island Board's Signage and Publication Manual.



## 3 Background

### 3.1 Management Context

The Lord Howe Island Board has the responsibility for the care, control and management of the Lord Howe Island Group (LHIG) under the NSW *Lord Howe Island Act 1953*. Its responsibilities include protection of World Heritage values; development control; administration of all Crown Land including the island's Permanent Park Preserve; provision of community services and infrastructure; and the delivery of sustainable tourism.

### 3.2 Legislative, policy and standards

The legislation, policy and standards relevant to walking tracks on LHI are listed here and expanded upon in Appendix 2.

#### **Commonwealth Government - legislation, plans and strategies**

- Australian/New Zealand Risk Management Standard AS4360:2004
- Australian Standard AS 2156.1 – 2001 Walking Tracks Part 1: Classification and signage
- Australian Standard AS 2156.2 - 2001 Walking tracks - Infrastructure design
- Australian Walking Track Grading System 2010
- *Environment Protection and Biodiversity Act 1999*

#### **New South Wales State Government - legislation, plans and strategies**

- *Civil Liability Act 2002*
- *Environmental Planning and Assessment Act 1979*
- *Lord Howe Island Act 1953*
- *Lord Howe Island Regulations 2014*
- Parks Facilities Manual 2010
- *Threatened Species Conservation Act 1995*
- *Work Health and Safety Act 2011*

#### **Lord Howe Island**

- Biodiversity Management Plan (DECC, 2007)
- Biosecurity Strategy (LHIB, 2016)
- Destination Management Plan 2014-2017 (LHITA, 2015)
- Lagoon Foreshore Management Plan (LHIB 2015)
- LHIB Corporate Plan
- LHIB Operations Plan
- LHIB Total Asset Management Plan and Asset Strategy
- Permanent Park Preserve Plan of Management (DECCW, 2010)
- Signage and Publication Manual (LHIB, 2000)
- Strategic Plan for the Lord Howe Island Group World Heritage Property (LHIB, 2010)
- Walking Track Strategy (Gorrell, 1997)
- Dog importation and management policy (LHIB 2015)

### 3.3 Recommendations from 1997 strategy

The previous Lord Howe Island Walking Track Strategy (Gorrell, 1997) reviewed the standards and condition of walking tracks across LHI at the time and made various recommendations regarding track upgrades, re-routing and information for visitors.

The key recommendations and status of implementation are:

- Development of a walking track west of Lagoon Road along the foreshore to relieve pedestrian congestion on Lagoon Road has been implemented between the Aquatic Club and the Boat Sheds, refer to Figure 2.
- Directional signage implemented at track heads and intersections. Additional information on track difficulty and duration are discussed in section 4.6.
- High quality visitor information has been produced by the LHIB both on track (interpretive signage) and off track (walking track brochures and web based LHI visitor user guide), refer to section 4.6.
- Monitoring of track use, walker experience and impacts on the tracks has been obtained through surveys conducted in 2007, 2012/13 and 2016. On-site automatic counts of walking track usage are recommended in this strategy.
- The closure and diversion of the Max Nicholls Memorial track to North Bay via Dawsons Point. This project was endorsed however did not proceed due to reallocation of funding. The track diversion with no track closure is included in this draft strategy for consideration, refer to section 4.3.
- Construction of rock steps on the Goat House Track did not proceed as it was, and still is, deemed unnecessary.
- Upgrade of Stevens Reserve Track to ambulant standard was endorsed. Completion of this project is included in this strategy for consideration, refer to section 4.3.
- Permitting walking of dogs on leash on tracks within the Settlement, a portion of Little Island track and one track in the Permanent Park Preserve (Transit Hill) have been adopted as Lord Howe Island Board (LHIB) Policy.

### 3.4 Developments since 1997

Since the 1997 strategy was prepared there have been updates to policy, standards and practices relevant to walking tracks as well as upgrades to the walking track network (in addition to those listed above) including:

- 2001 revision of the AS 2156 series for the classification, signage and design of walking tracks.
- 2010 Australian Walking Track Grading System that provides a nationally consistent system to grade the level of difficulty of a track's walking experience and how to clearly communicate that information to walkers.
- 2011 and 2015 landslides on the Mutton Bird Circuit Track forcing the closure of the track until a long term management and maintenance plan is determined.
- 2011 establishment of 5-yearly audits of built structures by structural engineer.
- 2011 establishment of annual audit of Mt Gower ropes.
- Installation of seven boot scrub bays at track heads as a biosecurity preventative measure.
- 2012 establishment of regular auditing of the condition of the LHI Walking Track network in accordance with AS 2156.1.
- 2013 Mt Gower Walking Track risk assessment.
- 2015 mapping of all walking tracks and major infrastructure using GIS (example map in Appendix 1).
- 2015 construction of new elevated viewing platform on Intermediate Hill through a donation from Dick Smith AC and Pip Smith AO.
- 2016 The trial of recycled plastic molded products for steps and decking instead of timber to increase lifespan and decrease slip risk.

### 3.5 Walking track network

Although relatively small (11.8 km long and 2.8km wide) Lord Howe Island has 24 km of walking track which reach the northern, central and southern sections of the Island, including Mt Gower and parts of Mt Lidgbird. All these areas are accessible as day walks. The walking track network enables visitors and residents to experience the spectacular scenery and unique environments of the Island. Many visitors to the Island use the walking track system for the purposes of viewing the Island's spectacular landscape and for bird watching.

The walks range from well-graded nature walks through the settlement area to relatively steep and uneven tracks in the more remote southern mountains. The majority (77%) of the walking tracks on Lord Howe Island are situated within the LHI Permanent Park Preserve (PPP).

Due to the steep topography of the PPP and the remoteness of the Island from mainland Australia, visitor safety is a primary concern. Visitors to the Island are discouraged from remote country bushwalking and are not permitted to attempt the Mt Gower walk without a LHIB licensed guide.

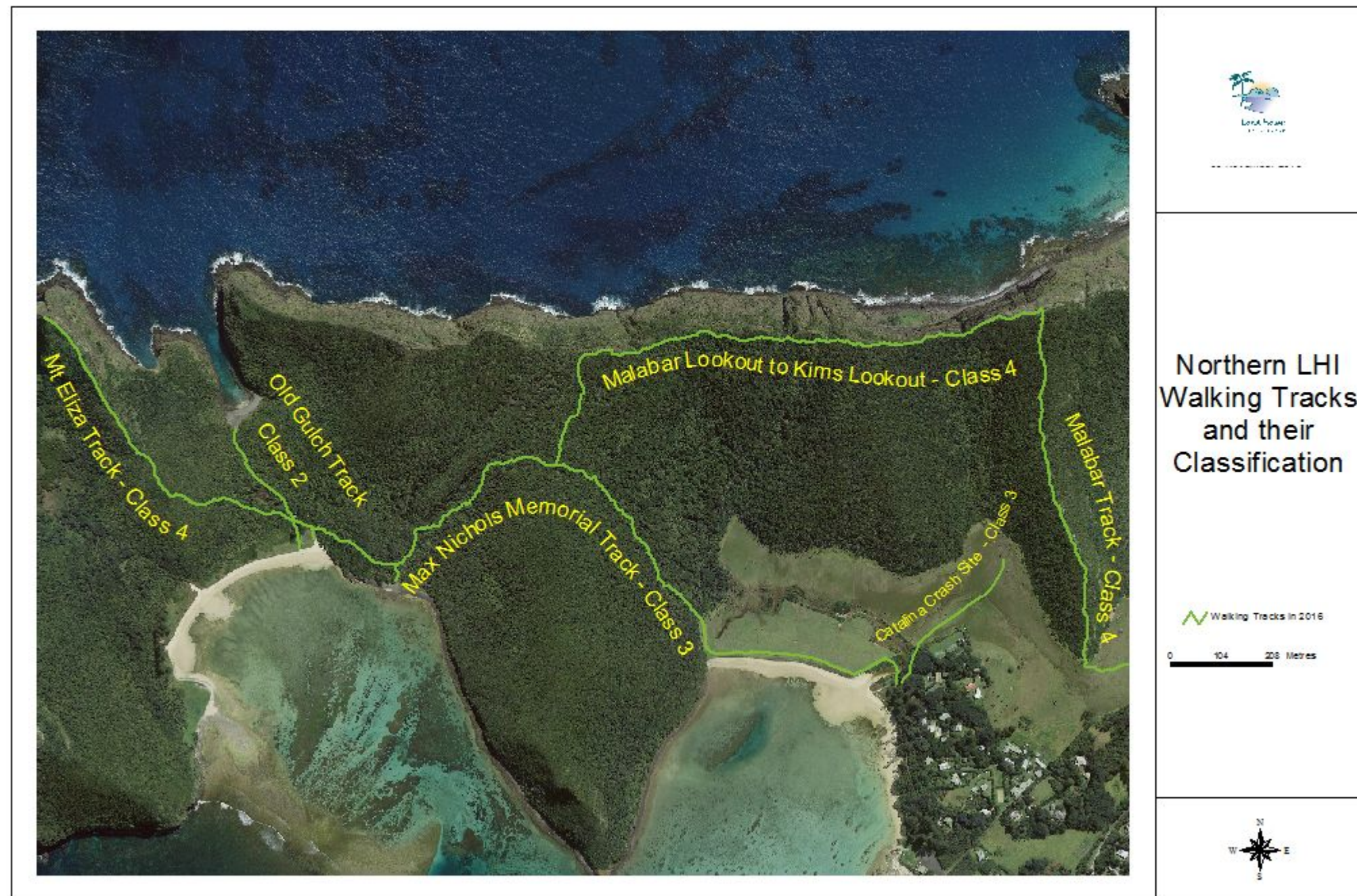
LHI's walking track network is divided into three sections on the island, the North, Central and South. There are 19 main walks (\*) and a number of ancillary walks (#). Table 1 lists the walks and their classification according to AS 2156.1 – 2001 Walking Tracks Part 1: Classification and signage.

| Table 1: Lord Howe Island Walking Track Network   |       |   |
|---|-------|---|
| Name of Track (destination in bold)   | Class | One-way distance to destination (LHIB GIS to nearest 50m) |
| Northern walks  |       |   |
| North Bay to <b>Mt Eliza*</b>   | 4     | 750   |
| North Bay to <b>Old Gulch*</b>  | 2     | 250   |
| Max Nicholls Memorial Track: Old Settlement to <b>North Bay*</b>  | 3     | 1750  |
| Neds Beach to <b>Malabar/Kims Lookout*</b>  | 4     | 1100 / 2100   |
| Malabar to <b>Dawsons Point Ridge*</b> (Intersection with Max Nichols Memorial Track)   | 4     | 1700  |
| Old Settlement to <b>Catalina crash site*</b>   | 3     | 350   |
| Central Walks   |       |   |
| <b>Stevens Reserve*</b> Loop start/finish at The Pines  | 2     | 1300  |
| Stevens Reserve access from nursery#  | 2     | 60  |
| Anderson Rd to <b>North Middle Beach*</b>   | 2     | 450   |
| <b>South Middle Beach*</b>  | 2     | 350   |
| <b>Clear Place*</b> from Anderson Road  | 2     | 800   |
| <b>Valley of the Shadows*</b> from Anderson Road  | 3     | 900   |
| <b>Transit Hill*</b> from Bowker Ave  | 3     | 1200  |
| <b>Transit Hill</b> to Blinky Beach   | 3     | 850   |
| <b>Lagoon Foreshore*</b> Boat Sheds to Pine Trees Boat Shed   | 1     | 1050  |
| <b>Blackburn Island*</b>  | 3     | 240   |
| Middle Beach Rd to Anderson Rd#   | 3     | 200   |
| Bowker Ave #  | 3     | 500   |
| The Southern Walks:   |       |   |
| Lagoon Road to <b>Intermediate Hill*</b>  | 4     | 1250  |
| Smoking Tree Ridge Road to <b>Intermediate Hill</b>   | 4     | 1450  |
| <b>Coastal Track*</b> : Lagoon Road to <b>Boat Harbour</b> via <b>Mutton Bird Point</b> and <b>Rocky Run</b> to Smoking Tree Ridge Road | 4     | 5550  |
| <b>Goat House*</b>  | 4     | 1650  |
| <b>Mount Gower*</b> from Little Island  | 5     | 3600  |
| <b>Little Island*</b> Track   | 2     | 1400  |

There are 19 main walks (\*) and a three ancillary walks (#)



**Figure 1:** Lord Howe Island Northern Walking Tracks



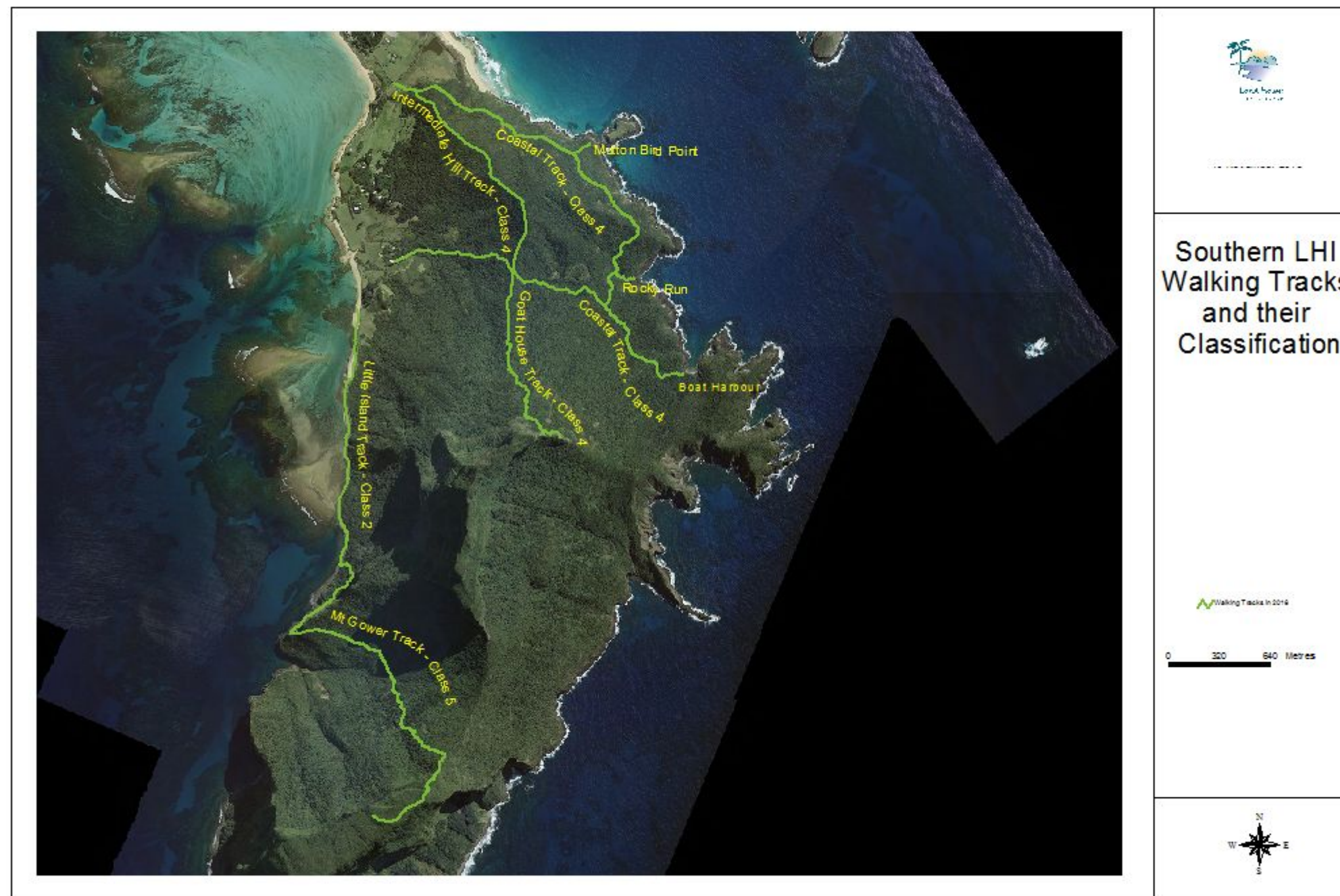


**Figure 2:** Lord Howe Island Central Walking Tracks





**Figure 2:** Lord Howe Island Southern Walking Tracks





### 3.6 Demand for walking

Walking is one of the primary activities associated with nature based tourism on LHI. It provides a popular means for visitors and the local community to enjoy and gain an understanding of LHI's unique natural and cultural values.

Walking provides people with the time, freedom and flexibility to interact intimately with LHI's environment. Walking plays a vital role in presenting LHI's World Heritage values. It can increase public awareness and understanding of the need for the conservation and protection of LHI's natural and cultural landscape.

Walking also provides social, recreational and educational benefits for all sectors of the community and caters for diverse interests and capabilities. It is a popular activity, undertaken by the majority of visitors, and contributes significantly to providing employment and economic benefits for LHI.

In March 2015, Destination NSW released data for the year ending September 2014 revealing that just over one in ten of all holiday trips in Australia (11%) includes bushwalking or rainforest walking, well over half (58%) of all holiday trips to NSW will involve a nature based activity and more than one in six of all holiday trips in NSW (16%) includes bush or rainforest walking (Destination NSW, 2015).

Destination NSW names the Mt Gower day hike as the number 1 "Ultimate Guided Walk" in NSW (Destination NSW, 2015).

Tourism is the foundation of Lord Howe Island's economy, directly injecting \$27m to the local economy, with flow on economic benefit to many non-tourism sectors (LHITA, 2014). The Lord Howe Island Tourism Association identifies the walking track network as major tourism infrastructure noting that ongoing maintenance and signage are two major issues (LHITA, 2014). The goals of LHI's Destination Management Plan include improving the range of product services for specialist interest groups (including walking) and identifying and correcting infrastructure gaps inhibiting destination growth (LHITA, 2014).

The Lord Howe Island Tourism Association has forecast visitor numbers of 22,000 in 2020 based on current annual growth rates of 5% per annum (LHITA, 2014).

There have been no on-site manual or automatic counts of walking track usage. However an indication of visitor walking track usage and feedback can be extrapolated from LHI's commercial walking guide records and three visitor surveys:

- LHIB Walking Track Survey (1995)
- Marine Parks Visitor and Expenditure Survey (2007)
- LHI Visitor Experience Card Data (2012/13)

- LHI commercial operators that provide guided walks on the island include: Ron's Rambles; Wilson's Specialty Tours; Lord Howe Island Nature Tours; Sea to Summit Expeditions; Lord Howe Island Environmental Tours; Pinetrees Lodge.

The LHI walking track network is also an important recreation and cultural asset for residents.

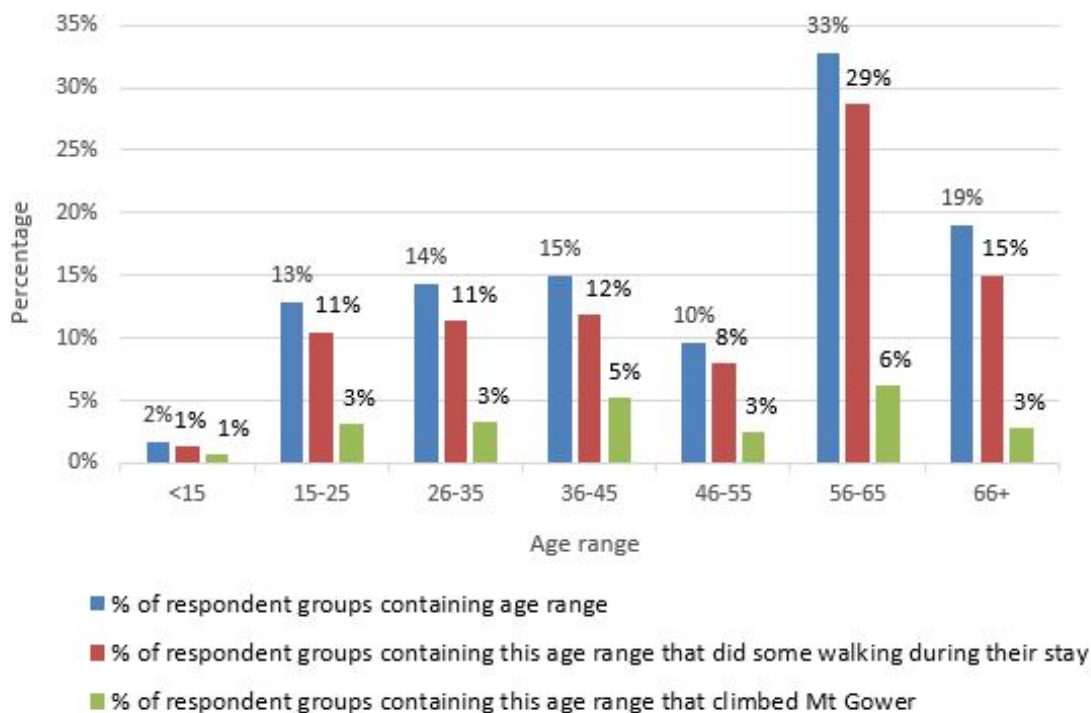
### 2012/13 LHI Visitor Experience Card Data

Over 18 months from late June 2012 until late December 2013, LHI visitor experience cards were placed in LHI lodge rooms. The cards asked a range of questions to gather valuable information about the demographic of visitors, their interests, what activities they undertook whilst on the island and what they enjoyed the most. 600 surveys were returned representing at least 2252 people (some respondents did not indicate the number in their group).

Relevant information for this strategy includes:

- The age group most represented in the visiting groups was the 56-65 year olds.
- 83% of all respondents did some walking during their stay and 24% climbed Mt Gower.
- Groups containing 56-65 year old respondents did the most walking.

### 2012/13 Visitor Experience Card Data



## **2007 Marine Parks Visitor and Expenditure Survey**

Between late January and late April 2007, the LHI Marine Parks Authority conducted a survey to collect socio-economic information on domestic and international visitors to LHI which could be used in planning and managing the NSW Lord Howe Island Marine Park (LHIMP). The survey asked questions about visitor recreation activities - including guided and independent walking. 376 surveys were completed for 1476 individuals (average group size was 4 people). No demographic age information was asked in the survey. Relevant information for this strategy includes:

- Survey conducted January to April 2007 (120 days of almost half of high season).
- 35% visited for the natural areas in the marine environment, 23% for the natural areas on land, and 19% because of LHI's World Heritage status.
- There were 6556 net tourist arrivals during that period (Qantas passenger reports to LHIB).
- Therefore survey represented 22.5% of visitors which is considered statistically relevant (when compared to other survey results published)\*
- Walking and cycling for sight-seeing were the most popular land-based activities.
- 93% took at least one unguided walk on the island during their stay.
- 61% took at least 1 unguided walk in the Permanent Park Preserve during their stay.
- 25% of visitors took at least one guided walk on the island and PPP during their stay.
- 49% went for unguided walks daily during their stay.

\*Note: the survey report does say that as respondents self-selected to complete the survey the group may not be representative of all visitors to LHI during that period.

## **2016 Walking Track Survey**

In August 2016 the LHIB invited a targeted group of regular users of the LHI Walking Track Network to complete a survey of their opinion of the following aspects for each of the tracks on LHI:

- Condition
- Directional signage
- Interpretive signage
- Infrastructure
- Alignment
- Overall rating.

Some of the survey responses have been incorporated into this draft strategy. It is intended that the survey remain open during the exhibition of this draft strategy. Completing the survey may assist in providing more detailed and specific comment on LHI's walking tracks. The survey can be accessed through <https://www.surveymonkey.com/r/LHI-Walking-Track-Survey> or hard copy via the LHIB.

The survey responses together with comment on this draft strategy will be considered in combination when finalising the strategy.

## 1995 LHIB Walking Track Survey

A paper based walking track survey was conducted for the majority of 1995 and it returned 74 responses responding on behalf of a minimum of 2 people. Over 60% of the respondents were aged 40-59. As this survey was returned by visitors that used the walking track network it is unable to be used to estimate track usage by all visitors to the island during that time. However it does provide some interesting data on where those people walked and their general comments that is relevant for this strategy:

**Table 2: 1995 LHIB Walking Track Survey results**

| Track                                 | Usage | Track Network General Comments                            | Comments addressed?   |
|---------------------------------------|-------|---|---|
| North Bay to Malabar                  | 45%   | Indication of times required on all tracks                | Yes, included on directional signage posts.                           |
| Old Settlement Beach to North Bay     | 41%   |   |   |
| Clear Place and Valley of the Shadows | 41%   | Naming of trees alongside tracks needed                   | Partially, included on Stevens Reserve interpretive signs             |
| Blinky Beach to Mutton Bird Point     | 39%   |   |   |
| Malabar to Kim's Lookout              | 38%   |   |   |
| Transit Hill                          | 35%   | More interpretive signs required at points of interest    | Partially, nine interpretive signs installed since 1995.              |
| North Bay to Mt Eliza                 | 34%   |   |   |
| Steven's Reserve                      | 31%   | More zig-zag tracks required                              | NA, no new or rerouted tracks   |
| Blinky Beach to Boat Harbour          | 26%   |   |   |
| Boat Harbour via Smoking Tree Ridge   | 24%   | Present signs unclear/confusing/more trail markers needed | Partially, track head and intersection directional markers installed. |
| Goat House                            | 24%   |   |   |
| Intermediate Hill                     | 20%   | Strenuous/dangerous, not aimed at target group            | The only significant track change has been the Lagoon Foreshore Walk  |
| Catalina Crash Site                   | 19%   |   |   |
| Mt Gower                              | 16%   |   |   |

**Recommendation 1:** Collect actual on-site data of usage of the walking track network in low and high season.

## 4 Strategies

### 4.1 Risk Management

Risks associated with walking tracks can be divided into two broad categories, risk to the environment and risk to walkers.

Risks to the environment include:

- Loss or reduced quality of habitat e.g. tracks located within breeding habitat of fauna.
- Weed invasion via weed seed on walkers' boots, poles and clothes.
- Plant pathogen invasion such as *Phytophthora sp* and Myrtle Rust via walker and maintenance crew equipment.
- Erosion from walking off track and through wet areas.
- Waste in the environment, including human waste.
- Harm to fauna caused by un-controlled dogs.

Risks to the environment are managed through environmental impact assessment prior to determining to proceed with a new or re-routed track; sensitive design of tracks such as elevated boardwalks over waterways and sensitive habitat; education and awareness material and provision of boot scrub bays for preventing the spread of weeds and plant pathogens; provision of facilities such as bins and toilets at track heads and permitting dogs on-leash on a small number of tracks. Specific environmental protection measures for individual tracks are discussed in Section 5.

Risks to walkers include:

- Dangerous trees/limbs falling.
- Rock fall, cliff and slope instability.
- Slips, trips or falls due to unstable ground, exposed roots, creek crossing etc.
- Walkers becoming lost in a remote location.
- Failure of rope and anchor system.
- Failure of communications.
- Risk of injury or illness to walkers due to their skill, experience and health / fitness levels.
- Exposure of walkers to elements resulting in heat stroke, heat exhaustion, dehydration, or hypothermia.

Risks to walkers are managed by adopting the Australian Standards for walking track classification, signage and infrastructure; in particular maintaining a track's classification elements, and management intervention and risk management guidance, refer to section 4.2.

Both the LHI State Emergency Service and Rural Fire Service have a limited number of active members who are trained in rescue techniques, however there is no on island accredited Vertical Rescue capability. The Gower Wilson Memorial Hospital is a three-bed hospital which caters for the range of health care needs of both the Island's residents and tourists. The facility is currently used for acute

medical/surgical admissions. Complex cases are transferred to the mainland for ongoing or specialist care. Visitors attempting the Mt Gower walk are required to be supervised by a Board licensed guide who has specific responsibilities with respect to duty of care to clients, emergency and first aid response.

Specific hazard and asset management measures for individual tracks are discussed in section 5.

## 4.2 Asset Management

The current Lord Howe Island Walking Track Network is valued at \$5.2M based on replacement costs of the track, track infrastructure and facilities.

The Board's Total Asset Management Plan and Asset Strategy (TAM Plan LHIB, 2015) is a rolling 10-year plan that guides the capital procurement, maintenance and disposal of the island's assets. It is reviewed as new information is obtained and used to prepare detailed annual budget plans.

In the TAM Plan, the entire walking track network is included in the Permanent Park Preserve (PPP) category, which also includes items such as fencing and flora and fauna management. Twenty-three percent of the current walking track length and associated infrastructure is located outside of the PPP, mostly in the main settled area. It is recommended to separate out the walking track network as a unique asset category to assist with budgeting and bidding for funding including capital expenditure, and external grants.

**Recommendation 2:** That Walking Tracks be listed as a unique capital and maintenance category in the LHIB TAM Plan to more accurately project capital procurement, replacements and cyclic maintenance of the entire network.

and

Walking track and infrastructure be divided proportionally between the PPP and the Public Open Space categories in the LHIB TAM Plan to more accurately project capital procurement, replacements and cyclic maintenance of the network and support access to funding for protected and settled areas.

The TAM Plan does not specify service levels for walking track infrastructure and refers to engaging with the community and industry to develop appropriate service standards. This strategy adopts the Australian Standards for walking tracks and infrastructure, see Section 4.3. A survey of walking track users and their opinion on track condition, alignment, infrastructure and signage is being conducted simultaneously with the preparation of this draft strategy and will provide important information for the further refinement of LHI service levels for walking tracks.

**Recommendation 3:** That the minimum service level for LHI walking tracks be guided by the classification, management intervention and risk management described in Australian Standards AS 2156.1 & 2.

Recommendation 4: That the results from the walking track user survey be used to refine service levels appropriate for Lord Howe Island.

## 4.3 Track standards

The walking track system will be designed and maintained in accordance with:

- Australian Standard AS 2156.1 - 2001 Walking Tracks Part 1: Classification and signage
- Australian Standard AS 2156.2 - 2001 Walking Tracks Part 2: Infrastructure design

These standards provide a classification and management intervention system for walking tracks; guidance for track markers and information signs; and specific requirements for the structural design of walking track structures to protect natural and cultural assets and for use as aids to recreation in outdoor areas where the environment is the focus of recreational activities.

### 4.3.1 Inspection and maintenance

Works on the track network are separated into regular (cyclic) and catch-up (ad hoc) maintenance, upgrades and new projects.

| Table 3: Inspection and Maintenance Categories |   |   |
|--|---|---|
| Category of works                              | Description   | Example   |
| Cyclic maintenance                             | Ongoing minor tasks scheduled into normal work program. Staff time and materials are funded from the recurrent budget. The tasks are exempt development, i.e. permitted to be undertaken without obtaining planning consent.  | <ul style="list-style-type: none"><li>• Trimming trackside vegetation.</li><li>• Weed control.</li><li>• Clearing drains.</li><li>• Repair isolated washouts.</li><li>• Tightening loose bolts.</li></ul> |
| Ad hoc maintenance                             | More substantial works that are required less frequently and are of longer duration than regular maintenance. Normal work program needs to be suspended. Staff time and materials are funded from the recurrent budget. The tasks are exempt development, i.e. permitted to be undertaken without obtaining planning consent. | <ul style="list-style-type: none"><li>• Step replacement.</li><li>• Treat elevated walkways with anti-mould and repaint.</li><li>• Replacement of ropes and bolts.</li></ul>                              |
| Upgrades                                       | Replacement of part of whole of existing track or infrastructure in the same location. Work is completed by staff or contractors as a one off project funded by the capital maintenance budget. These tasks require environmental assessment and development consent <sup>1</sup> .   | <ul style="list-style-type: none"><li>• Replacement of bridges, stairs.</li><li>• Stabilising.</li><li>• Realignment of track within the disturbance corridor.</li></ul>                                  |
| New projects                                   | Construction of new tracks or infrastructure to provide new recreational activities. Work is completed by staff or contractors as a one off project funded by the capital procurement budget. These tasks require environmental assessment and development consent <sup>2</sup> .   | <ul style="list-style-type: none"><li>• New viewing platform on existing track.</li><li>• New track through undisturbed area.</li></ul>   |

<sup>1 & 2</sup> Refer to section 4.4 for environmental assessment and development consent.



Inspections of track and infrastructure condition for *regular and catchup maintenance* requirements are carried out by field staff based on AS 2156.1 suggested frequencies. Adhoc inspections are also carried out post storm events.

An annual audit of track and infrastructure for identifying *upgrades* are identified through annual audits conducted by the Ranger or Field Supervisor. Environmental assessment, development consent and budget planning for upgrades is conducted between September and November.

Track and track infrastructure location, description and condition (as at last audit) have been captured in a GIS based database (see example map in Appendix 1). Improvements in digital capture of data during inspections and audits will enhance planning, budgeting and reporting.

**Recommendation 5:** Implement Asset Management System module into Authority and improve walking track data capture.

New projects are identified by the Walking Track Strategy (see Section 4.3.5) and are included and budgeted for in the LHIB TAM Plan (see Section 4.2). Environmental assessment, development consent and budget planning for new projects can be conducted as capital funding is secured.

Ideally, Catch-up maintenance, upgrades and new tracks would be undertaken outside the peak tourist season.

Appendix 7.3 list the annual schedule of activities for managing the maintenance and upgrade of the walking track network.

#### **4.3.2 Infrastructure**

Infrastructure is designed and certified to AS 2156.2. An assessment of the integrity of elevated structures on tracks is undertaken by a structural engineer every five years.

#### **4.3.3 Information signs**

Information signs are discussed in section 4.6.

#### **4.3.4 Facilities**

AS2156.1 also provides guidance for the provision of track head facilities. Those relevant for Lord Howe Island include car parking, toilets, picnic facilities and drinking water. The LHIB also provides bike racks, bins and boot scrub bays to prevent the spread of pathogens and weeds into the Permanent Park Preserve.

The walking track network is an identified high risk pathway for the spread of pathogens into the Permanent Park Preserve in the LHI Biosecurity Strategy (LHIB, 2016). The main pathogens of concern are Phytophthora sp and Myrtle Rust. There are currently two contained outbreaks of Phytophthora on the island and a Myrtle Rust incursion that has been treated and monitored aiming for eradication. .

To prevent the spread of pathogen spores and weed seeds into the PPP, boot scrub bays are provided at track heads for walkers and Board employees to clean boots and poles before entering the track. The Biosecurity Strategy (LHIB, 2016) recommends supplementing these with personal equipment decontamination sprays e.g. Quatsan at all walking track heads.

Track heads are largely compliant with AS2156.1 given the proximity to accommodation and public toilets within the Settlement. However, biosecurity and walker experience could be enhanced for several tracks with the installation of the additional facilities as recommended below.

**Recommendation 6:** Install picnic facilities, toilets and drinking water at Blinky Beach.

**Recommendation 7:** Install toilets and drinking water at Little Island Track gate.

**Recommendation 8:** Complete the installation of boot scrub bays, for the prevention of spread of pathogens into the Permanent Park Preserve, at all relevant track heads:

- 8.1 Both ends of the Bowker Ave Track on Anderson Road and opposite the Board Offices.
- 8.2 At the start of the Transit Hill walk from Pine Trees lodge.
- 8.3 At the start of the Middle Beach North track.

**Recommendation 9:** Place personal equipment decontamination sprays e.g. with Quatsan at all walking track heads.

#### 4.3.5 Classification

The current and proposed network classification according to AS 2156.1 is presented in section 4.2.

Visiting walkers could be divided into two main groups: beginner/family (class 1 and 2) and intrepid/experienced (class 3 and above).

Eighty percent of the current track network are classed 3 and above which means they include steep sections, rough surface and many steps.

Twenty percent of the tracks are suitable for beginner/ family walkers with no bushwalking experience, have gentle slopes and only occasional steps, and are the:

- Stevens Reserve Loop
- Lagoon Foreshore Track
- Little Island
- Middle Beach access tracks (north and south)
- North Bay to Old Gulch

There are no entire tracks suitable for someone requiring a walking aid such as a walking frame.

| Table 4: 2016 LHI Walking Track Network Track Classification Mix |              |  |
|--|--------------|--|
| AS2156.1 Class   | % of network | Description of walking experience*   |
| 1  | 0            | No bushwalking experience required.<br>Flat even surface with no steps or steep sections. Suitable for wheelchair users with someone to assist them.<br>No greater than 5 km.                  |
| 2  | 20           | No bushwalking experience required.<br>Track is hardened or compacted surface.<br>May have a gentle hill section or sections and occasional steps.<br>No greater than 10 km.                   |
| 3  | 24           | Suitable for most ages and fitness levels.<br>Some bushwalking experience recommended.<br>Tracks may have short steep hill sections a rough surface and many steps.<br>Walks up to 20 km.      |
| 4  | 41           | Bushwalking experience recommended. Tracks may be long, rough and very steep. Directional signage may be limited.  |
| 5  | 14           | Very experienced bushwalkers with specialized skills, including navigation and emergency first aid. Tracks are likely to be very rough, very steep and unmarked. Walks may be more than 20 km. |
| 6  |              | Unmarked route...  |

\*Applying the Australian Walking Track Grading System 2010

The Lord Howe Island Destination Management Plan 2014-2017 calls for access to new locations in the Permanent Park Preserve, stating that it would help achieve the desired outcomes of providing more new experiences for visitors, and encouraging differentiation between operators. Specific locations nominated relevant to this Strategy include Red Point (east side of Mt Lidgbird); Scab Point (north east side of Mt Lidgbird); Grey Face (north face of Mt Lidgbird); Barro Flats and The Tablelands (south side of Mt Lidgbird); Little Slope (west side of Mt Gower) and North Head.

Given the popularity of walking, the demographics of visitors to LHI and the growth in visitor numbers and visitor segments projected there is likely to be an increasing demand for walking and for a range of walking experiences on the island. Enhancing the network to increase the range of walking experiences on offer will satisfy repeat and first-time visitors alike.

- Recommendation 10:** Increase the number and length of beginner/family walks (Class 1 and 2) on the island by:
- 10.1 Extension of the Lagoon Foreshore Walking Track through construction of a raised boardwalk from the Pine Trees Boat Shed to the concrete foot path at Windy Point, refer to Figure 4. This would relocate pedestrians and cyclists from a known blind spot along Lagoon Road. The entire length of the Foreshore Walking Track then be 1.5 km. Stage 1 would be to construct Boardwalk (class 1), stage 2 would be to achieve class 1 the entire length.
  - 10.2 Upgrade of Stevens Reserve Loop Track to ambulant standard Class 1, refer to Figure 5.
  - 10.3 Inclusion of the Little Waterfall Track in the network as a Class 2 walking track. Currently this track is not maintained by the Board. It is promoted as a wet weather activity by commercial providers such as

|      |  |
|------|--|
|      | Pine Trees, refer to Figure 6  |
| 10.4 | Creation of a new Class 2 track from Old Settlement to North Bay via Dawsons Point as proposed by the 1997 Walking Track Strategy keeping the existing track from Old Settlement to the three ways intersection, refer to Figure 4 |
| 10.5 | Creation of new Class 2 track from Neds Beach to intersect with the North Middle Beach Access Track, refer to Figure 4   |

**Recommendation 11:** Increase the number and length of intrepid/experienced walks on the island by establishment of a new Class 6 walking route for example on the Eastern Side of Mt Lidgbird. Similarly to the current Mt Gower walk, visitors would need to be accompanied by a LHIB licensed guide. There would be a group number and annual walker limit on this walk.

Implementation of Recommendations 10 and 11 would expand the network by 7 km and provide 47% of track as class 1 and 2, and 53% class 3 and above, including introducing 9% of new class 1 and 10% of new class 6. The mix of classes of walking tracks in this way would be as follows or is shown in Table 5:

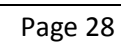
| <b>Table 5: Current and Proposed LHI Walking Track Network Classification Mix</b> |                    |                          |                   |                          |
|---|--------------------|--------------------------|-------------------|--------------------------|
| <b>Grade</b>  | <b>2016</b>        |                          | <b>2026</b>       |                          |
|   | <b>% of tracks</b> | <b>km of track/route</b> | <b>% of track</b> | <b>km of track/route</b> |
| 1   | 0                  | 0                        | 9                 | 3                        |
| 2   | 20                 | 5                        | 20                | 6                        |
| 3   | 24                 | 6                        | 18                | 6                        |
| 4   | 41                 | 10                       | 33                | 10                       |
| 5   | 14                 | 4                        | 11                | 4                        |
| 6   | 0                  | 0                        | 9                 | 3                        |
| Total   |                    | 25                       |                   | 32                       |

**Figure 4:** Proposed new or rerouted tracks for Northern LHI

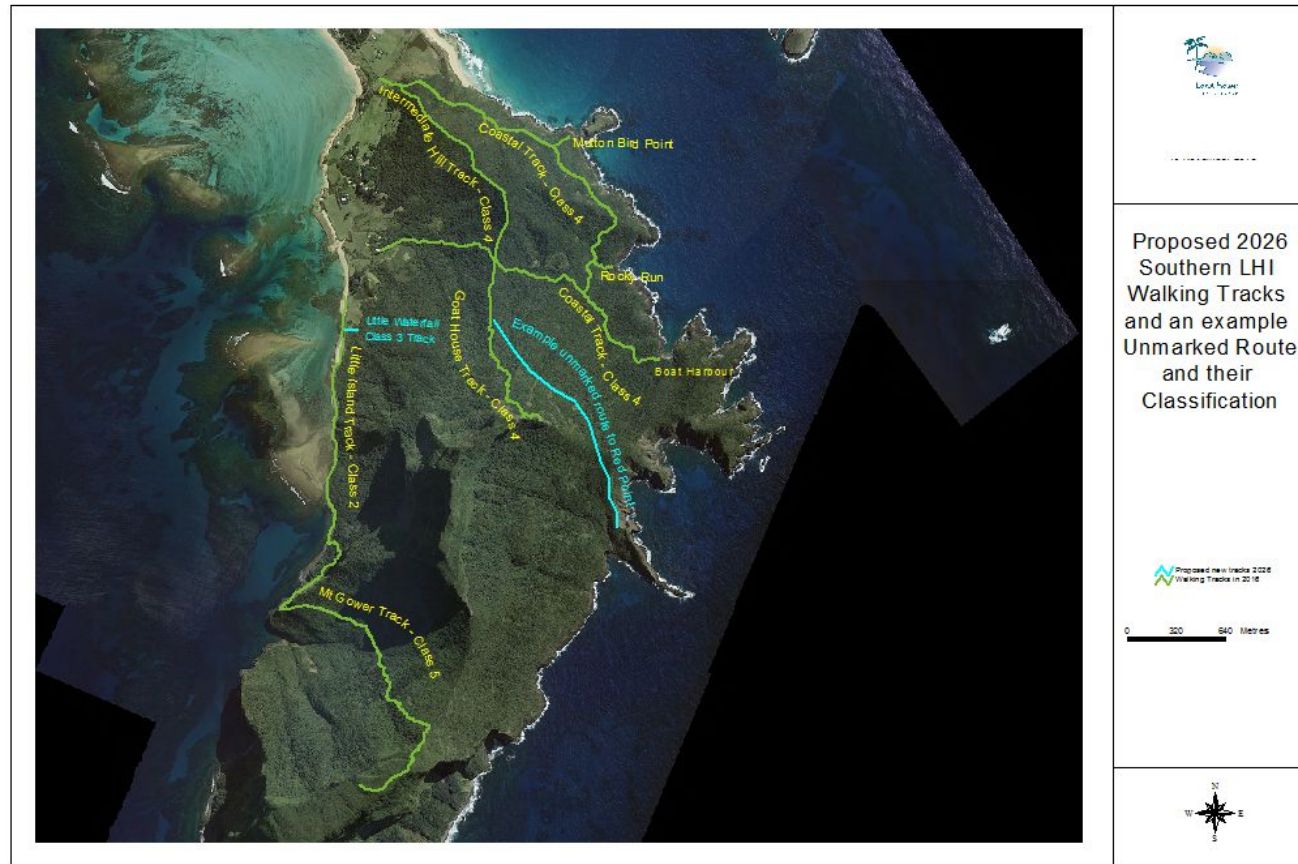




LHI Walking Track Strategy Draft for Comment November 2016



**Figure 6:** Proposed new tracks or unmarked routes for Southern LHI



## 4.4 Environmental Assessment

Routine and catch-up maintenance of an existing track can be conducted without obtaining prior development consent. These works are considered to have low environmental impact and are being conducted on an already approved track.

Upgrades that are consistent with the LHI PPP Plan of Management (LHIB, 2010) and objectives of the LHI Local Environmental Plan 2010, and are considered of low environmental impact will have a Conservation Risk Assessment (CRA) prepared for the LHIB's CEO to determine.

Upgrades and new projects that are consistent with the LHI PPP Plan of Management (LHIB, 2010) and objectives of the LHI Local Environmental Plan 2010, and are considered of more than low environmental impact will have a Review of Environmental Factors (REF) for the CEO to determine.

New tracks or new works on tracks outside of the PPP that require consent under the LHI LEP 2010 will submit a DA and threatened species assessment in accordance with the Environmental Planning and Assessment Act (1979).

## 4.5 Design approach

The guiding design principles for Lord Howe Island tracks include:

- Following the natural contour as much as possible avoiding straight lines.
- Maintain natural waterways and keep water away from track surfaces.
- Respect historic values, including the need to reflect applicable heritage construction techniques.
- Outside of the PPP, aim to locate tracks on already disturbed vacant Crown Land, gazetted roads and easements, or, special leases where no alternate is available.
- Aim for a consistent unobtrusive look and feel along the full length of a track.
- Make use of suitable local materials such as soil, stone and timber as much as possible.
- Where local materials are not available try to use recycled materials with a long design life.
- Use non-slip products.
- Avoid important habitat areas for threatened species, seabird nesting areas and endangered ecological communities.
- Use the Board's distinctive corporate colours for directional and interpretive signage.
- Consistently apply track class characteristics to establish clear expectation of track character and difficulty.

Guidance for design principles for elements such as tracks, drainage, steps, retaining walls, handrails, lookouts, foot bridges and boardwalks can be found in Australian Standard AS 2156.2 - 2001 Walking



Tracks Part 2: Infrastructure design and other land management agency documents such as the Park Facilities Manual (NSW DECC, 2010).

Recommendation 12: Review tenure of all walking tracks outside of the PPP and relocate to disturbed vacant Crown Land, gazetted roads and easements, or, special leases where no alternate is available, providing environmental assessment determines there would be no significant impact.

## 4.6 Information, Education, Promotion

Appropriate, accessible and consistent information about walks on Lord Howe Island is essential to:

- Promote LHI as a tourist walking destination.
- Help walkers choose walks which suit their abilities and interests.
- Ensure visitors are well prepared for safe walking prior to setting out on walks.
- Increase awareness of LHI biosecurity measures, e.g. plant/soil free packing and boot scrubbing.
- Enhance visitor walking experience through interpretation of LHI's natural and cultural values.

### Promoting LHI as a tourist walking destination

The Lord Howe Island Tourism Association (LHITA) is primarily responsible for promoting Lord Howe Island as a walking tourist destination. The Board's role in supporting the promotion of walking is to:

- Ensure track infrastructure and signage are maintained to the standard appropriate for the classification of track.
- Provide a clear and consistent description of each walking track that can be used for promotional purposes.
- Advise operators and LHITA, in a timely manner, of operational issues that may influence timing and promotion of walking activities, e.g. closures of tracks due to maintenance, upgrades or natural events.
- Support development of new walking experiences, providing those experiences do not adversely impact on the natural and cultural values of the island or the Boards ability to manage those values.

### Planning a walk

In 2010 the Australian Walking Track Grading System was developed and released to provide a nationally consistent two-step process for (1) grading the difficulty of a track and (2) communicating that grading in plain English. The System was introduced so that inexperienced walkers and walkers new to a track could clearly understand what to expect on that track prior to setting out.

The System recommends providing the full suite of information at the start of the track. Where that is not practical or desirable, the minimum information should be provided at the track head and the rest of a track's key information delivered via pre-visit brochures, websites, information boards or other means.

Minimum track information is the grade of walk (difficulty) and identifying symbol and the distance. The full suite of information includes gradient, quality of path and markings, experience required, time and steps.

Walk information on Lord Howe Island adopts the System's latter approach with unobtrusive signage provided at track heads and intersections, supported by a range of publications (paper and digital), visitor center and commercial tour staff.

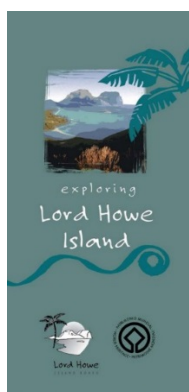
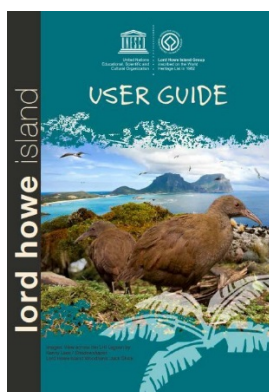


LHI walking track posts provide an orientation map and walking distance. Some posts include regulatory symbol signs such as dogs on leash, no dogs or no bicycles.

The Board provides additional information on tracks through three publications:

- The Board's Walking Track Brochure (2015). Available in print and on the internet <http://www.lhib.nsw.gov.au/services/tourism/walking-tracks>
- The Board's LHI on-line Visitor User Guide (2015) available for download prior to arriving from the mainland as well as from iPad kiosks at the airport and the visitors centre. <http://www.lhib.nsw.gov.au/services/tourism/user-guide>
- Steven Reserve Trail & Foreshore Walk Bush Trackers children's guide available in print on the island.

In 2015/16 the Walking Track Brochure and User Guide was downloaded 146 and 165 times respectively. Given the number of first time visitors to the island is estimated to be about 11,000<sup>3</sup>, the download frequency of the LHI's two primary pre-visit information documents is far too low.



<sup>3</sup> The Lord Howe Island Destination Management Plan (LHITA, 2014) estimates annual visitation at 15,500 with a repeat factor of 30%.

In addition, information on walking tracks and walking experiences is provided in the private sector via:

- LHITA's website <https://www.lordhoweisland.info/things-to-do/walking/>
- Individual operator websites.
- Ian Hutton's *A Rambler's Guide to Lord Howe Island* (2002).
- The Red Map, produced by Ron Matthews.
- Destination NSW's Lord Howe Island Arrival Guide (2016)  
<http://www.arrivalguides.com/en/Travelguides/Oceania/Australia/LORDHOWEISLAND>

There is inconsistency between information sources. Basic information (e.g. time) is not provided in some publications and other features (e.g. track grading) differs between information sources. No one information source provides the full suite of information required by the 2010 the Australian Walking Track Grading System.

**Recommendation 13:** Update the LHI on-line User Guide (2015) to include all elements from the Australian Walking Track Grading System (2010).

**Recommendation 14:** Update the Board's Walking Track Brochure (2015) to have the same look and feel as the User Guide and publish as an interactive PDF. Only print paper brochures when current stock depleted. Liaise with LHITA to aim for a consistent branding of visitor documents.

**Recommendation 15:** Develop and implement a social media plan for increasing the download of the interactive User Guide and new Walking Track Guide.

**Recommendation 16:** Update the walking track page on the Board's website to include a text and image description of the entire walking track network. Also include links to external walking sites e.g. Wildwalks, Google Trekker.

Recommendation 17: Include track grade (difficulty) symbol and time on walking track posts.

Recommendation 18: Install orientation map signs for the northern, central and southern group of walks to present options for walk experiences that connect multiple tracks and include time, track grade and key features.

Recommendation 19: Liaise with the LHI museum to display an updated whole of network orientation map that presents walk options as connected and loop tracks, including time, track grade and key features.

Recommendation 20: Liaise with LHITA and island tourism operators to ensure that walking track descriptions are consistent across all media platforms.

Recommendation 21: Establish a LHIB Facebook page and use it to promote management of the walking track network; and share information and publications about the walking tracks.

## Biosecurity

The walking track network is an identified high risk pathway for the spread of pathogens into the Permanent Park Preserve and raising awareness of visitors to this risk - pre-visit, on-arrival and at track heads - is recommended in the LHI Biosecurity Strategy (LHIB, 2016).

A Myrtle rust/Phytophthora brochure (LHIB, 2015) has been prepared for visitors and will be disseminated to lodges and be made available on the LHIB website.

The LHIB's User Guide (2015) contains biosecurity measures visitors can take before and after arrival. The website, User Guide and Walking Track Brochure (2015) described the purpose and use of the boot scrub bays. There is a biosecurity sign at the airport and some signage on the boot scrub bays.

Tourism operators can also provide their guests with pre-arrival biosecurity advice.

Recommendation 22: Provide tourism operators with biosecurity information they can share with clients before their visit to the island.

Recommendation 23: Use LHIB Facebook page to promote:

- Pre-arrival biosecurity messages particularly leading up to and during the peak tourist season.
- Use of boot scrub bays during stay.
- Visitor awareness and reporting of Myrtle rust and *Phytophthora*.

Recommendation 24: Install boot scrub signage at every boot scrub bay.

## Interpretation

Interpreting Lord Howe Island's natural and cultural values improves visitor understanding of and connection with the Island, leading to an enhanced visitor experience (LHIB Permanent Park Preserve Plan of Management (POM), 2010).

The Lord Howe Island Board provides all interpretive signage and some interpretive publications for the island's terrestrial based values (LHIB Signage and Publication Manual, 2000). The Department of Primary Industries provides interpretation of the LHI Marine Park. Private operators offer guided tours catering for a wide range of specific interests. The LHIB and private commercial publishers have produced a variety of publications catering for those who want to learn more about the island's environment.

Providing an integrated multi-layered interpretation of all of the island's values (marine and terrestrial), within and without the Permanent Park Preserve, is outside the scope of this document and would best be presented in a LHI Group World Heritage Interpretation Plan required by the POM (LHIB, 2000).

The POM (LHIB, 2010) and Signage and Publication Manual (LHIB, 2000) recommend minimal interpretive signs within the PPP that are unobtrusive; harmonise with their surroundings; and be placed where possible on existing infrastructure. AS 2156.1 recommends decreasing the provision of interpretive signage as the classification (or difficulty) of the track increases.

Within the walking track network there are interpretive signs at:

- One of 16 track heads, (Lagoon Foreshore Track).
- En-route on three of the 23 tracks (Catalina Crash Site, Old Settlement and Stevens Reserve).
- Four of 18 destinations (Transit Hill; Mutton Bird Point Lookout; Little Island and North Bay).

The existing signs vary in appearance and the most recent have departed from the standards presented in the Signage and Publication Manual (LHIB, 2000). There is scope to increase interpretive signage to present more of the island's natural and cultural values and the management programs in place to conserve them.

**Recommendation 25:** Co-ordinate the preparation of a Lord Howe Island Group World Heritage Area interpretation plan for the LHIB, DPI and private sector to present the Island's values for visitors in an integrated way via a range of media and experiences, including interpretive signs on walking tracks.

Recommendation 26: For input into a LHI interpretation plan:

- Prepare for each walking track, a description of the natural and cultural values including key features through which the track traverses or overlooks.
- For each of the island's natural and cultural values identify the track best located to interpret that value e.g:
  - Heritage sites.
  - Intermediate Hill Track viewing platform and Balls Pyramid and the phasmid rediscovery/recovery.
  - Mutton Bird Point Track and a living geological landscape.
  - Transit Hill Track and recovery of native flora after weed management success.



## 5 Managing individual tracks

In addition to the regular and catchup maintenance of all tracks, there are unique maintenance and management strategies for individual tracks and these are discussed below.

| Table 6: Managing Individual Tracks |  |
|-------------------------------------|--|
| Name of Track(s)                    | Unique maintenance or management strategy  |
| North Bay to Mt Eliza               | <p>The track is closed each summer to exclude walkers and potential impact on the Sooty Tern breeding colony. Sooty Tern numbers have significantly increased.</p> <p>Experiencing the activity of a bird breeding colony in this location with the dramatic views of the island on offer would be an added attraction for residents and visitors alike. Bunting and disturbance successfully deters Sooty Terns from nesting on the Blinky Beach dune to reduce the risk of aircraft bird strikes. The Blinky Beach access track (with dogs allowed on leash) transects the Sooty Tern breeding colony with minimal impact on breeding behaviour.</p> <p>It is recommended to review seasonal closure of the Mt Eliza Track pending an environmental assessment of the LHI population and the decision on proceeding or not with rodent eradication</p>   |
| Max Nicholls Track                  | <p>The section of the Max Nicholls Track at the location where Old Settlement Creek enters the lagoon is repeatedly at risk of encroachment or failure due to the coastal erosion of the embankment beneath. To rectify the problem the bank is to be stabilised with sand extracted from nearby, a new channel cut in the creek and the fence and track relocated away from the embankment edge.</p> <p>To avoid this cyclical repair and relocation, the walking track could be closed and walkers directed to used Old Settlement Beach, or, relocated by turning right once across the bridge (instead of left) and rerouted up the paddock and then alongside Old Settlement Creek to join the existing track. The track would offer walkers the opportunity to view the Endangered Ecological Community, the Sallywood Closed Swamp Forest. The walk would need to be on boardwalk through the wet areas. Walkers could still choose to start the Max Nicholls track by walking along Old Settlement Beach.</p> <p>About halfway along the section of track from the northern end of Old Settlement Beach and the vegetated canopy, the track traverses a population of the endangered <i>Calystegia affinis</i>. Walkers keeping to the</p> |

| Table 6: Managing Individual Tracks  |  |
|--|--|
| Name of Track(s)   | Unique maintenance or management strategy  |
|  | <p>track eliminates trampling impact of the endangered species that grow right up to the track edge.</p> <p>Boardwalk in this location keeps walkers to the track (and not off track trampling vegetation). An interpretative sign informing walkers of their proximity to an endangered plant species would enhance walker experience and education.</p>  |
| Malabar Lookout  | <p>Malabar Lookout is located on the edge of a high steep cliff with few natural barriers. Warnings to stay on the track and supervise children are provided in the walking track brochure, user guide and on signs en route.</p> <p>Additional signage about cliff hazards is required at track heads. A seat located away from the cliff edge close to the track might encourage walkers to stay away from the edge and provide a more comfortable and safe position to rest after the steep climb.</p>  |
| South Middle Beach; Transit Hill; Lagoon Foreshore track from The Pines to the Pine Trees Boat Shed; Little Island track from its start to where palm tree forest encloses the track; Stevens Reserve; Bowker Ave; Middle Beach to Anderson Road | <p>Dogs permitted on leash on Settlement walking tracks and on specifically identified walking tracks within the PPP as defined by the PPP POM and LHI Dog Importation and Management Policy (2015). Dogs on leash symbols are displayed at most track heads and intersections of tracks where dogs are permitted. There is no signage at the southern most end of the Little Island Track.</p> <p>The Walking Track Survey 2016 received suggestions that dogs on leash be permitted on more tracks in the PPP. This would require environmental impact assessment and a PPP POM amendment if deemed appropriate.</p> |
| Blackburn Island   | <p>Each year before the breeding season for Wedge-tailed Shearwater, the single pathway through the rookery to the wind sock is cleared and remarked. There is existing interpretative signage on Wedge-tailed Shearwaters.</p> <p>Three threatened fauna species are found on Blackburn Island the LHI Gecko (<i>Christinus guentheri</i>), LHI Skink (<i>Oligosoma lichenigera</i>) and LHI Wood-eating Cockroach (<i>Panesthis lata</i>). Consider an interpretative sign informing walkers of their proximity to these endangered species.</p>   |
| Goat House   | <p>A specific rope audit is scheduled for August of every year.</p> <p>A large number of visitors walk around to the SE side of the destination to see views of Balls Pyramid. Improved safety will need to be considered</p>  |
| Mount Gower  | A specific rope audit is scheduled for August of every year.   |

| Table 6: Managing Individual Tracks                               |   |
|---|---|
| Name of Track(s)  | Unique maintenance or management strategy   |
|   | <p>Visitors attempting the Mt Gower walk are required to be supervised by a Board licensed guide who has specific responsibilities with respect to duty of care to clients, emergency and first aid response. Residents are permitted to walk without a guide.</p>  |
| Malabar from Neds Beach to paddock style;<br>Middle Beach North   | <p>Almost the entire length of the Middle Beach North track and the start of the track to Malabar from Neds Beach Road to the style at the paddock traverses a Muttonbird breeding site. Walkers need to choose their steps carefully to avoid injury from collapsing a burrow and possibly burying an egg, chick or adult (in breeding season). Currently there is no interpretation or guidance for walkers.</p> <p>This environmental and safety risk can be avoided by constructing a raised boardwalk to separate walkers from Muttonbird burrows. Interpretive signage could educate walkers on what to do if they collapse a burrow.</p>   |
| Middle Beach South  | <p>The section of the track from the boot scrub bay on Anderson Road to the point where the track turns south east above Middle Beach transects prime habitat for the critically endangered Lord Howe Island Placostylus (<i>Placostylus bivaricosus</i>).</p> <p>The habitat for the Placostylus could be improved by closing and rehabilitating this track and redirecting walkers to the alternate existing route around the LHI Power Station to join the Middle Beach South, Clear Place and Valley of the Shadows tracks. An interpretive sign educating visitors about the island's electricity generation could be installed in this location.</p>  |
| Coastal Track to Boat Harbour via Mutton Bird Point and Rocky Run | <p>The track is currently closed between Mutton Bird Point Lookout and its intersection with the Intermediate Hill track (Lagoon Road end). Mutton Bird Point Lookout is open and accessible from the Smoking Tree Ridge track.</p> <p>The track remains closed following track damage caused by landslides in 2011 and 2015. A Quantitative Risk Assessment (QRA) completed in August 2016 recommended reinstating the track in the existing location; construction of upslope and within slip drainage works and closing the track for inspection after 50 mm rain falling in 24 hours.</p> <p>An REF for track works and management is in preparation that includes the following protocol for track closure and reopening:</p> <ol style="list-style-type: none"> <li>1. As soon as practical following the trigger rainfall event, a LHIB ECS representative will notify LHIB staff, lodges and LHI Tourism</li> </ol> |

| Table 6: Managing Individual Tracks |  |
|-------------------------------------|--|
| Name of Track(s)                    | Unique maintenance or management strategy  |
|                                     | <p>Association via email/fax and track users via a notice at either end of the track, that the track is closed.</p> <ol style="list-style-type: none"> <li>2. A LHIB representative will assess the condition of the track, drainage controls and immediate area within 2 business days of track closure.</li> <li>3. The track will be reopened if its condition is assessed as satisfactory. A LHIB ECS representative will advise LHIB staff, lodges and LHI Tourism Association via email/fax the track is open and remove the closed notices at either end of the track.</li> <li>4. The track will remain closed following an unsatisfactory condition assessment, until remediation works required to achieve a satisfactory condition have been implemented; e.g. clearing drainage controls</li> </ol> <p>Interpretive signs will be placed at either end of the MBP walking track advising of the “living geology” of the track and that it may be closed following high rainfall events. Residents and businesses on the island will be formally advised of the protocol.</p> |

**Recommendation 27:** Improve communication about Malabar cliff hazards by improving signage at track heads.

**Recommendation 28:** A seat located away from the cliff edge close to the track might encourage walkers to stay away from the edge and provide a more comfortable and safe position to rest after the steep climb.

**Recommendation 29:** Ensure the all tracks where dogs on leash are permitted have appropriate signage e.g. southern most point of the Little Island Track.

**Recommendation 30:** Consider the trialing the use of bunting to discourage Sooty Terns from nesting on the Mt Eliza Track and opening the track to walkers all year round.

**Recommendation 31:** Resolve the ongoing maintenance of the start of the Max Nicholls track where the embankment beneath the track is eroding.

Recommendation 32: For input into a LHI interpretation plan:

- Consider an interpretative sign on the Max Nicholls walking track educating walkers about the endangered *Calystegia affinis* growing next to the track.
- Consider an interpretative sign on Blackburn island educating walkers about the three threatened fauna species the LHI Gecko (*Christinus guentheri*), LHI Skink (*Oligosoma lichenigera*) and LHI Wood-eating Cockroach (*Panesthis lata*).
- Consider an interpretative sign at the Power House educating visitors about the island's electricity generation.
- Interpretive signage could educate walkers on what to do if they collapse a Muttonbird burrow.

Recommendation 33: The PPP Plan of Management prohibits dogs on walking tracks other than at Transit Hill. Consideration is to be given to whether it is appropriate to allow dogs on other tracks within the PPP as part of the plan of management review process.

Recommendation 34: Close and rehabilitate the Middle Beach South track from the boot scrub bay on Anderson Road to the point where the track turns south east above Middle Beach and redirect walkers to the alternate existing route around the LHI Power Station.

Recommendation 35: Reinstate Mutton Bird Point Walking Track as recommended by the August 2016 Jacobs Quantitative Risk Assessment including closing the track until after passing an inspection following rain events of 50 mm or more within 24 hours.

Recommendation 36: Construct a raised boardwalk to separate walkers from Muttonbird burrows between the start of the Malabar Walk at Neds Beach to the paddock. Interpretive signage could educate walkers on what to do if they collapse a burrow.

## 6 References

Destination NSW (2015) Media Release 30 March 2015 5.5 MILLION VISITORS SHOW NSW IS AUSTRALIA'S MOST POPULAR BUSHWALKING DESTINATION accessed on <http://www.destinationnsw.com.au/wp-content/uploads/2015/03/20150330-5-5-million-visitors-show-nsw-australias-most-popular-bushwalking-destination.pdf> 24 June 2016.

Gorrell, S. (1997) Walking Track Strategy Report for the Lord Howe Island Board.

Department of Environment and Climate Change (2007). Lord Howe Island Biodiversity Management Plan.

Department of Environment, Climate Change and Water (2010). Lord Howe Island Permanent Park Preserve Plan of Management.

Department of Sustainability and Environment, Victoria (2010). Users Guide to the Australian Walking Track Grading System.

Lord Howe Island Board (2000). Signage and Publication Manual.

Lord Howe Island Board (2010). Strategic Plan for the Lord Howe Island Group World Heritage Property.

Lord Howe Island Board (2014). The Lord Howe Island Board Corporate Plan 2014-2016.

Lord Howe Island Board (2015a). Dog Importation and Management Policy.

Lord Howe Island Board (2015b). Lagoon Foreshore Management Plan.

Lord Howe Island Board (2015c). Total Assessment Management Plan and Asset Strategy.

Lord Howe Island Board (2016). Lord Howe Island Biosecurity Strategy.

Lord Howe Island Tourism Association (2015). Destination Management Plan 2014-2017.

Standards Australia (2004). Australian/New Zealand Risk Management Standard AS4360:2004.

Standards Australia (2001). Australian Standard AS 2156.1 – 2001 Walking Tracks Part 1: Classification and signage.

Standards Australia (2001). Australian Standard AS 2156.2 - 2001 Walking tracks - Infrastructure design.



7 Appendices

7.1 Example Asset Maintenance System Map based on spatial data in GIS



## 7.2 Recommendations

| Recommendation | Description  | Category         | Estimated Cost        | Year of Strategy | Requires a PPP POM Amendment |
|----------------|--|------------------|-----------------------|------------------|------------------------------|
| 1              | Collect actual on-site data of usage of the walking track network in low and high season.  | Walker data      | \$8580 <sup>4</sup>   | 1                | No                           |
| 2              | That Walking Tracks be listed as a unique capital and maintenance category in the LHIB TAM Plan to more accurately project capital procurement, replacements and cyclic maintenance of the entire network.<br><br>Or<br><br>Walking track and infrastructure be divided proportionally between the PPP and the Public Open Space categories in the LHIB TAM Plan to more accurately project capital procurement, replacements and cyclic maintenance of the network and support access to funding for protected and settled areas. | Funding          | LHIB officer time     | 1                | No                           |
| 3              | That the minimum service level for LHI walking tracks be guided by the classification, management intervention and risk management described in Australian Standards AS 2156.1 & 2.  | Asset Management | Not costed            | 1                | No                           |
| 4              | That the results from the walking tracker user survey be used to refine service levels appropriate for Lord Howe Island.   | Asset Management | LHIB officer time     | 1                | No                           |
| 5              | Implement Asset Management System module into Authority and improve walking track data capture.  | Asset Management | \$2000 <sup>5</sup>   | 1                | No                           |
| 6              | Install picnic table, toilets and drinking water at Blinky Beach.  | Facilities       | \$42,500 <sup>6</sup> | 2-3              | Yes                          |
| 7              | Install toilets and drinking water at Little Island Track gate.  | Facilities       | \$31,500 <sup>7</sup> | 2-3              | No                           |
| 8              | Complete the installation of boot scrub bays, for the prevention of spread of pathogens into the Permanent Park Preserve, at all relevant track heads:<br>8.1 Both ends of the Bowker Ave Track on Anderson Road and opposite the  | Biosecurity      |                       | 1-2              | No                           |

<sup>4</sup> Based on quote of \$850 per track counter.

<sup>5</sup> Based on software quote of \$1500 and allowance for training.

<sup>6</sup> Based on replacement costs of current facilities.

<sup>7</sup> Based on replacement costs of current facilities.



| Recommendation | Description   | Category                       | Estimated Cost         | Year of Strategy | Requires a PPP POM Amendment |
|----------------|---|--------------------------------|------------------------|------------------|------------------------------|
|                | Board Offices.<br>8.2 At the start of the Transit Hill walk from Pinetrees lodge.<br>8.3 At the start of the Middle Beach North track.  |                                |                        |                  |                              |
| 9              | Place personal equipment decontamination sprays e.g. with 70% methylated spirits at all walking track heads.  | Biosecurity                    | \$1,700                | 1                | No                           |
| 10             | Increase the number and length of beginner/family walks (Class 1 and 2) on the island by:   |                                |                        |                  |                              |
|                | 10.1 Extension of the Lagoon Foreshore Walking Track through construction of a raised boardwalk from the Pine Trees Boat Shed to the concrete foot path at Windy Point, refer to Figure 4. This track would separate pedestrians and cyclists from vehicles at a known blind spot along Lagoon Road. The boardwalk would separate walkers from Muttonbird burrows. The entire length of the Foreshore Walking Track then be 1.5 km. Stage 1 would be to construct Boardwalk (class 1), stage 2 would be to achieve class 1 the entire length. | Track extension                |                        | 2                | No                           |
|                | 10.2 Upgrade of Stevens Reserve Loop Track to include 350 m ambulant standard Class 1 track as described in Gorrell (1997), refer to Figure 4.  | Track upgrade                  | \$62,000 <sup>8</sup>  | 3-5              | No                           |
|                | 10.3 Inclusion of the Little Waterfall Track in the network as a Class 2 walking track. Currently this track is not maintained by the Board. It is promoted as a wet weather activity by commercial providers such as Pine Trees, refer to Figure 6.  | Promotion and Asset management | Not costed             | 1                | Yes                          |
|                | 10.4 Creation of a new Class 2 track from Old Settlement to North Bay via Dawsons Point as proposed by the 1997 Walking Track Strategy keeping the existing track from Old Settlement to the three ways intersection, refer to Figure 4.  | New track                      | \$180,000 <sup>9</sup> | 5-10             | Yes                          |
|                | 10.5 Creation of new Class 2 track from Neds Beach to intersect with the North Middle Beach Access Track, refer to Figure 5.  | New track                      |                        | 5-7              | No                           |
| 11             | Increase the number and length of intrepid/experienced walks on the island  | New guided                     | Not costed             | 2-3              | Yes                          |

<sup>8</sup> Based on Gorrell (1997) estimate increased by CPI to 2016 dollars.

<sup>9</sup> Based on Gorrell (1997) estimate increased by CPI to 2016 dollars.

| Recommendation | Description   | Category                     | Estimated Cost       | Year of Strategy | Requires a PPP POM Amendment |
|----------------|---|------------------------------|----------------------|------------------|------------------------------|
|                | by establishment of a new Class 6 walking route for example on the Eastern Side of Mt Lidgbird. Similarly to the current Mt Gower walk, visitors would need to be accompanied by a LHIB licensed guide. There would be a group number and annual walker limit on this walk. | route                        |                      |                  |                              |
| 12             | Review tenure of all walking tracks outside of the PPP and relocate to disturbed vacant Crown Land, gazetted roads and easements, or, special leases where no alternate is available, providing environmental assessment determines there would be no significant impact.   | Land Tenure                  | Not costed           | 2                | No                           |
| 13             | Update the LHI on-line User Guide (2015) to include all elements from the Australian Walking Track Grading System (2010).   | Information                  | \$950                | 1                | No                           |
| 14             | Update the Board's Walking Track Brochure (2015) to have the same look and feel as the User Guide and publish as an interactive PDF. Only print paper brochures when current stock depleted. Liaise with LHITA to aim for a consistent branding of visitor documents.       | Information                  | \$1500               | 1                | No                           |
| 15             | Develop and implement a social media plan for increasing the download of the interactive User Guide and new Walking Track Guide.  | Promotion                    | \$4000 pa            | 1                | No                           |
| 16             | Update the walking track page on the Board's website to include a text and image description of the entire walking track network. . Also include links to external walking sites e.g. Wildwalks, Google Trekker.  | Information                  | \$800                | 1                | No                           |
| 17             | Include track grade (difficulty) symbol and time on walking track posts.  | Information                  | \$3200 <sup>10</sup> | 1-2              | No                           |
| 18             | Install orientation map signs for the northern, central and southern group of walks to present options for walk experiences that connect multiple tracks and include time, track grade and key features.  | Information & Interpretation | \$3465 <sup>11</sup> | 2                | No                           |
| 19             | Liaise with the LHI museum to display an updated whole of network orientation map that presents walk options as connected and loop tracks, including time, track grade and key features.  | Information & Interpretation | \$1000               | 2                | No                           |
| 20             | Liaise with LHITA and island tourism operators to ensure that walking track descriptions are consistent across all media platforms.   | Promotion                    | Not costed           | 1                | No                           |
| 21             | Establish a LHIB Facebook page and use it to promote management of the  | Promotion                    | \$2000 +             | 1                | No                           |

<sup>10</sup> Based on adding symbols to current 32 map posts.

<sup>11</sup> Based on cost of existing interpretation signs.

| Recommendation | Description  | Category           | Estimated Cost | Year of Strategy | Requires a PPP POM Amendment |
|----------------|--|--------------------|----------------|------------------|------------------------------|
|                | walking track network; and share information and publications about the walking tracks.  |                    | \$8000 pa      |                  |                              |
| 22             | Provide tourism operators with biosecurity information they can share with clients before their visit to the island.   | Promotion          |                | 1                | No                           |
| 23             | Use LHIB Facebook page to promote: <ul style="list-style-type: none"> <li>• Pre-arrival biosecurity messages particularly leading up to and during the peak tourist season.</li> <li>• Use of boot scrub bays during stay.</li> <li>• Visitor awareness and reporting of Myrtle rust and <i>Phytophthora</i>.</li> </ul>   | Education          | Not costed     | 1                | No                           |
| 24             | Install boot scrub signage at every boot scrub bay.  | Biosecurity        | \$2000         | 1                | No                           |
| 25             | Co-ordinate the preparation of a Lord Howe Island Group World Heritage Area interpretation plan for the LHIB, DPI and private sector to present the Island's values for visitors in an integrated way via a range of media and experiences, including interpretive signs on walking tracks.  | Interpretation     | Not costed     | 1-3              | No                           |
| 26             | For input into a LHI interpretation plan: <ul style="list-style-type: none"> <li>• Prepare for each walking track, a description of the natural and cultural values including key features through which the track traverses or overlooks.</li> <li>• For each of the island's natural and cultural values identify the track best located to interpret that value e.g: <ul style="list-style-type: none"> <li>○ Intermediate Hill Track viewing platform and Balls Pyramid and the phasmid rediscovery/recovery.</li> <li>○ Mutton Bird Point Track and a living geological landscape.</li> <li>○ Transit Hill Track and recovery of native flora after weed management success.</li> </ul> </li> </ul> | Interpretation     | Not costed     | 1-3              | No                           |
| 27             | Improve communication about Malabar cliff hazards by improving signage at track heads.   | Risk communication | \$400          | 1                | No                           |
| 28             | A seat located at Malabar Lookout away from the cliff edge close to the track might encourage walkers to stay away from the edge and provide a more comfortable and safe position to rest after the steep climb.   | Facilities         | \$2000         | 2                | No                           |
| 29             | Ensure the all tracks where dogs on leash are permitted has appropriate  | Information        | \$300          | 1                | No                           |

| Recommendation | Description  | Category              | Estimated Cost | Year of Strategy | Requires a PPP POM Amendment |
|----------------|--|-----------------------|----------------|------------------|------------------------------|
|                | signage e.g. southern most point of the Little Island Track.   |                       |                |                  |                              |
| 30             | Consider the trialing the use of bunting to discourage Sooty Terns from nesting on the Mt Eliza Track and opening the track to walkers all year round.   | Change in track use   | \$800 pa       | 1-2              | Yes                          |
| 31             | Resolve the ongoing maintenance of the start of the Max Nicholls track where the embankment beneath the track is eroding.  | Track upgrade         | Not costed     | 2-3              | No                           |
| 32             | <p>For input into a LHI interpretation plan:</p> <ul style="list-style-type: none"> <li>Consider an interpretative sign on the Max Nichols walking track educating walkers about the endangered <i>Calystegia affinis</i> growing next to the track.</li> <li>Consider an interpretative sign on Blackburn island educating walkers about the three threatened fauna species the LHI Gecko (<i>Christinus guentheri</i>), LHI Skink (<i>Oligosoma lichenigera</i>) and LHI Wood-eating Cockroach (<i>Panesthis lata</i>).</li> <li>Consider an interpretive sign at the Power House educating visitors about the island's electricity generation.</li> <li>Interpretive signage could educate walkers on what to do if they collapse a Muttonbird burrow.</li> </ul> | Interpretation        | Not costed     | 1-3              | No                           |
| 33             | The PPP Plan of Management prohibits dogs on walking tracks other than at Transit Hill. Consideration is to be given to whether it is appropriate to allow dogs on other tracks within the PPP as part of the plan of management review process.   | Dogs on tracks in PPP | Not costed     | 2-3              | Yes                          |
| 34             | Close and rehabilitate the Middle Beach South track from the boot scrub bay on Anderson Road to the point where the track turns south east above Middle Beach and redirect walkers to the alternate existing route around the LHI Power Station.   | Track relocation      | Not costed     | 2-3              | No                           |
| 35             | Reinstate Mutton Bird Point Walking Track as recommended by the August 2016 Jacobs Quantitative Risk Assessment including closing the track until after passing an inspection following rain events of 50 mm or more within 24 hours.  | Track upgrade         | Not costed     | 1                | No                           |
| 36             | Construct a raised boardwalk to separate walkers from Muttonbird burrows between the start of the Malabar Walk at Neds Beach to the paddock.   | Track upgrade         | Not costed     | 2                | No                           |

| Recommendation | Description   | Category | Estimated Cost | Year of Strategy | Requires a PPP POM Amendment |
|----------------|---|----------|----------------|------------------|------------------------------|
|                | Interpretive signage could educate walkers on what to do if they collapse a burrow. |          |                |                  |                              |

### 7.3 Schedule of annual walking track activities

| Month                            | Jul  | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun |
|----------------------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| C1 inspect & maintain            |  |     |     |     |     |     |     |     |     |     |     |     |
| C2 inspect & maintain            |  |     |     |     |     |     |     |     |     |     |     |     |
| C3 inspect & maintain            |  |     |     |     |     |     |     |     |     |     |     |     |
| C4 inspect & maintain            |  |     |     |     |     |     |     |     |     |     |     |     |
| C5 inspect & maintain            |  |     |     |     |     |     |     |     |     |     |     |     |
| Mt Eliza track closed            |  |     |     |     |     |     |     |     |     |     |     |     |
| Audit all tracks C1 – C5         |  |     |     |     |     |     |     |     |     |     |     |     |
| Mt Gower & Goat House rope audit |  |     |     |     |     |     |     |     |     |     |     |     |
| EIA & Dev. Consent               |  |     |     |     |     |     |     |     |     |     |     |     |
| Upgrade/New tracks               |  |     |     |     |     |     |     |     |     |     |     |     |
| Budget Planning                  |  |     |     |     |     |     |     |     |     |     |     |     |
| Budget Planning                  | December - capital projects. April - detailed budget.  |     |     |     |     |     |     |     |     |     |     |     |
| Audit all tracks                 | Every 5 years the annual audit will include an engineering assessment of elevated structures.  |     |     |     |     |     |     |     |     |     |     |     |
| EIA & Dev. Consent               | September to November conduct the environmental assessment (CRA or REF) and obtain development consent for upgrades identified from the annual audit. If a new project is identified in the TAM PLAN for the following year, conduct the REF or EIS and obtain development consent in September to November. |     |     |     |     |     |     |     |     |     |     |     |
| Upgrade / New tracks             | Following approval upgrade and/or construct new track and infrastructure.  |     |     |     |     |     |     |     |     |     |     |     |

## 7.4 Relevant legislation, policy and standards

| Level of Government | Act/Policy/Plan  | Background/Purpose  | Relevant Goals/Objectives/Actions  | Links to the LHI Walking Track Strategy  |
|---------------------|--|---|--|--|
| National            | <b><i>Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)</i></b> | The EPBC Act is the Commonwealth's principal environmental legislation. It provides a national framework for environmental management, directing resources towards improved environmental protection. | With respect to threatened species and ecological communities, the EPBC Act provides for: <ul style="list-style-type: none"> <li>• identification and listing of threatened species and threatened ecological communities</li> <li>• development of recovery plans for such species and ecological communities</li> <li>• recognition of key threatening processes</li> <li>• reducing these processes through threat abatement plans</li> </ul> | <p>Under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act), actions that have, or are likely to have, a significant impact on a matter of national environmental significance require approval from the Australian Government Minister for the Environment (the Minister).</p> <p>The following matters of national environmental significance are listed for Lord Howe Island: the World Heritage Property, Migratory species protected under international agreements and listed threatened species.</p> <p>Land clearing and die-back caused by root-rot fungus are identified as a key threatening processes under the EPBC Act</p> <p>Note: the LHI Biodiversity Management Plan constitutes the formal National and NSW Recovery Plan for threatened species and ecological communities listed in the EPBC Act and TSC Act</p> |
| National            | <b><i>Australian Standard AS 2156 parts 1 and 2- 2001 for walking tracks</i></b>       | As 2156.1 and 2 set out specifications designed to ensure walking tracks are provided in a safe, reliable and consistent way.   | These standards provide a classification and management intervention system for walking tracks; guidance for track markers and information signs; and specific requirements for the structural design of walking track structures to protect natural and cultural assets and for use as aids to recreation in outdoor areas where the environment is the focus of recreational activities.   | The walking track system will be designed and maintained in accordance with AS 2156.1 and 2.   |
| National            | <b><i>Australian Walking Track Grading System</i></b>                                  | The grading system is essentially designed to assist people who are not regular   | Track grading is a primary means of informing people about the features of walking tracks and assists in the marketing and promotion of walking as a leisure activity. By providing  | The technical grading and difficulty of a walk determined by applying AS 2156.1 – 2001 is communicated to the public in 'plan English  |

| Level of Government | Act/Policy/Plan   | Background/Purpose   | Relevant Goals/Objectives/Actions  | Links to the LHI Walking Track Strategy   |
|---------------------|---|--|--|---|
|                     |   | or confident bushwalkers to experience walking by providing helpful information about walking trails.  | a standardised level of difficulty or track grading users are able to gauge whether a particular track is suitable for them.   | language' using the Australian Walking Track Grading System.  |
| NSW                 | <b>Civil Liability Act (2002)</b>                               | <p>The <i>Civil Liability Act</i> 2002 (CLA) applies in most circumstances where negligence is alleged against a defendant</p> <p>As with common law negligence, in order to establish negligence under the Civil Liability Act, a plaintiff must prove that the defendant:</p> <p>owed the plaintiff a duty of care (Division 2)</p> <p>breached that duty of care caused the damage alleged (Division 3)</p> | <p>Under the Civil Liability Act 2002 (CLA), the LHIB is not negligent in failing to take precautions against a risk of harm unless:</p> <p>(1) The risk was foreseeable (that is, it is a risk of which the LHIB knew or ought to have known);</p> <p>(2) the risk was not insignificant; and</p> <p>(3) In the circumstances, a reasonable person in the LHIB's position would have taken additional precautions to limit or remove the risk (s.5B).</p> <p>When determining what precautions a reasonable person in LHIB's position would take in the circumstances, the CLA provides guidance. Section 5B (2) provides that when determining whether a reasonable person would have taken certain precautions, you should consider:</p> <p>(a) the probability of the harm occurring;</p> <p>(b) the likely seriousness of the harm;</p> <p>(c) the burden of taking the precautions; and</p> <p>(d) the social utility of the activity that creates the risk of harm.</p> | <p>The general position under common law is that the LHIB will owe a duty of care to take care of the safety of those who enter on land (including walking tracks and routes) under its management.</p> <p>However, the LHIB does not owe a duty for recreational activities where it has given warnings about the risks involved e.g. walking tracks along cliff or steep slopes, have many steps, rocks and roots or at heights.</p> <p>Further, by requiring walkers use a LHIB licenced guide for the Mt Gower walk the LHIB shares the responsibility for advising the public about the risks inherent with this class 5 walk.</p> |
| NSW                 | <b>Environmental Planning and Assessment Act 1979 (EPA Act)</b> | The EPA Act requires the relevant planning authority to take into consideration the impacts to the environment (both natural and built) and the community of proposed development or land-use change   | <p>Part 5A (Significant effect on threatened species, populations or ecological communities, or their habitats) applies to LHI.</p> <p>Part 5 Objects:</p> <p>The relevant objects of this Act are:</p> <p>(a to encourage:</p> <p>(i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,</p> <p>(vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats</p>   | <p>The Board assesses development applications based on their merit with regard to the provisions of the <i>Environmental Planning and Assessment Act 1979</i> (EP&amp;A Act), the LHI Local Environmental Plan, 2010 (LEP) and the LHI Development Control Plan, 2005 (DCP) and other relevant LHIB policies.</p> <p>See LEP / DCP below.</p>  |
| NSW                 | <b>NSW Threatened Species</b>                                   | This Act provides for the conservation of threatened   | <p>The objects of this Act are:</p> <ul style="list-style-type: none"> <li>to conserve biological diversity and promote ecologically</li> </ul>  | Under the TSC Act, two plant species are listed as Critically Endangered, eight plant species are   |



| Level of Government | Act/Policy/Plan   | Background/Purpose   | Relevant Goals/Objectives/Actions   | Links to the LHI Walking Track Strategy  |
|---------------------|---|--|---|--|
|                     | <b>Conservation Act 1995 (TSC Act)</b>                              | species, populations and ecological communities of animals and plants, setting out a number of specific objects relating to the conservation of biological diversity and the promotion of ecologically sustainable development.<br>The Act also provides for the listing of key threatening processes, and threatened species, populations and ecological communities, including the preparation and implementation of recovery plans and the identification of critical habitat | sustainable development <ul style="list-style-type: none"> <li>to prevent the extinction and promote the recovery of threatened species, populations and ecological communities</li> <li>to protect the critical habitat of those threatened species, populations and ecological communities that are endangered</li> <li>to eliminate or manage certain processes that threaten the survival or evolutionary development of threatened species, populations and ecological communities</li> <li>to ensure that the impact of any action affecting threatened species, populations and ecological communities is properly assessed</li> <li>to encourage the conservation of threatened species, populations and ecological communities by the adoption of measures involving co-operative management.</li> </ul> | list as Endangered, one ecological community is listed as Critically Endangered and two ecological communities are listed as Endangered.<br><br>Threatened species impact assessment is an integral part of environmental impact assessment. Proponents must undertake an assessment of significance to determine potential impacts of proposed activities on threatened species, populations and ecological communities.<br><br>Note: the LHI Biodiversity Management Plan constitutes the formal National and NSW Recovery Plan for threatened species and ecological communities listed in the EPBC Act and TSC Act |
| NSW                 | <b>Lord Howe Island Act 1953 (LHI Act)</b>                          | Under the LHI Act, the Lord Howe Island Board is responsible for the care, control and management of the Lord Howe Island.   | Under the Lord Howe Island Act 1953, the LHIB is charged with the care, control and management of the Island and of the affairs and trade of the Island. Its responsibilities include: protection of World Heritage values; development control; administration of all Crown Land including the island's Permanent Park Preserve; the provision of community services and infrastructure; and the delivery of sustainable tourism.<br>The LHIB maintains and implements these values and these responsibilities in managing walking tracks on LHI.  | All land on Lord Howe Island is Crown land and may only be dealt with in accordance with the provisions of the LHI Act.<br><br>Perpetual leases and special leases are subject to standard conditions and in the case of special leases a Property Management Plan which clearly identifies areas and appropriate land uses.<br><br>See LHI Permanent Park Preserve Plan of Management below.  |
| NSW                 | <b>Lord Howe Island Regulation 2014 (LHI Reg)</b>                   |  |   |  |
| Local               | <b>Lord Howe Island Biodiversity Management Plan 2007 (LHI BMP)</b> | The LHI BMP: <ul style="list-style-type: none"> <li>constitutes the formal National and NSW Recovery Plan for</li> </ul>   | The relevant objectives and actions from the LHI Biodiversity Management Plan are: <p>10.1 Protect vegetation in the vicinity of walking tracks.</p> <p>10.1.1 Promote the importance of staying on walking tracks.</p>   | The priorities identified in the BMP are reflected in this strategy including closure and relocation of tracks out of threatened species habitat; providing education and interpretation to avoid  |

| Level of Government | Act/Policy/Plan  | Background/Purpose   | Relevant Goals/Objectives/Actions  | Links to the LHI Walking Track Strategy  |
|---------------------|--|--|--|--|
|                     |  | <p>threatened species and ecological communities listed in the EPBC Act and TSC Act</p> <ul style="list-style-type: none"> <li>addresses threats and management actions relevant to biodiversity of the LHI Group, in particular rare and significant species and communities</li> </ul> | <p>10.1.2 Establish and implement an appropriate hygiene protocol for access to the PPP.</p> <p>10.1.4 Encourage tourists, residents, seed collectors, researchers and management staff to adopt minimal impact bushwalking practices.</p> <p>13.1 Habitat of threatened flora must be protected from clearing.</p> <p>13.2.1 Undertake weed control in the habitat of threatened flora.</p> <p>13.5.1 Reduce adverse human impacts on threatened flora and communities.</p> <p>13.5.4 Implement a strategy that minimizes the risk of introduction of <i>Phytophthora cinnamomi</i> to threatened flora and community sites.</p> <p>13.6 Promote public awareness of threatened plants and communities.</p> <p>15 To protect and enhance threatened fauna habitat.</p>  | <p>impact on threatened species (e.g. trampling); complete the roll out of boot scrub bays to prevent the spread of <i>Phytophthora</i>.</p>   |
| Local               | Lord Howe Island Permanent Park Preserve Plan of Management 2010 (LHI PPP PoM) | Required under the Lord Howe Island Act 1953.  | <p>The actions within this plan are designed to achieve “Protection of native vegetation, biodiversity, land, rivers and costal waterways” and protecting the World Heritage values. The Plan also contains a number of actions to help achieve “More people using parks”, including maintaining the walking track network. The plan establishes a scheme of operations in accordance with the National Parks and Wildlife Act 1974.</p> <p>The Plan of Management (POM) discusses ongoing management concerns for the track system include:</p> <ul style="list-style-type: none"> <li>fragmentation of the <i>Calystegia affinis</i> population by the Max Nicholls Memorial Track, and hence the potential for trampling of this species.</li> <li>access to part of the southern mountains may have detrimental impacts on <i>Coprosma inopinata</i> (Section 7 of the PPP POM).</li> <li>minimising erosion and wear, repair of tracks after landslips (Section 5.1 of the PPP POM),</li> <li>minimising impacts on nesting birds, particularly on Blackburn Island, Mutton Bird Point, King Point and the track to Mt Eliza (Section 4.4 of the PPP POM), and</li> <li>eliminating weed and pathogen incursions (Section 5.3 of the PPP POM).</li> </ul> | Each of the specific PPP POM actions related to walking tracks has been either adopted unchanged or identified as currently prohibited and requiring consideration for amendment during the PPP POM review planned for 2017. |

| Level of Government | Act/Policy/Plan | Background/Purpose | Relevant Goals/Objectives/Actions  | Links to the LHI Walking Track Strategy |
|---------------------|-----------------|--------------------|--|---|
|                     |                 |                    | <ul style="list-style-type: none"> <li>The following outcomes and strategies relating to walking tracks are identified in the POM:</li> </ul> <p>Desired Outcomes</p> <ul style="list-style-type: none"> <li>Access to the preserve does not impact on the preserve's values.</li> <li>The majority (77%) of the walking tracks on LHI are located within the LHI Permanent Park Preserve (PPP) (Figure 1).</li> <li>Maintain the walking track network shown in Figure 1 in accordance with the designated standards in the Standards Australia (2001).</li> <li>Where necessary to avoid impacts on native vegetation and populations of threatened species, or to replace tracks made impassable by landslips, divert existing tracks but only following a thorough assessment of the potential impacts of the new route.</li> <li>Each year before the breeding season, re-mark the single pathway through the rookery at Blackburn Island. The markers should be spaced close enough so visitors do not lose the path.</li> <li>Monitor the environmental impact of walking tracks, particularly in regard to erosion, endangered species, bird nesting areas, weeds and pathogens.</li> <li>Ensure that the condition of fixed ropes and rock bolts along tracks is monitored at least every three months, and replaced where necessary to maximise safety.</li> <li>Provide stiles to permit walkers to cross boundary fences.</li> <li>Promote the importance of staying on marked walking tracks. i.e safety and plant disease</li> <li>Protect populations of <i>Calystegia affinis</i> and <i>Coprosma inopinata</i> from trampling by restricting access to their locations in the southern mountains and by providing information in relation to visitors keeping to the defined path on the Max Nichols Memorial Track.</li> <li>Monitor the process of erosion and wear on the walking tracks in the preserve, and repair and rehabilitate as necessary.</li> </ul> |   |

| Level of Government | Act/Policy/Plan  | Background/Purpose  | Relevant Goals/Objectives/Actions  | Links to the LHI Walking Track Strategy                                |
|---------------------|--|---|--|--|
|                     |  |   | <ul style="list-style-type: none"> <li>Construct and maintain walking tracks to minimise erosion. Appropriate techniques to achieve this may include cross-drainage, re-alignment of short sections of track, and the use of boardwalks or steps.</li> <li>Maintain discrete track marking and orientation signs at track junctions and trackheads in the preserve.</li> </ul> |  |
| Local               | <b>Strategic Plan for the LHI Group World Heritage Property 2010 (SP LHIG WHP)</b> | The SP LHIG WHP provides a ten year overarching framework for consistent and coordinated management of the LHIG World Heritage Property. It is intended to ensure that day-to-day management of the Property complies with Australia's obligations under the World Heritage Convention and that appropriate consideration is given to protection, conservation, presentation and transmission of World Heritage values. | <p>Natural resources are sustainably managed and resource use does not degrade World Heritage values.</p> <p>Any adverse impacts from tourist activities or tourism infrastructure are prevented or minimised.</p>   | This strategy is consistent with the Strategic Plan for the LHI Group. |
| Local               | <b>Lord Howe Island Board Corporate Plan 2014-2016</b>                             | <p>The Corporate Plan sets the framework and direction for the LHI Board for 2014-16. The mission is <i>"to provide leadership, services and support which contribute to the wellbeing and sustainability of the LHI community and its environment"</i>.</p> <p>The plan is structured around 6 strategic directions:</p> <ol style="list-style-type: none"> <li>1. Effective governance and leadership</li> </ol>      | <ul style="list-style-type: none"> <li>Strategic Direction 4: Outstanding Environment</li> <li>Action 4.1.1 states "Protect threatened species, populations and ecological communities, and their habitats through implementation of the LHI BMP 2010."</li> </ul>   | This strategy is consistent with the LHIB Corporate Plan               |

| Level of Government | Act/Policy/Plan  | Background/Purpose  | Relevant Goals/Objectives/Actions   | Links to the LHI Walking Track Strategy   |
|---------------------|--|---|---|---|
|                     |  | 2. Strong and sustainable economy<br>3. Sound infrastructure and services<br>4. Outstanding environment<br>5. Responsible land management<br>6. Strong and engaged community<br>Strategies, actions, KPI's and responsibilities are assigned within each Strategic Direction. |   |   |
| Local               | Lord Howe Island Lagoon Foreshore Management Plan 2015 (FMP) | The FMP provides the framework within which the Board will manage the Foreshore for the next ten years  | . It outlines the main values, issues, management directions and priorities of the Board for managing the LHI Lagoon Foreshore consistent with the values of the area and the resources available for management. | This strategy is consistent with the Foreshore Management Plan.<br><br>This strategy recommends implementation of the full Lagoon Foreshore Walk. |



|                                     |                               |                         |
|-------------------------------------|-------------------------------|-------------------------|
| <b>Board Meeting:</b> November 2016 | <b>Agenda Number:</b> 8 (iii) | <b>File Ref:</b> AD0002 |
|-------------------------------------|-------------------------------|-------------------------|

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Annual Report and Financial Statements 2015/16

#### **RECOMMENDATION**

The Lord Howe Island Board Annual Report 2015/16, inclusive of Financial Statements, and the Independent Auditor's Report, are submitted for the information of the Board.

#### **BACKGROUND**

Board members have been provided with electronic copies of the Annual Report. A printed copy of the Annual Report will be available at the November 2016 Board meeting.

The Lord Howe Island Board Annual Report has been completed and submitted to the Minister in accordance with the provisions of the *Annual Reports (Statutory Bodies) Act, 1984* for presentation to Parliament.

#### **CURRENT POSITION**

The Annual Report incorporates the 2015/16 financial statements and the Independent Auditor's Report. The Audit Office completed their audit of the financial statements on 13 October 2016, and has issued an unqualified audit opinion stating that the statements are in accordance with section 41B of the *Public Finance & Audit Act, 1983* and the *Public Finance and Audit regulation 2015*.

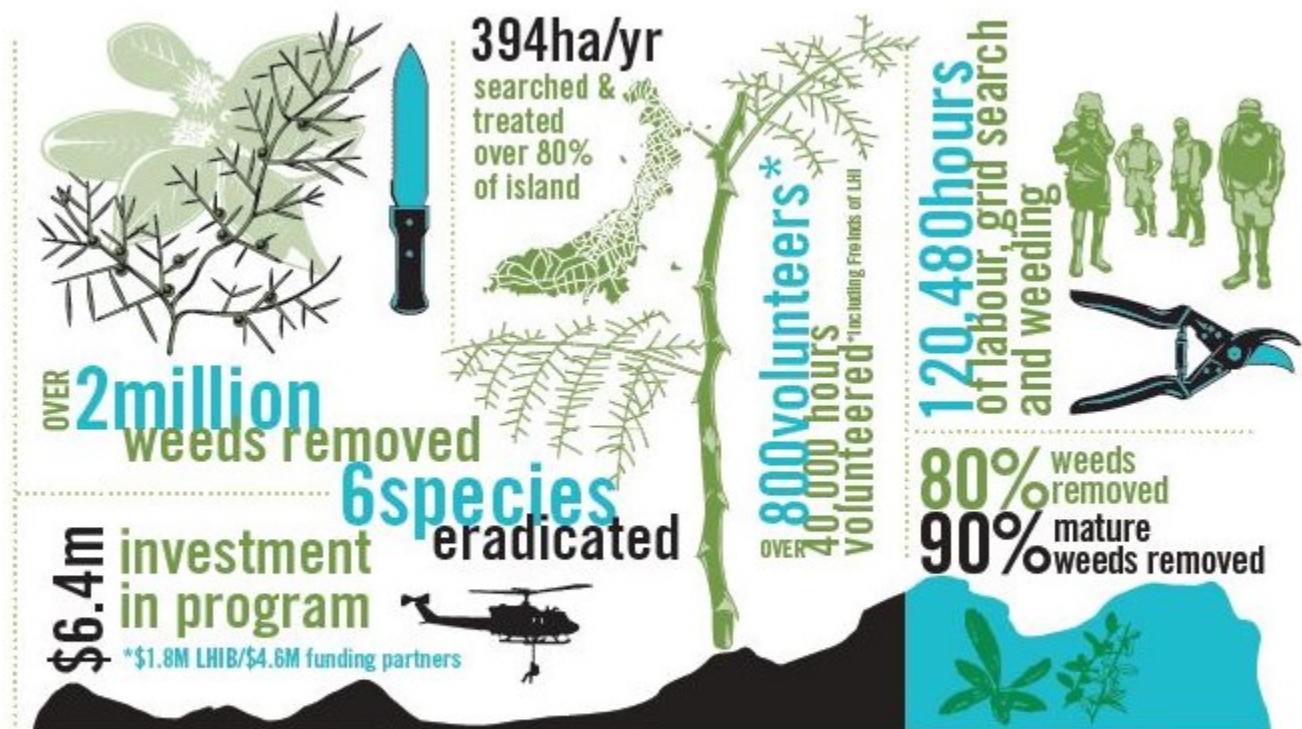
#### **RECOMMENDATION**

The Lord Howe Island Board Annual Report 2015/16, inclusive of Financial Statements, and the Statutory Audit Report are submitted for the information of the Board.

**Prepared** \_\_\_\_\_ Bill Monks      Manager Business & Corporate Services

**Endorsed** \_\_\_\_\_ Penny Holloway      Chief Executive Officer

# LORD HOWE ISLAND BOARD



## LHI weed eradication program results [1 July 2004 to 30 June 2014]

In March 2016 the Lord Howe Island Board celebrated the results of the first 10 years of the weed eradication program. A copy of the Lord Howe Island Weed Eradication Program Results 2004 – 2014 is available at [www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)

## 2015-16 ANNUAL REPORT

This is the sixty third report of the Lord Howe Island Board since the passing of the *Lord Howe Island Act 1953* and covers the period 1 July 2015 to 30 June 2016.



The Hon Mark Speakman MP  
Minister for Environment  
52 Martin Place  
SYDNEY NSW 2000

Dear Minister

We have pleasure in submitting the 63rd Annual Report of the Lord Howe Island Board for the year ended 30 June 2016 for presentation to Parliament in accordance with the *Annual Reports (Statutory Bodies) Act 1984*, the *Public Finance and Audit Act 1983*, the *Lord Howe Island Act 1953* and the Regulations under those Acts.

Yours sincerely



Barney Nichols  
Deputy Chair



Lisa Makiiti  
Elected Island Member

LORD HOWE ISLAND BOARD  
Administrative Office  
PO Box 5  
Lord Howe Island NSW 2898  
Phone: (02) 6563 2066  
Fax: (02) 6563 2127  
Email: [administration@lhib.nsw.gov.au](mailto:administration@lhib.nsw.gov.au)

**Table of Contents**

|  |    |
|--|----|
| Table of Contents .....  | 2  |
| CHARTER .....  | 4  |
| CORPORATE OBJECTIVES .....   | 5  |
| ACCESS.....  | 5  |
| MANAGEMENT AND STRUCTURE .....   | 6  |
| ORGANISATIONAL STRUCTURE .....   | 8  |
| CHAIRPERSON'S REPORT .....   | 9  |
| MANAGEMENT AND ACTIVITIES.....   | 12 |
| CORPORATE AND OPERATIONAL PLANS.....   | 12 |
| STRATEGIC DIRECTION – EFFECTIVE GOVERNANCE AND LEADERSHIP .....                        | 13 |
| STRATEGIC DIRECTION: STRONG AND SUSTAINABLE ECONOMY .....                              | 19 |
| TO SUPPORT THE DEVELOPMENT OF A STRONG AND SUSTAINABLE<br>ECONOMY FOR THE ISLAND ..... | 19 |
| STRATEGIC DIRECTION – SOUND INFRASTRUCTURE .....                                       | 22 |
| STRATEGIC DIRECTION – OUTSTANDING ENVIRONMENT .....                                    | 25 |
| STRATEGIC DIRECTION – RESPONSIBLE LAND MANAGEMENT .....                                | 30 |
| STRATEGIC DIRECTION – STRONG AND ENGAGED COMMUNITY.....                                | 31 |
| LEGAL CHANGE .....   | 33 |
| TRANSFER AND SUBLETTING OF PERPETUAL LEASES.....                                       | 33 |
| GRANTING OF PERPETUAL LEASES .....   | 33 |
| LAND DISPOSAL .....  | 33 |
| ECONOMIC OR OTHER FACTORS .....  | 33 |
| RISK MANAGEMENT AND INSURANCE ACTIVITIES .....   | 34 |
| LIABILITY MANAGEMENT PERFORMANCE .....   | 34 |
| PUBLIC INTEREST DISCLOSURES .....  | 34 |
| IMPLEMENTATION OF PRICE DETERMINATION.....   | 34 |
| REQUIREMENTS ARISING FROM EMPLOYMENT ARRANGEMENTS.....                                 | 35 |
| HUMAN RESOURCES .....  | 35 |
| WORKFORCE DIVERSITY .....  | 36 |
| PERFORMANCE AND NUMBERS OF EXECUTIVE OFFICERS .....                                    | 37 |
| DISABILITY PLANS.....  | 37 |

|   |    |
|---|----|
| RESEARCH AND DEVELOPMENT .....                                | 37 |
| CONSULTANTS.....  | 38 |
| FUNDS GRANTED TO NON-GOVERNMENT COMMUNITY ORGANISATIONS ..... | 38 |
| AGREEMENTS WITH THE COMMUNITY RELATIONS COMMISSION .....      | 39 |
| MULTICULTURAL POLICIES AND SERVICES PROGRAM .....             | 39 |
| PROMOTION .....   | 39 |
| CONSUMER RESPONSE .....                                       | 41 |
| PAYMENT OF ACCOUNTS .....                                     | 41 |
| INVESTMENT PERFORMANCE .....                                  | 42 |
| DIGITAL INFORMATION SECURITY POLICY ATTESTATION.....          | 42 |
| CREDIT CARD CERTIFICATION.....                                | 42 |
| INTERNAL AUDIT AND RISK MANAGEMENT POLICY ATTESTATION .....   | 43 |
| GOVERNMENT INFORMATION (PUBLIC ACCESS) ACT 2009 .....         | 44 |
| PRIVACY AND PERSONAL INFORMATION ACT 1998 .....               | 47 |
| DISCLOSURE OF CONTROLLED ENTITIES .....                       | 47 |
| DISCLOSURE OF SUBSIDIARIES .....                              | 47 |
| AFTER BALANCE DATE EVENTS.....                                | 47 |
| EXTERNAL COSTS INCURRED IN REPORT PRODUCTION.....             | 47 |
| REPORT AVAILABILITY .....                                     | 47 |
| BUDGETS .....   | 48 |
| FINANCIAL STATEMENTS .....                                    | 50 |
| Audit Opinion.....  | 50 |
| Appendix 1 – Financial Statements.....                        | A1 |

# Lord Howe Island Board

This is the sixty third report of the Lord Howe Island Board since the passing of the *Lord Howe Island Act, 1953* and covers the period 1st July 2015 to 30th June 2016.

## CHARTER

The Lord Howe Island Board is a statutory body established under the provisions of the *Lord Howe Island Act, 1953*. The Board is charged with the responsibility of administering the affairs of the Island. "Island" as defined by the Act means the island known as Lord Howe Island and all adjacent islands and coral reefs situated within one marine league measured from low-water mark on the coast of Lord Howe Island together with the islands known as Ball's Pyramid, Wheatsheaf Island, Observatory Rock and South-East Rock and the unnamed islands in the vicinity thereof.

Under the Act, the Board has the following charter:

- a) to provide directly or on behalf of other levels of government, after due consultation, adequate, equitable and appropriate services and facilities for the Island community and to ensure that those services and facilities are managed efficiently and effectively,
- b) to exercise community leadership,
- c) to exercise its powers, authorities, duties and functions in a manner that is consistent with and actively promotes the multicultural principals,
- d) to promote and to provide and plan for the needs of children,
- e) to manage, protect, restore, enhance and conserve the Island's environment in a manner that is consistent with and promotes the principles of ecologically sustainable development set out in section 6 (2) of the *Protection of the Environment Administration Act 1991*,
- f) to manage, protect, restore, enhance and conserve:
  - (i) vacant Crown lands, and
  - (ii) lands reserved or dedicated under section 19 or 19A (including, in particular, the Lord Howe Island Permanent Park Preserve), in a manner that recognises the World Heritage values in respect of which the Island is inscribed on the World Heritage List referred to in the United Nations *Convention Concerning the Protection of the World Cultural and Natural Heritage*,
- g) subject to paragraphs (e) and (f), to promote the Island as a tourist destination,
- h) to have regard to the long term and cumulative effects of its decisions,
- i) to bear in mind that it is the custodian and trustee of public assets and to effectively account for and manage the assets for which it is responsible,
- j) to facilitate the involvement of members of the Board, members of the public, users of facilities and services and the Board's staff in the development, improvement and co-ordination of the Board's powers, authorities, duties and functions,
- k) to raise funds for Island community purposes by the fair imposition of charges and fees, by income earned from investments and, when appropriate, by borrowings and grants,
- l) to keep the Island community and the State government (and through it, the wider community) informed about its activities,
- m) to ensure that, in the exercise of its regulatory powers, authorities, duties and functions, it acts consistently and without bias, particularly where an activity of the Board is affected,
- n) to be a responsible employer.

## CORPORATE OBJECTIVES

**VISION** The Island community is strong and sustainable and the Island environment is protected and enhanced for the benefit of all.

**MISSION** To provide leadership, services and support which contribute to the wellbeing and sustainability of the Lord Howe Island community and its environment pursuant to the Charter in the *Lord Howe Island Act 1953*.

**CORPORATE VALUES** The commitment of the Board members and staff of the Lord Howe Island Board to its residents and stakeholders is underpinned by the following corporate values and principles:

- **Leadership** - Responsible community leadership
- **Selflessness** - Teamwork and loyalty and recognition of effort and achievement.
- **Impartiality** – Fairness and objectivity in all our dealings
- **Initiative** - Creativity and innovation and openness to new ideas.
- **Accountability** - Transparency and accountability in all our dealings
- **Honesty, Openness and Integrity** - Ethical and legal behaviour
- **Respect** - Respect and fairness to all persons
- **Service** - Effective service delivery to the community

## ACCESS

The Board's principal place of business is located on Lord Howe Island. The Board can be contacted through the Chief Executive Officer at the Administration Office located in Bowker Avenue, Lord Howe Island.

MAIL: Lord Howe Island Board, PO Box 5, Lord Howe Island NSW 2898

EMAIL: [administration@lhib.nsw.gov.au](mailto:administration@lhib.nsw.gov.au)

PHONE: 02 65632066

WEBSITE: [www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)

The Board's Administration Office is open during normal business hours - 8:30am to 4:30pm Monday to Friday.

## MANAGEMENT AND STRUCTURE

### BOARD MEMBERSHIP

During the reporting period membership of the Board was as follows:

| Name              | Position  | Term(s)   |
|-------------------|---|---|
| Mr Phil Minns     | Chairperson and Appointed Member - officer of the Department of Premier and Cabinet | 26/06/15 – 27/11/15   |
| Ms Sonja Stewart  | Chairperson and Appointed Member - officer of the Department of Premier and Cabinet | 27/11/15 – 26/11/18   |
| Mr Barney Nichols | Deputy Chair and Elected Islander   | 13/02/09 - 12/02/12<br>13/02/12 - 12/02/15<br>13/02/15 – 12/02/18 |
| Ms Lisa Makiiti   | Elected Islander  | 13/02/12 - 12/02/15<br>13/02/15 – 12/02/18                        |
| Mrs Judith Riddle | Elected Islander  | 13/02/12 - 12/02/15<br>13/02/15 – 12/02/18                        |
| Mr Craig Wilson   | Elected Islander  | 13/02/15 – 12/02/18   |
| Mr John King      | Appointed Member representing the interests of business and tourism                 | 27/11/12 – 26/11/15<br>27/11/15 – 26/11/18                        |
| Mr Robert Pallin  | Appointed Member representing the interests of conservation                         | 27/11/12 - 26/11/15<br>27/11/15 – 26/11/18                        |

Elected Islanders are elected to the Board by the resident Island community every three years. The most recent poll for elected Island members was held on 9 February 2015 with four members being declared elected by the Minister for the Environment for a period of three years from 13 February 2015.

During the reporting period, the Board met on the following occasions:

- September 2015 - apologies Mr J King
- November 2015 - all Board members in attendance
- March 2016 - all Board members in attendance
- June 2016 - apologies Ms L Makiiti, Mr R Pallin, Mrs J Riddle

The Board also held a special meeting by teleconference in April 2016.

The chairmanship of Mr Phil Minns ceased in November 2015 as a consequence of his departure from the NSW Department of Premier and Cabinet.

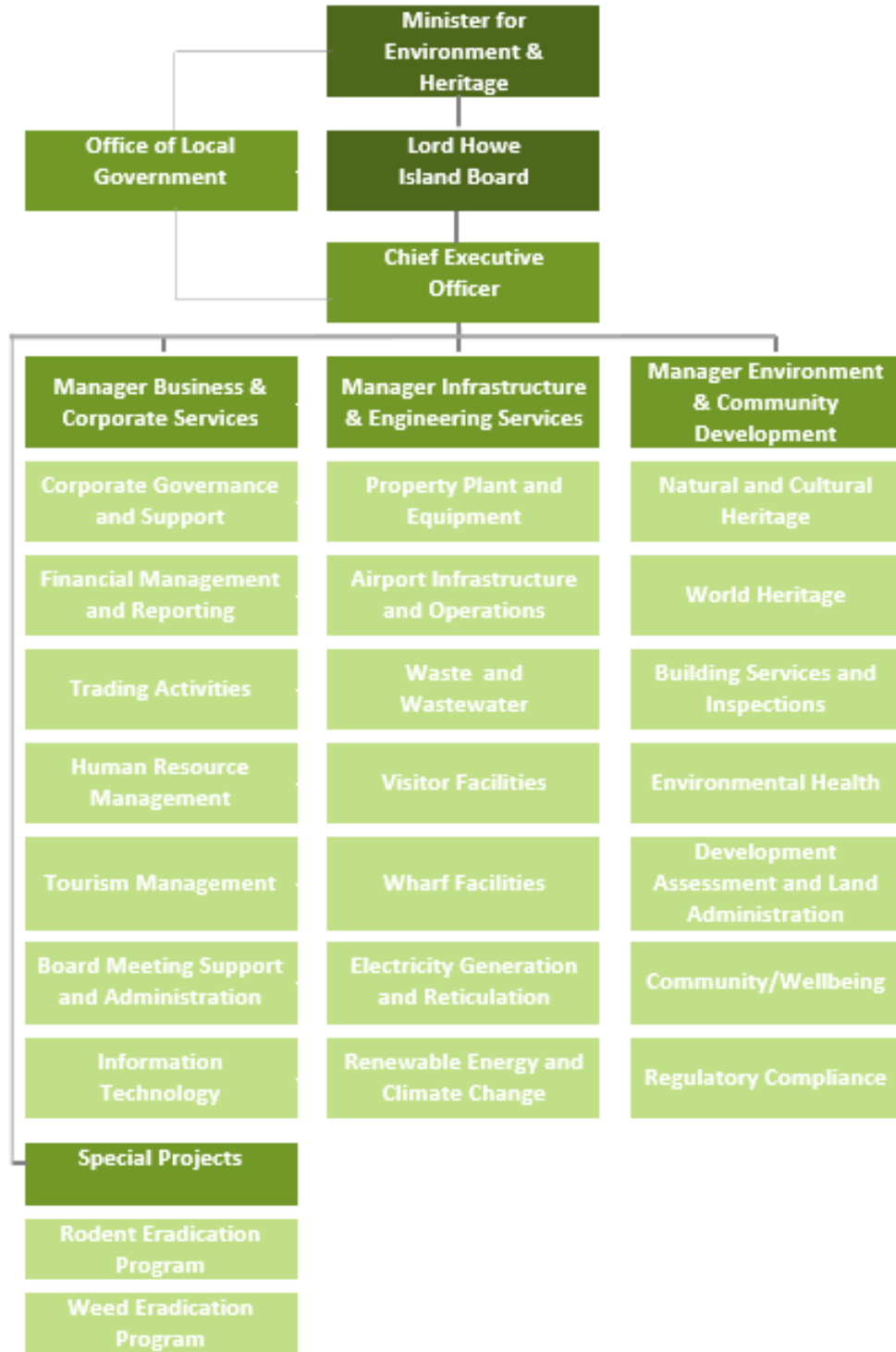
Board meetings are generally held in public, with the exception of items relating to commercial and business affairs, staff and personnel issues, legal matters and items affecting the private affairs of individuals. Members of the public are informed of the outcome of meetings through publication of minutes of the meetings. The Board has a Code of Conduct for Board Members and Officials. The Code is available on the Board's website along with the Board Meeting Code of Practice.

## SENIOR OFFICERS

During the reporting period the following persons held executive and senior positions within the Board's administration:

| Name              | Position                                      | Qualifications   |
|-------------------|---|--|
| Ms Penny Holloway | Chief Executive Officer                       | Bachelor of Arts (Honours), Bachelor of Social Work, Graduate Diploma in Public Policy, Master of Urban Planning |
| Mr Bill Monks     | Manager Business & Corporate Services         | Master of Business Administration (Finance)  |
| Mr Andrew Logan   | Manager Infrastructure & Engineering Services | Bachelor of Engineering (Environmental)  |
| Mr David Kelly    | Manager Environment & Community Development   | Bachelor of Applied Science, Master of Natural Resources   |

## ORGANISATIONAL STRUCTURE





# Year in Review

## CHAIRPERSON'S REPORT

It gives me great pleasure to provide the Chair's report to the Lord Howe Island Board Annual Report 2015–16.

I was appointed Chair of the Lord Howe Island Board in November 2015. I am pleased to have the opportunity to provide leadership to the Board of this unique and vital organisation.

I would like to acknowledge my predecessor, Mr Phil Minns, and recognise his contribution to the LHI Board's achievements over his time as Chair. The Board benefited greatly from his knowledge of the workings of government and his ability to find a way through complex problems.

In addition to the Board carrying out its wide range of statutory functions under The Lord Howe Island Act 1953 and the provision of other public services, the 2015 -16 financial year saw completion of and significant progress made in several major projects that will have an important and positive impact on the Island.

### **Air Services**

In October 2015, the \$8 million airstrip runway resealing project, jointly funded by the NSW and Commonwealth Governments, was completed. The newly sealed runway was officially opened in November 2015 by the Hon Michael McCormack MP, Assistant Minister to the Deputy Prime Minister, and the Hon Leslie Williams MP, Member for Port Macquarie and Minister for Early Childhood Education, Minister for Aboriginal Affairs and Assistant Minister for Education, representing the NSW Minister for the Environment.

A high-level Air Services Working Group consisting of NSW Government and Board representatives was established and met for the first time in March 2016, with the aim of investigating and advising the LHI Board on options for securing long-term air services to the Island. Air services consultants were engaged to investigate and evaluate operators, operating models and options for regular passenger transport services to the Island. This work was completed in June 2016. Grant funding has also been sought to undertake a comprehensive feasibility study into extending the airport runway.

Representatives of the Board and QantasLink met several times during the year as work continues to ensure the Island will have a viable airline service after the current five year licence period expires in March 2018.

In late 2015, the Board was successful in obtaining \$1.8 million in funding through Restart NSW for a major refurbishment or rebuild of the Airport terminal building. Architects have been appointed to the project and the design of the building has been completed.

### **Rodent Eradication Project**

The Rodent Eradication Project continued working through the planning and approvals stage during the financial year. Key staff were appointed and applications for approval were submitted to the Australian Pesticide and Veterinary Medicine Authority in relation to the use of the proposed pesticide and to the Federal Department of the Environment for consideration of the project under the Environment Protection and Biodiversity Conservation Act 1999. The Minister for the Environment requested of the Minister for Resources and Energy the services of the NSW Chief Scientist and Engineer in overseeing an independent Human Health Risk Assessment for the project.

### **Renewable Energy Project**

Good progress has been made on the move to a hybrid renewable energy system for the Island. The development application for the construction of the central solar photovoltaics (PVC) array and storage batteries was approved by the Board in November 2015. The tender for the procurement and installation of the solar photovoltaics and battery storage system was advertised and received a great degree of interest from prospective suppliers. The contract will be awarded shortly after an exhaustive evaluation process.

In relation to the wind turbine component of the project, extensive community consultation has been undertaken and several noise studies have been completed including a study of potential infrasound impact. Consultants were engaged to prepare the environment and visual impact assessments which form part of the development application. This will be considered before the end of 2016.

### **Environment Protection works**

The emergency environment protection works to address accelerating erosion on Lagoon Beach at Windy Point commenced in October 2015 and were completed in May 2016. The resulting rock wall has demonstrated good capacity to withstand weather and tidal impacts to date. Works further along the lagoon up to and including the Pinetrees Boatshed will be undertaken in late 2016.

### **Weed Management and Eradication**

In March 2016, the Board hosted a celebration of the successes in weed management and eradication on the Island over the past 10 to 20 years, acknowledging the input of many including the valuable contribution of volunteers. The investment of funds by the Board and major grants by many agencies adding up to just under \$7 million over the period was acknowledged with gratitude.

The weed strategy was also reviewed and the draft Weed Management Strategy 2016 was placed on public exhibition.

### **Wastewater Management**

Good progress has been made in implementing the Wastewater Management strategy on the Island, with many new wastewater systems being installed, including at Board properties during the financial year. However acknowledging the magnitude of the task and the amount of work involved, in March 2016, the Board extended the deadline for high risk systems to be compliant with the Wastewater Strategy for one year to 30 April 2017.

### **Waste Management Facility**

In June 2016, the Board considered options on composting technology options suitable to replace the existing vertical composting unit to ensure that compost is processed and sufficiently pasteurised to meet the NSW Environment Protection Agency's regulatory requirements. The Board agreed to proceed to a selective tender to procure a suitable unit to be installed in the next financial year.

### **Land issues**

The Board considered numerous land and leasehold issues during the year. In response to community concern, the Board's Administration prepared a preliminary report which outlined the legislative and policy framework in place on the Island, housing supply and demand, and options to moderate price increases on the Island. Further work is to be done on this issue.

The Handley report into the review of land allocation and tenure on the Island is currently with the NSW Government. The Minister for the Environment advised during his visit to the Island in August 2016 that a response should be expected by the end of 2016.

In concluding this report I would like to thank Chief Executive Officer, Penny Holloway, and the entire Board staff for their efforts during the year. The significant progress that was made, as outlined above, could not have been achieved without their invaluable contribution.

I would also like to thank Deputy Chair, Barney Nichols, elected Board members, Lisa Makiiti, Judy Riddle and Craig Wilson and appointed Board members John King and Rob Pallin, for their excellent contribution and support during the year.

I look forward to a challenging and exciting year ahead.



Sonja Stewart  
Chair

## MANAGEMENT AND ACTIVITIES

### CORPORATE AND OPERATIONAL PLANS

The Corporate Plan sets out the framework for the Board to continue delivering quality outcomes for the Island community and its many visitors. The Corporate Plan is a strategic document that identifies priority issues for the Island, outcomes proposed to address the priority issues and the strategies to achieve those outcomes.

Each financial year the Board prepares an Operational Plan which outlines specific outputs, activities and measures that are in response to the Corporate Plan's direction. The Board's adopted budget is consistent with its annual Operational Plan.

At the end of each financial year the Board's overall performance against the Operational Plan and success to date in addressing the outcomes of the Corporate Plan are reported to the community through the Annual Report.

The strategies and outcomes within the Corporate Plan are based on the following strategic directions:

- EFFECTIVE GOVERNANCE AND LEADERSHIP
- STRONG AND SUSTAINABLE ECONOMY
- SOUND INFRASTRUCTURE
- OUTSTANDING ENVIRONMENT
- RESPONSIBLE LAND MANAGEMENT
- STRONG AND ENGAGED COMMUNITY

## STRATEGIC DIRECTION – EFFECTIVE GOVERNANCE AND LEADERSHIP

### TO ENSURE THE PROVISION OF EFFECTIVE GOVERNANCE AND COMMUNITY LEADERSHIP FOR THE ISLAND.

STRATEGY - ENSURE ACCOUNTABILITY, FAIRNESS AND TRANSPARENCY IN THE BOARD'S DECISION-MAKING AND RELATIONSHIPS WITH ALL ITS STAKEHOLDERS

Scheduled Board meetings are held four times per year, with additional special meetings held as required. Agenda items are discussed and considered in open session (i.e. open to the public), with the exception of items relating to commercial-in-confidence and business affairs, personnel issues, legal matters and items affecting the private affairs of individuals. Open session papers are made available to the public prior to Board meetings via the Board's website. Minutes of Board meetings are also made available via the Board's website.

The Board has adopted a Code of Conduct, which incorporates all of the mandatory provisions of the Model Code issued by the Office of Local Government. The Code of Conduct applies only to "Board officials", that is, Board members, Board committee members, conduct reviewers and delegates of Board.

Board staff are employed under Part 4 of the *Government Sector Employment Act 2013* to enable to Board to exercise its functions. Therefore the Code of Ethics and Conduct for NSW government sector employees applies to Board staff.

#### **Delegated Authority**

Under the *Lord Howe Island Act 1953* the Board may, with the approval of the Minister, authorise any officer to exercise on behalf of the Board specific powers, authorities or duties.

Under the *Protection of the Environment Operations Act 1997* (POEO), the Board is the Appropriate Regulatory Authority (ARA) for most non-scheduled activities on Lord Howe Island. This gives the Board certain powers to deal with pollution incidents in regard to matters for which it is the ARA. To allow for the efficient administration of the POEO on Lord Howe Island, in February 2011 the Minister authorised the Chief Executive Officer of the Board to exercise the powers of the Board as ARA under the POEO.

The delegation allows for efficient and timely decision making and appropriate services delivery in relation to the day to day administration of the island.

#### **Budget Process**

The financial year 2015/16 budget was developed in concert with the Corporate Plan 2014-2016, the Operations Plan 2015/16 and the Schedule of Fees and Charges for 2015/16.

The Board reviews the Annual Budget on a quarterly basis, endorsing amendments to the Budget as appropriate. This becomes necessary, for example, where the Board is successful in receiving additional external grant funds or where savings are identified in the Expenditure Budget.

An External Audit of the 2015/16 end of year accounts was conducted by the Audit Office of New South Wales. The audit was designed to obtain reasonable assurance the financial statements are free from material misstatements. The audit did not detect any significant matters that require reporting in the Statutory Audit Report. The Audit opinion is included on page 50 of this Report.

### **Organisational Structure**

The Board's organisational structure is reviewed annually to ensure that it efficiently and effectively provides appropriate resources to allow the Board to undertake its charter and provide a range of services to the community.

### **STRATEGY - ENSURE CORPORATE GOVERNANCE PRACTICES MEET LEGISLATIVE REQUIREMENTS**

The Board has policies and procedures in place to ensure that all legislative requirements are met, and that good corporate governance practices are implemented. The Board proactively contributes to any reviews of legislation or guidelines.

In March 2014 The Hon. Ken Handley (AO QC) was commissioned by the NSW Government to conduct a comprehensive review of the current land allocation and tenure arrangements on Lord Howe Island. The Terms of Reference identify four key areas for consideration:

- Forms of tenure,
- Land allocation methods,
- Strategies to increase land and housing supply, and
- Economic sustainability.

It is expected that the government's response to the recommendations of the Handley review will be made public in the near future.

The Board has commenced a two stage review process of the *LHI Local Environmental Plan 2010* (the LEP). Stage 1 of the review process involves a number of known and more straightforward amendments to the plan.

A longer second stage of the review will address the potential for more fundamental and complex changes to the planning controls such as restrictions on the number of dwellings and tourist accommodation, and will address any recommendations from the Handley Review.

Following consultation, in April and May 2016, the Board has prepared a planning proposal, which seeks to make 22 separate amendments to the current LEP.

At the Lord Howe Island Board Meeting of 6 June 2016, the Board resolved to forward the planning proposal to the Department of Planning and Environment's LEP Gateway Review Panel to seek a Gateway determination from the Minister for Planning in accordance with Section 56 of the *Environmental Planning & Assessment Act, 1979*.

The Department of Planning and Environment will review the proposed changes and the document will be placed on public exhibition for a second round of consultation before making any changes.

## **Audit and Risk Committee**

An Audit and Risk Committee (ARC) is required in order to meet the requirements of NSW Treasury's Policy TPP 09-05 Internal Audit and Risk Management Policy for the NSW Public Sector.

The Department of Planning and Environment's (DPE) ARC provides risk management services to the Board, thus minimising the administration, financial costs and resource implications associated with an ARC. The ARC convenes at least four times per year.

## **Advice to Government**

The Board provides relevant and timely advice to Government on matters affecting the management of the island. Briefings and submissions as required are prepared for the Minister for the Environment and his office, DPE, NSW Treasury and the Office of Local Government.

## **STRATEGY - WORK TO ACHIEVE LONG TERM FINANCIAL SUSTAINABILITY**

In 2013 the Board engaged PricewaterhouseCoopers (PwC) to comprehensively assess the financial position of the Board and identify and evaluate options to move to a more sustainable revenue base.

The review assessed the current financial position of the Board, including a review of how that position will change over time if the current expenditure and revenue raising options are held in place. The review concluded that the Board generates just enough revenue (including annual recurrent funding from NSW Treasury) to meet ongoing cash operating expenses, but has very limited ability to fund its capital program.

The review also identified options for raising revenue to support and sustain the Board's ongoing services and ensure its financial sustainability into the future.

Since completion of the Review the Board has implemented many of the PwC recommendations.

NSW Treasury has indicated its willingness to work with the Board to ensure that the Board's base funding is adequate to maintain its core activities and be sustainable in the future without an over-reliance on one-off grants. It is hoped that new funding arrangements will be in place for financial year 2016-17.

## **Fees and Charges**

The Board has a comprehensive schedule of fees and charges which is updated annually during the budget process. A market-based approach is implemented for all of the Board's revenue raising activities.

The Board's Pricing Policy incorporates six classifications of fees and charges:

- Statutory charge: A statute dictates the amount to be charged.
- Zero cost recovery: Where there is significant community benefit and the services would not be provided if other principles were used to fund them.
- Partial cost recovery: Where the imposition of a fee or charge to recover full cost may result in widespread evasion, and where a service is subsidised to stimulate demand for activities with economic or social benefits.



- Full cost recovery: Where the fee or charge is calculated based on the full recovery of costs.
- Commercial business activity: Goods and services provided are of a commercial nature and pricing is based on commercial principles. Demand management: Fees and charges are greater than the direct cost of providing the service so as to become a disincentive for their use.

Formal lease agreements are in place for commercial premises owned by the Board. Independent valuations of all leased premises, both commercial and residential, are carried out every three years.

#### STRATEGY - ENSURE RISKS ARE PROPERLY MANAGED

The Board is currently refreshing its Risk Management Policy and Guidelines to help ensure that risk is managed systematically, effectively and efficiently. The Board's risk management policies and procedures are based on the Australia New Zealand Risk Management Standard.

A central Register to record identified risks and actions taken to mitigate the risk has been developed, and is presented to the Board annually for review and comment. The Register classifies risk for all categories specified within the Risk Management Policy.

Risk Treatment Plans are developed to manage risk impacts. These are tabled at monthly management meetings.

A Workforce Plan has been developed in order to ensure business continuity in the event of staffing disruptions, such as the resignation of key staff members at short notice.

#### STRATEGY - PROVIDE INTERNAL IT AND COMMUNICATIONS SYSTEMS WHICH ARE SECURE, STABLE AND SUPPORT BUSINESS OPERATIONS

The Board owns and manages its own satellite-based internet service. Consequently the Board is not reliant on external service providers. The service is very reliable.

The Board's Information & Communications Technology hardware and software supports the delivery of corporate services, and has a record of greater than 99 per cent uptime during business hours.

#### STRATEGY - PROVIDE EFFICIENT AND EFFECTIVE RECORDS MANAGEMENT AND INFORMATION MANAGEMENT

In the 2016-17 financial year the TRIM electronic records management system will be introduced. TRIM is a compliant Electronic Document and Records Management System and can be used to manage both electronic and hardcopy records. TRIM integrates with MS Office and Outlook to facilitate the storage and retrieval of emails, Word, Excel, Powerpoint and Project documents, as well as many other file formats, including JPEG, PDF and TIFF.

The introduction of TRIM will necessitate comprehensive training of many members of staff. It will also require changes to records management and ICT policies and procedures.

#### STRATEGY - ENSURE EFFECTIVE MANAGEMENT OF HUMAN RESOURCES

Attracting, developing and retaining an effective workforce present ongoing challenges for the Board. With an average permanent population of about 350 people and a paucity of qualified or skilled local



job seekers, training plays a key role in developing an effective work force and contributing to job satisfaction. This, in turn, assists in staff retention.

Many specialised skills are not available locally. Therefore the Board has developed relationships with several external organisations for the provision of specialist services. For example, the Board has a Memorandum of Understanding (MOU) with Port Macquarie Hastings Council (PMHC). The establishment of such an alliance has enabled the Board to access the extensive resources and expertise of PMHC and more efficiently manage variable workloads on the island. Under the MOU the Board is able to access PMHC specialist staff in the fields of building inspection and compliance, health compliance and waste management.

### **Workplace Health and Safety**

In view of the remoteness of Lord Howe Island and the limited medical facilities available locally, very close attention is paid to Workplace Health and Safety (WHS) in order to ensure the health, safety and welfare of employees. The WHS Management Plan is reviewed annually to ensure that it reflects best practice. Injuries and incidents are regularly reviewed and plans developed to minimise similar future occurrences. Comprehensive training is provided as required, often with the assistance of specialist trainers from the mainland.

The Board maintains a comprehensive Risk Register. Risks are assessed, rated and evaluated. Risk Treatment Plans are prepared for all risks rated Extreme or High, and reviewed regularly.

### **Work and Development Plans**

All staff have an annual Work and Development Plan. The Plan provides a framework to support individual development and organisational performance. More specifically, the purpose of the Plan is to:

- Enable alignment between the strategic direction of the Board and the work undertaken by staff,
- Be clear on what is expected of staff and assist with their development ,
- Provide a means of evaluating achievement and improving performance,
- Provide a way of aligning staff behaviours with the Board's values, and
- Facilitate ongoing regular two way communication between a staff member and his or her supervisor.

Meetings between the staff member and his or her supervisor are held biannually.

### **Workforce Planning**

A Workforce Plan, which incorporates a succession planning component, has been completed. The Board's Workforce Planning process is designed to match workforce requirements with organisational objectives, now and into the future. It provides the Board with direction and helps identify future desired workforce structure and composition. The Plan aims to have the right people in the right place at the right time, taking into account Lord Howe Island's remote location.

The Workforce Plan takes account of the constraints in which the Board operates and contributes to the attraction, retention and development of a capable workforce that delivers the Board's strategies and ensures adequate and appropriately skilled staff employed in the most effective and sustainable way.

The Workforce Plan encapsulates existing workforce policies and procedures and underpins the Board's ability to deliver on its Corporate Plan.

### **Organisational Structure**

The Board's organisational structure provides the framework around which the Board is organised. The structure is aligned to strategic priorities and legislative requirements with a view to efficient and effective service delivery. The best structure for any organisation depends upon who its members are, what the setting is, and how far the organisation has come in its development. Three elements are inherent in the organisational structure:

- Governance,
- Rules by which the Board operates, and
- A distribution of work.

A review of efficiency, which includes an appraisal of the Board's organisational structure, is undertaken annually.

### **STRATEGY - PROVIDE TIMELY AND PROACTIVE COMMUNICATION TO ALL STAKEHOLDERS**

During the reporting period the Board published and distributed Community Information Bulletins and Householder notices in order to provide information to the community on current issues and Board projects. The Chief Executive Officer (CEO) also contributed regularly to the local newspaper, the Signal. The Board continued to provide a wide variety of information via its website, [www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au).

Members of the community have the opportunity to raise issues with the elected Board members, who meet fortnightly with the CEO to discuss local issues. Furthermore, issues may also be raised with the CEO or relevant staff members.

Community input to the decision-making process was evidenced by the following:

- The Sustainable Energy Working Group,
- The Boat Launch and Retrieval Working Group,
- The Coastal Hazards Study Steering Committee, and
- The Rodent Eradication Project Community Working Group.

Community information sessions were held during the reporting period in relation to the Sustainable Energy Project and the Weed Eradication Program.

A Communication and Community Engagement Strategy is currently under development, following the completion of a comprehensive Communication and Community Engagement Survey.

## STRATEGIC DIRECTION: STRONG AND SUSTAINABLE ECONOMY

### TO SUPPORT THE DEVELOPMENT OF A STRONG AND SUSTAINABLE ECONOMY FOR THE ISLAND

#### STRATEGY-MARKET THE ISLAND AS A TOURIST DESTINATION

Under the *Lord Howe Island Act, 1953* the Board's charter includes promoting the island as a tourist destination. This is achieved by working in harness with the Lord Howe Island Tourism Association. The Association represents all tourism related businesses on the island. It is managed by a Committee comprised of seven elected members and two appointed members: the CEO of the Board and a QantasLink representative.

The Board contributes in excess of \$100,000 annually directly to the Tourism Association for promotional activities. With contributions from member organisations and Destination NSW, the Association's total annual budget is about \$250,000 annually.

The Board's major contribution to the marketing mix is the maintenance and enhancement of the island's primary tourism product, the Permanent Park Preserve, with annual expenditure in excess of \$900,000. The Board also maintains and enhances the sustainable tourism product through the provision of infrastructure, engineering and environmental services.

The Board provides significant in-kind support to the Tourism Association, such as the provision of office space and internet access.

The island's Destination Management Plan is developed jointly between the Tourism Association, Destination NSW and the Board. It is a business plan for building and managing the visitor economy for the island. The Plan captures and presents the information, learnings and actions identified through the Destination Management processes. It facilitates the sharing of information with stakeholders so that they can use it as a guide to manage and invest in the island's economy.

#### STRATEGY - FOSTER AN ENVIRONMENT THAT SUPPORTS SUSTAINABLE ECONOMIC DEVELOPMENT

The *Lord Howe Island Regulation 2014* requires that a person must not provide tourist accommodation or carry on any other commercial undertaking on the island except in accordance with a licence granted by the Board for that purpose. Furthermore, all businesses on Lord Howe Island are required to operate in accordance with all the requirements of the NSW Department of Fair Trading for each business type, and comply with all statutory and regulatory requirements. Businesses that have a high risk of serious injury to people and/or high risk of serious damage to the environment must satisfy additional conditions imposed by the Board.

The Board supports sustainable economic development primarily through the provision of supporting infrastructure. The Board manages and maintains the airport, wharf, buildings, roads and other infrastructure. It also maintains the Settlement area and the Permanent Park Preserve. Over the next 10 years capital expenditure of over \$10 million is planned.

In recent years the Board has been successful in obtaining grants for both operational and capital purposes. About 75 per cent of the Board's funding comes from both recurrent and on-off grants from the NSW Government, and one-off grants from the Australian Government for specific purposes or projects. Consequently only about 25 per cent of the costs of services delivered by the Board are borne by local residents and businesses, thereby facilitating investment in sustainable development.

The Board strives to incorporate the principles of a "triple bottom line" in all development and community activity. The triple bottom line approach adopted by the Board focuses attention not just on the creation of economic value, but also on environmental and social value. It is used to capture the whole set of values, issues and processes that the Board must address in order to minimise any harm resulting from its activities and to create economic, social and environmental value. This involves articulating the Board's purpose and taking into consideration the needs of all the Board's stakeholders – the local community, customers, employees, business partners, the NSW Government and the Australian Government.

### **Plant Nursery**

A private company, Kentia Fresh Pty Ltd, holds a long term lease on the former Kentia palm nursery. The company is implementing a two stage approach, with the following activities in Stage One:

- Production and sale of Kentia palm seedlings and, depending on demand, sale of semi-mature Kentia palms,
- Vegetable and fruit production pursuant to an initial pilot program,
- Native plant production for local sale and Board revegetation initiatives,
- Limited tourism activities, including the Phasmid House and tours of the Kentia nursery, and
- Feasibility studies regarding future tourism initiatives.

Stage One has been largely implemented.

In Stage Two the company will develop and implement the feasible tourism initiatives identified in Stage One.

The Board is very supportive of the nursery development. Board staff meet regularly with the lessees to develop cooperative plans.

### **Internet Services**

Internet services on the island have been poor for many years. However, following lobbying at State and Australian Government level island residents and businesses now have access to the National Broadband Network. A fast, reliable, affordable internet service supports business development and broadens channels of communication for many businesses on the island.

### **STRATEGY-EFFECTIVELY MANAGE THE BOARD'S BUSINESS ENTERPRISES**

In accordance with the *Lord Howe Island Regulation 2014*, the Board has a monopoly on the wholesaling of liquor on the island. Liquor is sold through retailers and other commercial operators, such as restaurants, as well as directly to the public at the Board's retail Liquor Store. In the financial year the Liquor Store generated a profit of \$380,000 on sales of \$1.68 million.

The Board owns and operates the island's airport, wharf and associated facilities.

A per passenger landing fee, collected by QantasLink on the Board's behalf, covers all operational and capital costs associated with the operation and maintenance of the airport. A per passenger environmental levy, also collected by QantasLink on the Board's behalf, contributes to the costs associated with the maintenance and enhancement of the Permanent Park Preserve.

A fee is applied to goods received at the island's wharf on a weight or volume basis. Charges are also applied for use of the wharf facilities by the crew of visiting yachts.

#### **STRATEGY - EFFECTIVELY MANAGE THE BOARD'S COMMERCIAL LEASES**

Formal lease agreements are in place for commercial premises owned by the Board. Valuations of all leased premises are determined by a qualified valuer every three years. Lease fees are adjusted annually between valuations to reflect changes in the consumer price index.

#### **STRATEGY - TAKE ACTION TO ENSURE APPROPRIATE AND ADEQUATE SERVICING OF THE ISLAND BY A MAJOR AIRLINE**

A regular, reliable air service of sufficient scale to satisfy demand on the Lord Howe Island route from Sydney is fundamental to the economic viability of the island and community well-being.

In New South Wales there are 14 regulated air routes on which airlines, following a competitive Expression of Interest process, have been granted exclusive access by the NSW Government. regulated routes are generally those routes linked to Sydney Airport which have fewer than 50,000 passengers annually. The purpose of the exclusive access is to maximise the volume of passengers carried by the airline, thereby contributing to its commercial viability. The route from Sydney to Lord Howe Island is a one such route. The Lord Howe Island route licence, currently held by QantasLink, expires in March 2018.

A high-level Air Services Working Group consisting of NSW Government and Board representatives has been established with the aim of investigating and advising the LHI Board on options for securing long-term air services to the Island. Air services consultants were engaged to investigate and evaluate operators, operating models and options for regular passenger transport services to the Island. This work was completed in June 2016. Representatives of the Board and QantasLink met several times during the year as work continues to ensure the Island will have a viable airline service after the current five year licence period expires in March 2018.

The Board is developing, in conjunction with Destination NSW, Transport for NSW and Infrastructure NSW a strategy for the possible extension of the runway in order to accommodate larger aircraft than the Dash 8 (200) currently used by QantasLink. Grant funding has also been sought to undertake a comprehensive feasibility study into extending the airport runway.

The Board has been successful in sourcing a \$1.8 million grant from the Restart New South Wales, Regional Airport Infrastructure Grants Fund. This funding will be used to rebuild and upgrade the airport terminal building. The upgrade will include a larger area for passengers and visitors, new and improved toilet facilities, an improved and enlarged refreshment area, a covered baggage collection area and biosecurity facilities. However, the traditional look and feel of the building will be retained. The building has been designed to be:

- Flexible to allow changes in use of the building and tenants;
- Easily expandable, so that if an aircraft with larger capacity should ever fly the route consistently, the building could be expanded to accommodate the additional passengers, and
- Provide a gateway experience which doesn't detract from the views of the mountains.

## STRATEGIC DIRECTION – SOUND INFRASTRUCTURE

### TO DEVELOP AND MANAGE THE ISLAND'S PUBLIC ASSETS AND INFRASTRUCTURE AND ENSURE THE PROVISION OF EFFECTIVE SERVICES TO THE ISLAND COMMUNITY AND VISITORS

#### STRATEGY – PROVIDE SOUND ASSET MANAGEMENT

The Board's key tool in asset management is the Total Asset Management Plan (TAM Plan) which is reviewed and implemented annually.

Under the Restart NSW - Regional Tourism Infrastructure Program, the Board was successful in receiving \$1.8 million of funding for the upgrading of the airport terminal building. Progress has been rapid towards meeting the ambitious 2017 construction program.

The risks from coastal erosion to a section of public road and underground electrical infrastructure were addressed during 2016, taking advantage of barge movements to the Island for the runway resurfacing project. The placement of rock to form a protective wall along a 30m long section of beach near Windy Point, was completed, with the remaining half to be completed in 2016/17.

The Board is preparing a walking track strategy which aims to provide a network of diverse walking experiences which meet agreed safety standards. The draft strategy is expected to be placed on public exhibition in November 2016. The Board has completed cyclic maintenance of all walking tracks, together with replacement of two bridges on Boat Harbour Track to comply with Australian Standards. Safety works on the Intermediate Hill Viewing Platform have been carried out, and improvement works are continuing at Mt Eliza Track.

#### STRATEGY - MAINTAIN RECREATIONAL FACILITIES FOR VISITOR AND COMMUNITY USE

A significant amount of time is allocated to maintaining the Board's recreational assets in the settlement area including BBQ and picnic areas, and the playground. This work is ongoing and their high use will require a sustained investment to meet the expectations of the community and visitors.

A new and robust shade sail was installed over the Playground area to provide a safe and sun protected area for the many young children and their families on the Island to enjoy.

#### STRATEGY - OPERATE AERODROME SAFELY FOR REGULAR PASSENGER TRANSPORT (RPT) SERVICES, MEDICAL EVACUATIONS AND GENERAL AVIATION

Despite the small number of aircraft movements, the Aerodrome continues to demonstrate its importance to the Island's economy and community through the attention it receives.



The resurfacing of the runway and taxiway surface with asphalt, which commenced in the 2014-15 year, was successfully completed in late 2015. The \$8 million project was jointly funded by the Federal and State governments, and was completed within budget and without any delays to regular flights to and from the Island.

The Board takes its responsibilities in Aerodrome management seriously, demonstrated through achievement of ongoing compliance with CASA rules, updating of the Aerodrome Manual and further work on mitigating risks at the aerodrome, including bird hazards. A significant improvement to the aerodrome's safety, was the removal of a long term hazard in the form of 15 Norfolk Island Pines at the Windy point end of the runway.

#### STRATEGY- MAINTAIN ROAD NETWORK IN GOOD CONDITION FOR ALL ROAD USERS

The Island's road network plays an important role in the tourist experience, with bicycle riding and pedestrians, representing the major forms of transport for most visitors around the Island. The focus of road maintenance is to ensure that the major risks to road users are managed as well as possible, given the less than optimum nature of road construction and drainage around the network.

The Board responds to requests for repairs and improvements within its normal maintenance schedule.

A number of sections of road including Smoking Tree Ridge Road and the last section of unsealed road to the new Powerhouse were rehabilitated and sealed with bitumen during the year.

#### STRATEGY - MAINTAIN WHARF TO SERVE SHIPPING CONTRACTOR, CHARTER OPERATORS AND VISITING BOATS

The wharf is another essential piece of infrastructure for the Island. The wharf has been continuously available throughout the 2015/16 year. The installation of new fendering on the side of the wharf during the year has reduced the wear and tear on the wharf and the *Island Trader* ship.

The wharf continues to service a variety of users including the regular freight service from Port Macquarie, charter boat operators, fishing and other recreational users.

#### STRATEGY - MAINTAIN BOARD BUILDING AND PROPERTY ASSETS

The Board has responsibility for a large portfolio of building assets including eight residences and more than fifteen other separate buildings.

The TAM Plan continues to drive the maintenance of the Board's building assets. The annual audit of these assets by Board staff provides the necessary information to plan future maintenance.

With the old Powerhouse building removed from the central settlement area, the final phase of rehabilitation of the site was completed with the removal of the underground fuel tanks and old concrete slabs. The site now awaits use as open space for the community and visitors.

Following recommendations from NSW Health engineers in 2015, significant improvements were realised at the Hospital, including electrical upgrades, new air conditioning units and removal of the internal carpet floor covering and replacement with hospital grade vinyl. This work was funded by NSW Health, and completed with the cooperation and support of the Board. The replacement of the original

roof on the Board's Depot shed roof was a significant achievement and now provides suitable all weather protection for some of the Board's equipment, workshop and mechanic.

An important safety element on building maintenance was addressed during the year, with the roll-out of working at heights training for Board staff, enabling maintenance work, particularly on roofs, to be carried out with lower risks.

#### STRATEGY - PROVIDE FACILITIES IN CONJUNCTION WITH ROADS AND MARITIME SERVICES FOR ALL ISLAND BOAT USERS TO SAFELY AND EFFICIENTLY LAUNCH, RETRIEVE AND MAINTAIN BOATS IN AN ENVIRONMENTALLY SOUND MANNER

For several years, the Board has been working with the boating community and wider community on a solution for the slipping of larger vessels on the Island for maintenance and survey inspections. Funding has previously been secured from Transport for NSW to undertake further design development on a slipway solution at the Waste Management Facility. This work continued during 2015-16, and is expected to achieve development consent in late 2016, allowing construction by the middle of 2017.

#### STRATEGY - PROVIDE RELIABLE AND EFFICIENT ELECTRICITY SUPPLY

The provision of a reliable and efficient electricity supply continues to be well managed for a distribution system which is aging. However, with the relatively new powerhouse assets and close management of the entire network, unplanned outages during the year were below previous years.

A significant amount of work has been undertaken on planning and design for the Island's renewable energy project. With grant funding from the Australian Renewable Energy Agency and a loan from NSW Treasury, the major achievements for the \$10 million project have included:

- ongoing community consultation
- completion of environmental assessment work for the solar, battery and control system aspect of the project, including development consent in late 2015
- commencement of environmental assessment for the wind turbine aspect of the project, including additional noise studies and bird monitoring

The project will continue to demand resources and attention in 2016-17 as work continues to enable construction works to commence early in 2017.

#### STRATEGY - PROVIDE EFFICIENT AND ENVIRONMENTALLY SUSTAINABLE WASTE AND RECYCLING

The management of waste and recycling on the Island continues to be a positive and proud achievement. The goal of diverting 90% of waste from landfill was not achieved in 2015/16, however, a level of 83% was achieved, slightly below the previous financial year's level.

The Board maintains compliance with its EPA licence for the Waste Management Facility to the best of its ability. Monitoring indicates there are no significant environmental impacts from the ongoing operation of the facility. Significant equipment upgrades were undertaken in 2015-2016, with the purchase of a new wastewater system for the site, replacement of the aging paper and cardboard shredder and a new conveyor for the glass crushing unit. Early planning was undertaken for the replacement of the Island's composting system, the key element of the waste diversion capability. An



options assessment was undertaken paving the way for a competitive tender process to supply and install a new system during 2016-17.

## STRATEGIC DIRECTION – OUTSTANDING ENVIRONMENT

### TO MANAGE, PROTECT, RESTORE, ENHANCE AND CONSERVE THE ISLAND'S ENVIRONMENT

#### STRATEGY – PROTECT AND MANAGE THE ENVIRONMENT IN A MANNER THAT RECOGNISES AND PROMOTES THE WORLD HERITAGE VALUES OF THE ISLAND

The Lord Howe Island Group (LHIG) was inscribed on the World Heritage List in 1982 under the United Nations World Heritage Convention in recognition of its superlative natural landscapes and scenery and its rich terrestrial and marine biodiversity as an outstanding example of an island ecosystem developed from submarine volcanic activity. These values are protected and managed by the Board in conjunction with Commonwealth and NSW Governments through various complementary pieces of legislation and planning instruments, statutory plans of management, various other plans and policies and community education and engagement.

Seventy-five percent of the main island and all of the outlying islands are protected for conservation purposes as a Permanent Park Preserve under the *Lord Howe Island Act 1953*. The *LHI Regulation 2014* gives effect to the *LHI Act 1953* and the *LHI Local Environmental Plan (LEP) 2010* provides statutory planning regulations that further protect and maintain these values within the settlement area.

The Board implement a broad range of environmental projects in accordance with the LHI Biodiversity Management Plan 2007, the Permanent Park Preserve Plan of Management 2009, the Strategic Plan the World Heritage Property 2010 and through the implementation of external grants from State and Commonwealth governments.

Through the LHI LEP 2010 and other relevant environmental legislation, policies and procedures, the Board assess development applications and assess activities in order to protect landscape, biodiversity and scenic values and features.

#### **Protect threatened species, populations and ecological communities, and their habitats through implementation of LHI Biodiversity Management Plan 2007.**

Lord Howe Island is well-known as a biodiversity hotspot to Islanders and visitors alike. Its unique ecosystems are home to over 2000 native species, half of which are found nowhere else in the world. Protecting this extraordinary biodiversity is an essential and challenging part of managing Lord Howe Island.

To assist with protecting Lord Howe Island's biodiversity, the NSW Office of Environment and Heritage, in consultation with the Lord Howe Island Board and community, prepared the Lord Howe Island Biodiversity Management Plan (LHI BMP) in 2007. This multi-species recovery plan was developed to manage and reduce threats to over 330 of Lord Howe's most significant plants, animals and ecosystems. It is a cost-effective approach that focusses actions in areas where they have the greatest biodiversity benefit, such that a single action (e.g. weed removal) will benefit many species. The plan set out priorities to conserve and recover biodiversity across the island over a ten year period.

Since the adoption of the plan, the Board has received significant external funding to implement biodiversity recovery programs based on actions identified in the LHI BMP. Of the 200 actions listed in the plan, 80% have been implemented, reducing the risk of extinction to a vast array of species and habitats, with many actions still underway or being planned for. The weed eradication program is an excellent example of such work, and its success has attracted widespread attention.

**Contribute to World Heritage Area conservation by being a member of the Australian World Heritage Advisory Committee (AWHAC).**

The Board's CEO and MEWH contribute to World Heritage Area conservation by participating in Australian World Heritage Advisory Committee (AWHAC) meetings. The MEWH provides progress reports to the Commonwealth on projects relevant to the protection and restoration of the LHI World Heritage Property.

**Implement strategy for the control and spread of *Phytophthora* including treatment at known sites and hygiene protocols.**

Boot scrub stations have been established at all track heads into the PPP, at Board facilities and at several lodges to help reduce the potential for spread of plant diseases and pathogens. The only known location of *Phytophthora cinnamomi* has been quarantined and is treated quarterly, aiming to eradicate this pathogen from the island. Soil samples taken downslope of this infestation detected a different species of *Phytophthora* (*Phytophthora multivora*), which is treated coincident with the infestation of *Phytophthora cinnamomi*. Ongoing monitoring is undertaken. To increase awareness of plant pathogens a brochure has been finalised for *Phytophthora* and Myrtle Rust which is also loaded on the Board's website and its key messages included in an Ipad user guide and quarantine signage.

**STRATEGY - WORK TO PREVENT THE INTRODUCTION OF EXOTIC PESTS AND PATHOGENS AND TO ERADICATE EXOTIC PESTS FROM THE ISLAND**

**Finalise LHI Biosecurity Strategy and implement biosecurity measures to protect against the introduction of exotic pests and pathogens to the Island.**

Significant impacts to LHI environmental and economic values have occurred through the entry and establishment of a range of pests, weeds and diseases. The introduction, establishment and spread of new pests, weeds and diseases constitute a major ongoing threat to the biodiversity and ecosystem processes on LHI and the economy and health of the Island and its residents.

In order to further protect the outstanding values, and protect the economy and health and safety of the community, the Lord Howe Island Board (LHIB) commissioned AECOM Australia to undertake a review and evaluation of the Quarantine Strategy for Lord Howe Island (Landos, 2003) and using the findings to develop the Lord Howe Island Biosecurity Strategy 2016. The review and evaluation of the 2003 Quarantine Strategy produced a range of findings including:

- Significant improvement has been made in the biosecurity system and associated risks reduction since 2003 through the implementation of a range of mitigating measures.
- Stakeholders generally understand the need of biosecurity and are happy with a level of mitigation as long as it is applied consistently, is not too onerous or doesn't impact dramatically on cost of living.

- Current biosecurity best practice is risk based, a shared responsibility and across the continuum of prevention, preparedness, response and ongoing management, before the border, at the border and post border.
- A range of pathways exist for spread of biosecurity risk to LHI.
- New incursions of weeds, animals, invertebrates, pathogens and marine pests could have significant impacts to LHI environmental and economic values.
- Current operational controls should continue and new recommendations have been made to mitigate high and medium risks.

The review has identified the following best value recommendations:

- focus on reducing risks at the Port Macquarie wharf through upgrades to infrastructure and increased inspections
- effecting legislative change for biosecurity protection
- increasing education and awareness for visitors pre arrival
- increasing awareness for residents and suppliers both before and after import
- increasing inspections at the LHI jetty and airport
- increasing capacity and capability to detect and respond to quickly to new incursions through early detection and emergency response planning
- Ongoing collaboration and partnerships with key stakeholders
- Recommendations should be considered in the context on current spend for ongoing management and eradication programs.

In autumn 2016 two ant species previously not detected on LHI were found under bark on imported Turpentine Jetty timbers. These were treated with a knock down insecticide, specimens collected and sent to CSIRO for identification and the surrounding site baited with ant bait. The species are native to the Australian mainland.

### **Undertake major ecological restoration projects including the weed and African Big-headed eradication programs.**

The Board is undertaking a program to eradicate the African Big-headed Ant (ABhA) from Lord Howe Island. No ABhAs were detected in summer of 2015. One residual infestation was detected during monitoring in April 2016 at two leases in the settlement area. Both infestations were treated and require ongoing monitoring. All previous infestation areas have been declared eradicated.

### **Finalise and implement LHI Weed Management Strategy**

The LHI weed eradication program has reached an 11 year landmark out of a projected 30 year program with work continuing on the 'War on Weeds' financed by the NSW Environmental Trust, North Coast Local Land Services, NSW Weeds Action Plan and recurrent LHIB funds. This achievement was celebrated with a recognition event in March 2016.

With over 9,900 hours of effort 71,600 individual weeds have been removed across 315 ha. This includes 6,453 mature target weeds which is a reduction of 90% compared to 2005/06 financial year where 63,783 mature weed plants were intercepted and removed.

A further helicopter lance spray operation has been undertaken to tackle infestations of ground asparagus and bitou bush on cliff lines. Funding has been received to investigate drone applications for weeds on LHI (including detection, spot treatment and mapping) which will provide an essential aerial compliment for weed detection in rugged terrain.

To reduce the spread and impact of Crofton Weed the biological control agent - *Baeodromus eupatorii* has been released on LHI; following careful testing and successful broad scale release on the mainland. Monitoring will be undertaken in 2016-17 to measure effectiveness on LHI.

The Draft LHI Weed Management Strategy 2016 has been prepared to guide the next decade in effective weed management on LHI. Based on the strategic approach identified in the 2006 Strategy, three weed management categories are established Eradicate; Alert (Sleeper Weeds) – Effectively Manage and Control. The draft strategy was placed on public exhibition in March 2016.

### **Undertake Planning and Approvals stage of Rodent Eradication Program**

During the 2015/2016 financial year, the focus of the Rodent Eradication Project (REP) was on Stage 2 planning and approvals, including:

- Staffing and resourcing: The project manager and assistant project manager were recruited and commenced work on the Island in November and October 2015 respectively. The former project manager has been retained as a consultant.
- Community consultation: A REP Community Working Group consisting of community members with differing views has met monthly during the period since Oct 2015.
- Individual property management planning: Discussions have taken place with almost all leaseholders on the Island regarding how the rodent eradication would be carried out on their individual leases
- Mouse toxicity trials: The second round of mouse toxicity trials using the bait proposed for the eradication (Pestoff 20R) has been completed by the Office of Environment and Heritage, Science Division staff.
- Approvals: An application has been made to the Australian Pesticide and Veterinary Medicine Authority (APVMA) for a Minor Use permit for use of an unregistered product with a registered active constituent (Brodifacoum). A referral has been made to the Commonwealth Department of the Environment under the *Environment Protection and Biodiversity Conservation Act* (EPBC) for assessment of potential impacts to Matters of National Environmental Significance.
- Human health risk assessment: The NSW Office of the Chief Scientist and Engineer (OCSE) has agreed to oversee the further independent human health risk assessment and has commenced procurement of the expert panel.
- Economic Evaluation: A Request for Quote for consultants to undertake an economic evaluation of the program and its impacts on business and tourism has been issued.
- Biodiversity Benefits monitoring: Biodiversity outcome monitoring has continued in 2015-16.
- Operational Planning: Planning for program implementation has included development of expressions of interest for workforce accommodation and the provision of helicopter services.
- Island Clean-up: An Island-wide community clean-up commenced to remove rubbish harbouring rodents.

- Biosecurity: The Board adopted the Lord Howe Island Biosecurity Strategy 2015 and the agreed strategies and priority actions will be implemented prior to or coincident with rodent eradication.

Aspects of the planning and approvals phase will be critical for the Board to make an informed final decision on whether or not to proceed with the eradication.

## STRATEGY IDENTIFY, PROTECT AND VALUE HERITAGE ITEMS

In March 2013 the Lord Howe Island Board adopted the Lord Howe Island Community Based Heritage Study. The study, undertaken by Musecape, provides a list of heritage items that have been identified and assessed through a consultative process with the island community, for possible inclusion on the heritage schedule to LEP 2010, including statements of significance and heritage database forms.

The study identifies several items which it recommends be included in the Schedule of heritage items in LEP2010 (Schedule 2). Further work needs to be undertaken to provide clarification as to the exact location and extent of heritage items in order to provide a clear description for LEP 2010, and to identify curtilage boundaries for some items where specific heritage controls will apply. This will ensure that a whole allotment is not affected if it is large enough that development at one edge will not impact the heritage item at another. It will also assist in specific Development Applications such as subdivision with the knowledge of which land is undevelopable, and the areas surrounding heritage items which are developable.

At the Lord Howe Island Board Meeting of 6 June 2016, the Board resolved to forward the planning proposal to the Department of Planning and Environment's LEP Gateway Review Panel to seek a Gateway determination from the Minister for Planning in accordance with Section 56 of the *Environmental Planning & Assessment Act, 1979*.

## STRATEGY - IMPROVE AWARENESS AND UNDERSTANDING OF THE ENVIRONMENT THROUGH EDUCATION AND RESEARCH

The Board publishes informative articles to update the community on environmental programmes and activities through the LHI Community Bulletin, Signal and Board website.

During the reporting period, the Board completed a review of its Scientific Research Policy, which encourages collaborations with research partners and other organisations

A number of opportunities were made available for the community to be involved in the protection of natural and cultural heritage, particularly through the LHI Central School and representation of various steering committees and working groups.

## STRATEGY - IMPROVE ENVIRONMENTAL SUSTAINABILITY OF BOARD PROGRAMS AND OPERATIONS (WASTE DISPOSAL; WASTE WATER; RENEWABLE ENERGY)

The Board has worked on a variety of sustainability measures across a number of areas, where varying levels of success in implementation.

To support the wider renewable energy project, assistance from Roads and Maritime Service has been sought to allow the conditional registration of electric vehicles on the Island. This work is ongoing as part of a broader review for NSW, with some progress made towards resolution during the year.

Implementation of improved wastewater management on the Island has been a focus of the Team Leader – Compliance and Projects position during the year. Assistance to leaseholders in achieving compliance with the Board's Wastewater Management Strategy has improved significantly. The Board has demonstrated its own compliance through the installation of compliant wastewater systems at the Airport \ Bureau of Meteorology and Public Hall, and purchase of new systems for the Jetty Shed and Waste Management Facility.

## **STRATEGIC DIRECTION – RESPONSIBLE LAND MANAGEMENT**

### **TO PROVIDE FOR SUSTAINABLE PLANNING AND DEVELOPMENT AND ENSURE RESPONSIBLE MANAGEMENT OF THE ISLAND'S LAND AND PROPERTY ASSETS**

#### **STRATEGY – DESIGN LAND USE AND DEVELOPMENT POLICIES THAT BALANCE ENVIRONMENTAL, ECONOMIC AND SOCIAL OUTCOMES**

During the reporting period, the Board finalised amendments to *LHI Local Environmental Plan* in relation to Significant Native Vegetation. The updated mapping is based on high resolution digital imagery of the island together with up-to-date technology, field inspections and consultation with individual leaseholders. The updated maps will ensure that the most appropriate planning rules and protections can be put in place across the island. Accurate mapping provides certainty for people seeking to undertake development making the process quicker and easier and is crucial for the protection of important habitat for the islands endemic and threatened species.

As reported above, the Board has completed Stage 1 of the review of the *LHI Local Environmental Plan* (LEP). A planning proposal has been completed which identifies numerous amendments to the LEP. This has been referred to the Department of Planning and Environment's LEP Gateway Review Panel to seek a Gateway determination from the Minister for Planning in accordance with Section 56 of the *Environmental Planning & Assessment Act, 1979*.

#### **STRATEGY - PROVIDE AN EFFICIENT AND EFFECTIVE DEVELOPMENT PLANNING AND ASSESSMENT SERVICE.**

In 2015-16 the Board continued to engage an external consultant to provide planning and assessment services in its capacity as a local government authority, and a consent authority under the *Environmental Planning & Assessment Act 1979*.

As part of the planning contract, an audit of planning and assessment systems and processes is reported to the Board in May and November each year. The audit aims to ensure that systems are up to date and compliant with legislative and procedural requirements, and reflect best practice.

A total of 65 applications (being 30 owner consent applications, 31 development applications and 4 s96 applications) were assessed during the reporting period. The average processing times were 15 days for owner consent applications, and 21 days for development applications. The average time for all OC and DA applications complies with the statutory 40 day deemed refusal period for standard applications and is well under the state average published by the NSW Department of Planning and Environment.



#### STRATEGY - PROVIDE AN EFFECTIVE LEASE ADMINISTRATION SYSTEM.

The Board has administered perpetual leases, special leases and permissive occupancies in accordance with the Act, and in a timely manner. An extension was granted to all special leases while the Handley review of land allocation was being completed.

#### STRATEGY - PROTECT AND MANAGE THE LHI PERMANENT PARK PRESERVE IN A MANNER THAT RECOGNISES THE WORLD HERITAGE VALUES OF THE ISLAND.

The Lord Howe Island Permanent Park Preserve Plan of Management was adopted by the Minister on 17 November 2010. Internal audits on the progress of the plan are made annually and a comprehensive 5 year audit was completed in March 2016. Overall, the assessment found that after 5 years, the Board is effectively managing the Preserve in accordance with the plan and the Board has fully or substantially implemented 80% of the actions. It is recommended that the priority and current requirements for all actions be revised.

#### STRATEGY - PROTECT AND MANAGE VACANT CROWN LANDS

In November 2015, the Board finalised the Lagoon Foreshore Management Plan and has commenced implementation of the 40 management actions.

#### STRATEGY – REHABILITATE DEGRADED AREAS

Towards the end of the reporting year, the final earthworks to level the former Powerhouse site in the township area were completed, allowing grass to be established on this new community open space area. The final component of the rehabilitation of the site will be completed in 2016-17 with the decommissioning and demolition of the electrical switchyard.

### **STRATEGIC DIRECTION – STRONG AND ENGAGED COMMUNITY**

#### **TO SUPPORT A STRONG AND ENGAGED COMMUNITY**

#### STRATEGY – PLAN FOR APPROPRIATE SERVICES FOR THE COMMUNITY

In implementing the Corporate Plan, the Board has continued to undertake planning for appropriate service delivery on the Island. This has included ongoing consultation and collaboration with other government agencies including NSW Health; Destination NSW; NSW Police; Roads and Maritime Services and the Department of Primary Industries (Marine Parks). The Board has also liaised with the federal Bureau of Meteorology regarding weather monitoring and reporting services on the Island.

#### STRATEGY - IMPROVE RELATIONSHIP WITH THE COMMUNITY THROUGH ENGAGEMENT AND CONSULTATION

The Board is currently preparing a Communication and Community Engagement Strategy as a framework to improve and strengthen communications with the island community.

In order to inform the Strategy, a Communications and Community Engagement Survey was carried out to provide the Board with a clear understanding of the community's expectations of the Board in regard to communication and community engagement.

The survey was prepared by a local communications graduate and circulated to the community in December 2015 and January 2016. A total of 101 people participated in the survey. The results represented a wide cross-section of people, including a range of age and residency groups. Key outcomes of the survey include various improvements to communication, access to information and customer service. The completion of the Communication and Community Engagement Strategy is scheduled for completion by June 2017.

#### STRATEGY - PROVIDE PROFESSIONAL ENVIRONMENTAL AND PUBLIC HEALTH SERVICES

The Board undertakes scheduled inspections and maintenance of drinking water supplies in accordance with the Public Health Act and the Australian Drinking Water Guidelines. A Drinking Water Quality Assurance Program, accepted by NSW Health was rolled out and implemented successfully for all of the Board's public supplies and residences.

The Board has a statutory obligation to implement food safety standards on the Island. To assist in this area, the Board engages a Senior Environmental Health Officer under the Memorandum of Understanding with Port Macquarie Hastings Council to provide expert advice and to carry-out periodic inspections and assessments of food business premises. In February 2016, a total of 24 food inspections were completed to assess the premises against the provisions of the NSW Food Act 2003. Overall, food hygiene and premises construction standards were found to be very good to excellent.

#### STRATEGY - SUPPORT CAPACITY BUILDING IN COMMUNITY ORGANISATIONS

During the reporting period, the Board made \$20,000 available under the Community Grants Program for activities or projects that benefit the Lord Howe Island community.

#### STRATEGY - PROMOTE PROGRAMS THAT PROVIDE FOR CHILDREN

In the 2015/16 financial year, the Board provided scholarships valued at \$10,000. The program aims to create opportunities for Islanders to obtain tertiary qualifications and to return to the island and contribute to its social, environmental and economic life.

The Board also supported many community events including Australia Day, Anzac Day, Discovery Day, Big Music Week, World Environment Day, Clean Up Australia Day and the annual Christmas Carols.

#### MANAGE THE LOCAL EMERGENCY MANAGEMENT COMMITTEE (LEMC) AND EMERGENCY MANAGEMENT PLAN

The Board has an important role in assisting the Island in preparing for emergencies. Together with government agencies such as the Police, RFS, SES and Marine Parks, and medical professionals and humanitarian organisations, the Board continues to manage the Local Emergency Management Committee. The committee has met every quarter for the past year, and continues to improve and test agency responses.

The Local Emergency Management Plan (LEM Plan) was reviewed by the LEMC during the financial year and the LEM Plan was formally approved by the Regional Emergency Management Committee.



# STATUTORY REPORTING

## LEGAL CHANGE

During the reporting period there were no changes made to the *Lord Howe Island Act 1953* or the *Lord Howe Island Regulation 2014*.

## TRANSFER AND SUBLETTING OF PERPETUAL LEASES

Under the terms of Section 36A of the *Lord Howe Island Act 1953*, the Board is required to include in its Annual Report, particulars of any transfers and subletting of leases to persons other than Islanders within the meaning of the Act.

On the fifteenth of June 2016 the Minister consented to the transfer of Perpetual Lease number 1996/01 from Mr Stephen Krick and Mrs Gracey Krick to non-Islanders Mr Christopher Wade and Mrs Rosalyn Wade.

## GRANTING OF PERPETUAL LEASES

Leases in perpetuity for the purpose of residence may be granted by the Minister to Islanders as defined under the Act.

During the reporting period no new Perpetual Leases were granted to Islanders by the Minister for residential development.

## LAND DISPOSAL

No properties with a value greater than \$5,000,000 were disposed of by the Board during the reporting year.

## ECONOMIC OR OTHER FACTORS

On average, the Board requires around \$7.4 million per annum to meet its annual operating budget commitments and about \$1.0 million per annum to meet its capital budget commitments in accordance with the Board's 10-year Total Asset Management Plan. The Board raises revenues through a variety of fees and charges and its own business operations. However, most of the Board's funding comes from recurrent and one-off grants (provided for specific purposes) from the NSW and Australian Governments.

In 2015-16 total grants and subsidies revenue was \$7.5 million, comprised of \$2.0 million in operating grants and \$5.5 million in capital grants. The main operating grants were:

- NSW Treasury recurrent: \$1.5 million.
- NSW Department of Local Government: \$194,000.
- Commonwealth Department of Environment: \$193,000.

- Local Land Services North Coast: \$114,000.

The main capital grants were:

- NSW Treasury: \$2.8 million.
- Commonwealth Department of Infrastructure and Regional Development: \$2.7 million.

The Board receives about \$1.5 million in recurrent funding to contribute towards operating expenditure. The Board does not currently receive an annual capital funding allocation. Therefore it relies upon one-off funding for specific purposes. However, discussions with NSW Treasury have commenced, with a view to agreeing a base level of ongoing capital funding in order to fund the Board's 10-year Total Asset Management Plan.

For further information regarding economic factors, please refer to Strategic Direction – Strong and Sustainable Economy (page 19) in the Management and Activities section.

## RISK MANAGEMENT AND INSURANCE ACTIVITIES

The Board's insurance activities are conducted through the NSW Treasury Managed Fund Scheme of self-insurance for Government agencies.

The Board maintains organisational arrangements that provide additional assurance, independent from operational management, on internal audit and risk management.

The Board uses the Lord Howe Island Board Risk Management Policy and Procedure to guide the Board to manage risk systematically, efficiently and effectively.

## LIABILITY MANAGEMENT PERFORMANCE

Nil.

## PUBLIC INTEREST DISCLOSURES

The Board has adopted a Protected Disclosures Policy which establishes an internal reporting system for the reporting of disclosures of corrupt conduct, maladministration or serious and substantial waste of public money by the Lord Howe Island Board or its staff.

No public interest disclosures have been received by the Board.

## IMPLEMENTATION OF PRICE DETERMINATION

The Board was not subject to any determination or recommendation under *the Independent Pricing and Regulatory Tribunal Act 1992* during the reporting period.

## REQUIREMENTS ARISING FROM EMPLOYMENT ARRANGEMENTS

The *Lord Howe Island Act 1953, Part 3, Section 12*, states:

“(3) The Board cannot employ any staff. Note: Staff may be employed under Chapter 1A of the *Public Sector Employment and Management Act 2002* in the Government Service to enable the Board to exercise its functions”.

Personnel services were provided to the Lord Howe Island Board during the reporting period by the Office of Local Government.

## HUMAN RESOURCES

The Board budgeted for 34.4 full time equivalent staff in the financial year with the Chief Executive Officer responsible for the overall day-to-day management and administration of the staff. Additional temporary staff were engaged during the reporting period to undertake externally funded projects.

The following employee numbers are based on the annual reference period average Full Time Equivalent (FTE) figures generated from Workforce Profile (WP) data collected on behalf of the Department of Premier and Cabinet. The following figures do not include the position of Chief Executive Officer, whose position is identified in the organization structure of the Office of Local Government.

| Area   | Category              | 2015/16     | 2014/15     | 2013/14     | 2012/13     |
|--|-----------------------|-------------|-------------|-------------|-------------|
| <b>Senior Management</b>                         | Senior Management     | 3.0         | 3.0         | 2.9         | 2.7         |
| <b>Business &amp; Corporate Services</b>         | Administration        | 5.5         | 3.8         | 3.7         | 4.0         |
|  | Visitor Centre        | -           | 0.9         | 0.8         | 0.8         |
|  | Nursery               | -           | -           | 0.2         | 3.8         |
|  | Liquor Store          | 1.4         | 1.5         | 1.4         | 1.4         |
| <b>Environment &amp; Community Development</b>   | Environment           | 8.3         | 8.2         | 8.6         | 13.8        |
|  | Grant Funded          | 6.5         | 7.2         | 7.6         | *           |
|  | Community Development | 0.3         | -           | -           | 0.4         |
| <b>Infrastructure &amp; Engineering Services</b> | Works and Services    | 14.6        | 13.1        | 12.0        | 10.9        |
|  | Powerhouse            | 2.0         | 2.0         | 1.7         | 1.4         |
|  | <b>Total</b>          | <b>41.6</b> | <b>39.7</b> | <b>38.9</b> | <b>40.4</b> |

\* Prior to 2013/14 externally funded positions were not reported separately.

Staff are engaged under the *Public Sector Employment Act 2013* in accordance with the conditions of the following awards:

- Crown Employees (Lord Howe Island Board Salaries and Conditions 2009) Award

- Crown Employees (Public Service Conditions of Employment) Award 2009
- Crown Employees (Skilled Trades) Award

## WORKFORCE DIVERSITY

Information in the following tables is provided by the Workforce Information group in the Public Service Commission. Statistics disclosed are for staff employed under the Crown Employees (Lord Howe Island Board Salaries and Conditions 2009) Award.

### A) STATISTICAL INFORMATION - WORKFORCE DIVERSITY GROUPS

| TABLE 1.  |                    |                           |       |       |
|---|--------------------|---------------------------|-------|-------|
| <b>Trends in the Representation of Workforce Diversity Groups</b> |                    |                           |       |       |
| Workforce Diversity Group   | Benchmark / Target | Percentage of Total Staff |       |       |
|   |                    | 2014                      | 2015  | 2016  |
| <b>Women</b>  | <b>50.0%</b>       | 23.3%                     | 22.2% | 23.9% |
| <b>Aboriginal people and Torres Strait Islanders</b>              | <b>2.6%</b>        | 0.0%                      | 0.0%  | 0.0%  |
| <b>People whose first language was not English</b>                | <b>19.0%</b>       | 7.0%                      | 6.7%  | 6.5%  |
| <b>People with a disability</b>                                   | <b>N/A</b>         | 7.0%                      | 6.7%  | 6.5%  |
| <b>People with a disability requiring work-related adjustment</b> | <b>1.5%</b>        | 7.0%                      | 4.4%  | 4.3%  |
| TABLE 2.  |                    |                           |       |       |
| <b>Trends in the Distribution of Workforce Diversity Groups</b>   |                    |                           |       |       |
| Workforce Diversity Group   | Benchmark          | 2014                      | 2015  | 2016  |
| <b>Women</b>  | <b>100</b>         | N/A                       | N/A   | N/A   |
| <b>Aboriginal people and Torres Strait Islanders</b>              | <b>100</b>         | N/A                       | N/A   | N/A   |
| <b>People whose first language was not English</b>                | <b>100</b>         | N/A                       | N/A   | N/A   |
| <b>People with a disability</b>                                   | <b>100</b>         | N/A                       | N/A   | N/A   |
| <b>People with a disability requiring work-related adjustment</b> | <b>100</b>         | N/A                       | N/A   | N/A   |

Note 1. A Distribution Index of 100 indicates that the centre of the distribution of the Workforce Diversity group across salary levels is equivalent to that of other staff. Values less than 100 mean that the Workforce Diversity group tends to be more concentrated at lower salary levels than is the case for other staff. The more pronounced this tendency is, the lower the index will be. In some cases the index may be more than 100, indicating that the Workforce Diversity group is less concentrated at lower salary levels.

Note 2. The Distribution Index is not calculated where group or non-Workforce Diversity group numbers are less than 20.

## B) WORKFORCE DIVERSITY ACHIEVEMENTS DURING THE REPORTING YEAR AND KEY WORKFORCE DIVERSITY STRATEGIES PROPOSED FOR THE FOLLOWING YEAR

During the reporting year the Lord Howe Island Board continued to implement the objectives of its Workforce Plan 2015-2018.

Because the Board is a small organisation operating in a remote location with a small resident population, there are limited employment opportunities and limited capacity to attract and employ people with specialist skills and qualifications. The Board is one of the larger employers on the Island and it is a desirable place of employment. It is a good organisation with a dedicated and committed staff.

The Workforce Plan takes account of the constraints in which the Board operates and contributes to the attraction, retention and development of a capable workforce that delivers the Board's strategies and ensures we have adequate and appropriately skilled staff employed in the most effective and sustainable way.

These constraints affect the Board's ability to meet the set benchmarks in relation to diversity in the workforce. There is also no indigenous population on Lord Howe Island.

Any employment decisions relating to a role within the public service is based on merit in accordance with the *Government Sector Employment Act*.

## PERFORMANCE AND NUMBERS OF EXECUTIVE OFFICERS

The Chief Executive Officer Lord Howe Island Board is a Public Service senior executive. This position is identified in the organization structure of the Office of Local Government and reported with that department's annual statistics.

## DISABILITY PLANS

The Board is not required to implement a disability plan.

## RESEARCH AND DEVELOPMENT

| Completed and continuing research and developmental activities                | Resources allocated |
|---|---------------------|
| Seabird surveys on LHI  | \$5,000             |
| Annual Woodhen Census   | \$32,140            |
| Mouse Toxicity Trials   | \$3,588             |
| Research & monitoring of bat and avifauna behavior around elevated structures | \$44,000            |

## CONSULTANTS

The Board paid the sum of \$202,279 during the financial year to various consultants. Details of consultants engaged are provided in the tables below.

Consultants engaged at a cost of \$50,000 or greater:

| Consultant                 | Project                          | 2015/16 Actual |
|----------------------------|----------------------------------|----------------|
| RPS Australia Asia Pacific | Planning and Assessment Services | \$178,627      |

Engagements costing less than \$50,000 categorised by the nature of the consultancy:

| Nature of Consultancy                       | Number of Engagements | Total Cost |
|---|-----------------------|------------|
| Building Certification/Environmental Health | 1                     | \$2,544    |
| Legal                                       | 5                     | \$20,888   |
| Valuations                                  | 1                     | \$220      |

## FUNDS GRANTED TO NON-GOVERNMENT COMMUNITY ORGANISATIONS

The Lord Howe Island Board administers an annual Community Grants Program. Grant allocations are determined by the Chief Executive Officer in consultation with Elected Board members.

The following grants were awarded for the 2015-2016 financial year:

| Recipient Organisation                                     | Amount of Grant | Nature and Purpose of Project  |
|--|-----------------|--|
| Lord Howe Island Bowling Club                              | \$5,500         | Event support and promotion and contribution toward solar installation |
| Lord Howe Island Golf Club                                 | \$5,500         | Design and equipment - new putting/chipping area with net              |
| Lord Howe Island Radio Station                             | \$1,200         | Ongoing station operations and purchase of equipment                   |
| Christ Church of England for Island Voices Community Choir | \$3,000         | Establish the Lord Howe Island Choral Festival                         |
| The Cooperative LHI  | \$5,500         | Equipment  |

The Lord Howe Island Board provided funding of \$121,000 to the Lord Howe Island Tourism Association to support its work to promote and develop the island as a tourism destination. The

provision of ongoing funding to the Association is consistent with the Board's Charter *to promote the Island as a tourist destination*.

## AGREEMENTS WITH THE COMMUNITY RELATIONS COMMISSION

No agreements were in place during the reporting period.

## MULTICULTURAL POLICIES AND SERVICES PROGRAM

The Board is committed to the Principles of Multiculturalism as confirmed in the Lord Howe Island Board Multicultural Policies and Services Statement.

The Lord Howe Island Board observes the Principles of Multiculturalism in conducting its affairs in accordance with its charter.

During the 2016-17 reporting period the Board will continue to progress and develop good practice, guided by the Multicultural Planning Framework.

## PROMOTION

The Island Ark Symposium is held every two years with themes including conservation tourism, island translocations, new advances in pest control and eradication, marine and island ecosystem linkages, restoration economics and global seabird ecology linkages. A Symposium was held on Norfolk Island in February 2016 and was attended by Lord Howe Island Board officers Mr Hank Bower, Manager Environment/World Heritage, Mrs Susan Bower, Flora Management Officer and Mr Christo Haselden, Ranger.

Mr Bower delivered a presentation at the Symposium on the Board's progress in implementing a range of ecological restoration projects and the importance of these being underpinned by a revised Biosecurity Strategy to secure investments made to date. Mr Haselden delivered a presentation on the targeted eradication of African Big-headed Ants from Lord Howe Island using systematic monitoring and treatment methods and Mrs Bower delivered a presentation on the weed eradication program including development on new techniques for remote and inaccessible terrain and the results of ten years data collection.

The projects being implemented on Lord Howe Island provide best practice examples of ecological restoration on islands and share many affinities with issues impacting Norfolk Island. Presentations at the Symposium provide a unique opportunity to showcase the successes and challenges in delivering restoration projects on Lord Howe Island to a national audience with interest in restoring island ecosystems. It also provides an opportunity to improve networks with other island managers, researchers and restoration practitioners.

Travel costs incurred in attending the Symposium were met jointly by the Australian Governments Caring for Our Country program, the NSW Environmental Trust program and the Lord Howe Island Board.

The Australian Small Island Forum was also held on Norfolk Island in February 2016. This was the second forum held with the inaugural Forum held on Lord Howe Island in May 2012. The Forum

provides opportunity for leaders from small island communities, governments, business, tourism bodies and educational institutions, to actively engage and discuss common challenges in terms of their economic, social and environmental futures. The forum focussed on 4 key areas: growing sustainable communities; enterprise and livelihoods; technology and services and culture, place and identity.

Mr David Kelly, LHI Board Manager Environment and Community Development attended the Forum and presented a workshop on 'planning for sustainability', which included information on strategic planning in a number of areas including development, housing, tourism, agriculture, renewable energy, waste and waste water management, environment, communication and community engagement.

Mr Kelly also attended the Island Ark Symposium and delivered a presentation on the social implications of successful island conservation projects, and shared lessons learnt from the proposed rodent eradication on Lord Howe Island.

Mr Kelly's travel costs were met by the Lord Howe Island Board.

The Island Eradication Advisory Group (IEAG) was established in 1997 by the New Zealand Department of Conservation (DOC) to capture existing knowledge and expertise and provide technical advice to its eradication project. New Zealand is widely recognised as the world leader in this field and DOC has been freely sharing the information it has learnt over the last 25 years as well as taking the lessons learnt from other countries to improve its own projects. While the IEAG's primary focus is still on internal projects, both eradications and biosecurity including the evaluation of best practice and building capability within DOC, the value the group could add to projects was soon recognised by international groups and government agencies and the Department expanded its mandate to include advising international eradication projects primarily in the Pacific but also around the world including projects on Macquarie Island, the Aleutians, Galapagos, and South Georgia. The aim of the group is to take the knowledge learnt from previous eradications and use it in the planning for future ones so that there is the maximum likelihood of success while minimising any possible negative outcomes.

The Australian and NSW Governments announced joint funding totalling \$9 million for the Lord Howe Island Rodent Eradication Project in June 2012. The project is being implemented by the Lord Howe Island Board.

Rodent eradications on inhabited islands, such as Lord Howe Island, are very complex and require extensive research and planning prior to implementation. Considerable expertise exists in New Zealand on the planning and conduct of pest eradication programs, particularly on inhabited and uninhabited islands.

In January 2016 Lord Howe Island Board Rodent Eradication Project Manager Mr Andrew Walsh attended an IEAG meeting in Wellington, New Zealand, to present the Lord Howe Island Eradication Program and receive expert advice on its planning and implementation. Mr Walsh also met individually with New Zealand eradication experts to learn from other projects and to discuss the details of the Lord Howe Island Program.

The costs of travel were met from the Rodent Eradication Project budget.



## CONSUMER RESPONSE

The Lord Howe Island Board assesses and responds to complaints in accordance with the LHIB Complaints and Allegations Policy.

This policy defines complaints as expressions of dissatisfaction with its service delivery. Any complaints associated with administrative matters such as decisions, procedures and fees/charges, where the complainant requests or demands that LHIB reconsider a decision or take some form of remedial action, are dealt with under the LHIB Decisions Appeal Policy.

The Board registered nine complaints during the reporting period, the focus of these complaints being:

- Negative Visitor Experience as a result of licenced operations
- Noise (People/Liquor Licenced Premises/Commercial Premises)
- Public Area Management

The Board will continue to improve service delivery in response to complaints and suggestions received.

## PAYMENT OF ACCOUNTS

| Accounts payable aged analysis by quarter |          |         |         |         |           |
|---|----------|---------|---------|---------|-----------|
| Quarter                                   | 90+ days | 90 days | 60 days | 30 days | Current   |
| September 2015                            | \$0      | \$0     | \$0     | \$0     | \$122,646 |
| December 2015                             | \$0      | \$0     | \$0     | \$0     | \$11,709  |
| March 2016                                | \$0      | \$0     | \$0     | \$0     | \$17,195  |
| June 2016                                 | \$0      | \$0     | \$0     | \$0     | \$129,950 |

| Accounts due or paid within each quarter                      | September    | December    | March       | June        | Total        |
|---|--------------|-------------|-------------|-------------|--------------|
| Number of accounts due for payment                            | 375          | 416         | 381         | 398         | 1,570        |
| Number of accounts paid on time (based on number of accounts) | *            | *           | *           | *           | *            |
| Percentage of accounts paid on time                           | *            | *           | *           | *           | *            |
| Amount of accounts due for payment                            | \$11,369,896 | \$3,744,841 | \$2,542,111 | \$2,765,846 | \$20,422,694 |
| Amount of accounts paid on time                               | *            | *           | *           | *           | *            |
| Percentage of accounts paid on time (based on \$)             | *            | *           | *           | *           | *            |
| Number of payments for interest on overdue accounts           | -            | -           | -           | -           | -            |
| Interest paid on overdue accounts                             | -            | -           | -           | -           | -            |

\*No quantifiable data currently available

The Lord Howe Island Board processes payments of accounts for goods and services received on a weekly basis. To ensure payment of accounts within specified time periods weekly payments are remitted for accounts identified as due on the day of payment processing and falling due within the ensuing six days.

The remote location of the island often requires the engagement of multiple freight companies to manage the delivery of goods. Goods requiring transport by sea freight can take up to six weeks to reach the Island. The resulting delay between dispatch and delivery can necessitate the payment of accounts outside of the terms of the invoice. Despite the logistical challenges the Board maintains an excellent relationship with suppliers and did not receive any complaints in relation to payment of accounts within the reporting period.

## INVESTMENT PERFORMANCE

During the reporting period some of the Board's surplus funds were invested in the TCorp Cash Hour-Glass Facility. In order to obtain enhanced returns without taking an unacceptable level of risk, the majority of the Board's surplus funds were invested in 'rolling' short term deposits with a major Australian bank.

The annual compound percentage rate of return achieved by the Board during the year from its TCorp Cash Hour-Glass Facility was 2.75 percent, while the average return from its term deposits was approximately 3.05 percent.

## DIGITAL INFORMATION SECURITY POLICY ATTESTATION

The Lord Howe Island Board has not adopted an Information Security Management System (ISMS) in accordance with the NSW Government Digital Information Security Policy.

The Board does not currently have an EDRMS (Electronic Document and Records Management System). The Board will undertake a major records management review during the 2016-17 year including adoption of a revised Business Classification Scheme and an EDRMS software program known as RM8 TRIM.

## CREDIT CARD CERTIFICATION

I certify that Credit Card use within the Lord Howe Island Board during the reporting period has been in accordance with Premier's Memoranda and Treasurer's Directions.

Four cards were in force during the period, on issue to the Chief Executive Officer, Manager Business and Corporate Services, Manager Infrastructure and Engineering Services and Stores Officer. Card usage was in accordance with Lord Howe Island Board Policy.



Penny Holloway

Chief Executive Officer, 24 October 2016

## INTERNAL AUDIT AND RISK MANAGEMENT POLICY ATTESTATION

### Internal Audit and Risk Management Attestation Statement for the 2015-2016 Financial Year for the Lord Howe Island Board

I, Sonja Stewart, on behalf of the Lord Howe Island Board, am of the opinion that the Lord Howe Island Board has internal audit and risk management processes in operation that are compliant with the eight (8) core requirements set out in the *Internal Audit and Risk Management Policy for the NSW Public Sector*, specifically:

#### Core Requirements

For each requirement, please  
specify whether compliant,  
non-compliant, or  
in transition<sup>1</sup>

#### Risk Management Framework

- |     |  |           |
|-----|--|-----------|
| 1.1 | The agency head is ultimately responsible and accountable for risk management in the agency  | Compliant |
| 1.2 | A risk management framework that is appropriate to the agency has been established and maintained and the framework is consistent with AS/NZS ISO 31000:2009 | Compliant |

#### Internal Audit Function

- |     |  |           |
|-----|--|-----------|
| 2.1 | An internal audit function has been established and maintained   | Compliant |
| 2.2 | The operation of the internal audit function is consistent with the International Standards for the Professional Practice of Internal Auditing | Compliant |
| 2.3 | The agency has an Internal Audit Charter that is consistent with the content of the 'model charter'  | Compliant |

#### Audit and Risk Committee

- |     |   |           |
|-----|---|-----------|
| 3.1 | An independent Audit and Risk Committee with appropriate expertise has been established   | Compliant |
| 3.2 | The Audit and Risk Committee is an advisory committee providing assistance to the agency head on the agency's governance processes, risk management and control frameworks, and its external accountability obligations | Compliant |
| 3.3 | The Audit and Risk Committee has a Charter that is consistent with the content of the 'model charter'   | Compliant |

#### Membership

The chair and members of the Audit and Risk Committee are:

1. Brian Blood, Independent Chair - term of appointment: four years starting 1 December 2013;
2. Alan Zammit, Independent Member - term of appointment: three years starting 27 February 2012 and term renewed for a further three years commencing 27 February 2015; and
3. Elizabeth Crouch, Independent Member - term of appointment: three years commencing 21 October 2013.

In accordance with a resolution of the Lord Howe Island Board at its September 2016 meeting



(Sign and Date)

14/9/16

Agency Contact Officer  
Bill Monks  
Manager Business & Corporate Services  
Tel: (02)65632066

## GOVERNMENT INFORMATION (PUBLIC ACCESS) ACT 2009

Clause 7A: Details of the review carried out by the agency under section 7 (3) of the Act during the reporting year and the details of any information made publicly available by the agency as a result of the review

| Reviews carried out by the agency | Information made publicly available by the agency |
|-----------------------------------|---|
| Yes                               | No  |

Clause 7B: The total number of access applications received by the agency during the reporting year (including withdrawn applications but not including invalid applications)

| Total number of applications received |
|---------------------------------------|
| 2                                     |

Clause 7C: The total number of access applications received by the agency during the reporting year that the agency refused either wholly or partly, because the application was for the disclosure of information referred to in Schedule 1 to the Act (information for which there is conclusive presumption of overriding public interest against disclosure)

| Number of Applications Refused | Wholly | Partly | Total |
|--------------------------------|--------|--------|-------|
|                                | 0      | 0      | 0     |
| % of Total                     | 0%     | 0%     |       |

Schedule 2 Statistical information about access applications to be included in annual report

Table A: Number of applications by type of applicant and outcome\*

|  | Access Granted in Full | Access Granted in Part | Access Refused in Full | Information not Held | Information Already Available | Refuse to Deal with Application | Refuse to Confirm/Deny whether information is held | Application Withdrawn | Total | % of Total |
|--|------------------------|------------------------|------------------------|----------------------|-------------------------------|---------------------------------|--|-----------------------|-------|------------|
| Media  | 0                      | 0                      | 0                      | 0                    | 0                             | 0                               | 0  | 0                     | 0     | 0%         |
| Members of Parliament                            | 0                      | 0                      | 0                      | 0                    | 0                             | 0                               | 0  | 0                     | 0     | 0%         |
| Private sector business                          | 0                      | 0                      | 0                      | 0                    | 0                             | 0                               | 0  | 0                     | 0     | 0%         |
| Not for profit organisations or community groups | 0                      | 0                      | 0                      | 0                    | 0                             | 0                               | 0  | 0                     | 0     | 0%         |
| Members of the public (by legal representative)  | 0                      | 0                      | 0                      | 0                    | 0                             | 0                               | 0  | 0                     | 0     | 0%         |
| Members of the public (other)                    | 2                      | 0                      | 0                      | 0                    | 0                             | 0                               | 0  | 0                     | 2     | 100%       |
| Total  | 2                      | 0                      | 0                      | 0                    | 0                             | 0                               | 0  | 0                     | 2     |            |
| % of Total                                       | 100%                   | 0%                     | 0%                     | 0%                   | 0%                            | 0%                              | 0%   | 0%                    |       |            |

\* More than one decision can be made in respect of a particular access application. If so, a recording must be made in relation to each such decision. This also applies to Table B.

Table B: Number of applications by type of application and outcome\*

|  | Access<br>Granted<br>in Full | Access<br>Granted<br>in Part | Access<br>Refused<br>in Full | Information<br>not Held | Information<br>Already<br>Available | Refuse to<br>Deal with<br>Application | Refuse to<br>Confirm/Deny<br>whether<br>information is<br>held | Application<br>Withdrawn | Total | % of<br>Total |
|--|------------------------------|------------------------------|------------------------------|-------------------------|-------------------------------------|---------------------------------------|--|--------------------------|-------|---------------|
| Personal<br>information<br>applications*   | 0                            | 0                            | 0                            | 0                       | 0                                   | 0                                     | 0  | 0                        | 0     | 0%            |
| Access<br>applications<br>(other than<br>personal<br>information<br>applications)                              | 1                            | 0                            | 0                            | 0                       | 0                                   | 0                                     | 0  | 0                        | 1     | 50%           |
| Access<br>applications<br>that are<br>partly<br>personal<br>information<br>applications<br>and partly<br>other | 1                            | 0                            | 0                            | 0                       | 0                                   | 0                                     | 0  | 0                        | 1     | 50%           |
| Total  | 2                            | 0                            | 0                            | 0                       | 0                                   | 0                                     | 0  | 0                        | 2     |               |
| % of Total   | 100%                         | 0%                           | 0%                           | 0%                      | 0%                                  | 0%                                    | 0%   | 0%                       |       |               |

\* A personal information application is an access application for personal information (as defined in clause 4 of Schedule 4 to the Act) about the applicant (the applicant being an individual).

Table C: Invalid applications

| Reason for invalidity   | No of applications | % of Total |
|---|--------------------|------------|
| Application does not comply with formal requirements (section 41 of the Act)  | 0                  | 0%         |
| Application is for excluded information of the agency (section 43 of the Act) | 0                  | 0%         |
| Application contravenes restraint order (section 110 of the Act)              | 0                  | 0%         |
| Total number of invalid applications received                                 | 0                  | 0%         |
| Invalid applications that subsequently became valid applications              | 0                  | 0%         |

Table D: Conclusive presumption of overriding public interest against disclosure: matters listed in Schedule 1 of Act

|   | Number of times<br>consideration used* | % of Total |
|---|--|------------|
| Overriding secrecy laws                               | 0                                      | 0%         |
| Cabinet information                                   | 0                                      | 0%         |
| Executive Council information                         | 0                                      | 0%         |
| Contempt  | 0                                      | 0%         |
| Legal professional privilege                          | 0                                      | 0%         |
| Excluded information                                  | 0                                      | 0%         |
| Documents affecting law enforcement and public safety | 0                                      | 0%         |
| Transport safety                                      | 0                                      | 0%         |
| Adoption  | 0                                      | 0%         |
| Care and protection of children                       | 0                                      | 0%         |
| Ministerial code of conduct                           | 0                                      | 0%         |
| Aboriginal and environmental heritage                 | 0                                      | 0%         |
| Total   | 0                                      |            |

\*More than one public interest consideration may apply in relation to a particular access application and if so, each such consideration is to be recorded (but only once per application). This also applies in relation to Table E

Table E: Other public interest considerations against disclosure: matters listed in table to section 14 of Act

|  | Number of times consideration used* | % of Total |
|--|-------------------------------------|------------|
| Responsible and effective government                                 | 0                                   | 0%         |
| Law enforcement and security   | 0                                   | 0%         |
| Individual rights, judicial processes and natural justice            | 0                                   | 0%         |
| Business interests of agencies and other persons                     | 0                                   | 0%         |
| Environment, culture, economy and general matters                    | 0                                   | 0%         |
| Secrecy provisions   | 0                                   | 0%         |
| Exempt documents under interstate Freedom of Information legislation | 0                                   | 0%         |
| Total  | 0                                   |            |

Table F: Timeliness

|  | Number of applications* | % of Total |
|--|-------------------------|------------|
| Decided within the statutory timeframe (20 days plus any extensions) | 2                       | 100%       |
| Decided after 35 days (by agreement with applicant)                  | 0                       | 0%         |
| Not decided within time (deemed refusal)                             | 0                       | 0%         |
| Total  | 2                       |            |

Table G: Number of applications reviewed under Part 5 of the Act (by type of review and outcome)

|  | Decision varied | Decision upheld | Total | % of Total |
|--|-----------------|-----------------|-------|------------|
| Internal review  | 0               | 0               | 0     | 0%         |
| Review by Information Commissioner*                              | 0               | 0               | 0     | 0%         |
| Internal review following recommendation under section 93 of Act | 0               | 0               | 0     | 0%         |
| Review by NCAT   | 0               | 0               | 0     | 0%         |
| Total  | 0               | 0               | 0     |            |
| % of Total   | 0%              | 0%              |       |            |

\*The Information Commissioner does not have the authority to vary decisions, but can make recommendations to the original decision-maker. The data in this case indicates that a recommendation to vary or uphold the original decision has been made by the Information Commissioner.

Table H: Applications for review under Part 5 of the Act (by type of applicant)

|   | Number of applications for review | % of Total |
|---|-----------------------------------|------------|
| Applications by access applicants   | 0                                 | 0%         |
| Applications by persons to whom information the subject of access application relates (see section 54 of the Act) | 2                                 | 100%       |
| Total   | 2                                 |            |

Table I: Applications transferred to other agencies.

|                                 | Number of applications transferred | % of Total |
|---------------------------------|------------------------------------|------------|
| Agency-Initiated Transfers      | 0                                  | 0%         |
| Applicant - Initiated Transfers | 0                                  | 0%         |
| Total                           | 0                                  |            |

## PRIVACY AND PERSONAL INFORMATION ACT 1998

During the reporting period the Board received no applications under the Privacy and Personal Information Protection Act 1998.

The Board's Privacy Management Plan is available on its website [www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au).

## DISCLOSURE OF CONTROLLED ENTITIES

Nil.

## DISCLOSURE OF SUBSIDIARIES

Nil.

## AFTER BALANCE DATE EVENTS

Nil.

## EXTERNAL COSTS INCURRED IN REPORT PRODUCTION

No External costs were incurred in the production of this report.

## REPORT AVAILABILITY

This report is available in the following formats:

1. Online at the Board's website [www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)
2. In electronic format or hard copy on request to the Lord Howe Island Board Administration Office.

Note that hard copies will not be held in stock but printed as required. Prior notice is requested for persons wishing to collect a hard copy.



## BUDGETS

The original budget for 2015-16 was approved by the Board in May 2015. Throughout the year the Board approved adjustments to several budget line items in order to reflect changing circumstances.

### FINAL BUDGET FOR THE REPORTING YEAR

| BUSINESS UNIT                         | OPERATIONAL AREA                   | EXPENSE           | REVENUE            |
|---------------------------------------|------------------------------------|-------------------|--------------------|
| CEO Office                            | CEO Office                         | 1,134,838         |                    |
| Business & Corporate Services         | Administration                     | 664,964           | -16,000            |
|                                       | Corporate                          | 725,700           | -2,514,316         |
|                                       | Governance                         | 119,422           |                    |
|                                       | Liquor Store                       | 1,310,910         | -1,625,000         |
|                                       | Tourism                            | 110,000           |                    |
| Infrastructure & Engineering Services | Airport                            | 1,144,667         | -1,725,000         |
|                                       | Electricity                        | 1,362,759         | -1,731,684         |
|                                       | General Services                   | 3,401,520         | -1,028,685         |
| Environment & Community Services      | Community Health & Wellbeing       | 73,540            | -6,000             |
|                                       | Environment                        | 1,779,316         | -269,310           |
|                                       | Land Administration & Planning     | 257,500           | -242,000           |
| Capital Works                         | Roads Capital Works                | 183,524           |                    |
|                                       | Marine Facilities Capital Works    | 60,415            |                    |
|                                       | Other Infrastructure Capital Works | 1,336,844         |                    |
|                                       | Buildings Capital Works            | 118,042           |                    |
|                                       | Airport Capital Works              | 3,980,680         | -2,800,000         |
|                                       | Plant & Equipment Capital Works    | 121,336           |                    |
|                                       | Electricity Capital Works          | 919,990           | -560,000           |
|                                       | Office Equipment Capital Works     | 26,000            |                    |
|                                       | Motor Vehicle Capital Works        | 41,000            |                    |
| <b>TOTAL</b>                          |                                    | <b>18,872,967</b> | <b>-12,517,995</b> |



## OUTLINE BUDGET FOR 2016-17

The following original budget for the financial year ending 30 June 2017 was approved by the Lord Howe Island Board in June 2016. This budget does not include Capital Works or carry forward grant related items. Adjustments will be tabled throughout the year for Board approval to reflect changing circumstances.

| 2016/2017 OUTLINE BUDGET              |                                | Expense          | Revenue           |
|---------------------------------------|--------------------------------|------------------|-------------------|
| CEO Office                            | CEO Office                     | 254,808          |                   |
| Business & Corporate Services         | Administration                 | 704,763          | -8,000            |
|                                       | Corporate                      | 765,644          | -1,292,316        |
|                                       | Governance                     | 118,922          |                   |
|                                       | Liquor Store                   | 1,345,771        | -1,675,000        |
|                                       | Tourism                        | 112,000          |                   |
| Infrastructure & Engineering Services | Airport                        | 620,012          | -1,758,000        |
|                                       | Electricity                    | 1,367,468        | -1,928,204        |
|                                       | General Services               | 3,066,913        | -943,000          |
| Environment & Community Services      | Community Health & Wellbeing   | 83,113           | -6,000            |
|                                       | Environment                    | 1,090,549        | -29,500           |
|                                       | Land Administration & Planning | 252,251          | -251,000          |
| <b>TOTAL</b>                          |                                | <b>9,782,214</b> | <b>-7,891,020</b> |

# FINANCIAL STATEMENTS

## Audit Opinion



### INDEPENDENT AUDITOR'S REPORT

Lord Howe Island Board

To Members of the New South Wales Parliament

#### Opinion

I have audited the accompanying financial statements of Lord Howe Island Board (the Board), which comprise the statement of financial position as at 30 June 2016, the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, notes comprising a summary of significant accounting policies and other explanatory information.

In my opinion, the financial statements:

- give a true and fair view of the financial position of the Board as at 30 June 2016, and of its financial performance and its cash flows for the year then ended in accordance with Australian Accounting Standards
- are in accordance with section 41B of the *Public Finance and Audit Act 1983* (PF&A Act) and the Public Finance and Audit Regulation 2015.

My opinion should be read in conjunction with the rest of this report.

#### Basis for Opinion

I conducted my audit in accordance with Australian Auditing Standards. My responsibilities under those standards are further described in the 'Auditor's Responsibilities for the Audit of the Financial Statements' section of my report.

I am independent of the Board in accordance with the auditor independence requirements of:

- Australian Auditing Standards
- ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 'Code of Ethics for Professional Accountants' (the Code).

I have also fulfilled my other ethical responsibilities in accordance with the Code.

The PF&A Act further promotes independence by ensuring the Auditor-General and the Audit Office of New South Wales are not compromised in their roles by:

- providing that only Parliament, and not the executive government, can remove an Auditor-General
- mandating the Auditor-General as auditor of public sector agencies, but precluding the provision of non-audit services.

I believe the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

### **The Board's Responsibility for the Financial Statements**

The members of the Board are responsible for preparing financial statements that give a true and fair view in accordance with Australian Accounting Standards and the PF&A Act, and for such internal control as the members of the Board determine is necessary to enable the preparation of financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the members of the Board must assess the Board's ability to continue as a going concern unless the Board will be dissolved by an Act of Parliament or otherwise cease operations. The assessment must include, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting.

### **Auditor's Responsibility for the Audit of the Financial Statements**

My objectives are to:

- obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error
- issue an Independent Auditor's Report including my opinion.

Reasonable assurance is a high level of assurance, but does not guarantee an audit conducted in accordance with Australian Auditing Standards will always detect material misstatements. Misstatements can arise from fraud or error. Misstatements are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions users take based on the financial statements.

A further description of my responsibilities for the audit of the financial statements is located at the Auditing and Assurance Standards Board website at: <http://www.auasb.gov.au/Home.aspx>.

The description forms part of my auditor's report.

My opinion does *not* provide assurance:

- that the Board carried out its activities effectively, efficiently and economically
- about the security and controls over the electronic publication of the audited financial statements on any website where they may be presented.



James Sugumar  
Director, Financial Audit Services

13 October 2016  
SYDNEY

**LORD HOWE ISLAND BOARD  
FINANCIAL STATEMENTS  
FOR THE YEAR ENDED 30 JUNE 2016**

Pursuant to Section 41C (1B) and (1C) of the *Public Finance and Audit Act, 1983*, and in accordance with a resolution of the members of the Lord Howe Island Board, we declare on behalf of the Board that in our opinion:

1. The accompanying financial statements exhibit a true and fair view of the financial position of the Lord Howe Island Board as at 30th June 2016 and its financial performance for the year then ended.
2. The statements have been prepared in accordance with Australian Accounting Standards (which include Australian Accounting Interpretations), the provisions of the *Public Finance and Audit Act 1983*, the *Public Finance and Audit Regulation 2015*, and the Treasurer's Directions.

Further, we are not aware of any circumstances that would render any particulars included in the financial statements to be misleading or inaccurate.



Barney Nichols  
Deputy Chair



Lisa Makiiti  
Elected Member

Dated: 11 October 2016

**LORD HOWE ISLAND BOARD**  
**STATEMENT OF COMPREHENSIVE INCOME**  
**FOR THE YEAR ENDED 30 JUNE 2016**

|  | Notes    | <b>Actual<br/>2016<br/>\$</b> | <b>Actual<br/>2015<br/>\$</b> |
|--|----------|-------------------------------|-------------------------------|
| <b>Revenue</b>   |          |                               |                               |
| Sales of liquor  |          | 1,678,031                     | 1,646,168                     |
| User charges and fees                                    | 2(a)     | 4,349,136                     | 4,298,313                     |
| Interest revenue   |          | 367,129                       | 553,552                       |
| Grants and subsidies provided for operating purposes     | 2(b)     | 2,001,362                     | 4,323,900                     |
| Grants and subsidies provided for capital purposes       | 2(b)     | 5,530,518                     | 4,884,360                     |
| Other revenue  |          | 106,816                       | 43,410                        |
| <b>Total revenue</b>                                     |          | <b>14,032,992</b>             | <b>15,749,703</b>             |
| <b>Expenses</b>  |          |                               |                               |
| Cost of sales - Liquor store                             |          | (1,183,265)                   | (1,206,103)                   |
| Personnel services                                       | 3(a)     | (3,751,299)                   | (3,456,274)                   |
| Depreciation   | 8        | (1,784,893)                   | (2,689,570)                   |
| Amortisation   | 9        | (49,709)                      | (49,709)                      |
| Loss on disposal of assets                               |          | (291)                         | -                             |
| Other expenses   | 3(b)     | (2,903,616)                   | (3,302,909)                   |
| <b>Total expenses</b>                                    |          | <b>(9,673,073)</b>            | <b>(10,704,565)</b>           |
| <b>Net result</b>  |          | <b>4,359,919</b>              | <b>5,045,138</b>              |
| <b>Other comprehensive income</b>                        |          |                               |                               |
| <b>Items that will not be reclassified to net result</b> |          |                               |                               |
| Re-measurement of defined benefit superannuation funds   | 12       | (84,348)                      | 150,212                       |
| Net increase/(decrease) in Revaluation Surplus           | 8 and 13 | 156,910                       | 3,391,266                     |
| <b>Total other comprehensive income for the year</b>     |          | <b>72,562</b>                 | <b>3,541,478</b>              |
| <b>Total comprehensive income for the year</b>           |          | <b>4,432,481</b>              | <b>8,586,616</b>              |

The above Statement of Comprehensive Income should be read in conjunction with the accompanying notes.

**LORD HOWE ISLAND BOARD**  
**STATEMENT OF FINANCIAL POSITION**  
**AS AT 30 JUNE 2016**

|   | Note | Actual<br>2016<br>\$ | Actual<br>2015<br>\$ |
|---|------|----------------------|----------------------|
| <b>ASSETS</b>                               |      |                      |                      |
| <b>CURRENT ASSETS</b>                       |      |                      |                      |
| Cash and cash equivalents                   | 4    | 14,555,638           | 16,079,103           |
| Trade and other receivables                 | 5    | 1,155,293            | 2,146,649            |
| Inventories                                 | 6    | 319,020              | 295,467              |
| Prepayments                                 |      | 30,221               | 57,943               |
| Loan receivable                             | 7    | 5,150                | 6,600                |
| <b>TOTAL CURRENT ASSETS</b>                 |      | <b>16,065,322</b>    | <b>18,585,762</b>    |
| <b>NON-CURRENT ASSETS</b>                   |      |                      |                      |
| Infrastructure, property, plant & equipment | 8    | 52,095,988           | 47,485,494           |
| Intangible assets                           | 9    | 129,106              | 178,815              |
| Loan receivable                             | 7    | -                    | 5,150                |
| Post-retirement benefit asset               | 12   | -                    | 6,161                |
| <b>TOTAL NON-CURRENT ASSETS</b>             |      | <b>52,225,094</b>    | <b>47,675,620</b>    |
| <b>TOTAL ASSETS</b>                         |      | <b>68,290,416</b>    | <b>66,261,382</b>    |
| <b>LIABILITIES</b>                          |      |                      |                      |
| <b>CURRENT LIABILITIES</b>                  |      |                      |                      |
| Trade and other payables                    | 10   | 628,450              | 3,050,138            |
| Provisions                                  | 11   | 952,823              | 1,003,001            |
| Unearned revenue                            |      | 17,044               | 25,896               |
| <b>TOTAL CURRENT LIABILITIES</b>            |      | <b>1,598,317</b>     | <b>4,079,035</b>     |
| <b>NON-CURRENT LIABILITIES</b>              |      |                      |                      |
| Provisions                                  | 11   | 8,007                | 8,923                |
| Post-retirement benefit liability           | 12   | 78,187               | -                    |
| <b>TOTAL NON-CURRENT LIABILITIES</b>        |      | <b>86,194</b>        | <b>8,923</b>         |
| <b>TOTAL LIABILITIES</b>                    |      | <b>1,684,511</b>     | <b>4,087,958</b>     |
| <b>NET ASSETS</b>                           |      | <b>66,605,905</b>    | <b>62,173,424</b>    |
| <b>EQUITY</b>                               |      |                      |                      |
| Accumulated funds                           |      | 17,351,634           | 13,076,063           |
| Revaluation surplus                         | 13   | 49,254,271           | 49,097,361           |
| <b>TOTAL EQUITY</b>                         |      | <b>66,605,905</b>    | <b>62,173,424</b>    |

The above Statement of Financial Position should be read in conjunction with the accompanying notes.

**LORD HOWE ISLAND BOARD**  
**STATEMENT OF CHANGES IN EQUITY**  
**FOR THE YEAR ENDED 30 JUNE 2016**

|   | Notes | Accumulated<br>Funds<br>\$ | Revaluation<br>Surplus<br>\$ | Total<br>\$ |
|---|-------|----------------------------|------------------------------|-------------|
| <b>BALANCE AS AT 1 JULY 2015</b>                          |       | 13,076,063                 | 49,097,361                   | 62,173,424  |
| Net operating result                                      |       | 4,359,919                  | -                            | 4,359,919   |
| <b>Other comprehensive income</b>                         |       |                            |                              |             |
| Re-measurement of defined benefit<br>superannuation funds |       | (84,348)                   | -                            | (84,348)    |
| Net increase / (decrease) in Revaluation Surplus          |       | -                          | 156,910                      | 156,910     |
| <b>Total comprehensive income for the year</b>            |       | 4,275,571                  | 156,910                      | 4,432,481   |
| <b>BALANCE AS AT 30 JUNE 2016</b>                         |       | 17,351,634                 | 49,254,271                   | 66,605,905  |
|   |       |                            |                              |             |
| <b>BALANCE AS AT 1 JULY 2014</b>                          |       | 7,880,713                  | 45,706,095                   | 53,586,808  |
| Net operating result                                      |       | 5,045,138                  | -                            | 5,045,138   |
| <b>Other comprehensive income</b>                         |       |                            |                              |             |
| Re-measurement of defined benefit<br>superannuation funds |       | 150,212                    | -                            | 150,212     |
| Net increase / (decrease) in Revaluation Surplus          |       | -                          | 3,391,266                    | 3,391,266   |
| <b>Total comprehensive income for the year</b>            |       | 5,195,350                  | 3,391,266                    | 8,586,616   |
| <b>BALANCE AS AT 30 JUNE 2015</b>                         |       | 13,076,063                 | 49,097,361                   | 62,173,424  |

The above Statement of Changes in Equity should be read in conjunction with the accompanying notes.

**LORD HOWE ISLAND BOARD  
STATEMENT OF CASH FLOWS  
FOR THE YEAR ENDED 30 JUNE 2016**

|   | Notes | Actual 2016<br>\$ | Actual 2015<br>\$ |
|---|-------|-------------------|-------------------|
| <b>CASH FLOWS FROM OPERATING ACTIVITIES</b>                       |       |                   |                   |
| <b>Receipts:</b>  |       |                   |                   |
| Receipts from customers   |       | 7,152,617         | 6,256,046         |
| Grants and subsidies received                                     |       | 8,015,500         | 8,408,260         |
| Other receipts  |       | 26,625            | 43,410            |
| <b>Payments:</b>  |       |                   |                   |
| Payments to personnel and suppliers                               |       | (11,000,804)      | (6,141,015)       |
| <b>Net cash flows from operating activities</b>                   | 14    | 4,193,938         | 8,566,701         |
| <b>CASH FLOWS FROM INVESTING ACTIVITIES</b>                       |       |                   |                   |
| <b>Receipts:</b>  |       |                   |                   |
| Proceeds from sale of property, plant and equipment               |       | 8,425             | -                 |
| Interest received   |       | 475,027           | 461,262           |
| <b>Payments:</b>  |       |                   |                   |
| Payments for property, plant and equipment                        |       | (6,200,855)       | (4,953,903)       |
| <b>Net cash flows used in investing activities</b>                |       | (5,717,403)       | (4,492,641)       |
| <b>Net increase/(decrease) in cash and cash equivalents</b>       |       | (1,523,465)       | 4,074,060         |
| <b>Cash and cash equivalents at beginning of reporting period</b> |       | 16,079,103        | 12,005,043        |
| <b>Cash and cash equivalents at end of reporting period</b>       | 4     | 14,555,638        | 16,079,103        |

The above Statement of Cash Flows should be read in conjunction with the accompanying notes.



**LORD HOWE ISLAND BOARD**  
**NOTES TO THE FINANCIAL STATEMENTS**  
**FOR THE YEAR ENDED 30 JUNE 2016**

| Contents of the notes to the financial statements |  | Page |
|---|--|------|
| Note 1  | Summary of significant accounting policies                               | 7    |
| Note 2  | Income from continuing operations  | 15   |
| Note 3  | Expenses from continuing operations                                      | 16   |
| Note 4  | Cash and cash equivalents  | 17   |
| Note 5  | Trade and other receivables  | 17   |
| Note 6  | Inventories  | 17   |
| Note 7  | Loan receivable  | 18   |
| Note 8  | Infrastructure, property, plant and equipment                            | 19   |
| Note 9  | Intangibles  | 25   |
| Note 10   | Trade and other payables   | 26   |
| Note 11   | Provisions   | 26   |
| Note 12   | Post-retirement benefit asset / liability                                | 27   |
| Note 13   | Revaluation surplus  | 28   |
| Note 14   | Reconciliation of net result to net cash flows from operating activities | 30   |
| Note 15   | Commitments for capital expenditure                                      | 31   |
| Note 16   | Financial risk management  | 32   |
| Note 17   | Contingent assets and liabilities  | 37   |
| Note 18   | Events occurring after balance sheet date                                | 37   |

**LORD HOWE ISLAND BOARD  
NOTES TO THE FINANCIAL STATEMENTS  
FOR THE YEAR ENDED 30 JUNE 2016**

The principal accounting policies adopted in the preparation of the financial statements are set out below. These policies have been consistently applied to each of the years presented, unless otherwise stated.

**1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**(a) Reporting entity**

The Lord Howe Island Board (the Board) is a statutory body established under the provisions of the *Lord Howe Island Act 1953*. The Board's primary function is administering the affairs of Lord Howe Island. The Lord Howe Island Board is a NSW Government statutory body and is a not-for-profit entity for the purpose of preparing financial statements.

These financial statements were authorised for issue by the Lord Howe Island Board on 11 October 2016.

**(b) Functional and presentation currency**

These financial statements are presented in Australian dollars, which is the Board's functional currency. Unless otherwise stated, all amounts have been rounded to the nearest Australian dollar.

**(c) Basis of preparation**

These general purpose financial statements have been prepared in accordance with Australian Accounting Standards which include Australian Accounting Interpretations, other authoritative pronouncements of the Australian Accounting Standards Board and the *Public Finance and Audit Act (1983)* and *Public Finance and Audit Regulation 2015*.

These financial statements, other than cash flow information, have been prepared on an accrual accounting basis. Certain classes of property, plant and equipment assets and intangibles are measured at fair value. Fair values are determined by reference to local cost structures, which are generally significantly higher than in most other parts of Australia, due to high transport costs arising from the remoteness of the island.

Other financial statement items have been prepared in accordance with the historical cost convention, unless otherwise stated.

*Critical accounting estimates*

The preparation of financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the group's accounting policies. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that may have a financial impact on the entity and that are believed to be reasonable under the circumstances.

An accounting estimate, being the useful life of a minor Property, Plant and Equipment asset, was revised as part of the independent valuation as at 30 June 2016 – refer Note 1(k)(i) for details. This change of useful life had no impact on the respective depreciation expense for the year. The amount of the effect on depreciation expense in relation to this asset in future years will be insignificant.

**(d) Revenue recognition**

The Board recognises revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the entity and specific criteria have been met for each of the Board's activities described below.

Revenue is measured at the fair value of the consideration received or receivable. Revenue is measured on major income categories as follows:

**1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)****(d) Revenue recognition (continued)***Sale of liquor*

Revenue from the sale of liquor is recognised when the Board transfers the significant risks and rewards of ownership of the assets.

*Grants and subsidies*

Grants and subsidies (including Government grants and subsidies) are recognised as revenue when the Board obtains control over the assets comprising these receipts.

Control over granted assets is normally obtained upon the receipt of cash.

Revenue is recognised when the Board obtains control of the subsidy or the right to receive the contribution, it is probable that the economic benefits comprising the subsidy will flow to the Board and the amount of the subsidy can be measured reliably.

Note 2(c) shows the composition of total grants and subsidies recognised as revenue during the year, separately between the total amount subject to conditions and the total amount which was unrestricted. Note 4 discloses the total unused grant or subsidy amounts received during the current and prior years subject to restrictions where those conditions were not fully discharged at balance date, including a description of the nature of the major grants and subsidies involved.

A liability has been recognised in respect of revenue that is reciprocal in nature to the extent that the requisite service has not been provided at balance date but cash has been received.

*User charges and fees*

User charges and fees are recognised as revenue when the service has been provided or when the payment is received, whichever occurs first.

*Sale of infrastructure, property, plant and equipment*

A gain or loss on sale of an asset is determined when control of the asset has irrevocably passed to the buyer.

*Interest revenue*

Interest revenue is recognised using the effective interest method.

**(e) Leases**

Leases of property, plant and equipment where the Board, as lessee, has substantially all the risks and rewards of ownership, are classified as finance leases. Finance leases are capitalised at the lease's inception at the fair value of the leased asset or, if lower, the present value of the minimum lease payments. The corresponding rental obligations, net of finance charges, are included in short-term and long-term payables. Each lease payment is allocated between the liability and finance cost.

The finance cost is charged to the income statement over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The infrastructure, property, plant and equipment acquired under finance leases is depreciated over the asset's useful life or over the shorter of the asset's useful life and the lease term if there is no reasonable certainty that the Board will obtain ownership at the end of the lease term.

Leases in which a significant portion of the risks and rewards of ownership are not transferred to the Board as lessee are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to the income statement on a straight-line basis over the period of the lease.

Lease income from operating leases where the Board is a lessor is recognised in income on a straight-line basis over the lease term. Revenue from leased premises where the Board is lessor is recognised in accordance with the respective individual lease arrangements, which usually require two weeks rent in advance.

**1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)****(f) Acquisition of assets**

The cost method of accounting is used to account for the initial recording of all acquisitions of assets controlled by the Board.

Cost is the amount of cash or cash equivalents paid, or the fair value of the other consideration given, to acquire the asset at the time of its acquisition or construction or, where applicable, the amount attributed to that asset when initially recognised in accordance with other Australian Accounting Standards.

Where settlement of any part of cash consideration is deferred, the amounts payable in the future are discounted to their present value as at the date of exchange. The discount rate used is the Board's incremental borrowing rate, being the rate at which a similar borrowing could be obtained from an independent financier under comparable terms and conditions.

**(g) Impairment of assets**

Assets are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount.

**(h) Cash and cash equivalents**

For cash flow statement presentation purposes, cash and cash equivalents includes cash on hand, cash at bank, including short term deposits, and cash held in TCorp HourGlass at Call Facility.

**(i) Trade and other receivables**

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. Trade and other receivables are generally due for settlement within 30 days.

Collectability of trade and other receivables is reviewed on an ongoing basis. Debts which are known to be uncollectible are written off by reducing the carrying amount directly. An allowance for doubtful debts is used when there is objective evidence that the Board will not be able to collect all amounts due according to the original terms of the receivables. Cash flows relating to short-term receivables are not discounted if the effect of discounting is immaterial.

When a receivable for which an impairment allowance had been recognised becomes uncollectible in a subsequent period, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against other expenses in the statement of comprehensive income.

**(j) Inventories**

Inventories are stated at the lower of cost and net realisable value.

Costs of Liquor Store inventory are determined after including inward freight costs and deducting rebates and discounts. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

Diesel stocks held for the generation of electric power on the Island are valued at cost, which includes freight inwards charges. Costs are assigned to closing stocks by using the weighted average cost method.

Other inventories are valued at cost, which includes freight inwards charges. Costs are assigned to closing stocks by using the weighted average cost method.

# 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

## (k) Property, plant and equipment ("PPE")

IPPE is recognised where the amount is at least \$5,000 and is initially recorded at cost. The Board conducts a revaluation of some classes of PPE at least every three years (for land and buildings) or five years (for other revalued asset classes), and ensures that the carrying amount of each asset in each class of assets does not differ materially from its fair value at reporting date.

PPE is valued on an 'existing use' basis, where there are no feasible alternative uses in the existing natural, legal, financial and socio-political environment. However, in the limited circumstances where there are feasible alternative uses, PPE is valued at the 'highest and best' use.

The latest revaluations for each of the classes of PPE assets which are shown at valuation are as follows:

| Valuer                     | Asset Classification | Date of Revaluation |
|----------------------------|----------------------|---------------------|
| HP Consultants Pty Limited | Electricity Network  | 30 June 2013        |
| HP Consultants Pty Ltd     | Roadworks            | 30 June 2015        |
| Valustate P/L              | Land and Buildings   | 30 June 2015        |
| HP Consultants Pty Ltd     | Marine Facilities    | 30 June 2015        |
| HP Consultants Pty Ltd     | Airport Facilities   | 30 June 2016        |
| HP Consultants Pty Ltd     | Other Infrastructure | 30 June 2015        |

The depreciated replacement cost method is used, in each revaluation except for land, to determine fair value. Increases in the carrying amounts arising on revaluation are credited to the revaluation surplus. To the extent that the increase reverses an impairment loss previously recognised in profit or loss, the increase is first recognised in profit or loss. Decreases that reverse previous increases of the same asset are first charged against revaluation surplus directly in equity to the extent of the remaining surplus attributable to the asset; all other decreases are charged to profit or loss in the statement of comprehensive income.

Non-specialised assets with short useful lives (being each of the motor vehicles, office equipment, and plant and equipment asset classes) are measured at depreciated historical cost as an approximation of fair value.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Board and the cost of the item can be measured reliably.

Land is not depreciated. Depreciation of other PPE assets is calculated using the straight line method to allocate its cost or valuation, net of the applicable residual value, over the estimated useful life.

The range of useful lives of individual assets within each PPE asset class are as follows:

|                          |                |
|--------------------------|----------------|
| Airport                  | See below      |
| Buildings                | 25 years       |
| Electricity Supply       | See below      |
| Marine Facilities        | 10 to 60 years |
| Motor Vehicles           | 10 years       |
| Office Equipment         | 3 to 5 years   |
| Other Infrastructure     | 10 to 60 years |
| Plant & Equipment        | 5 to 10 years  |
| Roadworks – Bitumen Seal | 12 years       |
| Roadworks - Pavement     | 25 years       |

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each balance sheet date. A \$nil residual value is applied for all PPE assets other than motor vehicles, for which a 25% residual value is applied.

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

### (k) Property, plant and equipment ("PPE") (continued)

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains and losses on disposals are determined by comparing proceeds with carrying amount, and are included in the statement of comprehensive income.

#### (i) Airport assets

The separate components of the assets comprising the airport are assessed as having economic lives, in accordance with the equivalent class of non-current assets applicable to each component, some of which have been revised as part of the 30 June 2016 valuation, as shown below:

|  |                               |
|--|-------------------------------|
| Earthworks, site clearance, top soil and turf, compacted roadbase, anchor block and surface drainage works | 100 years                     |
| Concrete culvert headwalls and pipe culvert extraction   | 60 to 100 years               |
| Boundary fencing and armoured revetments   | 50 years                      |
| Asphaltic concrete resurfacing   | 20 years                      |
| Concrete segment paving  | 15 years                      |
| Terrain lighting, runway lighting and signage  | 10 years                      |
| Painted lines  | 10 years (previously 5 years) |

#### (ii) Electricity assets

The separate components of the assets comprising the electricity function are assessed as having economic lives of between 10 and 80 years respectively, in accordance with the equivalent class of non-current assets applicable to each component, as shown below:

|                                      |                |
|--------------------------------------|----------------|
| Diesel generators                    | 15 years       |
| Generator switchgear                 | 30 years       |
| Housings, ducting, pipes             | 10 years       |
| Diesel tanks                         | 50 years       |
| Battery chargers                     | 10 years       |
| Load control equipment               | 10 to 15 years |
| Powerhouse/Workshop buildings        | 40 years       |
| Transformer equipment                | 30 years       |
| Reticulation: Electrical Substations | 50 years       |
| Reticulation: Other                  | 40-80 years    |

**1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)****(l) Loans and receivables**

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. These financial assets are recognised initially at fair value. Subsequent measurement is at amortised cost, using the effective interest rate method less an allowance for any impairment of receivables. Any changes are recognised in the net result for the year when impaired, de-recognised or through an amortisation process. Short term receivables with no e stated interest rate are measured at original invoice amount where the effect of discounting is immaterial.

**(m) Fair value measurement**

The only assets measured at fair value on a recurring basis in the statement of financial position are:

- certain asset classes within PPE, being airport, buildings, electricity supply, land, marine facilities, roads and other infrastructure; and
- the investment with TCorp, which is held at fair value through profit and loss.

Post-retirement benefit asset/liability amounts are determined by actuarial assessment.

PPE asset revaluations are conducted periodically, typically every five years for each asset class other than land and buildings and every three years for both the land and buildings asset classes, by independent professional valuers.

PPE revaluations are, with the exception of land, done on the basis of depreciated replacement cost, as there is no active market for such assets. The valuation technique used is the cost approach.

The key inputs to the depreciated replacement cost valuations are mostly unobservable inputs (Level 3), including:

- estimates of current costs to replace the respective asset; and
- an estimate of the extent of physical deterioration or other obsolescence of the asset in its current condition relative to its condition if new.

All airport assets were revalued at 30 June 2016, following a 'desktop' revaluation of such assets (excluding the runway) at 30 June 2015. There were also revaluations of several other PPE asset classes at 30 June 2015.

The depreciation expense for the year ended 30 June 2016 was, for PPE assets at valuation, based on the 30 June 2015 valuation amounts while the depreciation expense for the year ended 30 June 2015 for such assets continued to be based on the historic valuation amounts derived during prior years.

**(n) Intangible assets - software**

Costs incurred in acquiring software and licenses that will contribute to future period financial benefits through revenue generation and/or cost reduction are capitalised. Costs capitalised include external direct costs of materials and service. Software costs capitalised are subsequently amortised on a straight line basis over a five year period.

**(o) Payables**

These amounts represent liabilities for goods and services provided to the Board prior to the end of the financial year which are unpaid. Payables are recognised initially at fair value, usually based on the transaction cost or face value. Subsequent measurement is at amortised cost using the effective interest method. Short term payables with no stated interest rate are measured at the original invoice amount where the effect of discounting is immaterial. The amounts are unsecured and are usually paid within 30 days of recognition.

**(p) Provisions**

Provisions are recognised when the Board has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated. Provisions are not recognised for future operating losses.



## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

### (p) Provisions (continued)

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Non-current provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the reporting date. The discount rate used to determine the present value reflects current market assessments of the time value of money and the risks specific to the liability.

### (q) Personnel services

The Board receives personnel services provided through the NSW Office of Local Government. The personnel involved provide services which enable the Board to fulfil its functions.

#### (i) Short-term personnel benefit obligations

Liabilities for wages and salaries, including non-monetary benefits, expected to be settled within twelve months after the end of the period in which the personnel render the related service is recognised as payables and measured at the amounts expected to be paid when the respective liability is settled.

Liabilities for recreation leave of personnel are recognised as a provision and, where expected to be wholly settled within twelve months after the end of the period, are classified as a current liability.

Under the Board's terms and conditions of employment, sick leave is accumulating but non-vesting. The Board is of the opinion that total sick leave paid in any one year will not exceed leave entitlements for that year and therefore no liability exists in respect of sick leave accumulated to balance date.

Payroll tax, workers' compensation insurance premiums, superannuation contributions and fringe benefits tax amounts which are consequential to personnel providing their services to the Board, are recognised as liabilities and expenses where the personnel benefits to which they relate have been recognised.

#### (ii) Long-term personnel benefit obligations (continued)

The liability for extended leave and recreation leave which is not expected to be settled within twelve months after the end of the period in which the personnel render the related service is recognised as a provision and measured as the present value of expected future payments to be made in respect of services provided by personnel up to the end of the reporting period. Consideration is given to expected future wage and salary levels, experience of personnel departures and periods of service.

Expected future payments are discounted using market yields at the end of the reporting period on national government bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

The obligations are presented as current liabilities in the balance sheet if the Board does not have an unconditional right to defer settlement for at least twelve months after the reporting date, regardless of when the actual settlement is expected to occur.

The Board has chosen the net present value method for measurement of other long term personnel benefits.

#### (iii) Post-retirement benefit obligations

The Board is not directly responsible for any post-retirement benefits such as pensions, other retirement benefits, post-retirement life insurance or post-retirement medical care. However, all Board personnel are entitled to post-retirement benefits from superannuation funds to which the Board makes contributions.

The Board contributes to a defined contribution superannuation fund for most of its personnel and contributes to up to three defined benefit plans managed by Pillar Administration on behalf of two of its personnel.

A liability or asset in respect of defined benefit superannuation funds is recognised in the balance sheet, and measured as the present value of the defined benefit obligation at the reporting date plus actuarial gains (less actuarial losses) less the fair value of the superannuation fund's assets at that date and any unrecognised past service cost (as advised to the Board by Pillar Administration).



## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

### (r) New accounting standards and interpretations

The Board generally does not adopt new or revised accounting standards before its respective operative date.

The following new or revised Australian Accounting Standards have not been applied and are not yet effective:

- AASB 9 *Financial Instruments* (effective 1 January 2018) - this introduces new requirements for the classification and measurement of financial assets and liabilities, and includes a forward looking 'expected loss' impairment model and a substantially-changed approach to hedge accounting;
- AASB 15 *Revenue from Contracts with Customers* (effective 1 January 2018) – this establishes a new revenue recognition model, changes the basis for deciding whether revenue is to be recognised over time or at a point in time and expands disclosures about revenue;
- AASB 2014-4 *Amendments to Australian Accounting Standards – Clarification of Acceptable Methods of Depreciation and Amortisation* (effective 1 January 2016)
- AASB 2015-1 *Amendments to Australian Accounting Standards – Annual Improvements to Australian Accounting Standards 2012-2014 Cycle* (effective 1 January 2016);
- AASB 2015-2 *Amendments to Australian Accounting Standards – Disclosure Initiative: Amendments to AASB 101* (effective 1 January 2016);
- AASB 16 *Leases* – this will require all leases to be accounted for 'on balance sheet' by lessees, other than short term and low value leases;
- AASB 2015-6 *Amendments to Australian Accounting Standards – Extending Related Party Disclosures to not-for-profit public sector entities* (effective 1 January 2016) – this will require the Board to make additional disclosures regarding its key management personnel and related party transactions;
- AASB 2015-7 *Amendments to Australian Accounting Standards – Fair value disclosures of not-for-profit public sector entities* (effective 1 July 2016) – this reduces some of the disclosure requirements.

None of these new or revised accounting standards are expected to have a significant impact on the Board's financial statements, other than the additional related party disclosures.

Other new or revised accounting standards currently having a future operative date will not be relevant to the Board.

### (s) Insurance

The Board's insurance activities are conducted through the NSW Treasury Managed Fund Scheme of self-insurance for Government agencies. The expense (premium) is determined by the Fund Manager.

### (t) Goods and services tax (GST)

Revenues, expenses and assets are recognised net of the amount of associated GST, unless the GST incurred is not recoverable from the taxation authority. In this case it is recognised as part of the cost of acquisition of the asset or as part of the expense.

Receivables and payables are stated inclusive of the amount of GST receivable or payable. Cash flows are presented on a gross basis. GST components of cash flows arising from investing activities which are recoverable from, or payable to the taxation authority, are presented as operating cash flows.

**2. INCOME FROM CONTINUING OPERATIONS****(a) User charges and fees**

|                                    | <b>2016</b>      | 2015             |
|------------------------------------|------------------|------------------|
|                                    | <b>\$</b>        | <b>\$</b>        |
| Electricity user charges           | 899,736          | 785,192          |
| Waste management fees              | 363,351          | 311,940          |
| Airport user charges               | 1,771,083        | 1,692,801        |
| Marine Facilities user fees        | 291,594          | 313,773          |
| Housing and other building rentals | 234,053          | 218,544          |
| Public accommodation fees          | 295,200          | 273,200          |
| Lease fees                         | 249,643          | 326,554          |
| Other fees and charges             | 244,476          | 376,309          |
| <b>Total user charges and fees</b> | <b>4,349,136</b> | <b>4,298,313</b> |

**(b) Grants and subsidies****Grants and subsidies – for operating purposes**

|  |                  |                  |
|--|------------------|------------------|
| Grants and subsidies – NSW State government    | 1,793,642        | 4,147,200        |
| Grants and subsidies – Commonwealth government | 192,720          | 176,700          |
| Other grants and subsidies                     | 15,000           | -                |
|  | <b>2,001,362</b> | <b>4,323,900</b> |

**Grants and subsidies – for capital purposes**

|  |                  |                  |
|--|------------------|------------------|
| Grants and subsidies – NSW State government    | 2,759,000        | 3,184,360        |
| Grants and subsidies – Commonwealth government | 2,771,518        | 1,700,000        |
| Other grants and subsidies                     | -                | -                |
|  | <b>5,530,518</b> | <b>4,884,360</b> |

**Total Grants and subsidies**

|  |                  |                  |
|--|------------------|------------------|
| Grants and subsidies – NSW State government    | 4,552,642        | 7,331,560        |
| Grants and subsidies – Commonwealth government | 2,964,238        | 1,876,700        |
| Other grants and subsidies                     | 15,000           | -                |
|  | <b>7,531,880</b> | <b>9,208,260</b> |

**(c) Restrictions relating to grants and subsidies**

Certain grants and subsidies are obtained by the Board on the condition they be spent in a specified manner. Accordingly, the use of these monies is 'restricted' to the purposes specified by the respective grantor. Further details of these grants are shown in Note 4.

Grants and subsidies received during the year ended 30 June 2016 which were not 'restricted' have been fully spent during the year – this was also the case during the year ended 30 June 2015. Grants and subsidies received during the year were:

|                                   | <b>2016</b>      | 2015             |
|-----------------------------------|------------------|------------------|
|                                   | <b>\$</b>        | <b>\$</b>        |
| Restricted grants and subsidies   | 5,886,593        | 7,556,627        |
| Unrestricted grants and subsidies | 1,645,287        | 1,651,633        |
| <b>Total grants and subsidies</b> | <b>7,531,880</b> | <b>9,208,260</b> |

**3. EXPENSES FROM CONTINUING OPERATIONS**

|  | <b>2016</b>      | <b>2015</b>      |
|--|------------------|------------------|
|  | <b>\$</b>        | <b>\$</b>        |
| <b>(a) Personnel services expense</b>          |                  |                  |
| Salaries and wages, including recreation leave | 3,097,889        | 2,840,425        |
| Board member fees                              | 38,922           | 38,893           |
| Extended leave entitlements                    | 108,435          | 108,892          |
| Superannuation                                 | 297,843          | 277,009          |
| Workers' compensation insurance premium        | 59,616           | 61,375           |
| Fringe benefits tax                            | 3,007            | 1,671            |
| Payroll tax                                    | 145,587          | 128,009          |
| <b>Total personnel services expense</b>        | <b>3,751,299</b> | <b>3,456,274</b> |
| <br>Number of FTE personnel                    | <br><b>42.6</b>  | <br><b>40.7</b>  |

FTE does not include Board members, despite total personnel services expense including Board member fees, due to the difficulty in reliably estimating an FTE equivalent for Board members.

**(b) Other expenses**

Other expenses, by nature, were:

|   |                  |                  |
|---|------------------|------------------|
| Bad debts   | 2,196            | 714              |
| Building demolition and land rehabilitation         | -                | (28,728)         |
| Communication                                       | 62,444           | 64,240           |
| Community grants and donations                      | 107,690          | 62,889           |
| Contractors and consultants                         | 1,009,959        | 1,380,452        |
| External audit                                      | 76,980           | 68,749           |
| Fuel and materials                                  | 968,854          | 1,241,890        |
| Insurance   | 75,513           | 99,733           |
| Internal audit                                      | 48,198           | 43,220           |
| IPPE items not capitalised (individually < \$5,000) | 100,047          | 85,094           |
| Legal settlement costs                              | -                | (5,000)          |
| Relocation expenses                                 | -                | 41,103           |
| Staff training and conferences                      | 56,591           | 20,878           |
| Other human resource costs                          | 16,514           | 11,419           |
| Travel and accommodation                            | 30,221           | 49,341           |
| Other sundry expenses                               | 348,409          | 166,914          |
| <b>Total Other Expenses</b>                         | <b>2,903,616</b> | <b>3,302,909</b> |

External audit fees paid and payable to Audit Office of NSW total \$59,000 (2015 - \$58,835). The Board also meets the cost of travel and accommodation of Audit Office staff. No other benefits were provided to the Audit Office staff.

**4. CASH AND CASH EQUIVALENTS**

|                          | <b>2016</b>       | <b>2015</b>       |
|--------------------------|-------------------|-------------------|
|                          | <b>\$</b>         | <b>\$</b>         |
| Cash on hand             | 1,450             | 1,450             |
| Cash at bank (at call)   | 2,823,251         | 983,143           |
| Short term deposit       | 9,000,000         | 10,250,000        |
| TCorp HourGlass facility | 2,730,937         | 4,844,510         |
| <b>Total</b>             | <b>14,555,638</b> | <b>16,079,103</b> |

Cash and cash equivalents includes amounts subject to external restrictions (imposed by the respective grantor) or internal restrictions (established by the Board, if any) are set out below:

|  | <b>2016</b>       | <b>2015</b>       |
|--|-------------------|-------------------|
|  | <b>\$</b>         | <b>\$</b>         |
| Cash subject to external restrictions  | 10,297,206        | 10,727,729        |
| Cash not subject to any restrictions   | 4,258,432         | 5,351,374         |
| <b>Total cash and cash equivalents</b> | <b>14,555,638</b> | <b>16,079,103</b> |

The specific purposes for which most of the accumulated cash subject to external restrictions was held at 30 June 2016 related to:

- the eradication of rodents from the island, \$8,053,680 (2015: \$8,193,056)
- airport runway reseal \$nil (2015: \$1,470,506);
- eradication of weeds, \$411,261 (2015: \$616,312); and
- various capital items (mostly) \$1,832,265 (2015: \$447,855).

**5. TRADE AND OTHER RECEIVABLES**

|                     | <b>2016</b>      | <b>2015</b>      |
|---------------------|------------------|------------------|
|                     | <b>\$</b>        | <b>\$</b>        |
| Trade receivables   | 1,099,956        | 1,564,202        |
| Interest receivable | 55,337           | 162,797          |
| GST receivable      | -                | 419,650          |
| <b>Total</b>        | <b>1,155,293</b> | <b>2,146,649</b> |

**6. INVENTORIES****Held for Distribution**

|                          |                |               |
|--------------------------|----------------|---------------|
| Diesel Fuel - Powerhouse | 55,531         | 35,728        |
| Building materials       | 45,688         | 22,765        |
| Uniforms                 | 8,308          | 11,516        |
|                          | <b>109,527</b> | <b>70,009</b> |

**Held for Resale**

|                          |                |                |
|--------------------------|----------------|----------------|
| Liquor                   | 209,493        | 225,458        |
|                          | <b>209,493</b> | <b>225,458</b> |
| <b>Total inventories</b> | <b>319,020</b> | <b>295,467</b> |

**7. LOAN RECEIVABLE**

|                         | <b>2016</b>    |                    | <b>2015</b>    |                    |
|-------------------------|----------------|--------------------|----------------|--------------------|
|                         | <b>Current</b> | <b>Non-Current</b> | <b>Current</b> | <b>Non-Current</b> |
|                         | <b>\$</b>      | <b>\$</b>          | <b>\$</b>      | <b>\$</b>          |
| Loan to community group | 5,150          | -                  | 6,600          | 5,150              |
| <b>Total</b>            | <b>5,150</b>   | <b>-</b>           | <b>6,600</b>   | <b>5,150</b>       |

Interest at 5% per annum is receivable on the loan, which is unsecured and is repayable by equal instalments each calendar quarter within a term of three years, expiring 31 March 2017.

## 8. INFRASTRUCTURE, PROPERTY, PLANT AND EQUIPMENT

## By asset class

|                      | At 30 June 2015 |                             |                    | Movements during the year |                                 |                                   |                      |                        |                                      | At 30 June 2016  |                             |                    |
|----------------------|-----------------|-----------------------------|--------------------|---------------------------|---------------------------------|-----------------------------------|----------------------|------------------------|--------------------------------------|------------------|-----------------------------|--------------------|
|                      | Cost/fair value | Accum. dep'n and impairment | Written Down Value | Additions                 | Cost/val'n of sales/ write-offs | Accum. dep'n of sales/ write-offs | Dep'n and impairment | Transfers/ Adjustments | Revaluation increments/ (decrements) | Cost/ fair value | Accum. dep'n and impairment | Written Down Value |
| Capital WIP          | 5,094,695       | -                           | 5,094,695          | 5,527,295                 | -                               | -                                 | -                    | (8,079,309)            | -                                    | 2,542,681        | -                           | 2,542,681          |
|                      |                 |                             |                    |                           |                                 |                                   |                      |                        |                                      |                  |                             |                    |
| Airport              | 15,981,300      | 10,379,030                  | 5,602,270          | -                         | -                               | -                                 | 477,514              | 7,705,935              | 156,910                              | 17,651,200       | 4,663,600                   | 12,987,600         |
| Buildings            | 9,104,800       | 3,960,600                   | 5,144,200          | -                         | -                               | -                                 | 369,757              | 136,591                | -                                    | 9,241,391        | 4,330,357                   | 4,911,034          |
| Electricity Supply   | 6,878,565       | 3,032,005                   | 3,846,560          | 105,433                   | (186,200)                       | (177,484)                         | 188,787              | -                      | -                                    | 6,797,798        | 3,043,309                   | 3,754,490          |
| Land                 | 14,422,000      | -                           | 14,422,000         | -                         | -                               | -                                 | -                    | -                      | -                                    | 14,422,000       | -                           | 14,422,000         |
| Marine Facilities    | 3,435,700       | 1,664,300                   | 1,771,400          | -                         | -                               | -                                 | 62,955               | 7,416                  | -                                    | 3,443,116        | 1,727,255                   | 1,715,861          |
| Motor Vehicles       | 484,825         | 338,551                     | 146,274            | 110,153                   | (39,822)                        | (39,822)                          | 26,951               | -                      | -                                    | 555,156          | 325,680                     | 229,476            |
| Office Equipment     | 144,771         | 116,753                     | 28,018             | 24,949                    | (14,920)                        | (14,920)                          | 24,941               | 18,300                 | -                                    | 173,101          | 126,774                     | 46,326             |
| Other Infrastructure | 7,458,800       | 2,087,200                   | 5,371,600          | 9,600                     | -                               | -                                 | 136,519              | 31,187                 | -                                    | 7,500,546        | 2,224,678                   | 5,275,868          |
| Plant & Equipment    | 2,218,589       | 1,871,813                   | 346,776            | 469,763                   | (176,713)                       | (176,713)                         | 150,662              | 959                    | -                                    | 2,511,639        | 1,844,803                   | 666,836            |
| Roads                | 7,235,200       | 1,523,500                   | 5,711,700          | -                         | -                               | -                                 | 346,806              | 178,921                | -                                    | 7,320,721        | 1,776,906                   | 5,543,815          |
|                      |                 |                             |                    |                           |                                 |                                   |                      |                        |                                      |                  |                             |                    |
| Total IPPE Assets    | 72,459,245      | 24,973,752                  | 47,485,494         | 6,247,193                 | (417,655)                       | (408,939)                         | 1,784,893            | -                      | 156,910                              | 72,159,350       | 20,063,362                  | 52,095,988         |

**8. INFRASTRUCTURE, PROPERTY, PLANT AND EQUIPMENT (continued)**  
**By asset class**

|                      | At 30 June 2014  |                             |                    | Movements during the year |                                     |                                      |                      |                        |                                      | At 30 June 2015  |                             |                    |
|----------------------|------------------|-----------------------------|--------------------|---------------------------|-------------------------------------|--------------------------------------|----------------------|------------------------|--------------------------------------|------------------|-----------------------------|--------------------|
|                      | Cost/ Fair value | Accum. dep'n and impairment | Written Down Value | Additions                 | Cost/val'n of disposals/ write-offs | Accum.dep'n of disposals/ write-offs | Dep'n and impairment | Transfers/ Adjustments | Revaluation increments/ (decrements) | Cost/ Fair value | Accum. dep'n and impairment | Written Down Value |
| Capital WIP          | 343,111          | -                           | 343,111            | 5,001,093                 |                                     |                                      |                      | (249,509)              |                                      | 5,094,695        | -                           | 5,094,695          |
|                      |                  |                             |                    |                           |                                     |                                      |                      |                        |                                      |                  |                             |                    |
| Airport              | 14,634,936       | 5,639,640                   | 8,995,296          | -                         | -                                   | -                                    | 934,494              | -                      | (2,458,532)                          | 15,981,300       | 10,379,030                  | 5,602,270          |
| Buildings            | 7,347,757        | 2,931,096                   | 4,416,659          | -                         |                                     |                                      | 379,261              | 20,673                 | 1,082,946                            | 9,104,800        | 3,960,600                   | 5,144,200          |
| Electricity Supply   | 6,878,565        | 2,842,043                   | 4,036,522          | -                         | -                                   | -                                    | 189,963              | -                      | -                                    | 6,878,565        | 3,032,005                   | 3,846,560          |
| Land                 | 11,050,000       | -                           | 11,050,000         | -                         | -                                   | -                                    | -                    | -                      | 3,372,000                            | 14,422,000       | -                           | 14,422,000         |
| Marine Facilities    | 3,358,426        | 1,410,254                   | 1,948,172          | -                         | -                                   | -                                    | 253,814              | 7,747                  | 69,293                               | 3,435,700        | 1,664,300                   | 1,771,400          |
| Motor Vehicles       | 484,825          | 314,300                     | 170,525            | -                         | -                                   | -                                    | 24,252               | -                      | -                                    | 484,825          | 338,551                     | 146,274            |
| Office Equipment     | 196,631          | 148,725                     | 47,906             | -                         | (51,860)                            | (51,860)                             | 19,887               | -                      | -                                    | 144,771          | 116,753                     | 28,018             |
| Other Infrastructure | 5,775,036        | 833,668                     | 4,941,366          | -                         | -                                   | -                                    | 125,282              | -                      | 555,516                              | 7,458,800        | 2,087,200                   | 5,371,600          |
| Plant & Equipment    | 2,195,524        | 1,818,981                   | 376,543            | -                         | (95,377)                            | (95,377)                             | 157,003              | 135,744                | (15,443)                             | 2,218,589        | 1,871,813                   | 346,776            |
| Roads                | 9,548,532        | 4,102,049                   | 5,446,483          | -                         | -                                   | -                                    | 605,614              | 85,346                 | 785,486                              | 7,235,200        | 1,523,500                   | 5,711,700          |
|                      |                  |                             |                    |                           |                                     |                                      |                      |                        |                                      |                  |                             |                    |
| Total IPPE Assets    | 61,813,343       | 20,040,756                  | 41,772,584         | 5,001,093                 | (147,237)                           | (147,237)                            | 2,689,570            | -                      | 3,391,266                            | 72,459,245       | 24,973,752                  | 47,485,494         |

**8. INFRASTRUCTURE, PROPERTY, PLANT AND EQUIPMENT (continued)**

For IPPE assets measured at fair value on a recurring basis in the Statement of Financial Position after initial recognition:

- the valuation technique is, in each case except Land, the depreciated replacement cost method; and
- the fair value measurement at the end of the reporting period, and the level of the fair value hierarchy within which the fair value measurements are categorised, for each respective asset class are:

|                      | Level 1<br>\$ | Level 2<br>\$ | Level 3<br>\$     | Total<br>\$       |
|----------------------|---------------|---------------|-------------------|-------------------|
| Airport              | -             | -             | 12,987,600        | 12,987,600        |
| Buildings            | -             | -             | 4,911,034         | 4,911,034         |
| Electricity supply   | -             | -             | 3,754,490         | 3,754,490         |
| Land                 | -             | -             | 14,422,000        | 14,422,000        |
| Marine facilities    | -             | -             | 1,715,861         | 1,715,861         |
| Motor vehicles       | -             | -             | 49,000            | 49,000            |
| Other infrastructure | -             | -             | 5,275,868         | 5,275,868         |
| Plant and equipment  | -             | -             | 20,000            | 20,000            |
| Roads                | -             | -             | 5,543,815         | 5,543,815         |
| <b>Total</b>         | <b>-</b>      | <b>-</b>      | <b>48,679,668</b> | <b>48,679,668</b> |

The comparative amounts at 30 June 2015 were:

|                      | Level 1<br>\$ | Level 2<br>\$ | Level 3<br>\$     | Total<br>\$       |
|----------------------|---------------|---------------|-------------------|-------------------|
| Airport              | -             | -             | 5,602,270         | 5,602,270         |
| Buildings            | -             | -             | 5,144,200         | 5,144,200         |
| Electricity supply   | -             | -             | 3,846,560         | 3,846,560         |
| Land                 | -             | -             | 14,422,000        | 14,422,000        |
| Marine Facilities    | -             | -             | 1,771,400         | 1,771,400         |
| Other Infrastructure | -             | -             | 5,371,600         | 5,371,600         |
| Roads                | -             | -             | 5,711,700         | 5,711,700         |
| <b>Total</b>         | <b>-</b>      | <b>-</b>      | <b>41,869,730</b> | <b>41,869,730</b> |

There were no transfers of amounts between any levels of the fair value hierarchy during the year, nor during the previous year.

The fair value measurements for these asset classes are conducted by independent expert valuers, and the Board accepts their expertise and adopts the valuations they provide.

**Significant unobservable inputs for Level 3 and their sensitivity analysis****Airport**

All airport assets were revalued as at 30 June 2016, following a 'desktop' revaluation of these assets (excluding the runway) as at 30 June 2015.

Some of the major individual airport assets were effectively 're-built' early during the year, including the runway being re-sealed and associated drainage works and line marking (painting) completed. The revaluation amounts for these assets were determined by appropriately escalating the actual 're-build' costs for these assets for the months between completion of the re-build and 30 June 2016.



**8. INFRASTRUCTURE, PROPERTY, PLANT AND EQUIPMENT (continued)****Airport (continued)**

The fair value of these assets at 30 June 2016 is, in aggregate, \$7,356,000 which represents 57% of the total fair value of all airport assets at 30 June 2016.

For most other airport assets, there are both observable inputs such as volumes (cubic metres) or areas (square metres) of the respective physical items, and unobservable inputs being the replacement cost amounts per cubic metre or per square metre, as appropriate, escalated from previous corresponding cost amounts to reflect cost inflation during the respective period.

A small number (and aggregate value) of airport assets are single physical items (rather than areas or volumes) for which the only inputs are unobservable, being the estimated replacement cost of each such item escalated from previous corresponding cost amounts to reflect cost inflation during the respective period.

A + or – 5% sensitivity in the estimated costs per cubic metre or per square metre or individually would, given the fixed nature of the corresponding observable input or item, make a + or – 5% change in the respective value of each such individual airport asset (excluding those ‘rebuilt’ during the year) and, for the airport assets as a whole, a + or – 1.75% change in value.

The fair value of Airport assets at 30 June 2015 did not include any amount for the airport runway as it was then being upgraded, and the corresponding work-in-progress was at cost as part of Capital WIP.

**Buildings**

The valuation of each building at replacement cost reflects the size and design of the respective building, as well as the materials used (all of which are observable inputs) but also includes unobservable inputs in the form of estimated replacement costs for such materials and the requisite labour and other services required for construction. A + or – 5% change in the estimated replacement cost (unobservable input) for each component of material and labour would, given the fixed nature of the observable inputs, result in a + or – 5% change in the replacement cost and, consequently, the fair value, of each individual building.

Buildings are expected to have a total useful life of 25 years. The fair value of buildings is also affected by the remaining useful life of the building, which is assessed by reference to its physical condition. A consistent + or – 5% change in the useful lives of each building would result in approximately a + or – 5% or approximately \$257,000 change in the total written down value of buildings at 30 June 2015 (based on a total value of \$5.14 million (and a corresponding adjustment to Revaluation Surplus).

**Electricity supply**

Electricity supply includes both electricity generation assets and electricity distribution assets, each of which were last independently valued at 30 June 2013. Many new electricity generation assets were constructed or acquired during the year ended 30 June 2013 (as part of relocating the power station following a fire at the old power house site). As a result, the fair value of electricity generation assets at 30 June 2013 largely reflected their actual cost as most of them had very recently been constructed or acquired.

The replacement cost of electricity distribution assets are partly a function of the distances and voltages involved, each of which are fixed and observable inputs. It is also a function of the estimated cost (of materials and labour, etc) to replace the assets involved with respect to the applicable observable inputs.

**8. INFRASTRUCTURE, PROPERTY, PLANT AND EQUIPMENT (continued)****Electricity supply (continued)**

There is no reliable index available as a proxy for movements in the replacement cost of such assets on the island. Also, the revaluation surplus arising on revaluation of the electricity assets at 30 June 2013 was only approximately \$100,000 (over a five-year period since the previous valuation of the electricity assets) and extrapolation of that rate of change, as a proxy for a replacement cost escalation index, would be immaterial and has not been used to reflect potential changes in fair value of electricity assets between 30 June 2013 and 30 June 2016.

A consistent + or – 5% change in the estimated replacement cost of the electricity distribution assets (given the electricity generation asset values largely reflected actual costs) would result in approximately a + or – 2.5% change in the fair value of electricity assets.

The fair value of electricity assets is also affected by the estimated remaining useful life of such assets, which is assessed by reference to its physical condition. Most of the electricity generation assets are near-new, so the major risk associated with any sensitivity to the estimates of remaining useful life relates to the electricity distribution assets. A + or – 5% change in the remaining useful life of electricity distribution assets would result in approximately a + or – 2.5% change in the written down value of total electricity assets (including generation assets), and likely a corresponding amount of impact on Revaluation Surplus.

**Land**

All land on the island is vested in the Crown. Three categories of land have been recognised, viz:

- Land leased or subject to permissive occupancies;
- Crown land reserved or dedicated for a public purpose; and
- Lord Howe Island Permanent Park Preserve.

The 'valuation in use' method has been used for leased land, under which the respective lease rentals are an observable (and fixed) input and the capitalisation rate used is an unobservable input. A + or – 5% revision of the capitalisation rate would, given the fixed observable input, result in a corresponding + or – 5% change in fair value of such land.

Perpetual leases are able to be transferred among island residents, albeit such transfers are very infrequent. The Crown land reserved or dedicated for public purposes has been measured by reference to the area involved, in square metres (a fixed and observable input) and valued by applying to it an amount per square metre of land. The rate per square metre of Crown land reserved or dedicated for public purposes has been estimated by using, as a guide, historical transfer values for perpetual leases of as near to similar parcels of land as can be identified (a proxy value per square metre for such land).

A + or – 5% revision of the estimated value per square metre of land would, given the fixed land area involved, result in a corresponding + or – 5% change in fair value of such Crown land.

The permanent park preserve land is subject to significant restrictions – it may not be leased and has virtually no potential for development. The value of this land has been determined by applying to the land area involved (a fixed and observable input), a value per hectare (an unobservable input). The value per hectare has been estimated based on historic sale values for a range of unimproved land close to coastal population areas within mainland New South Wales.

A + or – 5% revision of the estimated amount per hectare would, given the fixed land area involved, result in a corresponding + or – 5% change in fair value of the permanent park preserve.

**8. INFRASTRUCTURE, PROPERTY, PLANT AND EQUIPMENT (continued)****Marine facilities**

The vast majority of the value of these assets is represented by the value of the island's wharf. The replacement cost estimate for the jetty has been calculated by reference to:

- the drawings provided (a fixed and observable input);
- measuring bulk quantities of materials required (most of which, together with pile driving services, would need to be sourced from the mainland) from the drawings – also observable inputs; and
- pricing such requirements using rates from similar recent projects on the Australian mainland, together with estimated shipping costs (unobservable inputs).

For the remaining marine facilities assets, historical costs (a fixed and observable input) have been escalated to the current date using appropriate ind(ices) – an unobservable input – to determine the respective replacement cost.

A + or – 5% variation in the respective unobservable inputs then, given the fixed amount of each applicable observable input, the estimated replacement cost amount would change by the corresponding + or – 5%.

The fair value of marine facilities is also affected by the estimated total useful life of such assets and by its estimated remaining useful life, the latter of which is assessed by reference to its physical condition.

A consistent + or – 5% variation in the estimated useful life would have a correspondingly + or – 5% impact on the fair value of the marine facilities assets.

**Other infrastructure**

The historical costs (a fixed and observable input) have been escalated to the current date using appropriate ind(ices) – an unobservable input – to determine the respective current replacement cost.

A + or – 5% variation in the respective unobservable inputs, given the fixed amount of each applicable observable input, would change the estimated replacement cost amount by the corresponding + or – 5%.

The fair value of other infrastructure is also affected by the estimated total useful life of such assets, and by its estimated remaining useful life, the latter of which is assessed by reference to its physical condition. A consistent + or – 5% variation in the estimated useful life would have a correspondingly + or – 5% impact on the fair value of the other infrastructure assets.

**Roads**

All roads have been classified within three different categories, viz:

- category 1: sealed primary road;
- category 2: sealed internal road; and
- category 3: unsealed road.

The physical composition of each road varies according to its category, and each sealed road comprises both:

- pavement; and
- bitumen seal.

The category, physical composition and distance (area in square metres) of each road are fixed and observable inputs.

**8. INFRASTRUCTURE, PROPERTY, PLANT AND EQUIPMENT (continued)****Roads (continued)**

The replacement cost of each road has been determined by applying, separately to each of its pavement and bitumen seal components, estimates of current construction costs per square metre (unobservable inputs).

A + or – 5% variation in the respective unobservable inputs, given the fixed amount of each applicable observable input, would change the estimated replacement cost amount by the corresponding + or – 5%.

Estimated total useful lives have been separately estimated for each of pavement and bitumen seal, by reference to their nature. The fair value of each road component is also affected by its estimated remaining useful life, which is assessed by reference to its physical condition. A consistent + or – 5% variation in the estimated useful life would have a correspondingly + or – 5% impact on the fair value of the roads.

The movements between the opening balance of each of these asset classes and its closing balance at 30 June 2016 have been shown above.

**9. INTANGIBLE ASSETS**

|  | <b>2016</b>    | <b>2015</b>    |
|--|----------------|----------------|
|  | <b>\$</b>      | <b>\$</b>      |
| <b>Software</b>  |                |                |
| Software in use - at cost  | 248,543        | 248,543        |
| Accumulated amortisation and impairment                            | (119,437)      | (69,728)       |
| <b>Total net book value</b>  | <u>129,106</u> | <u>178,815</u> |
| Movements in the carrying amount of software during the year were: |                |                |
| Net book amount at 1 July  | 178,815        | 228,523        |
| Software acquired during the year                                  | -              | -              |
| Amortisation during the year                                       | (49,709)       | (49,708)       |
| Net book amount at 30 June   | <u>129,106</u> | <u>178,815</u> |

Contractual commitments were entered into during June 2012 to acquire new software for a total cost of \$402,715. This software was available for use from 03 February 2014 and so amortisation of these costs commenced on that date.

**10. TRADE AND OTHER PAYABLES**

|                                | 2016<br>\$     | 2015<br>\$       |
|--------------------------------|----------------|------------------|
| <b>Payables</b>                |                |                  |
| Trade creditors and accruals   | 468,698        | 2,970,324        |
| Personnel services liabilities | 155,247        | 67,624           |
| GST Payable                    | 455            | -                |
| Security Deposits (a)          | 4,050          | 12,190           |
| <b>Total Payables</b>          | <b>628,450</b> | <b>3,050,138</b> |

Security deposits comprise cash amounts held on behalf of individuals, community groups and organisations

**11. PROVISIONS**

|   | 2016           |                   | 2015             |                   |
|---|----------------|-------------------|------------------|-------------------|
|   | Current<br>\$  | Non-Current<br>\$ | Current<br>\$    | Non-Current<br>\$ |
| Recreation Leave                            | 266,514        | -                 | 248,776          | -                 |
| Extended Leave                              | 618,629        | 8,007             | 604,224          | 8,923             |
| Building demolition and land rehabilitation | 67,679         | -                 | 150,000          | -                 |
| <b>Total Provisions</b>                     | <b>952,822</b> | <b>8,007</b>      | <b>1,003,001</b> | <b>8,923</b>      |

The Board does not employ any staff. Personnel services were provided by the NSW Office of Local Government (OLG).

Details of movements in provisions during the year ended 30 June 2016 are:

| Class of provision                             | Opening<br>balance<br>\$ | Payments<br>\$   | Increase/(Decrease)<br>in provision<br>\$ | Closing<br>balance<br>\$ |
|--|--------------------------|------------------|---|--------------------------|
| Recreation Leave                               | 248,776                  | (210,738)        | 228,476                                   | 266,514                  |
| Extended leave                                 | 613,148                  | (92,794)         | 106,282                                   | 626,636                  |
| Building demolition and<br>land rehabilitation | 150,000                  | (82,321)         | -   | 67,679                   |
| <b>Total</b>                                   | <b>1,011,924</b>         | <b>(385,853)</b> | <b>334,758</b>                            | <b>960,829</b>           |

The provision for buildings demolition and land rehabilitation relates to the old power house site.

**11. PROVISIONS (continued)**

Details of movements in provisions during the year ended 30 June 2015 were:

| Class of provision                             | Opening<br>balance<br>\$ | Payments<br>\$   | Increase/(Decrease)<br>in<br>provision<br>\$ | Closing balance<br>\$ |
|--|--------------------------|------------------|--|-----------------------|
|  |                          |                  |  |                       |
| Recreation Leave                               | 223,821                  | (228,944)        | 253,899                                      | 248,776               |
| Extended leave                                 | 591,834                  | (88,528)         | 109,842                                      | 613,148               |
| Building demolition<br>and land rehabilitation | 370,000                  | (191,272)        | (28,728)                                     | 150,000               |
| Settlement of legal<br>claim                   | 36,000                   | (31,000)         | (5,000)                                      | -                     |
| <b>Total</b>                                   | <b>1,221,655</b>         | <b>(539,744)</b> | <b>330,013</b>                               | <b>1,011,924</b>      |

**12. POST-RETIREMENT BENEFIT ASSET / LIABILITY**

|  | 2016        |                 | 2015         |                 |
|--|-------------|-----------------|--------------|-----------------|
|  | Asset<br>\$ | Liability<br>\$ | Asset<br>\$  | Liability<br>\$ |
| Post-Retirement Benefit Asset /<br>Liability | -           | 78,187          | 6,161        | -               |
| <b>Total</b>                                 | <b>-</b>    | <b>78,187</b>   | <b>6,161</b> | <b>-</b>        |

The Board is liable for defined benefit superannuation amounts in respect of personnel provided by the Office of Local Government.

Two of these personnel are entitled to superannuation benefits under the schemes, namely State Authorities Non-Contributory Superannuation (SANCS) Scheme, State Authorities Superannuation Scheme (SASS), and State Superannuation Scheme (SSS). All funds are administered by the Superannuation Administration Corporation trading as Pillar Administration.

**13. REVALUATION SURPLUS**

The revaluation surplus represents the net accumulated revaluation increments and decrements arising from revaluation of certain asset classes among the Board's IPPE assets since 1986.

|                      | <b>2016</b>       | <b>2015</b>       |
|----------------------|-------------------|-------------------|
|                      | <b>\$</b>         | <b>\$</b>         |
| Airport              | 13,850,023        | 13,693,113        |
| Buildings            | 6,927,059         | 6,927,059         |
| Electricity supply   | 1,211,624         | 1,211,624         |
| Land                 | 11,152,000        | 11,152,000        |
| Marine facilities    | 4,350,573         | 4,350,573         |
| Other infrastructure | 2,704,234         | 2,704,234         |
| Plant and equipment  | 11,382            | 11,382            |
| Roadworks            | 8,925,912         | 8,925,912         |
| Unallocated          | 121,463           | 121,463           |
| <b>Total</b>         | <b>49,254,271</b> | <b>49,097,361</b> |

Movements during the year re Airport were:

|  |            |             |
|--|------------|-------------|
| Opening balance                                    | 13,693,113 | 16,151,645  |
| Revaluation deficit on revaluation at 30 June 2016 | 156,910    | -           |
| Revaluation deficit on revaluation at 30 June 2015 | -          | (2,458,532) |
| Total closing balances                             | 13,850,023 | 13,693,113  |

Movements during the year re Buildings were:

|  |           |           |
|--|-----------|-----------|
| Opening balance                                    | 6,927,059 | 5,844,113 |
| Revaluation surplus on revaluation at 30 June 2015 | -         | 1,082,946 |
| Total closing balances                             | 6,927,059 | 6,927,059 |

Movements during the year re Electricity supply assets were:

|  |           |           |
|--|-----------|-----------|
| Opening balance                            | 1,211,624 | 1,209,764 |
| Transfer of amount from Unallocated assets | -         | 1,860     |
| Total closing balances                     | 1,211,624 | 1,211,624 |

Movements during the year re Land were:

|  |            |            |
|--|------------|------------|
| Opening balance                                    | 11,152,000 | 7,780,000  |
| Revaluation surplus on revaluation at 30 June 2015 | -          | 3,372,000  |
| Total closing balances                             | 11,152,000 | 11,152,000 |

Movements during the year re Marine Facilities were:

|  |           |           |
|--|-----------|-----------|
| Opening balance                                    | 4,350,573 | 4,281,280 |
| Revaluation surplus on revaluation at 30 June 2015 | -         | 69,293    |
| Total closing balances                             | 4,350,573 | 4,350,573 |

**13. REVALUATION SURPLUS (continued)**

|  | <b>2016</b>      | <b>2015</b>      |
|--|------------------|------------------|
|  | <b>\$</b>        | <b>\$</b>        |
| <hr/>  |                  |                  |
| Movements during the year re Other Infrastructure were:    |                  |                  |
| Opening balance  | 2,704,234        | 2,148,718        |
| Revaluation surplus on revaluation at 30 June 2015         | -                | 555,516          |
| Total closing balances                                     | <u>2,704,234</u> | <u>2,704,234</u> |
| <br>Movements during the year re Plant and Equipment were: |                  |                  |
| Opening balance  | 11,382           | 26,825           |
| Revaluation decrement on revaluation at 30 June 2015       | -                | (15,443)         |
| Total closing balances                                     | <u>11,382</u>    | <u>11,382</u>    |
| <br>Movements during the year re Roadworks were:           |                  |                  |
| Opening balance  | 8,925,912        | 8,140,426        |
| Revaluation surplus on revaluation at 30 June 2015         | -                | 785,486          |
| Total closing balances                                     | <u>8,925,912</u> | <u>8,925,912</u> |
| <br>Movements during the year re Unallocated assets were:  |                  |                  |
| Opening balance  | 121,463          | 123,324          |
| Transfer of amount re Electricity supply assets            | -                | (1,860)          |
| Total closing balances                                     | <u>121,463</u>   | <u>121,463</u>   |



**14. RECONCILIATION OF NET RESULT TO NET CASH FLOWS FROM OPERATING ACTIVITIES**

|  | <b>Notes</b> | <b>2016<br/>\$</b> | <b>2015<br/>\$</b> |
|--|--------------|--------------------|--------------------|
| Net result   |              | 4,359,919          | 5,045,138          |
| <b>Add:</b>  |              |                    |                    |
| Depreciation   | 8            | 1,784,893          | 2,689,570          |
| Amortisation   | 9            | 49,709             | 49,709             |
| Decrease in receivables  |              | 991,356            | -                  |
| Decrease in inventories  |              | -                  | 105,041            |
| Decrease in prepayments  |              | 27,722             | -                  |
| Decrease in loan to community group  |              | 6,600              | 6,600              |
| Increase in trade and other payables   |              | -                  | 2,375,293          |
| Loss on sale of IPPE assets  |              | 291                | -                  |
| Other amounts  |              | -                  | 34,978             |
| <b>Less:</b>   |              |                    |                    |
| Non-cash revenue   |              | (69,000)           | -                  |
| Increase in receivables  |              | -                  | (932,442)          |
| Increase in inventories  |              | (23,553)           | -                  |
| Increase in prepayments  |              | -                  | (41,775)           |
| Decrease in trade and other payables   |              | (2,421,688)        | -                  |
| Decrease in provisions   |              | (51,095)           | (209,731)          |
| Decrease in unearned income  |              | (8,852)            | (2,128)            |
| Interest and investment income   |              | (367,129)          | (553,552)          |
| Other amounts  |              | (85,235)           | -                  |
| <b>Net cash provided from (or used in) operating activities from the Statement of Cash Flows</b> |              | <b>4,193,938</b>   | <b>8,566,701</b>   |

## 15. COMMITMENTS FOR CAPITAL EXPENDITURE

|  | 2016<br>\$     | 2015<br>\$       |
|--|----------------|------------------|
| <b>Capital expenditure commitments</b>   |                |                  |
| Capital expenditure committed for at the reporting date but not recognised in the financial statements as liabilities: |                |                  |
| - Airport  | -              | 4,152,270        |
| - Buildings  | 194,074        | 18,842           |
| - Electricity  | 534,116        | 275,327          |
| - Marine Facilities  | 9,545          | -                |
| - Office equipment   | -              | 4,006            |
| - Other infrastructure   | 32,404         | -                |
| - Plant and Equipment  | -              | 20,530           |
| <b>Total</b>   | <b>770,139</b> | <b>4,470,975</b> |
| These expenditures are payable as follows:   |                |                  |
| - Not later than one year  | 770,139        | 4,470,975        |
| - Later than one year and not later than 5 years   | -              | -                |
| - Later than 5 years   | -              | -                |
| <b>Total</b>   | <b>770,139</b> | <b>4,470,975</b> |

The amounts shown above are GST exclusive.

There were no lease commitment receivables or payables, or contingent rentals recognised as at the reporting date.

## 16. FINANCIAL RISK MANAGEMENT

The Board's activities expose it to a variety of financial risks including price risk, credit risk, liquidity risk and interest rate risk. The Board does not engage in transactions expressed in foreign currencies and is therefore not subject to foreign currency risk.

The Board's main risks arising from financial instruments are outlined below, together with the Board's objectives, policies and procedures for measuring and managing risk. Further quantitative and qualitative disclosures are included throughout this financial report.

The Chief Executive Officer has overall responsibility for the establishment and oversight of risk management and reviews and agrees policies for managing of these risks. Risk management policies are established to identify and analyse the risks faced by the Board, to set risk limits and controls to monitor risks. Compliance with policies is reviewed by the Board's internal auditors on a periodic basis.

The Board held the following financial instruments at balance date:

|                              | Carrying value |            | Fair value |            |
|------------------------------|----------------|------------|------------|------------|
|                              | 2016           | 2015       | 2016       | 2015       |
|                              | \$             | \$         | \$         | \$         |
| <b>Financial Assets</b>      |                |            |            |            |
| Cash and cash equivalents    | 14,555,638     | 16,079,103 | 14,555,638 | 16,079,103 |
| Receivables*                 | 1,155,293      | 1,726,999  | 1,155,293  | 1,726,999  |
| <b>Financial Liabilities</b> |                |            |            |            |
| Payables**                   | 627,995        | 3,050,138  | 627,995    | 3,050,138  |

\* Excludes statutory receivables and prepayments (i.e. not within scope of AASB 7).

\*\* Excludes statutory payables and unearned revenue (i.e. not within scope of AASB 7)

Fair value is determined as follows:

- Cash and cash equivalents, receivables, payables – estimated to be the carrying value which approximates net market value.
- Financial assets at fair value through profit and loss, available for sale financial assets – based on quoted market prices in active markets for identical investments.

These financial instruments arise directly from the Board's operations or are required to finance the Board's operations. The Board does not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes.

### (a) Cash and cash equivalents and financial assets at fair value through profit and loss.

The Board's objective is to maximise its return on cash and investments, whilst maintaining an adequate level of liquidity and preserving capital.

Cash and cash equivalents comprises cash on hand and bank balances within the Board's operating bank account and a short term deposit with one of Australia's four major banks as well as a balance maintained with NSW Treasury Corporation Hour Glass cash facility. Interest is earned on the daily bank balances.

The major risk associated with investments is price risk – the risk that the capital value of investments may fluctuate due to changes in market prices, whether these changes are caused by factors specific to individual financial instruments or their issuers or factors affecting similar instruments traded in a market.

Cash and cash equivalents and investments are also subject to interest rate risk – the risk that movements in interest rates could affect returns.

**16. FINANCIAL RISK MANAGEMENT (continued)****(a) Cash and cash equivalents and financial assets at fair value through profit and loss (continued)**

Another risk associated with cash and cash equivalents and investments is credit risk – the risk that a contracting entity will not complete its obligations under a financial instrument resulting in a financial loss to the Board. These risks are mitigated by:

- (i) the major Australian bank with which the Board's short term deposit is lodged has AA- long term credit ratings from major global credit rating agencies; and
- (ii) TCorp is a managed investment pool, with each particular pool having different investment horizons and comprising a mix of asset classes appropriate to that investment horizon. TCorp appoints and monitors fund managers, and establishes and monitors the application of appropriate investment guidelines.

The interest rate being earned on the Board's short term deposit is a fixed rate of 3.05% per annum (2015 – 3.5%).

The Board places funds on deposit with one of Australia's 'big four' banks (rated AA-) or with TCorp, which is rated "AAA" by Standards and Poor's. These deposits are either "at call" or have short term maturity.

None of these assets are past due or impaired.

|  | 2016<br>\$ | 2015<br>\$ |
|--|------------|------------|
| Impact of a 10% <sup>(1)</sup> movement in value of investments: |            |            |
| - Equity   | 1,173,094  | 1,509,451  |
| - Statement of comprehensive income                              | 1,173,094  | 1,509,451  |
| Impact of a 1% <sup>(1)</sup> movement in interest rates:        |            |            |
| - Equity   | 145,542    | 160,791    |
| - Statement of comprehensive income                              | 145,542    | 160,791    |

- <sup>(1)</sup> Sensitivity percentages are based on management's expectation of future possible market movements. Movements are calculated on investments subject to fair value adjustments. Interest rate movements are calculated on total cash and cash equivalents.

**(b) Trade and other receivables**

The major risk associated with the Board's receivables is credit risk – the risk that the debts may not be repaid. The Board manages this risk by monitoring outstanding debt and employing stringent debt recovery policies.

Credit risk arises when there is a possibility of the Board's debtors defaulting on their contractual obligations, resulting in a financial loss to the Board. The maximum exposure to credit risk is generally represented by the carrying amount of the financial assets (net of any amount for impairment).

Credit risk arises from the financial assets of the Board, including cash and cash equivalents, and receivables. No collateral is held by the Board. The Board has not granted any financial guarantees.

All trade debtors are recognised as amounts receivable at balance date. Collectability of trade debtors is reviewed on an ongoing basis. Procedures as established in the Treasurer's Directions are followed to recover outstanding amounts, including letters of demand. Debts which are known to be uncollectible are written off. An allowance for impairment is raised when there is objective evidence that the entity will not be able to collect all amounts due. This evidence includes past experience, and current and expected changes in economic conditions and debtor credit ratings. No interest is earned on trade debtors. Sales are made on 30 days terms.

The Board is not materially exposed to concentrations of credit risk to a single trade debtor or group of debtors. The only financial assets that are past due or impaired are receivables in the statement of financial position.

**16. FINANCIAL RISK MANAGEMENT (continued)****(b) Trade and other receivables (continued)**

The profile of the Board's credit risk at 30 June 2016 was:

|                              | <b>Totals</b>  | <b>Past due but<br/>not impaired<br/>\$</b> | <b>Considered<br/>impaired<br/>\$</b> |
|------------------------------|----------------|---|---------------------------------------|
| <b>2016</b>                  |                |   |                                       |
| Amounts < 3 months overdue   | 151,791        | 151,791                                     | -                                     |
| Amounts 3 - 6 months overdue | 25             | 25  | -                                     |
| <b>Total</b>                 | <b>151,816</b> | 151,816                                     | -                                     |
| <b>2015</b>                  |                |   |                                       |
| Amounts < 3 months overdue   | 160,962        | 160,962                                     | -                                     |
| Amounts 3 - 6 months overdue | 2,990          | 2,990                                       | -                                     |
| <b>Total</b>                 | <b>163,952</b> | 163,952                                     | -                                     |

Each column in the table above shows 'gross receivables'.

The ageing analysis excludes statutory receivables, as these are not within the scope of AASB 7, and does not include receivables which are not 'past due' and are not impaired. Accordingly, the total shown above will not reconcile to the receivables total recognised in the Statement of Financial Position.

**16. FINANCIAL RISK MANAGEMENT (CONTINUED)****(c) Payables**

Payables are subject to liquidity risk – that is the risk that insufficient funds may be on hand to meet payment obligations as and when they fall due. The Board manages this risk by monitoring its cash flow requirements and liquidity levels and maintaining an adequate cash buffer.

During the current and prior years, there were no defaults or breaches on any loans payable. No assets have been pledged as collateral. The Board's exposure to liquidity risk is deemed insignificant based on prior periods' data and current assessment of risk.

The Board has no current stand-by credit arrangements or unused loan facilities in place.

The liabilities are recognised for amounts due to be paid in the future for goods or services, whether or not invoiced. Amounts owing to suppliers (which are unsecured) are settled in accordance with the policy set out in NSW TC11/12. If trade terms are not specified, payment is made no later than the end of the month following the month in which an invoice or statement is received. NSW TC 11/12 allows the Minister to award interest for late payment. No interest for late payment was awarded during the year ended 30 June 2016 (2015: \$nil).

The contractual undiscounted cash flows of the Board's payables are set out in the Liquidity Sensitivity Table below:

|                              | <b>Due within<br/>1 year<br/>\$</b> | <b>Due<br/>between 1<br/>and 5 years<br/>\$</b> | <b>Total<br/>contractual<br/>cash flows<br/>\$</b> | <b>Carrying values<br/>\$</b> |
|------------------------------|-------------------------------------|---|--|-------------------------------|
| <b>30 June 2016</b>          |                                     |   |  |                               |
| <i>Financial Liabilities</i> |                                     |   |  |                               |
| Payables                     | <b>627,955</b>                      | <b>-</b>  | <b>627,995</b>                                     | <b>627,995</b>                |
| <b>30 June 2015</b>          |                                     |   |  |                               |
| <i>Financial Liabilities</i> |                                     |   |  |                               |
| Payables                     | <b>3,050,138</b>                    | <b>-</b>  | <b>3,050,138</b>                                   | <b>3,050,138</b>              |

**(d) Market risk**

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. The Board's exposure to market risk is primarily through interest rate risk associated with the unit price of the Hour Glass Investment Facilities. The Board has no exposure to foreign currency risk and does not enter into commodity contracts.

**(e) Interest rate risk**

The Board has no interest bearing liabilities or borrowings and does not account for any fixed rate financial instruments at fair value through profit or loss or as available-for-sale. Therefore, a change in interest rates would not affect profit or loss or equity. A reasonably possible change of +/- 1% is used, based on current trends in interest rates. The basis will be reviewed annually and amended where there is a structural change in the level of interest rate volatility. The Board's exposure to interest rate risk is set out below.

## 16. FINANCIAL RISK MANAGEMENT (CONTINUED)

## (e) Interest rate risk (continued)

|                                    | Carrying<br>Amount<br>\$ | -1%<br>Profit<br>\$ | Equity<br>\$     | 1%<br>Profit<br>\$ | Equity<br>\$   |
|------------------------------------|--------------------------|---------------------|------------------|--------------------|----------------|
| <b>30 June 2016</b>                |                          |                     |                  |                    |                |
| <u>Financial Assets</u>            |                          |                     |                  |                    |                |
| Cash and cash equivalents          | 14,555,638               | (145,542)           | (145,542)        | 145,542            | 145,542        |
| Receivables                        | 1,155,293                | -                   | -                | -                  | -              |
| <u>Financial Liabilities</u>       |                          |                     |                  |                    |                |
| Payables                           | 628,450                  | -                   | -                | -                  | -              |
| <b>Total Increase / (Decrease)</b> |                          | <b>(145,542)</b>    | <b>(145,542)</b> | <b>145,542</b>     | <b>145,542</b> |
| <b>30 June 2015</b>                |                          |                     |                  |                    |                |
| <u>Financial Assets</u>            |                          |                     |                  |                    |                |
| Cash and cash equivalents          | 16,079,103               | (160,791)           | (160,791)        | 160,791            | 160,791        |
| Receivables                        | 2,146,649                | -                   | -                | -                  | -              |
| <u>Financial Liabilities</u>       |                          |                     |                  |                    |                |
| Payables                           | 3,050,138                | -                   | -                | -                  | -              |
| <b>Total Increase / (Decrease)</b> |                          | <b>(160,791)</b>    | <b>(160,791)</b> | <b>160,791</b>     | <b>160,791</b> |

## (f) Fair value compared to carrying amount

Financial instruments are recognised at cost, except for TCorp Hour-Glass facilities, which are measured at fair value, based on the Board's share of the market value of the underlying assets of the facility. The Hour-Glass facilities are valued using 'redemption' pricing. The carrying amount of receivables less any impairment provision and payables is a reasonable approximation of their fair value due to their short term nature.

## (g) Fair value recognised in the statement of financial position

The Board uses the following valuation technique hierarchy for the fair value of financial assets only (as no financial liabilities other than the Post-Retirement Benefit Obligations are measured at fair value in the Statement of Financial Position):

- Level 1 – Derived from quoted prices in active markets for identical assets / liabilities.
- Level 2 – Derived from inputs other than quoted prices that are observable directly or indirectly.
- Level 3 – Derived from valuation techniques that include inputs for the asset / liability not based on observable market data (unobservable inputs).

| Financial Assets at Fair Value        | Level 1<br>\$ | Level 2<br>\$    | Level 3<br>\$ | 2016 Total<br>\$         |
|---------------------------------------|---------------|------------------|---------------|--------------------------|
| TCorp Hour-Glass Investment Facility  | -             | 2,730,937        | -             | 2,730,937                |
|                                       | -             | <b>2,730,937</b> | -             | <b>2,730,937</b>         |
| <b>Financial Assets at Fair Value</b> |               |                  |               | <b>2015 Total<br/>\$</b> |
| TCorp Hour-Glass Investment Facility  | -             | 4,844,510        | -             | 4,844,510                |
|                                       | -             | <b>4,844,510</b> | -             | <b>4,844,510</b>         |

There were no transfers between Level 1 and Level 2 during the year ended 30 June 2016, nor any during the year ended 30 June 2015.

**17. CONTINGENT ASSETS AND LIABILITIES**

There are no material contingent assets or contingent liabilities for the financial year ended 30 June 2016 (2015: \$nil).

**18. EVENTS OCCURRING AFTER BALANCE SHEET DATE**

The Board is not aware of any matter or circumstance not otherwise dealt with in these financial statements that has or may significantly affect the operations of the Board, the results of those operations or the state of affairs of the Board in subsequent financial years that has occurred after reporting date.

**END OF FINANCIAL STATEMENTS**





## INDEPENDENT AUDITOR'S REPORT

### Lord Howe Island Board

To Members of the New South Wales Parliament

#### Opinion

I have audited the accompanying financial statements of Lord Howe Island Board (the Board), which comprise the statement of financial position as at 30 June 2016, the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, notes comprising a summary of significant accounting policies and other explanatory information.

In my opinion, the financial statements:

- give a true and fair view of the financial position of the Board as at 30 June 2016, and of its financial performance and its cash flows for the year then ended in accordance with Australian Accounting Standards
- are in accordance with section 41B of the *Public Finance and Audit Act 1983* (PF&A Act) and the Public Finance and Audit Regulation 2015.

My opinion should be read in conjunction with the rest of this report.

#### Basis for Opinion

I conducted my audit in accordance with Australian Auditing Standards. My responsibilities under those standards are further described in the 'Auditor's Responsibilities for the Audit of the Financial Statements' section of my report.

I am independent of the Board in accordance with the auditor independence requirements of:

- Australian Auditing Standards
- ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 'Code of Ethics for Professional Accountants' (the Code).

I have also fulfilled my other ethical responsibilities in accordance with the Code.

The PF&A Act further promotes independence by ensuring the Auditor-General and the Audit Office of New South Wales are not compromised in their roles by:

- providing that only Parliament, and not the executive government, can remove an Auditor-General
- mandating the Auditor-General as auditor of public sector agencies, but precluding the provision of non-audit services.

I believe the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

## **The Board's Responsibility for the Financial Statements**

The members of the Board are responsible for preparing financial statements that give a true and fair view in accordance with Australian Accounting Standards and the PF&A Act, and for such internal control as the members of the Board determine is necessary to enable the preparation of financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the members of the Board must assess the Board's ability to continue as a going concern unless the Board will be dissolved by an Act of Parliament or otherwise cease operations. The assessment must include, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting.

## **Auditor's Responsibility for the Audit of the Financial Statements**

My objectives are to:

- obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error
- issue an Independent Auditor's Report including my opinion.

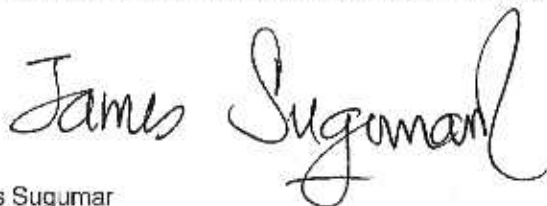
Reasonable assurance is a high level of assurance, but does not guarantee an audit conducted in accordance with Australian Auditing Standards will always detect material misstatements. Misstatements can arise from fraud or error. Misstatements are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions users take based on the financial statements.

A further description of my responsibilities for the audit of the financial statements is located at the Auditing and Assurance Standards Board website at: <http://www.auasb.gov.au/Home.aspx>.

The description forms part of my auditor's report.

My opinion does not provide assurance:

- that the Board carried out its activities effectively, efficiently and economically
- about the security and controls over the electronic publication of the audited financial statements on any website where they may be presented.



James Sugumar  
Director, Financial Audit Services

13 October 2016  
SYDNEY

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **ITEM**

Electrical Network Safety Management System

### **RECOMMENDATION**

It is recommended that the Board adopt the Electrical Network Safety Management System for implementation by the Administration.

### **BACKGROUND**

Earlier in 2016, the Board was advised by the Independent Pricing and Regulatory Tribunal (IPART) that they had taken over the role of the safety and reliability regulator for NSW electricity networks.

The Board is defined as an Electricity Network Operator and accordingly has responsibilities under the *Electricity Supply Act 1995* and *Electricity Supply (Safety and Network Management) Regulation 2014* in maintaining a safe and reliable electricity network on Lord Howe Island. More importantly, the Board seeks to provide a safe and reliable electricity supply for the benefit of the community.

The Board engaged a consultant in 2016 to prepare an Electrical Network Safety Management System for the Island's electricity generation and distribution system, which will meet the requirement of the legislation and IPART.

### **CURRENT POSITION**

Through this System, the Board is committing to take all reasonable steps to ensure that the design, construction, commissioning, operation, maintenance and decommissioning of its electrical network (or any part of its network):

- Is as safe as possible and the risk from such activities is as low as reasonably practicable (ALARP) or presents a negligible risk
- Complies with relevant legislation
- Is supported by all necessary policies, plans, procedures, work instructions
- Complies with IPART electrical network safety management system reporting requirements.

When standards or requirements change, the Board will take steps to comply with the most recent edition to the extent that is reasonably practical.

The document explains that our management structure is appropriate for the small size and limited complexity of our electrical network, and we will resource any temporary deficiencies, including to fill any periods where our staff may be on leave, by the use of contractors.

Through these documents, the Board has empowered those detailed in the electricity management structure above to act in accordance with the relevant responsibilities, accountabilities and authorities detailed in the ENSMS.

The major cost implications of the system's implementation are:

1. A requirement to have an annual audit completed of the System's implementation, and a report to IPART on the outcomes.
2. Annual refresher training for the Senior Electrical Officer and Electrical Apprentice in Resuscitation and Rescue from Live Electrical Equipment.
3. Relief contractors for the Senior Electrical Officer will need to have the above current training and competencies in working on high voltage equipment.

Attachment 1 is the combination of the 11 separate documents and one drawing into the Board's Electrical Network Safety Management System. The 11 documents are:

- Electricity Network Safety Management System Policy
- LHIB ENSMS Customer Electrical Installation Safety Plan
- LHIB ENSMS Planning, Design and Construction Plan
- LHIB ENSMS Maintenance Plan
- LHIB ENSMS Operations Plan
- LHIB ENSMS Bushfire Management Plan
- LHIB ENSMS Emergency Management Plan
- LHIB ENSMS Decommissioning Plan
- LHIB ENSMS Communication and Reporting Plan
- LHIB ENSMS Monitoring, Measurement and Audit Plan
- LHIB ENSMS Public Electrical Safety Awareness Plan

## **RECOMMENDATION**

It is recommended that the Board adopt the Electrical Network Safety Management System Policy and documents for implementation by the Administration.

**Prepared** \_\_\_\_\_ Andrew Logan      Manager Infrastructure & Engineering Services

**Endorsed** \_\_\_\_\_ Penny Holloway      Chief Executive Officer

Attachments:

1 - Electrical Network Safety Management System

# LORD HOWE ISLAND BOARD POLICY

|                               |   |                       |                     |
|-------------------------------|---|-----------------------|---------------------|
| <b>TITLE</b>                  | <b>Electricity Network Safety Management System Policy</b>  |                       |                     |
| <b>DATE ADOPTED</b>           |   | <b>AGENDA ITEM</b>    | 8(iv) November 2016 |
| <b>CURRENT VERSION</b>        | October 2016  | <b>AGENDA ITEM</b>    |                     |
| <b>REVIEW</b>                 | <b>5 years</b>  | <b>FILE REFERENCE</b> | EL0002              |
| <b>ASSOCIATED LEGISLATION</b> | <p><b>Electricity Supply Act 1995</b> (NSW) – Section 106 empowers regulations such as:</p> <p><b>Electricity Supply (Safety &amp; Network Management) Regulation 2014</b> – requires network operators to ensure safety of their distribution system which includes having a safety management system in accordance with AS5777 and this policy.</p> |                       |                     |
| <b>ASSOCIATED POLICIES</b>    | Bushfire Mitigation Hardship Policy   |                       |                     |

## 1. Background

As a network operator, as defined under the *Electricity Supply Act 1995*, the Lord Howe Island Board (LHIB) is required under the *Electricity Supply (Safety & Network Management) Regulation 2014* to have an "Electricity Network Safety Management System" (ENSMS). AS/NZS5577 *Electricity Network Safety Management Systems* provides guidance on establishing and maintaining an ENSMS that is consistent with industry engineering, technical and safety documents. More importantly, the LHIB seeks to provide a safe and reliable electricity supply for the benefit of the community.

## 2. The Island Group

The Lord Howe Island Group, located 700 kilometres north-east of Sydney, includes Lord Howe Island, Admiralty Islands, Mutton Bird Islands and Ball's Pyramid as well as the associated marine areas. The Lord Howe Island Group is part of the State of NSW. The island was first settled in 1834. Today, the main industry on the island is tourism. In 1982, the Lord Howe Island Group was included on the World Heritage List, and in 2007 was one of fifteen World Heritage places to be included in the National Heritage List.

The main and only inhabited island, which is volcanic in origin, is 11 km long and between 2.0 km and 0.3 km wide. It has an area of 14.55 km<sup>2</sup>, of which only 398 hectares is in the lowland settled area. The northern and southern mountainous ends of the Island and a central section, form part of the Permanent Park Preserve (similar to a National Park).

Most of the island is virtually untouched forest with many of the plants and animals found nowhere else in the world. Other natural attractions include the diversity of its landscapes, the variety of upper mantle and oceanic basalts, the world's southernmost barrier coral reef, nesting seabirds, and its rich historical and cultural heritage.

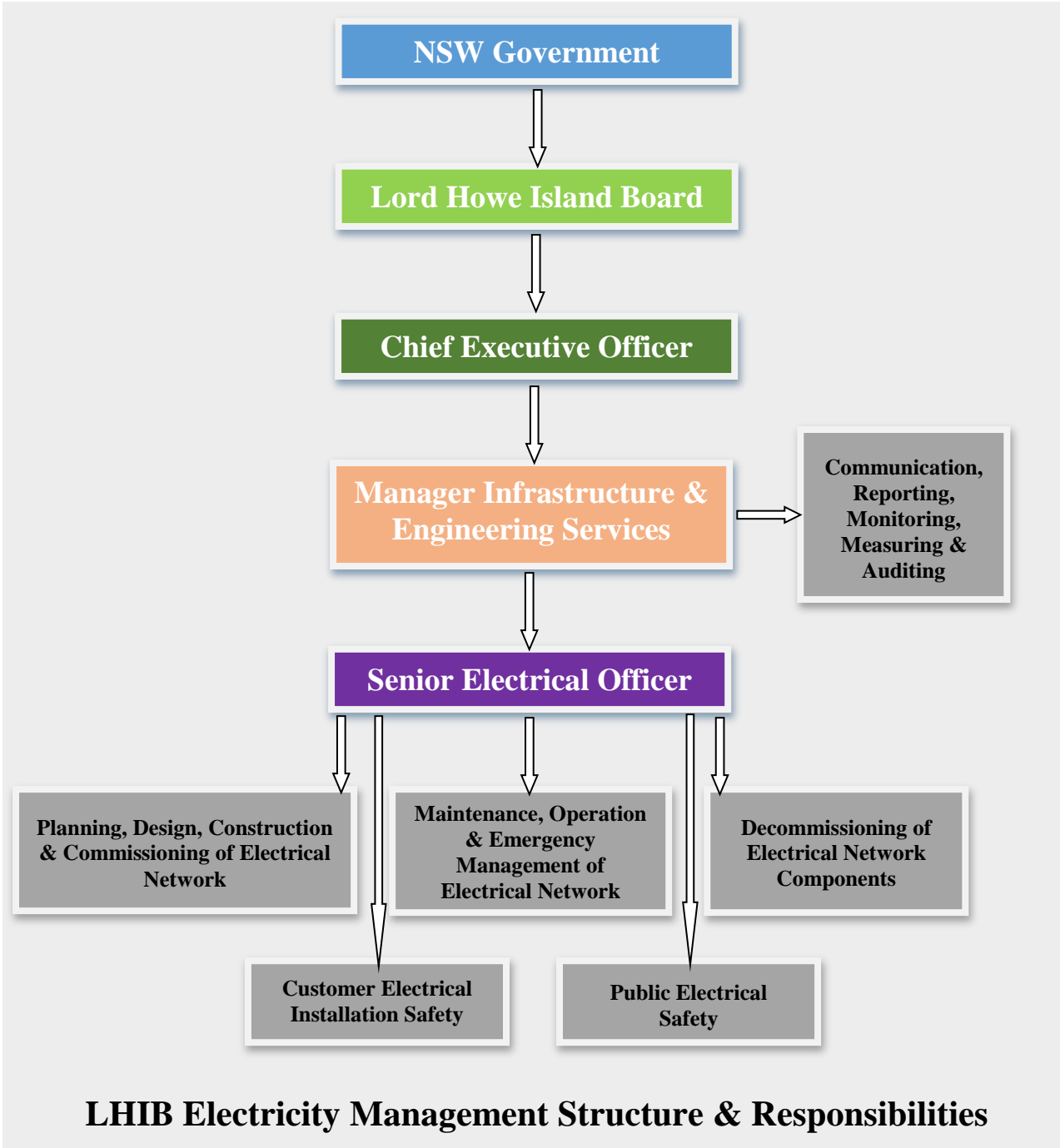
The Island's population comprises approximately 360 permanent residents and a maximum 400 tourists at any one time.

The LHIB is established under the Lord Howe Island Act 1953 and has responsibility for the care, control and management of the Lord Howe Island Group. Under the Act, the LHIB has a broad range of

responsibilities and provides the majority of services and infrastructure on the Island. These include the airport, the wharf, waste management services, roads, tourism infrastructure, public buildings, wastewater oversight and the regulation, and generation and supply of electricity.

**3. Management Structure and Responsibilities**

The responsibility for electricity generation and reticulation on Lord Howe Island fits into the LHIB structure as follows:



The LHIB believes that our management structure is appropriate for the small size and limited complexity of our electrical network, and we will resource any temporary deficiencies, including to fill any periods where our staff may be on leave, by the use of contractors or consultants.

The LHIB has empowered those detailed in the electricity management structure above to act in accordance with the relevant responsibilities, accountabilities and authorities detailed in the ENSMS.

#### 4. Our Electricity Network

The Lord Howe Island Board's generates and distributes electricity via an underground electrical reticulation system servicing approximately 280 customers on Lord Howe Island only.

The electricity generation system is housed in a centrally located powerhouse and consists of 3 x 300kW Detroit Series 60 diesel generating units. In addition to this there is 1 x 450 kW Cummins C55 D5 diesel generating unit that provides backup power in the event of major failure of the Series 60 generators.

The underground electrical reticulation system is designed for a HV distribution voltage of 11kV but is currently utilized at a transmission voltage of 6.6 kV. There is approximately 13 kilometres of underground HV cable. There are no aerial conductors on the island distribution system.

Two 500 kVA padmount substations supply the HV reticulation system from the powerhouse and one 500 kVA padmount substation supplies the HV reticulation system from the standby generating unit. These three 500 kVA padmount substations utilize ABB Safelink SF6 ring main units for HV control. There are basically two 6.6kV feeders from the substations with an intertie between the two via the ABB ring main units.

The existing HV network protection systems at the Power House and standby generator are 25 amp, 6.6 kV transformer fuses.

Ten smaller padmounts substations ranging in size from 50 kVA to 150 kVA convert this HV distribution voltage to a nominal 400/230 volt 3 phase supply which is then distributed locally to all customers via underground mains. These substations utilize Hazemeyer Magnefix MD400 ring main units for HV control and both "F" frame and Quicklag circuit breakers for LV control.

The existing LV network protection systems in use on the network are:

- Eaton Series NRX 1000 amp Air Circuit Breakers with Digitrip 520 controllers located on the main powerhouse switchboard;
- Thermal/magnetic MCB's and moulded case CB's located in both padmount substations and LV distribution pillars.

Existing powerhouse generator protection is provided by Woodward EGCP-2 engine control units. Distillate fuel is stored in 1 x 34,000 litre and 2 x 17000 litre underground fuel tanks at the powerhouse and is delivered fortnightly by a contracted Lord Howe Island Sea Freight shipping agent.

The existing standby generator protection is provided by Cummins PowerCommand 2.2 engine control units with onboard diesel storage.

There is approximately 120 kW of private grid connected solar arrays on the system. These are controlled by SMA inverters with standard voltage, frequency and anti-islanding protection.

Electrical hotwater booster load is controlled by a frequency injection control system which limits the operational hours of the electrical booster systems to non- peak periods. This system is monitored on a 24 hour basis and adjusted to suit changing seasonal load profiles.

All electrical installations on the island must comply with local Lord Howe Island Electrical Service Rules which regulate electrical installations and connections in order to ensure a reliable, stable electrical supply for all customers. All electrical installations must also comply with AS/NZS 3000 *Wiring Rules*. All new electrical installations, additions or alterations to electrical services require the submission of appropriate application forms to allow a thorough assessment to be undertaken for these works.

All customer installations are fitted with standardized electrical demand metering and customers are charged on a quarterly basis for all electrical consumption.

The location of electrical network assets is recorded on paper and is being transferred to our Geographical Information System and a schematic representation of the network is included in our drawing system and as displayed and pinned in the Powerhouse.

Our electricity network is managed by our Senior Electrical Officer with assistance from his apprentice. Contractors are used for relief or special projects as required.

## **5. Purpose of the Policy**

The purpose of the policy is to enable the Board to comply with the *Electricity Supply (Safety & Network Management) Regulation 2014* and more importantly to ensure:

- a) The safety of members of the public, and
- b) The safety of persons working on the LHIB network, and
- c) The protection of property, and
- d) The management of safety risks arising from the protection of the environment, and
- e) The management of safety risks arising from the loss of electricity supply.

## **6. Policy Statement**

The Lord Howe Island Board will take all reasonable steps to ensure that the design, construction, commission, operation, maintenance and decommissioning of its electrical network (or any part of its network):

- Fulfills the purpose of this policy
- Is as safe as possible and the risk from such activities is as low as reasonably practicable (ALARP) or presents a negligible risk
- Complies with relevant legislation
- Is supported by all necessary policies, plans, procedures, work instructions
- Complies with IPART electrical network safety management system reporting requirements.

When standards or requirements change, we will take steps to comply with the most recent edition to the extent that is reasonably practical.

## **7. Applicable Legislation**

The LHIB will comply with the requirements of the following NSW legislation in regards to its electrical network:

- Electricity Supply Act 1995
- Electricity (Consumer Safety) Act 2004
- Electricity (Consumer Safety) Regulation 2015
- Electricity Supply (Safety & Network Management) Regulation 2014
- Environmental Planning and Assessment Act 1979
- Environmental Planning and Assessment Regulation 2000
- Work Health and Safety Act 2011
- Work Health and Safety Regulation 2011



## **8. Documents to Meet Policy Statement**

The primary in-house documents that seek to fulfil the policy statement are:

- Lhib ENSMS Customer Electrical Installation Safety Plan
- Lhib ENSMS Planning, Design and Construction Plan
- Lhib ENSMS Maintenance Plan
- Lhib ENSMS Operations Plan
- Lhib ENSMS Bushfire Management Plan
- Lhib ENSMS Emergency Management Plan
- Lhib ENSMS Decommissioning Plan
- Lhib ENSMS Communication and Reporting Plan
- Lhib ENSMS Monitoring, Measurement and Audit Plan
- Lhib ENSMS Public Electrical Safety Awareness Plan
- Lhib Business Continuity Plan
- Lhib Risk Management Policy
- Lhib Risk Register
- Jacobs Lhib Renewable Energy Project Protection Study.

## **9. ENSMS Implementation**

The ENSMS, including this policy and documents listed in Section 8 of this policy, have been developed to reflect existing practices and to extend on those to meet requirements introduced in recent times.

The ENSMS has been introduced in consultation with relevant stakeholders and so is considered to be implemented from the date the Lhib approves it.

## **10. Records**

All documents that form part of the ENSMS shall be version controlled and old versions stored for future reference. All documents associated with the ENSMS shall also be stored for future reference including:

- a) Legislation, standards, codes and guidelines
- b) Plans for design, construction, commissioning, operation, maintenance and decommissioning of the network including and specific plans or procedures for a particular project.
- c) Asset records including maps, databases, designs and as-built drawings.
- d) Commissioning, operation, maintenance and audit records.
- e) ENSMS records.
- f) Accident/incident records.

The majority of these records will be stored at the Powerhouse by the Senior Electrical Officer and the remainder at the Lhib office. Progression to electronic copies on corporate drives is planned in the future.

## **11. ENSMS Review**

This policy and the complete ENSMS will be reviewed and amended as required, to meet the Lhib ENSMS Monitoring, Measurement and Audit Plan.



# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM CUSTOMER ELECTRICAL INSTALLATION SAFETY PLAN**

This Plan was introduced in 2016 and will continue to be in effect until it is removed from service. This plan will undergo regular review in accordance with the Electricity Supply (Safety and Network Management) Regulation 2014 and AS5577-2013. This Plan will be systematically reviewed against legislation and regulation applicable to distribution and transmission network service providers, industry standards including AS5577, the Lord Howe Island Board's strategic plans and relevant internal policies, procedures and standards and our regulatory determination. This plan will be updated as necessary in line with the outcome of these reviews.

In accordance with the NSW Electricity Supply (Safety and Network Management) Regulation 2014, this Plan will be made available to all stakeholders who are likely to be involved in its implementation.

This Electricity Network Safety Management System Customer Electrical Installation Safety Plan is available on the Lord Howe Island Board's website ([www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)). Printed copies of this Plan are available at the Lord Howe Island Board's office – 5 Bowker Avenue, Lord Howe Island NSW 2898.

All correspondence in relation to this document should be directed to:

The Lord Howe Island Board  
PO Box 5, Bowker Ave  
Lord Howe Island  
NSW 2898  
Australia

Phone: (02) 6563 2066 Fax: (02) 6563 2127

Email: [administration@lhib.nsw.gov.au](mailto:administration@lhib.nsw.gov.au) Website: [www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)

September 2016

## Table of Contents

|  |   |
|--|---|
| 1. INTRODUCTION.....   | 4 |
| 2. INSTALLATION COMPLIANCE REQUIREMENTS .....                        | 4 |
| 3. ELECTRICAL INSTALLATION WORK .....                                | 4 |
| 4.1 Purchasing a Property .....                                      | 4 |
| 4.2 Maintaining an Electrical Installation.....                      | 4 |
| 4.3 DON'T Do-It-Yourself .....                                       | 4 |
| 4.4 Process for New Installations or Additions and Alterations ..... | 5 |
| 4.5 Unsafe or Defective Installations .....                          | 5 |
| 4.6 Disciplinary Action for Electrical Contractors.....              | 5 |
| 4. REPORTING .....   | 6 |
| 5. PLAN REVIEW .....   | 6 |

# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM CUSTOMER ELECTRICAL INSTALLATION SAFETY PLAN**

## **1. INTRODUCTION**

This Plan is part of the Lord Howe Island Board's (LHIB) Electricity Network Safety Management System (ENSMS) and addresses the safety impacts of a customer's installation on the LHIB's electricity network.

The LHIB is committed to ensuring a safe and reliable electricity supply to all our customers by designing, operating and maintaining our electrical network to as high a standard as reasonably practicable. Our commitment also includes minimising/reducing the risk of harm to people within electrical installations.

The LHIB has developed this Plan to meet this commitment and to comply with the requirements of the Electricity Supply (Safety and Network Management) Regulation 2014 (NSW) and AS5577-2013: Electricity Network Safety Management Systems.

## **2. INSTALLATION COMPLIANCE REQUIREMENTS**

Electrical contractors and the LHIB are required to comply with but not limited to:

- LHIB Service Rules
- AS/NZS3000 Wiring Rules
- AS/NZS3000 Normative Referenced Documents
- AS/NZS3012 Electrical Installation – Construction and Demolition Sites
- Work Health and Safety Act and Regulation (NSW)

The NSW Service and Installation Rules will be used for guidance where the LHIB Service Rules are silent, but the LHIB decision on any provisions will be final.

Compliance with the following is recommended, but not essential, for all electrical contractors and the LHIB:

- AS/NZS3760 In Service Safety Inspection and Testing of Electrical Equipment
- AS/NZS4836 Safe Work on Low Voltage Electrical Installations
- National Code of Practice - Managing Electrical Risks in the Workplace

## **3. ELECTRICAL INSTALLATION WORK**

### **4.1 Purchasing a Property**

Prospective leaseholders on Lord Howe Island are encouraged to engage the services of a licensed electrical contractor to undertake a full electrical safety check to ensure the electrical installation within the building is safe and free from defects before purchase.

### **4.2 Maintaining an Electrical Installation**

Electrical installation owners are required by law to maintain their installation so it remains safe. The LHIB encourages customers to organise regular safety checks of their electrical installations by engaging the services of a licensed electrical contractor.

### **4.3 DON'T Do-It-Yourself**

Do-it-yourself (DIY) renovations and repairs have become more popular in recent times. However, DIY electrical work is not only dangerous but is also illegal in NSW. **You must always use a licensed electrical contractor** for any electrical repairs or installation work.

If you have any safety concerns, please contact the LHIB's Senior Electrical Officer for

advice.

#### **4.4 Process for New Installations or Additions and Alterations**

The process for the connection of new installations to the network or for additions and alterations to existing installations is as follows:

- a) Immediately it is known that a new supply or an addition and/or alteration is required, the appropriate application form or forms should be obtained from the LHIB's offices or website, filled in with all the required information, signed by the customer responsible for the payment of the accounts, and lodged with the LHIB.

The 'New Installation Application for Supply' and "Notification of Proposed Additions and/or Alterations to Existing Electrical Supply" forms must indicate the full extent of the proposed installations where such information is known by the applicant at the time of making the application.

No work should be undertaken on behalf of the customer until approval for the proposed installation has been given by the LHIB.

- b) The leaseholder's licensed electrical contractor can then carry out the approved new installation or additions and alterations in accordance with the LHIB Service Rules, any conditions of the approval and AS/NZS3000 Wiring Rules including requirements for testing.
- c) The LHIB Senior Electrical Officer will drill, fit and wire the Supply Authority supplied equipment on the meter panel where this is required.
- d) Permission may be granted by the LHIB's Senior Electrical Officer to connect an addition to an existing final sub-circuit or the connection of an additional circuit pending a certificate of compliance and inspection. Check with the Senior Electrical Officer before connection to the supply.
- e) Within 14 days of completion, the electrical contractor must submit a "Certificate of Compliance" to the Senior Electrical Officer.
- f) The Senior Electrical Officer will inspect all commercial and industrial electrical works and all major works for domestic installations for all submitted "Certificates of Compliance".

Minor electrical works for domestic installations will be inspected randomly and based on electrical contractor performance.

#### **4.5 Unsafe or Defective Installations**

The LHIB may disconnect premises from (or refuse to connect premises to) its distribution system if the Senior Electrical Officer reasonably considers that the electrical installation on the premises is (or is likely to become) unsafe in accordance with Section 39 of the Electricity Supply (Safety and Network Management) Regulation 2014. Section 40 of the same Regulation allows for immediate disconnection if it is reasonably considered that there is an immediate danger to life or property or an immediate risk of starting a fire if the premises continue to be connected to the distribution system.

#### **4.6 Disciplinary Action for Electrical Contractors**

LHIB may take disciplinary action against electrical contractors where it is known that they have:

- Undertaken defective or unsafe electrical work including non-conformance with AS/NZS3000;
- Failed to rectify breaches when notified;

- Failed to notify the LHIB of notifiable electrical installation work;
- Connected installations or electrical work without approval;
- Failed to test and therefore failed to comply with AS/NZS3000;
- Performed electrical work whilst unlicensed or using unlicensed/unqualified persons;
- Interfered with metering equipment.

Disciplinary actions are likely, depending on the seriousness of the breach, to include:

- Verbal or written notice;
- Formal interview or counselling session;
- Notification to NSW Fair Trading;
- Reassessment of the frequency and extent of electrical audits;
- Other actions as considered appropriate at the time.

The electrical contractor has the right of reply before any disciplinary action is taken.

#### **4. REPORTING**

LHIB will meet its reporting obligations to NSW Fair Trading for incidents involving electrical articles or electrical installations in accordance with the LHIB ENSMS Communication and Reporting Plan.

#### **5. PLAN REVIEW**

This plan will be reviewed and amended as required, to meet the LHIB ENSMS Monitoring, Measurement and Audit Plan.



# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM PLANNING, DESIGN, CONSTRUCTION & COMMISSIONING PLAN**



This Plan was introduced in 2016 and will continue to be in effect until it is removed from service. This plan will undergo regular review in accordance with the Electricity Supply (Safety and Network Management) Regulation 2014 and AS5577-2013. This Plan will be systematically reviewed against legislation and regulation applicable to distribution and transmission network service providers, industry standards including AS5577, the Lord Howe Island Board's strategic plans and relevant internal policies, procedures and standards and our regulatory determination. This plan will be updated as necessary in line with the outcome of these reviews.

In accordance with the NSW Electricity Supply (Safety and Network Management) Regulation 2014, this Plan will be made available to all stakeholders who are likely to be involved in its implementation.

This Electricity Network Safety Management System Planning, Design, Construction and Commissioning Plan is available on the Lord Howe Island Board's website ([www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)). Printed copies of this Plan are available at the Lord Howe Island Board's office – 5 Bowker Avenue, Lord Howe Island NSW 2898.

All correspondence in relation to this document should be directed to:

The Lord Howe Island Board  
PO Box 5, Bowker Ave  
Lord Howe Island  
NSW 2898  
Australia

Phone: (02) 6563 2066 Fax: (02) 6563 2127

Email: [administration@lhib.nsw.gov.au](mailto:administration@lhib.nsw.gov.au) Website: [www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)

September 2016

## Table of Contents

|  |   |
|--|---|
| 1. INTRODUCTION.....                                 | 4 |
| 2. METHODOLOGY.....                                  | 4 |
| 2.1 Planning.....                                    | 4 |
| 2.2 Project Justification .....                      | 4 |
| 2.3 General Requirements .....                       | 4 |
| 2.4 Training and Qualifications .....                | 4 |
| 2.5 Materials to be Used .....                       | 4 |
| 2.6 Design .....                                     | 5 |
| 2.7 Construction.....                                | 5 |
| 2.8 Commissioning.....                               | 5 |
| 3. PLANNING, DESIGN AND CONSTRUCTION STANDARDS ..... | 5 |
| 4. MATERIALS STANDARDS.....                          | 6 |
| 5. RECORDS .....                                     | 6 |
| 6. PLAN REVIEW .....                                 | 6 |

# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM PLANNING, DESIGN, CONSTRUCTION & COMMISSIONING PLAN**

## **1. INTRODUCTION**

This Plan is part of the Lord Howe Island Board's (LHIB) Electricity Network Safety Management System (ENSMS) and addresses the planning, design, construction and commissioning for the LHIB's electricity network.

The LHIB is committed ensuring a safe and reliable electricity supply to all our customers through the planning, design, construction and commissioning of the electrical network and carrying out those functions to as high a standard as is reasonably practicable.

The LHIB has developed this Plan to meet this commitment and to comply with the requirements of the Electricity Supply (Safety and Network Management) Regulation 2014 (NSW) and AS5577-2013: Electricity Network Safety Management Systems.

## **2. METHODOLOGY**

### **2.1 Planning**

The Senior Electrical Officer will use Maximum Demand Indicator (MDI) data to assist in planning any upgrades to the network. Planned network upgrades will be documented in the LHIB's Strategic Asset Management Plan, which is updated each year prior to March.

Other projects will be identified from time-to-time such as the Lord Howe Island Renewable Operations – Energy Supply Road-Map in 2012.

### **2.2 Project Justification**

Projects will be justified through the LHIB based on:

- The need for the project including any regulatory requirement.
- Improvements to safety.
- Benefits to the environment including reduction in greenhouse gases or pollution.
- Reduction in operation and maintenance costs.
- Reduced whole of life costs.
- Consideration of alternatives, including demand management options.

### **2.3 General Requirements**

All design, construction and commissioning works are to be performed in accordance with the documents as detailed in Sections 3 and 4.

Any deviation from such requirements are to be assessed and justified as to achieve at least an equivalent safety outcome through the following (as applicable):

- Formal safety assessments;
- Literature review;
- Consultant report; and
- Incident investigation outcomes.

### **2.4 Training and Qualifications**

All staff, consultants and contractors involved in planning, design, construction and commissioning of the electrical network, or part thereof, shall be suitably qualified. The Senior Electrical Officer must be satisfied that all personnel involved in such activities are suitably trained, qualified and competent to perform the work.

### **2.5 Materials to be Used**

All materials used for any network construction projects will comply with Australian Standards and where there is no applicable standard, with IEC standards (refer Section 4).

The standard high voltage cable to be used on the island is 16mm<sup>2</sup> Copper XLPE buried at a minimum depth of 700mm.

## **2.6 Design**

Any additions or alterations to the existing network will:

- Provide safe outcomes for the community and staff.
- Use the hierarchy of safety controls to minimise risks and improve safety outcomes.
- Seek to maintain or improve reliability and availability of the electricity supply.
- Provide adequate capacity to supply present electrical needs, with allowance for future needs as deemed necessary.
- Provide adequate power quality.
- Allow detection, discrimination and clearance of faults on the network.
- Consider environmental issues and provide high quality environmental outcomes.

## **2.7 Construction**

LHIB staff will complete any construction that is within their capability and if time permits. Otherwise, suitably qualified, experienced and adequately resourced contractors will be used to carry out specific projects.

Contractor selection will occur using NSW Government procurement guidelines and their safety is managed in accordance with ENA guideline NENS10 and industry practice.

## **2.8 Commissioning**

Commissioning of any additions or alterations shall comply with industry standards, Australian Standards and codes of practice (refer Section 4).

Testing shall be carried out as deemed necessary to ensure the addition or alteration is safe and meets requirements.

## **3. PLANNING, DESIGN AND CONSTRUCTION STANDARDS**

The following documents will be used in the design and construction of the network as required but not limited to:

- AS1824: Insulation Co-ordination
- AS2067: Substations and high voltage installations exceeding 1 kV a.c.
- AS2421: Guide to the selection and use of Power Transformers
- AS3953: Loading guide for dry-type power transformers
- Code of Practice: Electricity transmission and distribution asset management
- Code of Practice: Demand Management for Electricity Distributors
- ENA DOC 001: National Electricity Network Safety Code
- ENA DOC 014: National low voltage electricity network electrical protection guideline
- ENA DOC 015: National guidelines for prevention of unauthorised access to electricity infrastructure
- ENA DOC 019: Land Management Guidelines
- ENAEG1: Substations, earthing guide
- ENA DOC 025 EG-0 Power system earthing guide - Part 1: management principles
- ENANENS 010: National Guidelines for Contractor Occupational Health and Safety Management
- Safework Australia General Guide, Information Sheet and Code of Practice for Working in the Vicinity of Overhead and Underground Electric Lines
- Safework Australia Code of Practice - Excavation work

#### 4. MATERIALS STANDARDS

Materials used in the construction of the network shall comply with but not limited to the following standards:

|                                     |  |
|-------------------------------------|--|
| <b>Low Voltage Insulated Cables</b> |  |
| AS 4026                             | Electric Cables - for underground residential distribution systems   |
| AS 5000                             | Electric cables - Polymeric insulated - For working voltages up to and including 450/750 V                             |
| <b>Low Voltage Switchgear</b>       |  |
| AS/NZS60479                         | Low-voltage switchgear and controlgear - Switches, disconnectors, switch-disconnectors and fuse-combination units      |
| AS/NZS61439                         | Low-voltage switchgear and controlgear assemblies  |
| AS/NZS61009.1                       | Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs) |
| <b>HV Insulated Cables</b>          |  |
| AS 1429                             | Electric cables - Polymeric insulated - For working voltages 1.9/3.3 (3.6) kV up to and including 19/33 (36) kV        |
| <b>High Voltage Switchgear</b>      |  |
| AS 62271                            | High-voltage switchgear and controlgear  |
| <b>Conduit</b>                      |  |
| AS 2053                             | Conduits and fittings for electrical installations   |
| <b>Transformers</b>                 |  |
| AS 1767                             | Insulating oil for transformers and switchgear (IEC 296)   |
| AS 2374                             | Power transformers   |
| AS 60076.11                         | Power transformers - Dry-type transformers   |
| <b>Metering</b>                     |  |
| AS 60044.1                          | Instrument transformers - Current transformers   |
| AS 60044.2                          | Instrument transformers - Inductive voltage transformers   |
| AS 62052.11<br>AS 62053.21          | Electricity metering equipment (AC)  |
| <b>Batteries</b>                    |  |
| AS 2676                             | Guide to the installation, maintenance, testing and replacement of secondary cells in buildings                        |

#### 5. RECORDS

All records pertaining to planning, design, construction and commissioning are to be retained for future reference.

“As constructed plans” are to be provided by staff or contractors for project work so the “as designed plans” on the LHIB system can be updated including any changes to but certainly not limited to:

- The island HV schematic;
- Cable route selection that will required updates to the LHIB’s GIS.

#### 6. PLAN REVIEW

This plan will be reviewed and amended as required, to meet the LHIB ENSMS Monitoring, Measurement and Audit Plan.



# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM MAINTENANCE PLAN**

This Plan was introduced in 2016 and will continue to be in effect until it is removed from service. This plan will undergo regular review in accordance with the Electricity Supply (Safety and Network Management) Regulation 2014 and AS5577-2013. This Plan will be systematically reviewed against legislation and regulation applicable to distribution and transmission network service providers, industry standards including AS5577, the Lord Howe Island Board's strategic plans and relevant internal policies, procedures and standards and our regulatory determination. This plan will be updated as necessary in line with the outcome of these reviews.

In accordance with the NSW Electricity Supply (Safety and Network Management) Regulation 2014, this Plan will be made available to all stakeholders who are likely to be involved in its implementation.

This Electricity Network Safety Management System Maintenance Plan is available on the Lord Howe Island Board's website ([www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)). Printed copies of this Plan are available at the Lord Howe Island Board's office – 5 Bowker Avenue, Lord Howe Island NSW 2898.

All correspondence in relation to this document should be directed to:

The Lord Howe Island Board  
PO Box 5, Bowker Ave  
Lord Howe Island  
NSW 2898  
Australia

Phone: (02) 6563 2066 Fax: (02) 6563 2127

Email: [administration@lhib.nsw.gov.au](mailto:administration@lhib.nsw.gov.au) Website: [www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)

September 2016

## Table of Contents

|  |   |
|--|---|
| 1. INTRODUCTION.....                       | 4 |
| 2. MAINTENANCE PLAN.....                   | 4 |
| 2.1 Maintenance Standards.....             | 4 |
| 2.2 Non-Compliance with Standards .....    | 4 |
| 3. SPECIFIC MAINTENANCE REQUIREMENTS ..... | 5 |
| 3.1 Powerhouse and Standby Generator.....  | 5 |
| 3.2 Substations.....                       | 5 |
| 3.3 High Voltage Switchgear .....          | 5 |
| 3.4 Low Voltage Distribution Network.....  | 6 |
| 4. DEFECT RECTIFICATION .....              | 6 |
| 5. REPAIRS .....                           | 6 |
| 6. NETWORK SPARES .....                    | 6 |
| 7. RECORDS .....                           | 6 |
| 8. PLAN REVIEW .....                       | 6 |



# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM MAINTENANCE PLAN**

## **1. INTRODUCTION**

This Plan is part of the Lord Howe Island Board's (LHIB) Electricity Network Safety Management System (ENSMS) and addresses the maintenance aspects of the LHIB's electricity network.

LHIB is committed to ensuring a safe and reliable electricity supply to all our customers by maintaining our network.

The LHIB has developed this Plan to meet this commitment and to comply with the requirements of the Electricity Supply (Safety and Network Management) Regulation 2014 (NSW) and AS5577-2013: Electricity Network Safety Management Systems.

## **2. MAINTENANCE PLAN**

The LHIB electrical network must be maintained to ensure the electrical equipment is always in sound operating condition to perform the functions for which it was designed. This Plan lays out the maintenance requirements for the electrical network equipment.

### **2.1 Maintenance Standards**

The LHIB will follow industry practice and use the guidance of manufacturer's instructions and the following documents for the maintenance of electrical network equipment on the island:

- AS2467 Maintenance of electrical switchgear
- AS2676 Guide to the installation, maintenance, testing and replacement of secondary cells in buildings
- AS60422 Mineral insulating oils in electrical equipment - Supervision and maintenance guidance
- AS61000.3.100 Electromagnetic compatibility (EMC) - Limits - Steady state voltage limits in public electricity systems
- Ausgrid Electrical Safety Rules
- EC12 Guide to working on underground cables
- EC19 Guide to the inspection of Customers' electrical installations
- ENA DOC 022 ENA Industry Guideline for SF6 Management.
- ENA DOC 025 EG-0 Power system earthing guide - Part 1: management principles
- ENA EG1: Substations, earthing guide
- ISSC3 Guide to tree planting and maintaining safety clearances near power lines
- ISSC24 Guide to Electricity Workers' Escape and Rescue Procedures
- LHIB Operational Plan
- Safework Australia General Guide, Information Sheet and Code of Practice for Working in the Vicinity of Overhead and Underground Electric Lines
- Safework Australia Code of Practice - Excavation work

### **2.2 Non-Compliance with Standards**

Should the LHIB need to perform maintenance that is a deviation from standards, codes, guidelines and/or statutory requirements, we will justify the deviation to achieve at least an equivalent safety outcome through the following (as applicable):

- A formal safety assessment
- Literature review
- Consultant report, and/or
- Incident investigation outcomes.

### **3. SPECIFIC MAINTENANCE REQUIREMENTS**

Maintenance tasks for specific items of plant and equipment shall be carried out as follows:

#### **3.1 Powerhouse and Standby Generator**

The Powerhouse and standby generator equipment will be maintained in accordance with manufacturer requirements and at least every 300 hours. "A", "B" and "C" Maintenance Tasks sheets shall be used to ensure all maintenance tasks are completed and recorded.

The standby generator is to be:

- Visually inspected monthly and run off-load for approximately 60 minutes.
- Visually inspected and run every 3 months for approximately 6-7 hours at a minimum 50% of full island load.
- Protection relays to be tested every 5 years by current injection and timing trip tests.

#### **3.2 Substations**

Substations are to be maintained as follows:

- Visually inspected for defects and assessed for obvious signs of deterioration and/or malfunction every year.
- Transformers maintained as follows:
  - Free of rust and oil leaks.
  - Transformer oil to be sampled and tested every 5 years – water content, dissolved gas analysis, dielectric breakdown voltage.
  - Bushings and fuses cleaned yearly.
  - Thermography on the High Voltage (HV) and Low Voltage (LV) ends yearly.
- Earths tested every 10 years initially and every 5 years once equipment is 20 years old.
- Earthing managed as required by ENA DOC 025 EG-0 Power system earthing guide - Part 1: management principles.

#### **3.3 High Voltage Switchgear**

##### **3.3.1 Hazemeyer Switchgear**

Hazemeyer high voltage switchgear is to:

- Be visually inspected for defects every year.
- Be cleaned annually using the manufacturer's procedure.

A program for replacement of the Hazemeyer switchgear is to be established so that all units are replaced by 2025 due to a record of industry failure. It is known that the failure of these units has typically been due to a lack of maintenance. A continued commitment to annual maintenance is mandatory.

##### **3.3.2 SF6 Switchgear**

SF6 switchgear to be:

- Inspected annually to determine any further actions.
- Cleaned every 5 years.
- Insulation and contact resistance tested every 5 years.
- Partial discharge and corona tested every 5 years if possible.
- Operated to ensure functionality.
- Managed as required by the manufacturer and ENA DOC 022 *ENA Industry Guideline for SF6 Management*.
- Disposed of in accordance with environmental requirements at end of life.

### **3.4 Low Voltage Distribution Network**

The following items of the Low Voltage network are to be inspected 6 monthly:

- Pillars
- Street lights and bollards
- Numbers, labels and warning/danger signs

Distribution substation Maximum Demand Indicators (MDIs) are to be read monthly and readings assessed to determine the status of the load on each transformer.

## **4. DEFECT RECTIFICATION**

Any defects found by the inspection and maintenance regime shall be rectified according to priorities as assessed by the Senior Electrical Officer. Defects that do not pose a threat to safety or system reliability, what could be called “discretionary maintenance”, may be rectified as workloads permit.

## **5. REPAIRS**

Supply should be restored to as much of the network as possible and repairs implemented as soon as possible using suitably qualified, competent and authorised persons. Isolation for repairs to the network shall be carried out in accordance with the LHIB Electrical Network Operations Plan.

Contractors may be required to implement repairs which are beyond the scope of island electrical staff.

## **6. NETWORK SPARES**

Adequate spares shall be carried to allow immediate repair of the network should an unplanned outage occur as a result of equipment failure. The following is considered a minimum list of spares:

- 1 x Hazemeyer switchgear – circuits: in and out and transformer
- 50m x HV cable – 16mm<sup>2</sup> XLPE Copper
- 2 x inline cable joints for HV cable
- 1 x Termination kit and leads for Hazemeyer switchgear
- A full set of each relevant HV fuse size
- One distribution transformer
- 2 x LV circuit breakers for generator output
- Miscellaneous spares such as MDIs, F Frame circuit breakers, CT's and Quicklag circuit breakers.

No spare generator output transformers are needed as the island could cope with just one if necessary. If a failure occurred, the minimum 20 week lead time on a transformer to suit the Island's network would necessitate the immediate ordering of a replacement transformer.

## **7. RECORDS**

All records of inspection and maintenance activities are to be stored by the Senior Electrical Officer for future reference, defect trend analysis, auditing and/or reporting.

## **8. PLAN REVIEW**

This plan will be reviewed and amended as required, to meet the LHIB ENSMS Monitoring, Measurement and Audit Plan.



# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM OPERATIONS PLAN**

This Plan was introduced in 2016 and will continue to be in effect until it is removed from service. This plan will undergo regular review in accordance with the Electricity Supply (Safety and Network Management) Regulation 2014 and AS5577-2013. This Plan will be systematically reviewed against legislation and regulation applicable to distribution and transmission network service providers, industry standards including AS5577, the Lord Howe Island Board's strategic plans and relevant internal policies, procedures and standards and our regulatory determination. This plan will be updated as necessary in line with the outcome of these reviews.

In accordance with the NSW Electricity Supply (Safety and Network Management) Regulation 2014, this Plan will be made available to all stakeholders who are likely to be involved in its implementation.

This Electricity Network Safety Management System Operations Plan is available on the Lord Howe Island Board's website ([www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)). Printed copies of this Plan are available at the Lord Howe Island Board's office – 5 Bowker Avenue, Lord Howe Island NSW 2898.

All correspondence in relation to this document should be directed to:

The Lord Howe Island Board  
PO Box 5, Bowker Ave  
Lord Howe Island  
NSW 2898  
Australia

Phone: (02) 6563 2066 Fax: (02) 6563 2127

Email: [administration@lhib.nsw.gov.au](mailto:administration@lhib.nsw.gov.au) Website: [www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)

September 2016

## Table of Contents

|   |   |
|---|---|
| 1. INTRODUCTION.....                            | 4 |
| 2. OPERATIONS.....                              | 4 |
| 3. NETWORK SCHEMATICS & MAPPING.....            | 4 |
| 4. AUTHORISATION.....                           | 4 |
| 5. COMPETENCY, QUALIFICATIONS & TRAINING.....   | 5 |
| 6. AUTHORISED WORKER RESPONSIBILITIES.....      | 6 |
| 7. SENIOR ELECTRICAL OFFICER UNAVAILABLE.....   | 6 |
| 8. PROTECTION COORDINATION.....                 | 6 |
| 9. OPERATION OF HAZEMEYER SWITCHGEAR.....       | 6 |
| 10. SWITCHING SHEETS.....                       | 6 |
| 11. ISOLATION, EARTHING AND ACCESS PERMITS..... | 6 |
| 12. ABNORMAL OPERATIONS.....                    | 7 |
| 13. BLOWN HV FUSE.....                          | 7 |
| 14. LOAD SHEDDING.....                          | 7 |
| 15. BLACK START.....                            | 7 |
| 16. LOSS OF VOLTAGE REGULATION.....             | 7 |
| 17. COMMUNICATION OUTAGE.....                   | 7 |
| 18. DIESEL STORAGE.....                         | 8 |
| 19. HV TOOLS.....                               | 8 |
| 20. NOTIFICATION OF PLANNED OUTAGES.....        | 8 |
| 21. INCIDENT MANAGEMENT.....                    | 8 |
| 22. RECORDS.....                                | 8 |
| 23. STANDARDS.....                              | 8 |
| 24. PLAN REVIEW.....                            | 8 |
| 25. APPENDIX A – HV AUTHORISATION CARD.....     | 9 |

# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM OPERATIONS PLAN**

## **1. INTRODUCTION**

This Plan is part of the Lord Howe Island Board's (LHIB) Electricity Network Safety Management System (ENSMS) and addresses the operation of the LHIB's electricity network.

LHIB is committed to ensuring a safe and reliable electricity supply to all our customers when we need to operate our electrical network.

The LHIB has developed this Plan to meet this commitment and to comply with the requirements of the Electricity Supply (Safety and Network Management) Regulation 2014 (NSW) and AS5577-2013: Electricity Network Safety Management Systems.

## **2. OPERATIONS**

The operation of network equipment shall be carried out safely by suitably qualified, competent and authorised personnel using suitable PPE and the guidance of Ausgrid's Electrical Safety Rules. Operational activities shall include isolating, testing de-energised, earthing and issuing/cancelling access permits.

Staff and contractors shall be inducted prior to any operational work and authorised in accordance with Section 4.

An operator shall seek guidance if operations fall outside normal operating parameters or if it lies outside their skillset. A suitably qualified consultant may also be contacted if the situation lies outside the skills and knowledge of the island electrical management team or the team is not contactable.

## **3. NETWORK SCHEMATICS & MAPPING**

A High Voltage Operating Diagram is to be displayed at all times at the Powerhouse Operations Room and pinned to show the present state of the network.

Geographical mapping of electrical network assets is available within the LHIB Geographical Information System (GIS). This information is available to those with access to the LHIB network at the Bowker Avenue offices.

## **4. AUTHORISATION**

LHIB shall ensure that ALL staff and contractors involved with the High Voltage (HV) network are qualified and authorised for the work to be performed using Appendix A and recorded in an Excel spreadsheet titled "LHIB HV Authorisation Register". This register shall be held and managed by the Senior Electrical Officer.

The authorising officer must be satisfied that the person is qualified and competent to perform the required functions before issuing an authorisation card or when renewing authorisations. This authorisation allows staff to perform the identified functions on Lord Howe Island only for the period identified on their authorization card. Authorisations from other companies do not allow electrical workers to work or operate at Lord Howe Island.

Authorisation of staff and contractors will include the following:

- (a) Open HV cabinets
- (b) Supervise HV maintenance or installation works
- (c) Operate HV switchgear
- (d) Lock out/Tag out HV equipment
- (e) Test HV equipment de-energised
- (f) Earth/Short Circuit HV equipment
- (g) Issue and Receive Access Permits
- (h) Induct workers for work on or near HV equipment
- (i) Write switching sheets.

An authorisation card may be issued or renewed at the discretion of the authorising officer, dependent upon demonstration and/or maintenance of competence.

The “LHIB HV Authorisation Register” will include:

- (a) Authorisation number;
- (b) Name of authorised person;
- (c) Company;
- (d) Authorisation type;
- (e) Date of issue;
- (f) Date of authorisation expiry.
- (g) File reference for qualifications and/or evidence of competence.

Records used to issue an authorisation such as copies of qualifications or evidence of competence are to be stored for future reference.

LHIB may withdraw an authorisation at any time and the Authorisation Card is to be returned to the LHIB.

Authorisation in the future may be via the Australian Electricity Supply Industry (ESI) Skills Passport as may recording of all ESI training. Details of this system can be found at [www.esipassport.com.au](http://www.esipassport.com.au)

## **5. COMPETENCY, QUALIFICATIONS & TRAINING**

As stated above “The authorising officer must be satisfied that the person is qualified and competent to perform the required functions before issuing an authorisation card or when renewing authorisations.”

Competency/qualification requirements shall include:

- Electrician (Supervisor) License
- Certificate III in Electrotechnology Electrician, Electrical Supply Industry - Distribution or similar
- General Construction Induction Card
- Experience in the operation of networks and HV equipment;
- Knowledge and experience using the high voltage equipment utilised on Lord Howe Island;
- Suitable qualifications and/or units of competence such as those detailed below:
  - UEPOPS349B Operate Local HV Switchgear
  - UEPOPS428B Develop High Voltage Switching Programs
  - UEPOPS456A Perform Switching to a Switching Program
  - UEPOPS525A Coordinate and direct switching program
  - UETTDREL16A Working safely near live electrical apparatus
  - UETTDRI544A Perform HV field switching operation to a given schedule
  - UETTDRSB39A Perform power system substation switching operation to a given schedule
  - UETTDRI548A Develop high voltage switching schedule
  - UETTDRI50A Coordinate power system permit procedures
  - UETTDRI51A Coordinate and direct power system switching schedules
  - UETTDRI567A Solve problems in energy supply network equipment

Refreshers training should be performed every 2-3 years.



## **6. AUTHORISED WORKER RESPONSIBILITIES**

Authorised workers shall:

- (a) Have authorisation cards readily available when working on the island;
- (b) Produce their card when requested;
- (c) Secure the card to reduce the likelihood of unauthorised use;
- (d) Report lost or stolen cards to LHIB as soon as practical;
- (e) Ensure all training and competencies are current and copies of certificates provided to LHIB; and
- (f) Ensure that they only undertake work for which they are competent and authorised to perform.

## **7. SENIOR ELECTRICAL OFFICER UNAVAILABLE**

The Senior Electrical Officer may be unavailable for reasons such as illness, injury, or on leave. In this absence, an authorised contractor shall be used to carry out any authorised operational activities.

If an authorised contractor is not on site and a safety issue or emergency arises, an authorised contractor may direct LHIB staff to perform certain functions before an authorised contractor arrives on site.

## **8. PROTECTION COORDINATION**

The high voltage protection for the island high voltage electrical network has been in place for some time. A review by Jacobs Group (Australia) Pty Limited in 2015 details the protection methodology and coordination details and forms part of this Operations Plan.

## **9. OPERATION OF HAZEMEYER SWITCHGEAR**

The Hazemeyer switchgear is not to be operated on load and arc-flash clothing and face shields are to be used when operating at no-load.

## **10. SWITCHING SHEETS**

Due to the simplicity of the network and the knowledge of the Senior Electrical Officer, it is deemed that switching sheets will generally not be required. However, if an operator is required to operate the network and is unfamiliar with the network, a switching sheet should be developed by a suitably qualified and authorised person (which could be the operator) prior to the work commencing.

## **11. ISOLATION, EARTHING AND ACCESS PERMITS**

Isolation and lock out/tag out of the isolated equipment shall be in accordance with the Ausgrid Electrical Safety Rules as will earthing/shorting of the isolated equipment. Appropriate earthing/shorting equipment shall be used and installed and/or removed by authorised operators only.

The LHIB Access Permit shall be utilised to access isolated HV equipment using the guidance of Ausgrid's Electrical Safety Rules. Yellow or white tape barriers may be needed to define the isolated equipment and work area using the guidance of Ausgrid's Electrical Safety Rules.

## **12. ABNORMAL OPERATIONS**

The Senior Electrical Officer shall use knowledge, skills and training to manage any abnormal situations including emergencies (also refer LHIB ENSMS Emergency Management Plan). Safety will always be a priority in any actions taken.

In an unplanned outage situation, the electricity supply can be restored very quickly due to the small size of the island. It is however a requirement that a patrol of assets be carried out before restoring supply for public safety reasons e.g. a car accident involving network assets.

Items of plant that have failed or need repair are to be isolated and repaired using the guidance of the Ausgrid Electrical Safety Rules and supply should be restored to as much of the network as possible. Repairs are to be implemented using only authorised persons, along with relevant testing and recommissioning works.

Priority will be given to the hospital and any “life support” customers when restoring supply after an unplanned outage.

No further risk management planning is considered necessary for abnormal situations due to the small size and limited complexity of the network.

The LHIB Business Continuity Plan will include requirements for abnormal operations once updated.

## **13. BLOWN HV FUSE**

All three fuses must be replaced when one fuse has blown on any transformer on the island.

## **14. LOAD SHEDDING**

It is not anticipated that load shedding should be necessary at any stage due to the sizing of the generators and the remote location of the backup generator which is capable of supplying all the electrical load to the island.

However, if load shedding was required, then all but the hospital load would be cycled on a three hourly basis. Any “life support” customers would also be excluded from the load shedding program unless other arrangements have been made.

## **15. BLACK START**

Restoring the electricity supply after a complete outage to the island is easily achieved following standard restart procedures. Electrical supply restorations to the hospital is considered a priority under these circumstances.

## **16. LOSS OF VOLTAGE REGULATION**

Loss of voltage regulation at the Powerhouse would necessitate swapping to the Standby Generator or manual control of voltage until repairs are implemented. The decision by the Senior Electrical Officer will depend on circumstances at the time.

## **17. COMMUNICATION OUTAGE**

The loss of the LHIB radio network or phone service is not considered a serious issue for the management of the network due to the limited size of the island and network, and the number of network staff. The Senior Electrical Officer or authorised contractor are required to follow all parts of this plan and so the risk from a communication outage is minimal.

## **18. DIESEL STORAGE**

Adequate quantities of diesel are to be stored at the Powerhouse and Backup Generator. Diesel will be cleaned on a six monthly basis to ensure trouble-free operation of the generator engines.

## **19. HV TOOLS**

HV tools such a HV operating stick, earthing/shorting kits and tester are to be available. These are to be maintained in a suitable condition and the stick tested every 2 years.

## **20. NOTIFICATION OF PLANNED OUTAGES**

Notification for planned outages will be in accordance with the LHIB Electrical Network Communications and Reporting Plan.

## **21. INCIDENT MANAGEMENT**

The Senior Electrical Officer will take charge of electrical incidents to ensure electrical safety on behalf of the LHIB. The Senior Electrical Officer will work in with other emergency services during an incident.

All electrical incidents are to be investigated (refer LHIB Document 5 - Safety Incident Management, Reporting and Investigation), recorded and reported (refer LHIB ENSMS Communication and Reporting Plan) including unplanned outages.

Incidents investigations are to be overseen by the Manager of Infrastructure and Engineering Services and generally undertaken by the Senior Electrical Officer unless an assessment determines that an independent lead investigator is necessary. The independent lead investigator may be a manager from another department or an external consultant.

## **22. RECORDS**

Records of planned and unplanned outages and incidents are to be retained by the Senior Electrical Officer in the Network Incident Register.

## **23. STANDARDS**

The following documents provide guidance for the operation of the island network:

ENA Doc 024 National guideline for management of tools and equipment used in the electricity supply industry

ENA NENS03: National guidelines for safe access to electrical and mechanical apparatus

ENA NENS04: National guidelines for safe approach distances to electrical and mechanical apparatus

ENA NENS07: National guidelines for manual reclosing of high voltage electrical apparatus following a fault operation (Manual Reclose Guidelines)


ENA NENS09: National Guideline for the Selection, Use and Maintenance of Personal Protection Equipment for Electrical Arc Hazards

ENA NENS 010: National Guidelines for Contractor Occupational Health and Safety Management

## **24. PLAN REVIEW**

This plan will be reviewed and amended as required, to meet the LHIB ENSMS Monitoring, Measurement and Audit Plan.

## 25. APPENDIX A – HV AUTHORISATION CARD

|   |  |
|---|--|
| <div><p>Lord Howe<br/>ISLAND BOARD</p></div> <div><h3>HV Authorisation</h3></div> <div><p>Name:<br/>Company:<br/>Role:<br/>Issue Date:<br/>Expiry Date:<br/>Authorised to: (see over)<br/>Authorised by:</p></div> | <ul style="list-style-type: none"><li><input type="checkbox"/> Open HV Cabinets</li><li><input type="checkbox"/> Supervise HV Maintenance or Installation Works</li><li><input type="checkbox"/> Operate HV Switchgear</li><li><input type="checkbox"/> Lock out/Tag out HV Equipment</li><li><input type="checkbox"/> Test HV Equipment De-energised</li><li><input type="checkbox"/> Earth/Short Circuit HV Equipment</li><li><input type="checkbox"/> Issue and Receive Access Permits</li><li><input type="checkbox"/> Induct Workers for Work on or near HV Equipment</li><li><input type="checkbox"/> Write Switching Sheets</li></ul> |
|---|--|



# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM BUSHFIRE MANAGEMENT PLAN**

This Plan was introduced in 2016 and will continue to be in effect until it is removed from service. This plan will undergo regular review in accordance with the Electricity Supply (Safety and Network Management) Regulation 2014 and AS5577-2013. This Plan will be systematically reviewed against legislation and regulation applicable to distribution and transmission network service providers, industry standards including AS5577, the Lord Howe Island Board's strategic plans and relevant internal policies, procedures and standards and our regulatory determination. This plan will be updated as necessary in line with the outcome of these reviews.

In accordance with the NSW Electricity Supply (Safety and Network Management) Regulation 2014, this Plan will be made available to all stakeholders who are likely to be involved in its implementation.

This Electricity Network Safety Management System Bushfire Management Plan is available on the Lord Howe Island Board's website ([www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)). Printed copies of this Plan are available at the Lord Howe Island Board's office – 5 Bowker Avenue, Lord Howe Island NSW 2898.

All correspondence in relation to this document should be directed to:

The Lord Howe Island Board  
PO Box 5, Bowker Ave  
Lord Howe Island  
NSW 2898  
Australia

Phone: (02) 6563 2066 Fax: (02) 6563 2127

Email: [administration@lhib.nsw.gov.au](mailto:administration@lhib.nsw.gov.au) Website: [www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)

September 2016

## Table of Contents

|  |   |
|--|---|
| 1. INTRODUCTION.....                       | 4 |
| 2. BUSHFIRE STATUS.....                    | 4 |
| 3. PREVENTATIVE ELECTRICAL STRATEGIES..... | 4 |
| 4. HARDSHIP POLICY .....                   | 4 |
| 5. PLAN REVIEW .....                       | 4 |

# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM BUSHFIRE MANAGEMENT PLAN**

## **1. INTRODUCTION**

This Plan is part of the Lord Howe Island Board's (LHIB) Electricity Network Safety Management System (ENSMS) and addresses the management of bushfire risks relating to the LHIB's electricity network.

LHIB is committed to preventing bushfires initiated by the electrical network by designing, maintaining and operating our electrical network to as high as standard as reasonably practicable and in accordance with industry standards.

The LHIB has developed this Plan to meet this commitment and to comply with the requirements of the Electricity Supply (Safety and Network Management) Regulation 2014 (NSW) and AS5577-2013: Electricity Network Safety Management Systems.

## **2. BUSHFIRE STATUS**

The bushfire risk on Lord How Island is assessed as low due to the island being sub-tropical in nature and the lush vegetation that prevails.

## **3. PREVENTATIVE ELECTRICAL STRATEGIES**

The whole electrical network on Lord Howe Island is installed underground and all future network extensions are to be installed underground. The high voltage network is also protected at the powerhouse and standby generator by high voltage fuses. The LHIB will comply with our design, construction, commissioning, maintenance, operations and decommissioning plans to assist with bushfire prevention.

The propensity to start a bushfire in such circumstances is extremely low.

## **4. HARDSHIP POLICY**

The LHIB electrical network is underground, there are no private overhead power lines or high voltage customers and there is a low risk of a bushfire on the Island. For these reasons, electrical customers will not be in financial hardship as a result of a need to upgrade, repair or maintain their private overhead assets.

The LHIB has in place a Bushfire Mitigation Hardship Policy, to comply with the requirements of the Electricity Supply (Safety and Network Management) Regulation 2014 (NSW) and AS5577-2013: Electricity Network Safety Management Systems.

## **5. PLAN REVIEW**

This plan will be reviewed and amended as required, to meet the LHIB ENSMS Monitoring, Measurement and Audit Plan.





# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM EMERGENCY MANAGEMENT PLAN**

This Plan was introduced in 2016 and will continue to be in effect until it is removed from service. This plan will undergo regular review in accordance with the Electricity Supply (Safety and Network Management) Regulation 2014 and AS5577-2013. This Plan will be systematically reviewed against legislation and regulation applicable to distribution and transmission network service providers, industry standards including AS5577, the Lord Howe Island Board's strategic plans and relevant internal policies, procedures and standards and our regulatory determination. This plan will be updated as necessary in line with the outcome of these reviews.

In accordance with the NSW Electricity Supply (Safety and Network Management) Regulation 2014, this Plan will be made available to all stakeholders who are likely to be involved in its implementation.

This Electricity Network Safety Management System Emergency Management Plan is available on the Lord Howe Island Board's website ([www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)). Printed copies of this Plan are available at the Lord Howe Island Board's office – 5 Bowker Avenue, Lord Howe Island NSW 2898.

All correspondence in relation to this document should be directed to:

The Lord Howe Island Board  
PO Box 5, Bowker Ave  
Lord Howe Island  
NSW 2898  
Australia

Phone: (02) 6563 2066 Fax: (02) 6563 2127

Email: [administration@lhib.nsw.gov.au](mailto:administration@lhib.nsw.gov.au) Website: [www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)

September 2016

## Table of Contents

|  |          |
|--|----------|
| <b>1. INTRODUCTION.....</b>                        | <b>4</b> |
| <b>2. EXTERNAL SUPPORTING PLANS.....</b>           | <b>4</b> |
| <b>3. OVERARCHING CONTROL/RESPONSIBILITY .....</b> | <b>4</b> |
| <b>4. INCIDENT CONTACTS LIST .....</b>             | <b>4</b> |
| <b>5. PRIORITIES.....</b>                          | <b>5</b> |
| <b>6. RESOURCES .....</b>                          | <b>5</b> |
| <b>7. ELECTRICAL STAFF SAFETY .....</b>            | <b>5</b> |
| <b>8. NETWORK RESPONSE TO EVENTS .....</b>         | <b>5</b> |
| <b>8.1 High Seas .....</b>                         | <b>5</b> |
| <b>8.2 Storm Water .....</b>                       | <b>5</b> |
| <b>8.3 Tsunamis .....</b>                          | <b>6</b> |
| <b>8.4 Vandalism.....</b>                          | <b>6</b> |
| <b>8.5 Terrorism .....</b>                         | <b>6</b> |
| <b>8.6 Fire .....</b>                              | <b>6</b> |
| <b>8.7 General Network Faults .....</b>            | <b>6</b> |
| <b>9. PLAN REVIEW .....</b>                        | <b>6</b> |

# ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM EMERGENCY MANAGEMENT PLAN

## 1. INTRODUCTION

This Plan is part of the Lord Howe Island Board's (LHIB) Electricity Network Safety Management System (ENSMS) and addresses the management of the LHIB's electricity network in an emergency.

The LHIB is committed to ensuring a safe and reliable electricity supply to all our customers even in extreme or emergency conditions.

The LHIB has developed this Plan to meet this commitment and to comply with the requirements of the Electricity Supply (Safety and Network Management) Regulation 2014 (NSW) and AS5577-2013: Electricity Network Safety Management Systems.

## 2. EXTERNAL SUPPORTING PLANS

- Lord Howe Island Local Emergency Management Plan (EMPLAN)
- Lord Howe Island Tsunami Emergency Sub Plan

## 3. OVERARCHING CONTROL/RESPONSIBILITY

Under the EMPLAN, the Local Emergency Operations Controller (LEOCON), appointed as the Senior Police Officer on the Island, has overarching responsibility for "major failure of essential utility for unreasonable periods of time as a result of a natural or man-made occurrence."

## 4. INCIDENT CONTACTS LIST

| ORGANISATION                                    | EMAIL  | NAME            | CONTACT DETAILS               |
|---|--|-----------------|-------------------------------|
| <b>LORD HOWE ISLAND BOARD</b> (Fax: 6563 2127)  |  |                 |                               |
| Chief Executive Officer                         | <a href="mailto:penny.holloway@lhib.nsw.gov.au">penny.holloway@lhib.nsw.gov.au</a>                       | Penny Holloway  | 02 6563 2066 Ah: 02 6563 2449 |
| Manager Infrastructure and Engineering Services | <a href="mailto:andrew.logan@lhib.nsw.gov.au">andrew.logan@lhib.nsw.gov.au</a>                           | Andrew Logan    | 02 6563 2066 Ah: 02 6563 2353 |
| Senior Electrical Officer                       | <a href="mailto:greg.higgins@lhib.nsw.gov.au">greg.higgins@lhib.nsw.gov.au</a>                           | Greg Higgins    | 02 6563 2066 Ah: 02 6563 2085 |
| <b>EMERGENCY SERVICES</b>                       |  |                 |                               |
| Hospital  | <a href="mailto:kara.kulakowski@sesiahs.health.nsw.gov.au">kara.kulakowski@sesiahs.health.nsw.gov.au</a> | Kara Kulakowski | 02 6563 2000 Ah: 02 6563 2291 |
| Ambulance Service                               | <a href="mailto:frankreed2898@gmail.com">frankreed2898@gmail.com</a>                                     | Dr Frank Reed   | 000\0265632000 Ah: 0265632052 |
| Police LHI                                      | <a href="mailto:meeh2sim@police.nsw.gov.au">meeh2sim@police.nsw.gov.au</a>                               | Simon Meehan    | "000" or 02 6563 2199         |
| Police Mid North Coast LAC – LHI LEOCON         | <a href="mailto:feho1pau@police.nsw.gov.au">feho1pau@police.nsw.gov.au</a>                               | Paul Fehon      | 02 6583 0133                  |
| Fire Brigade LHI                                | <a href="mailto:cakawilson7@hotmail.com">cakawilson7@hotmail.com</a>                                     | Craig Wilson    | "000" or 02 6563 2392         |
| State Emergency Service LHI                     | <a href="mailto:james.mcfadyen@member.ses.nsw.gov.au">james.mcfadyen@member.ses.nsw.gov.au</a>           | Jim McFadyen    | 02 6563 2066 Ah: 6563 2481    |

## **5. PRIORITIES**

Priorities for the electrical network in an emergency condition including restoration of the electricity supply are in the following order:

1. Safety of LHIB electrical network staff and the community.
2. Electricity supply to the hospital, airport and Emergency Operations Centre.
3. Electricity supply to any “life support” customers.
4. Electricity supply to the telecommunications network.
5. Electricity supply to evacuation centres.
6. Electricity supply to the business community.
7. Electricity supply to residential areas.

## **6. RESOURCES**

Existing staff resources are considered adequate for emergency conditions. However, contractors may be required to assist with repairs after an event, as detailed in the LHIB ENSMS Maintenance Plan.

Equipment spares are also detailed in the LHIB ENSMS Maintenance Plan.

## **7. ELECTRICAL STAFF SAFETY**

A swift response in emergency situations is critical, but safety shouldn't be compromised. It is therefore necessary for electrical staff when attending to an emergency and on their arrival at the site to:

- Visually check for hazards, assess the risk and establish risk controls to be implemented.
- Coordinate work activities with other emergency services.
- Continue with normal work procedures and manage hazards and risk.

Relief network operators shall seek guidance from the Senior Electrical Officer or the Manager of Infrastructure and Engineering Services if operations fall outside normal operating parameters or their skillset.

## **8. NETWORK RESPONSE TO EVENTS**

The LHIB may need to respond to various natural and man-made events and isolate the electricity supply. Any advice to the community will be in accordance with the LHIB ENSMS Communication and Reporting Plan.

The following provides planning for specific foreseeable events:

### **8.1 High Seas**

High seas would not normally pose a threat to the electricity supply on the island. However, sea levels and their effects will be monitored to ensure safety and isolation of the supply to affected electrical assets would occur if necessary.

### **8.2 Storm Water**

Excessive rain may cause storm water to inundate low lying areas of the township, particularly around the school area. This may necessitate isolation of the electricity supply to parts of the network in that area to ensure safety and prevent electrical damage to the electrical assets.

The Senior Electrical Officer shall monitor Bureau of Meteorology predictions and will determine in conjunction with the LHIB Manager Infrastructure and Engineering Services / Chief Executive Officer if the electricity supply shall be isolated.

Once water levels have receded and are considered unlikely to inundate electricity assets again, the assets shall be inspected and cleaned if required, dried and tested as necessary before the supply is restored.

### **8.3 Tsunamis**

A land inundation type tsunami has the potential to damage electrical assets, particularly if the electricity supply has not been isolated beforehand. The Senior Electrical Officer in conjunction with the LHIB Manager Infrastructure and Engineering Services / Chief Executive Officer, will decide if the electricity supply to areas that may be affected should be isolated prior to any predicted tsunamis. The Senior Electrical officer may have to make the decision to isolate if senior LHIB staff are unavailable and time is short.

The electricity supply to Evacuation Centres for tsunamis at the Golf Club and corner of Anderson Road and Middle Beach Road is to be maintained whenever possible and if safe to do so.

Once the tsunami threat has abated, the assets shall be inspected and cleaned, dried and tested if necessary by the LHIB electrical staff before the supply is restored.

### **8.4 Vandalism**

Vandalism of network assets on the island generally takes the form of graffiti on substations and minor damage to street lighting and poses little threat to electricity supply security.

The response to more serious vandalism will depend on the extent of damage. The community are encouraged to report any suspicious behaviour to the police to prevent or limit vandalism.

### **8.5 Terrorism**

Threat of terrorism is very low on the island given that the primary means of access to the island is via air and the associated security screening. Members of the public are encouraged to report any suspicious activity to the local police.

The network response to any terrorism act will depend on the assets damaged or destroyed. The backup generator at its remote location from the powerhouse helps provide security of supply if the powerhouse was destroyed or damaged by a terrorist attack.

Spare equipment for network repairs and repair strategy following a terrorist attack, or from any source of damage, is detailed in the LHIB ENSMS Maintenance Plan.

### **8.6 Fire**

Bushfires are unlikely due to the nature of the island (refer LHIB ENSMS Bushfire Management Plan).

The LHIB has emergency and evacuation plans for fires at their office, depot and powerhouse to help ensure the safety of personnel. Plans are displayed prominently on notice boards throughout the office and buildings.

Any electrical assets that catch fire will be electrically isolated as soon as practicable before the Rural Fire Service, if required, controls the fire.

### **8.7 General Network Faults**

Miscellaneous network faults will occur from time-to-time. The Senior Electrical Officer will isolate the affected part of the network, restore supply to as much of the network as possible and then organise repairs (in accordance with the LHIB ENSMS Operations Plan).

## **9. PLAN REVIEW**

This plan will be reviewed and amended as required, to meet the LHIB ENSMS Monitoring, Measurement and Audit Plan.



# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM DECOMMISSIONING PLAN**

This Plan was introduced in 2016 and will continue to be in effect until it is removed from service. This plan will undergo regular review in accordance with the Electricity Supply (Safety and Network Management) Regulation 2014 and AS5577-2013. This Plan will be systematically reviewed against legislation and regulation applicable to distribution and transmission network service providers, industry standards including AS5577, the Lord Howe Island Board's strategic plans and relevant internal policies, procedures and standards and our regulatory determination. This plan will be updated as necessary in line with the outcome of these reviews.

In accordance with the NSW Electricity Supply (Safety and Network Management) Regulation 2014, this Plan will be made available to all stakeholders who are likely to be involved in its implementation.

This Electricity Network Safety Management System Decommissioning Plan is available on the Lord Howe Island Board's website ([www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)). Printed copies of this Plan are available at the Lord Howe Island Board's office – 5 Bowker Avenue, Lord Howe Island NSW 2898.

All correspondence in relation to this document should be directed to:

The Lord Howe Island Board  
PO Box 5, Bowker Ave  
Lord Howe Island  
NSW 2898  
Australia

Phone: (02) 6563 2066 Fax: (02) 6563 2127

Email: [administration@lhib.nsw.gov.au](mailto:administration@lhib.nsw.gov.au) Website: [www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)

September 2016



## Table of Contents

|                              |   |
|------------------------------|---|
| 1. INTRODUCTION.....         | 4 |
| 2. GENERAL REQUIREMENTS..... | 4 |
| 3. SAFETY .....              | 4 |
| 4. ENVIRONMENTAL .....       | 4 |
| 5. PLAN REVIEW .....         | 4 |

# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM DECOMMISSIONING PLAN**

## **1. INTRODUCTION**

This Plan is part of the Lord Howe Island Board's (LHIB) Electricity Network Safety Management System (ENSMS) and addresses the safety and environmental impacts of decommissioning of any component of the LHIB's electricity network.

## **2. GENERAL REQUIREMENTS**

All decommissioning works are to be performed in accordance with Australian Standards, codes, guidelines, and statutory requirements. Any deviation from such requirements are to be assessed and justified as to achieve at least an equivalent safety outcome through the following (as applicable):

- Formal safety assessments;
- Literature review;
- Consultant report; and/or
- Incident investigation outcomes.

All staff, consultants or contractors involved in decommissioning of the electrical network, or part thereof, shall be suitably trained, qualified and competent. The Senior Electrical Officer must be satisfied that all personnel involved in decommissioning works are suitably trained, qualified, competent and equipped to perform the work.

## **3. SAFETY**

Any component of the network that is to be de-energised must be isolated, locked and tagged, tested de-energised and earthed/short circuited. An access permit must be issued before any network component can be removed. Ausgrid's Electrical Safety Rules shall be followed for this process to ensure safety. The integrity of any remaining network assets is not to be compromised.

Any isolated cables left in the ground that may have unwanted voltages induced or transferred into them are to be suitably terminated and/or insulated at any exposed parts.

No asbestos or PCBs are expected to be found as part of the electrical network as no equipment has been identified containing either.

## **4. ENVIRONMENTAL**

As much of the removed network components shall be recycled as possible when any decommissioning of the network or parts thereof occurs. Recycling particularly applies to transformer oil and SF6 and these shall be suitably contained and then recycled. Spill kits are likely to be required in case of accidental transformer oil escape when transformer works are in progress.

Disposal of goods will be in accordance with environmental laws and guidelines including the Protection of the Environment Operations Act 1997 and requirements of the NSW Environmental Protection Authority.

## **5. PLAN REVIEW**

This plan will be reviewed and amended as required, to meet the LHIB ENSMS Monitoring, Measurement and Audit Plan.



# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM COMMUNICATION AND REPORTING PLAN**

This Plan was introduced in 2016 and will continue to be in effect until it is removed from service. This plan will undergo regular review in accordance with the Electricity Supply (Safety and Network Management) Regulation 2014 and AS5577-2013. This Plan will be systematically reviewed against legislation and regulation applicable to distribution and transmission network service providers, industry standards including AS5577, the Lord Howe Island Board's strategic plans and relevant internal policies, procedures and standards and our regulatory determination. This plan will be updated as necessary in line with the outcome of these reviews.

In accordance with the NSW Electricity Supply (Safety and Network Management) Regulation 2014, this Plan will be made available to all stakeholders who are likely to be involved in its implementation.

This Electricity Network Safety Management System Communication and Reporting Plan is available on the Lord Howe Island Board's website ([www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)). Printed copies of this Plan are available at the Lord Howe Island Board's office – 5 Bowker Avenue, Lord Howe Island NSW 2898.

All correspondence in relation to this document should be directed to:

The Lord Howe Island Board  
PO Box 5, Bowker Ave  
Lord Howe Island  
NSW 2898  
Australia

Phone: (02) 6563 2066 Fax: (02) 6563 2127

Email: [administration@lhib.nsw.gov.au](mailto:administration@lhib.nsw.gov.au) Website: [www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)

September 2016

## Table of Contents

|   |          |
|---|----------|
| <b>1. INTRODUCTION</b>  | <b>4</b> |
| <b>2. COMMUNITY</b>   | <b>4</b> |
| <b>3. LOCAL EMERGENCY SERVICES</b>                            | <b>4</b> |
| <b>4. ELECTRICAL CONTRACTORS</b>                              | <b>5</b> |
| <b>5. EMPLOYEES</b>   | <b>5</b> |
| <b>6. LHIB NETWORK CONTRACTORS</b>                            | <b>5</b> |
| <b>7. LORD HOWE ISLAND BOARD</b>                              | <b>5</b> |
| <b>8. INDEPENDENT PRICING AND REGULATORY TRIBUNAL (IPART)</b> | <b>5</b> |
| 8.1 Annual Reporting  | 5        |
| 8.2 Notification of Serious Electricity Works Accidents       | 5        |
| <b>9. NSW FAIR TRADING</b>                                    | <b>6</b> |
| 9.1 Annual Reports  | 6        |
| 9.2 Notification of Serious Electrical Accidents              | 6        |
| <b>10. PLAN REVIEW</b>  | <b>6</b> |

# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM COMMUNICATION AND REPORTING PLAN**

## **1. INTRODUCTION**

This Plan is part of the Lord Howe Island Board's (LHIB) Electricity Network Safety Management System (ENSMS) and addresses the communication and reporting related to the LHIB's electricity network.

The LHIB is committed to ensuring a safe and reliable electricity supply to all our customers by implementing an Electrical Network Safety Management System.

The LHIB has developed this Plan to

- Identify key stakeholders and communication requirements with those stakeholders.
- Identify statutory reporting requirements.
- Comply with the requirements of the Electricity Supply (Safety and Network Management) Regulation 2014 (NSW) and AS5577-2013: Electricity Network Safety Management Systems.

## **2. COMMUNITY**

Electricity customers are to be notified of planned outages at least 4 business days before the date of the interruption.

Extended unplanned outages will also require some community notification.

We will consult with the community as appropriate when changes to electricity generation or the distribution network are likely to have an effect on the community or environment. The level of consultation will be determined by the issue at the time and the likely significance to the community.

The dissemination of information and consultation for the above scenarios may include:

- Mail outs (householders) through the local Post office
- Community meetings
- Quarterly LHIB meetings
- Radio
- Local newspaper
- LHIB Website
- Social media
- Development application process.

The community are encouraged to contact the Senior Electrical Officer if there are any concerns about electrical safety or excavation works in case of underground electrical mains. There is no formal Dial Before You Dig service like that found on the mainland. The same service on the Island is initiated through contact with the Senior Electrical Officer and does not incur costs to any customers.

## **3. LOCAL EMERGENCY SERVICES**

The Local Emergency Management Committee comprises representatives from all local emergency and support agencies i.e. State Emergency Service and Rural Fire Service (additional information is provided on the LHIB website - <http://www.lhib.nsw.gov.au/services/emergency-services>). The committee is supported by the LHIB through the provision of administrative services. It is responsible for the planning, preparation, response and recovery of all matters relating to emergencies that may affect the local community.

This close relationship ensures that consultation and management of issues associated with the electrical network does occur.

#### **4. ELECTRICAL CONTRACTORS**

Electrical contractors are required to comply with our Service Rules and submit applications for supply, and Certificates of Compliance for Electrical Work in accordance with the LHIB ENSMS Customer Electrical Installation Safety Plan. Information and forms are as provided on the LHIB website - <http://www.lhib.nsw.gov.au/infrastructure/electricity>

Electrical contractors new to the island are encouraged to contact our Senior Electrical Officer at the Powerhouse before commencing work for the first time.

#### **5. EMPLOYEES**

LHIB electrical staff will be consulted with any changes to electrical requirements or procedures as required by Work Health and Safety legislation.

#### **6. LHIB NETWORK CONTRACTORS**

LHIB network contractors will be required to comply with all requirements that electrical staff are required to comply with and any specific contract conditions. Contractors will be inducted onto the site and may manage the site from thence on.

Network contractors are encouraged to consult with the Senior Electrical Officer as required to ensure safety and contract compliance. Any contract reporting obligations are to be fulfilled including providing “as completed” plans.

#### **7. LORD HOWE ISLAND BOARD**

The ENSMS is subject to approval by the LHIB, as part of their quarterly meetings.

A report on the ENSMS implementation and audit findings shall be provided to the LHIB meeting on an annual basis.

#### **8. INDEPENDENT PRICING AND REGULATORY TRIBUNAL (IPART)**

##### **8.1 Annual Reporting**

The LHIB will communicate with IPART as necessary. We will provide IPART with annual reports as required by the IPART Electricity Networks Reporting Manual as follows:

- ENSMS performance report
- Bushfire preparedness

##### **8.2 Notification of Serious Electricity Works Accidents**

The LHIB will report serious electricity works accidents (SEWA) as required by the Electricity Supply Act 1995 to IPART. SEWA are accidents:

- a) in which electricity works are involved, and
- b) as a consequence of which a person dies or suffers permanent disability, is hospitalised, receives treatment from a health care professional or is unable to attend work for any period of time.

Incident reports are to be submitted on an occurrence basis within specified timeframes depending on the seriousness of the incident with immediate verbal or equivalent written notification for “major” incidents by telephoning the inspector on duty on (02) 8001 6492. Stage 1 (notification), 2 (interim) and 3 (final) reporting timeframes for the various category of incidents are as provided by the IPART’s reporting manual.

Incident reports are to be submitted using the online reporting portal at [www.ipart.nsw.gov.au](http://www.ipart.nsw.gov.au) or may be sent to [energy@ipart.nsw.gov.au](mailto:energy@ipart.nsw.gov.au)

Network incidents will be investigated/reported/recorded using the “Network Incident

Form”.

Incidents involving electric shocks from static discharge, defibrillators or from systems operating nominally at extra-low voltage are not reportable.

## **9. NSW FAIR TRADING**

### **9.1 Annual Reports**

There are no LHIB annual reporting requirements for NSW Fair Trading.

### **9.2 Notification of Serious Electrical Accidents**

Serious electrical accidents must be reported to NSW Fair Trading as required by the Electricity (Consumer Safety) Act and Regulation where the following applies

- a) in which an electrical article or electrical installation is involved that is or was used for (or for purposes incidental to) the conveyance, control and use of electricity and electricity was, at the time of the accident, being so conveyed, controlled and used, and
- b) as a consequence of which a person dies or suffers permanent disability, is hospitalised, receives treatment from a health care professional or is unable to attend work for any period of time.

Serious electrical accidents are to be reported by telephoning NSW Fair Trading on 13 32 20 but written notice or electronic communication may be acceptable (as allowed by the Regulation).

## **10. PLAN REVIEW**

This plan will be reviewed and amended as required, to meet the LHIB ENSMS Monitoring, Measurement and Audit Plan.





# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM MONITORING, MEASUREMENT AND AUDIT PLAN**

This Plan was introduced in 2016 and will continue to be in effect until it is removed from service. This plan will undergo regular review in accordance with the Electricity Supply (Safety and Network Management) Regulation 2014 and AS5577-2013. This Plan will be systematically reviewed against legislation and regulation applicable to distribution and transmission network service providers, industry standards including AS5577, the Lord Howe Island Board's strategic plans and relevant internal policies, procedures and standards and our regulatory determination. This plan will be updated as necessary in line with the outcome of these reviews.

In accordance with the NSW Electricity Supply (Safety and Network Management) Regulation 2014, this Plan will be made available to all stakeholders who are likely to be involved in its implementation.

This Electricity Network Safety Management System Monitoring, Measurement and Audit Plan is available on the Lord Howe Island Board's website ([www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)). Printed copies of this Plan are available at the Lord Howe Island Board's office – 5 Bowker Avenue, Lord Howe Island NSW 2898.

All correspondence in relation to this document should be directed to:

The Lord Howe Island Board  
PO Box 5, Bowker Ave  
Lord Howe Island  
NSW 2898  
Australia

Phone: (02) 6563 2066 Fax: (02) 6563 2127

Email: [administration@lhib.nsw.gov.au](mailto:administration@lhib.nsw.gov.au) Website: [www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)

September 2016

## Table of Contents

|   |          |
|---|----------|
| <b>1. INTRODUCTION</b>  | <b>4</b> |
| <b>2. MONITORING AND MEASURING</b>  | <b>4</b> |
| <b>2.1 Planning, Design, Construction, Commissioning, Decommissioning</b> | <b>4</b> |
| <b>2.2 Maintenance</b>  | <b>4</b> |
| <b>2.3 Reliability</b>  | <b>4</b> |
| <b>2.4 Power Quality</b>  | <b>4</b> |
| <b>3. AUDITING</b>  | <b>5</b> |
| <b>4. ENSMS REVIEW</b>  | <b>5</b> |
| <b>5. ADDRESSING AUDIT OR REVIEW FINDINGS</b>                             | <b>5</b> |

# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM MONITORING, MEASUREMENT AND AUDIT PLAN**

## **1. INTRODUCTION**

This Plan is part of the Lord Howe Island Board's (LHIB) Electricity Network Safety Management System (ENSMS) and addresses the monitoring, measurement and auditing for the LHIB's electricity network.

The LHIB is committed to ensuring a safe and reliable electricity supply to all our customers through the monitoring, measuring and auditing of the electrical network performance.

The LHIB has developed this Plan to meet this commitment and to comply with the requirements of the Electricity Supply (Safety and Network Management) Regulation 2014 (NSW) and AS5577-2013: *Electricity Network Safety Management Systems*.

## **2. MONITORING AND MEASURING**

All elements of the LHIB ENSMS shall be internally checked at the end of each IPART reporting period to ensure all requirements have been achieved. Failure to meet requirements will require an action plan to be developed to ensure compliance and/or a review of requirements to ensure they are realistic and in accordance with industry standards and practice at the time.

### **2.1 Planning, Design, Construction, Commissioning, Decommissioning**

The annual review by the Senior Electrical Officer prior to the external IPART audit shall check that all requirements for planning, design, construction, commissioning and decommissioning has been performed in accordance with the relevant LHIB Plans, Australian Standards, codes and guidelines for these items.

The Senior Electrical Officer shall also monitor and audit contractor projects relevant to the network, to ensure compliance with requirements.

### **2.2 Maintenance**

Maintenance works as described in the LHIB ENSMS Maintenance Plan shall be audited to ensure scheduled targets have been achieved. Failure to meet targets will require an action plan to ensure compliance and/or a review of targets to ensure that the targets are realistic and in accordance with industry standards and practice at the time.

### **2.3 Reliability**

The number and length of unplanned outages will be monitored to ensure the number and frequency of interruptions to the electricity supply does not deteriorate over time without relevant cause.

### **2.4 Power Quality**

The voltage output at the Powerhouse is monitored and alarms will highlight if there is an excessive deviation in Powerhouse output voltage.

The Senior Electrical Officer will respond to power quality complaints from customers and may use spot checks or loggers to check power quality.

### **3. AUDITING**

The LHIB ENSMS will be audited for/by IPART annually in accordance with IPART's 'Electricity Networks Audit Guideline'. The Senior Electrical Officer will conduct a review to ensure that the ENSMS is in order prior to the audit.

Due to size of the network and associated operations, we believe that an external audit should not normally be necessary and the annual review by the Senior Electrical Officer and the audit for IPART will be adequate. We will however, carry out internal or independent auditing of our ENSMS on an as needs basis.

Auditing of electrical staff and LHIB electrical network contractors will be carried out on an informal basis.

### **4. ENSMS REVIEW**

The ENSMS is to be amended as required to meet legislative, organisational structure changes, operational experience or events, coronial findings and Royal Commission recommendations. Changes to the ENSMS will require approval from the Manager of Infrastructure and Engineering Services.

A review and update to the ENSMS shall be carried out at least every 5 years.

### **5. ADDRESSING AUDIT OR REVIEW FINDINGS**

Changes identified to the LHIB ENSMS as part of an audit or review shall be made as soon as reasonably practical.

### **6. PLAN REVIEW**

This plan will be reviewed and amended as required, to meet the LHIB ENSMS Monitoring, Measurement and Audit Plan.



# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM PUBLIC ELECTRICAL SAFETY AWARENESS PLAN**

This Plan was introduced in 2016 and will continue to be in effect until it is removed from service. This plan will undergo regular review in accordance with the Electricity Supply (Safety and Network Management) Regulation 2014 and AS5577-2013. This Plan will be systematically reviewed against legislation and regulation applicable to distribution and transmission network service providers, industry standards including AS5577, the Lord Howe Island Board's strategic plans and relevant internal policies, procedures and standards and our regulatory determination. This plan will be updated as necessary in line with the outcome of these reviews.

In accordance with the NSW Electricity Supply (Safety and Network Management) Regulation 2014, this Plan will be made available to all stakeholders who are likely to be involved in its implementation.

This Electricity Network Safety Management System Public Electrical Safety Awareness Plan is available on the Lord Howe Island Board's website ([www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)). Printed copies of this Plan are available at the Lord Howe Island Board's office – 5 Bowker Avenue, Lord Howe Island NSW 2898.

All correspondence in relation to this document should be directed to:

The Lord Howe Island Board  
PO Box 5, Bowker Ave  
Lord Howe Island  
NSW 2898  
Australia

Phone: (02) 6563 2066 Fax: (02) 6563 2127

Email: [administration@lhib.nsw.gov.au](mailto:administration@lhib.nsw.gov.au) Website: [www.lhib.nsw.gov.au](http://www.lhib.nsw.gov.au)

September 2016

## Table of Contents

|   |          |
|---|----------|
| <b>1. INTRODUCTION</b>                              | <b>4</b> |
| <b>2. OBJECTIVES</b>                                | <b>4</b> |
| <b>3. ELECTRICAL SAFETY INITIATIVES</b>             | <b>4</b> |
| 3.1 Underground Cable Safety                        | 4        |
| 3.2 Damaged Network Equipment                       | 4        |
| 3.3 Switchboard Upgrades                            | 5        |
| 3.4 Electric Shocks                                 | 5        |
| 3.5 Electrical Product Safety Recalls               | 5        |
| 3.6 DIY Electricity Safety                          | 5        |
| 3.7 Lightning Awareness                             | 5        |
| 3.8 General Electrical Safety                       | 5        |
| 3.9 Electrical Safety of Emergency Safety Personnel | 6        |
| <b>4. PLAN REVIEW</b>                               | <b>6</b> |



# **ELECTRICITY NETWORK SAFETY MANAGEMENT SYSTEM**

## **PUBLIC ELECTRICAL SAFETY AWARENESS PLAN**

### **1. INTRODUCTION**

This Plan is part of the Lord Howe Island Board's (LHIB) Electricity Network Safety Management System (ENSMS) addresses the methods of informing the public of electrical safety issues related to the LHIB's electricity network and electrical safety issues with customer's electrical installations.

The LHIB is committed to ensuring a safe and reliable electricity supply to all our customers by operating and maintaining our electrical network to as high as standard as reasonably practicable.

The LHIB has developed this Plan to meet this commitment and to comply with the requirements of Electricity Supply (Safety and Network Management) Regulation 2014 (NSW) and AS5577-2013: Electricity Network Safety Management Systems.

Our initiatives (see Section 3) are identified from incidents and accidents, our network risk analysis and other data sources.

The LHIB will inform the Island community of the identified risks and recommended controls using all reasonable means. These means are likely to include specific newsletters, board newsletters, local radio, community noticeboards, school visits and the web (refer LHIB ENSMS Communication and Reporting Plan).

### **2. OBJECTIVES**

The LHIB's ENSMS Public Electrical Safety Awareness Plan objectives are to:

- Reduce the risk of harm to the community from electrical issues;
- Raise awareness of the hazards related to the Island's electricity network;
- Raise awareness of electrical issues identified through our electrical safety initiatives;
- Encourage the safe electrical practices.

### **3. ELECTRICAL SAFETY INITIATIVES**

#### **3.1 Underground Cable Safety**

The LHIB has an underground cable network for the distribution of electricity on the Island. You should check with us before carrying out any excavation works to ensure safety at the site and eliminate electrical network damage. This applies to works on both private and public lands.

The LHIB's Senior Electrical Officer will provide advice and/or conduct a cable location as required - this is a free service.

Any suspected damage to the electricity network should be immediately reported to the LHIB's Senior Electrical Officer.

The Safework Australia's *General Guide for Working in the Vicinity of Overhead and Underground Electric Lines* and *Working in the Vicinity of Overhead and Underground Electric Lines Information Sheet* provides useful guidance for work near underground powerlines.

#### **3.2 Damaged Network Equipment**

LHIB encourages members of the public to report any damage to network equipment such as transformers, pillar boxes, underground cables or streetlights.

### 3.3 Switchboard Upgrades

Residual current devices, or safety switches as they are often called, are now used to protect electrical circuits when constructing or modifying a new building. These safety switches help to significantly improve customer safety on outgoing installation circuits. Safety switches are easily identified by a “test button” located on the front of the switch.

The LHIB strongly recommends that you replace all old circuit protection with safety switches. You will need to contact your electrical contractor to arrange for the replacement works.

### 3.4 Electric Shocks

Electric shocks, no matter how small, from appliances, switchboard boxes, water taps, metallic downpipes and roofs, require investigation from suitably qualified personnel. Contact the LHIB’s Senior Electrical Officer as soon as possible for assistance if this occurs. In the meantime, ensure you and your family stay clear of all metallic items.

### 3.5 Electrical Product Safety Recalls

Electrical products are recalled from time-to-time due to safety concerns. We recommend that the community regularly check the ACCC’s Product Safety Recall Australia’s website, [www.recalls.gov.au](http://www.recalls.gov.au) and/or sign up for their email alerts.

The LHIB will seek to notify the Island community where we are aware of electrical products that we believe are likely to affect the wider community.

### 3.6 DIY Electricity Safety

Do-it-yourself (DIY) renovations and repairs have become more popular in recent times. However, DIY electrical work is not only dangerous but is also illegal in NSW. **You must always use a licensed electrical contractor** for any electrical repairs or installation work.

If you have any safety concerns, please contact our Senior Electrical Officer for advice.

### 3.7 Lightning Awareness

Lightning can have disastrous and devastating consequences. The Island community should take precautions when storms are likely. Precautions for lightning include:

- Install lightning protection in switchboards and/or use surge protection boards on sensitive electronic equipment;
- Shut down computers and unplug appliances before any storm activity.
- Seek shelter indoors and avoid contact with electrical appliances, metal pipes and metal fixtures, stay clear of windows and glass doors and avoid using fixed telephones.

### 3.8 General Electrical Safety

The following advice should be used as a guideline for electrical installations:

- Install safety switches on all circuits (see Section 3.3)
- Test safety switches with the “test button” every 6 months if possible;
- Never put a metal object in a toaster or power point.
- Don’t use electrical appliances or power cords where there is water;
- Use an appropriately rated extension lead and one that is not too long;
- Unwind extension leads before use to help prevent overheating;
- Never use more than one double adaptor in a single power point and try to avoid their use altogether;
- Don’t overload power boards;
- Use a licensed electrical contractor if renovating;
- Contact us before digging (see Section 3.1);
- Replace damaged appliances or leads;

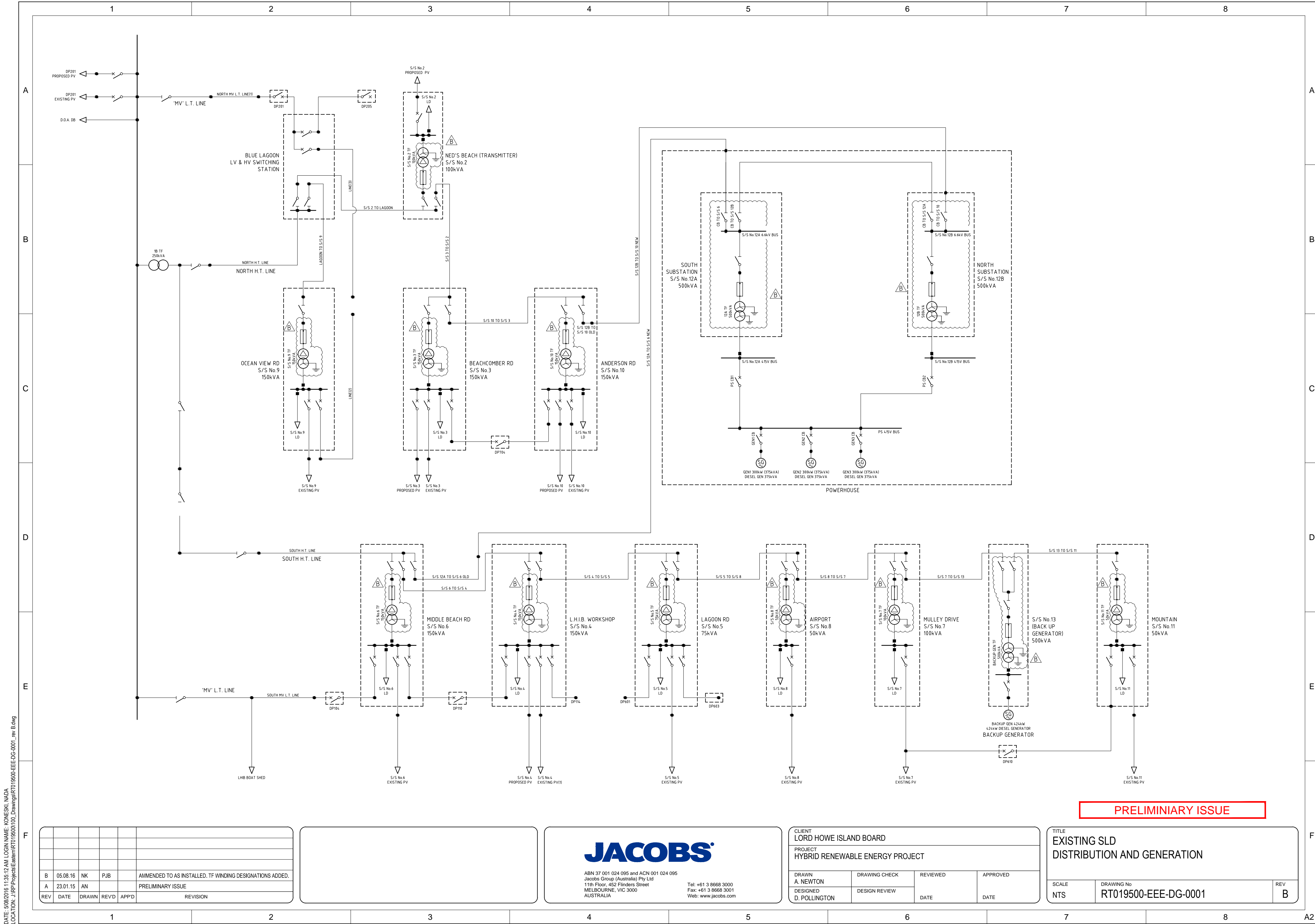
- Check for wires before drilling into walls, floors and ceilings;
- Keep a battery-operated torch in case of a blackout.

### **3.9 Electrical Safety of Emergency Safety Personnel**

ENA DOC 008 provides guidance on electrical safety of emergency safety personnel. The LHIB encourages emergency service personnel to become familiar with the requirements of this document.

## **4. PLAN REVIEW**

This plan will be reviewed and amended as required, to meet the LHIB ENSMS Monitoring, Measurement and Audit Plan.



DATE: 5/08/2016 11:35:12AM LOGIN NAME: KONESKI, NADA  
LOCATION: J:\RP\Projects\Eastern\RT019500\100\_Drawings\RT019500-EEE-DG-0001\_rev B.dwg

| REV | DATE     | DRAWN | REV'D | APP'D | REVISION   |
|-----|----------|-------|-------|-------|--|
| B   | 05.08.16 | NK    | PJB   |       | AMMENDED TO AS INSTALLED. TF WINDING DESIGNATIONS ADDED. |
| A   | 23.01.15 | AN    |       |       | PRELIMINARY ISSUE  |

**JACOBS**

ABN 37 001 024 095 and ACN 001 024 095  
Jacobs Group (Australia) Pty Ltd  
11th Floor, 452 Flinders Street  
MELBOURNE, VIC 3000  
AUSTRALIA  
Tel: +61 3 8668 3000  
Fax: +61 3 8668 3001  
Web: www.jacobs.com

|  |                                |                  |                  |
|--|--------------------------------|------------------|------------------|
| CLIENT<br>LORD HOWE ISLAND BOARD           |                                |                  |                  |
| PROJECT<br>HYBRID RENEWABLE ENERGY PROJECT |                                |                  |                  |
| DRAWN<br>A. NEWTON                         | DRAWING CHECK<br>DESIGN REVIEW | REVIEWED<br>DATE | APPROVED<br>DATE |

|  |                                    |          |
|--|------------------------------------|----------|
| TITLE<br>EXISTING SLD<br>DISTRIBUTION AND GENERATION |                                    |          |
| SCALE<br>NTS   | DRAWING No<br>RT019500-EEE-DG-0001 | REV<br>B |

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Electrical Network Upgrades – Developer Contributions

#### **RECOMMENDATION**

It is recommended that the Board note the information in the report, and decide on the contribution amount to be recovered from new electricity customers connecting to the Beachcomber substation from the following options:

1. The upgrade is carried out by the Board and no costs are passed on.
2. The upgrade is carried out following agreement with the three likely new customers, regarding an equal sharing arrangement of the \$20,000 cost.
3. A contribution of \$5,000, or other amount, is charged to the likely three new customers and any future customer on the Beachcomber substation.

#### **BACKGROUND**

The Island's electricity distribution system, made up of 13 km of high voltage cable, was put underground in 1984. The other major components of the distribution system are the two padmount substations supplying the high voltage (HV) reticulation system from the powerhouse and one padmount substation supplying the HV reticulation system from the standby generating unit.

Ten smaller padmount substations convert the HV distribution voltage to a nominal 415/240 volt 3 phase supply, which is then distributed locally to all customers via low voltage underground mains.

There are 87 distribution pillars (DPs) located around the Island, providing the low voltage supply to the customers.

The Island's distribution system was well designed and has catered for the growth in demand since its installation more than 32 years ago. The last major upgrade of the system occurred when the powerhouse was moved to its new location in 2012, when 1.3 km of HV cable was installed and the two new substations were installed at the powerhouse.

The Board's Senior Electrical Officer monitors demand on each substation on a monthly basis, partly to enable planning for upgrades of the substation to meet future demand. The ten smaller substations were specifically designed for the Island, which has caused some issues when upgrades have been required. The physically small size of the green outer cabinet restricts the size of the transformer that can be used in the substation, and the layout of the electrical components internally, can also limit the ability to expand or upgrade.

When a substation reaches 90% of its capacity over a 3 month period, the site is monitored more regularly, and consideration is then given to upgrading the size of the substation transformer so that the substation does not overload and interrupt supply to customers regularly. Some upgrades in transformer size can be carried out simply, with a larger capacity transformer able to be inserted into the outer green cabinet without the need for the whole substation to be replaced.

The Board maintains spare transformers of varying capacities on the Island so that if a substation transformer fails, it can be replaced relatively quickly, rather than waiting the 6 months for a new transformer to be built to the Island's specific needs.

The only known occasion when a lessee\proponent has contributed to an upgrade to the electricity distribution system was when Airservices Australia (ASA) requested a specific level of supply to their new facility. The requested level of supply could not be delivered from the existing substation, so this required an upgrade to the transformer (ie. doubling in size), the cost of which was passed onto ASA.

### **CURRENT POSITION**

Over the last 12 months, there has been some focus on the distribution system around the Beachcomber Substation and Skyline Drive area, with some new connections requested to replace private on-site diesel generation, and some known and potential development proposals involving additional load in the future.

The substation at Beachcomber supplies power to a distribution pillar, shown as Distribution Pillar 1 (DP 1) on Attachment 1, via a single cable. From DP 1, the supply is split into two cables, one which goes south supplying all of the properties around to the McFadyen residence, and the other going north, supplying all of the properties around to Ebbitide.

The Beachcomber substation has previously been upgraded, from 100 kVA to 150 kVA as the load in the general area increased, without any new connections. Currently, the substation is sitting at around 72% of its maximum load, and is not in need of any upgrade.

Recently, there have been three new customers connected to the Island network in the Top Shop area, and a fourth has been approved, but not yet connected. These new approved customers, may take the Beachcomber substation to around 92% of its capacity, triggering some additional monitoring of the substation, but no other upgrade work at the substation. The existing cable from the Beachcomber substation to DP 1 would not requiring any upgrade.

There are three more known, new customers likely in the next few years, who will connect to the Beachcomber substation. The calculations for the additional load of these customers on the cable joining Beachcomber substation to DP 1, indicate that the cable will be unable to handle the new load, and will trip the circuit breaker at the Beachcomber substation, resulting in loss of supply to many customers.

The solution would be to install a duplicate cable from the Beachcomber substation to DP 2 on Attachment 1, allowing the area from the Top Shop to Ebbitide to be supplied on one cable, and the southern area of Skyline Drive to be supplied from the existing cable. The estimated cost of an additional cable from the Beachcomber substation to DP 2 on Skyline Drive is approximately \$20,000 (excl GST). This is made up of approximately \$14,000 of materials and \$6,000 of Board labour to install the cable.

Without the three likely new customers, the cable from the Beachcomber substation to DP 1, would not require an upgrade.

On the mainland, electricity network operators charge customers for the full cost of upgrades to their network, whether it be new infrastructure, such as a new powerline to a residence, or an upgrade to a substation to supply a new facility.

Under the Environmental Planning and Assessment Act 1979 (EP&A Act), NSW Councils have been able to levy contributions for public amenities and services required as a consequence of development. This may be the provision of new facilities for a new area, or may be the expansion of existing facilities where a developed area is growing. This is typically levied to cover the costs of providing libraries, community and cultural facilities, open space, roads, drainage, emergency services facilities and the provision of car parking in commercial areas.

Section 94 contributions are imposed by way of a condition of development consent or complying development. Since 1993, councils have been able to levy s94 contributions only if they have prepared and exhibited a development contributions plan which has allowed the system to be made more transparent.

The Board does not have a Development Contributions Plan as it funds Island facilities and infrastructure through fees and charges to users, and grants from the State government. Additionally, there is no development proposed on the Island of a scale sufficient to warrant the preparation of the contributions plan. Therefore, this method of recovering upgrade costs is not recommended.

The options available to manage this situation are:

1. The upgrade is carried out by the Board and no costs are passed on.
2. The upgrade is carried out following agreement with the three likely new customers, regarding an equal sharing arrangement of the \$20,000 cost.
3. A contribution of \$5,000, or other amount, is charged to the likely three new customers and any future customer on the Beachcomber substation.

## **RECOMMENDATION**

It is recommended that the Board note the information in the report, and decide on the contribution amount to be recovered from new electricity customers connecting to the Beachcomber substation from the following options:

1. The upgrade is carried out by the Board and no costs are passed on.
2. The upgrade is carried out following agreement with the three likely new customers, regarding an equal sharing arrangement of the \$20,000 cost.
3. A contribution of \$5,000, or other amount, is charged to the likely three new customers and any future customer on the Beachcomber substation.

**Prepared** \_\_\_\_\_ Andrew Logan Manager Infrastructure & Engineering Services

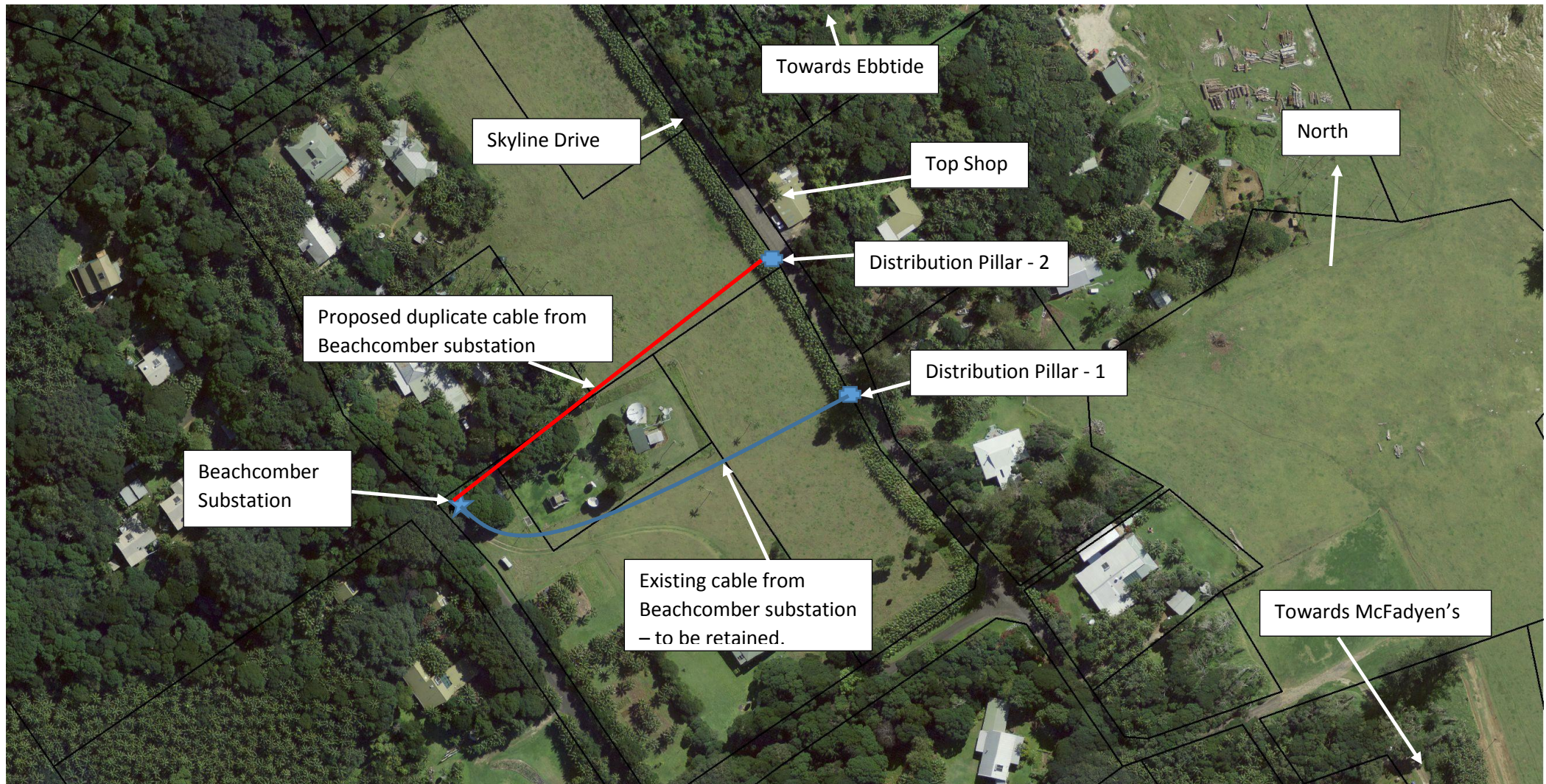
**Endorsed** \_\_\_\_\_ Penny Holloway Chief Executive Officer

Attachment 1 - Beachcomber Substation Site Plan



# Attachment 1 – Electrical Network Upgrades – Developer Contributions

## Beachcomber Substation Site Plan





# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Lord Howe Island Land Allocation Review

#### **RECOMMENDATION**

It is recommended that the Board determine its position on the LHI Land Allocation Review

#### **BACKGROUND**

In March 2014, the Government commissioned the Hon Ken Handley AO QC to conduct an independent review of land allocation and tenure on Lord Howe Island. The Review of Land Allocation by the Hon Ken Handley AO QC was undertaken with the support and assistance of the Department of Premier and Cabinet. It was undertaken at arm's length from the Lord Howe Island Board (the Board).

The Terms of Reference identify the following four key areas for consideration:

1. Forms of tenure,
2. Land allocation methods,
3. Strategies to increase land and housing supply, and
4. Economic sustainability

In March 2014, the Hon Ken Handley undertook targeted consultation with a range of stakeholders including Board members, staff of the Board and residents. A discussion paper was prepared and released for comment in August 2014 which set out preliminary options in order to generate and guide discussion. During this period the Hon Ken Handley visited Lord Howe Island to conduct a community information session and had 28 face to face meetings with members of the Lord Howe Island community. 59 submissions were received (written, verbal or both) with the majority provided by the Island's residents.

The Hon Ken Handley submitted his report to the government in February 2015.

#### **CURRENT POSITION**

The Handley Review has now been considered by Government and the report and the government response have been released (see attached). Copies have been distributed to all residents of Lord Howe Island and information has been loaded onto the Government's "haveyoursay" website and the Board's website. There is an opportunity for community comment with a closing date for submissions to the Department of Premier and Cabinet of 28 November.

The Handley Review makes 16 recommendations most of which are supported by the government, some supported with amendment. Three recommendations have not been supported by government:

Rec 4: Regarding the granting of permissive occupancies for a fixed term of 5 years

Rec 7: Regarding reserving the remaining quota for new dwellings for dual occupancy dwellings

Rec 12: Regarding the proposal to return additional taxation revenue raised from land tax and stamp duty to the island by being credited to the LHI Board.

The Board has the opportunity to consider the government response and provide comments if it determines to do so.

### **RECOMMENDATION**

It is recommended that the Board determine its position on the LHI Land Allocation Review

Prepared \_\_\_\_\_ Penny Holloway, Chief Executive Officer

# **Lord Howe Island Land Allocation Review**

**The Hon Ken Handley AO QC  
February 2015**

**Page intentionally left blank**

# Contents

|   |    |
|---|----|
| 1. Introduction.....  | 4  |
| 2. Background .....   | 4  |
| 3. Overview of the consultation process.....                                    | 6  |
| 4. Summary of the recommendations .....   | 6  |
| 5. Reasons for Recommendations.....   | 8  |
| Appendix 1: Terms of Reference .....  | 22 |
| Appendix 2: Summary of the submissions made in response to the discussion paper | 24 |
| Forms of Tenure.....  | 24 |
| Land Allocation Methods .....   | 25 |
| Strategies to Increase land and housing supply .....                            | 27 |
| Other issues .....  | 31 |

# 1. Introduction

During the past four years Lord Howe Island (the Island) has been the subject of several reviews. There was a statutory review of the *Lord Howe Island Act 1953* (the Act) in 2010, a governance review in 2012 and a financial sustainability review in 2013. These reviews did not explore options for reform of the land system.

In February 2014 I was engaged by the NSW Department of Premier and Cabinet to review the land allocation and tenure systems on the Island and provide advice to the Minister for the Environment (the Minister).

The purpose of the review was to identify options for different land allocation methods and forms of tenure which would maintain and protect the unique environmental and cultural values of the Island. The forms of tenure and allocation methods should be transparent, fair, financially sustainable and recognise the needs of current and future generations of Islanders.

The Terms of Reference identified four key areas for consideration:

1. Forms of tenure
2. Land allocation methods
3. Strategies to increase land and housing supply
4. Economic sustainability.

The Terms of Reference are in Appendix 1.

# 2. Background

The Island is located 760 kilometers north east of Sydney and has an area of 1,455 hectares. Three quarters of the Island is protected as Permanent Park Reserve because of its World Heritage status. It has a population of 388 with a median age of 48. 23 per cent of the population (or some 87 residents) are over 65. The population has remained relatively stable over the last 10 years. Tourism is the principal industry and 40 per cent of the workforce is directly employed in that industry. All land on the Island is vested in the Crown and may only be dealt with under the Act which is administered by the Lord Howe Island Board (the Board) under the Minister. Land is not available for freehold title purchase.

The first Board was appointed in 1913 to administer the Island and its land. It had a permissive occupancy over the whole Island and could grant smaller permissive occupancies to settlers and their descendants.

The Act provided for the grant of perpetual leases (for residential purposes) and of special leases for up to 10 years (for agriculture and other approved purposes); giving Islanders a more secure title. The Act's evident objective was to support a permanent and committed residential community. To achieve this, it restricts the persons eligible to acquire and hold a lease, regulates the transfer of leases in life or on death, and imposes conditions on lease holders (e.g. bona fide residence).

The Act was amended at various times between 1968 and 2004. The changes relating to land allocation and tenure included provisions:

- enabling part of a lease to be transferred
- enabling a lease to be surrendered in whole or in part
- dealing with the inheritance of leases
- fixing the maximum price for the transfer of a lease.

Opportunities for increasing the housing stock are limited by the Island's environment and the capacity of its infrastructure and services. The Local Environmental Plan 2010 (LEP) prohibited the Board approving more than 25 new dwellings during the 20 year period from October 2005 to October 2025. 10 dwellings have already been approved. The new dwellings have been built on land sourced from the subdivision or dual occupancy of perpetual leases (Category A allotments). Applications for approval of a dwelling on a Category A allotment require a joint application by the existing perpetual lease holder and the proposed new lessee or dual occupant.

A second category of new dwelling allotment, 'Category B', has also been established. These could be sourced from vacant Crown Land, or from special leases. Three Category B lots have been identified from land held under special leases for allocation to Islanders whose lineal ancestors did not hold suitable land under perpetual lease that could be made available for the construction of a new dwelling. It was envisaged that a ballot would be held to select the successful applicants for these allotments from those considered eligible. In February 2011 the Board invited applications from eligible Islanders and 30 were received of which 22 were assessed as eligible. However, in May 2012, in response to community concerns, the Minister deferred the ballot pending the outcome of the Governance Review, then underway. The Category B allotments have not been allocated.

There are currently 159 perpetual leases for residential use, including use as tourist accommodation (s 21); 17 special leases for agricultural, horticultural or pastoral uses (s22); and 25 permissive occupancies for community and business, principally boat shed, uses (s 31A).

In his Foreword to the Discussion Paper, released in August 2014, the Minister wrote:

'The characteristics that make Lord Howe Island so idyllic are its size, limited development and rich heritage. However this characteristic is challenging from a land allocation and tenure perspective. The presence of a community living within a World Heritage site...has been a key consideration of the existing land allocation and tenure system. A delicate balance needs to be struck between maintaining the important World Heritage values of the Island and providing opportunities for future generations of Islanders wanting to reside in their own home and work on the island. The NSW Government is committed to ensuring that the island continues to hold those unique characteristics which make it so popular with residents and visitors alike.'

The Terms of Reference included the following statement:

'The review will not seek to open the definition of Islanders that is used for the purpose of identifying who should have access to land.'

This direction is a clear indication that the Government considers that the transfer of land on the Island must continue to be regulated if the Island's unique characteristics are to be maintained. My review must work within the limits set by the Government, but in any event I fully accept the need to maintain such regulation. This was supported by the great majority of the Islanders who were consulted or who responded to the Discussion Paper. A constant refrain was their wish for the Island to remain the way it is. Many considered that the island had already reached the limits of its capacity for sustainable residential development. I have given weight to this opinion, although it is necessarily one of impression, in formulating my recommendations.

### 3. Overview of the consultation process

Consultation with stakeholders and Island residents was an important part of the review process. I visited the Island in March 2014 to undertake targeted consultation with a range of stakeholders including Board members, staff of the Board and residents. Residents were selected by Board staff to ensure a mix of tenure types, age and experience with the existing land allocation and tenure arrangements. 15 individual meetings were held on the Island and I also attended a number of meetings in Sydney with stakeholders.

During the consultations, individuals were asked their opinion on the key issues or limitations with the existing land allocation and tenure arrangements. Their ideas for solutions were also sought. This information helped inform the development of a Discussion Paper which was released for public comment in August 2014. The Discussion Paper outlined 15-options for reform in the areas identified in the Terms of Reference. The options were not exhaustive and were intended to generate feedback from the community.

Written and/or verbal submissions in response to the Discussion Paper were invited. A submission template was included but submissions in other forms were accepted. I made a second visit to the Island between 19- 22 August 2014. The options were outlined at a public meeting on the evening of 19 August and I later met individuals privately, by appointment, to receive their feedback. 59 submissions were received (written, verbal or both) from individuals or families and four were received from groups or institutions. Verbal and written submissions from the same person or persons were counted as one.

The majority of the submissions were from the Island's residents. Some did not complete the demographic questions but of those that did, 31 said they were 'Islanders' (as defined in the Act), 28 reported that they held perpetual leases, and seven reported they were sub-tenants. A summary of the submissions is at Appendix 2.

### 4. Summary of the recommendations

1. The present system of land tenure, with most Crown land outside the Permanent Park Reserve held under perpetual (s21) or special (s22) lease, should be retained. **No action.**
2. The statutory residency condition in perpetual leases (s 21(7)) should be policed and enforced, with forfeiture as a last resort (s 27), to ensure that leaseholders make the property their "usual home" (definition in s 3(1)), and do not use it as a holiday or second home. **Change Board policy and practice.**



3. Special leases are due to expire in 2015, without any legal right of renewal, although the lease holders expect to obtain renewals. The new leases should be granted for 20 year terms with strong covenants to encourage new investment and ensure that the land is fully and properly used. **Amend the Act.**
4. Permissive occupancies for business purposes, principally as boat sheds, which are currently revocable at will (s31A(3)), should be granted for fixed terms of five years, to increase security of tenure and encourage investment. **Amend the Act.**
5. The existing restrictions on the enforcement of mortgages of leases (s 23(5)-(9)) should be relaxed to make leases more acceptable to lenders as security and mortgages to corporations should not require the Minister's consent. **Amend the Act.**
6. Dual occupancies to provide suitable accommodation for senior residents and others should be encouraged to release larger homes for sub-letting to relatives and others. **Amend the LEP preferably by statute.**
7. Subject to pending applications for approval of a Category A dwelling the remaining quota for new dwellings under the LEP should be reserved for dual occupancy dwellings. **New Board policy.**
8. The LEP should be amended to make it easier to subdivide perpetual leases with two existing detached dwellings erected before 28 October 2005 to increase the saleable housing stock without further building development, or use of the quota. **Amend the LEP preferably by statute.**
9. There should be no more Category B allotments, and the three existing ones should revert to special lease land where substantial restitution by both parties is practicable and the former leaseholder agrees. Where restitution is not practicable or the former leaseholder does not agree the allotment or allotments should be allocated by a revised ballot process open to Islanders deemed eligible. **New Board policy.**
10. The provisions dealing with the succession to perpetual leases on death (s23(10)-(13)) should be rationalised, clarified and extended to surviving spouses and de facto partners. **Amend the Act.**
11. The existing exemption from land tax for all leases on the Island (Land Tax Management Act s 21C(6)(h)) should be removed to allow that Act to operate on the Island in the normal way with the general exemption for the taxpayer's principal place of residence (s 10(1)(r)) and the indexed tax threshold (s 62TBA(5)) which in the 2014 tax year was \$412,000. The Chief Commissioner and the Board should be permitted to exchange information to ensure that leaseholders only claim one principal or usual place of residence. **Amend the Land Tax Management Act, the Act and the Taxation Administration Act.**
12. The Board should comply with its statutory duty under s 301(1) of the Duties Act by requiring grants, transfers and mortgages of leases to be stamped or marked exempt before they are registered by the Board under cl 45 of the Lord Howe Island Regulation which should be extended to include permissive occupancies if recommendation 4 is adopted. **Board practice and**

**amend the Regulation.**

13. In the interest of transparency and accountability, should recommendations 11 and 12 be adopted, provision should be made for the additional taxation revenue, raised from the island in these ways, to be returned to the Island by being credited to the Lord Howe Island Account (s 34). **Amend the Act , this would probably be sufficient, but it may be necessary to amend the taxation acts as well.**
14. The legal framework under which the Board and the Minister consider applications for consent to the transfer of perpetual leases (s 23(2)) should be strengthened to prevent vendors evading the maximum price provision (s23(1)(a)) by requiring purchasers to purchase their furniture and other chattels at prices above their fair market value, and to prevent vendors withdrawing their lease from sale when an Islander is willing to purchase the lease. **Amend the Act or Regulation.**
15. Again in the interests of transparency and accountability the Board should maintain and publish in its Annual Report to Parliament (s36A) separate accounts for its functions as custodian and manager of the Permanent Park Reserve, and its functions as the local council for the Settlement. The island community cannot reasonably be expected to pay for the upkeep of the Park out of its own resources. **Amend the Act.**
16. Miscellaneous recommendations by way of statute law revision which are not thought to raise any question of principle. **Amend the Act.**

## **5. Reasons for Recommendations**

### **Recommendation 1: Retain the basic features of the present system of land tenure**

The conversion of perpetual leases to unrestricted freehold would almost certainly lead to the bulk of the Island's housing stock becoming second homes for mainlanders, leading to the disintegration of the existing community of permanent residents. Conversion of perpetual leases to restricted freehold at the cost of leaseholders, with transfers still subject to Minister's consent, offers no advantages. It would increase the cost of housing and create legal difficulties in enforcing the residency condition.

### **Recommendation 2: Police and enforce the residency condition**

Many of those who made representations in the review considered that a number of houses were being used as holiday or second homes and that the Board has not been effectively enforcing the residency condition. Enforcing this condition could increase the number of permanent residents on the island and the level of economic activity. It could also increase the number of houses on the market and alleviate any housing shortage. The Board may have been reluctant to initiate forfeiture action in the past because it did not fully understand the legal position and exaggerated the difficulties.

The standard form of a Category A lease contains the following condition and covenant requiring the leaseholder to reside on the lease:

'1. That the Lessee shall subject to and in accordance with the provisions of the

Lord Howe Island Act 1953 and the Regulations thereunder reside on the said land and make it bona fide residence.'

Section 21(7) provides:

'Subject to this subsection and subsections (7A) and (7B), a condition of residence on the lease shall attach thereto in perpetuity, and shall be performed by the holder or sublessee thereof for the time being...'

Subsection (7) allows the Board to suspend the condition, for such period and subject to such conditions as the Board may approve, where the holder or sublessee is prevented from performing the condition by sickness or other adverse circumstances. Subsection (7A) enables the Minister 'in special circumstances' to suspend the condition of residence on a lease held by or subleased to an Islander who already holds not more than 'one other lease'. In the context this probably means 'one other perpetual lease' but the subsection should be amended to make this clear. Subsection (7B) applies where a lease is held by two or more persons jointly and authorises action under subsections (7) and (7A) to suspend the condition of residence in respect of any of the joint holders or sublessees.

Residence is defined in section 3 as meaning:

"a residing by the person referred to in the context continuously and in good faith on the land indicated by the context as his or her usual home without any other habitual residence".

The strictness of this definition is relaxed in section 3(2) but only for the purpose of determining whether a person has resided or resided continuously on the Island and can therefore retain Islander status. However the most important provision for present purposes is section 23 which allows a lease holder, with the consent of the Minister, to sub-lease the property. Since section 21(7) provides that in such cases the residency condition shall be performed by the sub-lessee, it necessarily follows that the lease holder's obligation to reside on the property is suspended.

The Board should review all suspensions and sub-leases to determine whether they are current, and appropriate. Any that are no longer appropriate should be terminated on notice where this is legally possible. Where a suspension has expired or can be terminated or an approved sub-lease has expired the holder of the lease should be reminded of his/her obligations under the residency condition and advised that if they are not prepared to make the lease their usual home they should sub-let or sell and that failure to take one of these steps will lead in due course to forfeiture proceedings under section 27.

The same advice should be given to holders of leases where the residency condition has not been suspended, but the Board has reason to believe that they are not using the lease as their usual home, without any other habitual residence (definition in s 3(1)). In considering whether to recommend that the Minister consent to a new sub-lease the Board will naturally consider the matters referred to in section 3(2) and section 21(7) and (7A), and the undesirability of creating a class of absentee landlords.

Respondents said that the Island community were well aware of the leases which are not being used as the leaseholder's usual home and were empty for much of the year. The aircraft passenger lists will disclose when residents leave the island by air and return.

Section 27(1) provides for a lease to be forfeited 'if it should appear to the satisfaction of the Minister after report by the Board that the land comprised in the lease is not used

and occupied bona fide for the purpose for which the lease was granted.’ Section 129(1) of the Conveyancing Act requires a landlord seeking to forfeit a lease for breach of covenant to give notice to the tenant specifying the breach complained of and, where appropriate requiring the tenant to remedy the breach. Subsection (6)(a) provides that the section does not apply to ‘any Crown lease’ and perpetual leases are Crown leases.

However the Board, in seeking to initiate the forfeiture procedure, by deciding to make an adverse report to the Minister, must comply with the general obligation at common law of those who have the power to make decisions which will or may cause another person to lose some right, benefit or advantage such as a perpetual lease. The person who would be affected by such a decision must be given reasonable notice of the reasons why adverse action is contemplated, and must be given a reasonable opportunity to answer that case. For the reasons outlined above, the Board should be able to form a prima facie view without too much difficulty, enabling it to call on a lease holder to show cause, before considering whether to make an adverse report to the Minister which would entitle him to forfeit the lease.

The Minister may forfeit a lease by notification in the Gazette in accordance with section 27(2). The Minister will also be bound by the common law requirement to give the leaseholder a reasonable opportunity to respond in writing to the Board’s adverse report before proceeding to a decision. The holder may challenge the forfeiture or seek relief from it by commencing proceedings for that purpose in the Equity Division of the Supreme Court. However relief from a valid forfeiture would only be granted if the holder was willing and able to comply with the residency condition in the future, and the holder would almost always have to pay the costs of the Minister as a condition of relief from a valid forfeiture. The onus would be on the leaseholder when showing cause against an adverse report by the Board, and in any legal proceedings.

In the long run a leaseholder without a current suspension will either have to comply with the residency condition or sell or sublease with Minister’s consent to avoid a forfeiture.

### **Recommendation 3: Increase the term of special leases to 20 years**

All current special leases expire at the end of 2015. They were originally granted for five year terms with options for renewal for a further five years. Section 22(2) provides that special leases may be granted for up to 10 years, but the Board may recommend an extension. It is not clear whether the Minister’s power to ‘extend’ the maximum term is only available after the lease has been granted, or whether it enables a special lease to be granted for more than 10 years at the outset.

Respondents generally agreed that special lease land was not being fully or properly used for its intended agricultural or pastoral purposes and that this was undesirable. The Island’s economy would be expanded, if it could produce more of the fruit, vegetables, meat and milk that are consumed on the Island. To this end, the new special leases should be granted for terms of 20 years, but the lessees should be obliged by strict covenants to make the land productive.

Applicants seeking renewal of their expiring special leases or initial grants should be required to lodge draft management plans for the use of the land for designated pastoral, agricultural or horticultural purposes. Successful applicants should be required to submit fully developed management plans and covenant to develop and

use the land in accordance with their plan. Provision should be made in the special lease for a review of the lessee's performance every five years during the term.

Special leases should be granted for 20 year terms, where this is legally possible under the complex legislative matrix governing the subdivision of land on the island, to encourage investment in developing the land, including the planting of fruit trees which may not become productive for some years, and to encourage investment in an abattoir and a pasteurisation facility. Although there was some opposition to this proposal, the grant of special leases for a longer term cannot injure other residents provided the holders make proper use of the land for the covenanted purposes.

The Act (s 22(8)) allows the Minister, on the recommendation of the Board, to 'withdraw from any [special] lease...any land required for home sites or public purposes'. Subsections (9) and (10) make provision for compensation to be paid in such cases. Subsection (11) enables the Minister, on the recommendation of the Board, to refuse to renew a special lease if the land is required for home sites or public purposes and subsections (12) and (13) provide for compensation to be paid in such cases. These powers, in relation to land required for home sites, will no longer be required if there are to be no more Category B allotments (recommendation 9) and the provisions should be amended to limit these powers to land required for public purposes. This would increase the leaseholders' security of tenure.

**Recommendation 4: Permissive occupancies used for business purposes should be granted for fixed terms of five years.**

Most, if not all of the permissive occupancies used for business purposes relate to boatsheds on the lagoon. The boatsheds are used in connection with businesses offering deep sea fishing, diving, or the hire of watercraft for use on the lagoon. The services provided by these businesses form an important part of the experiences offered by the Island to its visitors, and it is important that these services be of the highest standard.

This recommendation is made to encourage investment in those boatsheds and in those businesses generally. These businesses require access to boatsheds, and some legal security of tenure would encourage investment in the business as a whole, and not just in the boatsheds. Subject to heritage considerations, sensitive investment in improving the external appearance of some of the boat sheds on the foreshore of the lagoon would improve the outlook in that direction. Although there was some opposition to this change it seems to me that improved security of tenure for these occupiers, without discrimination, would not disadvantage other residents. Improvements to the external appearance of these boatsheds would require Board approval, and they can and should be trusted to safeguard the visual amenity of the lagoon.

Permissive Occupancies should be granted for fixed terms of five years to avoid possible complications under the complex legislative matrix governing the subdivision of land on the island. Licences under Division 4 of Part 4 of the Crown Lands Act 1989 would not be a suitable option for these purposes. Although 45(2) enables licences to be granted for such term the Minister thinks fit, and they are transferrable with Minister's consent (s48). However, section 47(1) makes them revocable at will, and in that event subsection (2) provides that compensation is not payable. Such licences confer no security of tenure.

**Recommendation 5: The existing restrictions on the enforcement of mortgages should be relaxed to make leases more acceptable to corporate lenders as security**

Respondents complained that mortgage providers did not regard leases as satisfactory security and often required security on mainland property particularly for business loans. This is hardly surprising in view of the restrictions on the enforcement of mortgages if the borrower defaults. The relevant provisions in section 23 (5), (6), (7) and (8) are:

- '(5) If any lease...is mortgaged and the mortgagee enters into possession...the mortgagee may hold the same for such period as the Minister on the recommendation of the Board may permit. But the mortgagee shall not...enter into possession...more than once, except with the permission of the Minister on the recommendation of the Board; such mortgagee shall not foreclose the mortgage except with the consent of the Minister on the recommendation of the Board. Such consent...may be given or refused, as in the case of a transfer.
- (6) Such mortgagee shall not transfer the lease except in accordance with this section.
- (7) If within such period the mortgagee does not obtain the consent of the Minister to a foreclosure, or does not transfer the lease in accordance with this section, the same shall be liable to forfeiture.
- (8) A foreclosure or transfer in contravention of this section shall be void and any agreement or contract for the sale of such lease made without the permission of the Minister shall render such lease liable to forfeiture if such agreement or contract be not submitted for the approval of the Minister within three months from the date of execution thereof.'

The provisions, other than subsection (6), should not apply to mortgages to a corporate lender. A corporate mortgagee seeking to enforce the mortgage by selling the lease will be bound by the general provisions in section 23 requiring the consent of the Minister or the Governor to a transfer. There is no justification for exempting corporate mortgagees from these provisions, but there is no longer any justification for further restrictions on the enforcement of their mortgages.

Mortgages, except to the Board which no longer lends on mortgage, currently require the Minister's consent under section 23(2). This restriction seems quite unnecessary in the case of corporate mortgagees. It causes unnecessary work for the Board and the Minister, and delay and expense for Islanders wishing to borrow for housing or business purposes. Corporate mortgagees cannot occupy perpetual leases as their usual home.

Mortgages of leases involve either a transfer or a sublease to the lender. Under the present Act, the Minister's consent is required in either case and consent operates automatically to suspend the residency condition for the mortgagee. However, unless the Minister imposes the necessary condition on his consent, the mortgagor borrower will not have to comply with the residency condition. He will no longer be the holder of the lease and if he is a sublessor he will not be entitled to possession.

Section 23(2) should be amended to exclude mortgages to a corporation from the requirement for Minister's consent, and to provide that in such a case the mortgagor

borrower will comply with and observe the residency condition while the mortgage remains in force or the mortgagee enters into possession following default. The Act should further provide for the condition to be suspended while the mortgagee is in possession provided the lease is sold within 12 months, or within such further time as the Board, on application by the mortgagee, may allow. I do not see any need for the Minister to be bothered with such applications.

Mortgages to natural persons should continue to be subject to Minister's consent. Such mortgages raise different issues because the mortgagee can enter and use the lease as his home. Unless the requirement for consent and the associated provisions are retained for such cases, a mortgage to a non-Islander could be used to evade the residency condition and the requirement for the Governor's consent to a transfer to the non-Islander. The non-Islander mortgagee could go into possession, possibly collusively, and remain in possession indefinitely without making the lease his usual home.

**Recommendation 6: Dual occupancies to provide suitable accommodation for senior residents and others should be encouraged to release larger homes for sub-letting to relatives and others.**

Clause 24 of the LEP, which facilitates the erection of dual occupancies, contains restrictions which should be relaxed. Subclause (1)(c) requires the proposed new dwelling for the dual occupancy to be occupied by 'the children, siblings, parents, grandparents or grandchildren of those proposing to reside in the existing dwelling'. This restriction, if strictly enforced, would prevent approval of a dual occupancy with either a 'granny flat' or the existing dwelling to be occupied by a friend, carer or anyone else. There is little point in maintaining this restriction since there is no continuing requirement in the LEP for one of the dwellings to be used by the designated family members. Subclause (1)(c) should be amended, preferably by statute, to read 'it is proposed that one of the dwellings will be occupied by the holder of the subject lease' or words to that effect. This would not prevent perpetual lease holders applying for the suspension of the residency condition in a proper case.

**Recommendation 7: Subject to pending applications for the approval of a Category A dwelling the remaining quota for new dwellings under the LEP should be reserved for dual occupancy dwellings.**

At the last census 23 per cent of the island's population, or some 87 people, were over 65 years of age, and there are no facilities for aged care on the Island. There was general agreement among respondents that this group wanted to remain in their own homes, or at least on their leases, as long as possible, and that dual occupancy was their preferred option. There are only 15 new dwellings left in the quota. In view of the demographics, the available quota, subject to pending Category A applications, should be reserved for dual occupancy dwellings, to be allocated by the Board progressively over the period until 2025 on a needs basis. This recommendation relates to the policy of the Board, and would not prevent it using the remaining quota in other ways if the expected demand for dual occupancy housing does not eventuate. In any event the Board does not have to use the whole quota. It is a cap, not an obligation.

**Recommendation 8: The LEP should be amended to make it easier to subdivide perpetual leases with two existing detached dwellings erected before 28 October 2005 to increase the saleable housing stock without further building development or use of the new dwelling quota.**

There are perpetual leases occupied by two dwellings, erected before 28 October 2005, which cannot be subdivided because the LEP (c11 20 and 21) requires minimum lot sizes of 2500 square metres for such a subdivision. One of the dwellings can be sub-let with the consent of the Minister (s 23(2)), but cannot be sold separately. The housing stock available for purchase on the Island would be increased, without additional building development, by permitting subdivision of such leases in the discretion of the Board, and the LEP should be amended for this purpose. The proposed exemption would not be open ended. If adopted this recommendation would require amendment of clause 21(2)(b) of the LEP which currently provides:

- (b) 'if there are one or more existing dwellings (but no existing tourist accommodation, staff accommodation or commercial premises) on a proposed allotment- the total area of the allotment is at least the minimum dwelling area.'

The expression 'minimum dwelling area' is relevantly defined in clause 20(4), in the case of dual occupancy or multiple dwellings erected before 28 October 2005, as 2500 square metres. The new clause 21(2) (b) should read:

- (b) 'if there are two or more existing dwellings...on a proposed allotment- the total area of the allotment is at least the minimum dwelling area or is otherwise sufficiently large, in the opinion of the Board, to justify the subdivision proposed' or words to that effect.

**Recommendation 9: There should be no more Category B allotments and the three existing ones should revert to special lease land where this is practicable.**

No more Category B allotments should be created because, as the respondents who were opposed to the process said, the process was not transparent and was very divisive in a small community. The attachment of the holders of special leases to the land which in some cases has been occupied by their families for generations is understandable although it has no basis in law. The Crown can withdraw special leases and can lease it as it thinks fit when the leases have expired. The three existing allotments should revert to special lease land where the former special leaseholder is prepared to restore or surrender the benefits received for his/her/or their consent to the Category B subdivision and mutual restitution is practicable.

Any remaining Category B allotments should be allocated by ballot, because there is no fairer method in the circumstances. The ballot should be restricted to eligible Islanders subject to criteria to be developed by the Board. However applicants should be required to demonstrate their financial capacity to purchase and build on the allotment, and multiple applications by siblings or spouses should not be accepted. Given the Government's decision to exclude the definition of Islander from consideration in this review, the ballot should not be restricted to "traditional" Islanders.

The Act (s 22(8)) allows the Minister, on the recommendation of the Board, to 'withdraw from any [special] lease...any land required for home sites or public purposes'. Subsections (9) and (10) provide for compensation to be paid in such cases.



Subsection (11) enables the Minister, on the recommendation of the Board, to refuse to renew a special lease if the land is required for home sites or public purposes and subsections (12) and (13) provide for compensation to be paid in such cases. These powers, in relation to land required for home sites, will no longer be required if there are to be no more Category B allotments (recommendation 9). These provisions should be amended to limit these powers to land required for public purposes. These amendments are also proposed in Recommendation 3 (special leases should be granted for 20 year terms).

These recommendations would not restrict the Board's powers over unallocated Crown Land, or prevent the Board deciding not to re-grant expired or surrendered special lease so that the subject land reverted to unallocated Crown Land.

**Recommendation 10: The provisions dealing with the succession to perpetual leases on death should be rationalised and extended to surviving spouses, de facto partners and lineal descendants who are prepared to make the island their home.**

On the death of the holder and grant of probate or letters of administration the lease passes, by operation of law, to the legal personal representative of the deceased (executor or administrator). The Act does not, and should not, attempt to restrict this initial transfer. The legal personal representative charged with the administration of the estate may or may not be the ultimate beneficiary, who may be another person. The Act restricts the rights of the legal personal representative to hold the lease as trustee or beneficiary, and the right and duty to transfer it to the ultimate beneficiary if that is another person.

The relevant provisions are section 23(10)-(13). Subsection (10) deals with the right of the legal personal representative to hold the lease, but it is badly drafted. It provides:

- '(a) If a lease...devolves under a will or intestacy upon a person, such person may hold the lease for such period after the death of the testator or intestate as the Minister on the recommendation of the Board may permit.
- (b) Within any such period such person may, upon application and upon the recommendation of the Board obtain a certificate from the Minister that the person is entitled to hold the lease; or such person may...sell and transfer the lease.'

The subsection almost certainly refers to the devolution of the lease to the legal personal representative rather than its later devolution to the ultimate beneficiary when administration is complete. The reference to holding the lease for a period after the death of the holder supports this view. However this should be made clear by substituting 'legal personal representative' for 'person' in the first line of paragraph (a).

The subsection does not require the legal personal representative to apply to the Board to fix the period, but appears to require the Board to make a recommendation to the Minister of its own motion. In most cases the Board will not know how long the legal personal representative reasonably requires to complete the administration of the estate and commence to hold the lease either as beneficial owner or in trust for the ultimate beneficiary. Unless the legal personal representative or the estate solicitor are prepared to disclose the necessary information on request the Board will not be able to make a realistic recommendation to the Minister.

The subsection should fix a reasonable time for the administration of the estate to be completed, say two years (the period in subsection(11)), placing the onus where it properly belongs, on the legal personal representative, to apply to the Board if more time is required. The present provision places the onus on the Board in every case, and placing it on the legal personal representative will simplify and reduce the work of the Board and the Minister because they will only have to act when asked. Beneficiaries who are not Islanders and not residents may be happy for the administration of the estate to drag on because that allows them to use the perpetual lease as a second home in the meantime.

Although this is not clear, it seems that paragraph (a) suspends the residence condition from the death of the holder, and it remains suspended until the Minister fixes the permitted period and that period has expired. The condition should be suspended while the estate is being properly administered, but this should be made clear by an amended section which fixes the period subject to discretionary extension.

Paragraph (b) appears to apply where the legal personal representative is the ultimate beneficial owner of the lease because the only alternatives are to obtain a certificate or sell. It makes no provision for a transfer to another person as beneficiary. This is appropriate because, once administration is complete, a legal personal representative who is the intended beneficial owner can commence to hold the lease in that capacity without any transfer or formality.

Section 11(1) of the Trustee Act enables the legal personal representative to execute a declaration that he holds the lease as beneficiary, and subsection (2) enables such a declaration to be registered with the Registrar-General, but these steps are not mandatory. Section 23(2) of the Lord Howe Island Act will not apply, and the Minister's consent will not be required under that provision for this change in the title of the legal personal representative. Subsection 10(b) covers this situation by requiring the legal personal representative to obtain the Minister's certificate or to sell.

Since the Board is not obliged to recommend the grant of a certificate, nor the Minister to grant one if the Board recommends this, both appear to have discretion. However the Act does not specify the matters which they are to consider when exercising their discretions. The legal position which applies in such a case was explained by Dixon J in the High Court in *Water Conservation and Irrigation Commission (NSW) v Browning* (1947) 74 CLR 492, 504-5:

'The statutory provision which gives to the Commission the discretionary power of consenting to the transfer contains no statement of the matters which the Commission is to take into consideration in exercising the power...The discretion is therefore unconfined except in so far as the subject matter and the scope and purpose of the [statute] may enable the Court to pronounce given reasons to be definitely extraneous to any objects the legislation could have had in view.'

In my opinion the Board would be justified in refusing to recommend to the Minister that he grant a certificate under subsection (10)(b), and the Minister would be justified in refusing to grant it if, for example, the legal personal representative did not intend to comply with the residency condition and make the perpetual lease his usual home. This could not be regarded as an irrelevant consideration. In the absence of a positive certificate the legal personal representative will have to sell the lease.

Paragraph (c) applies where the legal personal representative does not have a power of sale under the will or by law, and the relevant beneficiaries cannot or do not consent to a sale. It provides that the legal personal representative may apply to the Supreme Court for an order authorising the sale of the lease. The estate should not be put to this trouble and expense and the necessary power should be conferred by amending the Act. This could be achieved by adding at the end of paragraph (b) the words 'whether or not he has a power of sale under the will or by law' or words to that effect, and paragraph (c) could be repealed.

Subsection (10) (d) provides:

'If such person does not within any such period obtain the certificate of the Minister as aforesaid, nor transfer the lease as aforesaid, the same...shall be liable to forfeiture.'

In view of this provision it is not surprising that legal personal representatives are in no hurry to have the Minister fix the permitted period under subs (10)(a).

Subsection (11) provides:

'Where under the will, or upon the intestacy, of a lineal ancestor, a lease...devolves beneficially upon a person who is not an Islander, that person shall, for the purposes of subsections (2), (4), (4A), and (7A)..., be deemed to be an Islander if application is, not later than the expiration of the period of 2 years, or such longer period as the Minister may in a particular case approve, that next succeeds the death of the lessee, made for his or her registration as holder of the lease.'

The subsection only applies where the legal personal representative is not the ultimate beneficiary because it envisages that the lease will have to be transferred to the beneficiary and that the Minister's consent under subsections (2) and (4) will be required.

If application is made within time the subsection operates automatically to deem the beneficiary to be an Islander for the purposes of the subsections referred to. However, the Minister may still refuse consent to the transfer and would be fully justified in doing so if it appeared that the beneficiary did not intend to make the lease his or her usual home and comply with the residency condition.

It will be apparent that the class of beneficiaries who can take advantage of subsection (11) is very narrow. The most glaring omission is that there is no provision for a spouse or de facto partner of the deceased holder. One wonders why this anomaly has not come to public attention before this. The problem could be avoided by making the spouse or de facto partner the executor of the holder's will, and this may be what has been happening. It is possible that the problem has simply been overlooked. The section should be amended to close this gap.

The next question is whether the class of beneficiary with access to this privilege in subsection (11) should be extended to collateral relatives such as nephews or nieces, or even more widely to cover any person nominated by the deceased in his will. Widening the class of beneficiary will not assist anyone who is not prepared to make the lease his usual home and comply with the residency condition. It may not be

desirable to increase the number of deemed Islanders in this way when real Islanders are finding it difficult to buy a home on the Island.

It should be noted that section 23 does not prevent a lease passing beneficially, under the holder's will, to any Islander, even one not related by blood to the deceased, including a spouse or de facto, subject to the Minister's consent.

The provisions in section 23 dealing with succession to leases on the death of the holder should be incorporated in a separate section and redrafted in plain English to set out, step by step, what I believe is the legal effect of the opaque provisions in sections 23 (10) and (11) in their context, incorporating the changes recommended above.

**Recommendation 11: The existing exemption from land tax for all leases on the island (Land Tax Management Act s 21C (6) (h)) should be withdrawn to allow the Act to operate on the island in the normal way.**

The general exemption for all leases under section 21C(6)(h) should be withdrawn. There is no longer any justification for it. The fears of respondents who voiced opposition to the change are, with respect, groundless. The ordinary Islander would not be affected because of the general exemption for a taxpayer's principal place of residence under section 10 (1)(r) and Schedule 1A, and smaller businesses would have the benefit of the indexed taxation threshold in S 62TBA which for the 2014 tax year was \$412,000. This exempts land with a taxable value which does not exceed the threshold.

The only persons affected would be those who owned a second home on the mainland and the owners of the larger tourist lodges. Since it was common knowledge on the Island that tourist bed licences change hands for \$100,000 a bed, the larger lodges clearly have the capacity to pay the tax.

**Recommendation 12: The Board should comply with its statutory duty under s 301(1) (g) of the Duties Act and require grants, leases and mortgages of leases to be stamped or marked exempt before they are registered by the Board under cl 62 of the Regulation.**

There is no exemption in the Duties Act for dutiable instruments dealing with land on the island, but in practice the Board has not enforced the payment of duty on the grant, transfer, or mortgage of leases before registering such instruments. The Board, which maintains a register of leases, should comply with its existing statutory duty under section 301(1) of the Duties Act and require dutiable instruments to be stamped or marked as exempt before they are registered. The Board is not required by the Act or the Regulation to maintain a register of permissive occupancies, and since they are terminable at will their value, if any, would be modest. If they are to be granted for fixed terms pursuant to Recommendation 4 above they will acquire real value, and sales of the relevant businesses should become dutiable. This could be achieved by amending the Regulation to require the Board to maintain a register of permissive occupancies. Section 301(1) would then do the rest.

**Recommendation 13: In the interest of transparency and accountability, should recommendations 11 and 12 be adopted, provision should be made for the additional taxation revenue to be returned to the Island by being credited to the Lord Howe Island Account (s34).**

Such arrangements should make the recommended taxation changes more acceptable to the Island community, and would help reveal the extent to which the Island is supported by the rest of the State. There is no exemption for employers on the island from the Payroll Tax Act, but one wonders whether this has been overlooked by the Chief Commissioner and the owners of the larger lodges. This should be checked. If the other taxation receipts raised from the Island are to be returned to the Island via the Lord Howe Island Account consideration could be given to making the same arrangements for any payroll tax receipts.

**Recommendation 14: The legal framework under which the Board and the Minister consider applications for consent to the transfer of leases (s23(2),(3)) should be strengthened to prevent vendors evading the provision fixing the maximum price at the value determined by the Valuer-General (s 23(1)) by requiring purchasers to purchase the vendor's furniture and chattels at prices above their fair market value, and to prevent vendors withdrawing their lease from sale when an Islander is willing to purchase the lease because they want to sell to a non-Islander.**

There was anecdotal evidence that some vendors were evading the provision in section 23(1) which fixes the maximum price on the sale of a lease at its fair market value, as determined by the Valuer-General. It was suggested that this was done by requiring the purchasers to purchase their furniture and chattels at prices above fair market value when they needed them or not.

Applications under section 23(2) for consent to the transfer of a lease must be in the prescribed form and clause 57(1) of the Regulation prescribes Form 5 for this purpose. Clause 57(2) requires the applicant who has entered into a contract of sale to lodge a certified copy of the contract with the application. The regulation should be amended to require applicants to lodge either a certified copy of a contract, or a draft contract, in either case without any provision requiring the purchaser to purchase any chattels from the vendor. The vendor and purchaser would be free to bargain for the sale of the furniture and chattels, but without any compulsion.

There was also anecdotal evidence of another abuse of the present system which occurred when a vendor, who apparently wished to sell the property to a non-Islander, withdrew it from sale when it appeared that an Islander was willing and able to purchase the property at the Valuer-General's valuation. Consent to a transfer to the non-Islander was later sought, more than once, based on ever higher valuations with the same result until the Islander was priced out of the market and a transfer to the non-Islander was approved.

Clause 57 and Form 5 should be amended to deem a leaseholder who applies for consent to a transfer to a non-Islander to make an open offer to sell the property to any eligible Islander on the terms of the contract or draft contract lodged with the Form 5, such offer to be irrevocable for 60 days from the date the Board gives public notice of the intending vendor's application.

The Board would have to amend its Transfer of Perpetual Leases Policy to reflect these amendments to the Regulation. Such provisions would be effective in making the

vendor's offer irrevocable and open for acceptance by an Islander during that period: see the decision of the High Court in *R.A.Brierley Investments Ltd v Landmark Corporation Ltd* (1966) 120 CLR 224 at [8],[9].

**Recommendation 15: In the interests of transparency and accountability, the Board should maintain and publish in its Annual Report to Parliament (s36A), separate accounts for its functions as custodian and manager of the Permanent Park Reserve, and its functions as the local council for the Settlement. The Island community cannot be expected to pay for the whole upkeep of the Park out of its own resources.**

This recommendation, if adopted, would help the Island community understand the true cost of the services provided by the Board for the residents, and the extent to which the island is subsidised by the rest of the State.

**Recommendation 16: Miscellaneous recommendations by way of statute law revision which are not thought to raise any question of principle.**

Section 12 (1)(g) gives the Board power to 'provide...shops, offices and other buildings for lease to the public'. There is some doubt about the Board's power to lease land associated with such buildings. The matter should be put beyond doubt by adding to subsection (1)(g) the power to include in such a lease the land associated with or surrounding such buildings.

Section 21(2) enables perpetual leases to be granted to two or more Islanders as joint tenants or tenants in common, but subsections (7A) and (7B) only refer to joint tenants. They should be amended to include tenants in common.

Section 21, which only deals with perpetual leases provides in subsection (7A):

'The Minister may...suspend the condition of residence on a lease held or owned... by...an Islander who already...holds or owns...or subleases not more than one other lease.'

In its context the expression 'not more than one other lease' may refer to a perpetual lease only, and not to a special lease or one granted under section 12(1)(g), but the subsection should be amended to make this clear. This provision is used, and properly used, to allow a holder to operate tourist lodge on one perpetual lease and have his or her home on another.

Section 22(3) provides that a special lease may only be granted to the holder of a perpetual lease, but there is no expressed requirement for the perpetual leaseholder to remain the holder of the special lease. In *Lance Wilson v The Minister for the Environment (No 2294 of 1992)* the Equity Division of the Supreme Court held that there was no implied requirement for the holder to remain the holder of both leases.

The plaintiff, who retained his special lease after he had transferred his perpetual lease, succeeded in having the forfeiture of his special lease set aside. Given the evident policy behind section 22(3), that special leases should be held by Islanders who have their usual home on the Island, to prevent them being held by non-residents and non-Islanders, the result appears anomalous. Section 22(3) should be strengthened by the addition of words such as 'and must continue to be held by such

holder but may be transferred with such lease or to an Islander who holds a perpetual lease but does not already hold a special lease' or words to that effect.

Section 27(1) dealing with forfeiture provides:

'Every lease...shall be liable to be forfeited if any rent be not paid...or upon breach of any condition annexed to the lease...or if it should appear to the satisfaction of the Minister after report by the Board that the land comprised in the lease is not used and occupied bona fide for the purpose for which the lease was granted, or where in pursuance of any other provision of this Act the lease becomes liable to forfeiture.'

Every forfeiture must be declared by the Minister by notification in the Gazette (section 27(2)), but there is no express requirement in subsection (1) for the Board to report to the Minister in cases of forfeiture for non-payment of rent or breach of any condition other than that relating to the purpose for which the lease was granted. Subsection (1) should be amended to require a report from the Board in every case where forfeiture is sought.

# Appendix 1: Terms of Reference

## Background

All land on Lord Howe Island is owned by the Crown, with ownership and transfer of land controlled by the *Lord Howe Island Act 1953* (the Act). Perpetual leases are granted for residential purposes and special leases are granted for other purposes including agricultural production. To encourage a permanent residential community on the island, priority for leases is given to individuals with 'Islander' status. This status is defined as anyone who has resided continuously on the island for a period of 10 years.

Land is subject to strict controls and provisions under the Act and the Lord Howe Island Local Environmental Plan 2010 (LEP). Given the limited supply of residential land, the increasing population and increasing demand for land on the island, the Lord Howe Island (LHI) Board has adopted a policy to guide the allocation of the limited number of dwellings that are able to be approved (the Allocation and Granting of Dwelling Entitlements Policy).

The Gleeson review of Lord Howe Island Governance Arrangements (completed in June 2012) flagged land allocation and tenure as issues requiring further investigation. Consequently, the ballot process for the allocation of land has been put on hold and a comprehensive review of land allocation and tenure arrangements is now required.

## The Review

The Hon. Ken Handley AO QC has been appointed by the NSW Government to undertake a comprehensive review of the current arrangements for land allocation and tenure on Lord Howe Island.

The objective of the review is to provide advice to the Minister for the Environment and Heritage on options for new land allocation and forms of tenure, including options for increasing supply of land and improving economic sustainability. In addition, the review will consider the intergenerational issues which arise from current restrictions on land access.

In particular the review will:

- Examine the current arrangements for land allocation and tenure on LHI. This includes existing policies and legislative frameworks.
- Identify future options for land allocation and tenure and assess the relative merits of the options.
- Make recommendations to the Government on the future options for land allocation and tenure.
- Provide advice to the Government on the legislative and/or regulatory impacts of future options.

In undertaking this Review, consultation will be undertaken with key stakeholders and Lord Howe Island residents in order to identify the risks and challenges with the current arrangements and to seek feedback on future options.

The review will not seek to open the definition of Islanders that is used for the purpose of identifying who should have access to land.



### **Project Governance**

The review will be managed by the NSW Department of Premier and Cabinet. A project reference group will be established to advise on matters related to the project and to ensure that the project is being undertaken according to plan.

## **Appendix 2: Summary of the submissions made in response to the discussion paper**

### **Forms of Tenure**

#### **Option 1: Allow the conversion of perpetual leases to freehold, while maintaining appropriate controls in relation to Islander ownership**

##### **Description of the option:**

Perpetual leases could be converted to freehold at a cost to the leaseholder. Transfers of freehold title would still be subject to Ministerial consent in order to maintain the integrity of Islander status in relation to property holdings.

##### **Issues raised in public submissions:**

The majority of respondents did not support the conversion of perpetual leases to freehold even with transfers subject to ministerial consent. From a total 43 responses on this option, 32 were opposed. Very few suggested any alternate forms of tenure, with a large majority preferring the existing system. Many thought that such a change would raise house prices and make it even more difficult for young Islanders to buy their own home.

Most of those who favoured conversion to freehold title said that transfers of freehold should not be subject to ministerial consent.

##### **Independent Reviewer's Recommendation**

This option is not recommended.

#### **Option 2: Create a new commercial category of perpetual lease**

##### **Description of the option:**

This option proposed the creation of an additional category of perpetual lease to be used wholly or partly for commercial purposes (e.g. accommodation for paying guests, restaurants etc.). This would enable the Board and the Minister to adopt a more relaxed approach to compliance with the Islander requirement and the residence condition for this type of lease, and allow the Board to charge differential rents for residential and commercial leases.

##### **Issues raised in public submissions:**

27 of the 35 responses were opposed to this principally because of the suggestion that the residency condition could be relaxed for such leases. Respondents believed that if this was not enforced, businesses would pass into the hands of non-residents and non-Islanders and this would limit opportunities for Islanders.

### **Independent Reviewer's Recommendation**

This option is not recommended.

### **Option 3: Convert permissive occupancies to special lease**

#### **Description of the option:**

This option proposed the conversion of permissive occupancies to special leases to provide additional security and encourage investment.

#### **Issues raised in public submissions:**

Mixed responses were received for this option with 13 in support and 22 opposed. Many said that it would encourage maintenance and enhancement of the boat sheds and that longer tenure would give greater stability.

Those that did not support the proposal suggested that Permissive Occupancies suited community uses for Churches, the Museum and the Bowling Club etc. Others suggested that boat sheds were never intended to become business premises and the current tenure system is appropriate.

### **Independent Reviewer's Recommendation**

I recommend that permissive occupancies used for business purposes be granted for fixed terms of 5 years to give the occupiers some security of tenure and encourage investment in those businesses.

## **Land Allocation Methods**

### **Option 4: Sale of perpetual leases to be conducted through an independent agency**

#### **Description of the option:**

An independent agency could be given additional powers such that intending vendors would be required to give a transfer notice to that agency with the current valuation by the Valuer General and a draft contract for sale of the land and buildings only.

The transfer notice would appoint the independent agency as the vendor's agent to find a buyer under that contract and at that price. If no Islander was prepared to pay that price, the independent agency could accept an offer from an Islander at a lower but still reasonable price. The Board was suggested as the potential agent to carry out this function and suggestions for other independent agencies were also sought.

**Issues raised in public submissions:**

21 respondents out of a total 35 did not support this option and 25 out of 32 did not support the Board undertaking this function.

**Independent Reviewer's Recommendation**

This option is not recommended.

**Option 5: Establish a new ballot process for Category B allotments with revised eligibility criteria****Description of the option:**

A new call for applications for the purchase of the 3 Category B allotments could be issued with additional criteria such as:

- Exclusion of multiple applications from members of the same immediate family
- Exclusion of applicants under the age of 25
- Evidence of capacity to pay for the lease and build the house.

Any future category B allotments could also be allocated in this manner, following an independent assessment to identify suitable sites for housing.

**Issues raised in public submissions:**

The allocation of unimproved land by ballot was not generally supported. Of the 32 relevant responses, 20 were opposed.

Most respondents called for the Category B process to be abolished because it lacked transparency and was highly divisive in the small community. They were particularly opposed to the creation of perpetual lease lots from special lease land which had been "held" by a family for some generations.

The Discussion Paper flagged the option of establishing a new ballot process for Category B allotments with additional eligibility criteria. 9 respondents (out of 15) supported one or more of the additional criteria, but support for individual ones was mixed. Requiring evidence of financial capacity was the one most supported. There was no clear support for excluding applicants under the age of 25 or multiple applicants from the one immediate family. There were few suggestions and little support for other means for allocating Category B allotments.

**Independent Reviewer's Recommendation**

No more Category B allotments should be created. The 3 existing allotments should revert to special lease land where the former special leaseholder is prepared to restore or surrender the benefits received for his/her/or their consent to the Category B subdivision and mutual restitution is practicable.

## **Strategies to Increase land and housing supply**

### **Option 6: Increase the dwelling quota in the Lord Howe Island Local Environmental Plan (LEP) 2010**

#### **Description of the option:**

The LEP caps at 25 the number of new dwellings that can be approved by the Board over the period 2005 - 2025. Ten have already been erected. This option proposed increasing the quota by amending the LEP.

#### **Issues raised in public submissions:**

There was no general consensus on the extent of unmet demand for housing. 18 respondents said that there is no unmet demand and 13 said there is. Some respondents referred to unsold houses which have been on the market for some time. There were suggestions that the Category B ballot and the dwelling quota created an artificial demand for housing land. A majority suggested that affordability was the real problem.

A clear majority of respondents (29 out of 37) rejected the option of increasing the dwelling quota. Many said that the Island had already reached its capacity and that, given its size and unique quality, demand for housing would always exceed the supply. Only 2 respondents suggested that the quota should be abandoned and applications for the erection of new dwellings assessed on a case by case basis.

A number mentioned that, on a poll of residents during the consultation process leading to the LEP, a substantial majority supported much lower quotas than the one adopted.

#### **Independent Reviewer's Recommendation:**

This option is not recommended.

### **Option 7: Keep the existing quota but change the Local Environmental Plan to increase access to housing and land supply**

#### **Description of the option:**

Access to land for housing could be increased by amending the LEP to:

- Reduce the minimum size of lots from 3,000 square metres
- Widen the class of persons who can reside in a dual occupancy

#### **Issues raised in public submissions:**

The majority of the relevant responses did not support increasing access to housing and land supply in this way (18 negative out of 26). The suggestion that the minimum lot size be reduced received some support but there was solid support for dual occupancies, especially for family members.

**Independent Reviewer's Recommendation**

The class of persons who can be proposed for a dual occupancy should be widened.

**Option 8: Provide self-care accommodation for older residents****Description of the option:**

A medium density, single story multi-unit self-care facility for older residents could be provided. This type of multi-unit dwelling could be excluded from the dwelling quota. Lessees who take up residency in the self-care facility should be able to retain their perpetual lease, with the residency condition suspended, making a number of homes available for sub-leasing. It was also proposed that this type of accommodation be used for seasonal workers if there was capacity.

**Issues raised in public submissions:**

This proposal was not supported by the majority of respondents (20 from 32 responses) with many suggesting that elderly residents would prefer to remain in their own homes. Those who said that there may be interest or demand for a self-care accommodation facility for older residents pointed to the need for further investigation. Many respondents expressed a strong preference for 'granny flats' or dual occupancy arrangements.

**Independent Reviewer's Recommendation:**

This option is not recommended.

**Option 9: Review and enforce the 2 hectare limit on Perpetual Leases****Description of the option:**

There are currently 5 perpetual leases in excess of 2 hectares. Additional land for new housing might be available if those lessees surrendered the excess.

This option proposed that excess land suitable for subdivision would be surrendered without compensation and offered to the Islander market via a ballot process.

**Issues raised in public submissions:**

This option was based on s 21(1) which prohibits the grant of a perpetual lease for more than 2 hectares. This option was strongly rejected by 30 responses out of a total of 37. It appears that perpetual leases in excess of 2 hectares were granted before the conversion of Imperial units of measurement to Metric. Many respondents commented that this option was not likely to result in the creation of suitable building blocks.

**Independent Reviewer's Recommendation:**

This option is not recommended.

## **Option 10: Review compliance with the residency condition**

### **Description of the option:**

This option proposed a three stage process for reviewing and enforcing compliance with the residency condition. The three stages would involve:

- Develop guidelines to assist the Board in reviewing applications for suspension of the residency condition.
- Undertake an audit of all perpetual leases under the new guidelines to determine whether existing suspensions remain appropriate and whether there are any leases where the condition has not been suspended, but the house is not the lessee's principal place of residence.
- Give notice to lessees in apparent breach of the residency condition of intention to commence forfeiture action unless the lessee takes up permanent residence, obtains a suspension, or sells the lease.

### **Issues raised in public submissions:**

Most respondents agreed that the existing housing stock was underutilised (18 out of 25 responses) and stricter enforcement of the residency condition was supported by the majority. From a total of 34 responses, 23 were in favour of this proposal.

Respondents suggested that stricter enforcement of the residency condition could free up existing accommodation and create greater housing supply by forcing properties onto the market if permanent residency was not taken up. Those that did not support stricter enforcement felt the condition was 'heavy handed' and outdated and suggested that there might be valid reasons why a resident might need to be absent from their lease.

### **Independent Reviewer's Recommendation:**

This option is recommended.

## **Economic Sustainability**

### **Option 11: Remove the exemption for land tax**

#### **Description of the option:**

Under this option the general exemption from land tax which applies to leases granted under the Act would be removed, leaving the Land Tax Management Act to operate on the Island in the normal way. It was proposed that land tax receipts be returned to the Board for local requirements.

#### **Issues raised in public submissions:**

Most respondents were against removing the exemption from land tax, with 17 out of 24 responses not supportive. Feedback stated the exemption should be maintained because of the current excessive lease fees and other LHI Board charges, the high cost of living on the island, and the low average yearly income of residents. Even

though Land Tax is not paid on a owner's principal place of residence there was a concern that removing the exemption would further drive up costs associated with home ownership .

If the exemption is to be removed the suggestion that land tax receipts be returned to the LHI Board for local requirements was supported.

#### **Independent Reviewer's Recommendation**

This option is recommended.

### **Option 12: Commence the collection of stamp duty on the grant transfer and mortgage of leases**

#### **Description of the option:**

There is no exemption in the Duties Act for dutiable instruments involving land on the island, but in practice duty has not been paid on the grant, transfer, or mortgage of leases or permissive occupancies. This option proposed that the Board, which maintains a register of leases, comply with its statutory duty under s 301(1) of the Duties Act and require dutiable instruments to be stamped or marked as exempt before they are registered. Stamp duty receipts could be returned to the Board for local requirements.

#### **Issues raised in public submissions:**

This option did not attract many responses. 6 out of 9 respondents did not support it. Two respondents said that stamp duty was already paid. Feedback supported stamp duty receipts being paid to the Board for local requirements. One respondent suggested that stamp duty should only apply to transfers, and not to grants.

#### **Independent Reviewer's Recommendation**

This option is recommended.

### **Option 13: Split rents into separate land use and service charges**

#### **Description of the option**

This option proposed that rents be split into a land use and service charge component, with the latter subject to the same percentage limits on increases that apply to local council rates on the mainland.

#### **Issues raised in public submissions:**

The Board and some respondents indicated that rents are already split in this manner.

#### **Independent Reviewer's Recommendation:**

No action is required.



## **Other issues**

### **Option 14: Review and enforce special leases to ensure they are being used to proper capacity for proper purposes**

#### **Description of the option:**

A review process could be implemented to determine whether land held under special lease is being used to full capacity. The review process proposed includes:

- An audit of special leases prior to their expiry in 2015.
- Renewed leases should contain strict conditions requiring proper use of the land and failure to comply with user conditions should result in the lease being forfeited.

This option also sought feedback on whether the maximum term for special leases should be extended from 10 to 20 years. It was also suggested that the residual lots following the creation of the 3 category B lots should be relet as part of the 2015 renewals.

#### **Issues raised in public submissions:**

There was strong support for improving the use of land held under special lease. 16 out of 20 respondents agreed that there was scope for improving the use of such land and supported the proposal.

Some suggested that lessees should be required to have and comply with management plans, and that such plans be enforced to ensure that the land is being used to proper capacity and for proper purposes. Overall the suggestion of increasing the term of Special Leases was not widely supported with 17 out of 26 respondents stating that there was no need to increase the term.

Some respondents referred to natural constraints such as the Island's geography, soil quality and water availability when considering more intensive use of special lease land. The lack of an abattoir and a milk pasteurisation facility were also cited as barriers to more intensive use.

#### **Independent Reviewer's Recommendation:**

This option is recommended and Special leases should be granted for longer terms.

### **Option 15: Clarify provisions related to the transfer of perpetual leases on death**

#### **Description of the option:**

This option proposed a range of amendments to the provisions of the Act governing succession to perpetual and special leases on death. They were intended to remove anomalies, make the provisions clearer, and facilitate the efficient administration of deceased estates.

**Issues raised in public submissions:**

There was strong support for greater clarity in the provisions in the Act relating to the succession to perpetual leases on death. 17 out a total 26 responses supported this proposal.

Retention of the islander preference was supported but it was suggested that non-islander spouses and de factos should be entitled to succeed to leases held by their deceased spouse or partner. There was some support for extending the eligibility to other family members (not just lineal descendants) if they were prepared to take up permanent residence on the island.

**Independent Reviewer's Recommendation:**

This option is recommended.



# The Lord Howe Island Land Allocation Review

Preliminary Government Response to the Recommendations

## Forward

---

In 2014 the Hon. Ken Handley AO QC was engaged by the NSW Government to review the land allocation and tenure systems on Lord Howe Island and provide advice to the Minister for the Environment.

The purpose of the review was to identify options for different land allocation methods and forms of tenure which would maintain and protect the unique environmental and cultural values of Lord Howe Island. After extensive consultation the review has been completed. The report can be found at [www.haveyoursay.nsw.gov.au](http://www.haveyoursay.nsw.gov.au).

The Government has considered the 16 recommendations and has developed a preliminary response, which supports the majority of the recommendations.

Before finalising the response, I am inviting written feedback from the Lord Howe Island community.

You can choose to provide your feedback in a number of ways:

- Email written feedback to: [lordhoweisland@dpc.nsw.gov.au](mailto:lordhoweisland@dpc.nsw.gov.au)
- Send your written feedback by post to:  
Lord Howe Island Land Allocation Review  
Resources and Land Use Branch  
Department of Premier and Cabinet  
GPO Box 5341  
Sydney NSW 2001

Written feedback is due by 5pm Monday 28 November 2016.

Your input is important to the Government in deciding how land allocation and tenure arrangements can best meet the needs of the community now and into the future.

Mark Speakman  
Minister for the Environment

## Proposed Government response to the recommendations

| # | Independent Reviewer's Recommendation  | Government Response   |
|---|--|---|
| 1 | Retain the present system of land tenure, with most Crown land outside the Permanent Park Reserve held under perpetual or special lease.   | <b>Supported</b>  |
| 2 | Properly police and enforce the residency condition in perpetual leases, with forfeiture as a last resort.   | <b>Supported</b><br>Guidelines will be developed to support the Board in: <ul style="list-style-type: none"> <li>&gt; assessing applications for suspension in residency condition</li> <li>&gt; monitoring habitual residence of leaseholders</li> <li>&gt; enforcing the residency requirements in the case of 'joint tenants' and 'tenants in common' or situations where there are multiple dwellings on an allotment.</li> </ul>   |
| 3 | Special leases should be granted for 20 year terms with strong covenants to encourage new investment and ensure that the land is fully and properly used.  | <b>Supported</b><br>The Lord Howe Island Act 1953 ('The Act') will be amended to increase the special lease term to 20 years. The addition of covenants can be done without legislative change.<br>Applicants seeking renewal of their expiring special leases or initial grants will be required to lodge draft management plans for the use of the land for designated pastoral, agricultural or horticultural purposes. If successful in their application for a special lease, fully developed management plans will be requested and Lessees will be obliged by strict covenants (attached to the Lease) to make the land productive.<br>Provision will also be made in the special lease for a review of the lessee's performance against the conditions of the lease every five years during the term. |
| 4 | Permissive occupancies for business purposes, principally as boat sheds, which are currently revocable at will (s31A(3)), should be granted for fixed terms of 5 years, to increase security of tenure and encourage investment. | <b>Not supported</b><br>This proposal is inconsistent with amendments to the Crown Lands Act 1989 made in 2005 to replace permissive occupancies with licences. Permissive occupancies are no longer issued over Crown land in NSW, having been replaced by licences.<br>Permissive occupancies cannot be transferred and can be terminated by the Minister at any time. By comparison in certain circumstances a licence may be transferred, and may permit use or occupation for a specified or unspecified period of time.<br>Investigations will be undertaken to explore the option of replacing permissive occupancies with licences to align the management of Crown land on Lord Howe Island with the current provisions of the Crown Lands Act.  |

| # | Independent Reviewer's Recommendation   | Government Response   |
|---|---|---|
| 5 | Restrictions on the enforcement of mortgages of leases should be relaxed to make leases more acceptable to lenders as security and mortgages to corporations should not require the Minister's consent. | <p><b>Supported</b></p> <p>It was reported that mortgage providers do not regard leases as satisfactory security because of the restrictions on the enforcement of mortgages if the borrower defaults. The Act will be amended to remove the requirement for corporate mortgagees to obtain Ministerial consent before entering into a mortgage, entering into possession or foreclosing a mortgage.</p>  |
| 6 | The restrictions on who can occupy a dual occupancy dwelling should be relaxed.   | <p><b>Supported</b></p> <p>Currently the Lord Howe Island Local Environmental Plan (LEP) requires that the new dual occupancy dwelling is occupied by the 'children, siblings, parents, grandparents or grandchildren' of those proposing to live in the existing dwelling. The LEP will be amended to remove this restriction, allowing for occupancy by those other than family members.</p>  |
| 7 | Subject to pending applications for approval of a Category A dwelling the remaining quota for new dwellings under the LEP should be reserved for dual occupancy dwellings.                              | <p><b>Not supported</b></p> <p>The Lord Howe Island Dwelling Entitlement and Allocation Policy will be updated in consultation with the community. It is proposed that:</p> <ul style="list-style-type: none"> <li>&gt; A register of interest in purchasing a building block and/or obtaining a dwelling quota be established.</li> <li>&gt; This may encourage existing holders of large perpetual leases to subdivide their land and offer it for sale and will allow the Board to assess the true level of demand for housing.</li> <li>&gt; Eligibility criteria will be established for allocating dwelling entitlements, with the criteria prepared in consultation with the community.</li> </ul> |

| # | Independent Reviewer's Recommendation   | Government Response  |
|---|---|--|
| 8 | <p>The LEP should be amended to make it easier to subdivide perpetual leases with 2 existing detached dwellings erected before 28 October 2005 to increase the saleable housing stock without further building development, or use of the quota.</p>  | <p><b>Supported</b></p> <p>There are perpetual leases occupied by two dwellings, erected before 28 October 2005, which cannot be subdivided because the LEP requires minimum lot sizes of 2500 square metres. As a result, one of the dwellings can be sub-let with the consent of the Minister but cannot be sold separately.</p> <p>The minimum subdivision principles have been included for a number of reasons including: protecting island landscape and visual character; protection of significant native vegetation within the settlement area; provision of open space to residents; and adequate area for effluent disposal.</p> <p>The housing stock available for purchase on the Island will be increased (without additional building development) by permitting subdivision of such leases where the Board is able to justify that a subdivision will not negatively impact on any of the above.</p> <p>The Department of Planning and Environment, together with LHI Board, will undertake further investigations to determine the most appropriate standards and conditions and amend the LEP accordingly.</p> |
| 9 | <p>There should be no more Category B allotments, and the 3 existing ones should revert to special lease land where substantial restitution by both parties is practicable and the former leaseholder agrees. Where restitution is not practicable or the former leaseholder does not agree, the allotment or allotments should be allocated by a revised ballot process open to Islanders deemed eligible.</p> | <p><b>Supported with amendment</b></p> <p>Given the extent of community concern with how the Category B process was instigated, the Government supports the three existing category B lots reverting to special lease land if restitution can be achieved within a fixed timeframe (3 months). This process should be supported by an independent mediator. However, if restitution is not possible, the allotments should remain as Category B and be allocated via a new ballot process with revised criteria.</p> <p>The option to create future dwelling allotments from Special Lease land will be maintained (section 22(8) of the Act). However, new guidelines for the identification of land suitable for future housing and new ballot criteria will be prepared in close consultation with the community.</p>   |

| #  | Independent Reviewer's Recommendation  | Government Response  |
|----|--|--|
| 10 | The provisions in the Act dealing with the succession to perpetual leases on death (s23(10)-(13)) should be rationalised, clarified and extended to surviving spouses and de facto partners.   | <p><b>Supported</b></p> <p>The amendments will predominately seek to clarify the provisions within the Act. The only amendments that would be considered a departure from the current Act are:</p> <ul style="list-style-type: none"> <li>&gt; Fixing a reasonable time for the administration of the estate to be completed (2 years - reflecting current policy) and place the onus on the legal personal representative (not the Board) to apply for more time if required.</li> <li>&gt; Including spouse or defacto partner (of the deceased lease holder) in the class of beneficiaries who can apply under section 23(11) of the act to be deemed an Islander.</li> </ul> |
| 11 | The existing exemption from land tax for all leases on the island (Land Tax Management Act s 21C(6)(h)) should be removed to allow that Act to operate on the island in the normal way. The Chief Commissioner and the Board should be permitted to exchange information to ensure that leaseholders only claim one principal or usual place of residence. | <p><b>Supported</b></p> <p>The NSW Government will amend the Land Tax Management Act 1956 and the Taxation Administration Act 1996 to remove the existing exemption from land tax and to permit the exchange of information between the Chief Commissioner and the Board.</p>  |
| 12 | The Board should comply with its statutory duty under s 301(1) of the Duties Act by requiring grants, transfers and mortgages of leases to be stamped or marked exempt before they are registered by the Board.  | <p><b>Supported</b></p> <p>There is no exemption in the Duties Act for dutiable instruments dealing with land on the island, but in practice the Board has not enforced the payment of duty on the grant, transfer, or mortgage of leases before registering such instruments.</p> <p>The Board, which maintains a register of leases, will give notice to the community and then in compliance with the Duties Act, require dutiable instruments to be stamped or marked as exempt before they are registered.</p>  |
| 13 | In the interest of transparency and accountability, should recommendations 11 and 12 be adopted, provision should be made for the additional taxation revenue, raised from the island in these ways, to be returned to the island by being credited to the Lord Howe Island Account (s 34).  | <p><b>Not supported</b></p> <p>This practice would be inconsistent with standard practice in NSW. The spending of stamp duty and land tax revenue raised in particular areas is never "quarantined" to those areas.</p>  |



| #  | Independent Reviewer's Recommendation  | Government Response  |
|----|--|--|
| 14 | The legal framework under which the Board and the Minister consider applications for consent to the transfer of perpetual leases, should be strengthened to prevent vendors evading the maximum price provision, by requiring purchasers to purchase their furniture and other chattels at prices above their fair market value, and to prevent vendors withdrawing their lease from sale when an Islander is willing to purchase the lease. | <p><b>Supported</b></p> <p>The Lord Howe Island Regulation will be amended to require applicants to lodge either a certified copy of a contract, or a draft contract, without any provision requiring the purchaser to purchase any chattels from the vendor. The vendor and purchaser will be free to bargain for the sale of the furniture and chattels, but without any compulsion.</p> <p>The Board's Transfer of Perpetual Lease policy will be amended to reflect these proposed amendments to the Regulation.</p> |
| 15 | In the interests of transparency and accountability, the Board should maintain and publish in its Annual Report to Parliament (s36A) separate accounts for its functions as custodian and manager of the Permanent Park Reserve, and its functions as the local council for the Settlement. The island community cannot reasonably be expected to pay for the upkeep of the Park out of its own resources.                                   | <p><b>Supported</b></p> <p>The Act will be amended to require that separate accounts be published in the LHI Board Annual Report.</p>  |
| 16 | Miscellaneous recommendations by way of statute law revision which are not thought to raise any question of principle.   | <p><b>Supported</b></p> <p>These changes would seek to clarify non-contentious areas of the Act and would only to be made if other changes to the Act (as proposed above) are made.</p>  |



# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Lord Howe Island Weed Management Strategy 2016

#### **RECOMMENDATION**

To adopt the Draft Lord Howe Island Weed Management Strategy 2016 subject to making changes to align it with the *Biosecurity Act 2015*.

#### **BACKGROUND**

At its meeting of 22 March 2016, the Board resolved that the Draft Weed Management Strategy 2016 be placed on Public Exhibition for 28 days. Submissions were received up till the 25 May 2016.

In addition to the submission process, the LHI Weed Technical Panel, established to provide advice on the weed program, met on island on the 21 October 2016 to provide technical review of the Strategy and weed eradication program methodology.

Of the 18 submissions received, 94% supported the continuation of the strategic approach identified in the 2006 Weed Management Strategy which forms the basis of the Draft 2016 Strategy. All submissions acknowledge the achievements from the past 10 years and support the effort to continue the effective management of weeds on LHI.

There were two key phrases from submissions worth noting - *Invest Don't Rest* and a comment that the weed program has been the '*Conservation Heart Beat*' over the island for the last decade or more.

Feedback from the Technical Panel emphasised the importance of continuing the program post rodent eradication, as browsing pressure on weeds will be reduced.

#### **CURRENT POSITION**

Attachment 1a provides a summary of the submissions; key issues raised and recommended changes to the Strategy.

Attachment 1b provides a summary of feedback from the LHI Weed Technical Panel meeting.

The Draft LHI Weed Management Strategy 2016 has been amended to incorporate changes of format and editing. Changes regarding technical aspects of the weed eradication program methodology have also been made.

These include amendments to:

- improve effectiveness in weed eradication management with reducing weed populations;
- increase the search interval for residual mature weeds,
- research weed seed persistence, data categories and collection methods,
- remain alert
- upgrade weed categories post rodent eradication, and
- commission a technical review every three years to forecast future direction and funding needs.

Search methodology and feasibility of a multi weed species eradication program were discussed with the Technical Panel. The advice was that the Board needs to continue to apply effort to continue the effort to further deplete and reduce the immediate threat of weeds. The Panel also stressed the importance of removing ecosystem transformer weeds to avoid replacing one weed with another, as most inhabit the same environment. The development of an operations manual to provide more technical detail on eradication program methodology and weed species traits to support the Strategy was also advised.

A key point raised in feedback is that the weed categories in the Strategy will need to align to the *Biosecurity Act 2015*. Advice is expected from the Department of Primary Industries in this regard, and amendments will be made to the Strategy after receipt of that advice.

The outcomes of the program were recognised and suggestions made that the program has significant benefits for tourism which need to be promoted. Finally the Board will need to continue to seek external funding to implement the Strategy.

## **RECOMMENDATION**

To adopt the Draft Lord Howe Island Weed Management Strategy 2016 subject to making changes to align it with the *Biosecurity Act 2015*.

**Prepared** \_\_\_\_\_ Sue Bower      Flora Management Officer

**Endorsed** \_\_\_\_\_ Penny Holloway      Chief Executive Officer

## Attachment 1a: Draft Weed Management Strategy Submission Report

### BACKGROUND

At its meeting of 22<sup>nd</sup> March 2016, the Board resolved that the Draft Weed Management Strategy 2016 be placed on Public Exhibition for 28 days. It was advertised in the Community Information Bulletin, on the Board's website and in The Signal that the period for submissions closed at close of business on 5<sup>th</sup> May 2016. However on request the period for submissions was extended. Submissions were received up till the 25<sup>th</sup> May 2016. Submissions have been collated and analysed for reporting to the Board.

### PUBLIC SUBMISSIONS

A total of 18 submissions from a range of individuals and from a range of organisations was received (Table 1). Of the 18 submissions received, up to 21 main themes were identified and are summarised (Table 2 and 3). Four submissions were also received from seven of the members on the LHI Weed Technical Panel.

**Table 1 Summary/groupings of submissions**

| <b>Submissions received</b>                                   | <b>No.</b> |
|---|------------|
| Friends of Lord Howe Island                                   | 1          |
| LHIB staff working on the weed team (past and current)        | 5          |
| LHIB management staff   | 2          |
| Office Environment Heritage (combined submission) (#)         | 1          |
| NSW Department of Primary Industries                          | 1          |
| Botanical expert (combined submission)                        | 1          |
| LHI lodge manager   | 1          |
| Prior LHI Manager Environment World Heritage / Consultant (#) | 1          |
| Ecological editor   | 1          |
| Noxious weeds inspector (#)                                   | 1          |
| Local community (combined submission)                         | 1          |
| Volunteer or contract weeding on LHI                          | 2          |
| Total of submissions  | 18         |

(#) Submission received from LHI Weeds Technical Panel

### SUMMARY OF REVISIONS MADE TO DRAFT WEED MANAGEMENT STRATEGY 2016 FOLLOWING PUBLIC EXHIBITION PROCESS

There was overwhelming support for the adoption of the Draft Strategy and strategic approach for the continuation of the program to manage and eradicate target invasive weeds from Lord Howe Island. One submitter largely focussed on document structure and editing however commented that he was *“struck by the remarkable achievements over the initial years and what a solid basis this applies for future control and eradication”*. Of the submissions over 94% supported the continuation of the strategic approach identified in the 2006 Weed Management Strategy which forms the basis of the Draft 2016 Strategy.

Responses from individuals, both internal and external to the LHI Board, who have been involved in the weed eradication program, who have had exposure to the weed problem on Lord Howe Island prior to the adoption of the strategic approach; or who have experience in other island weed eradication programs have provided informed feedback on what is required for effective weed management on LHI into the future.

While the feasibility of eradication of widespread weeds has been questioned, the overwhelming view from the submissions is that the Board with support from the Federal and State Governments needs to continue the effort to suppress and eliminate priority invasive weeds (including Cherry Guava and Ground Asparagus) where appropriate with support for adoption of technical approaches to improve success. There is awareness of the importance of the program continuing to protect the past and present investment in weed eradication and thereby the island's World Heritage Values which underpin the island's tourism based economy.

Points were raised about area of search effort, weed search intervals and weed management categories. These are aligned to weed species reproductive traits and risk to the environment. The program needs to remain adaptive to address new weed risks, the consequences of reduced resourcing and capacity to prioritise search effort where outcomes can be achieved. This is largely guided by the LHI weeds database.

There were two key phrases from submissions worth noting - *Invest Don't Rest* and a comment that the weed program has been the '*Conservation Heart Beat*' over the island for the last decade or more.

There were comments which did not apply directly to the Strategy and consequently have not being included in this analysis. However, there were a number of comments raised in submissions that were relevant to the Strategy and some changes, clarifications, and corrections to the Strategy are advised. These are listed below

1. Modify some sections of the document and aggregate information e.g. conservation significance and eradication theory to improve presentation and understanding; emphasis on the vision of the strategy;
2. Improve awareness on the astounding outcomes achieved to date which form the basis for the revised strategy;
3. Comprehensively edit the document;
4. Make reference to a weed eradication manual and weed program procedures to assist current and future operational roll out;
5. Undertake weed risk assessments of Category 2 species (Note: this will be ongoing);
6. Add a section on management of mature weeds with a marking and monitoring system, known as *INF-ing* (for Infestation);
7. Include additional reference to other eradication programs and islands and eradication theory;
8. Align weed categories with the requirements under *Biosecurity Act 2015*, which will repeal the *NSW Noxious Weeds Act 1993*. While the NSW Weed Risk Management system was applied for noxious weed ranking, consider application of OEH Conservation Weed Risk Assessment method;
9. Upgrade Sea Spurge *Euphorbia paralias* to the Category 2: Alert List or for a control and containment strategy;
10. Investigate upgrading of New Zealand Christmas Bush *Metrosideros kermadecensis* to eradication if hybridisation with endemic species is evident. Note: research and genetic testing of wildings is required;
11. Ensure the Alert list is adaptive and updated. Note: introduced invasive species list needs completion;
12. Include further reference to J. Le Cussan's contribution to program success;
13. Include information on weed species; seed bank persistence and reproductive maturity in lists or species profiles to clarify search interval to effect eradication;

14. Suggestion for working on less species, species based approach and prioritization of species based on eradication feasibility – reduce area to achieve outcomes;
15. Explain objective of island scale management of weeds if risk to environment is priority; identify which species are likely to reach the eradication endpoint first;
16. Develop weed eradication operations - procedures manual to future proof and guide the roll out and the Strategy.

#### Other minor edits

17. Action 1.1.1 – make note of increased awareness '*of quarantine measures*';
18. Objective 4.1 – make note '*network with the LHI Tourism Association and Tourism NSW to promote importance of the program to tourists in maintaining a pristine – high quality weed free destination*';
19. Action 3.2.4 - expand to include Knicker Nut . *Caesalpinia bonduc*;
20. Action 3.2.2 - add the wording '*including strandline vegetation communities*' and reference to Little Island track; and,
21. Goal 3 Part II – note weed control in threatened species habitat and include examples of sites.  
NB: Threatened species; plant community profiles and weed management priorities to be included in a LHI *Weed Operational Manual/ Procedures*.

**Table 2: Theme aggregation of points raised in submissions**

| Number | Theme   | Responses |
|--------|---|-----------|
| 1      | No support: Does not support strategy and program methodology. The 2006 strategic approach is not effective.  | 1         |
| 2      | Support: Supports strategy and program methodology  | 17        |
| 3      | Program continuation: Island environment and biodiversity conservation significance justifies continuation of the program and eradication   | 13        |
| 4      | Madeira Vine: More input on Madeira Vine by Board and community   | 3         |
| 5      | Biosecurity: Improve Quarantine   | 1         |
| 6      | Roadsides: Management of weeds on roadsides and Little IslandTrack; manage exotic grasses strandline  | 2         |
| 7      | Tourism: Weed program is important for tourism and island's economy; social benefit   | 5         |
| 8      | Conservation: Supports other Board conservation programs  | 1         |
| 9      | Alternate technologies: Supports technologies to access remote areas; investigate weed detector dogs; continue effort in southern mountains                                       | 7         |
| 10     | Editing: Further editing needed   | 5         |
| 11     | Threatened communities: Manage weeds in restricted or threatened plant communities  | 2         |
| 12     | Government support: Commend LHIB and Government for support to the program  | 3         |
| 13     | Resourcing: Staffing, teams, capacity building, performance measures, maintain large teams, increased need for vigilance  | 5         |
| 14     | Skills and commitment: Commends technical skills and commitment of project management particularly Jenny Le Cussan; commends teams on ground, Bruce Thompson and volunteer effort | 6         |

|    |   |   |
|----|---|---|
| 15 | Comparisons and networks: Program should be strategically compared to other islands as opposed to the mainland; Network with eradication and restoration practitioners (including mainland) to remain abreast with new technologies   | 5 |
| 16 | Future proofing: Future proof the program; eradication manual and weed program procedures   | 1 |
| 17 | Biodiversity funding and support: Promote biodiversity conservation outcomes including tourism benefits; Continue to seek funding; maintain support from traditional investment including government; Promote philanthropy; seek non-traditional investment; Further promote achievements | 5 |
| 18 | Weed risks and eradication feasibility: Remain adaptive to new weed risks; prioritisation of weeds based on risk and resources/feasibility for eradication; search interval to be guided by weed seed bank persistence and species reproductive biology.                                  | 4 |
| 19 | Community awareness: Education and extension to residents and visitors to improve awareness; continue to work with community  | 4 |
| 20 | Data analysis: Analysis of eradication trajectories and impact of failing to adopt eradication; identify costs of not eradicating   | 3 |
| 21 | LHI Board operational aspects regarding weed management   | 1 |



### Table 3 Point score from submissions against aggregated themes

[illegible]





## **Attachment 1b: LHI Weed Technical Panel Feedback**

A meeting with the LHI Weed Technical Panel was held on the 21 October 2016 to discuss the Draft LHI Weed Management Strategy 2016 (the Strategy) and weed eradication program methodology. The Technical Panel was formed to provide expert advice and support to the LHI Weed Eradication Program and to address requirements of the NSW Environmental Trust project 'The Tide is Turning – Driving Weed Eradication on LHI'.

The Panel comprises up to seven participants with two panel members with a shared position. The technical panel members include:

- Office of Environment and Heritage (OEH) senior invasive weed technical staff, senior threatened species officer;
- Hastings Landcare - project manager (past noxious weeds inspector),
- ecological consultant (prior LHIB World Heritage Manager),
- New Zealand Department of Conservation (NZDOC) - conservation programs director and
- Biosecurity Queensland Department Agriculture and Fisheries (DAF) - weed eradication Project Coordinator.

The technical panel comprises members with and without first-hand knowledge of LHI, expert knowledge in weed management and / or expertise in eradication programs including pest plant and pest animal eradications on islands.

Of the seven panel members four submitted responses during the public submission period. Three panel members visited the island including two who had not provided a public submission.

### **SCOPE OF TECHNICAL PANEL INPUT AND FEEDBACK**

The technical panel was provided with a range of targeted questions which came out of the public submissions and invited to discuss technical aspects of the Strategy. One of the panel members undertook a day of weed grid search with the LHIB weed team to gain understanding and to provide feedback on the LHI program search method on ground

### **SUMMARY OF TARGETED QUESTIONS PROVIDED TO THE PANEL**

1. Is the 24 month search interval for weeds suitable?
2. Why remove multiple invasive weeds?
3. Is the Target area of 500ha suitable?
4. Feedback on Weed Categories in the draft Strategy
5. Feedback on Eradication program phases
6. Feedback on Implementation tables

### **SUMMARY OF FEEDBACK / RECOMMENDATIONS**

#### **1. Is the 24 month island scale search method suitable?**

- Species time to maturity drives search interval – this needs to be added to the strategy
- Modelling on timeframe to eradication is being undertaken based on past data
- Search period determined by species with longest seed longevity

- Seed bank persistence – apply longest period of persistence for search longevity
- Keep recording nil INF's (Infestation Markers) to measure progress of eradication
- Consider teams to spatially record residual weeds on ground
- Can you apply disturbance to encourage germination – re: residual weeds in Crofton Weed. Not really too dense.
- In NZ programs the locality of a prior mature infestation is searched for 10 years. Based on an example weed with 4 yr persistence.

## **2. Why remove multiple invasive weeds**

- To avoid replacing one invasive weed with another – best practise management
- Species inhabit same environment
- Targeting ecosystem transforming weeds only six species most commonly encountered species. Other weeds not abundant mainly in gardens (referring to the 40 less common species)
- Ensure the teams don't get bored.
- Alert list species: add grape, passionfruit and agapanthus on the alert list.
- Comments made to the introduced plants lists on LHI re: alert species etc

## **3. Target area – 500ha**

- Advised it be based on 24 month search interval
- Described the areas excluded from the search interval
- Based on average progress over 10 years
- Actual FTE hours considers sick days, weather, holidays etc. Average 40 hrs/ha- note: actual 32 hrs / ha
- Ochna – include yearly search interval for residual mature sites
- Analyse data to identify if matures are decreasing on management blocks – this will trigger increased search interval and review of search efficacy if it is not decreasing fast enough.
- Rope access – to work between helicopter and ground search needs investment and to not take away from on ground search.
- Schedule surveillance to stop reproduction and know how long to keep searching.

## **4. Weed Categories**

- Improve scientific evidence of time to reach maturity and seed longevity - add profiles for weeds including reproductive biology and time to maturation – flower and fruiting periods to help hone weed search before fruiting.
- Add a category to the weed table of 'date last seen' (for plants classified as eradicated or presumed eradicated).
- Link to new legislation under the *Biosecurity Act 2015*
- Keep weeds categorised alphabetically – not list as those first to reach eradication endpoint
- Add a range of categories for mature plants – to capture various stages – vegetative, in flower, in fruit,

## **5. Eradication program phases**

- Support the diagrammatic pictures showing program phases

## **6. Implementation tables – data collection etc**

- Cross reference research and development
- Separate operational detail out from strategy into an operational manual.
- Add best practice on rope
- Remove “eradication not feasible for plants that reach maturity in one year (is feasible if resourcing is adequate and area delimited).
- Download GPS more frequently – daily/ weekly
- Consider modification of weed mapping – over time as weeds reduce the maps won't be meaningful. Team grid search data may aid density mapping.
- Engage statistician / weed ecologist to analysis data

## **7. Feedback from grid search**

- Teams to improve accuracy in data recording – self record or more frequently
- Search spacing for the weeds targeted on the day was suitable
- Teams to capture spatial data on weeds
- Data capture must be STRICT; reconfirm 'INF' infestation marking procedures.
- AUDIT – FMO needs to get out with teams to audit performance and ensure data recording and search protocols are being implemented.
- Query about effectiveness of stringline – North Queensland uses GPS track log. As it is biodegradable, is there a need to collect up – which reduces time doing actual grid search effort.

## **8. Other comments**

- Prepare a weed eradication operations manual/procedures
- Add profiles for weeds including reproductive biology and time to maturation – flower and fruiting periods
- Drones project work
- HBT project work
- Weed detector dog – project work
- Biological control
- Improve awareness of biosecurity
- Eradication trajectory – the more you search the less you find.
- Audit of program important – review team
- Invest money into research
- BUDGET- engage a ops manager to support Flora Management Officer (FMO) to allow FMO to focus on reporting, funding, tendering, helicopters drone, data analysis. Ops manager to deal with day to day - logistics, scheduling work, HR.
- Suggest technical review in three years time

## **OUTCOMES**

The Technical Panel provided constructive feedback and advised a number of changes to the strategy which have been adopted.





# Lord Howe Island Weed Management Strategy 2016 – 2025



Lord Howe Island Board

© Lord Howe Island Board 2016

With the exception of photographs, the Lord Howe Island Board and State of New South Wales are pleased to allow this material to be reproduced in whole or in part for educational and non-commercial use, provided the meaning is unchanged and its source, publisher and authorship are acknowledged. Specific permission is required for the reproduction of photographs.

**Lord Howe Island Board**

PO Box 5 / Bowker Avenue  
Lord Howe Island NSW 2898

Phone: +61 2 6563 2066

Fax: +61 2 6563 2127

Email: [administration@lhib.nsw.gov.au](mailto:administration@lhib.nsw.gov.au)

Website: <http://www.lhib.nsw.gov.au/>

For additional information or any enquiries regarding the Lord Howe Island Weed Management Strategy please contact the Lord Howe Island Board Administration Office at the above address.

ISBN

This document should be cited as follows:

Lord Howe Island Board, 2016, *Lord Howe Island Weed Management Strategy 2016 – 2025*.  
Lord Howe Island Board, Lord Howe Island, NSW.

**Cover photographs:** Main photo – J. Shick; Inset photos: LHIB.

**November 2016**



# Lord Howe Island Weed Management Strategy 2016 – 2025

Lord Howe Island Board

November 2016



## Acknowledgements

This Weed Management Strategy was prepared by the Lord Howe Island Board. The Board would like to thank its staff, government agencies and weed-management professionals for their involvement in weed management on Lord Howe Island and for their valuable contribution to the planning process.

This report was prepared and written by Sue Bower (Lord Howe Island Board) with assistance from Megan Bennett (Lord Howe Island Board).

## Photographs

Unless noted, photos have been sourced from the Lord Howe Island Board (LHIB).

**Helicopter with forward mounted lance-spray apparatus. Trialled in 2015, this method has provided a breakthrough in treating Ground Asparagus on cliffs.**



**The LHIB team at elevation on Mt Gower, completing the follow-up of a former Cherry Guava outbreak (see page 10). Photo: S. Wilson, LHIB.**

## Foreword



**Forest dominated by the native plant Fitzgerald (*Dracophyllum fitzgeraldii*) on Mt Lidgbird. Lord Howe Island is a haven for endemic species. The Lord Howe Island Weed Management Strategy aims to protect these unique values for the long term.**

Oceanic islands globally are threatened by the impacts of introduced invasive species. Lord Howe Island's environment is at risk from invasive weeds despite having 80% cover of native vegetation and being reasonably undisturbed. Invasive weeds not only compromise the integrity of the island's terrestrial ecosystems and World Heritage values (DECC 2007) but also pose a threat to agricultural productivity (which is a limited resource) and to human health.

This strategy aims to adopt a framework to prevent the introduction of new weed incursions, detect and contain newly emerging weed risks and to continue to address weed risks at the island scale.

The impacts of widespread, highly invasive weeds are being managed through a multi-species weed-eradication program that has been in effect since 2004. This 10-year program has proven effective in reducing the extent and threat of target weeds (LHIB 2016). With a 90% reduction in mature weed plants achieved across the island, the opportunity to eradicate many weeds has improved.

The implementation of this strategy will benefit the island ecosystems but also the local community and economy by protecting the integrity of the island's nature-based tourism assets and World Heritage values. Weeds are everyone's problem and a cooperative approach ensuring the community, relevant stakeholders and government remain alert, committed and capable will help to address current and future weed risks to the island.

## The Vision of the Weed Management Strategy

The long-term vision of the Weed Management Strategy is to protect Lord Howe Island's unique ecosystems and World Heritage values from current and future threats posed by invasive weeds, so as to improve the island's resilience to inevitable future disturbances.

THIS PAGE LEFT INTENTIONALLY BLANK



# Executive Summary

This strategy outlines the requirements for effective weed management on Lord Howe Island for the next decade 2016–2026. It is based on the experience gained from, and the on-ground results of, controlling and eradicating invasive weeds on Lord Howe Island over 12 years (for example see LHIB 2016). The 2006 Weed Management Strategy advised the eradication of 25 weed species over a forecast 30-year program. The results of weed management undertaken since late 2004 show an 80% reduction in target weeds of all life-stages and a 90% reduction in numbers of mature weeds across the island. This has greatly improved the feasibility of eventual eradication of these weed species. Without taking the bold step to eradicate these target weeds, the ecosystems and biota of Lord Howe Island will remain at risk. This Weed Management Strategy advises the continuation of the weed eradication program for at least the next two decades.

The significant reduction in the distribution and density of target weeds achieved over the past 10 years has improved the opportunity and the capacity of the Lord Howe Island Board to drive an eradication program given adequate funding, dedicated teams on the ground and development of technical applications. The program has incorporated adaptive management through experience and improvements in technique and expertise, thus increasing the ability to achieve eradication.

Protection of the island's World Heritage values from invasive weeds is a primary focus, as is reducing the impact of weeds on agricultural productivity and human health. Nearly all of the introduced and invasive plants were intentionally brought to Lord Howe Island. The local community plays a vital role in the future stewardship of the island, in replacing plants of sentimental or cultural value with species that are sustainable and safe for the island environment.

**The following goals and strategies will deliver best practice weed management outcomes on LHI:**

**Goal 1 – Exclude:** Prevent the establishment of new invasive weeds;

**Goal 2 – Eradicate:** Eliminate or prevent the spread of invasive weeds;

**Goal 3 – Manage effectively:** Reduce the impact of widespread, non-eradicable invasive weeds; and

**Goal 4 – Build capacity:** Ensure the Lord Howe Island Board and Lord Howe Island community have the ability and commitment to manage invasive weeds, promote awareness of invasive weeds within the community and inform visitors to the island of the threat posed by weeds to the ecosystems of Lord Howe Island.

As many as 1000 introduced plant species are estimated to occur on Lord Howe Island, with 670 introduced species recorded to date (LHIB 2006). Of the introduced species that occur on the island, 68 are declared under the NSW *Noxious Weeds Act 1993* and have been targeted for **eradication**, including 40 species with limited distribution on the island.

**The following categories, based on the risk they pose and the feasibility of management, will allow effective and coordinated on-ground weed management:**

**Category 1:** Eradicate (immediate eradication, or suppression leading to eradication);

**Category 2:** Alert (sleeper weeds – watch and act as necessary);

**Category 3:** Control (effectively manage).

Preventing the introduction of invasive weeds as well as early detection and rapid removal provide the greatest cost–benefit in invasive species management (DPI 2013). Continuing the eradication of widespread invasive weeds is also an effective weed-management strategy. Eradication is an optimal investment because it can provide permanent protection for the island’s unique environment and World Heritage values.

## Weeds pose a significant threat to the integrity of the environment of Lord Howe Island



**Working on an outbreak of Cherry Guava on Mt Gower, at 550 m above sea level (2011).**

# Contents

|  |           |
|--|-----------|
| <b>Acknowledgements</b>  | <b>4</b>  |
| <b>Foreword</b>  | <b>5</b>  |
| <b>Executive Summary</b>   | <b>7</b>  |
| <b>Contents</b>  | <b>9</b>  |
| <b>Some definitions</b>  | <b>11</b> |
| <b>Abbreviations</b>   | <b>12</b> |
| <b>1 Introduction</b>  | <b>13</b> |
| 1.1 Lord Howe Island — World Heritage  | 13        |
| 1.2 Local and global conservation values                                     | 15        |
| 1.3 The Weed Management Strategy   | 17        |
| <b>2 The impact of weeds on Lord Howe Island</b>                             | <b>18</b> |
| 2.1 What is a weed?  | 18        |
| 2.2 Weeds on Lord Howe Island  | 18        |
| 2.3 Legislative and policy settings  | 20        |
| 2.4 Weeds as a Key Threatening Process                                       | 20        |
| 2.5 The effects of weeds on endemic and uncommon native plant species of LHI | 22        |
| 2.6 Weeds targeted for management on Lord Howe Island                        | 24        |
| 2.7 Declared weeds on Lord Howe Island                                       | 25        |
| <b>3 The 2006 Lord Howe Island Weed Management Strategy</b>                  | <b>27</b> |
| 3.1 Measuring progress towards eradication                                   | 27        |
| <b>4 Weed management on islands</b>  | <b>33</b> |
| <b>5 Weed eradication methodology on Lord Howe Island</b>                    | <b>36</b> |
| 5.1 Weed search, treatment and data recording                                | 36        |
| 5.2 Other methods of weed management   | 40        |
| 5.3 Maintaining effective search effort for low-density weed populations     | 41        |
| 5.4 Declaring the eradication of a weed species                              | 42        |
| <b>6 Weed management categories on LHI</b>                                   | <b>46</b> |
| <b>7 The vision of the Weed Management Strategy</b>                          | <b>53</b> |
| 7.1 Weed management goals, objectives and actions                            | 53        |
| <b>8 Program budget 2016–25</b>  | <b>70</b> |
| <b>9 Conclusion</b>  | <b>73</b> |
| <b>References</b>  | <b>74</b> |

|                   |   |            |
|-------------------|---|------------|
| <b>Appendix 1</b> | <b>Weed management categories</b>                     | <b>79</b>  |
| <b>Appendix 2</b> | <b>History of weed management on Lord Howe Island</b> | <b>102</b> |
| <b>Appendix 3</b> | <b>Relevant legislation and strategies</b>            | <b>104</b> |
| <b>Appendix 4</b> | <b>Staffing strategy</b>                              | <b>111</b> |
| <b>Appendix 5</b> | <b>Sample Weed Species Profile — Draft</b>            | <b>112</b> |



## Some definitions

|                  |  |
|------------------|--|
| Active phase     | The period of removal of all life-stages (including mature plants) of weeds targeted for eradication while search effort (delimitation) continues.   |
| Containment      | A weed-management strategy that aims to prevent the spread of a weed.  |
| Control          | A weed management strategy that reduces the extent of a weed in a specific locality.   |
| Delimitation     | Identification of the extent of a weed incursion or infestation.   |
| Endemic          | An organism that is native to a particular place or region.  |
| Eradication      | A weed management strategy that aims to completely remove a target weed and all of its propagules. There should be limited or no risk of re-invasion of the species. The eradication of a weed species is declared when the target weed species remains undetected beyond the period of seed viability and the species continues to remain undetected following consecutive visitations. |
| Invasive weed    | A weed that can establish in undisturbed vegetation communities and compete with native plant species for resources (light, water and nutrients, and space) and, over time, can form dense populations resulting in the decline and eventual replacement of native species, or affect valued assets, such as human health or agricultural productivity.                                  |
| Monitoring phase | The continuation of search effort to monitor the absence of weeds, beyond the limit of seed-bank persistence, in the lead up to eradication.   |
| Outliers         | Isolated infestations of weeds, mostly in remote and rugged terrain. Outliers pose a significant threat to the success of weed control or eradication programs if left undetected and unchecked, as they can act as sources for the establishment of new infestations. Outliers are also referred to as <i>nascent foci</i> .  |
| Seed persistence | The length of time that seeds remain viable to germinate in the environment where they are subject to ecological factors and decay (generally referring to seeds on or in soil).   |
| Seed viability   | The length of time that seeds remain viable in laboratory conditions; seeds viability is often greater in laboratory conditions than in the environment (see Seed persistence).  |
| Zero density     | Weeds are not evident in the landscape but are not necessarily absent.   |

## Abbreviations

|                 |   |
|-----------------|---|
| APVMA           | Australian Pesticides and Veterinary Medicines Authority                            |
| CSIRO           | Commonwealth Scientific and Industrial Research Organisation                        |
| DPI             | NSW Department of Primary Industries  |
| <i>EPBC Act</i> | <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Commonwealth) |
| FMO             | Flora Management Officer  |
| FTE             | full-time equivalent  |
| HBT             | Herbicide Ballistic Technology  |
| KTP             | Key Threatening Process   |
| LCA             | Local Control Authority   |
| <i>LHI Act</i>  | <i>Lord Howe Island Act 1953</i> (NSW)  |
| LHI             | Lord Howe Island  |
| LHIB            | Lord Howe Island Board  |
| LHI BMP         | Lord Howe Island Biodiversity Management Plan                                       |
| LHIG            | Lord Howe Island Group  |
| LHI WMS 2006    | <i>Weed Management Strategy for Lord Howe Island</i> (LHIB 2006)                    |
| LLS             | Local Land Service  |
| MEWH            | Manager Environment World Heritage  |
| Mt              | Mount   |
| NCLLS           | North Coast Local Land Service  |
| NSW             | New South Wales   |
| NZDOC           | New Zealand Department of Conservation  |
| OEH             | NSW Office of Environment and Heritage (Department of Premier and Cabinet)          |
| PPP             | Permanent Park Preserve   |
| <i>TSC Act</i>  | <i>Threatened Species Conservation Act 1995</i> (NSW)                               |
| UAV             | unmanned automated vehicles (drones or aero robotics)                               |
| WAP             | NSW Weeds Action Program 2015–2020 (DPI 2015)                                       |
| WoNS            | Australian Weeds of National Significance   |
| WRA             | Weed Risk Assessment  |
| WRM             | Weed Risk Management  |

Standard units and their abbreviations are used, including: ha, hectares; km, kilometres.

# 1 Introduction

The Lord Howe Island Group (LHIG) is an isolated oceanic island group located in the Tasman Sea, lying 783 km north-east of Sydney and 585 km east of Port Macquarie and is politically treated as part of New South Wales (NSW), Australia (31°33'29"S, 159°05'12"E). The island group consists of Lord Howe Island (LHI) and its smaller associated islands, including the remote Balls Pyramid. The main island is 11 km long and from 0.6 to 2.8 km wide, with a total land area of 1455 hectares (ha). The topography of the main island rises from beaches to low hills and sheer mountain slopes and cliffs in the north and south, with the distinctive peaks of Mt Lidgbird and Mt Gower reaching an elevation of 875 m above sea level (Figure 1). About 75% of the terrestrial part of the property is managed as a Permanent Park Preserve (PPP), consisting of the northern and southern mountains of the main island, plus the Admiralty Islands, Mutton Bird Islands, Balls Pyramid and surrounding islets.

LHI is a unique oceanic island with a high number of endemic and threatened species and as such plays an important global role in biodiversity conservation. Collectively, islands worldwide cover only 5% of the Earth's land area but support an estimated 20% of all known bird, reptile and plant species and almost half of all endangered species. Between 70 and 95% of the world's extinctions of terrestrial species have occurred on islands, and most of these (55–67%) were directly caused or facilitated by invasive alien species (see <http://www.islandconservation.org/>).

## 1.1 Lord Howe Island — World Heritage

The LHIG was inscribed on the World Heritage List in 1982 in recognition of the Group's outstanding natural landscapes and scenery and its rich terrestrial and marine biodiversity (UNESCO; see <http://whc.unesco.org/en/list/186>). It was one of only five Australian World Heritage properties at that time (there are now 19 properties listed for Australia; see <http://whc.unesco.org/en/statesparties/au>).

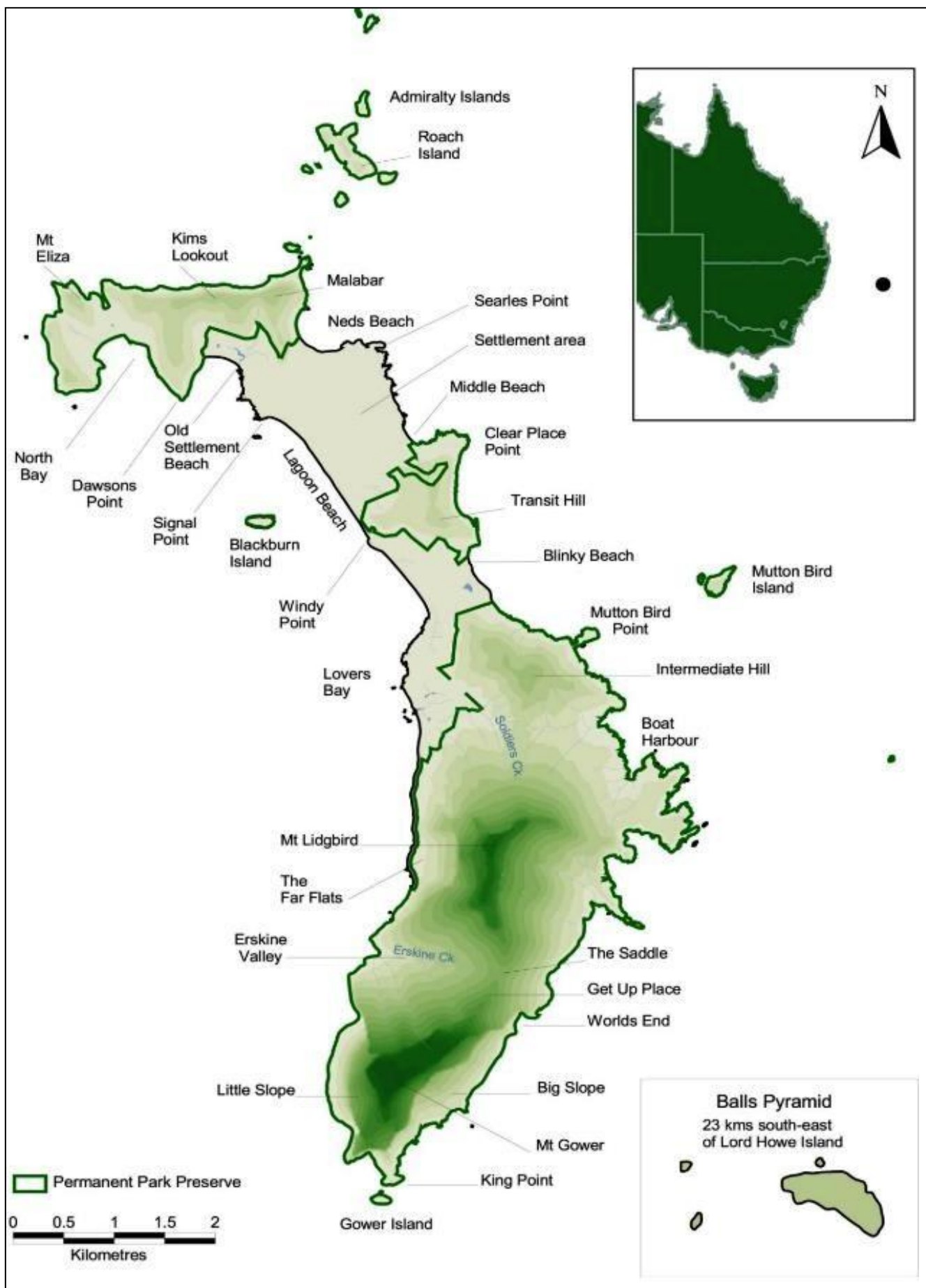
The LHIG meets two criteria for World Heritage listing:

- *Criterion (vii) — contain superlative natural phenomena, formations or features, for instance, outstanding examples of the most important ecosystems, areas of exceptional natural beauty or exceptional combinations of natural and cultural elements; and*
- *Criterion (x) — contain the most important and significant natural habitats where threatened species of animals or plants of outstanding universal value from the point of view of science or conservation still survive.*

The LHIG was deemed by UNESCO to have Outstanding Universal Value as 'an outstanding example of an oceanic island of volcanic origin, having a unique biota with a high level of endemism and the world's most southerly true coral reef. It is an area of exceptional natural beauty and provides important breeding grounds for colonies of seabirds as well as habitat for rare and endangered species'. The World Heritage property covers the terrestrial and marine areas, including the coral reefs, and covers 146,300 ha, with the terrestrial area covering approximately 1540 ha (see <http://www.environment.gov.au/system/files/pages/a7088999-c54e-4e80-9891-fba5de5acd77/files/lord-howe-map.pdf>).

Specific attributes of the World Heritage listing include:

- the exceptional diversity of spectacular and scenic landscapes, including sheer mountain slopes and cliffs, and the hills enclosing the lagoon, as well as Balls Pyramid rising abruptly from the ocean to the south-east;



**Figure 1 The Lord Howe Island Group (from DECC 2007).**

- as an outstanding example of an island ecosystem developed from submarine volcanic activity;
- the most southerly coral reef in the world, with unique assemblages of temperate and tropical forms;
- large colonies of nesting seabirds, and the only major breeding locality for the Providence Petrel (*Pterodroma solandri*), and one of the world's largest breeding concentrations of Red-tailed Tropicbird (*Phaethon rubricauda*);
- an outstanding example of independent evolutionary processes and an insular biota that has adapted to the island environment through speciation, with a significant number of endemic species or subspecies of plants and animals in a very limited area;
- the high number of threatened and endemic species and subspecies of plants and animals, for example the Lord Howe Woodhen (*Gallirallus sylvestris*);
- an outstanding example of an oceanic island group with a diverse range of ecosystems and species that have been subject to human influences for a relatively limited period; and
- as containing important and significant habitats for *in situ* conservation of biological diversity.

The LHIG was also included on the Australian National Heritage List (in 2007) and in the NSW State Heritage Register.

## 1.2 Local and global conservation values

The vegetation of LHI is broadly classified as Oceanic Rainforest and, at higher elevations, Oceanic Cloud Forest; the latter, with an area of only 300 ha, is the most restricted vegetation class in NSW (Keith 2004). The island's vegetation has affinities with the flora of eastern Australia, New Zealand, Norfolk Island and New Caledonia. The LHIG supports at least 239 native vascular plant species (DECC 2010) and a recent systematic flora survey recorded a total of 222 plant taxa, including 47 exotic species, in floristic sites (Sheringham *et al.* 2016).

The recent systematic flora survey and vegetation classification for LHI recognised 33 vegetation communities for the LHIG (excluding Balls Pyramid). A saltmarsh and two rainforest communities that had not been recognised in previous studies were identified and mapped in the study (Sheringham *et al.* 2016). At least 18 vegetation communities have been considered of high conservation significance, owing to threatening processes or restricted distributions, or both (e.g. Gnarled Mossy Cloud Forest, mangrove communities) (DECC 2007; Sheringham *et al.* 2016).

The LHIG exhibits a high level of endemism, with 113 species (47%) of the island's flora endemic to the LHIG. The high degree of endemism is illustrated not only at the species level, but also at the generic level, with five endemic genera of vascular plants, including three endemic genera of palms. Further, at least six vertebrate animals are also endemic to the LHIG, and the diversity of terrestrial invertebrates is very high, with more than 1600 species recorded, also with high levels of endemism. The southern mountains have the highest species richness of endemic flora and endemic invertebrates on the island (DECC 2007).

Since human settlement, nine species of land bird, one species of bat and two species of plant have become extinct or are presumed extinct on LHI (DECC 2007; Sheringham *et al.* 2016). Legislation protecting threatened species is applied at both the State and Federal level in Australia, and the NSW *Threatened Species Conservation Act 1995 (TSC Act)* and Commonwealth *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)* (DECC 2007) list 41 species of threatened flora and fauna, including resident and migratory

species on the LHIG (this excludes threatened bird species that occur in the LHIG only as occasional vagrants) and two Endangered Ecological Communities (Table 1).

**Table 1 A summary of the threatened flora, fauna and ecological communities of the LHIG identified under the *TSC Act* or *EPBC Act*. Status: CE = Critically endangered; E = Endangered; CEEC = Critically Endangered Ecological Community; M = Migratory; V = Vulnerable.**

| Group                             | Number | Species or ecological community   | TSC Act | EPBC Act |
|-----------------------------------|--------|---|---------|----------|
| Endangered Ecological Communities | 2      | Gnarled Mossy Cloud Forest on Lord Howe Island  | CEEC    |          |
|                                   |        | Lagunaria Swamp Forest on Lord Howe Island  | CEEC    |          |
| Plants                            | 13     | Phillip Island Wheat Grass ( <i>Anthosachne kingiana</i> subsp. <i>kingiana</i> [listed as <i>Elymus multiflorus</i> subsp. <i>kingianus</i> ]) | CE      | CE       |
|                                   |        | Knicker Nut ( <i>Caesalpinia bonduc</i> )   | E       |          |
|                                   |        | Lord Howe Island Morning Glory ( <i>Calystegia affinis</i> )  | CE      | CE       |
|                                   |        | Lord Howe Island Broom ( <i>Carmichaelia exsul</i> )  | E       |          |
|                                   |        | Sand Spurge ( <i>Chamaesyce psammogeton</i> )   | E       |          |
|                                   |        | Small-leaved Currant Bush ( <i>Coprosma inopinata</i> )   | E       |          |
|                                   |        | Hutton's Geniostoma ( <i>Geniostoma huttonii</i> )  | E       | E        |
|                                   |        | <i>Hypolepis elegans</i>  | Ex      |          |
|                                   |        | Little Mountain Palm ( <i>Lepidorrhachis mooreana</i> )   | CE      | CE       |
|                                   |        | Coast Euodia ( <i>Melicope vitiflora</i> )  | E       |          |
|                                   |        | Rock Shield Fern ( <i>Polystichum moorei</i> )  | E       | E        |
|                                   |        | <i>Solanum bauerianum</i>   | Ex      |          |
|                                   |        | Mountain Xylosma ( <i>Xylosma parvifolia</i> )  | E       | E        |
| Invertebrates                     | 8      | Lord Howe Island Phasmid ( <i>Dryocelcus australis</i> )  | E       | CE       |
|                                   |        | Lord Howe Island Earthworm ( <i>Pericryptodrilus nanus</i> )  | E       |          |
|                                   |        | Lord Howe Island Wood-eating Cockroach ( <i>Panesthis lata</i> )  | E       |          |
|                                   |        | Lord Howe Island Placostylus ( <i>Placostylus bivaricosus</i> )   | E       | CE       |
|                                   |        | Master's Charopid Land Snail ( <i>Mystivagor masteri</i> )  |         | CE       |
|                                   |        | Whitelegge's Land Snail ( <i>Pseudocharopa whiteleggei</i> )  |         | CE       |
|                                   |        | Mount Lidgbird Charopid Snail ( <i>Pseudocharopa lidgbirdii</i> )   |         | CE       |
|                                   |        | <i>Gudeoconcha sophiae magnifica</i> (a snail)  |         | CE       |
| Reptiles                          | 2      | Lord Howe Island Gecko ( <i>Christinus guentheri</i> )  | V       | V        |
|                                   |        | Lord Howe Island Skink ( <i>Cyclodina lichenigera</i> )   | V       | V        |
| Resident landbirds                | 4      | Lord Howe Silvereye ( <i>Zosterops lateralis tephroleurus</i> )   |         |          |
|                                   |        | Lord Howe Golden Whistler ( <i>Pachycephala pectoralis contempta</i> )  |         |          |
|                                   |        | Lord Howe Pied Currawong ( <i>Strepera graculina</i> )  | V       |          |



|                          |           |  |   |   |
|--------------------------|-----------|--|---|---|
|                          |           | <i>crissalis</i> )   |   |   |
|                          |           | Lord Howe Woodhen ( <i>Gallirallus sylvestris</i> )        | E |   |
| <b>Breeding seabirds</b> | <b>12</b> | Red-tailed Tropicbird ( <i>Phaethon rubricauda</i> )       | V |   |
|                          |           | White-bellied Storm-Petrel ( <i>Fregetta grallaria</i> )   | V | V |
|                          |           | Flesh-footed Shearwater ( <i>Ardenna carneipes</i> )       | V | M |
|                          |           | Little Shearwater ( <i>Puffinus assimilis</i> )            | V |   |
|                          |           | Kermadec Petrel ( <i>Pterodroma neglecta</i> )             | V | V |
|                          |           | Providence Petrel ( <i>Pterodroma solandri</i> )           | V |   |
|                          |           | Gould's Petrel ( <i>Pterodroma leucoptera leucoptera</i> ) | V | E |
|                          |           | Black-winged Petrel ( <i>Pterodroma nigripennis</i> )      | V | M |
|                          |           | Masked Booby ( <i>Sula dactylatra</i> )                    | V | M |
|                          |           | White Tern ( <i>Gygis alba</i> )                           | V |   |
|                          |           | Grey Ternlet ( <i>Procelsterna cerulea</i> )               | V |   |
|                          |           | Sooty Tern ( <i>Onychoprion fuscata</i> )                  | V |   |
| <b>Total</b>             | <b>41</b> |  |   |   |

### 1.3 The Weed Management Strategy

This Weed Management Strategy for the decade 2016–25 aims to further protect the unique ecosystems of the LHIG by providing a strategic framework for the continued reduction and elimination of the threats posed by invasive weeds over the next 10 years. It is important that a consistent and coordinated approach to weed management continues, to ensure resources and effort are allocated according to the highest priorities to achieve best weed threat-abatement outcomes on LHI.

This Strategy for the 10 years 2016–25 is based on a sound and well-informed knowledge of the biology of the weed species that pose a risk to the environment of LHI, of the effective measures required to control them and the experience in the control, containment and eradication of target weeds gained over the past 10 years.

The effective management of weeds on LHI requires an all-tenure approach with public and private land managers and owners having a shared responsibility to manage weeds. The Strategy will be reviewed and adapted to reflect the outcomes of monitoring and evaluation, new weed risks, improved knowledge and new technologies.

## 2 The impact of weeds on Lord Howe Island

### 2.1 What is a weed?

A weed is a non-native or native plant species that colonises and persists in an ecosystem in which it did not previously exist, and which may have been introduced either intentionally or incidentally. A weed is also recognised as a plant that requires some form of action to reduce its effect on the economy, the environment, human health, amenity or cultural practices (see <http://www.environ/invasive/weeds/.html>).

Typically, invasive weeds have high reproductive rates, broad environmental tolerances that allow them to persist and thrive in a range of habitats, and the ability to spread widely. Invasive weeds can out-compete native plant species, change the composition of native habitats, facilitate the invasion of other weeds, and alter ecosystem processes (Radosevich *et al.* 2007). The impact of introduced plants may not be immediately perceived or understood: invasive species may establish rapidly or it may take decades for introduced species to spread invasively. The gardening practices of today, as well as those of yesterday, can affect ecosystems in years to come (Basset *et al.* 2016).

Invasive weeds are a major concern throughout Australia, adversely affecting natural environments and agricultural productivity. More than 27,000 non-native plant species have been introduced into Australia and, of these, 94% were introduced through the gardening and horticultural industry (Groves *et al.* 2005).

Invasive plants pose a significant threat to the conservation values of islands (Timmins and Braithwaite 2002). Islands are particularly fragile ecosystems and highly vulnerable to invasion by introduced species owing to their isolation and finely adapted ecologies (Macarthur and Wilson 1967; Simberloff 1995). Islands in general have high levels of endemism resulting from their long-term isolation and separation from mainland environments, and have limited resilience to the long-term impacts of invasive weeds. Extinctions of native species on islands have rapidly accelerated following the advent of global trade and human settlement, which has allowed both the deliberate and inadvertent movement of species, often resulting in unexpected and sometimes disastrous consequences (Steiner 2010).

Islands, however, by the very nature of their often limited size and isolation, provide opportunities to achieve biodiversity conservation and management outcomes, such as eradications, that would otherwise not be feasible in mainland environments (see <http://www.islandconservation.org/invasive-species-council-of-australia/>).

### 2.2 Weeds on Lord Howe Island

Non-native, invasive plant species have been present on LHI, and affecting the ecology of the island, since settlement in 1834. As early as the 1930s, the local island authority raised concerns about the indiscriminate introduction of seed of exotic plants and sought restrictions on the importation of introduced plant species, other than common vegetables and flowers (Lord Howe Island Board of Control 1933). The threat of Climbing Asparagus fern (*Asparagus plumosus*) was recognised in the 1940s; an island circular issued 13 February 1940 advised the removal of the weed from a lease at the leaseholder's expense. However, by the 1960s, the weed must have remained uncontrolled, as large clumps of the plant were evident on the property and adjacent road verge (C. Murray, personal communication). Concerns about the threat posed by other invasive weeds on LHI, particularly of Cherry Guava (*Psidium cattleianum* var. *cattleianum*), were first formally reported as part of the biological surveys of

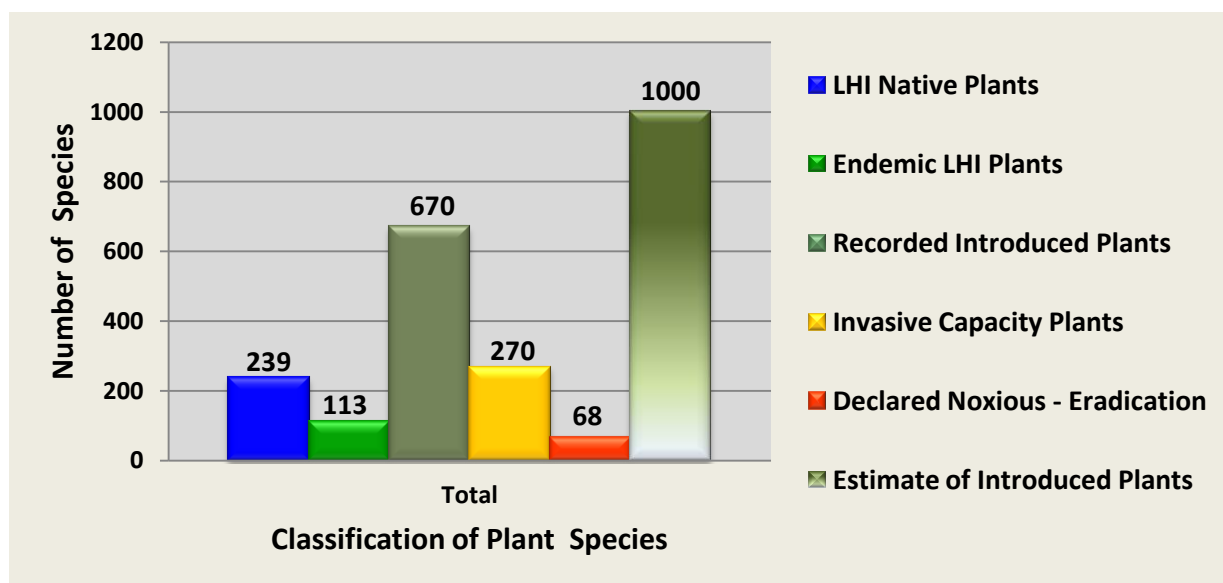


the island conducted by the Australian Museum and Royal Botanic Gardens, Sydney, in 1970 (Recher & Clark 1974; Pickard 1983). These surveys noted that 120 introduced species had naturalised, and recommended that the import of introduced species be prohibited. Hunter (2002) identified weeds as one of the most serious threats to the natural values of the island.

In the 1990s, the LHIB targeted weed management on 13 invasive weed species, including Bitou Bush (*Chrysanthemoides monilifera* subsp. *rotundata*), African Boxthorn (*Lycium ferocissimum*), Cherry Guava, Climbing Asparagus, Ground Asparagus (*Asparagus aethiopicus*) and Ochna (*Ochna serrulata*) in priority areas in the PPP, and on leasehold lands.

Baseline mapping of the density and distribution of weeds was undertaken in 2002–03 across 460 ha of the island's landscapes to quantify the extent and effects of weeds on LHI (Le Cussan 2002a, 2002b, 2003a, 2003b). This mapping confirmed the significant threat that was posed by weeds and that an island-scale and time-bound eradication approach was needed to deal with this threat.

An inventory of garden plants in 2002 identified more than 670 introduced species on the island and, of these, at least 270 had invasive characteristics (DECC 2007). It is estimated that at least 1000 introduced plants are likely to occur on the island (LHIB 2006). Based on these figures, the number of species of native vascular flora of LHI is far smaller than the numbers of introduced species, in a ratio of 1 : 4 (239 native species compared with >1000 introduced species; Figure 2).



**Figure 2** The vascular plant species of LHI, highlighting numbers of introduced and native and endemic species and introduced species. Endemic LHI Plants ( $n = 113$ ) are a subset of LHI Native Plants and are included within that total ( $n = 239$ ). Invasive Capacity Plants ( $n = 270$ ) and plants Declared Noxious – Eradication ( $n = 68$ ) are subsets of, and recorded within, the total number of Recorded Introduced Plants ( $n = 670$ ).

It is likely that additional introduced species that exhibit weedy characteristics will be recorded on LHI in the future. Since the publication of the initial *Weed Management Strategy for Lord Howe Island* (LHI WMS 2006) in 2006 (LHIB 2006), a number of invasive weeds species have been newly detected in gardens on LHI, including Bathurst Burr (*Xanthium spinosum*), Cat's Claw Creeper (*Dolichandra unguis-cati*), Climbing Nightshade (*Solanum seaforthianum*), Ming Fern (*Asparagus macowanii* var. *zuluensis*), Leaf Cactus (*Pereskia aculeata*), French Broom (*Genista monspessulana*) and Tree of Heaven (*Ailanthus altissima*). Other species thought to

have been removed have been detected again, including Dutchman's Pipe (*Aristolochia elegans*).

A more detailed summary of the history of weed management on LHI is provided in Appendix 2.

## 2.3 Legislative and policy settings

The LHIB has the responsibility for the care, control and management of the LHIG under the NSW *Lord Howe Island Act 1953 (LHI Act)*. The Commonwealth and NSW State governments, with the LHIB, have specific statutory obligations for the management of weeds in the LHIG. The implementation of this Weed Management Strategy addresses objectives in the Lord Howe Island Biodiversity Management Plan (LHI BMP; DECC 2007), which is a Federal and State multi-species threatened species recovery plan. This Strategy also addresses targets in the *New South Wales Biosecurity Strategy 2013–2021* (DPI 2013), the *New South Wales Weeds Action Program 2015–2020* (WAP; DPI 2015), *New South Wales Invasive Species Plan 2008–2015* (DPI 2008) and the *Australian Weeds Strategy* (NRMCC 2007). The LHI Weed Management Strategy will need to align to changes in weed management legislation when the *Biosecurity Act 2015* enacted (due to commence in 2017; NSW Government 2015). The legislation, strategies and plans relevant to weed management on LHI are summarised in Table 2 (with further details provided in Appendix 3).

### Land tenure and responsibility for weed management on LHI

LHI is Crown Land, with tenure consisting of Public Land (including the PPP), Perpetual Lease, Special Lease and Permissive Occupancy. The LHIB is responsible for the PPP, which covers approximately 75% of the main island. The PPP has a similar status to a national park but is managed by the LHIB. Under the NSW *Noxious Weeds Act 1993*, leaseholders are obliged to manage declared weeds on their leases, which collectively cover 160 ha of the island.

## 2.4 Weeds as a Key Threatening Process

Weeds are a key threatening process (KTP) for a number of threatened species. The implementation of the current Weed Management Strategy addresses nine KTPs listed under the NSW *TSC Act* or the Commonwealth *EPBC Act* that affect threatened species and their habitats, either directly or indirectly. A preliminary summary of the risks posed by weeds to threatened species of the LHIG and their habitats is summarised in Table 3. The strategy will help to address a number of KTPs, thus improving ecosystem resilience by removing the competitive advantage of invasive weeds.

**Table 2 International, Commonwealth, NSW and other legislation, strategies and plans relevant to management of weeds on LHI.**

### Global conservation initiatives

International Union for Conservation of Nature (IUCN)  
 World Heritage Program (<https://www.iucn.org/theme/world-heritage>)  
 Species Survival Commission (IUCN SSC; [www.iucn.org/theme/species/about/species-survival-commission](http://www.iucn.org/theme/species/about/species-survival-commission))  
 IUCN SSC Invasive Species Specialist Group ([www.issg.org/](http://www.issg.org/))  
 International Convention for Biological Diversity (Australia is a signatory)

### Commonwealth Government legislation, plans and strategies

*Environment Protection and Biodiversity Conservation Act 1999*  
*Biological Control Act 1984*  
 Australian Weeds Strategy (NRMMC 2007)  
 Weeds of National Significance Strategic Plan (see [www.enviro/WONS/weeds/publications](http://www.enviro/WONS/weeds/publications))

### NSW State Government legislation, plans and strategies

(Acts with an asterisk are due to be repealed by the *Biosecurity Act 2015*, which is yet to be enacted)

*Biosecurity Act 2015* (to be enacted in 2017)  
*Local Land Service Act 2013*  
*Pesticides Act 1999*  
 \**Threatened Species Conservation Act 1995*  
 \**Noxious Weeds Act 1993*  
*NSW National Parks and Wildlife Act 1976*  
*Lord Howe Island Act 1953*  
 \**Plant Diseases Act 1924*  
 NSW Weeds Action Program 2015–2020 (DPI 2015)  
 NSW Biosecurity Strategy 2013–2021 (DPI 2013)  
 NSW Invasive Species Plan 2008–2015<sup>1</sup> (DPI 2008)

### Lord Howe Island Board regulations, plans and strategies

Lord Howe Island Regulation 2014 ([www.legislation.nsw.gov.au/regulations/2014-497.pdf](http://www.legislation.nsw.gov.au/regulations/2014-497.pdf))  
 Lord Howe Island Board Pesticide Use Notification Plan (LHIB 2015a)  
 Lord Howe Island Lagoon Foreshore Management Plan (LHIB 2015b)  
 Lord Howe Island Biosecurity Strategy (AECOM 2016)  
 Lord Howe Island Vegetation Rehabilitation Plan (2002)  
 Lord Howe Island Plant Importation Policy (LHIB 2014)  
 Lord Howe Island Permanent Park Preserve Plan of Management (DECCW 2010)  
 Strategic Plan for the Lord Howe Island Group World Heritage Property (LHIB 2010)  
 Lord Howe Island Biodiversity Management Plan (DECC 2007)

<sup>1</sup> This plan is being updated, with a draft having been available for public consultation (NSW Government 2015).

**Table 3 Identified Key Threatening Processes relating to weed invasion on LHI.**

| <b>Primary KTPs (TSC Act)</b>  |
|--|
| Invasion and establishment of exotic vines and scramblers  |
| Invasion, establishment and spread of Lantana ( <i>Lantana camara</i> )  |
| Invasion of native plant communities by <i>Chrysanthemoides monilifera</i> (Bitou Bush and Boneseed)   |
| Invasion of native plant communities by African Olive ( <i>Olea europaea</i> L. subsp. <i>cuspidata</i> )  |
| Invasion of native plant communities by exotic perennial grasses   |
| Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants   |
| <b>Secondary KTPs (TSC Act and EPBC Act)</b>   |
| Infection of native plants by <i>Phytophthora cinnamomi</i>  |
| Introduction and establishment of exotic rust fungi of the order Pucciniales that are pathogenic (Myrtle Rust) on plants of the family Myrtaceae                         |
| Predation by the Ship Rat (Black Rat <i>Rattus rattus</i> ) on LHI (TSC Act) and exotic rats on Australian offshore islands of less than 1000 km <sup>2</sup> (EPBC Act) |

## 2.5 The effects of weeds on endemic and uncommon native plant species of LHI

As already stated, the LHIG shows high levels of endemism. At least half of the vascular plants and six vertebrate animals are endemic to the LHIG, and terrestrial invertebrate diversity is also very high with high levels of endemism (DECC 2007). The southern mountains have the highest species richness of endemic flora and endemic invertebrates on the island but the area continues to be at risk from infestations of Cherry Guava (with thickets detected and removed from up to 600 m above sea level and outliers on cliffs which remain untreated) and Ground Asparagus (with mature plants detected and removed at elevation from Mt Lidgbird). The LHI BMP (DECC 2007) recommends that rapid responses are adopted to control outbreaks of significant weeds in remote areas.

Many native or endemic plant species on LHI have restricted distributions or occupy specialist niches that are at risk from invasive weeds, such as Lord Howe Island Passionfruit (*Passiflora herbertiana* subsp. *insulae-howe*) and native ground orchids like the Helmet Orchid (*Corybas barbarae*), which are threatened by competition from asparagus weeds.

The weed species targeted for eradication on LHI are species that show typical invasive characteristics: broad environmental tolerances, ability to spread widely, are known to affect and alter ecosystems, and may affect human health. They are capable of wide dispersal and establishing in all habitats across the island, from cliff edges to undisturbed forest, and many are dispersed by wind or birds (and, formerly, Pigs, which were eradicated in 1979). The main vectors of fleshy fruited plants on LHI currently are the endemic Lord Howe Silvereye (*Zosterops lateralis tephroleurus*) and Lord Howe Pied Currawong (*Strepera graculina crissalis*) and the introduced Common Blackbird (*Turdus merula*).

Table 4 provides a preliminary summary of the actual and potential of impacts of weeds on threatened species of LHI.

**Table 4 Preliminary listing of the threatened species of LHI and the weeds that pose a risk to their status. The scientific names and status of species are given in Table 1.**

| Threatened species   | Weed risk   |
|--|---|
| Flesh-footed Shearwater<br>Black-winged Petrel<br>Little Shearwater<br>Red-tailed Tropicbird         | Bitou Bush, Bridal Creeper ( <i>Asparagus asparagoides</i> ) and Ground Asparagus smothering burrows;<br>Entrapment of birds by African Boxthorn and Climbing Asparagus |
| Lord Howe Woodhen  | Breeding and foraging habitat at risk from ground-covering weeds, including Ground Asparagus and Climbing Asparagus; entrapment by Leaf Cactus                          |
| Lord Howe Island Morning Glory (southern mountains and Old Settlement)                               | Crofton Weed ( <i>Ageratina adenophora</i> ) in the southern mountains and Kikuyu ( <i>Pennisetum clandestinum</i> ) in Old Settlement                                  |
| Lord Howe Island Broom<br>Mountain Xylosma<br>Hutton's Geniostoma<br><i>Coprosma</i> sp. nov. [rare] | Competition from dense thickets of Cherry Guava, Crofton Weed and Ground Asparagus (Figure 23)  |
| Knicker Nut  | Competition from Buffalo Grass ( <i>Stenotaphrum secundatum</i> ) and invasion from asparagus weeds   |
| Sand Spurge  | Smothering from Bitou Bush and <i>Scaevola calandulacea</i> (an introduced Australian native)   |
| Small-leaved Currant Bush<br>Rock Shield Fern  | Ground Asparagus invasion of rock outcrops and cliff-lines  |
| Phillip Island Wheat Grass   | Ground Asparagus, with lesser threat from annual grasses and broad-leaved weeds   |
| Lord Howe Silvereye<br>Lord Howe Pied Currawong<br>Lord Howe Golden Whistler                         | All weeds, resulting in simplification of plant community composition resulting in loss of biotic interactions and seasonality of food resources                        |
| Lord Howe Island Phasmid on Balls Pyramid  | Coastal Morning Glory ( <i>Ipomoea cairica</i> ), smothering the main food tree of the Phasmid (Tea Tree <i>Melaleuca howeana</i> ) and preventing its                  |
| Gnarled Mossy Cloud Forest EEC   | Cherry Guava and Ground Asparagus found in proximity and at elevation in the southern mountains (Figure 23)   |
| Sallywood ( <i>Lagunaria Patersonia</i> ) Closed Swamp Forest EEC                                    | Coastal Morning Glory and all other weeds   |

Most of the weeds targeted for management on LHI can form dense thickets or monocultures and would eventually out-compete and exclude native plant species if left unchecked. The diversity of the life-forms of introduced weeds on LHI (vines, herbaceous and ground layering plants, shrubs, trees and epiphytes) increases the impact on the island's ecology as they can occupy and overwhelm all strata of a native plant community. Further, the invasion of multiple weed species can also have a compound impact on habitats and, over time, may eventually dominate and replace native vegetation.

Some vegetation communities, such as *Howea* forest (DECC 2007), show a degree of resilience to weed invasion, but all habitats are known to be at risk. The two most abundant

weed species – Cherry Guava and Ground Asparagus – are recorded from 165 and 192 weed blocks respectively, the area of the blocks covering an area of 1064 ha (73% of the island area) and 1018 ha (70% of island), demonstrating their island-scale invasive range.

## 2.6 Weeds targeted for management on Lord Howe Island

The invasive weed species targeted for active management or eradication on LHI are species recognised under a range of international, national, state or other listings of invasive species. These invasive species listings are summarised in Table 5, and discussed in more detail below.

**Table 5 Classification of weed species targeted for eradication or control on LHI under broader categories of weeds at federal, state or other levels. Details of each category are provided below.**

| Invasive weed recognition group or listing   | Number of plant species |
|--|-------------------------|
| Australian Weeds of National Significance (WoNS)   | 11                      |
| National Environmental Weeds Alert List  | 3                       |
| World's 100 Worst Invasive Alien Species   | 4                       |
| Declared weeds under the NSW <i>Noxious Weeds Act 1993</i>   | 68                      |
| NSW Regional and State High-Priority weeds   | 14                      |
| Native Australian plants not indigenous to LHI (i.e. introduced to LHI) that have spread or which are showing invasive characteristics | 23                      |
| Recognised Sleeper Weeds or introduced ornamental plants with invasive characteristics   | >20                     |

**Weeds of National Significance (WoNS)** are regarded as among the worst weeds in Australia and require national effort owing to their degree of invasiveness, potential for spread, and their social, economic or environmental impacts in at least two Australian states or territories. Management of these weeds must also benefit from national coordination (see [www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/wons.html](http://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/wons.html)). Of the 32 listed WoNS, 11 occur, or formerly occurred, on LHI. All WoNS that occur on LHI are identified for eradication.

The **National Environmental Weeds Alert List** outlines non-native plant species in the early stages of establishment that have the potential to become a significant threat to biodiversity if not managed. The National Environmental Weeds Alert List currently identifies 28 species that have established naturalised populations in Australia and have the potential to become a significant threat to biodiversity (see <http://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/alert.html>). Three species are, or were, recorded on LHI: Glory Lily (*Gloriosa superba*), Leaf Cactus and Tipuana (*Tipuana tipu*; now eradicated).

The list of the **World's 100 Worst Invasive Alien Species** (Lowe *et al.* 2004; ISSG 2013; see <http://www.issg.org/database/welcome/>) lists invasive pest animals and weeds considered among the worst on the planet. Four species from this list occur on LHI: Cherry Guava, Ginger Lily (*Hedychium gardnerianum*), Singapore Daisy (*Sphagneticola trilobata*) and Giant Reed (*Arundo donax*).



**NSW Noxious Weeds Act 1993.** Currently, 68 invasive weed species declared under this Act occur on LHI and are targeted for eradication (see section 2.7, following).

**Regional and State High-Priority Weeds.** The NSW Natural Resource Commission undertook a review of weed management in NSW (Natural Resource Commission 2014) and identified 22 extreme- to high-priority invasive weed species that posed a threat to biodiversity in NSW, most of which are declared noxious weeds. Of these 22, 14 occur on LHI and are listed for eradication.

**Native Australian plants.** A number of plants native to the Australian mainland but not indigenous to LHI have been introduced and have spread across the island. In order of numbers of individuals removed on LHI they are: Sweet Pittosporum (*Pittosporum undulatum*), Silky Oak (*Grevillia robusta*), Umbrella Tree (*Schefflera actinophylla*), Flame Tree (*Brachychiton acerifolius*), White Cedar (*Melia azedarach* var. *australasica*) and Purple Cherry (*Syzygium paniculatum*). Other Australian plant species targeted for removal include some that occur in small numbers, including Bower Vine (*Pandorea jasminoides*) and Red Cedar (*Toona ciliata*), or that may hybridise with endemic species, for example the King Orchid (*Dendrobium speciosum*).

**Sleeper weeds** are introduced plants that have naturalised and have the potential to form large and widespread populations, but have not yet done so (Groves *et al.* 2005). Such plants can appear benign for many years, but may suddenly spread rapidly and widely, and can include ornamental plants that have long been grown in gardens and that may suddenly become environmental weeds. Such a transformation can result from changing climatic conditions, introduction of new non-sterile material, the appearance, development or introduction of a dispersal vector (spread mechanism) or pollinator, or changes in horticultural or agricultural practices. Sleeper weeds are often not recognised as significant problems until their impact becomes evident (see <http://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/sleeper.html>).

## 2.7 Declared weeds on Lord Howe Island

The *NSW Biosecurity Act 2015* is due to subsume the *NSW Noxious Weeds Act 1993* and the associated Noxious Weeds (Weed Control) Order 2014 (NSW Government 2014) (as well as the *TSC Act* and *Plant Diseases Act 1924*; see Table 2). Under the new legislation, management of declared species will be referred to as a General Biosecurity Duty (GBD). LHI is a proposed biosecurity zone under the new Act (NSW Government 2015). However, until the undertakings and responsibilities of the new legislation and their application to LHI are known fully, the *NSW Noxious Weeds Act 1993* continues to apply (as does other legislation, plans and strategies outlined in Table 2).

Under the *Noxious Weeds Act 1993*, declared weeds are those plants that have the potential to cause harm to the economy, environment, community and individuals, can be controlled by reasonable means and have the potential to spread within an area and to other areas. The Noxious Weeds (Weed Control) Order 2014 (NSW Government 2014) lists all weeds declared noxious in NSW, their class (five classes of noxious weeds are defined) and the area to which the order applies. Noxious weeds are declared for a Local Control Authority (LCA) area or state-wide. A LCA has a responsibility for inspections and enforcement on private lands as well as control of noxious weeds on their own lands; the LCA for LHI is the LHIB. Declared noxious weeds require all-tenure management in accordance with the Act.

The NSW Weed Risk Management (WRM) system is used to evaluate noxious weed declarations and to guide weed management practise. The NSW WRM system uses a series

of questions to arrive at a score for weed risk (invasiveness, impacts, potential distribution) and feasibility of coordinated control (control costs, persistence, current distribution) (refer to [dpi.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0004/279958/INT09-54079-revised-Weed-Risk](http://dpi.nsw.gov.au/__data/assets/pdf_file/0004/279958/INT09-54079-revised-Weed-Risk)).

Currently, 68 weed species declared under the Noxious Weeds (Weed Control) Order 2014 (NSW Government 2014) occur on LHI and all are targeted for eradication (Table 6, Appendix 1). Although management of these species may seem an onerous task, 40 of these species have, or had, only small populations (<1000 individuals on the island) or restricted distributions at a limited number of sites, mainly close to the Settlement. Weed management since 2004 has reduced the density and distribution of all of these species (LHIB 2016). Continued management with early intervention for these species will further reduce their impacts and the costs of management.

NSW legislation relating to weeds provides a regulatory basis to enable the management of high-risk species. However, before legislative action, it is preferable to firstly raise awareness with leaseholders to undertake the removal of potentially harmful plants before they spread.

**Table 6 Summary of declared noxious weeds on LHI and eradication targets. Note that weed populations have been significantly reduced during the 10 years of the Weed Eradication Program and populations are lower than indicated for targeted weeds below; the residual populations are being determined.**

| Declared noxious weeds on LHI   | Number of species |
|---|-------------------|
| Declared noxious weeds specified for LHI LCA area   | 68                |
| NSW state-declared weeds, not recorded on LHI   | 87                |
| Distribution of declared weeds targeted for <i>eradication</i> on LHI   |                   |
| Species targeted for eradication with 13,000–700,000 plants removed to 2014 (classified as Common and Widespread to Localised) – Settlement and PPP | 10                |
| Species targeted for eradication with >1000 to <2000 plants removed to 2014 (classified as Occasional to Uncommon) – Settlement and PPP             | 18                |
| Species targeted for eradication with <1000 individuals removed to 2014 (classified as Uncommon) – Settlement only                                  | 40                |
| <b>Total</b>  | <b>68</b>         |



The team involved in the Cherry Guava chain-sawing days (2005). The team here includes staff of the LHIB and New Zealand Department of Conservation (NZDOC) and volunteers.



### 3 The 2006 Lord Howe Island Weed Management Strategy

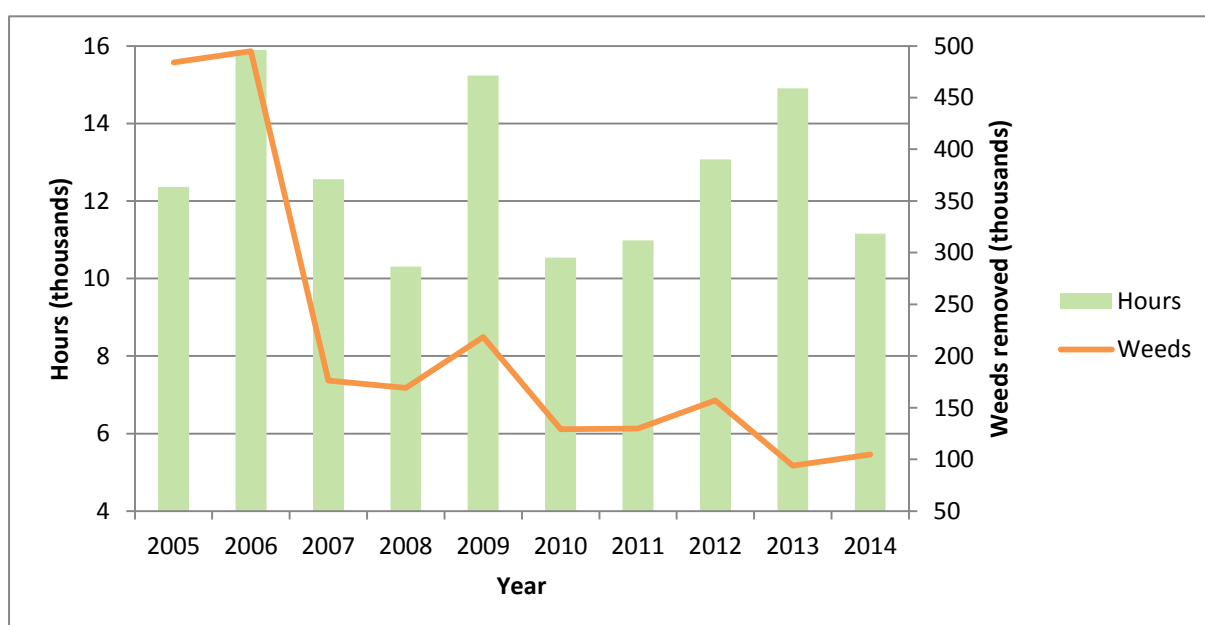
Since 2004 the LHIB has been implementing the Weed Eradication Program, applying a systematic repeated grid-search and treatment effort across the island, aiming to treat priority weed blocks every 24 months to remove ecosystem-transforming invasive weed species (LHIB 2006). This program also applied a time driven approach to weed grid-search effort and strict data collection and data management systems. A multispecies approach was adopted to avoid only removing one serious weed to be replaced by another serious weed.

The LHI WMS 2006 (LHIB 2006) forecast a 30-year time-frame to achieve the eradication of 25 target invasive weed species across the island. Seven main agencies have funded the LHI Weed Eradication Program, collectively contributing more than \$6.4 million dollars over the 10-year period (LHIB 2016).

#### 3.1 Measuring progress towards eradication

The Weed Eradication Program has achieved significant results, reducing the abundance and distribution of highly invasive weeds over the past 10 years as reported in the *Lord Howe Island Weed Eradication Program – Results 2004–2014* (LHIB 2016). The results were quantified through collection of data, analysis of the numbers of target weeds counted and removed between first and last treatments, and comparison of mapping of weed density and distribution done in 2002–03 and 2013–14 through (LHIB 2016).

Within the PPP, there has been a reduction of 80% of weed plants of all life-stages (seedlings, and juvenile and mature plants) and a reduction of 90% of mature plants (LHIB 2016; Figure 3). The top 10 weeds on LHI, based on the total number of individuals removed over the ten years 2004–14, are listed in Table 7. Six species of invasive weed with restricted distributions are considered eradicated (LHIB 2016; Table 8).



**Figure 3** Hours of search effort and total counts of target weeds removed from 2005 to 2014. A strong downward trend in weed numbers is evident. The hours of search effort per year and numbers of weeds removed is a function of funding inputs; a stronger downward trend could have been achieved with consistent funding to maintain annual search effort (15,000 hours per year) and with no other setbacks. (Source: LHIB 2016.)

**Table 7 The 10 most abundant weed species on LHI in terms of numbers removed over the decade 2004–14, and the area of occupancy (the sum of the area of all blocks in which a weed is detected, not actual area of weed infestation).**

| Weed species  | Number of plants removed | Area (ha) |
|---|--------------------------|-----------|
| Cherry Guava ( <i>Psidium cattleianum</i> var. <i>cattleianum</i> )       | 704,266                  | 1064      |
| Ground Asparagus ( <i>Asparagus aethiopicus</i> )                         | 665,831                  | 1018      |
| Ochna ( <i>Ochna serrulata</i> )  | 485,168                  | 648       |
| Bridal Creeper ( <i>Asparagus asparagoides</i> )                          | 110,794                  | 328       |
| Sweet Pittosporum ( <i>Pittosporum undulatum</i> )                        | 84,729                   | 394       |
| Climbing Asparagus ( <i>Asparagus plumosus</i> )                          | 53,840                   | 260       |
| Cotoneaster ( <i>Cotoneaster glaucophyllus</i> )                          | 26,211                   | 266       |
| Glory Lily ( <i>Gloriosa superba</i> )                                    | 13,655                   | 55        |
| Night Jasmine ( <i>Cestrum nocturnum</i> )                                | 13,380                   | 81        |
| Bitou Bush ( <i>Chrysanthemoides monilifera</i> subsp. <i>rotundata</i> ) | 3,459                    | 215       |

**Table 8 Invasive weeds considered eradicated from LHI.**

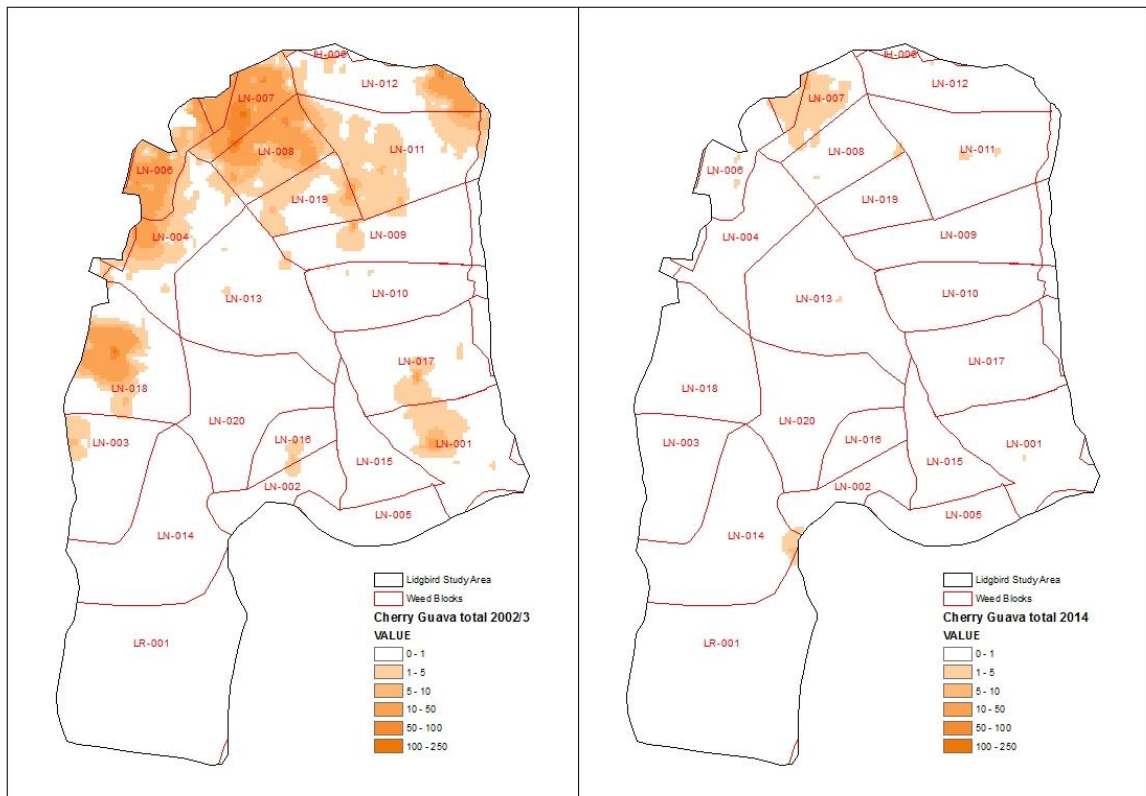
| Weed species   | Plants removed |
|--|----------------|
| Cat's Claw Creeper ( <i>Dolichandra unguis-cati</i> )        | 25             |
| Cocos Palm ( <i>Syagrus romanzoffiana</i> )                  | 3              |
| French Broom ( <i>Genista monspessulana</i> )                | 1              |
| Potato Vine ( <i>Solanum wendlandii</i> ) (not Madeira Vine) | 1              |
| Turkey Rhubarb ( <i>Acetosa sagittata</i> )                  | 1              |
| Tipuana ( <i>Tipuana tipu</i> )                              | 1              |

Another measure of success is to compare the number of weeds intercepted per hour by a weeder. Comparing first treatment in blocks in 2005 to treatment in 2014 (across similar extent of terrain), the number of Cherry Guava intercepted per hour (all life-stages) has declined from 22 plants per hour to 1.06 plants per hour, a 95% reduction.

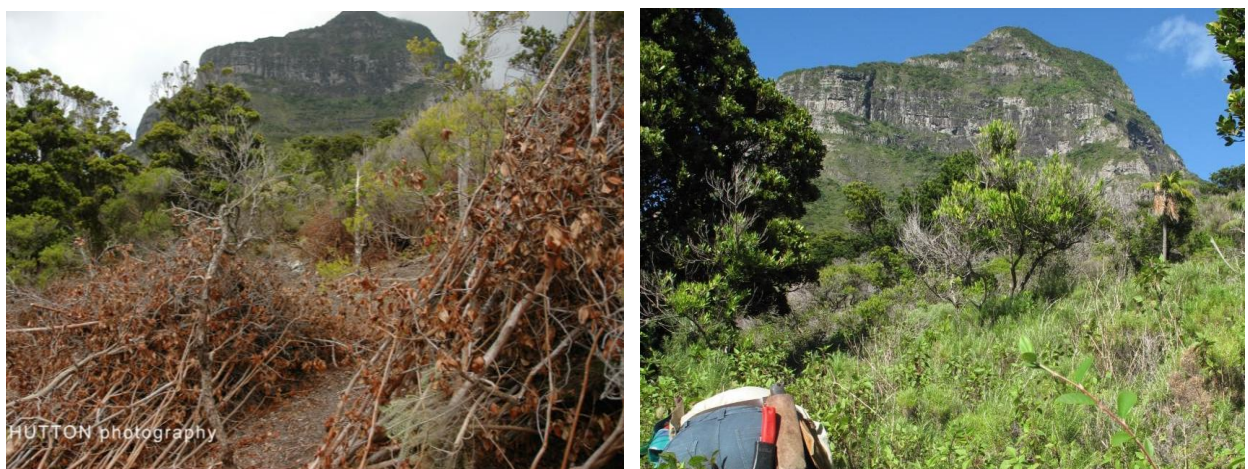
### Successful weed management: Cherry Guava and Ground Asparagus

Cherry Guava, the most abundant weed on LHI, where first recorded in 1898, has been removed from 165 weed management blocks across 1064 ha of the island (Figure 4, Figure 5, Figure 23), and Ground Asparagus, the second most abundant weed on LHI and first recorded in 1930, has been removed from 192 weed management blocks across 1018 ha (Figure 6, Figure 7; see Table 7). Both species have demonstrated island-scale invasiveness on potential and cumulative biodiversity impacts, occupying a range of strata from the ground to the tree layer. Despite being present on LHI for 32 years or less, the invasion range of Ground Asparagus matches that of Cherry Guava (Bower 2016).

The scale of the numbers of weeds removed to do indicates the extent of the threat to the ecosystems of LHI and the importance of continuing the effort to contain and eradicate them. In total, over 2 million individual weeds have been removed from habitats across LHI (LHIB 2016). The outcomes achieved over the past decade have improved the feasibility for eradication of priority species.



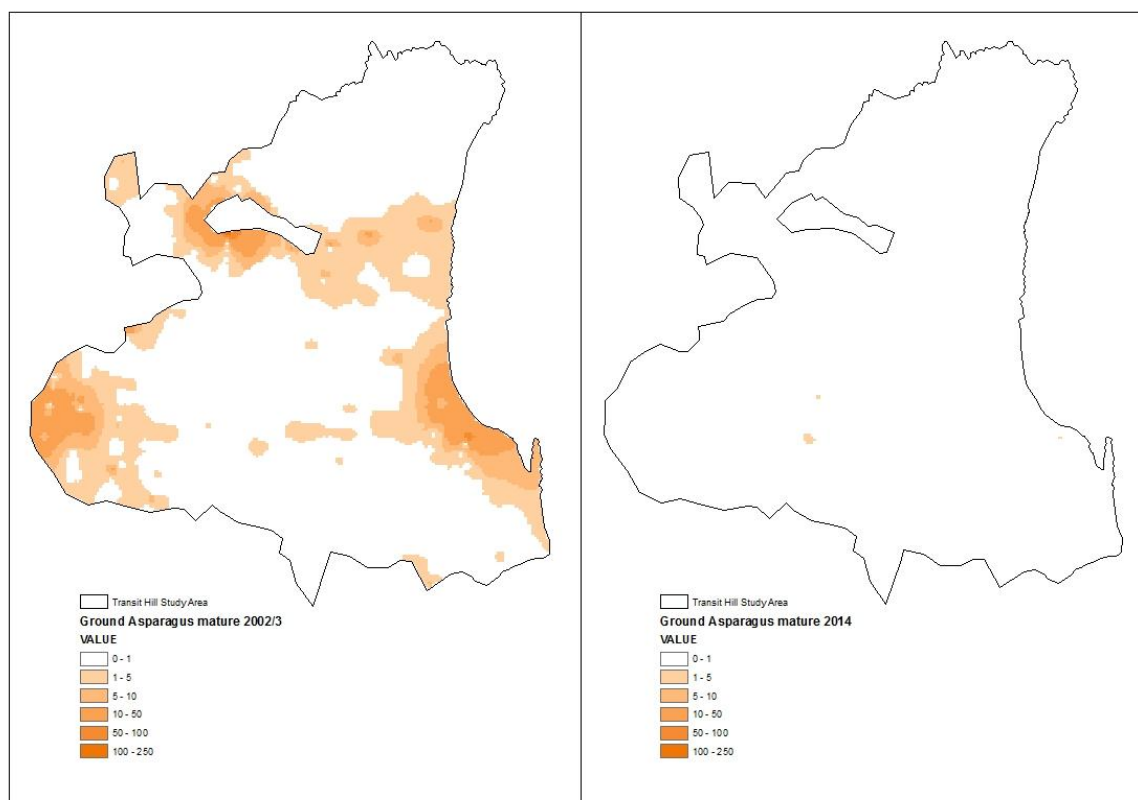
**Figure 4** Changes in the density and distribution of Cherry Guava from the Lidgbird North weed management landscape unit between 2002–03 and 2013–14. Individuals remaining in 2014 are mainly juvenile plants.



**Figure 5** Weed management block LN007 in the northern portion of the Lidgbird North landscape unit with piles of chain-sawed Cherry Guava in 2005 (left; Photo I. Hutton) and during follow-up for residual weeds in 2010 (right).



The LHI WMS (LHIB 2006) identified 25 species as priorities for eradication, all but two of which remain the focus of eradication effort. The remaining two – Mauritian Hemp (*Furcraea foetida*) and Sea Spurge (*Euphorbia paralias*) – are treated as control targets as, firstly, they are not declared weeds (so their control across all tenures is not mandatory) and, secondly, it is not considered feasible to eradicate Sea Spurge as it will continue to be dispersed to LHI through sea-drift.



**Figure 6** Changes in the density and distribution of mature Ground Asparagus from the Transit Hill landscape unit between 2002–03 and 2013–14. The area has received repeat follow-up for juvenile plants.



**Figure 7** Weed management block TH025 in the Transit Hill landscape unit before treatment, in 2011 (left), and after treatment in 2016 (right). Ground Asparagus, which was formerly common and widespread, is now uncommon owing to weed management effort.

Under Noxious Weeds (Weed Control) Order 2014 (NSW Government 2014) additional weeds were declared in a bid to allow early intervention for weeds that had escaped into the PPP and to enable an all-tenure approach to management.

Removal of outliers (nascent foci of Mack & Lonsdale 2002) is needed to prevent a build up of populations in the areas where they occur, especially in remote and rugged terrain. . Failure to deal with outlier weeds will compromise weed management and eradication success, and outlier weeds need to be a priority for management. Invasive weed populations have significantly reduced in extent on LHI, yet they still pose a risk to the environment until they are completely removed or contained. The outcomes achieved over the past decade have improved the feasibility of this for the diversity of weed species on LHI.

Weed eradication programs often require 10 or more years to achieve their objectives and may require a period of gradual elimination to precede eradication (Holloran 2006). This is relevant for LHI given the prior scale of abundance and distribution of ecosystem-transforming weed species. However, the significant progress made can be measured in the great reduction in the number of mature plants, delimitation of the extent of infestation, and containment and extirpation of seed-banks (Panetta 2007). The LHI program has not reached the stage of extirpation of seed-banks (island-scale) as mature weeds are still present in the landscape, but mature plants have already been reduced by 90% since commencement of the program.

## How are we planning to manage weeds on Lord Howe Island?

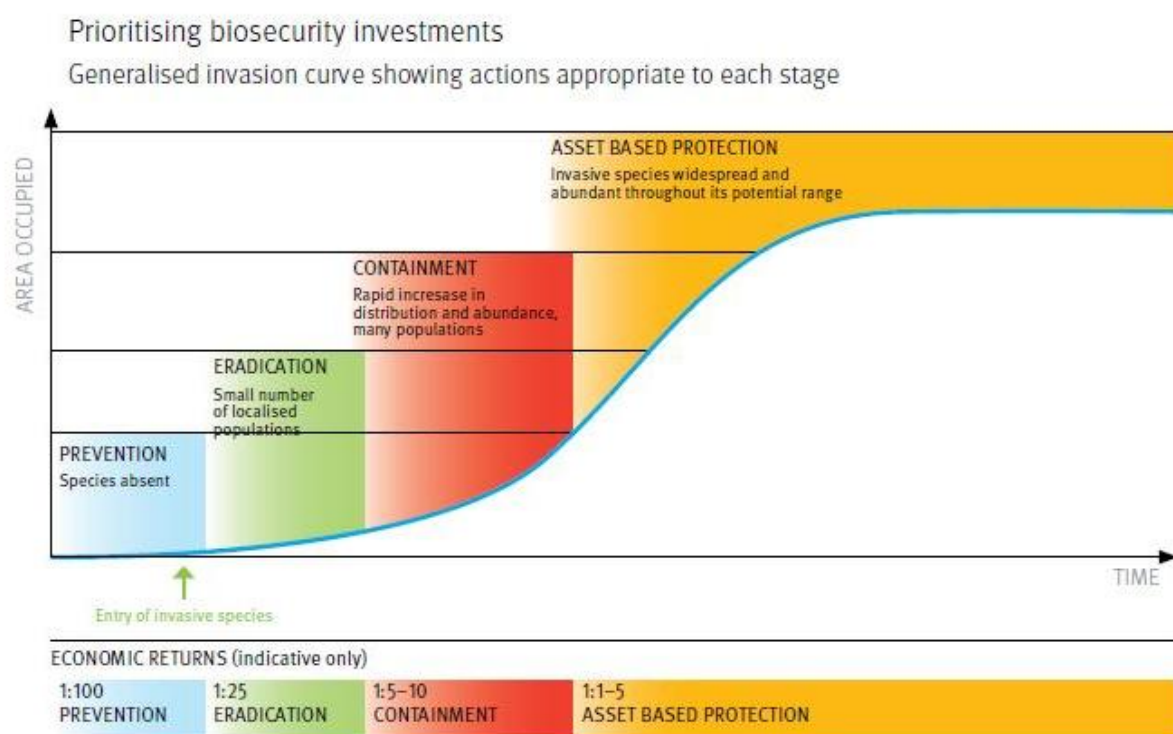


**Cherry Guava at Stevens Reserve in the 1990s. Cherry Guava is now hard to find on LHI as a result of the past 10 years of island-scale search and removal of weeds.**



## 4 Weed management on islands

The management of weeds, on island and mainland environments, requires an assessment of the ecological and economic threat presented by a weed invasion, the stage of invasion and the implementation of management strategies appropriate to these factors. Figure 8 illustrates schematically the various stages of weed invasion, the strategies to be adopted and an indicative economic cost–benefit of control.



**Figure 8** The invasive species curve showing management actions appropriate to each stage of invasion. (From NSW Biosecurity Strategy 2013–2021, DPI 2013.)

### Prevention

The most cost-effective mechanism for managing the threat of weeds is to prevent the introduction of invasive weeds (DPI 2013; Figure 8). To address this approach, the importation of invasive weed species is prohibited under the *LHI Act* and Lord Howe Island Regulation 2014 (see [www.legislation.nsw.gov.au/regulations/2014-497.pdf](http://www.legislation.nsw.gov.au/regulations/2014-497.pdf) [accessed 8 Nov 2016]), with details explained in the Plant Importation Policy 2014 (LHIB 2014). The importation of plant species new to LHI requires a weed risk assessment (WRA) to screen the invasive potential of the plant and the potential threat to the island, both in the short and long term. The Plant Importation Policy 2014 for LHI adopted the WRA methodology of Pheloung (1995). Under a WRA, plants are assessed as approved or rejected for importation, or require further information before an assessment is finalised. The WRA is a consistent, partially quantitative, question-based screening system that considers the biogeography of a plant, and its historical, biological and ecological characteristics. An informed WRA may take up to two days to complete, requiring searches of weeds databases and summaries of knowledge of the ecological and reproductive traits of the plant species.



## Eradication, Containment and Asset-based protection

The feasibility of eradicating a weed species is a significant consideration in determining current and future management priorities. Although adequate funding is a key component of effective weed management and eradication, the feasibility of eradication must be based on a range of criteria including life-traits, biology and ecology, distribution of the weed species, and management regimes (Gherardi and Angiolini 2004; Pannetta & Timmins 2004; Panetta 2007; Panetta *et al.* 2011, Parks & Wildlife Service 2014). Criteria associated with weed eradication are summarised in Table 9.

**Table 9 Criteria likely to lead to successful eradication of weed species (based on Gherardi and Angiolini 2004; Pannetta & Timmins 2004; Panetta 2007; Panetta *et al.* 2011, Parks & Wildlife Service 2014).**

| Biological characteristics and life-history traits  |
|---|
| Easy to detect or identify at all life-stages (in differing vegetation types)   |
| Responds to control treatments – all reproductive individuals must be at risk of effective treatment                              |
| Target species can be detected at low densities   |
| Immigration is zero   |
| Long juvenile periods with low rates of persistence in seed-banks   |
| Management considerations   |
| Suitable socio-political environment and community support for the program  |
| Effective organisation and operational structure  |
| Committed funding and on-going financial support, until eradication end-point   |
| Cost effective – discounted benefit:cost analysis favours eradication over control  |
| Species prohibited from re-introduction with sufficient barriers and effective quarantine in place                                |
| Ability to gain access – target species can be logistically removed from all areas  |
| Implementation team highly capable and motivated, dedicated to applying program methodology and committed to the eradication goal |
| The rate of removal can exceed the rate of reproduction   |

Where eradication is not considered feasible, strategies of containment or asset-based management are needed.<sup>1</sup> These strategies require ongoing inputs compared with the end-point that is achieved through eradication (Grice *et al.* 2012). Weed management categories are more fully described in Section 6, and species assigned to each category are listed in Appendix 1.

The LHI WMS 2006 (LHIB 2006) projected a 30-year time-frame with the aim of applying sufficient resources to eradicate or contain widely dispersed, ecosystem-transforming weed species and introduced species in the early stages of establishment. The LHI WMS aimed to reverse the invasive trends of weeds and to eradicate species entirely where possible.



In a mainland environment, the sheer extent and diversity of invasive weeds present on LHI before 2004 may have been subject to containment<sup>2</sup> or asset-based protection management owing to the likelihood of low returns on the investment in weed management (e.g. Pannetta *et al.* 2011). In a mainland situation, eradication may be less feasible owing to uncertainty of the species invasive range and likelihood of re-invasion from adjacent areas. LHI, owing to its geographical distance from the mainland (more than 550 km of ocean to nearest point), small size (1455 ha), limited entry points, and increasing biosecurity awareness and restrictions on imports, provides an opportunity for an effective island-wide approach to the eradication of weeds.

The weed species identified for **eradication** on LHI are:

- those species for which eradication is considered feasible given the life-history traits of the species, adequate resourcing and technical applications; or
- those species that, by failing to eradicate them, will continue to seriously endanger the island's ecosystems, threatened native species, human health or economy.

Eradication of high-priority invasive weeds on LHI is considered to be a better investment (cost–benefit) compared to an ongoing control program in which the island's World Heritage values would remain at ongoing risk from invasive weeds. Compared with an eradication program, which aims to provide long-term protection of the ecological assets of LHI from weed reinvasion, a control program provides only a limited insurance policy.

The economic returns on the investment in the LHI Weed Eradication Program may not be fully realised until the program reaches its 20<sup>th</sup> or 30<sup>th</sup> year. However, the results achieved over the past decade have greatly improved the weed management prospects for the next two decades. Continued investment while weeds are at low densities will drive downward trends in density and distribution of weeds, the elimination of remaining mature weeds, further depletion of weed seed-banks, and will maximise the benefits of investments made to date and improve the feasibility of eradication.

Further, the continuation of island-scale weed eradication will address the risk of weed populations rebounding following the proposed eradication of exotic rodents (Lord Howe Island Rodent Eradication Program; see

<http://www.lhib.nsw.gov.au/environment/environmental-programs/rodent-eradication>

[accessed 8 Nov 2016]). The NZDOC weed-management program on Raoul Island reported increased regeneration success of target weeds after the eradication of rodents (West 2002). Other benefits of reducing invasive weeds on LHI include improved ecosystem resilience in the event of spread of a plant pathogen.

The implementation of this current 10-year Weed Management Strategy and continuation of the Weed Eradication Program will have multiple benefits in protecting and maintaining the integrity of threatened and endemic plant and animal species and their habitats over the long term. The significant reduction in weed densities and distributions over the 10 years 2004–14 has increased the feasibility of achieving the goals of the WMS. However, the most abundant and widespread weed species (e.g. Cherry Guava and Ground Asparagus), will require ongoing suppression to approach or achieve eradication in the next decade or two. The smaller populations of localised weeds species (estimated up to 30 species), initially limited in occurrence or depleted due to search effort are likely to reach an eradication end-point in the coming decade.

---

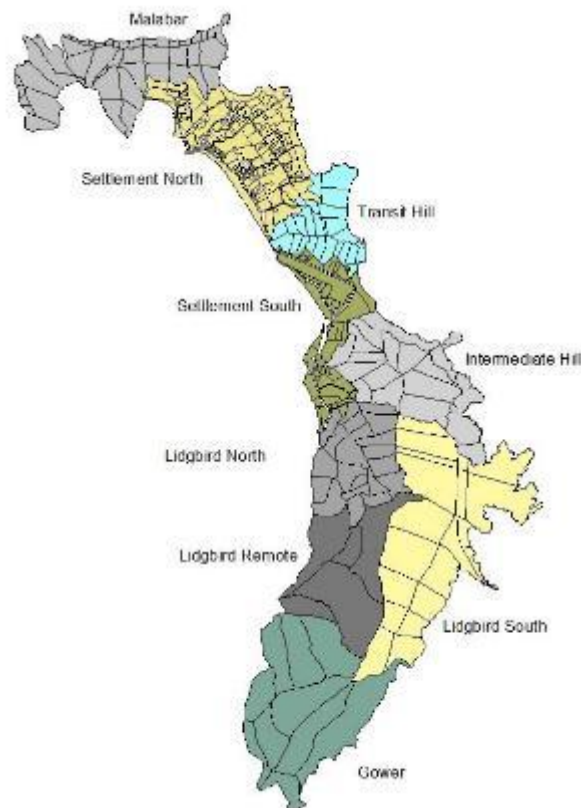
<sup>2</sup> Containment also describes the phase of an eradication program whereby no new mature weed plants are found, there is no new seed-set and the extent of the infestation is delimited (Figure 13).

## 5 Weed eradication methodology on Lord Howe Island

The methodology of the LHI Weed Eradication Program (LHIB 2006, 2016) was developed from the Raoul Island Weed Eradication Program managed by the New Zealand Department of Conservation (NZDOC) as part of its island conservation programs (West 2002). This methodology is considered best practise for LHI (Le Cussan 2004a, 2004b; LHIB 2006).

For the management and eradication of weeds on LHI, the entire 1455 ha of the island has been divided into nine landscape units (Figure 9), as follows:

- Malabar (191 ha)
- Settlement North (186 ha)
- Transit Hill (83 ha)
- Settlement South (92 ha)
- Intermediate Hill (170 ha)
- Lidgbird North (129 ha)
- Lidgbird Remote (155 ha)
- Lidgbird South (309 ha)
- Gower (255 ha)



**Figure 9 Map of LHI landscape units and weed management units.**

These units are further divided into a total of 395 weed management blocks, which are based around terrain, tracks or leasehold boundaries (Figure 9).

Of the 1455 ha of island, 1024 ha of terrain with known weed infestations is a priority for on-ground, grid-based weed search and removal (unshaded areas in Figure 10). This excludes 160 ha of leasehold land within the Settlement (being the responsibility of leaseholders) and 271 ha of remote terrain that is assumed to be largely or wholly weed free (determined by planned and incidental surveillance, on ground and by air, and in consideration of current invasive range of known weed species) (shaded areas in Figure 10). There is approximately 34 km of cliff-line with 12 km of that known to have infestations of target weeds.

### 5.1 Weed search, treatment and data recording

The LHI Weed Eradication Program is a multispecies program combining search and control, with all target weeds removed progressively as they are detected in a block. The procedure aims to detect, and remove, all mature plants in the early stages of the Weed Eradication Program to prevent fruiting, or further fruiting, and the spread of seeds and to then, during

follow-up grid-searches, detect and remove all missed plants, seedlings and re-shooting plants before they are able to mature and set fruit. This process eventually depletes seed-banks to deliver eradication.

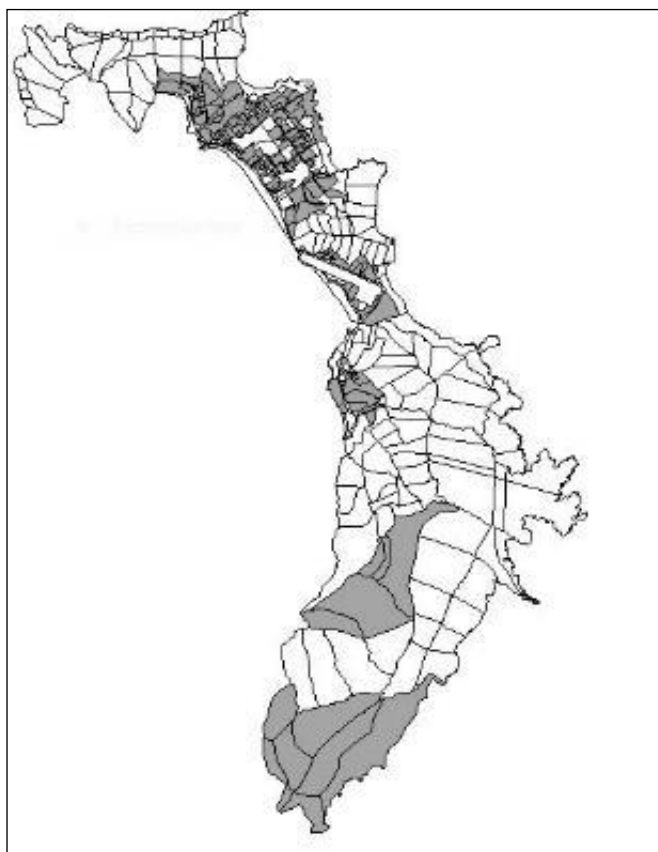
Optimally, all weed management blocks on LHI need to be searched and all target weeds removed every 24 months. A target of 500 ha of on-ground search effort every 12 months is needed to treat an area of 1000 ha every 24 months. The 24-month search cycle is based on the life-history traits of the commonly encountered and broadly dispersed invasive weeds on LHI, with most requiring 3–4 years to reach reproductive maturity and having a short-term seed-bank persistence (1–5 years; Kleyer *et al.* 2008). However, the search-cycle relies on quality of search effort to avoid missing early stage and residual mature weed plants. Yearly search effort can be applied given adequate funding but such a timeframe may not be effective in detecting seedlings or allow sufficient time for soil seed-banks to germinate, but will assist in detection of missed juvenile and mature plants. Equally, analysis of the LHI Weeds Database shows that a 36-month treatment cycle is inadequate in suppressing weeds, particularly for Ground Asparagus, where missed juveniles in preliminary search effort can reach reproductive maturity within the 36-month interval.

The shaded zones in Figure 10 are blocks of the Settlement leases (with leaseholders having the responsibility for weed management) or remote terrain assumed to be largely weed-free and that are not priorities for search at 24-month intervals. The unshaded areas are to be completely searched over a 24-month period.

A number of weed species, including Madeira Vine (*Anredera cordifolia*), Climbing Asparagus (in former hot spots), Glory Lily and Bitou Bush, can reach reproductive capacity within one year and require annual search and treatment to prevent seed production and spread of the species. With the exception of Bitou Bush, most of these species occur in the Settlement and management is the responsibility of leaseholders. However, the LHIB provides assistance and monitors weed management through the leasehold inspection process for declared weeds.

Weed management blocks that are not trending downwards (following analysis of the LHI Weeds Database) will be subject to increased search frequency and scrutiny of search efficacy.

Each weed management block is searched systematically to ensure that all terrain is covered and target weeds both detected and removed. Systematic searches are used when working in accessible terrain or in inaccessible areas, such as cliff-lines. Where outlier weeds are



**Figure 10** LHI showing priority areas for on-ground grid-search every 24 months (white), which excludes leasehold tenure and remote terrain assumed to be largely or wholly weed free (grey shading).

detected in remote terrain, they will be treated rapidly and the location, including a dispersal buffer zone, incorporated into repeat search programs.

## Accessible terrain

Effective search effort requires all terrain to be searched in a tight grid-pattern. In accessible terrain, grid-search is undertaken with teams forming an 'emu parade' and physically walking to search and find weeds. Effective searching requires each team member to be able to overlap their area of visual search for weeds on the ground, mid strata or canopy weeds. On average this may equate to a 5 m distance between team members, but it is dictated by weed lifestage, density and density of vegetation; ultimately you need to be able to see your team member.

Currently, stringlines and flagging tape are used to delineate the edge of a sweep of search effort. Weed-search teams line up along the edge of a weed-management block and work along the boundary tape in a staggered line (emu parade) towards the end of the block. The person on the marked edge effectively leads the team. The weeder on the opposite end of the team deploys a stringline that delineates the next edge of search effort. The team leader retrieves the set stringline and progressively leads a new run of search effort while the person at the outer end of the search line deploys a new stringline. This is repeated until the weed management block has been fully searched and treated. Weed search and treatment is recorded using a global positioning system (GPS) to enable accurate mapping and review of treatment areas.

## Remote or cliff terrain

To detect and remove weeds in remote terrain or other areas that are difficult or impossible to reach on the ground, it is necessary to use technical methods, such as rope access systems or helicopter winching, or to use aerial equipment, such as helicopter lance-spray programs.

**Rope access or work positioning systems** (rope systems that are set up to enable safe access and prevent fall from a height) are needed to search for and remove weeds in the areas that fall between the areas readily accessible for on-ground grid-search effort and those areas searched and treated by aerial methods. The areas require a means of attachment to improve safety and quality of search effort.

Two **helicopter programs** are required annually to deal with different weed species and to work around seasonal constraints such as seabird breeding periods.

- **Helicopter winch programs** need to be undertaken annually to search for Cherry Guava in steep and remote terrain in the southern mountains. This work needs to be undertaken outside the breeding period of Providence Petrels (*Pterodroma solandri*; September to the end of February).
- **Helicopter lance-spray programs** (Figure 11) are required to complete surveillance and treatment of Bitou Bush and Ground Asparagus and to continue to treat established infestations in the northern hills. The heli-lance spray apparatus has a 200-litre capacity, which is critical for reducing large weed infestations within a short period. Ideally, this work needs to be undertaken between June and mid-August to avoid breeding by migratory seabirds (Sooty Terns *Onychoprion fuscata* and Red-tailed Tropicbirds *Phaethon rubricauda*).

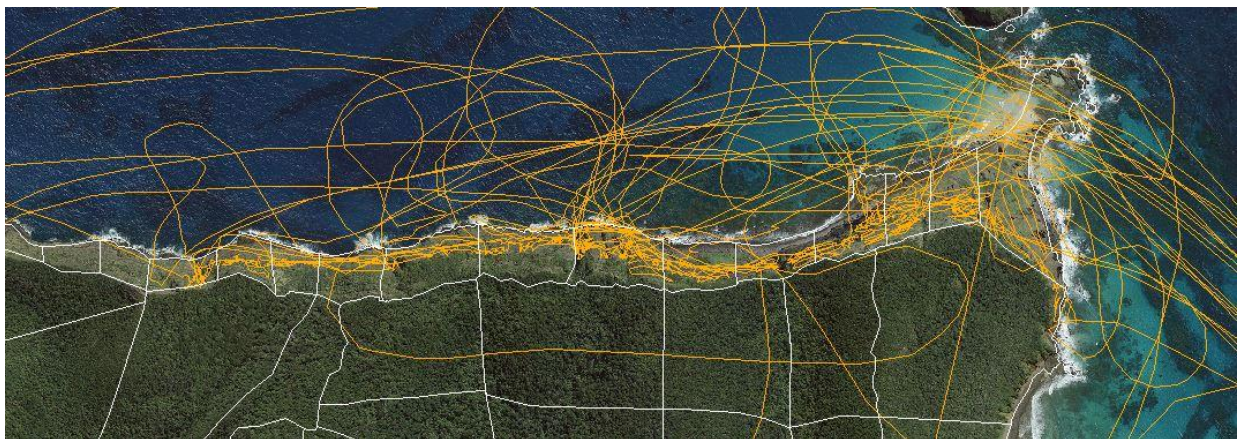
**Unmanned Automated Vehicles (UAV, or drones) and Herbicide Ballistic Technology (HBT)** applications are being developed for surveillance and treatment of weeds in remote areas. Infestations of Bitou Bush on cliff-lines need to be treated every 12 months. These two



techniques may allow better and more efficient treatment for Bitou Bush, and reduce the search and removal effort on rope and by helicopter. These new techniques will complement current aerial applications, until cliff-line weed infestations are reduced significantly as UAVs have limited carrying capacity.



**Figure 11 Helicopter lance-sprayer in action (left) and mature Ground Asparagus on a cliff on Mt Lidgbird being precision sprayed by the lance (right); latter image from inside the cockpit.**



**Figure 12 GPS track of helicopter search and control effort during lance-spraying operations.**

## Data recording

All life-stages of all target weeds are removed during weed grid-search and treatment. Data are recorded for each life-stage of each weed species for each weed management unit, including number of hours of search effort, and numbers of plants of each stage. These data are entered into the LHI Weeds Database (Microsoft Access) program. The Weeds Database will need to be modified to allow recording the stage of maturity of weed plants (e.g. vegetative mature, in flower or in fruit); this information will be increasingly important as mature weed populations become scarce. All search effort is recorded on GPS and downloaded into a geographic information service (GIS) program for monitoring and reporting (e.g. Figure 12).

**Recording and marking isolated weed infestations or mature plants.** Isolated or mature weed infestations are recorded as a waypoint on GPS, uniquely coded and marked in the field with flagging tape. The recording and flagging of sites alerts the weed team to the former location of mature plants to increase awareness and the quality of weed search for new recruits within a 30-m radius of the site. Such sites remain labelled through the Weed Eradication Program phases until the plant is deemed eradicated in the location. For example, sites that supported a weed with seed-bank persistence of 4 years will need to be flagged for

10 years from the initial removal of a mature plant. Eventually – in the reduced-weed environment and as the eradication program reaches a monitoring phase – residual **juvenile** weeds will need to be marked and mapped to enable teams to navigate to locations.

## Weed-treatment techniques

Weeds are treated in a number of ways, including: removal by hand (crowning out or digging up); by cut, scrape and paint; scrape and paint; foliar spray using spray packs (see recommended generic weed control techniques for LHI at [www.lhib.nsw.gov.au/environment/environmental-programs/weed-eradication-program/noxious-weeds](http://www.lhib.nsw.gov.au/environment/environmental-programs/weed-eradication-program/noxious-weeds)). Other technical application are also applied by splatter gun; or applied by helicopter (lance-spray; Figure 11). All herbicide treatments are applied in accordance with product labels, Australian Pesticides and Veterinary Medicines Authority (APVMA; <http://apvma.gov.au/>) off-label permits for environmental weeds, and the LHI Pesticide Use Notification Plan 2015 (LHIB 2015a).

## 5.2 Other methods of weed management

### Biological control

Biological control is another tool in an integrated approach to weed management. Biological control agents are particularly important when eradication of weed species is not a management option, because such agents are a long-term management option that can reduce the vigour, spread and impacts of weed species. Biological control programs are largely managed by CSIRO in accordance with the *Biological Control Act 1984* (Commonwealth).

Four biological control agents are currently present on LHI, although their effects have been variable or limited so far. They are Bridal Creeper Rust (*Puccinea myrsiphylli*), Crofton Weed Stem Gall Fly (*Procecidochares utilis*), Crofton Weed Leaf-spot Fungus (*Cercospora eupatoris*) and Crofton Weed Rust (*Baeodromus eupatorii*). The latter was released on LHI in July 2016. It has been widely used on the east coast of mainland Australia where it has shown promising results (see <http://www.csiro.au/en/Biological-control/Crofton-weed>). Endemic and native plants of the family Asteraceae from LHI were tested before release to ensure they would not be affected by the release of the Rust.

A reduction in the extent and spread of Crofton Weed (*Ageratina adenophora*) on LHI will benefit agricultural land on LHI as well as aiding the protection of significant plant communities of the waterfall cliff-line and improve access and detection of target weeds. Crofton Weed also competes with the endemic and critically endangered Lord Howe Island Morning Glory (*Calystegia affinis*) in the southern mountains. It is too early to measure the success of the Crofton Weed Rust release on LHI.

Biological control agents for other weed species should be investigated, including for Wandering Trad (*Tradescantia fluminensis*), Parramatta Grass (*Sporobolus africanus*), Mother-of-millions (*Bryophyllum delagoense*), Sea Spurge (*Euphorbia paralias*) and Formosan (Tiger) Lily (*Lilium formosanum*). With the exception of Formosan Lily, effective biological agents for each of these species have already been trialled in Australia (A. Mc Connachie, personal communication, 2016).

### Detection dogs

Detection dogs are being used in other weed management programs to find small, cryptic plants, such as seedlings, that may be overlooked during human searches. However, detection

dogs are effective only when weed populations are small, when they can be used to verify eradication from an area and the quality of human search effort. Use of a multi-weed species detector dog should be considered on LHI to assist detection when weeds only exist at low densities or in seedling or juvenile stages. Weeds such as Ground Asparagus, Ochna and Cherry Guava, which can be difficult to detect when small, could be effective targets, once populations are reduced to low levels. NSW OEH has been using weed detection dogs for the Orange Hawkweed (*Hieracium aurantiacum*) eradication program (OEH 2016). The Raoul Island Weed Eradication Program managed by NZDOC has used detection dogs for management of Cherry Guava and other weed species (DOC 2015). The Raoul Island program provides a good reference point for LHI as the weed species and challenging terrain are similar.

## Genetic control techniques

The use of genetic drivers to modify weeds to reduce their vigour and spread may prove to be useful for future environmental weed management on LHI. Genetic drivers avoid the need for the use of herbicides to control invasive plant species.

Genetic drivers are developed through identifying potential weaknesses in a weed species and developing and breeding plants with these features. The modified plants are then established with the intent that they interbreed with existing weed populations and that subsequent generations of weed plants have reduced reproductive capacity, less vigour or increased vulnerability to climatic regimes or environmental stressors and, ultimately, have less environmental impact.

While strict and high-level checks and balances will be required before release of such plants on LHI, the weeds targeted should be restricted to introduced species that are not related to native and endemic plants on LHI. The technique may be particularly relevant for invasive weeds such as Panic Veldt Grass (*Ehrharta erecta*) and Ground Asparagus that have established in rugged terrain that is difficult to access.

## 5.3 Maintaining effective search effort for low-density weed populations

As weed populations are reduced, the effort required to detect individual weeds increases because plants are harder to find. Mature weed populations on LHI have been reduced by 90% across areas that have received repeated search effort, and the removal of the remaining mature plants is critical to prevent replenishment of weed seed-banks. Once all mature weeds are removed, adequate and continuous search pressure is critical to ensure juvenile weeds are removed before they mature and set fruit. It is also important to map and control isolated mature weeds to ensure repeat search effort removes any seedling recruits.

For weed management blocks that have received repeat visits and experienced a significant reduction in weed numbers, the time needed for search and treatment within blocks has not declined significantly across the island (LHIB 2016). Search effort is also not likely to reduce in future because eradication requires a sustained search effort across the entire area subject to invasion and repeat surveillance must be conducted at intervals that do not allow target species to flower or set seed.

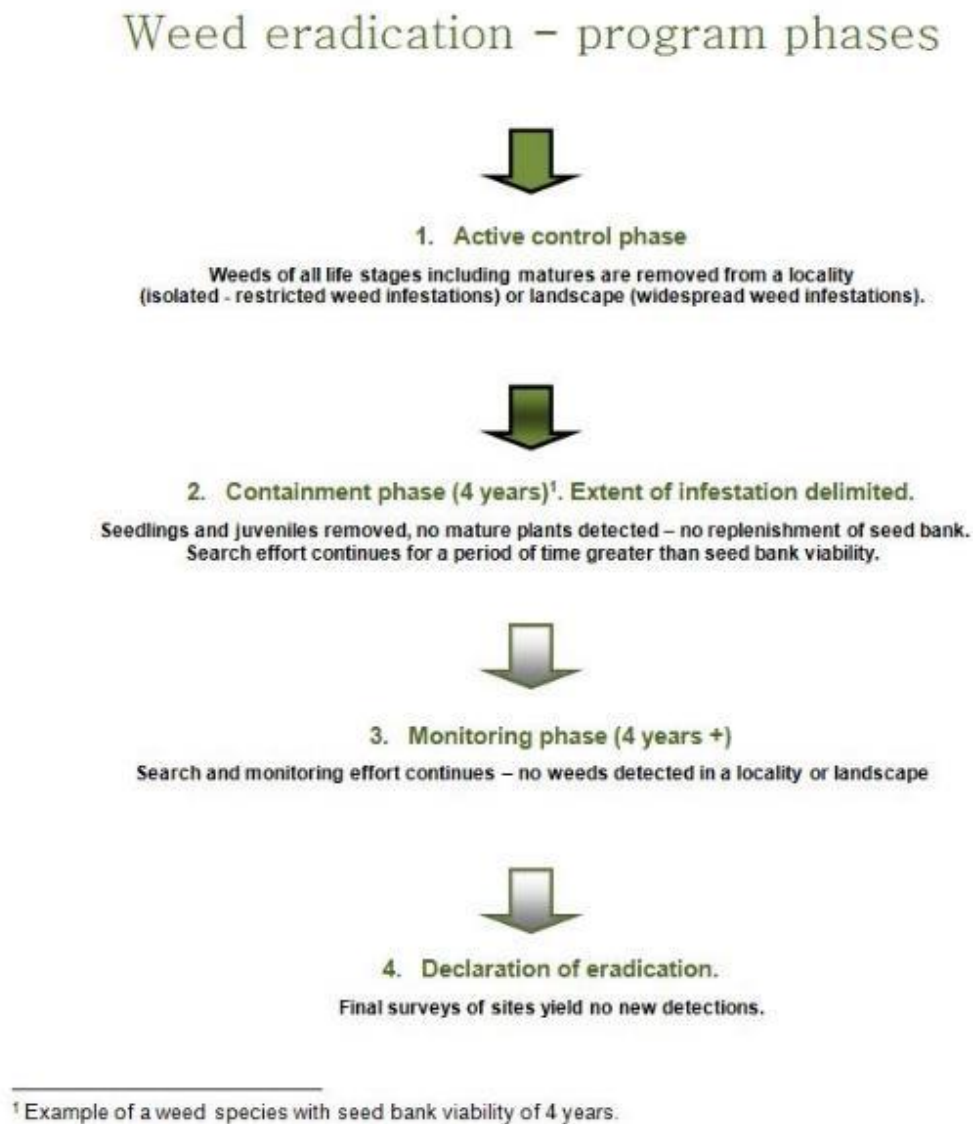
Personnel undertaking weed searches (LHIB staff, volunteers and contractors) must be capable, motivated and dedicated to the goal of eradication, as quality of search effort is critical to program success (Appendix 4).



Given the lack of reduction in search and treatment times, resourcing of future search and treatment needs to match prior inputs (see section 8 for details of estimated costs and staffing level to maintain effective weed management).

## 5.4 Declaring the eradication of a weed species

Panetta (2007) describes four main operational phases in weed eradication programs based on the life-history traits and reproductive biology of weed species (Figure 13).



**Figure 13 Four phases of a weed eradication program (after Panetta 2007).**

To declare a weed species eradicated, all individuals of that species and their propagules must be completely removed from the landscape and remain absent (undetected) over a monitoring period greater than the time that seed or propagules can persist in the environment. For example, if a weed has seed that is viable for three years in the environment, eradication cannot be declared until no plants, including seedlings, are detected for three or more years.

For most of the weeds targeted for eradication on LHI, they have a short-term persistent seed-bank viability, from one to less than 5 years. However, Madeira Vine and Glory Lily establish



underground storage organs and may remain dormant, thus requiring longer monitoring periods before eradication can be declared. The longevity of Bitou Bush seed is not known exactly, although a single seed can persist for 5 years (Winkler *et al.* 2008), and this species also requires an extended monitoring period. As populations of most broadly dispersed weeds are reduced, searches of weed management blocks needs to continue at adequate intervals to monitor populations to prevent weed maturation confirm absence and, if necessary, undertake active treatment; Bitou Bush, Glory Lily and Mairida Vine are exceptions, requiring annual grid-search and treatment.

For widespread weeds, the LHI Weed Eradication Program is still within the Active Control phase of Panetta (2007; Figure 13), owing to the high density of the weed infestations that had to be controlled. It is expected that in the next few years, and given adequate resources, the program should transition to the Containment phase at least for some weed species, and then to the Monitoring phase. After the Active Control phase, progress towards eradication can be measured stepwise, by the delimitation and containment of weed incursions (in preventing spread) and depletion or extirpation of soil seed-banks. On LHI the eradication of a weed may be achieved firstly within weed management blocks then landscape units and, ultimately, island-wide.

Within the Settlement, isolated or small populations of target weeds that had not spread elsewhere on the island and have been removed are considered eradicated if they remain undetected during consecutive noxious weed inspections that correspond to the period of seed persistence for the species within a 100-m radius of the location of the weed before removal.

## Promoting island stewardship with good gardening practice

Good gardening practices can help reduce the spread of potentially invasive species. De-seeding or de-heading spent flowers will stop plants setting seed and spreading (for example removing spent flower heads of *Agapanthus* and Mauritius Hemp (*Furcraea foetida*) and pruning bushes (for example Snow Plant *Breynia nivosa*). Community education is required for widespread adoption of this approach.

Many plants were introduced – and are still being introduced – to the island without approval. This risks the introduction of plant pests, pathogens and diseases. There are many plants already present in gardens on LHI, that are not invasive and could be shared rather than bringing new, foreign species to the island. The LHI Plant Importation Policy (LHIB 2014) allows an array of fruit, vegetable and ornamental plants that are permissible for import.

Cooperative effort in monitoring the invasiveness of introduced plants is the responsibility of the LHIB and the local community. Everyone plays a vital role in raising the alarm about plants that are showing signs of spread.

Everyone plays a role in the prevention of the establishment of weeds and management of them and **stewardship of the island's environment for future generations**. The **challenge** is to make good gardening choices and using plants that are sustainable, don't spread and are safe for the island environment.

## Exotic plant pests and diseases — Biosecurity

While this Weed Management Strategy is focused on invasive weed species, the LHIB remains alert to current and future risks from exotic plant pests and disease-causing pathogens and pest animals. The importation of plants and quarantine-risk materials is managed under the LHI Plant Importation Strategy (LHIB 2014), the draft LHI Biosecurity Strategy (AECOM 2016) and the Lord Howe Island Regulation 2014 (see [www.legislation.nsw.gov.au/regulations/2014-497.pdf](http://www.legislation.nsw.gov.au/regulations/2014-497.pdf) [accessed 8 Nov 2016]). It is prohibited to import invasive plants to LHI, with a weed risk assessment (WRA) needed for all imports (Pheloung 1995).

Introduced animal and plant pests and diseases pose a cumulative threat to the integrity of the terrestrial ecosystems of LHI. They may cause the decline or death of native plant species and plant communities, increasing the opportunity for the expansion of weeds.

There are currently two serious plant pathogens on LHI: the root-rot fungus *Pythophthora cinnamomi* and, recently, an outbreak of Myrtle Rust (*Puccinia psidii*; detected 14 Oct 2016).

The root-rot fungus is confined to a property in the Settlement South landscape unit and is treated with a fungicide quarterly and with soil testing undertaken annually. The perimeter of the infestation is clearly marked with quarantine tape. Boot scrub-stations (containing Quatsan) are installed at the heads of tracks in an effort to prevent spread into the PPP from local people, returning residents and visitors. Up to 15 endemic plant species on LHI have congeners elsewhere that can be affected by root-rot fungus (DECC 2007).

The outbreak of Myrtle Rust is currently limited to two sites in the north of the Settlement and mostly infecting the introduced Rose Apple (*Syzygium jambos*). At this early stage, the LHIB plans to contain and eradicate the pathogen. The infestation has been treated with fungicide and plants controlled. All the endemic plants of the family Myrtaceae on LHI are susceptible to Myrtle Rust. No new infections have been detected in the Settlement or on tracks in the PPP as of November 2016.

### Risk of spread of plant pathogens by LHIB staff

LHIB staff undertaking weed search across the PPP are potential vectors of plant pathogens (and weeds), as their search effort is off track and covers all terrain (DECC 2007). LHIB staff are required to use foot scrub-stations at any point where they enter the PPP on a daily basis (LHI Weeds Operational Manual in preparation).

Returning residents and visiting contactors or volunteers working in the PPP are advised to wash and decontaminate all their bush gear, including footwear, if they have been in an area infected by Myrtle Rust before coming to LHI.

Adherence to basic hygiene and quarantine measures will help to address current and future biosecurity risks on LHI.



Over the past 10 years, more than 700,000 individual Cherry Guava plants (of all life-stages) have been removed from LHI across 165 weed management blocks (which cover an overall area of 1065 ha). Cherry Guava is an ecosystem-modifying invasive weed and considered to be the worst invasive plant species in Hawaii (GISD 2016). On LHI, Cherry Guava has been progressively advancing into the southern mountains but suppression through repeated grid-search effort and treatment has achieved significant reductions in numbers and the opportunity to provide long-term protection for the island's ecosystem. (Photo: C. Jones, Parks Australia.)



## 6 Weed management categories on LHI

Three management categories were developed for weeds on LHI. These are based on their level of threat (invasiveness and environmental impact) and the feasibility of their eradication (WRA) combined with the outcomes of weed management over the past 10 years in reducing the extent of weed invasions. These categories aim to align with those of the *Biosecurity Act 2015*, which will replace the control classes of the *Noxious Weeds Act*.

The categories are:

**Category 1: Eradicate (immediate removal or suppression leading to eradication);**

**Category 2: Alert (sleepers weeds – watch and act as needed);**

**Category 3: Control (effectively manage).**

Appendix 1 provides a list of all species in each of these categories and identifies the operational phase in which they currently fall.

### Category 1: Eradicate (immediate removal or suppression leading to eradication)

Category 1 includes invasive weed species that are:

- established in the PPP and require strategic management and continued suppression to achieve their eradication over the short to long term to protect the island ecosystems;
- new arrivals to LHI (including unauthorised imports) or recently detected invasive weed species that pose a high risk; and
- recently declared eradicated.

Currently 68 weed species – all declared species under the NSW *Noxious Weeds Act 1993* – are targeted for eradication, including 40 species with limited distribution on LHI (Appendix 1).

Category 1 species are managed through a cross-tenure approach. Highly invasive weed species detected on leasehold land need to be removed as rapidly as possible while their distribution and effects are restricted and minimal. The preferred approach is through education and liaison, although a legislative and enforcement approach may be required in some instances.

In the past ten years, eradication grid-search effort has achieved a 90% reduction in numbers of broadly dispersed mature weeds. Given adequate funding over the next decade the **containment** of the broadly dispersed species (removal of all matures to reach a monitoring phase) and **eradication** of limited species will be realised in the current or next decade. Species considered eradicated will remain as Category 1 to allow for ongoing awareness and monitoring.

### Examples of Category 1 weeds

**Kahili Ginger** (*Hedychium gardnerianum*; Figure 14) is a major environmental weed, and listed as one of the World's 100 Worst Invasive Alien Species. It has spread widely in New Zealand and Hawaii, where it is transforming and degrading native habitats.

Fewer than 150 plants have been recorded as removed on LHI, mostly from the PPP, and plants in gardens within the Settlement need to be removed. Curtailing the spread of this highly invasive weed will have significant benefits in avoiding future impacts and costs. This species is currently in the Active Control phase, with mature plants remaining in the environment. Given the small numbers on LHI and low seed-bank persistence, it could feasibly be eradicated within the next ten years.



**Figure 14 Kahili Ginger.**

**Ground Asparagus** (*Asparagus aethiopicus*), is a WoNS and has been detected in 192 weed management blocks (total area of blocks is 1018 ha), although dense and extensive (evenly distributed) infestations of Ground Asparagus are no longer present (LHIB 2016; Figure 15). It is essential that seedling and early stage juvenile plants that may have been missed in initial searches are detected and prevented from reaching maturity. Ground Asparagus can reach reproductive maturity within two



**Figure 15 Ground Asparagus on the eastern flank of Transit Hill (2011). Dense and widespread infestations of this species, such as this, are no longer evident on LHI. Infestation and outliers on cliffs are being treated progressively with the helicopter lance-spray program.**

years (OEH 2013) but field observations on LHI suggest a maturation period of 2–3 years is more likely. Low-density infestations with small seedlings do pose a detection challenge which may be improved with a weed detector dog.

Outliers of mature Ground Asparagus occur at high elevation in the southern mountains. With adequate suppression, this species may reach a Containment phase (with no new seed inputs) within the next decade. However, owing to the wide distribution and tenacity of this species, this may take longer. Without eradication over the entire island, this species will continue to represent a serious and ongoing serious threat to the ecology of LHI.

## Eradicated species

Six weed species are considered eradicated from LHI (LHIB 2016): Cocos Palm (*Syagrus romanzoffiana*), Cat's Claws Creeper (*Dolichandra unguis-cati*), Tipuana (*Tipuana tipu*), Potato Vine (*Solanum wendlandii*), Turkey Rhubarb (*Acetosa sagittata*) and French Broom (*Genista monspessulana*). Monitoring for these plants continues however through weed inspections and weed search throughout the PPP.

**Tipuana**, or African Rosewood, is listed on the National Environmental Alert Weed List and was identified in a garden on LHI. It produces seeds that are widely spread by wind so early intervention was undertaken. It occurred on LHIB land and so consent for control was immediate. The mature tree, 20 m tall, was removed by an arborist.

**Turkey Rhubarb** only known from one garden on LHI and was controlled with permission from the leaseholder. This plant is prohibited from sale in NSW, is declared noxious in Western Australia and in some control areas in NSW, and has been identified as a Significant Environmental Weed (Groves *et al.* 2005) and a NSW State high-priority weed (Natural Resource Commission 2014).

**Cat's Claw Creeper** is a WoNS and a highly invasive, transformer species (Figure 16). Immature plants were detected in a garden in 2006 and removed and have remained undetected since then. This weed is spread by wind, and is capable of smothering and killing trees, displacing native vegetation and forming a monoculture of Cat's Claw Creeper.



**Figure 16 Cat's Claw Creeper.**

## Category 1 species in the containment or monitoring phases

A number of declared invasive weeds are currently considered within a containment or monitoring phase. A number of species that were last removed between 2014 and 2016 had not reached reproductive maturity at that stage and have remained undetected since, including Giant Reed (*Arundo donax*), Ming Fern, Mirror Bush (*Coprosma repens*) and Red Cedar (*Toona ciliata*).

Pampas Grass (*Cortaderia selloana*) was last recorded as reproductively mature plants from three sites between 2010 and 2014 (Settlement South in 2010, Malabar in 2012, and Transit Hill in 2014) and has not been detected since they were treated. The seed-bank persistence of Pampas Grass is only two years (Pausas *et al.* 2006) and the species is entering a containment phase. Sites where the species was recorded will continue to be monitored.

## Category 2: Alert (sleeper weeds – watch & act as needed)

Category 2 species includes sleeper weed species that are:

- known environmental weeds or introduced plants that may invade following a 'lag' phase and showing characteristics of local spread;
- weed plants recently detected in the PPP that are not declared and not currently targeted for eradication; and
- introduced plants highly susceptible to serious plant diseases, such as Myrtle Rust.



Category 2 weeds are primarily ornamental plants that are known to be invasive elsewhere in the world (identified on regional or global alert lists) or plants that may be demonstrating weediness in gardens or have spread into the PPP (see Appendix 1). When a new weed is detected in the PPP, this indicates that the species is likely to invade elsewhere on the island.

Environmental weeds that are known to be highly invasive and are newly detected on the island should be removed immediately before they spread (early intervention). This is the most economical method to prevent the species becoming a problem. Such species may be treated opportunistically where they are encountered during grid-search effort in the PPP or where landholders are willing to remove them.

Category 2 weeds will be elevated to Category 1 if they are identified as highly invasive. To enable corrective management across all tenures, weeds will be assessed under the NSW WRM system to enable their declaration. The current list of Category 2 weeds will in future be subject to WRM assessments.

When identifying the invasiveness of new weed species the precautionary principle is to be applied, as early stages of invasion may be missed and the price of inaction are ecological impacts and compounding management costs.

## Examples of Category 2 weeds

Sleeper weed species on LHI include Kangaroo Grass (*Themeda australis*), Golden Rain Tree (*Koelreuteria paniculata*), Dutchman's Pipe (*Aristolochia elegans*), Buddleja (*Buddleja madagascarensis*), New Zealand christmas bush (*Metrosideros kermadecensis* and *M. excelsa*) and Velvet Groundsel (*Roldana petasitis*).



**Dutchman's Pipe** (Figure 17) is a recognised environmental weed on the mainland. It has been recorded from two locations on LHI yet remains at one location. Owing to its invasive potential, toxic properties and wind-dispersed seeds it has the capacity to spread widely. Early intervention and removal of this plant is warranted. This species is being applied a WRM assessment to enable all tenure management.

**Figure 17 Dutchman's Pipe flower, foliage and seeds.**

**New Zealand christmas bush** (*Metrosideros kermadecensis* and *M. excelsa*) was planted along the lagoon foreshore. New Zealand christmas bush plants have been treated in the PPP at Malabar, west of Mutton Bird Point and from the northern flanks of Mt Lidgbird. Plants that appear to be hybrids between New Zealand christmas bush and Lord Howe Island Mountain Rose (*M. sclerocarpa*) have also been treated. Genetic testing of plants that appear to be hybrids is required. New Zealand christmas bush has robust growth characteristics and a broader environmental tolerance than the endemic LHI species.

**Velvet Groundsel** (*Roldana petasitis*) is considered a sleeper weed on LHI (Figure 18). An isolated outbreak was detected from a helicopter near Middle Cave on the eastern flanks of Mt Lidgbird in 2009. This location is identified in the Flora of Australia (Green 1994). Plants have been removed from within the PPP and from the edges of the PPP where it has spread from

gardens. An outlying infestation of 30 juveniles was removed from Intermediate Hill in bushland above Mutton Bird Point. It has a wind-dispersed seed and, thus, a potentially broad range for expansion on LHI.

**Rose Apple** (*Syzygium jambos*) occurs only in gardens, with some localised spread into the edges of regrowth forest. This plant is highly susceptible to Myrtle Rust infection and with the recent outbreak of Myrtle Rust on LHI creates an immediate localised source of spores. To contain and eradicate this pathogen, before it affects the endemic Myrtaceae species of the island, Rose Apple will be upgraded to Category 1: Eradicate. A specimen of Rose Apple was retained to act as an early indicator of the spread of Myrtle Rust to LHI, but that purpose has now been achieved.

Non-native plants of the family Myrtaceae and that are highly susceptible to Myrtle Rust should be removed as a priority, at least until native endemic species become infected. Introduced Myrtaceae will be treated as Category 2: Alert unless they show susceptibility to Myrtle Rust, in which case they may be upgraded to Category 1: Eradication. There are 38 introduced Myrtaceae species recorded on LHI (see <http://www.lhib.nsw.gov.au/board/publications/information-sheets>).



**Figure 18** Velvet Groundsel infestation near Middle Cave on Mt Lidgbird (2009).

### Category 3: Control (effectively manage)

Category 3 includes all introduced plants that are considered to have invasive characteristics but are not feasible to eradicate, are of lower risk to the environment, or where intermittent



control delivers the desired management outcomes of preventing their spread or reducing their impact. The Control approach is applied to Category 3 species until such time that eradication is deemed possible or the plant species demonstrates a significant threat, requiring intensive management.

Investment in controlling weeds that are of low risk to the environment should not be undertaken at the expense of allowing highly invasive weed species to spread. Active control of weeds may be undertaken on a site or species basis to reduce their extent or to exclude weeds from certain areas (e.g. public areas, revegetation sites) or to reduce the impact of the weeds (e.g. for threatened species).

Ornamental plants that have spread from gardens into the PPP are removed during weed eradication grid-search within the PPP. Until source plants are completely removed from the Settlement, these species can only be controlled.

At least 50 weed species have been detected and treated within the PPP over the past 10 years.

## Examples of Category 3 weeds

Management actions for Category 3 weeds include the localised reduction of Kikuyu (*Pennisetum clandestinum*) and Buffalo Grass (*Stenotaphrum secundatum*) in habitat of the threatened species Lord Howe Island Morning Glory (*Calystegia affinis*) at Old Settlement and in revegetation plantings, the reduction of Crofton Weed, and the removal of regenerating Norfolk Island Pines (*Araucaria heterophylla*), which can inhibit regeneration of native vegetation. Norfolk Island Pines tend to spread only locally but stands need to be actively managed to remove seedlings and will need to be monitored after rodent eradication on LHI (see <http://www.lhib.nsw.gov.au/environment/environmental-programs/rodent-eradication> [accessed 8 Nov 2016]). On Raoul Island, Norfolk Island Pine regeneration increased after the eradication of exotic rodents (C. West, personal communication).

**Panic Veldt Grass** (*Ehrharta erecta*) (Figure 19) and **Broadleaf Paspalum** (*Paspalum mandiocanum*) are non-native grasses that are common on LHI. They are dispersed by rats, birds, on footwear, by vehicles and, previously, by Goats (now eradicated). These grasses can establish in low light conditions and invade intact bushland, spreading inwards from edges. It is not feasible to eradicate either species because they have a short life-cycle, reach maturity quickly, have massive seed production and are widespread in pastures and lawns. Localised control on tracks and roadsides will reduce the extent of their spread. These species may suit control through genetic drivers (see section 5.2). Low-level infestations of Broadleaf Paspalum should be actively controlled on tracks in the southern mountains to prevent further spread.



**Figure 19** Panic Veldt Grass.

**Tobacco Bush** (*Solanum mauritianum*) (Figure 20) is removed from accessible terrain during weed grid-search effort. It is not feasible to eradicate the species owing to its life-history traits (e.g. it can produce up to 2000 seeds per year, with seed-bank longevity of 39 years). This plant is removed as teams undertake weed grid-search but it is not possible for removal across all tenures. Only localised control can be achieved.



**Figure 20 Tobacco Bush.**

**Spear Thistle** (*Cirsium vulgare*) (Figure 21) is an annual species that produces many seeds that are dispersed broadly by wind. Spear Thistle prefers exposed situations, such as disturbed and agricultural land. Effective control requires all plants at a location to be removed simultaneously. Localised control is undertaken by the LHIB during maintenance of the PPP fencelines and in planting areas, but widespread control is not feasible.



**Figure 21 Spear Thistle.**

**Sea Spurge** (*Euphorbia paralias*) (Figure 22) was an eradication target in the 2006 LHI WMS (LHIB 2006) but it has now been categorised as a Control weed, as seed inputs will continue to arrive on LHI through sea-drift. Sea Spurge is mostly restricted to the dunal system on the lagoon foreshore. It can form monocultures and exclude native dune species and should be considered for containment. The limitations of its distribution and ease of access provides an opportunity for a containment program involving volunteers.



**Figure 22 Sea Spurge.**

## 7 The vision of the Weed Management Strategy

*The long term vision of this strategy is to protect Lord Howe Island's unique ecosystems and World Heritage Values from current and future threats posed by invasive weeds and to improve the island's resilience to future disturbances and associated impacts.*

### 7.1 Weed management goals, objectives and actions

The goals of the Weed Management Strategy, and the objectives under each, aim to deliver best-practice weed threat abatement and management outcomes on LHI:

#### **Goal 1 – Exclude: Prevent the establishment of new invasive weeds.**

- Objective 1.1 Identify high-risk pathways and intercept high-risk species.
- Objective 1.2 Develop and implement early detection capabilities.

#### **Goal 2 – Eradicate: Eliminate or prevent the spread of invasive weeds.**

- Objective 2.1 Respond rapidly to eradicate and contain new species and outliers of priority invasive weeds.
- Objective 2.2 Continue to suppress and eliminate priority invasive weeds in the PPP (including offshore islands) and Settlement areas.

#### **Goal 3 – Effectively manage: Reduce the impact of widespread invasive weeds.**

- Objective 3.1 Investigate the application of biological control agents on LHI, and implement biological control programs where applicable.
- Objective 3.2 Apply effective on-ground control where benefits are greatest.

#### **Goal 4 – Build capacity: Ensure that Lord Howe Island has the ability and commitment to manage invasive weeds; and to promote awareness of invasive weeds within the community.**

- Objective 4.1 Build partnerships to effectively manage the threat and impact of weeds on LHI.
- Objective 4.2 Maintain competent, skilled and motivated weed-eradication staff.
- Objective 4.3 Monitor progress of the Weed Management Strategy and eradication trajectories.
- Objective 4.4 Improve knowledge base, build local capacity and involvement in sharing the responsibility of weed management
- Objective 4.5 Improve effectiveness in weed management through research and development.
- Objective 4.6 Implement and enforce legislation and policies for consistent and effective weed management.





**Figure 23** Cherry Guava growing close to the threatened Lord Howe Island Broom (*Carmichaelia exsul*) on the North Face of Mt Gower, west of Eddies Cave, in 2008 (weed management block GW001). A total of 1300 Cherry Guavas have been removed from the northern face of Mt Gower. If Cherry Guava were left untreated, dense thickets would establish and out-compete the Broom. Not only does the Cherry Guava present a risk to the individual plant species but it is here growing close to the Gnarled Mossy Cloud Forest Critically Endangered Ecological Community on Mt Gower. (Photo: S. Bower, LHIB.)

# Goal 1 – Exclude: Prevent the establishment of new invasive weeds

## The challenge

Preventing the introduction of high-risk weed species to LHI provides the most cost-effective means to mitigate future impacts. Situated 550 km east of mainland Australia, the ocean provides an effective barrier from the natural spread of weed incursions or re-invasion of weeds (except for ocean-dispersed species like Sea Spurge) that have been eradicated. The intentional or incidental importation of new weed species to LHI by residents or visitors, however, remains a risk. Risk pathways are identified in the Draft Lord Howe Island Biosecurity Strategy (AECOM 2016) and Plant Importation Policy (LHIB 2014). Education and awareness of import restrictions, the species that are allowed to be imported, and improved biosecurity measures are required.

## Outcomes

The introduction of high-risk, invasive weeds is prevented and new weed risks intercepted and eradicated.  
LHI remains free of any new serious invasive weeds.

| Goal 1 – Exclude: Prevent the establishment of new invasive weeds                |   |  |  |
|--|---|--|--|
| Action   |   | Outputs & Performance Indicators   | Responsibility   |
| <b>Objective 1.1 Identify high-risk pathways and intercept high-risk species</b> |   |  |  |
| 1.1.1  | Implement the LHI Biosecurity Strategy (AECOM 2016) and LHI Plant Importation Policy (LHIB 2014)                          | Increased awareness of importat requirements, restrictions and species permissible to import                 | LHIB, local community, suppliers, stevedores, Qantas, other transport agencies |
| 1.1.2  | Undertake weed risk assessments (WRA) (Pheloung 1995) to screen requests to import new species to LHI for their weed risk | No new weeds intentionally imported to the island without approval<br>Plants approved or rejected under WRAs | LHIB, prospective importers, suppliers   |
| 1.1.3  | Register approved imports to enable tracking of a weed or disease outbreak  | New approved plant imports are monitored   | LHIB   |
| 1.1.4  | Provide information to plant suppliers about LHI importation requirements and restrictions                                | Awareness material prepared and distributed to suppliers, local community (as hard copy and digitally)       | LHIB, residents, prospective importers, suppliers, the LHI plant nursery       |

## Goal 1 – Exclude: Prevent the establishment of new invasive weeds

| Action  | Outputs & Performance Indicators                                      | Responsibility   |
|---|---|--|
| 1.1.5 Detect and remove illegally imported plants in accordance with LHI Regulations 2014 ( <a href="http://www.legislation.nsw.gov.au/regulations/2014-497.pdf">www.legislation.nsw.gov.au/regulations/2014-497.pdf</a> [accessed 8 Nov 2016]) | New weed risks intercepted  | LHIB   |
| 1.1.6 Review of Category 3 or non-listed species as per NSW Department of Primary Industry (DPI) Weed Risk Management (WRM) criteria (or equivalent) as per <i>Biosecurity Act 2015</i>   | New weeds risks and latent sleeper weeds put on alert and categorised | LHIB, Flora Management Officer (FMO), DPI and Office of Environment and Heritage (OEH) |

## Objective 1.2 Develop and implement early detection capabilities

|  |   |  |
|--|---|--|
| 1.2.1 Continue inventory of garden plants on LHI; maintain LHI Herbarium and database  | Increased knowledge base of introduced species on LHI     | FMO, LHI Museum, LHI Herbarium and other herbaria          |
| 1.2.2 Undertake annual declared weed inspections to monitor for potential new weeds not currently identified as Category 1, 2 or 3 species | New weed risks identified                                 | LHIB, local community, DPI, Noxious Weed Control Authority |
| 1.2.3 Increase botanical and plant recognition skills of weeding staff and interested locals   | Staff and community capable of alerting of new weed risks | LHIB   |
| 1.2.4 Inform community and LHIB staff of new weed risks  | Staff and community alert to new weed risks               | LHIB, local community, DPI                                 |



## Goal 2 – Eradicate: Eliminate or prevent the spread of invasive weeds

### The challenge

Early intervention to achieve the complete removal of new or emerging weed risks is a cost-effective measure to protect the ecosystems of LHI. Priority weed species targeted for eradication on LHI are classified as Category 1 species. They include Weeds of National Significance (WoNS), National Environmental Alert List for weeds, World's 100 Worst Invasive Alien Species or Australian natives that have spread and are impacting the island's ecosystems. Category 1 weeds are declared noxious to enable an all-tenure approach to their management. Isolated occurrences of serious invasive weeds are also removed through mutual agreement with leaseholders. The continuation of the Weed Eradication Program and grid-search effort across the whole island every 2 years is required to continue to contain and suppress populations of target invasive weeds to achieve eradication in the long-term.

### Outcomes

Priority invasive weeds eliminated.

Eradicated species are monitored to ensure they do not re-invade.

| Goal 2 – Eradicate: Eliminate or prevent the spread of invasive weeds   |  |  |  |
|---|--|--|--|
| Action  |  | Outputs & Performance Indicators   | Responsibility   |
| <b>Objective 2.1 Respond rapidly to eradicate and contain new species and outliers of priority invasive weeds</b> |  |  |  |
| 2.1.1   | Undertake annual declared weed inspections to monitor removal of Category 1 species (refer to Action 1.2.2)    | 50% of Settlement inspected annually   | NSW Weeds Action Program 2015–2020 (WAP), LHIB, weed inspectors from DPI |
| 2.1.2   | Ensure new invasive plant species detected in Settlement or PPP during grid-search are controlled and recorded | Level of threat determined and source location identified; species listed as noxious or controlled or both                     | LHIB, Weed Team Supervisor and other staff                               |
| 2.1.3   | Undertake WRM for new weeds and assign control classes as per <i>Biosecurity Act 2015</i> .                    | Weeds upgraded to Category 1 or removed through mutual agreement with leaseholder<br>Records entered in the LHI Weeds Database | LHIB, FMO, DPI   |

## Goal 2 – Eradicate: Eliminate or prevent the spread of invasive weeds

| Action  | Outputs & Performance Indicators  | Responsibility                                   |
|---|---|--|
| 2.1.4 Remove newly declared noxious weeds or identified high-risk species<br>Document location and extent                                       | Eradication achieved; monitoring ongoing  | FMO, Weed Team Supervisor and other staff        |
| 2.1.5 Undertake strategic surveillance; record and control reported outbreaks or priority locations of mature plants of Category 1 target weeds | All plants treated and locations recorded;<br>Maturation and seed-set of target weeds prevented | LHIB, Weed Team and other supervisors, community |
| 2.1.6 Prepare maps of distribution of priority weeds and known locations of outliers  | Locations of outlier weeds updated  | FMO  |

### Objective 2.2 Continue to suppress and eliminate priority invasive weeds in the PPP (including offshore islands) and Settlement

#### PART I: GRID-SEARCH ACCESSIBLE TERRAIN IN THE PPP

|       |   |   |   |
|-------|---|---|---|
| 2.2.1 | Implement LHI weed eradication methodology  | Multiple invasive weed species effectively managed<br>Plants removed before maturation, with reduction in number of mature weeds detected with repeat visitation  | LHIB, Weed Team Supervisor and other staff                |
| 2.2.2 | Undertake grid-search and weed treatment across accessible blocks in the PPP and suppress to eradicate Category 1 species | Search for and treat priority species every 24 months or at other specified intervals (refer Action 2.2.3)<br>Nine full-time equivalent (FTE) staff engaged annually (equivalent hours) dedicated to weed grid-search | FMO, Weed Team Supervisor, staff, volunteers, contractors |
| 2.2.3 | Search for and treat Bitou Bush and contain isolated mature plants  | Annual search for and treatment of Bitou Bush<br>Location of new mature plants recorded accurately (GPS) and added to search schedule<br>A reduction in total counts of Bitou Bush is measured over time              | LHIB, Weed Team Supervisor                                |
| 2.2.4 | Search for and treat Glory Lily twice per year, between December and April  | Glory Lily sites are searched and treated twice annually; reduction in total counts achieved;<br>Location of new sites recorded and added to the search schedule  | LHIB, FMO, Weed Team Supervisor                           |



## Goal 2 – Eradicate: Eliminate or prevent the spread of invasive weeds

| Action   | Outputs & Performance Indicators  | Responsibility            |
|--|---|---------------------------|
| 2.2.5 Analyse weeds database to determine if residual mature plants (e.g. of Ochna) in weed management blocks are trending downwards | Increased search effort of weed management blocks and target species and scrutiny of search effectiveness to increase downward trend in mature plants | FMO, Weed Team Supervisor |
| 2.2.6 Identify low-density target weeds requiring improved detection capacity with detector dogs (refer to Action 4.5.3)             | Dog trainer and handler identified and target weed species confirmed  | LHIB, FMO, consultant     |

## PART II: RUGGED TERRAIN AND CLIFFS IN THE PPP

|        |   |  |   |
|--------|---|--|---|
| 2.2.7  | Priority given to search effort of high-elevation weed management blocks with known Category 1 weeds (blocks LN001, 002, 005, 021; LR001–003; LS009–018; and GW001–003)   | Island-wide search effort of priority areas completed in 24 months   | FMO, Weed Team Supervisor   |
| 2.2.8  | Implement helicopter winch programs annually<br>Complete search and treatment of northern face of Mt Gower<br>Begin search effort on Mt Lidgbird and continue for 5 years | High-elevation infestations of target weeds removed<br>Repeat treatment of a swathe of terrain between 450 and 600 m above sea level every 24 months   | LHIB, helicopter contractor   |
| 2.2.9  | Yearly implementation of helicopter lance-spray program, for 5 years  | Surveillance and treatment across cliff-lines undertaken and weed status monitored   | LHIB, helicopter contractor   |
| 2.2.10 | Investigate approvals to apply HBT to remove outliers of Cherry Guava<br>Repeat treatment until zero detections   | Outliers of Cherry Guava on cliffs treated   | LHIB, University of Hawaii Manoa, NSW OEH, Australian Pesticides and Veterinary Medicines Authority (APVMA) |
| 2.2.11 | Continue progressive search effort on-rope or at height at the interface between aerial and on ground access  | Interface weeds detected and treated<br>Priority sites include cliff-edges on Malabar, above the Lower Road, between Round Face and Barrow Flats treated<br>Linear extent of search effort recorded<br>Time-frame and costs to repeat treatments in this terrain | LHIB, On-rope Access Team   |

## Goal 2 – Eradicate: Eliminate or prevent the spread of invasive weeds

| Action  | Outputs & Performance Indicators  | Responsibility               |
|---|---|------------------------------|
|   | understood  |                              |
| 2.2.12 Trial UAV (drones) to undertake surveillance, weed monitoring and control, including HBT to remove outlier weeds       | UAV and HBT methods trialled and improved   | LHIB, FMO                    |
| 2.2.13 Continue surveillance and rapid response to outliers on cliffs after helicopter operations                             | Treatment of missed weeds by UAV or via on-rope access undertaken   | LHIB, Weed Team Supervisor   |
| <b>PART III: OFFSHORE ISLANDS</b>   |   |                              |
| 2.2.14 Undertake sea-based routine surveillance for priority invasive weeds every 2 years                                     | Prevent spread and build up of invasive weed populations on offshore islands  | FMO, LHIB rangers            |
| 2.2.15 Ensure research activities on offshore islands include incidental surveillance of weeds                                | Researchers informed of priority weeds and advised of their obligation for incidental weed surveillance and reporting | FMO, LHIB rangers            |
| 2.2.16 Trial digital surveillance methods to monitor weeds on offshore islands, including UAV                                 | Survey methodology established for surveillance of weeds on offshore islands  | FMO, LHIB rangers            |
| <b>PART IV: SETTLEMENT</b>  |   |                              |
| 2.3.17 Treat Madeira Vine 2–4 times per year  | All sites searched and treated<br>Infestation reduction recorded (mass, in kg)  | LHIB, leaseholders           |
| 2.3.18 Undertake grid-search and treatment of all Climbing Asparagus sites  | Area of annual search effort measured<br>Reduction in plants treated and quantity of herbicide used                   | LHIB, leaseholders           |
| 2.3.19 Search and treat tracks and blocks with Palm Grass and Castor Oil, before seed-set<br>Map locations of priority blocks | Reduction in plants detected  | LHIB, LHIB rangers, visitors |
| 2.3.20 Treat all target invasive weeds in revegetation areas during maintenance   | All target invasive weeds controlled from revegetation areas  | LHIB, field supervisor       |

## Goal 3 – Effectively manage: Reduce the impact of widespread weeds

### The challenge

Over 270 introduced plants recorded on LHI may have invasive characteristics (LHIB 2006; DECC 2007), yet not all of these pose a significant risk to the environment, agriculture or human health. However they may have localised impact or be a nuisance. While eradication may not be feasible, intermittent treatment may achieve desired management outcomes. Biological control agents may assist in reducing the extent of widespread weeds.

### Outcomes

Widespread weeds effectively managed on a site and species basis.

| Goal 3 – Effectively manage: Reduce the impact of widespread weeds            |   |   |                  |
|---|---|---|------------------|
| Action  |   | Outputs & Performance Indicators                        | Responsibility   |
| Objective 3.1 Investigate the application of biological control agents on LHI |   |   |                  |
| 3.1.1   | Release Crofton Weed Rust ( <i>Baeodromus eupatorii</i> ) biological control agent for Crofton Weed ( <i>Ageratina adenophora</i> ) and monitoring of effectiveness | Density and spread of Crofton Weed reduced over time    | LHIB, CSIRO, DPI |
| 3.1.2   | Investigate suitability of other biological control agents (e.g. Parramatta Grass Smut) to reduce further spread of common weeds                                    | Other agents to aid in management of widespread species | LHIB, CSIRO, DPI |
| Objective 3.2 Apply effective on ground control where benefits are greatest   |   |   |                  |
| PART I: GENERAL WEED CONTROL  |   |   |                  |
| 3.2.1   | Undertake removal of Tobacco Bush from localised infestations as they are encountered   | Density and spread of Tobacco Bush reduced              | LHIB Weed Team   |

### Goal 3 – Effectively manage: Reduce the impact of widespread weeds

| Action  | Outputs & Performance Indicators  | Responsibility   |
|---|---|--|
| 3.2.2 Implement LHIB strategies and plans: Lagoon Foreshore Management Plan (LHIB 2015b), Revegetation Plan (LHIB 2002b), and PPP Plan of Management (DECCW 2010) | Weeds in planting areas and along edges of native vegetation and foreshore reduced<br>Native vegetation along edge of PPP gradually expanded<br>Exotic grasses along tracks reduced | Manager Environment World Heritage (MEWH), Senior Field Supervisor |

### PART II: WEED CONTROL IN THREATENED SPECIES HABITAT

|       |  |   |                         |
|-------|--|---|-------------------------|
| 3.2.3 | Implement threatened species habitat management actions (e.g. Saving our Species program) and LHI BMP (DECC 2007)  | Threatened species actions implemented  | MEWH, FMO               |
| 3.2.4 | Undertake localised site-based treatment for threatened species habitat management   | Direct competition of exotic grasses in habitat of threatened species (e.g. Lord Howe Island Morning Glory <i>Calystegia affinis</i> ) reduced and habitat improved | MEWH                    |
| 3.2.5 | Reduce the extent of Coastal Morning Glory ( <i>Ipomoea cairica</i> ) from the Banyan tree on Blackburn Island and near the main Lord Howe Island Phasmid food tree<br>Expand control onto adjacent ledges (2 visits per year) | Coastal Morning Glory reduced and native species regeneration on Blackburn Island increased<br>Habitat improved   | MEWH, FMO, LHIB rangers |

## Goal 4 – Build Capacity: Ensure the LHIB has the ability and commitment to manage invasive weeds, and promote awareness of invasive weeds within the community

### The challenge

To protect the island's ecosystems from priority invasive weeds a 30-year eradication program was forecast in the 2006 LHI Weed Management Strategy (LHIB 2006). Over the past 10 years populations of weeds have decreased. As weed populations reduce, the job on the ground gets harder and poses a greater mental challenge. The retention of local program knowledge is important and engagement of staff with the dedication and drive to 'get the last weed' is critical. The collective effort in weed management on LHI is shown by the more than 60 people employed to work on weeds in the past 10 years, 155 LHIB supported volunteers and 752 Friends of Lord Howe Island volunteers.

Ongoing support from the community in understanding the importance of eradicating priority invasive weeds (Appendix 1) and preventing the introduction of new weeds is critical to program success. Everyone plays a role and has a shared responsibility in preventing and managing the impacts of weeds on LHI.

### Outcomes

Weed management on LHI demonstrates a cooperative approach with community and program implementation recognised as global best practice in island conservation management.

| Goal 4 – Build Capacity: Ensure the LHIB has the ability and commitment to manage invasive weeds, and promote awareness of invasive weeds within the community. |   |  |                      |
|---|---|--|----------------------|
| Action  |   | Outputs & Performance Indicators   | Responsibility       |
| Objective 4.1 Build partnerships to effectively manage the threat and impact of weeds on LHI  |   |  |                      |
| 4.1.1   | Engage key stakeholders and work with them to build a commitment to implement the LHI WMS and eradication program methodology   | LHI weed management program recognised and represented on national, state and regional conservation priorities and weed committees   | LHIB, FMO            |
| 4.1.2   | LHIB committed to seeking ongoing project partners and funding to fully implement the LHI WMS and Eradication Program, including ongoing support from Federal and State governments | Project partners established or maintained; consistent and adequate funding secured<br>WAP and other Federal and State government weed strategies and business plans implemented | LHIB, FMO, MEWH, DPI |

**Goal 4 – Build Capacity: Ensure the LHIB has the ability and commitment to manage invasive weeds, and promote awareness of invasive weeds within the community.**

| Action | Outputs & Performance Indicators   |  | Responsibility                                      |
|--------|--|--|---|
| 4.1.3  | Engage with external weed eradication professionals  | Currency with global and national weed eradication and management approaches maintained                            | FMO, LHI Weed Team, MEWH                            |
| 4.1.4  | Update the LHI Weeds Technical Panel (LHIWTP) on results of the Weed Eradication Program and seek advice where necessary | Technical panel informed of progress and or constraints, and feedback provided                                     | FMO   |
| 4.1.5  | Report progress to project partners, stakeholders and government agencies as required, including LHIB                    | Stakeholders and project partners informed of progress and engaged in delivery of the LHI Weed Management Strategy | FMO, project partners including government agencies |
| 4.1.6  | Establish LHI Weed Eradication Program Trust Fund (or equivalent) to receive donations for weed eradication project work | Fund established and promoted; contributions secured, partners informed of progress                                | LHIB, trust fund directors, project partners        |

**Objective 4.2 Maintain competent, skilled and motivated weed-eradication staff**

|       |   |   |  |
|-------|---|---|--|
| 4.2.1 | Ensure the weed management program maintains a high proportion of experienced, qualified and dedicated weed eradication staff (including casual, temporary and permanent staff) | Personnel selected through merit-based selection process<br>All staff inducted in program methodology, targets and expected outputs<br>Recruitment of local staff with demonstrated high performance encouraged<br>Local program knowledge maintained and enhanced to deliver high-quality search effort on ground. | LHIB, FMO, TAFE NSW, LHIB Weed Team            |
| 4.2.2 | Establish a core group of four LHIB permanent staff, with rope access and heights safety training. <sup>3</sup>   | Funding for recurrent positions secured<br>Core team with heights safety and rope access skills are maintained  | LHIB, FMO, registered training organisations   |
| 4.2.3 | Engagement and retention of staff, volunteers and contractors with experience and demonstrated good performance on LHI  | Improved efficiency and effectiveness in search effort and gaining access to remote weed management blocks<br>Contract and volunteer register maintained  | FMO, Weed Team Supervisor, LHIB administration |

<sup>3</sup> A team of 4 LHIB staff working on a part time basis throughout the year, to the equivalent of 1 FTE position is recommended. This technical project work can be fulfilled on a contract basis if skill-set is not available locally.

**Goal 4 – Build Capacity: Ensure the LHIB has the ability and commitment to manage invasive weeds, and promote awareness of invasive weeds within the community.**

| Action   | Outputs & Performance Indicators  | Responsibility  |
|--|---|---|
| 4.2.4  | Improve competency and knowledge of eradication target species and sleeper weeds; inform staff of new weed risks  | Ongoing training in botanical skills and weed recognition provided<br>FMO, Noxious Weeds Inspector  |
| 4.2.5  | Standards in Work Health Safety and work procedures updated as new risks arise  | Near-miss reports and incidents reduced<br>FMO, Weed Team Supervisor and staff  |
| 4.2.6  | Ensure staff maintain competencies in key operational areas   | Skilled tasks undertaken by certified staff<br>FMO, Weed Team Supervisor  |
| 4.2.7  | Investigate opportunities for staff to improve skills, knowledge and understanding of the importance of island conservation   | Staff encouraged to undertake TAFE or natural resource management training or exchange programs; increased capacity and understanding of island conservation programs including the Weed Eradication Program<br>FMO, Island Conservation project partners |
| <b>Objective 4.3 Monitor progress of the Weed Management Strategy and eradication trajectory</b> |   |   |
| 4.3.1  | Download GPS track-log weekly and merge data monthly to review quality and extent of search effort on ground  | Gaps in search data or effort filled<br>Progress of search effort improved<br>FMO, Weed Team Supervisor and staff   |
| 4.3.2  | Maintain LHI Weeds Database<br>Entry of data from weed management blocks (monthly – or as blocks are completed)<br>Analyse database inputs and change in weed populations | Weed management block treatment priorities confirmed; eradication trends evident<br>FMO, Weed Team Supervisor and staff   |
| 4.3.3  | Redefine data categories of weed life-stages to measure change in status of mature weeds and monitor program progress   | Definitions and recording fields in database reflect change in weed populations, e.g. mature weeds categorised as vegetative, flower and fruit or age (early mature, mature)<br>FMO, LHI Weeds Database manager, Weed Team Supervisor and staff           |
| 4.3.4  | Monitor and evaluate effectiveness of on-ground weed search effort to determine detection and treatment rate  | Review of search effort and weed treatments (in field and desktop) undertaken<br>Detection and thoroughness of search effort and treatments maintained at a high level<br>FMO, project partners, Weed Team Supervisor and staff                           |

**Goal 4 – Build Capacity: Ensure the LHIB has the ability and commitment to manage invasive weeds, and promote awareness of invasive weeds within the community.**

| Action   | Outputs & Performance Indicators  | Responsibility                      |
|--|---|-------------------------------------|
| 4.3.5 Repeat weed-density mapping across four landscape units using methodology of Le Cussan (2002b) <sup>4</sup><br>This action may be superseded by Action 4.3.6 as weeds further reduce | Mapping results analysed and compared, reduction in weeds demonstrated<br>Frequency of mapping based on reporting needs otherwise undertaken every decade   | FMO                                 |
| 4.3.6 Map residual locations of weeds removed as part of weed search effort, to improve spatial awareness and monitoring of weed distribution  | Methodology to record spatial capture of weed distribution by teams developed and implemented<br>Teams informed of location of residual weed distributions before start of search effort  | FMO, Weed Team Supervisor and staff |
| 4.3.7 Undertake external program review every 3–5 years  | Priorities confirmed; new risks identified; improvements made; eradication trajectory and funding needs understood  | FMO, Weeds Technical Panel          |
| 4.3.8 Ensure the Weed Eradication Program is future proofed for successional management  | LHI Weed Operations Manual and Procedures prepared linking to the LHI Weed Management Strategy and Biodiversity Management Plan (LHI BMP)<br>Weed profiles, key operational projects, distribution maps and site descriptions of Category 1 weed species prepared | FMO, Weeds Technical Panel          |

**Objective 4.4 Improve knowledge base, build local capacity and involvement in sharing the responsibility of weed management**

|   |  |   |
|---|--|---|
| 4.4.1 Undertake LHI Central School Weed Awareness program – four times per year                               | Awareness and involvement in weed management   | FMO, LHIB ranger, LHI Central School teachers |
| 4.4.2 Report annually on program outcomes in the LHIB annual report   | Community informed of annual progress  | FMO   |
| 4.4.3 Introduce digital media for information sharing and reporting of program updates among all stakeholders | LHI Weed Program facebook page maintained ( <a href="http://www.facebook.com/protectingparadiseLHI">www.facebook.com/protectingparadiseLHI</a> ) | FMO, LHIB administration,                     |

<sup>4</sup> Weed-density mapping should be repeated in 2020 and in 2025. Density mapping should be repeated at halfway point of the eradication program (Year 15), which hopefully coincides with high-level funding to enable repeat treatment of the island twice so that by Year 15 considerable reductions in weed populations will be evident; which may improve modelling eradication trajectories and investment needs.



**Goal 4 – Build Capacity: Ensure the LHIB has the ability and commitment to manage invasive weeds, and promote awareness of invasive weeds within the community.**

| Action   | Outputs & Performance Indicators  | Responsibility   |
|--|---|--|
|  | including the community   | Content of LHIB website ( <a href="http://www.lhib.nsw.gov.au">www.lhib.nsw.gov.au</a> ) updated and linked with websites of project partners  |
| 4.4.4  | Support the Friends of LHI, LHIB-sponsored volunteers and promote local volunteering on LHI   | Ongoing involvement in weed management on LHI from volunteers  |
| 4.4.5  | Establish Island Stewardship Program to promote and acknowledge sustainable gardening practices with safe, non-invasive ornamental and native species   | Reduced number of potential invasive species spreading into the PPP and across Settlement<br>Recognition and celebration of sustainable gardeners under the Island Stewardship Program |
| 4.4.6  | Support opportunities for visitors to participate in weeding on LHI (e.g. Sea Spurge control)   | Reduction in the extent of Sea Spurge and other weeds on LHI   |
| 4.4.7  | Provide opportunities for local community to increase skills in operation of weed program & weed identification   | Local community offered to participate in relevant training when practical   |
| 4.4.8  | Recognise and celebrate weeding effort on LHI   | Events staged and involvement in weeding recognised and support for future effort ongoing  |
| 4.4.9  | Continue the LHI garden plant inventory   | Knowledge of plant species and invasive capacity understood by leaseholders  |
| 4.4.10   | Ongoing updates in the local LHIB <i>Community Information Bulletin</i> and the community newspaper, the <i>Lord Howe Island Signal</i> regarding current and new weed risks and program outcomes | Residents kept up to date with weed program updates and weed risks   |
| <b>Objective 4.5 Improve effectiveness in weed management through research and development</b> |   |  |
| 4.5.1  | Network with other agencies on investment into research and development in eradication methodology and technical applications   | Partnerships established to further research and add value to LHI project work   |

**Goal 4 – Build Capacity: Ensure the LHIB has the ability and commitment to manage invasive weeds, and promote awareness of invasive weeds within the community.**

| Action  |   | Outputs & Performance Indicators   | Responsibility   |
|---|---|--|--|
| 4.5.2   | Ensure the methodology of the LHI Weed Management Strategy and Weed Eradication Program remains current, with outcomes shared with other natural resource management and island conservation programs   | LHIB monitors progress of weed eradication programs on other islands<br>Deliver presentations at relevant conferences and participation in workshops | FMO, key project partners                              |
| 4.5.3   | Investigate the feasibility and application of a multispecies weed-detector dog for LHI   | Feasibility study for multispecies weed-detector dog undertaken  | NZDOC, NSW OEH, LHIB, FMO, DPI                         |
| 4.5.4   | Continue investigation of new technologies, such as UAVs and HBT, for weed surveillance and treatment   | New technologies (UAV, HBT) trialled, weed populations in remote terrain depleted  | NSW OEH, FMO, Weeds Technical Panel, project partners  |
| 4.5.5   | Monitor responses of weeds after implementation of LHI Rodent Eradication Program (see <a href="http://www.lhib.nsw.gov.au/environment/environmental-programs/rodent-eradication">http://www.lhib.nsw.gov.au/environment/environmental-programs/rodent-eradication</a> [accessed 8 Nov 2016]) | New weed risks identified and categorised for management   | LHI Rodent Eradication Program team, FMO, NSW OEH      |
| 4.5.6   | Investigate seed-bank persistence of priority weeds after eradication of rodents  | Weed seed-bank persistence after rodent eradication is understood<br>Search interval adjusted based on outcomes                                      | FMO, research partners, Weed Team Supervisor and staff |
| 4.5.7   | Assess the cost–benefit of the LHI Weed Eradication Program and methodology in island biodiversity conservation   | LHI program measured against other island weed eradication programs  | FMO, NZDOC, Weeds Technical Panel                      |
| Objective 4.6 Implement and enforce legislation and policies for consistent and effective weed management |   |  |  |
| 4.6.1   | Ensure the LHIB complies with obligations under the NSW <i>Noxious Weed Act 1993</i> until subsumed by the <i>Biosecurity Act 2015</i>  | Active management and monitoring of declared weeds undertaken across the LHI Local Control Authority (LCA)   | DPI, MEWH, FMO, LHIB rangers, Noxious Weed Inspectors  |

**Goal 4 – Build Capacity: Ensure the LHIB has the ability and commitment to manage invasive weeds, and promote awareness of invasive weeds within the community.**

| Action | Outputs & Performance Indicators  |   | Responsibility                                      |
|--------|---|---|---|
| 4.6.2  | Align weed declarations and control classes to legislative changes under the <i>Biosecurity Act 2015</i>  | Weed risk and control categories for LHI aligned to <i>Biosecurity Act 2015</i>   | DPI, MEWH, FMO                                      |
| 4.6.3  | Seek assistance from external strategic weeds officers undertake annual declared weed inspections on LHI  | Planned 50% of Settlement to be inspected annually (to match 24-month search frequency of weed management blocks required for the PPP)                                  | CEO, FMO, MidCoast Council (Hastings River – Taree) |
| 4.6.4  | Ensure LHI environmental management plans and polices are consistent with the goals, objectives and actions in the LHI WMS  | LHIB policies and management plans aligned to the goals, objectives and actions in the LHI WMS<br>Weed treatment measures applied in accordance with plans and policies | LHIB  |
| 4.6.5  | Demonstration of best-practise weed management and compliance on leases by LHIB staff   | LHIB staff demonstrate best-practise control of weeds on leases and acknowledged for their efforts in the Island Stewardship Program                                    | LHIB, Noxious Weed Inspectors                       |
| 4.6.6  | Ensure residents manage weeds in accordance with Property Management Plans (special leases) and declared weed management requirements on perpetual lease and permissive occupancies | Leaseholders are compliant with weed management   | LHIB, Noxious Weed Inspectors, leaseholders         |

## 8 Program budget 2016–25

The 2006 LHI WMS (LHIB 2006) projected a timeframe of 30 years to achieve the eradication of widespread invasive weeds on LHI. This Weed Management Strategy outlines the priorities and program requirements for the next decade 2016 – 2025, with the expected continuation of the program to at least 2035. The costing of this Strategy is focused on weed-eradication priorities.

The LHI Weed Eradication Program is shifting into a new era, with significantly reduced weed densities across the island. For the next decade, an initial four-year budget is proposed to enable two complete sweeps of the island (Table 10) this includes a program review (in Year 3, 2018–19) to measure performance, and identify improvements, new weed risks and resource needs for the following years (to 2025). It is projected that expenditure will need to be sustained as the labour effort to gain access to and physically search the same area of weed management blocks is still required. Future budgeting and assessment of the program end should be progressive, with assessment of weed population data at least every three years.

Within the next decade of this Weed Management Strategy, an estimated 30 invasive weed species with limited occurrence (reduced with the past effort or initially restricted in numbers and those permissible for removal across tenures) are projected to be eradicated (see Appendix 1). More broadly distributed target weeds are expected to reach the containment phase (achieving no new seed inputs) and monitoring phase within the next decade, given adequate funding and technical applications.

### **The LHI Weed Management Strategy requires resourcing to deliver seven core elements of the program:**

- 1 Grid-search of weeds across 500 ha of LHI per year, with the effect that all weed management blocks are visited every 24 months.**
- 2 Annual search for Bitou Bush and targeting weed management blocks with residual mature weeds, such as Ochna.**
- 3 Technical access to weeds along cliff-lines and in rugged and remote terrain (on-rope access, helicopter winch access, helicopter lance-spray operations).**
- 4 Dealing with current and future weed risks in the Settlement.**
- 5 Research and development of new methods for detection and control of weeds (e.g. UAV, HBT, weed-detector dogs), of seed-bank persistence and response of weeds following eradication of rodents on LHI.**
- 6 Monitoring and review of the Weed Eradication Program and Weed Management Strategy.**
- 7 Capacity building on and off LHI, fund-raising, networking with weed and botany specialists, developing and maintaining connections with project partners and the Friends of LHI.**

The LHI Weed Eradication Program is administered by the LHIB and staffing accords with the LHIB Crown Employees (Lord Howe Island Board Salaries and Conditions) Award. A proposed staffing strategy, and associated staff grades are provided in Appendix 4.

**Table 10 Proposed budget, secured funding and remaining funds sought for LHI Weed Eradication Program for initial four years of decade 2016–25 (note some expenditure already undertaken in 2016–17). Costs cover program administration, on-ground and technical operations, and research and development; funding indicates LHIB recurrent inputs (dependent on LHIB budgets). FTE = full-time equivalent; PT = part-time.**

| Activities  | Year 1<br>2016–17 | Year 2<br>2017–18 | Year 3<br>2018–19 | Year 4<br>2019/20 |
|---|-------------------|-------------------|-------------------|-------------------|
| <b>Program management, administration &amp; extension</b>                                     |                   |                   |                   |                   |
| Project Assistant   | 23,000            | 37,152            | 38,081            | 39,033            |
| Administration  | 8,000             | 17,465            | 17,902            | 18,349            |
| Program review  | 35,000            | 0                 | 30,000            | 0                 |
| Data management system support and analysis   | 0                 | 5,000             | 5,125             | 5,253             |
| Noxious weeds supplement  | 5,000             | 5,125             | 5,253             | 5,384             |
| Community engagement & training   | 2,000             | 10,000            | 10,125            | 10,253            |
| Materials   | 25,000            | 30,000            | 30,750            | 31,519            |
| <b>On-ground operations</b>   |                   |                   |                   |                   |
| Field staff – 9 FTE   | 667,719           | 684,412           | 701,522           | 719,060           |
| Rope-access team – 1 FTE (4 PT)   | 78,000            | 79,950            | 81,949            | 83,997            |
| Settlement project (0.4 FTE)  | 30,000            | 30,750            | 31,519            | 32,307            |
| Ochna contract teams (0.55 FTE)   | 70,305            | 72,063            | 73,864            | 75,711            |
| Volunteers  | 10,000            | 10,250            | 10,506            | 10,769            |
| <b>Special operations</b>   |                   |                   |                   |                   |
| Helicopter – lance-spray  | (Completed)       | 120,000           | 123,000           | 126,075           |
| Helicopter – winch operations   | 100,000           | 100,000           | 102,500           | 105,063           |
| <b>Research &amp; trials</b>  |                   |                   |                   |                   |
| UAV trials (estimated)  | 65,000            | 5,000             | 5,125             | 5,253             |
| HBT trials (estimated)  | 63,000            | 0                 | 10,000            | 0                 |
| Weed detector dog (maintenance)   | 0                 | 25,000            | 10,000            | 10,000            |
| Weed persistence before and after rodent eradication  | 0                 | 0                 | 10,000            | 10,000            |
| <b>Total expenditure</b>  | <b>1,309,182</b>  | <b>1,362,503</b>  | <b>1,430,816</b>  | <b>1,442,961</b>  |
| <b>Secured funding (see Table 11 for breakdown in secured funding in 2016–17 and 2017–18)</b> |                   |                   |                   |                   |
| Total LHIB inputs (pending budget)  | 390,871           | 449,535           | 460,773           | 472,293           |
| Special operations  | 283,000           | 5,125             | 5,253             | 5,384             |
| On-ground   | 438,850           | 55,000            | 0                 | 0                 |
| In-kind hours on-ground Green Army  | 60,000            | 0                 | 0                 | 0                 |
| <b>Total secured funding</b>  | <b>1,172,721</b>  | <b>509,660</b>    | <b>466,027</b>    | <b>477,677</b>    |
| <b>Remaining funding sought</b>   | <b>136,461</b>    | <b>852,843</b>    | <b>964,789</b>    | <b>947,284</b>    |

**Table 11 Current secured funding for 2016–17 and 2017–18. NCLLS = North Coast Local Land Services; SoS = Saving our Species Program, NSW State Government ([www.environment.nsw.gov.au/savingourspecies](http://www.environment.nsw.gov.au/savingourspecies)); NSWET = NSW Environmental Trust; WAP = NSW Weeds Action Program 2015–2020 (DPI 2015).**

| Program              | Activity and staffing   | FTE         | \$                 |
|----------------------|---|-------------|--------------------|
| <b>2016–17</b>       |   |             |                    |
| LHIB                 | Project management, materials, volunteers, grid-search                  | 3.6         | \$390,871          |
| NCLLS                | Grid-search team & helicopter winch (80K)                               | 1.6         | \$196,000          |
| SOS <sup>A</sup>     | Grid-search team, including supervisor capacity + helicopter (\$20,000) | 3           | \$268,850          |
| NSWET                | Grid-search team and special projects                                   | 1           | \$252,000          |
| Green Army           | Grid-search team (average output)                                       | 1           | \$60,000           |
| WAP                  | Declared weeds  | 0           | \$5,000            |
| <b>Total 2016–17</b> |   | <b>10.2</b> | <b>\$1,172,721</b> |
| <b>2017–18</b>       |   |             |                    |
| LHIB <sup>B</sup>    | Project management, materials, volunteers, grid-search                  | 4           | \$449,535          |
| NCLSS                | Grid-search team  | 0.75        | \$55,000           |
| WAP                  | Declared weeds  | 0           | \$5,125            |
| <b>Total 2017–18</b> |   | <b>4.75</b> | <b>\$509,660</b>   |

<sup>A</sup> Funds allocated in table identify weed eradication component of this grant only.

<sup>B</sup> Proposed LHIB inputs pending 2017–18 budget

## Funding recommendations

It is important that the Weed Eradication Program attracts adequate and ongoing funding over the duration of this WMS to allow forward planning, to secure staff and to offer employment security (important on an isolated island with resource limitations).

Further, the 24-month treatment schedule of weed management blocks is necessary for adequate management of nearly all widespread weeds and to deliver effective landscape-scale weed management and eradication.

The funding for the program has varied over the life of the program, but the program has shown a degree of robustness, with data management systems that enable prioritisation of search effort in times of lean funding. Funding shortfalls do not necessarily mean an open-ended control program but do entail the need to work smart and that the overall timeframe for eradication may then extend.

The LHIB are working to secure long-term funding for a fully resourced multi-year program to improve outcomes in weed eradication on LHI. Future funding and project partners and investment include 'Adopt a Block – Protecting Paradise LHI' (a local fundraising group being developed) and mainstream government funding, including applications to the NSW State Government to fund conservation project work in the PPP.

## 9 Conclusion

The impact of weeds on the unique environment of Lord Howe Island has long been recognised. Local island elder Bill Retmock recalls his mother brought Ground Asparagus to LHI. When it started to spread onto the lagoon foreshore he was worried that it was going to harm the island, so he started pulling it out. Bill was possibly the first bush regenerator, or weeder as they are referred to locally, on the island.

When we walk around Lord Howe Island today the weeds are getting hard to find, so much so that we could be excused for thinking that there has never been a serious weed problem on the island. Another resident, Chris Murray, refers to Transit Hill as 'Transformation Hill' because it is now free of the monocultures of Climbing Asparagus, Cherry Guava and Ground Asparagus that once smothered the native vegetation in that area. The results of the past 10 years of the Weed Eradication Program (LHIB 2016) demonstrate – with hard data – the significant reduction in weeds achieved island-wide.

It is hoped that the outcomes of reducing weeds and their impacts on LHI have provided a valuable lesson in the need for extreme caution in importing new plants to the island – the introduction of 'one small invasive weed plant' can have a major economic and environmental impact in the long term. It has taken millions of dollars, the concerted actions of the community – both island and mainland – and more than a decade of hard work to achieve the significant gains made in reducing the numbers and distribution of weeds on the island and protecting the ecosystems and native vegetation of LHI. We have also demonstrated that we can make a change and reverse the trend and impacts of widespread invasive weeds.

The outcomes to date would not have been possible without the support and effort of the whole island community, especially Ian Hutton, the Friends of Lord Howe Island, and funding agencies, including the Commonwealth and State governments, and their agencies such as the NSW Environmental Trust and North Coast Local Land Services. The hard work undertaken by the weeders – including staff of the LHIB, volunteers and contract teams – have ensured all of the island has been searched come rain or shine. The great gains made would not have been achieved without their dedicated boots on the ground.

Jenni Le Cussan also had the foresight to investigate the impact of weeds on other islands and to draw together global best-practice in weed eradication, which culminated in the 2006 *Weed Management Strategy for Lord Howe Island* (LHIB 2006) and implementation of the Weed Eradication Program methodology. This approach laid the foundation for the first decade of weed eradication on LHI, which in turn has set a sound benchmark for the work of the next two decades, the continuation of best-practice weed eradication and the continued restoration and protection of the island's World Heritage values.

The continuation of the Weed Management Strategy into the next decade will relieve the precious environment of LHI of the impacts of ecosystem-transforming weeds and maintain the vision of Protecting Paradise.





## References

**Note:** All websites cited below or in the body of the report were accessed or verified 08 March 2016 unless otherwise indicated.

AECOM, 2016, *Lord Howe Island Biosecurity Strategy 2016*. AECOM Australia Pty Ltd, Townsville, Qld.

Bower S, 2016, Breaking Bad – 10 years into a Projected 30 Year Weed Eradication Program on World Heritage Listed Lord Howe Island. Pp 201–208 In *Proceedings of the 20th Australasian Weeds Conference, 11–15 September, Perth, Western Australia*. Edited by R. Randall, S. Lloyd and C. Borger. Published by Weeds Society of Western Australia ISBN 978-0-646-96031-9 [Available at [http://caws.org.au/awc\\_contents.php?yr=2016](http://caws.org.au/awc_contents.php?yr=2016)]

DECC, 2007, *Lord Howe Island Biodiversity Management Plan*. NSW Department of Environment and Climate Change, Sydney.

DECC, 2010, *New South Wales Natural Resources Monitoring, Evaluation and Reporting Strategy 2010–15*. Department of Environment and Climate Change, Sydney. [Available at <http://www.environment.nsw.gov.au/soc/NaturalresourcesMER.htm>]

DECCW, 2010, *Lord Howe Island Permanent Park Preserve Plan of Management*. Department of Environment, Climate Change and Water (NSW), Sydney. [Available at [www.environment.nsw.gov.au/resources/planmanagement/final/20110007LordHoweIslandPomFinal.pdf](http://www.environment.nsw.gov.au/resources/planmanagement/final/20110007LordHoweIslandPomFinal.pdf)]

Diong CH, 1982, *Population Biology and Management of the Feral Pig (Sus scrofa L.) in Kipahulu Valley, Maui*. PhD thesis (Zoology), University of Hawaii, Honolulu. [Available at <http://www.hear.org/articles/diong1982/pdfs/diong1982.pdf>]

DOC, 2015, Doggedly determined to sniff out weeds. *Conservation Blog* 30 March 2015. NZ Department of Conservation, Wellington, NZ. [Available at <https://blog.doc.govt.nz/2015/03/30/raoul-weed-dog/>, accessed 3 October 2016]

DPI, 2008, *New South Wales Invasive Species Plan 2008–2015*. NSW Department of Primary Industries, Orange, NSW. [Available at [http://www.dpi.nsw.gov.au/\\_data/assets/pdf\\_file/0020/236900/nsw-invasive-species-plan.pdf](http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0020/236900/nsw-invasive-species-plan.pdf)]

DPI, 2013, *New South Wales Biosecurity Strategy 2013–2021*. NSW Department of Primary Industries, Sydney. [Available at [www.dpi.nsw.gov.au/\\_data/assets/pdf\\_file/0005/467699/NSW-biosecurity-strategy-2013-2021.pdf](http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/467699/NSW-biosecurity-strategy-2013-2021.pdf)]

DPI, 2015, *New South Wales Weeds Action Program 2015–2020 – Guidelines*. NSW Department of Primary Industries, Sydney. [Available at [www.dpi.nsw.gov.au/\\_data/assets/pdf\\_file/0007/318454/NSW-Weeds-Action-Program-Guidelines-2015-2020.pdf](http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0007/318454/NSW-Weeds-Action-Program-Guidelines-2015-2020.pdf)]

Gherardi F & Angiolini C, 2004, Eradication and control of invasive species. Pp 271–299 In *Biodiversity Conservation and Habitat Management. Volume 1*. Edited by F Gherardi, C



- Cortj & M Gualtieri. Encyclopaedia of Life Support Systems (EOLSS). UNESCO and EOLSS Publishers, Paris, France.
- GISD (Global Invasive Species Database), 2016, Species profile: *Psidium cattleianum*. Invasive Species Specialist Group (ISSG), Species Survival Commission, World Conservation Union (IUCN), Auckland, NZ. [Available at [www.iucngisd.org/gisd/species.php?sc=59](http://www.iucngisd.org/gisd/species.php?sc=59), accessed 4 Nov 2016]
- Green PS, 1994, *Flora of Australia. Volume 49 Oceanic Islands. Part 1*. Australian Government Publishing Service, Canberra, ACT.
- Grice AC, Clarkson JR, Friedel MH, Murphy HT, Fletcher CS & Westcott DA, 2012, Containment: The State of Play. Pp 320–324 In *Developing Solutions to Evolving Weed Problems. Proceedings of the 18th Australasian Weeds Conference, Melbourne, 8–11 October 2012*. Edited by V. Eldershaw. Weed Society of Victoria Inc., Batman (Melbourne), Vic.
- Groves RH, Boden R & Lonsdale WM, 2005, *Jumping the Garden Fence: Invasive Garden Plants in Australia and Their Environmental and Agricultural Impacts*. CSIRO report prepared for WWF-Australia. WWF-Australia, Sydney.
- Holloran P, 2006, Measuring performance of invasive plant eradication efforts in New Zealand. *New Zealand Plant Protection* **59**: 1–7.
- Hutton I & Le Cussan J, 2001, *Outline for a Weed Control Strategy and An Inventory Of Weeds for Lord Howe Island*. Unpublished internal report to the Lord Howe Island Board.
- ISSG, 2013, *100 of the World's Worst Invasive Alien Species*. Invasive Species Specialist Group (ISSG), Species Survival Commission, World Conservation Union (IUCN), Auckland, NZ. [Available at [www.iucngisd.org/gisd/100\\_worst.php](http://www.iucngisd.org/gisd/100_worst.php), accessed 8 Nov 2016]
- Keith D, 2004, *Ocean Shores to Desert Dunes, The Native Vegetation of New South Wales and the ACT*. Department of Environment and Conservation (NSW), Sydney.
- Kleyer M, Bekker RM, Knevel IC, Bakker JP, Thompson K, Sonnenschein M, Poschlod P, Van Groenendael JM, Klimeš L, Klimešová J, Klotz S, Rusch GM, Hermy M, Adriaens D, Boedeltje G, Bossuyt B, Dannemann A, Endels P, Götzenberger L, Hodgson JG, Jackel A-K, Kühn I, Kunzmann D, Ozinga WA, Römermann C, Stadler M, Schlegelmilch J, Steendam HJ, Tackenberg O, Wilmann B, Cornelissen JHC, Eriksson O, Garnier E & Peco B, 2008, The LEDA Traitbase: a database of life-history traits of the Northwest European flora. *Journal of Ecology* **96** (6): 1266–1274. doi:10.1111/j.1365-2745.2008.01430.x
- Le Cussan JM, 2002a, *Density Distribution of Bridal Creeper, Myrsiphyllum asparagoides, and Two Other Weeds on Malabar Range, Lord Howe Island*. Unpublished internal report to the Lord Howe Island Board.
- Le Cussan JM, 2002b, *Density Distribution of 5 Major Weeds on Transit Hill, Lord Howe Island*. Unpublished internal report to the Lord Howe Island Board.
- Le Cussan JM, 2003a, *Density Distribution of 6 Major Weeds on Intermediate Hill, Lord Howe Island*. Unpublished internal report to the Lord Howe Island Board.

- Le Cussan JM, 2003b, *Density Distribution of 6 Major Weeds on the North-western Slopes of Mt Lidgbird, Lord Howe Island*. Unpublished internal report to the Lord Howe Island Board.
- Le Cussan JM, 2004a, *Report on Vegetation Management at Raoul Island, Kermadec Group, New Zealand*. Report prepared for the Swire Group Churchill Fellowship.
- Le Cussan JM, 2004b, *Investigating the Management, Control and Monitoring of the Invasive Woody Weed Species, Psidium cattleianum in National Park Areas in USA, New Zealand, Mauritius and Ile De La Reunion. Raoul Island Weed Eradication Program Methodology and Application to Lord Howe Island*. Unpublished report prepared for the Winston Churchill Memorial Trust and The Swire group Churchill Fellowship.
- LHIB, 2002a, *Strategic Plan for Weed Management*. Internal report prepared for the Lord Howe Island Board.
- LHIB, 2002b, *Lord Howe Island Revegetation Plan*. Lord Howe Island Board, Lord Howe Island.
- LHIB, 2006, *Weed Management Strategy for Lord Howe Island*. Lord Howe Island Board, Lord Howe Island.
- LHIB, 2010, *Strategic Plan for the Lord Howe Island Group World Heritage Property*. Lord Howe Island Board, Lord Howe Island. [Available at [www.lhib.nsw.gov.au/sites/lordhowe/files/public/images/documents/lhib/Tourism/lhi%20whp%20draft%20strategic%20plan%20-%20final%20draft%2014%20october%202010.pdf](http://www.lhib.nsw.gov.au/sites/lordhowe/files/public/images/documents/lhib/Tourism/lhi%20whp%20draft%20strategic%20plan%20-%20final%20draft%2014%20october%202010.pdf)]
- LHIB, 2014, *Lord Howe Island Plant Importation Strategy*. Lord Howe Island Board, Lord Howe Island. [Available at [www.lhib.nsw.gov.au/sites/lordhowe/files/public/images/documents/lhib/Publications/Policies/Plant%20Importation%20Strategy%20-%20May%202014.pdf](http://www.lhib.nsw.gov.au/sites/lordhowe/files/public/images/documents/lhib/Publications/Policies/Plant%20Importation%20Strategy%20-%20May%202014.pdf)]
- LHIB, 2015a, *Lord Howe Island Board Pesticide Use Notification Plan 2015*. Lord Howe Island Board, Lord Howe Island, NSW.
- LHIB, 2015b, *Lord Howe Island Lagoon Foreshore Management Plan*. Lord Howe Island Board, Lord Howe Island, NSW.
- LHIB, 2016, *Lord Howe Island Weed Eradication Program – Results 2004–2014*. Lord Howe Island Board, Lord Howe Island, NSW.
- Lowe S, Browne M, Boudjelas S & De Poorter M, 2004, *100 of the World's Worst Invasive Alien Species. A Selection from the Global Invasive Species Database*. Updated version. Invasive Species Specialist Group (ISSG), Species Survival Commission, World Conservation Union (IUCN), Auckland, NZ. [Available at [http://www.issg.org/database/species/reference\\_files/100English.pdf](http://www.issg.org/database/species/reference_files/100English.pdf)]
- Mack RN & Lonsdale WM, 2002, Eradicating invasive plants: hard-won lessons for islands. Pp 164–172 In *Turning the Tide: The Eradication of Invasive Species. Proceedings of the International Conference on Eradication of Island Invasives*. Occasional Paper of the IUCN Species Survival Commission No. 27. Edited by CR Vietch & MN Clout. IUCN SSC

- Invasive Species Specialist Group, IUCN, Gland, Switzerland, and Cambridge, UK.  
[Available at [portals.iucn.org/library/efiles/documents/ssc-op-028.pdf](http://portals.iucn.org/library/efiles/documents/ssc-op-028.pdf)]
- Natural Resource Commission, 2014, *Weeds – Time to Get Serious. Review of Weed Management in NSW. Final Report and Recommendations*. NSW Natural Resource Commission, Sydney.
- NRMMC (Natural Resource Management Ministerial Council), 2007, *Australian Weeds Strategy – A National Strategy for Weed Management in Australia*. Australian Department of the Environment and Water Resources, Canberra, ACT. [Available at [www.weeds.org.au/docs/The%20Australian%20Weeds%20Strategy.pdf](http://www.weeds.org.au/docs/The%20Australian%20Weeds%20Strategy.pdf)]
- NSW Government, 2014, Noxious Weeds (Weed Control) Order 2014. *Government Gazette of the State of New South Wales* **23** (28 February 2014): 734–845.
- NSW Government, 2015, *Draft NSW Invasive Species Plan 2015–2022. Consultation Document*. Department of Industry, Skills and Regional Development, Sydney.
- OEH, 2013, *Asparagus Weeds Management Manual: Current Management and Control Options for Asparagus Weeds (Asparagus spp.) in Australia*. NSW Office of Environment and Heritage, Sydney.
- OEH, 2016, *Hawkweed Detector Dogs*. NSW Office of Environment Heritage, Sydney.  
[Available at [www.environment.nsw.gov.au/pestsweeds/OrangeHawkweed.htm](http://www.environment.nsw.gov.au/pestsweeds/OrangeHawkweed.htm) accessed 11 Oct 2016]
- Panetta FD, 2007, Evaluation of weed eradication programs: containment and extirpation. *Diversity and Distributions* **13**: 33–41.
- Panetta FD & Timmins SM, 2004, Evaluating the feasibility of eradication for terrestrial weed incursions. *Plant Protection Quarterly* **19** (1): 5–11.
- Panetta D, Csurhes S, Markula A & Hannah-Jones M, 2011, Predicting the cost of eradication for 41 Class 1 declared weeds in Queensland. *Plant Protection Quarterly* **26** (2): 42–46.
- Pausas JG, Lloret F & Vila M, 2006, Simulating the effects of different disturbance regimes on *Cortaderia selloana* invasion. *Biological Conservation* **128** (1): 128–135.
- Pheloung PC, 1995, *Determining the Weed Potential of New Plant Introductions into Australia. A report on the development of a Weed Risk Assessment System commissioned by the Australian Weeds Committee and the Plant Industries Committee*. Agriculture Protection Board, Perth, Western Australia.
- Pickard J, 1983, Vegetation of Lord Howe Island. *Cunninghamia* **1**(2): 133–265.
- Radosevich SR, Holt SH & Ghersa CM, 2007, *Ecology of Weeds and Invasive Plants: Relationship to Agriculture and Natural Resource Management*. Third edition. John Wiley & Sons, Oregon, USA.
- Recher HF & Clark SS (Eds), 1974, *Environmental Survey of Lord Howe Island: A Report to the Lord Howe Island Board*. Australian Museum, Sydney.

- Sherringham P., Richards P., Gilmour P., & Kemmerer E., 2016, *A Systematic Flora Survey, Floristic Classification and High-Resolution Vegetation Map of Lord Howe Island*. Lord Howe Island Board, Lord Howe Island, NSW.
- Steiner A, 2010, Far too many governments have failed to grasp the scale of the threat from invasive species. Presentation to *Helping Islands Adapt. A Workshop on Regional Action to Combat Invasive Species on Islands to Preserve Biodiversity and Adapt to Climate Change*, 11–16 April 2010, Hyatt Regency, Auckland, New Zealand. [Available at [http://issg.org/cii/Electronic%20references/pii/helping\\_islands\\_adapt\\_workshop\\_summary.pdf](http://issg.org/cii/Electronic%20references/pii/helping_islands_adapt_workshop_summary.pdf)]
- Timmins SM & Braithwaite H, 2002, Early detection of invasive weeds on islands. Pp 311–318 In *Turning the Tide: The Eradication of Invasive Species. Proceedings of the International Conference on Eradication of Island Invasives*. Occasional Paper of the IUCN Species Survival Commission No. 27. Edited by CR Vietch & MN Clout. IUCN SSC Invasive Species Specialist Group, IUCN, Gland, Switzerland, and Cambridge, UK. [Available at <https://portals.iucn.org/library/efiles/documents/ssc-op-028.pdf>]
- West C, 2002, Eradication of alien plants on Raoul Island, Kermadec Islands, New Zealand. Pp 365–373 In *Turning the Tide: The Eradication of Invasive Species. Proceedings of the International Conference on Eradication of Island Invasives*. Occasional Paper of the IUCN Species Survival Commission No. 27. Edited by CR Vietch & MN Clout. IUCN SSC Invasive Species Specialist Group, IUCN, Gland, Switzerland, and Cambridge, UK. [Available at <https://portals.iucn.org/library/efiles/documents/ssc-op-028.pdf>]
- Winkler MA, Cherry H & Downey PO (Eds), (2008), *Bitou Bush Management Manual: Current Management and Control Options for Bitou Bush (Chrysanthemoides monilifera ssp. rotundata) in Australia*. Department of Environment and Climate Change (NSW), Sydney.

# Appendix 1 Weed management categories

Three management categories are applied to weeds on LHI based on their level of threat (invasiveness and impact), weed risk assessment (WRA) and the feasibility of eradication, combined with the reduction in the extent of widespread weed invasions resulting from weed management over the past 10 years. These three management categories aim to align with those of the new *Biosecurity Act 2015*, which will replace the control classes of the *Noxious Weeds Act 1993*.

The categories are:

**Category 1: Eradicate (immediate or suppression leading to eradication);**

**Category 2: Alert (sleepers weeds – watch and act as necessary); and**

**Category 3: Control (effectively manage).**

It is important to note that this categorisation is not static, and as threats develop or new threats arise, categories and management priorities may change.

The following tables list the species of weeds (alphabetically by common names) within each of the three categories, with:

- **Common name** (and alternative common names).
- **Scientific name.**
- **Control class:** The control class under the *Noxious Weeds Act* (see Table A1); an \* indicates a plant that must not be sold, propagated or knowingly distributed.
- **Other class:** Identifies other categorisations of weeds (see section 2 for further details of these listings):
  - WoNS** = Weeds of National Significance (as at April 2012);
  - IUCN** = World's 100 Worst Invasive Alien Species;
  - Alert** = National Environmental Alert List;
  - NRC**, extreme (NRCx) to very high (NRCv) priority invasive species that pose a threat to biodiversity in NSW;
  - AUS** = Australian species introduced to LHI; and
  - EW** = Environmental Weed (Weeds Australia database; Groves *et al.* 2005).
- **# removed 2004–15:** The number of plants removed between 2004 and 2014–15. These figures indicate the scale of weed infestation at the start of the program. With a 90% reduction in mature plants of the widespread weed species, remaining populations average roughly 10–20% of populations at start of program.
- **Last seen:** The year the species was last removed and last observed on LHI.
- **Area (# WMB):** The total area of the blocks in which a weed has been recorded and the number of weed management blocks (WMB) in which a species has been recorded; ~ indicates the number of WMBs is an estimate. The area does not equate to the actual size of a weed infestation, as most weeds are variously dispersed in the blocks.
- **Location (WMB):** Notes on the landscape units, WMBs or sites where a species has been recorded (and the WMB identifiers where relevant). Information for this column is incomplete for Categories 2 and 3.

- **Current abundance:** Described in terms of density (number of individuals) and dispersion of all life-stages of a species across the island. These estimates are based on data from the preceding 24-months search effort (LHI Weeds Database).

| Density    | Number of individuals | Dispersion | Description  |
|------------|-----------------------|------------|--|
| Common     | 50,000 – 150,000      | Widespread |  |
| Occasional | 15,000 – 50,000       | Localised  |  |
| Uncommon   | 1,000 – 15,000        | Isolated   | Unique individual  |
| Few        | <100                  | Outliers   | Disjunct or isolated infestations of weeds separate from main area of weed infestation |
| Zero       | 0                     | Nil        | Not evident but not necessarily absent   |

- **Propagule persistence:** Provided for Category 1 species only. Weed species propagule persistence indicates the longevity in the environment of **seeds** (seed-bank persistence), other **vegetative** structures (e.g. underground storage organs, such as bulbs or tubers, aerial tubers, offsets), or **spores** (for ferns). Understanding propagule persistence, particularly soil seed-banks, is critical for planning treatment regimes to achieve eradication; the feasibility of eradication is greater for weed species with low propagule persistence. Most weed species on LHI have seed propagules. Eradication target species on LHI that bear seeds (or spores) have been divided into three persistence groupings (LEDA categories, after Kleyer *et al.* 2008; see <http://www.research/projects/LEDA>):  
**Transient (T)** – seed-persistence <1 year;  
**Short-term persistent (STP)** – seed-persistence of 1–5 years; and  
**Long-term persistent (LTP)** – seed-persistence >5 years.

Weed species with vegetative propagules or spores are indicated as such. Vegetative structures are expected to have long-term persistence.

Propagule persistence will be further detailed for each eradication target species in the LHI Weeds Operational Manual (LHI WOM), which is in preparation.

Throughout table,

? indicates status or data uncertain and further research needed.



**Table A1 Weed control classes and control measures as defined under the *Noxious Weeds Act 1993* (adapted from <http://www.dpi.nsw.gov.au/aboutus/about/legislation-acts/noxious-weeds>). Under Example control requirements, an \* indicates that, in some cases, the species may not be sold, propagated or knowingly distributed.**

| Control class | Weed type   | Example control requirements   |
|---------------|---|--|
| 1             | Plants that pose a potentially serious threat to primary production or the environment and are not present in the State or are present only to a limited extent   | The plant must be eradicated from the land and the land must be kept free of the plant<br>The weeds are also 'notifiable' and a range of restrictions on their sale and movement exist |
| 2             | Plants that pose a potentially serious threat to primary production or the environment of a region to which the order applies and are not present in the region or are present only to a limited extent                       | The plant must be eradicated from the land and the land must be kept free of the plant<br>The weeds are also 'notifiable' and a range of restrictions on their sale and movement exist |
| 3             | Plants that pose a potentially serious threat to primary production or the environment of a region to which the order applies, are not widely distributed in the area and are likely to spread in the area or to another area | The plant must be fully and continuously suppressed and destroyed*   |
| 4             | Plants that pose a potentially serious threat to primary production, the environment or human health, are widely distributed in an area to which the order applies and are likely to spread in the area or to another area    | The growth of the plant must be managed in a manner that continuously inhibits the ability of the plant to spread*   |
| 5             | Plants that are likely, by their sale or the sale of their seeds or movement within the State or an area of the State, to spread in the State or outside the State  | There are no requirements to control existing plants of Class 5 weeds<br>However, the weeds are 'notifiable' and a range of restrictions on their sale and movement exists             |

## Category 1: Eradicate (immediate or suppression leading to eradication)

| Common name<br>(Alternate names)                                | Scientific name  | Control class | Other class | # Removed<br>2004–15 | Last seen | Area<br>(# WMB)  | Location (WMB)   | Current abundance                | Propagule persistence |
|---|--|---------------|-------------|----------------------|-----------|------------------|--|----------------------------------|-----------------------|
| <b>Eradicated – monitor</b>                                     |  |               |             |                      |           |                  |  |                                  |                       |
| Cat's Claw Creeper  | <i>Dolichandra unguis-cati</i>                             | 2             | WoNS, NRCv  | 25                   | 2006      | 1.99 ha (1 WMB)  | Settlement North (SN171, SN083)  | Zero                             | T – STP               |
| Cocos Palm  | <i>Syagrus romanzoffiana</i>                               | 3*            |             | 3                    | 2014      | 0.72 ha (3 WMBs) | Settlement North (SN149, SN071, SN009)   | Zero                             | T                     |
| French Broom<br>(Montpellier Broom, Cape Broom)                 | <i>Genista monspessulana</i>                               | 2*            | WoNS        | 1                    | 2011      | 0.28 ha (1 WMB)  | Settlement South (SS179)<br>In fruit, but site modified  | Zero                             | LTP                   |
| Potato Vine (not Madeira Vine)                                  | <i>Solanum wendlandii</i>                                  |               |             | 1                    | 2012      | 0.2 ha (1 WMB)   | Settlement North (SN205)   | Zero                             | LTP?                  |
| Tipuana (African Rosewood)                                      | <i>Tipuana tipu</i>  |               | Alert       | 1                    | 2008      | 2 ha (1 WMB)     | Settlement North (SN901)   | Zero                             | STP                   |
| Turkey Rhubarb  | <i>Acetosa sagittata</i>                                   |               | NRCv        | 1                    | 2015      | 0.4 ha (1 WMB)   | Settlement North (SN149)   | Zero                             | STP?                  |
| <b>Active management – Top 10 (most broadly spread species)</b> |  |               |             |                      |           |                  |  |                                  |                       |
| Bitou Bush  | <i>Chrysanthemoides monilifera</i> subsp. <i>rotundata</i> | 2             | WoNS, NRCx  | 3,459                | 2016      | 215 ha (48 WMBs) | Transit Hill, Blinky Beach, Lower Road, Nobbin, northern hills, Mostly on cliff-lines and at edges of bushland | Occasional – Localised; Outliers | STP – LTP?            |
| Bridal Creeper  | <i>Asparagus asparagoides</i>                              | 3*            | WoNS, NRCv  | 110,794              | 2016      | 328 ha (60 WMBs) | Mainly northern hills, close to cliff-lines, including   | Common – Localised;              | STP + Vegetative      |



## Category 1: Eradicate (immediate or suppression leading to eradication)

| Common name<br>(Alternate names)     | Scientific name                                    | Control class | Other class | # Removed 2004–15 | Last seen | Area (# WMB)       | Location (WMB)  | Current abundance                      | Propagule persistence |
|--------------------------------------|--|---------------|-------------|-------------------|-----------|--------------------|---|--|-----------------------|
|                                      |  |               |             |                   |           |                    | Curio Point, Mt Eliza and Malabar and Middle Beach Outliers on Lagoon Foreshore, Intermediate Hill (IH002–003), Lidgbird South (LS006) and Lidgbird North (LN006) | Outlier sites                          |                       |
| Cherry Guava                         | <i>Psidium cattleianum</i> var. <i>cattleianum</i> | 3*            | IUCN        | 704,266           | 2016      | 1064 ha (165 WMBs) | Most areas except remote south-facing terrain in the southern mountains Uncommon northern hills and Settlement  | Occasional – Widespread; Localised     | STP                   |
| Climbing Asparagus                   | <i>Asparagus plumosus</i>                          | 3*            | WoNS        | 53,840            | 2016      | 260 ha (93 WMBs)   | Transit Hill, Middle Beach to Neds Beach; outliers removed from Malabar and Intermediate Hill Prefers calcarenite soils   | Occasional – Localised                 | STP                   |
| Cotoneaster (Large-leaf Cotoneaster) | <i>Cotoneaster glaucophyllus</i>                   | 3*            |             | 26,211            | 2016      | 266 ha (52 WMBs)   | Scattered throughout, excluding remote terrain  | Occasional – Widespread                | STP                   |
| Glory Lily                           | <i>Gloriosa superba</i>                            | 3*            | Alert       | 13,655            | 2016      | 55 ha (15 WMBs)    | Isolated locations in Settlement Main infestations at Soldiers Creek (SS127) and Evies Hill (LN006)   | Uncommon – Localised                   | T + Vegetative        |
| Ground Asparagus                     | <i>Asparagus aethiopicus</i>                       | 3*            | WoNS, NRCv  | 665,831           | 2016      | 1018 ha (192 WMBs) | Main infestations Transit Hill and northern hills, including cliff-lines  | Common (northern hills) – Occasional – | STP                   |

## Category 1: Eradicate (immediate or suppression leading to eradication)

| Common name<br>(Alternate names) | Scientific name              | Control class | Other class | # Removed 2004–15 | Last seen | Area (# WMBs)    | Location (WMB)   | Current abundance                                     | Propagule persistence |
|----------------------------------|------------------------------|---------------|-------------|-------------------|-----------|------------------|--|---|-----------------------|
|                                  |                              |               |             |                   |           |                  | Less common in the southern mountains<br>Arboreal plants infrequent  | Widespread –<br>Outlier sites                         |                       |
| Lady-of-the-night                | <i>Cestrum nocturnum</i>     | 4*            |             | 13,380            | 2016      | 81 ha (32 WMBs)  | Settlement, with outliers on edges of PPP at Transit Hill and Malabar  | Occasional –<br>Localised                             | LTP?                  |
| Ochna                            | <i>Ochna serrulata</i>       | 3*            | NRCv        | 485,168           | 2016      | 648 ha (97 WMBs) | Most common on Intermediate Hill and Lidgbird North<br>Outliers in northern hills, Lidgbird South and two juvenile plants removed from Mt Gower at 400 m above sea level | Common –<br>Localised –<br>Occasional –<br>Widespread | T – STP               |
| Sweet Pittosporum                | <i>Pittosporum undulatum</i> | 3*            | AUS         | 84,729            | 2016      | 394 ha (84 WMBs) | Mostly located on Transit Hill, with outliers in northern hills and Lidgbird North   | Occasional –<br>Widespread                            | STP                   |

### Active management – Less abundant species

|                  |                            |    |      |     |      |                |  |                         |     |
|------------------|----------------------------|----|------|-----|------|----------------|--|-------------------------|-----|
| African Boxthorn | <i>Lycium ferocissimum</i> | 3* | WoNS | 460 | 2016 | 68 ha (9 WMBs) | Restricted to edges, mostly on cliffs, including Middle Beach (SN290, SN291, SN912), Clear Place (point) and cliffs on Transit Hill (TH021–023)<br>Outliers removed from | Uncommon –<br>Localised | STP |
|------------------|----------------------------|----|------|-----|------|----------------|--|-------------------------|-----|

## Category 1: Eradicate (immediate or suppression leading to eradication)

| Common name<br>(Alternate names)   | Scientific name                              | Control<br>class | Other<br>class | # Removed<br>2004–15 | Last seen | Area<br>(# WMB)     | Location (WMB)  | Current<br>abundance   | Propagule<br>persistence |
|------------------------------------|--|------------------|----------------|----------------------|-----------|---------------------|---|------------------------|--------------------------|
|                                    |  |                  |                |                      |           |                     | Malabar (cliff-blocks MB006)  |                        |                          |
| African Olive                      | <i>Olea europaea</i> subsp. <i>cuspidata</i> | 4*               |                | 4                    | 2016      | – (~15 WMBs)        | Settlement and spreading into edges of PPP<br>Where mature plants have set fruit, they have been removed  | Occasional – Localised | STP                      |
| Arum Lily                          | <i>Zantedeschia aethiopica</i>               | 4*               |                | 2                    | 2016      | – (~2 WMBs)         | Settlement North and South  | Few                    | T (Vegetative)           |
| Arundinaria Reed<br>(Simon Bamboo) | <i>Arundinaria</i> spp.                      | 3*               |                | 556                  | 2016      | 1 ha (2 WMBs)       | Valley Garden near Clear Place (TH021); regrowth last removed in 2016<br>Southern edge of golf course (SS299)<br>Potted plants recently removed | Few                    | Vegetative               |
| Black Locust                       | <i>Robinia pseudoacacia</i>                  | 3*               |                | 45                   | 2016      | 1 ha (1 WMB)        | Settlement North (SN208)  | Few                    | T – STP                  |
| Blue Lilly Pilly                   | <i>Syzygium oleosum</i>                      | 3                | AUS            | 0                    | ?         | – (5 WMBs)          | Settlement North and South  | Few                    | STP                      |
| Blue Morning Glory                 | <i>Ipomoea indica</i>                        | 3*               | NRCv           | 1,845<br>(5 blocks ) | 2016      | 3 ha (5 WMBs)       | Settlement North (SN041, SN078, SN319, SN339, SN340)  | Uncommon – Localised   | STP                      |
| Blue Passionflower                 | <i>Passiflora caerulea</i>                   | 3*               |                | 280                  | 2016      | 21.46 ha (>10 WMBs) | Settlement and edges of the PPP, spreading from old gardens (IH016, IH018, SN031, SN279)  | Uncommon – Localised   | STP                      |

## Category 1: Eradicate (immediate or suppression leading to eradication)

| Common name<br>(Alternate names)           | Scientific name             | Control class | Other class | # Removed 2004–15 | Last seen | Area (# WMBs)   | Location (WMB)   | Current abundance      | Propagule persistence |
|--|-----------------------------|---------------|-------------|-------------------|-----------|-----------------|--|------------------------|-----------------------|
| Blue Periwinkle<br>(Greater Periwinkle)    | <i>Vinca major</i>          | 3*            |             | 110               | 2016      | – (~30 WMBs)    | Settlement North and South   | Occasional – Localised | Rarely sets seed      |
| Bower Vine                                 | <i>Pandorea jasminoides</i> | 3*            | AUS         | 13                | 2016      | 1 ha (3 WMBs)   | Settlement North (SN019, SN164, SN359)<br>Plants have recruited  | Few                    | T                     |
| Broad-leaf Privet<br>(Large-leafed Privet) | <i>Ligustrum lucidum</i>    | 2             | NRCv        | 3                 | 2011      | 5.8 ha (1 WMB)  | Mature plants (in flower) removed on old fenceline south of Soldiers Creek, foothill of Mt Lidgbird (LN007)<br>No recruits found | Few – Zero?            | STP                   |
| Broad-leaved Lilly Pilly                   | <i>Syzygium hemilampra</i>  | 3             | AUS         | 0                 | ?         | – (~5 WMBs)     | Settlement   | Few                    | STP                   |
| Brush Cherry<br>(Magenta Cherry)           | <i>Syzygium paniculatum</i> | 3*            | AUS         | 22                | 2014      | 7.4 ha (2 WMBs) | Settlement South (SS300)<br>Recruits removed from foothills of Mt Lidgbird (LN006)   | Few                    | STP                   |
| Camphor Laurel                             | <i>Cinnamomum camphora</i>  | 3*            |             | 81                | 2016      | 45 ha (11 WMBs) | Mature plants remain in Settlement, recruitment is evident Lidgbird North, Intermediate Hill, Settlement                         | Uncommon – Localised   | STP                   |
| Cape Ivy                                   | <i>Delairea odorata</i>     | 3*            | NRCv        | 56                | 2016      | – (5 WMBs)      | Settlement North   | Uncommon – Localised   | Rarely sets seed      |
| Cassia (Senna,                             | <i>Senna pendula</i>        | 3*            |             | 21                | 2016      | – (10 WMBs)     | Settlement North and   | Uncommon –             | LTP                   |

## Category 1: Eradicate (immediate or suppression leading to eradication)

| Common name<br>(Alternate names)              | Scientific name                 | Control class | Other class | # Removed<br>2004–15 | Last seen | Area<br>(# WMB) | Location (WMB)   | Current abundance   | Propagule persistence |
|---|---------------------------------|---------------|-------------|----------------------|-----------|-----------------|--|---------------------|-----------------------|
| Winter Senna,<br>Easter Cassia)               | <i>var. glabrata</i>            |               |             |                      |           |                 | South  | Localised           |                       |
| Castor Oil Plant                              | <i>Ricinus communis</i>         | 3*            |             | 1074                 | 2016      | 19 ha (6 WMBs)  | Settlement North and South (SS914, SS191, SS348, SN236), Evies Glenn (TH011), foreshore – Waste Management Facility            | Uncommon – Isolated | LTP                   |
| Climbing Nightshade<br>(Brazilian Nightshade) | <i>Solanum seaforthianum</i>    | 2             |             | 3                    | 2015      | – (3 WMBs)      | Settlement North (SN137, SN284, SN316)<br>Mature plants removed, and seedlings located and removed                             | Few                 | LTP?                  |
| Coastal Tea-tree                              | <i>Leptospermum laevigatum</i>  | 3*            | AUS         | 10                   |           | 8 ha (2 WMBs)   | Lagoon foreshore and Settlement North (SN298, SN913)   | Few                 | STP                   |
| Common Thornapple                             | <i>Datura stramonium</i>        | 3*            |             | 2                    | 2015      | 1 ha (3 WMBs)   | Special lease – Settlement South (SS123) and Settlement North (SN032), including Fierce Thornapple ( <i>D. ferox</i> ) (SN357) | Few                 | STP                   |
| Flame Tree                                    | <i>Brachychiton acerifolius</i> | 3*            | AUS         | 120                  | Current   | 96 ha (18 WMBs) | Mature trees recently removed from Settlement (last in 2015); recruits mostly found in the northern hills                      | Uncommon            | STP                   |

## Category 1: Eradicate (immediate or suppression leading to eradication)

| Common name<br>(Alternate names) | Scientific name                | Control class | Other class | # Removed 2004–15 | Last seen | Area (# WMBs)    | Location (WMB)  | Current abundance    | Propagule persistence |
|----------------------------------|--------------------------------|---------------|-------------|-------------------|-----------|------------------|---|----------------------|-----------------------|
| Freckle-face                     | <i>Hypoestes phyllostachya</i> | 3*            |             | 40                | Current   | – (~10 WMBs)     | Settlement North and South  | Uncommon             | STP                   |
| Giant Reed<br>(Elephant Grass)   | <i>Arundo donax</i>            | 3*            |             | 93                | 2015      | 1 ha (2 WMBs)    | Near Windy Point;<br>Last rhizome dug up in 2014 and no regrowth evident to date  | Zero?                | Vegetative            |
| Ginger Lily (Kahili Ginger)      | <i>Hedychium gardnerianum</i>  | 2             | IUCN        | 123               | Current   | 68 ha (15 WMBs)  | Mostly restricted to gardens in the Settlement, Intermediate Hill and outliers at Lidgbird North (LN004) and Malabar (MB028)<br>Plants spreading into bushland edges      | Uncommon – Localised | STP (Vegetative)      |
| Holly Fern                       | <i>Cyrtomium falcatum</i>      | 4             |             | 26                | Current   | 28 ha (~30 WMBs) | Mostly Settlement, with removal progressing under the Noxious Weed Inspection process<br>A few plants removed from Middle Beach and PPP, and outlier at Red Point (LS010) | Uncommon – Localised | STP (Spore)           |
| Japanese                         | <i>Lonicera japonica</i>       | 3*            | NRCv        | 15                | Current   | – (~5 WMBs)      | Settlement North  | Few                  | T                     |

## Category 1: Eradicate (immediate or suppression leading to eradication)

| Common name<br>(Alternate names)       | Scientific name             | Control class | Other class | # Removed<br>2004–15 | Last seen                 | Area<br>(# WMB)  | Location (WMB)   | Current abundance    | Propagule persistence |
|--|-----------------------------|---------------|-------------|----------------------|---------------------------|------------------|--|----------------------|-----------------------|
| Honeysuckle                            |                             |               |             |                      |                           |                  |  |                      |                       |
| King Orchid                            | <i>Dendrobium speciosum</i> | 3*            | AUS         | 7                    | Current                   | – (~10 WMBs)     | Intermediate Hill (potentially planted) and in Settlement<br>Note this species is used by orchid growers for creating hybrids                                      | Few                  | STP                   |
| Lantana (all forms)                    | <i>Lantana camara</i>       | 2             | WoNS, NRCx  | 451                  | 2016 one juvenile removed | 45 ha (12 WMBs)  | Restricted. Individual plants removed from IH016 – near golf course, southern side Transit Hill in gardens/bush edges, Malabar (east), isolated patch Middle Beach | Uncommon – Isolated  | LTP?                  |
| Leaf Cactus (Satan Plant)              | <i>Pereskia aculeata</i>    | 2             | Alert       | 5                    | 2016                      | – (~15 WMBs)     | Settlement North and South   | Few                  | STP?                  |
| Lilly Pilly (Small-leaved Lilly Pilly) | <i>Acmena smithii</i>       | 3             | AUS         | 0                    | ?                         | – (~5 WMBs)      | Settlement   | Few                  | STP                   |
| Madeira Vine                           | <i>Anredera cordifolia</i>  | 3*            | WoNS, NRCx  | 5,245 kg             | Current                   | 71 ha ( 49 WMBs) | Mostly in gardens, with outlying patch found off Little Island track in patch of dead Tobacco Bush, which may have been dispersal by a weeder                      | Uncommon – Localised | Vegetative            |
| Ming Fern (Ming Asparagus Fern)        | <i>Asparagus macowanii</i>  | 2*            |             | 1                    | 2015                      | 0.25 ha (1 WMB)  | Individual plant removed in 2015 estimate to have been on island for 4 years;  | Zero?                | STP?                  |

## Category 1: Eradicate (immediate or suppression leading to eradication)

| Common name<br>(Alternate names)               | Scientific name                   | Control<br>class | Other<br>class | # Removed<br>2004–15 | Last seen                     | Area<br>(# WMB)    | Location (WMB)  | Current<br>abundance     | Propagule<br>persistence |
|--|-----------------------------------|------------------|----------------|----------------------|-------------------------------|--------------------|---|--------------------------|--------------------------|
| no recruits evident.                           |                                   |                  |                |                      |                               |                    |   |                          |                          |
| Mirror Bush<br>(Coprosma)                      | <i>Coprosma repens</i>            | 2                |                | 7                    | 2014                          | – (3 WMBs)         | Propagated by cuttings<br>and planted on LHI – since<br>removed   | Few – Zero?              | STP                      |
| Mother-of-millions                             | <i>Bryophyllum<br/>delagoense</i> | 4*               |                | 20                   | current                       |                    | Settlement North and<br>South   | Few                      | STP<br>(Vegetative)      |
| Murraya (Orange<br>Jessamine)                  | <i>Murraya paniculata</i>         | 3*               |                | 3                    | current                       | – (~15 WMBs)       | Mostly Settlement but two<br>sites in PPP   | Uncommon –<br>Localised  | STP                      |
| Narrow-leaf Privet<br>(Small-leafed<br>Privet) | <i>Ligustrum sinense</i>          | 2                | NRCv           | 897                  | current                       | 68 ha (26<br>WMBs) | Most common in the<br>Settlement and Malabar;<br>less common Intermediate<br>Hill   | Uncommon –<br>Widespread | STP                      |
| Native Frangipani                              | <i>Hymenosporum<br/>flavum</i>    | 3*               | AUS            | 2                    | 2016<br>(mature – no<br>seed) | – (3 WMBs)         | Settlement North  | Few                      | STP                      |
| Palm Grass                                     | <i>Setaria palmifolia</i>         | 3*               |                | 1,071                | 2016                          | 68 ha (22<br>WMBs) | Tracks and edges of<br>bushland in the<br>Settlement, including<br>Stevens Reserve, and in<br>PPP at Transit Hill (Clear<br>Place and Valley of the<br>Shadows), Goat House<br>and edge of PPP opposite<br>the Catalina wreck | Uncommon –<br>Localised  | LTP?                     |
| Pampas Grass                                   | <i>Cortaderia selloana</i>        | 3*               |                | 13                   | 2014                          | 20 ha (4 WMBs)     | Last recorded plants<br>removed from Transit Hill   | Few – Zero               | STP                      |



## Category 1: Eradicate (immediate or suppression leading to eradication)

| Common name<br>(Alternate names)           | Scientific name                  | Control class | Other class | # Removed<br>2004–15 | Last seen | Area<br>(# WMB) | Location (WMB)   | Current abundance      | Propagule persistence |
|--|----------------------------------|---------------|-------------|----------------------|-----------|-----------------|--|------------------------|-----------------------|
|  |                                  |               |             |                      |           |                 | (TH005 in 2014), Malabar (MB039 in 2012) and Settlement South (2010)   |                        |                       |
| Red Cedar                                  | <i>Toona ciliata</i>             | 3             | AUS         | 0                    | 2015      | – (2 WMBs)      | Settlement North<br>Mature trees removed in 2015   | Few – Zero             | LTP                   |
| Resurrection Plant<br>(Mother-of-millions) | <i>Bryophyllum pinnatum</i>      | 4*            | NRCv        | 210                  | 2016      | – (15 WMBs)     | Mostly Settlement, edge of Crown Land – Neds Beach<br>Common<br>Outlier from Intermediate Hill (D. Kennedy, personal communication)  | Occasional – Localised | STP<br>(Vegetative)   |
| Rhizomatous Bamboo                         | <i>Phyllostachys</i> spp.        | 3*            |             | 0                    | ?         | ?               | Settlement   | Few                    | Vegetative            |
| Rhus Tree                                  | <i>Toxicodendron succedaneum</i> | 4*            |             | 36                   | 2014      | 11 ha (4 WMBs)  | Transit Hill, Settlement North   | Few                    | STP                   |
| Rice Paper Plant                           | <i>Tetrapanax papyrifer</i>      | 3*            |             | 824                  | 2015      | 19 ha (3 WMBs)  | Settlement, and Transit Hill, at Evies Glenn (TH011) and forest edge of TH008  | Few – Zero             | STP                   |
| Salvinia                                   | <i>Salvinia molesta</i>          | 2             | WoNS        | 0                    | 2016      | – (~15 WMBs)    | Settlement North and South<br>Mostly contained in water features; outbreak on dam at golf course (A. Wright, personal communication) | Uncommon – Localised   | Vegetative            |

## Category 1: Eradicate (immediate or suppression leading to eradication)

| Common name<br>(Alternate names)                 | Scientific name                   | Control class | Other class | # Removed 2004–15 | Last seen | Area (# WMBs)    | Location (WMB)   | Current abundance       | Propagule persistence |
|--|-----------------------------------|---------------|-------------|-------------------|-----------|------------------|--|-------------------------|-----------------------|
| Silky Oak  | <i>Grevillia robusta</i>          | 3*            | AUS         | 271               | 2016      | 323 ha (48 WMBs) | Mostly in Settlement, northern hills, and Intermediate Hill; outliers from Worlds End (LS015) and Lower Rd; mature specimens recently removed from Transit Hill (TH025)<br>Few mature plants remaining in Settlement | Occasional – Widespread | STP                   |
| Singapore Daisy                                  | <i>Sphagneticola trilobata</i>    | 2             | IUCN        | 119               | 2016      | – (3 WMBs)       | Foreshore – waste management facility<br>Settlement North (SN254, SN326)   | Few                     | STP (Vegetative)      |
| Siratro  | <i>Macroptilium atropurpureum</i> | 3*            |             | 51                | 2016      | 1 ha (2 WMBs)    | Airport (around fuel shed), patches on lawn and entrance to golf club  | Uncommon – Localised    | LTP                   |
| Smooth Senna (Arsenic Bush, Brazilian Buttercup) | <i>Senna septemtrionalis</i>      | 3*            |             | 186               | 2016      | 28 ha (~3 WMBs)  | Stevens Reserve and Settlement North and South   | Few                     | LTP                   |
| Spanish Moss (Old Man's Beard)                   | <i>Tillandsia usneoides</i>       | 2             |             | 0                 | 2016      | – (~15 WMBs)     | Settlement North and South   | Uncommon – Localised    | Vegetative            |
| Staghorn Fern                                    | <i>Platyserium superbum</i>       | 3*            | AUS         | 9                 | 2016      | – (10 WMBs)      | Settlement<br>Most plants sent off island<br>Last two removed 2016   | Few                     | STP Spores            |

## Category 1: Eradicate (immediate or suppression leading to eradication)

| Common name<br>(Alternate names) | Scientific name                | Control class | Other class | # Removed 2004–15 | Last seen | Area (# WMBs)    | Location (WMB)  | Current abundance     | Propagule persistence |
|----------------------------------|--------------------------------|---------------|-------------|-------------------|-----------|------------------|---|-----------------------|-----------------------|
| Umbrella Tree                    | <i>Schefflera actinophylla</i> | 3*            | AUS         | 702               | 2016      | 151 ha (30 WMBs) | Settlement, with recruits mostly found in the northern hills  | Uncommon – Widespread | STP                   |
| Water Hyacinth                   | <i>Eichhornia crassipes</i>    | 2             | WoNS        | 0                 | 2016      | – (~10 WMBs)     | Settlement North and South<br>Mostly contained in water features  | Few                   | LTP (Vegetative)      |
| Water Lettuce                    | <i>Pistia stratiotes</i>       | 1             |             | 0                 | 2015      | – (2 WMBs)       | Settlement North<br>Major environmental weed – plant should not be shared; mostly contained in water features | Few – Zero            | Vegetative            |
| White Cedar (Chinaberry)         | <i>Melia azedarach</i>         | 4             | AUS         | 292               | 2016      | 60 ha (17 WMBs)  | Mostly restricted to Settlement<br>Seedlings also removed from Malabar and near Big Waterfall (LN020)         | Uncommon – Widespread | STP                   |

## Category 2: Alert (sleeper weeds – watch and act as necessary)

| Common name<br>(alternate names)  | Scientific name                  | Control class | Other class | # removed<br>2004–15 | Area<br>(# WMBs)  | Location and invasive potential   | Current abundance      |
|-----------------------------------|----------------------------------|---------------|-------------|----------------------|-------------------|---|------------------------|
| African Tulip                     | <i>Spathodea campanulata</i>     |               | EW          |                      | – (5 WMBs)        | Settlement North<br>Seed spread by wind; invasive in<br>Queensland and northern NSW   | Few (<10 plants)       |
| Agapanthus (African Lily)         | <i>Agapanthus praecox</i>        |               |             | 584                  | 46 ha (8<br>WMBs) | Settlement North and South<br>Outliers removed from PPP at Malabar<br>(MB021, MB042) and Round Face –<br>Lidgbird North (LN021)<br>Reported as planted on site although<br>plants are spreading at LN021<br>Remove from PPP<br>Actively remove seed-heads | Occasional – Localised |
| Argentine Ombu                    | <i>Phytolacca dioica</i>         |               |             |                      | – (1 WMB)         | Settlement South  | Few (<2 plants)        |
| Bathurst Burr                     | <i>Xanthium spinosum</i>         |               |             | 1                    | – (1 WMB)         | One plant removed from Settlement<br>near a chicken pen<br>Imported in chicken feed   | Few                    |
| Buddleia                          | <i>Buddleja madagascariensis</i> |               | EW          | 35                   | – (3 WMBs)        | Settlement North and South<br>Environmental weed  | Few                    |
| Bushman's Poison<br>(Wintersweet) | <i>Acokanthera oblongifolia</i>  |               |             | 373                  | – (~40 WMBs)      | Settlement North and South  | Occasional – Localised |
| Climbing Fig                      | <i>Ficus pumila</i>              |               |             |                      |                   | Settlement North and South  | Occasional – Localised |
| Cordyline                         | <i>Cordyline fruticosa</i>       |               |             |                      | – (~40 WMBs)      | Settlement North and South<br>Plants observed fruiting<br>Invasive on Raoul Island  | Uncommon – Localised   |
| Crocosma                          | <i>Crocosmia crocosmiiflora</i>  |               |             |                      | – (~19 WMBs)      | Settlement North and South  | Few                    |

| Common name<br>(alternate names) | Scientific name              | Control<br>class | Other<br>class | # removed<br>2004–15 | Area<br>(# WMBs) | Location and invasive potential   | Current abundance      |
|----------------------------------|------------------------------|------------------|----------------|----------------------|------------------|---|------------------------|
| Cunjevoi                         | <i>Alocasia brisbanensis</i> |                  | AUS            | 3                    | – (2 WMBs)       | Settlement South<br>Invasive on Raoul Island  | Few                    |
| Edible Grape                     | <i>Vitis vinifera</i>        |                  |                |                      | – (~15 WMBs)     | Settlement  | Few                    |
| English Ivy                      | <i>Hedera helix</i>          |                  | EW             | 20                   | – (~40 WMBs)     | Settlement North and South  | Occasional – Localised |
| Everlasting Pea                  | <i>Lathyrus latifolius</i>   |                  |                | 275                  | – (3 WMBs)       | Settlement North, near Blinky Beach<br>Sets viable seed   | Uncommon – Localised   |
| Fan Flower                       | <i>Scaevola calendulacea</i> |                  | AUS            | 0                    | – (1 WMB)        | Settlement South (SS911)<br>Introduced with revegetation work on<br>Blink Dune (I. Hutton, personal<br>communication); smothering the habitat<br>of the endangered Sand Spurge<br>( <i>Chamaesyce psammogeton</i> ) | Uncommon – Localised   |
| Fierce Thornapple                | <i>Datura ferox</i>          |                  |                |                      | – (~2 WMBs)      | Settlement  | Few                    |
| Firethorn                        | <i>Pyracantha crenulata</i>  |                  |                |                      | ?                | Settlement  | Unknown                |
| Golden Wreath Wattle             | <i>Acacia saligna</i>        |                  | AUS            |                      | – (~10 WMBs)     | Settlement North and South  | Uncommon – Localised   |
| Indian Hawthorn                  | <i>Raphiolepis indica</i>    |                  | EW             | 44                   | – (~20 WMBs)     | Settlement, with outliers on<br>Intermediate Hill (west side) and<br>Lidgbird North (lower flanks and LN014)<br>Seed spread by birds  | Uncommon – Localised   |
| Indian Shot                      | <i>Canna indica</i>          |                  | EW             |                      | – (~20 WMBs)     | Older variety of Canna produces viable<br>seed that can be spread by birds  | Uncommon               |
| Jacaranda                        | <i>Jacaranda mimosifolia</i> |                  | EW             |                      | – (~10 WMBs)     | Weed of dry rainforest; seed spread by<br>wind  | Few                    |
| Mauritis Hemp                    | <i>Furcraea foetida</i>      |                  | EW             |                      | – (~20 WMBs)     | Settlement North and South, localised<br>spread observed; weed on Raoul Island  | Occasional – Localised |

| Common name<br>(alternate names) | Scientific name                   | Control<br>class | Other<br>class | # removed<br>2004–15 | Area<br>(# WMBs) | Location and invasive potential  | Current abundance     |
|----------------------------------|-----------------------------------|------------------|----------------|----------------------|------------------|--|-----------------------|
| Moreton Bay Fig                  | <i>Ficus macrophylla</i>          |                  |                |                      | – (1 WMB)        | Settlement North (one plant)<br>May hybridise with Banyan Fig ( <i>Ficus macrophylla</i> subsp. <i>columnaris</i> )  | Few                   |
| New Zealand Christmas Bush       | <i>Metrosideros excelsa</i>       |                  |                | ?                    | – (9 WMBs)       | Planted in the Settlement; outliers removed<br>Identity of outliers needs to be confirmed (whether <i>M.excelsa</i> and <i>M kermadecensis</i> or potential hybrids) | Uncommon – Localised  |
| New Zealand Christmas Bush       | <i>Metrosideros kermadecensis</i> |                  |                | 36                   | – (9 WMBs)       | Planted in the Settlement; outliers removed from Malabar, Intermediate Hill and Lidgbird North<br>Concern re potential hybridisation                                 | Uncommon – Localised  |
| Panadus                          | <i>Pandanus tectorius</i>         |                  |                | 2                    | – (2 WMBs)       | Settlement<br>Concern about hybridisation  | Few                   |
| Roldana                          | <i>Roldana petasitis</i>          |                  |                | 113                  | 30 ha (~40 WMBs) | Mostly in the Settlement (North and South) and detected in PPP with a large patch at Middle Cave, Mt Lidgbird (LS012) and Intermediate Hill (IH010)                  | Occasional –Localised |
| Rose Apple                       | <i>Syzygium jambos</i>            |                  |                | >100                 | – (5 WMBs)       | Mostly in Settlement North and one site in Settlement South<br>Initial control undertaken<br>Highly susceptible to Myrtle Rust                                       | Uncommon – Localised  |
| Snow Plant                       | <i>Breynia nivosa</i>             |                  |                |                      | – (~20 WMBs)     | Settlement<br>Seedling regeneration observed; seeds potentially spread by wind   | Uncommon –Localised   |
| South African Iris               | <i>Dietes biflora</i>             |                  | EW             |                      | – (~20 WMBs)     | Edge of PPP at Intermediate Hill, and Settlement<br>May hybridise with endemic Wedding Lily ( <i>Dietes robinsoniana</i> )   | Uncommon – Localised  |

| Common name<br>(alternate names)     | Scientific name                 | Control<br>class | Other<br>class | # removed<br>2004–15 | Area<br>(# WMBs) | Location and invasive potential   | Current abundance      |
|--------------------------------------|---------------------------------|------------------|----------------|----------------------|------------------|---|------------------------|
| Striped Trad (Silvery<br>Inch Plant) | <i>Tradescantia zebrina</i>     |                  | EW             | 50                   | – (~20 WMBs)     | Settlement North and South  | Occasional – Localised |
| Tree of Heaven                       | <i>Ailanthus altissima</i>      |                  | EW             |                      | – (2 WMBs)       | Settlement North (suckering root stock<br>and seedling observed)<br>Windblown seed; known invasive plant<br>on mainland | Few (<10 plants)       |
| Trumpet Vine                         | <i>Campsis radicans</i>         |                  |                |                      | – (~5 WMBs)      | Settlement North and South  | Localised              |
| Wandering Jew<br>(Wandering Trad)    | <i>Tradescantia fluminensis</i> |                  | EW             | 30                   | – (~20 WMBs)     | Settlement North and South  | Occasional – Localised |
| Widow's-thrill                       | <i>Bryophyllum fedtschenkoi</i> |                  |                |                      | – (~30 WMBs)     | Settlement North and South<br>Only localised spread observed  | Occasional – Localised |

### Category 3: Control (effectively manage)

| Common name<br>(alternate names) | Scientific name                | Control<br>class | Other<br>class | # Removed<br>2004–15 | Area<br>(# WMB) | Location and invasive potential                                     | Current abundance       |
|----------------------------------|--------------------------------|------------------|----------------|----------------------|-----------------|---|-------------------------|
| African Plum (Kaffir Plum)       | <i>Harpephyllum caffrum</i>    |                  |                | 146                  | – (~40 WMBs)    | Settlement North and South  | Occasional – Localised  |
| Begonia                          | <i>Begonia</i> spp.            |                  |                | 42                   | 33 ha (1 WMB)   | Escaped garden plant removed from Goat House (LS006)                | Occasional – Localised  |
| Brazil Cherry                    | <i>Eugenia uniflora</i>        |                  |                | 30                   | – (2 WMBs)      | Limited spread on island  | Few                     |
| Broadleaf Paspalum               | <i>Paspalum mandiocandum</i>   |                  |                |                      |                 | Tracks – Mutton Bird Point, Rocky Run – Intermediate Hill           | Occasional – Widespread |
| Buffalo Grass                    | <i>Stenotaphrum secundatum</i> |                  |                |                      |                 | Lagoon Foreshore  | Occasional – Localised  |
| Chinese Elm                      | <i>Ulmus parvifolia</i>        |                  |                | 1                    |                 | Mature plants in Settlement; semi-mature plant removed from Malabar | Few                     |
| Coastal Morning Glory            | <i>Ipomoea cairica</i>         |                  | EW             |                      |                 | Throughout the PPP  | Common – Widespread     |
| Coffee                           | <i>Coffea arabica</i>          |                  | EW             |                      |                 | Settlement North<br>Plants removed from the PPP                     | Uncommon – Localised    |
| Coral Tree                       | <i>Erythrina cristi-gali</i>   |                  | EW             | 9                    |                 | Settlement North and South<br>Spreads by seed                       | Few                     |
| Crofton Weed                     | <i>Ageratina adenophora</i>    |                  | EW             |                      |                 | More prevalent in the southern mountains                            | Common – Widespread     |
| Dwarf Umbrella Tree              | <i>Schefflera arboricola</i>   |                  |                |                      |                 | Settlement North and South;<br>Plants observed fruiting             | Uncommon                |
| Farmer's Friend                  | <i>Bidens pilosa</i>           |                  |                |                      |                 | Tracks and disturbed area   | Occasional – Widespread |
| Formosan Lily (Tiger Lily)       | <i>Lilium formosanum</i>       |                  | EW             |                      |                 | Mostly in the PPP   | Common – Widespread     |



| Common name<br>(alternate names)                 | Scientific name                   | Control<br>class | Other<br>class | # Removed<br>2004–15 | Area<br>(# WMB) | Location and invasive potential  | Current abundance      |
|--|-----------------------------------|------------------|----------------|----------------------|-----------------|--|------------------------|
| Fruit Salad Plant<br>(Monstera)                  | <i>Monstera deliciosa</i>         |                  |                | 8                    |                 | Settlement North and South   | Occasional – Localised |
| Giant Fishbone Fern                              | <i>Nephrolepis biserrata</i>      |                  |                |                      |                 | Settlement North and South   | Common – Localised     |
| Golden Trumpet                                   | <i>Solandra maxima</i>            |                  |                |                      | – (~10 WMBs)    | Settlement   | Few                    |
| Golden Trumpet Vine                              | <i>Allamanda cathartica</i>       |                  | EW             |                      |                 | Settlement North and South.  | Occasional – Localised |
| Hoop Pine  | <i>Araucaria cunninghamii</i>     |                  | AUS            | 140                  |                 | Settlement North   | Uncommon – Localised   |
| Indian Coral Tree                                | <i>Erythrina crista gali</i>      |                  | EW             |                      | – (3 WMBs)      | This species produces viable seed  | Few                    |
| Kikuyu   | <i>Pennisetum clandestinum</i>    |                  |                |                      |                 | Settlement North and South, edges of the PPP, Lower Rd and Get Up Place                            | Common – Widespread    |
| Lemon  | <i>Citrus x taitensis</i>         |                  |                | 22                   |                 | Plants regularly harvested by the local community along tracks are to be retained                  | Uncommon – Localised   |
| Loquat   | <i>Eriobotrya japonica</i>        |                  |                | 10                   |                 | Plants removed from the edge of the PPP  | Uncommon – Localised   |
| Molasses Grass                                   | <i>Melinis minutiflora</i>        |                  |                |                      |                 | Settlement South – Intermediate Hill   | Uncommon – Localised   |
| Montbretia                                       | <i>Crocasmia x crocosmiiflora</i> |                  | EW             |                      |                 | Settlement North   | Uncommon – Localised   |
| Mulberry   | <i>Morus</i> spp.                 |                  |                | 21                   |                 | Plants removed from the PPP  | Uncommon – Localised   |
| Norfolk Island Pine                              | <i>Araucaria heterophylla</i>     |                  | NFI            |                      |                 | Isolated plants removed from the PPP   | Common – Localised     |
| Painted Spurge                                   | <i>Euphorbia cyathophora</i>      |                  |                |                      | – (~20 WMBs)    | Settlement, Lagoon Foreshore   | Occasional – Localised |
| Panic Veldt Grass (African<br>Panic Veldt Grass) | <i>Ehrharta erecta</i>            |                  |                |                      | – (~150 WMBs)   | Settlement North and South, PPP<br>Common in the northern hills, above the Get Up Place – Mt Gower | Common – Widespread    |

| Common name<br>(alternate names)                              | Scientific name               | Control<br>class | Other<br>class | # Removed<br>2004–15 | Area<br>(# WMB) | Location and invasive potential  | Current abundance       |
|---|-------------------------------|------------------|----------------|----------------------|-----------------|--|-------------------------|
| Parlor Palm   | <i>Chamaedorea elegans</i>    |                  |                |                      |                 | Settlement North and South   |                         |
| Parramatta Grass  | <i>Sporobolus africanus</i>   |                  |                |                      |                 | Tracks throughout the PPP, road edges, special leases  | Common – Widespread     |
| Peach   | <i>Prunus persica</i>         |                  |                | 108                  |                 | Plants removed from the PPP  | Uncommon                |
| Pellitory   | <i>Parietaria judaica</i>     |                  | EW             |                      |                 | Settlement North   | Common – Localised      |
| Peruvian Lily (Parrot Alstromeria)                            | <i>Alstroemeria pulchella</i> |                  | EW             | 54                   |                 | Settlement North and South, Transit Hill Lookout   | Occasional – Localised  |
| Pink Periwinkle   | <i>Catharanthus roseus</i>    |                  | EW             |                      |                 | Settlement North and South   | Uncommon – Localised    |
| Redhead Cottonbush<br>(Red-heart Cottonbush,<br>Blood Flower) | <i>Asclepias curassavica</i>  |                  |                |                      |                 | Settlement North and South   | Occasional – Widespread |
| Rhodes Grass  | <i>Chloris gayana</i>         |                  |                |                      |                 | Common on Blackburn Island   | Occasional – Localised  |
| Rose Apple  | <i>Syzygium jambos</i>        |                  |                |                      |                 | Settlement North and South;<br>Highly susceptible to Myrtle Rust<br>( <i>Puccinia psidii</i> ) | Occasional – Localised  |
| Rubber Tree   | <i>Ficus elastica</i>         |                  |                | 1                    |                 | Settlement North   | Few                     |
| Seaside Daisy   | <i>Erigeron karvinskianus</i> |                  |                |                      |                 | Settlement North and South   | Uncommon – Localised    |
| Shasta Daisy  | <i>Leucanthemum maximum</i>   |                  |                |                      |                 | Settlement North and South   | Uncommon – Localised    |
| Spanish Bayonet (Dagger Plant)                                | <i>Yucca aotifolia</i>        |                  | EW             | 35                   |                 | Settlement North and South   | Uncommon – Localised    |
| Spear Thistle   | <i>Cirsium vulgare</i>        |                  |                |                      |                 | Special Leases at edges of PPP;<br>fence-lines   | Occasional              |
| Swamp Oak   | <i>Casuarina glauca</i>       |                  | AUS            |                      |                 | Settlement North and South   | Uncommon – Localised    |

| Common name<br>(alternate names) | Scientific name            | Control<br>class | Other<br>class | # Removed<br>2004–15 | Area<br>(# WMBs) | Location and invasive potential   | Current abundance       |
|----------------------------------|----------------------------|------------------|----------------|----------------------|------------------|---|-------------------------|
| Tobacco Bush (Wild Tobacco Tree) | <i>Solanum mauritianum</i> |                  | EW             | 7,083                | 384 ha (63 WMBs) | Throughout settlement and disturbance zones in the PPP<br>Mature stand established on erosion scar at Big Pocket – Mt Gower   | Occasional – Widespread |
| Tung Oil                         | <i>Vernicia fordii</i>     |                  |                | 32                   |                  | Settlement North and South  | Uncommon – Localised    |
| Umbrella Sedge                   | <i>Cyperus eragrostis</i>  |                  |                |                      |                  | Settlement<br>Prefers damp environments, disturbed edges of creeklines  | Uncommon – Widespread   |
| Willow Myrtle                    | <i>Agonis flexulosa</i>    |                  | AUS            | 2                    | – (2 WMBs)       | Seedlings observed  | Few                     |
| Yellow Guava                     | <i>Psidium guajava</i>     |                  | EW             | 6,931                | – (37 WMBs)      | Settlement North and South<br>Edges of PPP at Transit Hill, Lidgbird North, Intermediate Hill<br>Introduced about the same time as Cherry Guava but it is not as invasive | Occasional – Localised  |
| Yellow Oleander                  | <i>Thevetia peruviana</i>  |                  |                |                      |                  | Settlement North and South<br>Localised spread observed   | Uncommon – Localised    |

## Appendix 2 History of weed management on Lord Howe Island

The following table summarises the history of weed management actions on LHI.

| Year    | Weed management actions and investment  |
|---------|---|
| 1930s   | The local Island Authority (predecessor of the LHIB) raised concerns about, and urged residents to remove, asparagus ferns.   |
| 1970s   | Biological surveys undertaken by the Australian Museum and Royal Botanical Gardens (Recher & Clark 1974). Concerns about the threat posed by invasive weeds on LHI, particularly Cherry Guava were first formally reported. The surveys noted that 120 introduced species – including invasive species – had naturalised on the island and recommended that the importation of introduced species be prohibited.  |
| 1990s   | Efforts to manage weeds on LHI increased. The LHIB applied significant effort to control 13 invasive weed species at key locations, including the back of the golf course, Grey Face, Lagoon Foreshore, the Settlement, northern hills, including Curio Point, and abseil access to remove Bitou Bush from the Nobbin on Mt Lidgbird, Kims Lookout and Malabar (LHIB 2002).   |
| 1995    | The first Weeding Ecotour initiated by Ian Hutton, curator of the LHI Museum, which eventually led to the formation of the volunteer Friends of Lord Howe Island (in 2001). There are currently 108 members. The volunteers have collectively contributed more than 24,000 hours of weeding, with a focus on Transit Hill.  |
| 1997    | 16 weeds declared noxious under the NSW <i>Noxious Weeds Act 1993</i> .   |
| 1999    | The NSW Department of Primary Industries (DPI) assisted in weed management by implementing a leasehold (urban) weed inspection program and introduced new selective herbicides (metsulfuron-methyl for foliar spraying of Ground Asparagus, and triclopyr for cut-and-paint applications on Cherry Guava and Ochna).  |
| 2001    | The World Wildlife Foundation sponsored Ian Hutton to attend the Island Invasives Conference in Auckland, New Zealand. This facilitated contact with the NZDOC and their weeding programs on Raoul Island and raised further awareness that Cherry Guava was potentially the worst weed occurring on LHI.<br><br>Ian Hutton and Jenni Le Cussan prepared an outline for a weed control strategy and inventory of weeds for LHI (Hutton & Le Cussan 2001).   |
| 2001–03 | The NSW Environmental Trust awarded major grants (a total of \$139,640) for two weed management projects: Stop the Spread of Pittosporum (2001, \$71,240) and Cherry Guava in the southern mountains (2003, \$68,400).  |
| 2002    | Strategic Plan for Weed Management on LHI prepared (LHIB 2002a), identifying priority weeds and areas for treatment. Other structural elements of the program were identified – training, volunteers, noxious weed inspections.<br><br>The Churchill Trust awarded a fellowship to Jenni Le Cussan (LHIB field officer) to investigate the impacts of invasive woody weed species, including Cherry Guava, on Indo-Pacific islands. This research informed a large part of the LHI WMS 2006 (LHIB 2006).<br><br>A garden plant inventory recorded 670 introduced species, of which at least 270 had invasive characteristics (DECC 2007). |
| 2002–03 | Landscape-scale mapping and monitoring was undertaken to quantify the extent of   |

|         |   |
|---------|---|
|         | invasive weeds on LHI (Le Cussan 2002a, 2002b, 2003a, 2003b). This mapping found that eight weed species had spread extensively into the PPP and posed an immediate and serious threat to the terrestrial ecology of the island. The mapping identified the need for an island-wide and time-driven weed eradication program, without which the island would remain at significant risk from invasive weeds.  |
| 2004    | \$1.2 million awarded from the NSW Environmental Trust (NSW Government) kick starting an eradication approach to weed management including data recording systems. The LHIB undertook to eradicate all noxious weeds (with the exception of Crofton Weed and Formosan (Tiger) Lily ( <i>Lilium formosanum</i> )).   |
| 2005    | Bridal Creeper Rust ( <i>Puccinea myrsiphylli</i> ) released but extent of effect variable.   |
| 2005–09 | Long-line cone-spray apparatus applied to treat Bitou Bush on cliff-lines in June 2005 and July 2009.   |
| 2006    | The position of Flora Management Officer created.<br>The LHIB prepared and began implementation of the <i>Weed Management Strategy for Lord Howe Island</i> (LHIB 2006) with the aim of eradicating 25 species of weeds on LHI.   |
| 2006–14 | <b>\$6.4 million invested to implement the <i>Lord Howe Island Weed Management Strategy 2006</i> and Weed Eradication Program of which the following was given:</b><br>NSW Environmental Trust (\$2,857,974);<br>LHIB (\$1,835,937);<br>Northern Rivers Catchment Management Authority / Local Land Services (\$935,710);<br>Caring for our Country (CFOC, \$825,000);<br>Foundation for National Parks (\$2,700); and<br>DPI 10-year noxious weed inspection program (\$32,273). |
| 2010–15 | Four heli-winch programs undertaken to increase extent of search effort on Mt Gower; with surveillance runs undertaken on Big Slope and Big Pocket, free of target weeds (March 2011, October 2012, February 2013, February 2015).  |
| 2011    | The program stopped using triclopyr and switched to a glyphosate–metsulfuron-methyl mix on all woody weeds.   |
| 2013–14 | The NSW Noxious Weeds (Weed Control) Order 2014 – under the NSW <i>Noxious Weeds Act 1993</i> introduced 45 new noxious weed declarations for the LHI Local Control Authority area. This includes species listed under the LHI Regulations 2004 and additional species currently limited in distribution; listed in a bid to reduce their spread, impacts and future costs.   |
| 2014    | The LHIB adopted a revised Plant Importation Policy and Strategy.   |
| 2015    | Review of Weed Eradication Program and its results 2004–2014 (LHIB 2016).<br>First successful trial of helicopter lance-spray apparatus; 10 km of cliff-lines and 1500 weeds treated.<br>Funding secured to engage an arborist to remove large mature weed trees from leasehold land in the Settlement (Camphor Laurel, Flame Tree, White Cedar and Silky Oak) through Local Land Services and Friends of LHI (\$10,000).   |
| 2016    | Publication of <i>Lord Howe Island Weed Eradication Program – Results 2004–2014</i> (LHIB 2016)<br>Publication of <i>A Systematic Flora Survey, Floristic Classification and High-resolution Vegetation Map of Lord Howe Island</i> (Sheringham <i>et al.</i> 2016)<br>Draft of this report placed on public display for comment.   |

## Appendix 3      Relevant legislation and strategies

### International obligations

#### *World Heritage Convention*

The World Heritage Convention (see <https://www.iucn.org/theme/world-heritage>), concerning the protection of the World Cultural and Natural Heritage which was adopted in 1972 by the United Nations Educational, Scientific and Cultural Organization (UNESCO), provides for the declaration of heritage of outstanding universal cultural and natural value as part of the World Heritage List. The Convention and the associated Operational Guidelines provide guidance for the protection and conservation of World Heritage properties.

As a signatory to the World Heritage Convention, Australia has obligations under Article 5, including:

- to protect, conserve and present the World Heritage values of the property;
- to integrate the protection of the area into a comprehensive planning program;
- to give the property a function in the life of the Australian community;
- to conduct scientific and technical research and develop operating methods to counteract threats to World Heritage values; and
- to take appropriate scientific, technical, legal, administrative and financial measures necessary for achieving the foregoing objectives.

### Commonwealth legislation, plans and strategies

#### *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*

The *EPBC Act* provides a national framework for environmental management (including the recognition of nationally threatened species and ecological communities) and the listing of Key Threatening Processes (KTPs) that affect threatened species and their habitats. Relevant KTPs that relate to biosecurity on LHI include (but are not limited to):

- the loss and degradation of native plant and animal habitat by invasion of escaped garden; and plants, including aquatic plants; and
- novel biota and their impact on biodiversity.

#### *The Australian Weeds Strategy*

The Australian Weeds Strategy (NRMMC 2007) recognises that weeds impact on Australia's economy, environment and society, and provides a framework to establish consistent guidance for all parties. It identifies priority weeds for management across Australia with the aim of minimising their impacts. This strategy emphasises the importance of preventing new weeds from establishing and the need to respond quickly to incursions.

The Australian Weeds Strategy identifies the following goals and objectives:

**Goal 1:** prevent new weed problems;

**Goal 2:** reduce the impact of existing priority weed problems; and

**Goal 3:** enhance Australia's capacity and commitment to solve weed problems.

These goals are translated through strategies and actions within the following three sub-strategies:

- National Weed Spread Prevention Action Plan;
- Weeds of National Significance (Strategic Plans); and
- National Weed Awareness Action Plan.

## New South Wales legislation, plans and strategies

### *Biosecurity Act 2015*

The *Biosecurity Act 2015* (the 2015 Act in following), which is expected to come into effect in 2017, will provide regulatory controls and powers to manage noxious weeds in NSW and will repeal the *Noxious Weeds Act 1993*. The 2015 Act is based on the principle that biosecurity is a shared responsibility between governments, industries and individuals. The 2015 Act underpins the *New South Wales Biosecurity Strategy 2013–2021* (DPI 2013), and provides a range of new regulatory tools to manage biosecurity risks pertaining to animal and plant pests and diseases, weeds and contaminants. Invasive weeds will be prioritised under the General Biosecurity Duty using the NSW Weed Risk Management (WRM) system, *NSW Invasive Species Plan 2008–2015* (DPI 2008; currently being updated, with a draft having been available for public consultation [NSW Government 2015]), and Biosecurity Threat Decision Tree.

Weeds will be managed under the broad categories of Prohibited Matter, Control Order, Biosecurity Zone, General Biosecurity Duty, Mandatory Measures Regulation, Emergency Order, Biosecurity Direction and Biosecurity Undertaking. Lord Howe Island is being considered for designation as a Biosecurity Zone. Until this determination, weeds will be prioritised and categorised as part of the North Coast Local Land Services Regional Strategic Weed Management Plan 2017–2020 (in prep).

### *Local Land Services Act 2013*

Local Land Services (LLS) bring together agricultural production advice, biosecurity, natural resource management and emergency management into a single organisation. The Act established LLS, repealed the *Rural Lands Protection Act 1998*, the *Rural Lands Protection Amendment Act 2008* and the *Catchment Management Authorities Act 2003*. The Act became fully operational in January 2014.

LLS have now replaced all Catchment Management Authorities (CMAs) as statutory authorities in newly defined regions. CMAs, Livestock Health and Pest Authorities and some advisory services of the Department of Primary Industries, which previously operated separately, form the integrated LLS.

In this Act, local land services means programs and advisory services associated with agricultural production, biosecurity, natural resource management and emergency management, including programs and advisory services.

### *North Coast LLS Regional Strategic Weed Management Plan 2017–2020*

The North Coast Regional Strategic Weed Management Plan 2017–2020 (in preparation) will prioritise and categorise weed species for the North Coast region in accordance with legislative provisions under the *Biosecurity Act 2015*. Weeds will be prioritised under State and Regional

objectives and assigned management outcomes and actions based on the NSW Weed Risk Management System. LHI will be represented under this plan until designated as a Special Biosecurity Zone under the *Biosecurity Act 2015*.

### NSW Biosecurity Strategy 2013 – 2021

The NSW Biosecurity Strategy outlines how government, industry and the community need to work together to identify, minimise, respond to and manage biosecurity risks. It identifies eight objectives that are aligned to the *Biosecurity Act 2015*. The objectives of the strategy are summarised:

- communicate and build support for a strong and integrated biosecurity system;
- work towards a strong economy, strengthen local environments and communities;
- increase State capacity to respond to, manage and control biosecurity threats according to our state and national obligations;
- foundation building – stakeholders collaborate and share knowledge and expertise;
- identify clear goals, outcomes and strategies meaningful to the NSW community;
- provide guidance for prioritisation, decision-making and actions at state level;
- detailed planning, monitoring and reporting of biosecurity programs; and
- provide a clear direction for biosecurity research.

### Noxious Weeds Act 1993

The *Noxious Weed Act 1993* is to be repealed with the enactment of the *Biosecurity Act 2015*, discussed above. Until that time the current legislative basis for weed management on LHI and NSW continues to apply.

Under the NSW *Noxious Weeds Act 1993* and the Noxious Weeds (Weed Control) Order 2014 (NSW Government 2014), declared noxious weeds are those plants that have the potential to cause harm to the economy, environment, community and individuals, can be controlled by reasonable means and have the potential to spread within an area and to other areas.

The Noxious Weeds (Weed Control) Order 2014 (NSW Government 2014) lists all weeds declared noxious in NSW, their class (five classes of noxious weeds are defined) and the area to which the order applies. Noxious weeds are declared for a LCA area or state-wide. A LCA has a responsibility for inspections and enforcement on private lands as well as control of noxious weeds on their own lands, and the LCA for LHI is the LHIB. Declared noxious weeds require all-tenure management in accordance with the Act.

The NSW Weed Risk Management (WRM) system is used to evaluate noxious weed declarations and to guide weed management practise. The NSW WRM system uses a series of questions to arrive at a score for weed risk (invasiveness, impacts, potential distribution) and feasibility of coordinated control (control costs, persistence, current distribution) (refer to [dpi.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0004/279958/INT09-54079-revised-Weed-Risk](http://dpi.nsw.gov.au/__data/assets/pdf_file/0004/279958/INT09-54079-revised-Weed-Risk)).

Currently, 68 weed species declared under Weed Control Order 2014 occur on LHI and all are targeted for eradication (Appendix 1). Although management of these species may seem an onerous task, 40 of those species had small populations (less than 1000 individuals on the island) or restricted distributions at a limited number of sites, mainly close to the Settlement, when declared.

### Lord Howe Island Act 1953

The *Lord Howe Island Act 1953* provides for the care, control and management of LHI to protect its unique values and the interests of its residents. The Act contains provisions for the



management, protection, restoration, enhancement and conservation of the Island's environment in a manner that recognises the World Heritage values of LHI. This Act is administered locally by the LHIB.

### *Local Land Services Act 2013*

Local Land Services (LLS) brings together agricultural production advice, biosecurity, natural resource management and emergency management into a single organisation. The Act established LLS, repealed the *Rural Lands Protection Act 1998*, the *Rural Lands Protection Amendment Act 2008* and the *Catchment Management Authorities Act 2003*. The Act became fully operational in January 2014.

LLS have now replaced all previous Catchment Management Authorities (CMAs) as statutory authorities in newly defined regions. CMAs, Livestock Health and Pest Authorities and some advisory services of the Department of Primary Industries, which previously operated separately, form the integrated LLS.

In this Act, local land services means programs and advisory services associated with agricultural production, biosecurity, natural resource management and emergency management, including programs and advisory services.

### *Pesticides Act 1999*

This Act controls and regulates the use of pesticides in NSW. The key objectives of the Act are to promote the protection of human health, the environment, property and trade in relation to pesticide use, having regard to the principles of ecologically sustainable development. Regulations and other measures support the Act's objectives.

The Act regulates pesticides storage, use, disposal, labels and containers. "Pesticide" is defined by s5 to include herbicides, insecticides, defoliants and fungicides, but not fertilisers.

Registered pesticides must be used in accordance with the label and a permit is required to use an unregistered pesticide.

### *Plant Diseases Act 1924*

The *Plant Diseases Act*, administered by the NSW Department of Primary Industries (DPI), has provisions that regulate the importation of listed plants and plant diseases or pests into the State (or into any specified portion thereof) and have powers to control the pests should they become established. This Act is to be integrated into the NSW Biosecurity Act 2015.

### *New South Wales Weeds Action Program 2015–2020*

The NSW Weeds Action Program 2015–2020 (WAP; DPI 2015) aims to:

- deliver regional strategic weed management plans;
- facilitate and coordinate regional strategic weed planning; and
- assist with education and community outreach programs.

Regional committees will comprise LCAs, public and private landholders and community members. The establishment of Regional Weed Committees is a high priority for Local Land Services to support regional planning under the *Biosecurity Act* and to utilise WAP funds.

# Lord Howe Island Board regulations, plans and policies

## Lord Howe Island Regulation 2014

This is the primary piece of legislation regulating the importation of plants and potential weed species to LHI. *Part 5 – Protection of the Environment, Division 2 – Flora and Fauna* of this Regulation requires:

- Approval from the LHIB for the importation of seeds, plants or any part of a seed or plant to the Island (Clause 61).
- Any seed, plant, part of seed or plant, animal or bird that is brought to the Island in contravention of the requirements in *Division 2*, may be seized by the LHIB and destroyed or otherwise disposed of (Clause 63).

## Lord Howe Island Pesticide Use Notification Plan 2015

The LHI Pesticide Use Notification Plan has been prepared in accordance with the requirements of the Pesticides Regulation 2009 (the Regulation). The aim of this plan is to meet the community's general right to know about pesticide applications made to outdoor public places that are owned or controlled by public authorities. The plan sets out how the LHIB will notify members of the community of pesticide applications made by the LHIB to public places that it owns or controls. Further information on the LHIB's pesticide use can be obtained from the LHIB.

## Lord Howe Island Biosecurity Strategy

The Draft LHI Biosecurity Strategy (AECOM 2016) aims to ensure that the biodiversity and natural values of LHI (and the economies those values support) and the health and safety of the community are provided an Appropriate Level of Protection (ALOP) from biosecurity risks in the least trade-restrictive manner. The Strategy lists potential pathways for weeds to the Island, and includes risks associated with domestic and international movement of goods, people, vessels and aircraft. The Strategy also considers risks associated with postal items.

The Strategy provides guidance for the prevention of new weed species and pathogens being introduced to the Island through the development and implementation of the LHIB Plant Importation Policy (LHIB 2014).

## Lord Howe Island Plant Importation Policy 2014

This Policy (see Appendix 1 in LHIB 2014) aims to protect LHI against the risks that may arise from introduced plants and pathogens entering, establishing and spreading on LHI.

The Policy is based on the principle that the most cost-effective means of managing weeds, plant pests and diseases is to prevent their initial incursion. This requires a collaborative effort between the LHIB, Commonwealth and State government agencies, suppliers, transport companies and the community.

This Policy plays a critical role in preventing further introduction of new weed species to LHI, as well as the reintroduction of weeds targeted for eradication.

## Lord Howe Island Lagoon Foreshore Management Plan

The LHI Lagoon Foreshore Management Plan (LHIB 2015b) provides the framework within which the LHIB will manage the foreshore for the next ten years. It outlines the main values, issues, management directions and priorities for managing the foreshore consistent with the

values of the area and the resources available for management. The lagoon foreshore is a special and unique part of the island, with important scenic, conservation, tourism and recreation values and it provides opportunities for limited commercial use, and contains a number of privately held assets and essential public utilities. The foreshore is on the western side of the island, extending from the northern end of Old Settlement Beach to the southern end of Kings Beach, generally between Lagoon Road and the mean high water mark. The foreshore is Crown Land occupied under various forms of tenure, including Government Reserves, Special Leases, Permissive Occupancies and Commercial Leases pursuant to the *LHI Act*.

## Lord Howe Island Permanent Park Preserve Plan of Management

The PPP covers approximately 75% of the LHIG. The PPP is not a national park but is similar in that the primary management emphasis is conservation and preservation of natural values. However, unlike a national park, the management of the PPP allows for sustainable harvesting of some natural resources (mainly palm seeds).

The PPP Plan of Management (DECCW 2010) provides specific management directions for the preservation and protection of natural values and ecological processes, restoration of disturbed areas, and scientific reference areas with minimal human interference while providing opportunities for low-impact recreation, restrictions on development and permitting of exploitative activities, which are essential to the LHI economy, under strict guidelines.

## Strategic Plan for the Lord Howe Island Group World Heritage Property

This Strategic Plan (LHIB 2010) provides an overarching ten-year framework for consistent and coordinated management of the LHIG World Heritage Property by the NSW and Commonwealth agencies with responsibilities in the area. It is intended to ensure that day-to-day management of the Property complies with Australia's obligations under the World Heritage Convention and that appropriate consideration is given to protection, conservation, presentation and transmission of World Heritage values.

## Lord Howe Island Revegetation Plan 2002

This Plan (LHIB 2002b) is being redrafted and aims to restore pre-existing or degraded native vegetation communities and to extend buffering of disturbed edges on LHI using the most appropriate revegetation techniques. This plan recognises that weeds play a significant role in the management of revegetation sites.

This Weed Management Strategy will inform the drafting of a revised Revegetation Plan in terms of methodologies needed to manage weeds within all revegetation sites.

## Lord Howe Island Biodiversity Management Plan

The LHI Biodiversity Management Plan (DECC 2007) constitutes the formal national and NSW Recovery Plan for threatened species and ecological communities listed under the *EPBC Act* and *TSC Act* on LHI. This Plan addresses threats and management actions relevant to the Island's overall biodiversity, with a particular focus on rare and significant species and communities. The plan identifies weed invasions as one of the main threats to the Islands biodiversity. The recovery actions relevant to weed management include:

- implementing the LHIB Biosecurity Strategy (AECOM 2016);
- protecting existing native vegetation;
- on-ground eradication and control of weeds;

- revegetation of priority sites;
- research and monitoring into species' ecology and management options;
- monitoring the impacts of climate change; and
- community awareness.

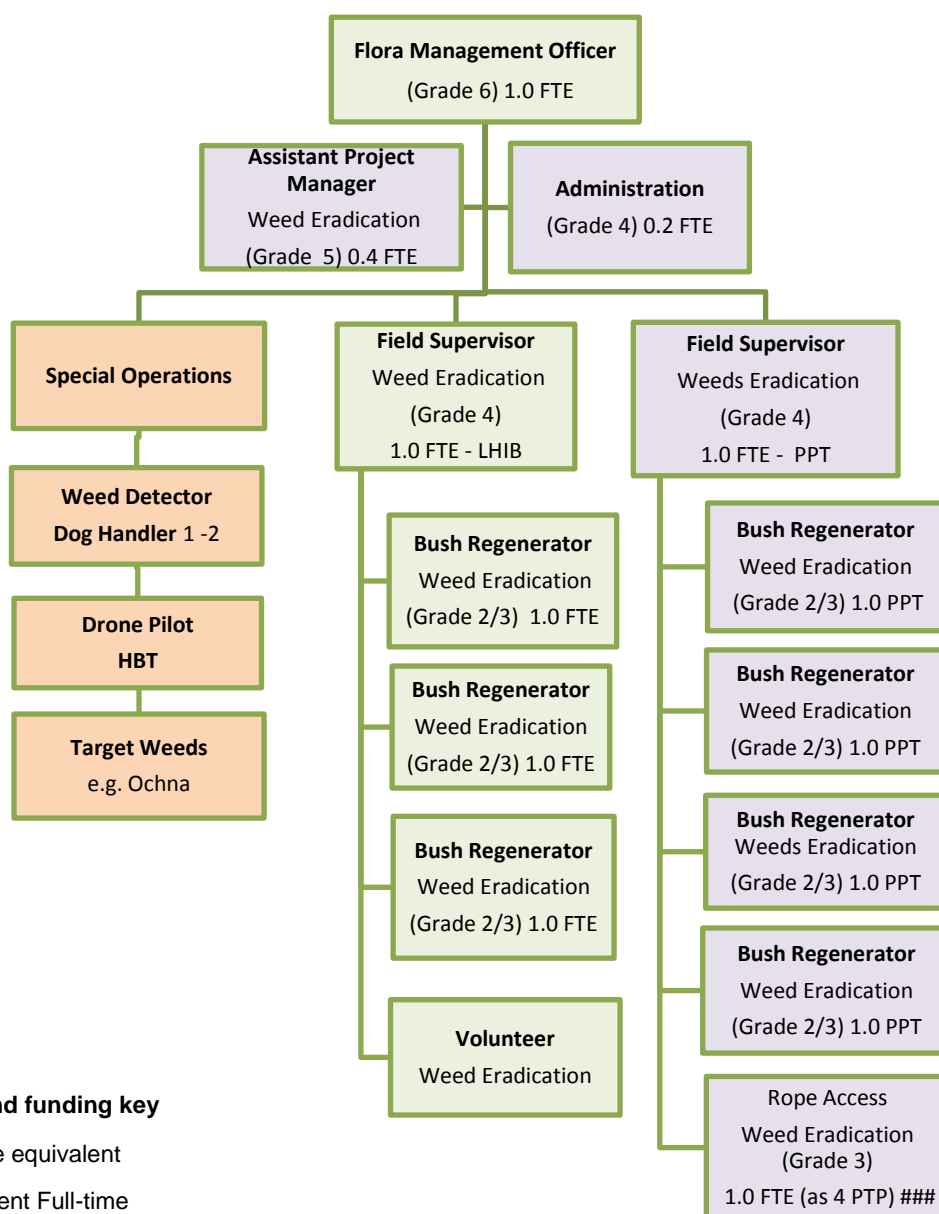
The LHI BMP provides overall guidance for other LHI Strategies and Policies relating to maintaining LHI's biodiversity, including weed management, biosecurity and revegetation.

## Appendix 4

## Staffing strategy

### Lord Howe Island Board Weed Eradication Program Organisational Chart

Grades are Lord Howe Island Officer in accordance with the Crown Employees (Lord Howe Island Board Salaries and Conditions) Award. Weeding positions have previously been identified as Bush Regenerators. Positions need to be aligned to 'eradication' project work noting that the approach to weeding is more time-driven and may require a higher level of physical exertion to gain access to remote areas. It is also recommended that a local four-person rope-access team is formed, working on a part-time basis (equivalent to 1 FTE; as per Section 8). Positions are subject to recurrent LHIB funding and raising funds from external sources.



#### Positions and funding key

FTE Full-time equivalent

PFT Permanent Full-time

PPT Permanent Part-time

Special Operations

LHIB Funding

External funding

### LHIB/EXT pending skills base

## Cherry Guava *Psidium cattleianum* var. *cattleianum* Family MYRTACEAE

**Life-form:** Shrub to small tree.

**Seed-bank persistence:** Short-term persistent >1 year.

**Seed:** Multi-seeded fleshy fruit.

**Age to reproductive maturity:** 4 years.

**Persistence:** Shade tolerant.

**History on LHI:** Cherry Guava was introduced to LHI as a fruit tree, possibly as early as 1880 (Hutton & Le Cussan 2001). Plants were established in bushland gardens at Transit Hill, Lidgbird North and near Rocky Run. Cherry Guava was identified to be the most serious weed threat on LHI, growing so thickly that it crowds out other plants (Green 1994). Repeated grid-search and removal effort (to date) has depleted infestations throughout the PPP and Settlement.



**Dispersal agents:** Birds, potentially people; formerly Feral Pigs (*Sus scrofa*).

**Current management status:** Eradication – Active control phase.

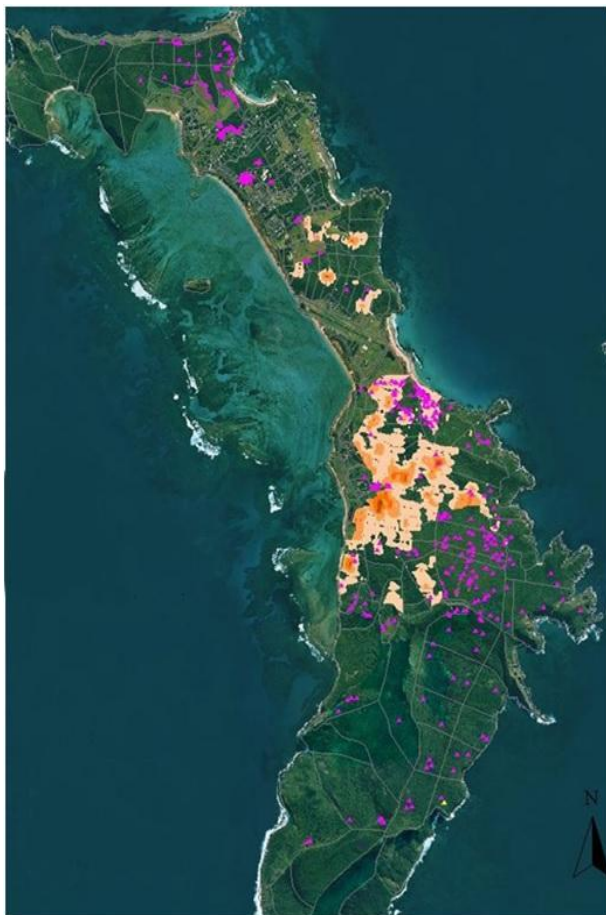
**Current abundance – 2016:** Occasional and widespread, across an estimated 1064 ha, including localised patches. **Current treatment:** 2500 mature plants removed 30 June 2015 to 30 October 2016 (22 months) (LHI Weeds Database).

**Numbers removed 2004–14:** 704,266 plants (502,689 seedlings and juvenile plants; 201,577 mature plants). One of the most common weeds removed on LHI 2004–14.

**Density and distribution:** Map shows prior density mapping (orange shading) in 2002–03 and point location of plants removed (pink). Island-scale invasion capacity. The summit of Mt Lidgbird and Mt Gower, and adjacent south-facing terrain are assumed free of Cherry Guava (based on surveillance runs).

Feral Pigs were eradicated in 1979. It was a major disperser of Cherry Guava (Diong 1982), but could not reach the summit of Mt Gower (owing to cliff-lines), which is reflected in the absence of Cherry Guava there. Isolated patches of Cherry Guava on the northern flanks of Mt Gower in rugged terrain seem indicative of prior dispersal by Pigs.





**Control techniques:** Cut, scrape and paint, HBT.

**Management challenges:** Gaining access to remote terrain and outliers in the southern mountains.

**Management priorities:** Remote weed blocks LN-001, LN-005, LN-021, LS 009, LS 018 and Gower (north face) are a priority for repeated and timely search effort. Advance search effort and monitoring in the southern mountains (HBT, UAV, heli-winch access). Trial weed detector dogs to improve detection of low density infestations.

**Key threats & impacts:** Cherry Guava is a mature phase, long-lived plant that can invade and persist in undisturbed plant communities, outcompeting native plants over time will form dense monocultures.

**Ecosystems or species at risk:**

- Gnarled Mossy Cloud Forest
- Lord Howe Island Broom (*Carmichaelia exsul*)
- Mountain Xylosma (*Xylosma parvifolium*)
- Lord Howe Island Currant Bush (*Coprosma inopinata*)
- Hutton's Geniostoma (*Geniostoma huttonii*)

# LORD HOWE ISLAND BOARD

## Business Paper

### **ITEM**

Application for a certificate and consent to transfer Perpetual Lease (1981/01) being Lot 205 DP40355 Anderson Road, Lord Howe Island to Denise Robyn Rickard pursuant to the Will of the late Ysobel Allen Heffernan, to the Deed of Family Arrangement and section 23 of the *Lord Howe Island Act, 1953*

### **RECOMMENDATION**

That the Board recommend to the Minister to:

- a) grant a certificate to transfer the Perpetual Lease (1954.09) pursuant to section 23(10)(b) of the *Lord Howe Island Act 1953*
- b) grant approval to the transfer of Perpetual Lease (1981/01) being Lot 205 DP40355 Anderson Road, Lord Howe Island to Denise Robyn Rickard pursuant to the Will of the late Ysobel Allen Heffernan, to the Deed of Family Arrangement and section 23 of the *Lord Howe Island Act, 1953*

### **BACKGROUND**

All land on Lord Howe Island vests in the Crown and may only be dealt with in accordance with the provisions of the *Lord Howe Island Act, 1953*. The Minister may grant perpetual leases of vacant Crown Land for the purposes of residence (section 21 LHI Act).

Section 23 of the *Lord Howe Island Act, 1953* governs the transfer of perpetual leases, with subsections (10) to (13) dealing with the transfer of leases the subject of a will or intestacy. The Act allows for the executor or administrator of the estate to hold a perpetual lease for the purpose of residence for a period stipulated by the Minister (section 23(10)(a)).

Section 23(10)(b) of the Act states:

*Within any such period such person may, upon application and upon the recommendation of the Board obtain a certificate from the Minister that the person is entitled to hold the lease; or such person may, subject to this section, sell and transfer the lease.*

On 4 November 2015, the Minister granted approval to Ms Joana Hunter and Mr William Baxter as the executors of the Estate of the Late Ysobel Heffernan to hold Perpetual Lease 1981/01 being Lot 205 DP40355 Lord Howe Island until 23 December 2016 to enable them to complete the administration of the estate.



## **CURRENT POSITION**

On 2 November 2016, the Board received a letter from the executors requesting that a recommendation is made to the Minister for a certificate to transfer the lease pursuant to section 23(10)(a) of the Act.

The application also requests that should the request for a certificate be successful then approval is sought for the Perpetual Lease 1981/01 to be transferred to Denise Robyn Rickard pursuant to the Will of the late Ysobel Heffernan and to the Deed of Family Arrangement (Form 5, Tab A).

The Deed of Family Arrangement is an agreement between the parties for the settlement of a Claim in the Supreme Court of New South Wales in regard to the estate (Tab B).

Neither the Act or the *Lord Howe Island Regulation 2014* prescribe the process that must be followed for applying to the Board to recommend to the Minister for a certificate of eligibility to hold the lease for the purposes of section 23(10)(b). The application is consistent with the Board's "Transfer of Perpetual Lease Policy" and the Board's Administration does not have any objections to the proposal.

The application for consent to transfer Perpetual Lease (1981/01) to Denise Robyn Rickard pursuant to a Will, and to the Deed of Family Arrangement is consistent with the Act, and the Board's policy.

### **Islander status**

Section 23(11) of the Act, provides:

*Where, under the will, or upon the intestacy, of a lineal ancestor, a lease under section 21 devolves beneficially upon a person who is not an Islander, that person shall, for the purposes of subsections (2), (4), (4A) and (7A) and of section 25, be deemed to be an Islander if application is, not later than the expiration of the period of 2 years, or such longer period as the Minister may in a particular case approve, that next succeeds the death of the lessee, made for his or her registration as holder of the lease.*

Ms Rickard is the daughter and lineal descendant of the late Ysobel Heffernan and the application for the transfer of the Estate was received within the 2 year allowable period.

## **RECOMMENDATION**

That the Board recommend to the Minister to:

- c) grant a certificate to transfer the Perpetual Lease (1954.09) pursuant to section 23(10)(b) of the *Lord Howe Island Act 1953*
- d) grant approval to the transfer of Perpetual Lease (1981/01) being Lot 205 DP40355 Anderson Road, Lord Howe Island to Denise Robyn Rickard pursuant to the Will of the late Ysobel Allen Heffernan, to the Deed of Family Arrangement and section 23 of the *Lord Howe Island Act, 1953*

**Prepared** \_\_\_\_\_ David Kelly      Manager Environment  
& Community Development

**Endorsed** \_\_\_\_\_ Penny Holloway      Chief Executive Officer

**Attachments:**

Tab A: Form 5 - Application for consent to transfer Perpetual Lease 1981/01 to Denise Robyn Rickard  
pursuant to the Will of the late Ysobel Heffernan

Tab B: Deed of Family Arrangement

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Administration of the Estate of the Late Jann Lillian Garton– Perpetual Lease 1954/31

#### **RECOMMENDATION**

That the Board recommend to the Minister for the Environment, that Mr Francis Reed as the Executor of the Estate of the Late Jann Lillian Garton be granted approval to hold Perpetual Lease 1954/31 of Lot 33 in Deposited Plan 46194 Lord Howe Island until 17 June 2017 to enable him to complete the administration of the estate.

#### **BACKGROUND**

An application has been received from Mr Francis Reed, as executor of the Estate of the Late Jann Garton, requesting that Perpetual Lease 1954/31 of Lot 33 in Deposited Plan 46194 Lord Howe Island be transferred into the name of the Estate of the Late Jann Garton to allow him to deal with the administration of the estate. A copy of this letter is attached Tab A.

A copy of the Grant of Probate of the Will of the late Jann Garton has been provided, appointing Mr Francis Reed as the executor of the Estate of the Will. Probate for the Estate was granted on 17 June 2015 (copy attached Tab B)

#### **CURRENT POSITION**

All land on Lord Howe Island vests in the Crown and may only be dealt with in accordance with the provisions of the *Lord Howe Island Act, 1953*. The Minister may grant perpetual leases of vacant Crown Land for the purposes of residence (section 21 LHI Act).

Section 23 of the LHI Act governs the transfer of perpetual leases, with subsections (10) to (13) dealing with the transfer of leases the subject of a will or intestacy.

Section 23(10)(a) provides that *“If a lease under this Act devolves under a will or intestacy upon any person, such person may hold the lease for such period after the death of the testator or intestate as the Minister on the recommendation of the Board may permit.”*

By virtue of section 45 of the *Probate and Administration Act 1898* upon the grant of probate of a Will all real and personal estate of the deceased devolves to the executor of the estate by operation of law. As probate of Mrs Garton’s estate has now been granted, perpetual lease 1954/31 has by operation of law devolved to Mr Reed as the executor of the estate.

The effect of section 23(10)(a) of the LHI Act is to limit the period of time that the executor of an estate to whom a perpetual lease had devolved may hold the lease to *“such a period as the Minister on the recommendation of the Board may permit.”*

Section 23(10)(b) of the LHI Act then goes on to provide that during the time that the Minister permits the executor to hold the lease, the executor may either:

- apply to the Board to obtain a certificate from the Minister that they are entitled to hold the lease; or
- sell or transfer the lease.

It should be noted that if during the period the Minister permits the executor to hold the lease, the executor does not either obtain a certificate from the Minister that the persons are permitted to hold the lease or transfer the lease, the lease shall be liable to forfeiture (LHI Act section 23(10)(d)).

Mr Reed as the executor of the Estate of the Late Jann Garton has written to the Board requesting that the current lease be transferred into the name of the Estate of the Late Jillian Garton to allow him to deal with the administration of the estate.

The LHI Act does not stipulate the period of time the Minister may approve an executor of an estate to hold a perpetual lease. The Board's "Transfer of Perpetual Lease Policy" recommends that *“a maximum of 2 years from the date of probate as a reasonable period of time to enable an executor to either apply to the Board for a certificate from the Minister that the beneficiary is entitled to hold the lease or to sell and transfer the lease”* (page 4).

## **RECOMMENDATION**

That the Board recommend to the Minister for the Environment, that Mr Francis Reed as the Executor of the Estate of the Late Jann Lillian Garton be granted approval to hold Perpetual Lease 1954/31 of Lot 33 in Deposited Plan 46194 Lord Howe Island until 17 June 2017 to enable him to complete the administration of the estate.

**Prepared** \_\_\_\_\_ David Kelly      Manager Environment & Community Services

**Endorsed** \_\_\_\_\_ Penny Holloway      Chief Executive Officer

Attachments:

Attachment A: Letter from Mr Frank Reed dated 20 October 2016

Attachment B: Probate of the Will dated 17 June 2015 (CONFIDENTIAL)

21/10/2016 12:58

Received  
61-2-65632240

21 Oct 2016 12:35  
GOWER WILSON HOSP  
21/10/16

PAGE 01/03

P-L 323

FOL 11

RECEIVED

21 OCT 2016

and Board

Dr Frank Reed MBBS DIP.RACOG (UNSW)

Provider no. 0459903Y

Gower Wilson Memorial Hospital

Lagoon Rd, Lord Howe Island, NSW 2898

Tel: (02) 65632000 / 65632460, Fax: (02) 65632240

20/10/16

TO: DAVID-KELLY

Re: JANN GARTON'S ESTATE

Dear David —

From recent correspondence it  
(E Warwick Dunn)  
doesn't appear you have my  
letter requesting to hold Jann's  
lease on "Palmer Haven"

Following is the copy from my file.

The 2 years is racing past since  
probate was issued on the estate  
& a decision has to be made by the  
LHI Board & NSW state government  
re Pauli Branko's inheritance of the  
property.

Warwick Dunn & I have awaited  
eagerly the recommendations of the  
Handley report and any actions/  
policy changes that may result —  
Do you know when the report is due  
for release? There appears to be a  
"lack of transparency" issue in this matter

What will the process be to make the  
decision re Pauli's inheritance? —

copy

Frank Reed.  
Lagoon Rd,  
Lord Howe Island  
2898 NSW.

15th September  
2015

To: Lord Howe Is. Board  
Re: ESTATE of LATE JANN GARTON ne...  
- PERPETUAL LEASE 1954/31

Dear Sirs/MS -

As the executor of Jann's will  
I wish to apply to the Board for a  
certificate from the Minister to be  
entitled to hold the lease for a period  
of two years from the date of probate  
(12th June 2015) to allow the administration  
of the estate to be dealt with.

Many thanks for considering -

Frank Reed  
MBBS

Executor of the Estate of  
Jann Garton -

20.10.16

2

re JANN CARTON'S ESTATE

When will this happen?

If he is denied the right to inherit as per Jann's will, could he purchase the house from the estate if no other purchaser were available?

Thanks for considering these questions -

Sincerely

Frank Reed

(Executor of Jann's Estate)

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Estate of the Late Norma Margaret Whitfield – Perpetual Lease 1954/40

#### **RECOMMENDATION**

That the Board recommend to the Minister to grant approval to transfer Perpetual Lease 1954/40 to Ms Christine Dorothy Daggar and Mr Gregory Robert Whitfield, pursuant to the Will of the late Norma Whitfield, and section 23 of the *Lord Howe Island Act, 1953*

Subject to approval of the transfer of lease above, two separate Perpetual Lease documents will be issued in the prescribed form following cancellation of the original lease, as follows:

- a) lease in perpetuity for the purpose of a residence, over Lot 1 DP1183351 to Ms Christine Dorothy Daggar, subject to the standard perpetual lease conditions; and
- b) lease in perpetuity for the purpose of a residence, over Lot 2 DP 1183351 to Mr Gregory Robert Whitfield, subject to the standard perpetual lease conditions

#### **BACKGROUND**

All land on Lord Howe Island vests in the Crown and may only be dealt with in accordance with the provisions of the *Lord Howe Island Act, 1953*. The Minister may grant perpetual leases of vacant Crown Land for the purposes of residence (section 21 LHI Act).

Section 23 of the Act prescribes the form and manner by which the whole or part of a perpetual lease may be transferred, including transfers pursuant to a will or intestacy (section 23(10) to section 23(13)). Approval to transfer a perpetual lease to an Islander requires the approval of the Minister (section 23(3)). That approval is made on the recommendation of the Board. Where approval is sought to a transfer to a non-Islander the approval of the Governor is also required (section 23(2)).

Generally, to be eligible to hold a perpetual lease an applicant must demonstrate that the person is an Islander as defined by the Act (section 3(1)) or a lineal descendant of the deceased (that is a child, grandchild, great grandchild etc) (section 23(11)).



## **CURRENT POSITION**

The Board has received an application for consent to transfer Perpetual Lease 1954/40, pursuant to the Will of the Late Norma Margaret Whitfield. A copy of the Grant of Probate of the Will, appointing Ms Christine Dorothy Daggar as the executor of the Estate of the Will has been provided (Tab A). Ms Christine Dorothy Daggar and Mr Gregory Robert Whitfield are listed as the beneficiaries to the Will.

The Board's Administration has reviewed that application to ensure compliance with the Act and the Board's Transfer of Perpetual Lease policy.

### **Islander Status**

Section 23(11) of the Act, provides:

*Where, under the will, or upon the intestacy, of a lineal ancestor, a lease under section 21 devolves beneficially upon a person who is not an Islander, that person shall, for the purposes of subsections (2), (4), (4A) and (7A) and of section 25, be deemed to be an Islander if application is, not later than the expiration of the period of 2 years, or such longer period as the Minister may in a particular case approve, that next succeeds the death of the lessee, made for his or her registration as holder of the lease.*

Ms Daggar and Mr Whitfield are the children and lineal descendants of the late Norma Whitfield.

### **Transfer of part only of the land of a perpetual lease**

Perpetual Lease 1954/40 covers two allotments being Lots 1 and 2 of Deposited Plan 1183351 (Tab B).

The executor of the Estate has requested that part of the above lease (Lot 1 DP1183351) be transferred to Ms Daggar and part of the lease (Lot 2 DP 1183351) be transferred to Mr Whitfield, by way of issuing separate perpetual leases.

Section 23(4B) of the Act governs the transfer of part only of the land comprised in an original lease, where the original lease was a lease under section 21 of the Act and the residue of the land is retained by the transferor. In these circumstances, separate perpetual leases are to be issued in respect of the part transferred and the residue of the land retained, and the original lease shall be delivered up for cancellation.

Should the Minister approve the transfer, in accordance with the provisions of section 23(4B) of the Act separate perpetual leases are to be issued, and the original lease must be delivered up for cancellation.

### **Condition of Residency**

The original application included a request dated 1 September 2014 from Ms Daggar to suspend the residency condition under 21(7) of the Act for a period of two years and was supported by medical certificates. Following several attempts to resolve an issue regarding the interim use of the dwelling by Capella Lodge, this period has now lapsed.

The Act provides that the condition of residency shall commence within six months after the granting of the application or such further period as the Minister on the recommendation of the Board may approve (section 21(7)).

## **RECOMMENDATION**

That the Board recommend to the Minister to grant approval to transfer Perpetual Lease 1954/40 to Ms Christine Dorothy Daggar and Mr Gregory Robert Whitfield, pursuant to the Will of the late Norma Whitfield, and section 23 of the *Lord Howe Island Act, 1953*

Subject to approval of the transfer of lease above, two separate Perpetual Lease documents will be issued in the prescribed form following cancellation of the original lease, as follows:

- c) lease in perpetuity for the purpose of a residence, over Lot 1 DP1183351 to Ms Christine Dorothy Daggar, subject to the standard perpetual lease conditions; and
- d) lease in perpetuity for the purpose of a residence, over Lot 2 DP 1183351 to Mr Gregory Robert Whitfield, subject to the standard perpetual lease conditions

**Prepared** \_\_\_\_\_ David Kelly      Manager Environment & Community Services

**Endorsed** \_\_\_\_\_ Penny Holloway      Chief Executive Officer

Attachments:

Attachment A: Probate of the Will dated 17 June 2015 (CONFIDENTIAL)

Attachment B: Lots 1 and 2 of Deposited Plan 1183351

CO-ORDINATES

| CLAUSE 35(1)(b) AND CLAUSE 6(2) OF THE SURVEYING AND SPATIAL INFORMATION REGULATION 2006 |             |               |      |       |         |
|--|-------------|---------------|------|-------|---------|
| MARK   | MCA EASTING | MCA NORTHING  | ZONE | CLASS | METHOD  |
| PM 1099  | 507 307.882 | 6 509 097.416 | 57   | C     | 4 FOUND |
| PM 2195  | 507 115.719 | 6 509 673.880 | 57   | A     | 1 FOUND |
| PM 2196  | 507 129.054 | 6 509 433.457 | 57   | 2A    | 0 FOUND |

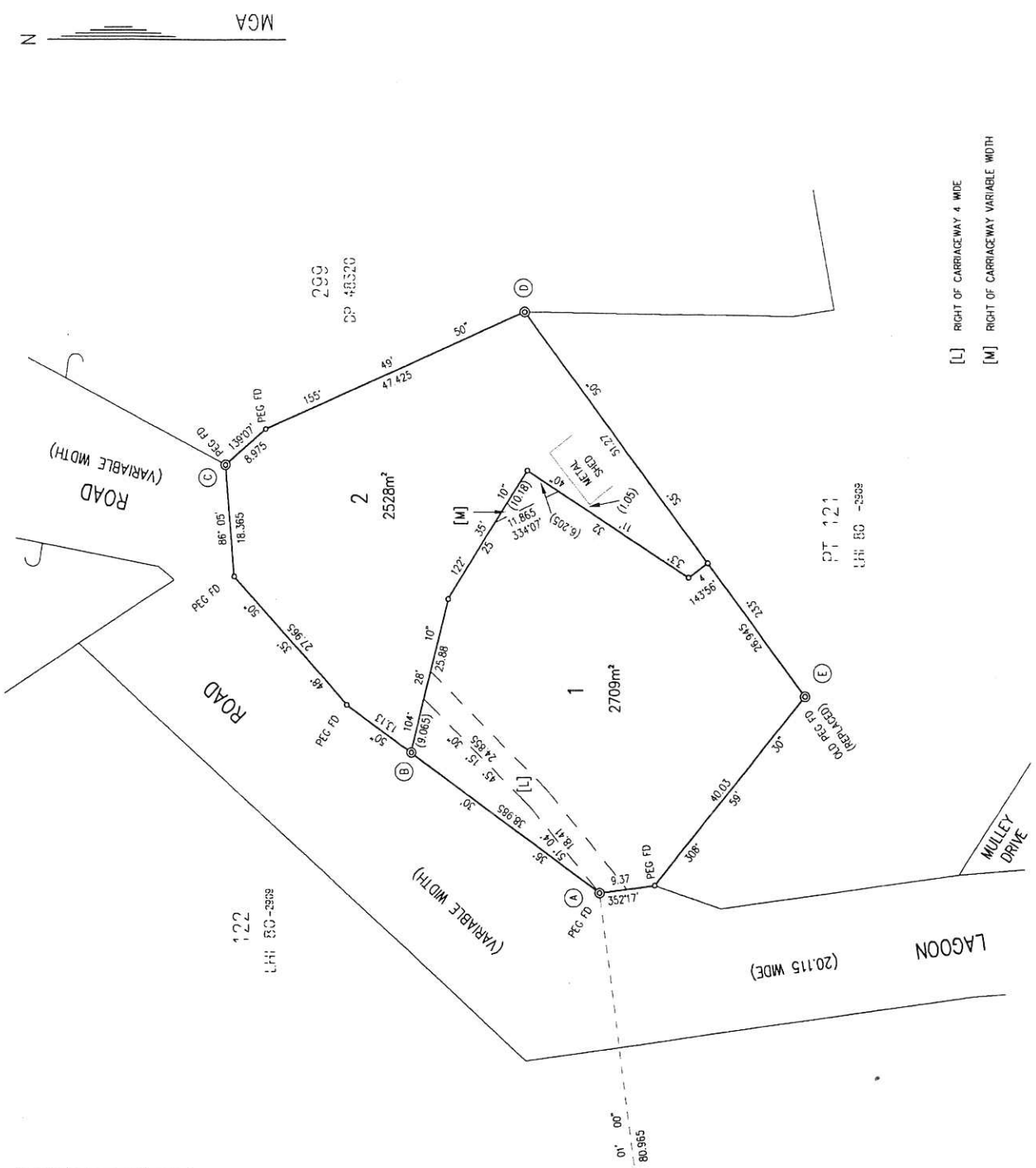
MCA CO-ORDINATES ADOPTED FROM SCMS AS AT 16TH FEBRUARY 2012  
COMBINED SCALE FACTOR = 0.9996

SSM CONNECTIONS

PM 1099 - (D) 358°26'10" 598.33

REFERENCE MARKS

| TYPE      | BEARING | DISTANCE | SOURCE       |
|-----------|---------|----------|--------------|
| A RMGP FD | 83°01'  | 1.31     | DP 1038686   |
| B RMGP    | 257°34' | 1.05     | PLACED       |
| C RMGP FD | 124°10' | 0.46     | LHI 80-2909  |
| D RMGP    | 338°53' | 1.08     | PLACED       |
| E RMGP FD | 233°56' | 1.005    | LHI 118-2909 |



[L] RIGHT OF CARRIAGEWAY 4 WIDE  
[M] RIGHT OF CARRIAGEWAY VARIABLE WIDTH

Surveyor: MARTIN PUNDYK  
Date of Survey: 8TH MARCH 2012  
Surveyor's Ref: 7L66-28

PLAN OF  
SUBDIVISION OF  
LOT 34.8 DP 1038686

LGA: UNINCORPORATED AREA  
Locality: LORD HOWE ISLAND  
Subdivision No: SC2013/01  
Lengths are in metres Reduction Ratio 1 : 500

Registered  
14.3.2013

DP1183351

|                                     |                              |                         |
|-------------------------------------|------------------------------|-------------------------|
| <b>Board Meeting:</b> November 2016 | <b>Agenda Number:</b> 12 (i) | <b>File Ref:</b> AN0004 |
|-------------------------------------|------------------------------|-------------------------|

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Lord Howe Island Rodent Eradication Program Update

#### **RECOMMENDATION**

That the Board note the LHI Rodent Eradication Program (REP) update

#### **BACKGROUND**

On 18 May 2015, after the community consultation process over late 2014 and early 2015 ending with the community survey, the LHI Board decided to proceed with the planning and approvals stage of the Program leading towards implementation of the rodent eradication plan, if the required approvals were received.

The rodent eradication program has now been divided into three stages:

#### **Stage One: Preliminary planning and community consultation**

This stage has already been completed. It involved undertaking required initial trials including captive management and toxin resistance trials as well as initial operational planning. It included the biosecurity review and progressing of biodiversity outcome monitoring. Finally it included the community consultation and engagement process and the community survey.

#### **Stage Two: Planning and Approvals**

This stage is now underway. The key tasks during this stage are:

- Assemble personnel to undertake the work on the next stages
- Review the Rodent Eradication Plan to ensure that it takes into consideration all new information since it was drafted in 2009
- Develop individual property and livestock management plans, which will inform the eradication plan and the approval process. This will involve a detailed property by property consultation with individual leaseholders and residents.
- Undertake any necessary studies required for the approval process, including independent health assessment
- Continue the relevant baseline outcome monitoring
- Finalise detailed planning and all necessary risk assessments;
- Obtain required permits and approvals,

- Update and finalise operational details;
- Prepare tender documentation

### **Stage Three: Implementation and evaluation of the eradication plan**

This Stage will not happen until Stage Two is completed.

After all the necessary approvals are obtained and the required planning is undertaken, the decision-makers, that is the Commonwealth and State funding bodies and the Board will consider all the information and make the decision about proceeding to Stage Three.

Stage Three will involve the eradication plan being implemented in winter 2017 over a three month period.

### **CURRENT POSITION**

#### **1. Approvals Applications Update**

##### EPBC Public Environment Report

Draft Public Environment Report (PER) guidelines were issued by the Department of Environment and Energy (DEE) on 15 Aug 2016. The DEE decided to seek public comments on the Draft Guidelines and exhibited them from 15-29 August. Six submissions were received and minor amendments were made to the guidelines as a result. Final guidelines were issued on 27 September. The Draft PER was submitted to the DEE on 7 October for adequacy review. The document was assessed as adequate and a direction to publish the draft PER was issued on 31 October. Advertisements were approved by DEE for publishing on 1 November. A Householder to residents notifying of the publication of the PER and invitation to comment was sent to all residents on 2 November and an advertisement was published in the Australian newspaper on the same day. The public exhibition period closes on 2 December. The full PER and attachments are available at: <http://www.lhib.nsw.gov.au/environment/environmental-programs/rodent-eradication/community-information>

The next steps are:

- The Board to collate and address comments and submit Final PER, submissions report and all submissions to DEE
- Final PER put on public display (no further comments)
- DEE prepares the assessment report for the Minister
- Minister to make decision within 40 business days of receiving final documents from proponent (decision expected 9 February 2017)

##### NSW Approvals

The DPI Fisheries and Marine Parks permit application was submitted on 3 November. There is no statutory timeframe for assessment.

The Development Application and Species Impact Statement are expected to be submitted in November 2016

##### APVMA Permit Application

The APVMA assessment decision is expected January 2017.

### Legal Register

The Board has engaged RPS (planners) to develop a legal register for the project to ensure that all required approvals are considered.

## **2. Human Health Risk Assessment (HHRA)**

The NSW Office of the Chief Scientist and Engineer (OCSE) has selected and engaged the preferred consultant (Ramboll Environ) to undertake the Human Health Risk Assessment. OCSE reps and the consultant were on island between 8 and 10 November and held two public forums. The OCSE has also established a feedback mechanism for the community which was outlined in a householder. The expected timeframe for delivery of the consultant's report is late December 2016 and the OCSE's final report is expected in mid January 2017.

## **3. Community Engagement Update**

Community Working Group meetings were held in September and October. Information has also been provided to the community regarding the unsuitability of sterilization methodology for an eradication on LHI following its approval in the USA.

Cattle valuations were undertaken on island between 7 and 10 September. A valuation report was received on 18 October. Discussion on the compensation process has been deferred to November Board meeting.

The Economic Evaluation has been conducted. The consultant Rob Gillespie was on island from 10 to 12 August. The draft report will be distributed to the public through the LHI Tourism Association, the Community Working Group and Board website.

## **4. Island Cleanup**

The island cleanup has taken place on approximately 90% of properties that registered. To date more than 400 m<sup>3</sup> (approximately 120 tonnes) of hard waste have been removed from the island with approximately another 100 m<sup>3</sup> collected at the waste management facility ready to send off island.

## **5. Tenders**

Tenders to be released to the market in November are:

- Detector Dog
- Workforce Accommodation
- Helicopter

## **6. Biosecurity**

Updated biosecurity requirements will be included in the new draft shipping tender. Rodent Eradication Program related requirements include maintaining bait stations at the mainland wharf and on the vessel and a de-ratting certificate for the vessel.

LHI is still under consideration to be a legislated "Biosecurity Zone" under the new NSW biosecurity legislation. It is likely that agricultural zones on the mainland will be declared first whilst the Department of Primary Industries legal team looks at changes needed to the LHI Act.

The Board is investigating providing nationally recognized Incident Management System Training for some staff. This could include World Heritage Manager, Rangers, Environment unit and REP staff.

A recent incursion of Myrtle Rust on the island demonstrated an effective response capability, which incident management system training would enhance.

A grant application for a biosecurity detector dog (and possible backup as a rodent dog) and inspection and response training has been submitted to the Environmental Trust Rehabilitation and Restoration program.

A trial regarding devices that could be used in the rodent detection monitoring network will commence soon. It will consist of 4 x 300m transects with each of the devices (chew blocks, chew cards, tracking tunnels, traps) located at 20m intervals.

## **7. Operational Planning**

Taronga Zoo has appointed a project manager to oversee the captive management facility development (for woodhens and currawongs). A Taronga Zoo fauna manager and construction manager visited the island between 19 and 21 October to confirm site requirements. Sufficient space is available at the area set aside at the nursery (not included in Kentia Fresh lease). A consideration in design has been future use of the site.

Taronga Zoo representatives will present their project plan and key risks at the REP Steering Committee meeting on 15 November. A final project plan and budget will follow shortly.

A targeted survey for snails was conducted in September 2016 by the Australian Museum. Very low numbers of three out of the four critically endangered species were found. Rodent predation was considered to be major cause of low numbers and species decline. The report considered the outlook for the endangered land snails under a continuation of the current rodent management to be bleak and their long-term survival appears questionable under a scenario of continued rodent predation. The report indicated that the potential benefits of the eradication far outweigh risks posed.

Biodiversity benefits monitoring has continued with significant impacts to seabirds and plants from rodents detected.

Bait pods have been purchased from the NZ Antipodes project and are in storage in New Zealand. This resulted in a significant saving to the program.

Andrew Walsh and Anthony Wilson will present the LHI REP operational plan at the Island Eradication Advisory Group meeting in New Zealand in December 2016.

## **8. Project Timelines**

An overall Project Schedule for Stages 2 to 4 has been developed and continues to be refined. Key milestones for Stage 2 are shown below.

| Step | Description   | Start Date | End Date   | Status   |
|------|---|------------|--|--|
| 1    | <b>Assemble resources</b>   | July 2015  | 30 Jul 2016  |  |
|      | Engage staff to undertake the Planning and Approvals work: <ul style="list-style-type: none"> <li>- Project Manager</li> <li>- Asst PM (Community)</li> <li>- Asst PM (Operations (PMcL))</li> </ul> Develop role descriptions for field staff  | Jun 2016   | Nov 2015<br>Oct 2015<br>30 Jul 2016  | Completed<br>Completed<br>Completed<br>Working draft developed                                       |
| 2    | <b>Community consultation/engagement</b>  | May 2015   | 30 June 2017   |  |
|      | Community Engagement Plan developed   | Jan 2016   | Apr 2016   | Complete   |
|      | Individual Property Management discussions  | Nov 2015   | 20 Mar 2016  | 95% complete   |
|      | Ongoing consultation  | May 2015   | 30 June 2017   | Ongoing  |
| 3    | <b>Eradication Plan update</b>  | Dec 2015   | 20 June 2016   |  |
|      | Updated to support NSW approvals.   | Dec 2015   | 20 June 2016   | PER complete   |
| 4    | <b>Permits and approvals</b>  | Mar 2016   | Jan 2017   |  |
|      | Prepare applications for approvals: <ul style="list-style-type: none"> <li>• APVMA application submitted</li> <li>• EPBC referral submitted <ul style="list-style-type: none"> <li>○ PER Environment Report submitted</li> <li>○ Minister Decision</li> </ul> </li> <li>• Fisheries permits submitted</li> <li>• DA, EA and Species Impact Statement submitted</li> <li>• Other approvals applications submitted</li> <li>• All approvals received</li> </ul> |            | 19 Apr 2016<br>13 May 2016<br>Oct 2016<br><br>Feb 2017<br>3 Nov 2017<br>Nov 2016<br><br>Jan 2017 | Complete.<br>Complete<br>PER on public exhibition<br><br>Complete<br>In progress 80%<br><br>Feb 2017 |
| 5    | <b>Livestock Management</b>   | Nov 2015   | 20 Sep 2016  |  |
|      | Livestock Management discussions  | Nov 2015   | 20 Apr 2016  | 100% complete  |
|      | Livestock Valuation tender released   |            | 28 May 2016  | 100% complete  |
|      | Livestock Valuation tender awarded  |            | 30 Jun 2016  | 100% complete  |
|      | Livestock Valuation complete  |            | Oct 2016   | 100% complete  |



|    |   |             |   |  |
|----|---|-------------|---|--|
| 6  | <b>Human health assessment review</b>   | 30 Mar 2016 | 30 Nov 2016                               |  |
|    | Identify and engage appropriate reviewer<br>Review to be undertaken   | 30 May 2016 | 15 May 2016<br>15 Jan 2017                | Complete<br>Consultant engaged.<br>Report due Jan 2017   |
| 7  | <b>Biodiversity outcome monitoring</b>  | 1 July 2015 | 30 June 2017                              |  |
|    | Monitoring Plan confirmed<br>Monitoring undertaken  | May 2016    | 20 Mar 2016<br>30 June 2017               | Complete<br>In progress                                  |
| 8  | <b>Biosecurity arrangements</b>   | 1 July 2015 | 30 June 2017                              |  |
|    | Finalise Biosecurity Plan<br>Develop implementation plan<br>Implement plan (subject to funding)   |             | 30 Apr 2016<br>30 Oct 2016<br>30 Jun 2017 | Complete<br>In progress<br>Detection trial commences Nov |
| 10 | <b>Preparation of contracts</b>   | 30 Nov 2015 | 24 Feb 2017                               |  |
|    | Tender documentation prepared for: <ul style="list-style-type: none"> <li>• Bait procurement</li> <li>• Helicopter operations</li> <li>• Captive management</li> <li>• Accommodation</li> <li>• Detector Dog</li> </ul> |             | 24 Feb 2017                               | Not started<br>Draft<br>Draft<br>Draft<br>Draft          |
| 11 | <b>Technical, social and financial feasibility assessment</b>   | 04 Jan 2017 | 27 Feb 2017                               |  |
|    | Revised feasibility and risk assessment<br>Final Go / No Go Decision made by LHIB, CfoC and ET to proceed to Stage 3  | 04 Jan 2017 | 25 Jan 2017<br>27 Feb 2017                | Not started<br>Not started                               |

## 9. Budget

A budget summary as at 30 June 2016 is presented below.

| Funding Source             | Previous Period Summary                        |  | FY16/17                          |                             |  |                    |
|----------------------------|--|--|----------------------------------|-----------------------------|--|--------------------|
|                            | Total Funding Received<br>(as at 30 June 2016) | Total Expenses<br>(as at 30 June 2016) | Opening Balance<br>(1 July 2016) | Funding Received<br>FY16/17 | Funding Expended<br>(1 July 2016 to 31 Oct 2016) | Closing<br>Balance |
| Caring for our Country     | 4,500,000                                      | 894,269                                | 3,605,731                        | 0                           | 147,243  | 3,458,488          |
| NSW Environment Trust      | 4,542,442                                      | 894,269                                | 3,648,173                        | 0                           | 147,243  | 3,500,930          |
| Activity Generated Income* | 787,410  |  | 787,410                          |                             | 0  | 787,410            |
| <b>Total</b>               | <b>9,829,852</b>                               | <b>1,788,538</b>                       | <b>8,041,314</b>                 | <b>0</b>                    | <b>294,485</b>                                   | <b>7,746,829</b>   |

A breakdown of remaining forecast expenditure is included as Attachment A. The project is generally within allocated budget.

**RECOMMENDATION**

That the Board note the LHI Rodent Eradication Program (REP) update

**Prepared** \_\_\_\_\_ Andrew Walsh, Rodent Eradication Project Manager

**Endorsed** \_\_\_\_\_ Penny Holloway, Chief Executive Officer

## LHI Rodent Eradication Project

[illegible]

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Renewable Energy Program Update

#### **RECOMMENDATION**

It is recommended that the Board note the information.

#### **BACKGROUND**

In 2012, the Lord Howe Island Board (the Board) adopted the Lord Howe Island Renewable Operations – Energy Supply Road-Map (the Road Map), to reduce the Island's reliance on diesel fuel for electricity generation. The Road Map was developed with the important assistance of the community based Sustainable Energy Working Group (SEWG).

The Road Map set the ambitious target for the island of 63% renewable energy by 2017. Funding for the project is provided through a \$4 million grant from the Federal Government via the Australian Renewable Energy Agency (ARENA), a \$5.9 million loan from NSW Treasury (to be paid back via diesel fuel savings), and \$0.5 million from the Board. With funding secured, work has continued on the next phase of the implementation of the Road Map. A requirement of the funding from ARENA was that the project achieves a minimum 1 megawatt (MW) of new renewable energy.

Consultants Jacobs were engaged by the Board in 2014 to lead the technical elements of the project, and community consultation. Jacobs completed a Technical Feasibility Study in March 2015 which examined the mix of solar panels, batteries and wind turbines. The study showed that using 450 kW of solar panels (around 2,000 panels), a 400kWh battery and two small 275kW wind turbines, will reduce the Island's diesel fuel consumption from 541,000 litres per year to around 180,000 litres per year, a 66% reduction. This combination also provides 67% of the Island's annual electricity needs, exceeding the target set in the Road Map.

#### **CURRENT POSITION**

##### **ARENA Funding**

Further discussions have occurred with ARENA to resolve a significant variation to the timing and project objectives. It is hoped that the variation will go to the ARENA Board meeting on 8 December 2016.

## **Budget**

The total cost of the project to date (July 2014 to 07 October 2016) is \$1,420,660 (excl GST). Expenditure since the last report on 31 August has been \$189,335, mostly focussed on the solar panel and battery tender assessment, and community engagement. Overall, the project budget remains appropriate. The first major check for the budget will be the tendered prices for the solar, battery and control system package of work, which will be able to be discussed upon award of the contract in mid-January 2017.

## **Solar, Battery and Control System Contract**

The tender for the solar, battery and control system contract package of work was advertised on NSW e-tendering between 15 June and 24 August. The assessment of the tenders by Jacobs and the Board is complete, a preferred contractor is known. However, ARENA has requested a review of all tenders and the tender assessment by their consultants AECOM, which will lead to an ARENA Board meeting on 8 December 2016.

Following ARENA's approval, it is planned for the tender recommendation to go to the NSW Environment Minister for approval during January 2017.

## **Program \ Schedule**

The ARENA Board meeting constraint to the award of the Solar, Battery and Control System Contract (SBC) has caused a delay to the project. Instead of the original SBC contract award date of mid-October 2016 and a March 2017 on-site start date, the revised dates are February 2017 for contract award and late April 2017.

The flow-on effects move the potential wind turbine works on-site to November 2017, and the commissioning of the whole system to April 2018.

## **Wind Turbines**

### *Environmental Assessment Process*

The Environmental Report to support the Development Application for the wind turbine component of the project was lodged on 15 September 2016, and placed on public exhibition from 16 September to 28 October. Stephen Ambrose from Ambrose Ecological Services has carried out two additional site visits over a week's duration each to observe bird movements across the site, with one more planned during December.

The DA report is provided in Item 7(ii).

A referral to the Federal Government under the *Environment Protection Biodiversity Conservation Act* was lodged on 29 September 2016. The referral was advertised on the Department's website on 7 November, and is open for public comment until 21 November. The Department has advised that we should receive advice regarding the referral by 2 December.

### *Wind Turbine Impacts on Airservices Australia (ASA) Infrastructure*

ASA have been concerned about the potential impact of the wind turbines on their equipment and have requested additional work to understand the potential impact. The first stage of this further specialist assessment work was completed in August 2016, and then submitted to ASA for assessment. The conclusion from the assessment by the consultants, IDS, indicates little impact from the wind turbines on the ASA infrastructure. Feedback from ASA was received on 19 October, and required additional work to enable ASA to make a decision. The request has been sent to IDS and we are awaiting their advice.

## **Community Consultation**

Since the September Board meeting, Jacobs have assisted with the following community engagement activities:

- Managing the project's Facebook page.
- Preparation of an updated Environmental Report Summary Booklet.
- Preparation of a Submission Form for the wind turbine DA.
- Management of the consultation event on the Island during Friday 16 to Monday 19 September, involving four noise talks by noise consultant Renzo Tonin and a Working Group meeting.

## **Wind and Avifauna Monitoring Mast**

The wind and avifauna monitoring mast was installed and erected on 13 November 2014. Data is collected on a weekly basis and sent to Jacobs for analysis.

## **RECOMMENDATION**

It is recommended that the Board note the above information.

**Prepared** \_\_\_\_\_ Andrew Logan      Manager, Infrastructure & Engineering Services

**Endorsed** \_\_\_\_\_ Penny Holloway      Chief Executive Officer

|                                     |                                |                         |
|-------------------------------------|--------------------------------|-------------------------|
| <b>Board Meeting:</b> November 2016 | <b>Agenda Number:</b> 12 (iii) | <b>File Ref:</b> AD0115 |
|-------------------------------------|--------------------------------|-------------------------|

# LORD HOWE ISLAND BOARD

## Business Paper

### OPEN SESSION

#### **ITEM**

Environmental Grants Progress Report, November 2016

#### **RECOMMENDATION**

It is recommended that the Board note the attached information.

#### **BACKGROUND**

The Board has been successful in obtaining a number of major externally funded grants. A summary of these grants is shown below:

| <b>Funding Body</b>   | <b>Project Name</b>  | <b>Total Project Value (excl. GST)</b>  |
|---|--|---|
| North Coast Local Land Services (NCLLS)                           | <i>2015-18: Progressing the treatment and eradication of invasive weeds and African Big-headed Ants (ABhA) from World Heritage listed Lord Howe Island (NC00276)</i> | \$470,610, being original grant of \$186,610 plus \$54,000 (variation 1) plus \$230,000 (variation 2) |
| Caring for Our Country (Australian Government)                    | <i>Managing the World Heritage Values of Lord Howe Island (NSW) A0000010418G</i>   | \$793,500 (being original grant of \$530,100 plus an additional \$263,400 + GST)                      |
| NSW Environmental Trust   | <i>2015-17: The Tide is Turning - Driving Weed Eradication on Lord Howe Island (2014/MG/0005)</i>  | \$483,946 (+ GST)   |
| Green Army  | <i>Accelerating the demise of the five worst weeds on LHI Project 1(B0340031501G)</i>  | \$42,000 (+ GST)  |
| NSW Office of Environment and Heritage Saving Our Species Program | Lord Howe Island Saving Our Species Site Managed Species 2016-2017.  | \$357,150 (+ GST)   |

#### **CURRENT POSITION**

Progress reports for each project for the period between September and November 2016 are provided in Attachment A. A progress report on the Rodent Eradication is provided in a separate paper.

## **RECOMMENDATION**

It is recommended that the Board note the attached information.

**Prepared** \_\_\_\_\_ David Kelly      Manager Environment & Community  
Services

**Endorsed** \_\_\_\_\_ Penny Holloway      Chief Executive Officer



## Attachment A

|  |   |
|--|---|
| <b>Program Name:</b>                                     | North Coast Local Land Services (NCLLS)   |
| <b>Project Name:</b>                                     | <i>Progressing the treatment and eradication of invasive weeds and African Big-headed Ants (ABhA) from World Heritage listed Lord Howe Island</i>   |
| <b>Project Manager</b>                                   | David Kelly (Project Manager), Sue Bower (project officer, weeds), Hank Bower (project officer, ABhA, revegetation)   |
| <b>Grant Reference No:</b>                               | NC00276   |
| <b>Maximum Funding Amount:</b>                           | <b>\$470,610</b> , being original grant of \$186,610 plus \$54,000 (variation 1) plus \$230,000 (variation 2)   |
| <b>Expenditure:</b>                                      | \$ 176,061 (as of 7 Nov 2016)   |
| <b>Funding Term:</b>                                     | 10 June 2015 - 31 May 2018  |
| <b>Brief Description of Project:</b>                     | <p>This project aims to monitor and treat residual infestations of ABhA, continue to treat priority invasive weeds and maintain the Island as 'myrtle rust' free.</p> <p>In May 2016 the Board was successful in obtaining an additional \$54,000 from NCLLS, for the following projects.</p> <p>a) Restoration of Sallywood Swamp Forest Critically Endangered Ecological Community;<br/> b) Progressing the treatment and eradication of invasive weeds on Lord Howe Island; and<br/> c) Removal of Tree Weed Species from Settlement Area on Lord Howe Island.</p> <p>In June 2016, the Board was successful in obtaining an additional \$230,000 for the following projects:</p> <p>d) Propagation of local plants for revegetation at priority sites<br/> e) Additional Grid Search Effort – All Terrain weeding<br/> f) Helicopter Lance Spraying<br/> g) Helicopter Winch Operations</p> |
| <b>Activities completed during the reporting period:</b> | <p>Activities completed during the reporting period include:</p> <ul style="list-style-type: none"> <li>• Ongoing grid search and control of priority weeds.</li> <li>• Completion of planting of revegetation site at golf club. Completion of weed control. Initial targeted control of Siratro Vine and Funeral Lily complete</li> <li>• Liaise with Golf Club Green keeper for ongoing maintenance</li> <li>• Developed media articles for local publication and for NCLLS and LHIB website.</li> </ul>   |

|  |   |
|--|---|
| <b>Program Name:</b>                                     | World Heritage Grants 2013-18   |
| <b>Project Name:</b>                                     | Managing World Heritage Values of Lord Howe Island  |
| <b>Grant Reference No:</b>                               | A0000010418G  |
| <b>Project Manager</b>                                   | Hank Bower  |
| <b>Maximum Funding Amount:</b>                           | <b>\$793,500</b> (being original Fee of \$530,100 plus an additional \$263,400 + GST)   |
| <b>Expenditure:</b>                                      | (\$142,181) against \$263,400   |
| <b>Funding Term:</b>                                     | January 2014 to 30 June 2016. Extension granted 13 May for another 2 years (30 June 2018).  |
| <b>Brief Description of Project:</b>                     | Employment of a Lord Howe Island Group World Heritage Area Executive Officer (Manager Environment/World Heritage). See previous reports for further detailed information.   |
| <b>Activities completed during the reporting period:</b> | <p>This grant secures funding for the MEWH position till 30 June 2018.</p> <p>The MEWH has been developing and implementing programs to protect the World Heritage values of the island in accordance with the position description, grant obligations and legislative responsibilities. The position coordinates projects within the Environment &amp; Community Development Unit including the Rehabilitation Plan, Quarantine Strategy and progresses targets identified in the LHI Biodiversity Management Plan. The position undertakes ecological assessments for Development Assessments and Tree Removal requests. The position also promotes environmental initiatives and information to the broader community through newsletters, community forums, media releases and provides reports to federal, state and regional NRM bodies and key stakeholders.</p> <p>Submitted financial statements to auditor for acquittal.</p> <p>Implemented rapid response measures for Myrtle Rust incursion.</p> |

|  |   |
|--|---|
| <b>Program Name:</b>                                     | NSW Environmental Trust   |
| <b>Project Name:</b>                                     | The Tide is Turning - Driving Weed Eradication on Lord Howe Island  |
| <b>Project Manager</b>                                   | Sue Bower   |
| <b>Grant Reference No:</b>                               | 2014/MG/0005  |
| <b>Maximum Funding Amount:</b>                           | \$483,946   |
| <b>Expenditure</b>                                       | \$ 219,506  |
| <b>Funding Term:</b>                                     | 1 July 2015 to 30 June 2017   |
| <b>Brief Description of Project:</b>                     | <p>This project aims to scope new and improved weed surveillance and treatment methods and apply adaptive management to improve the weed eradication program on Lord Howe Island.</p> <p>Key outputs from this project include:</p> <ul style="list-style-type: none"> <li>• Reduced impact of invasive weeds across 350 hectares of accessible terrain.</li> <li>• Surveillance and detection of invasive weeds from 300 hectares of rugged inaccessible terrain on LHI.</li> <li>• Independent expert review of the LHI Weed Eradication Program</li> <li>• Trial of Unmanned Automated Vehicle (UAV), Aero Robot (AR) and Herbicide Ballistic Technology (HBT) technology for weed surveillance and control on LHI.</li> <li>• Control of known infestations of weeds in remote terrain through helicopter winch access in conjunction with UAV/HBT.</li> <li>• Release of Crofton Weed bio-control <i>Baeodromus eupatorii</i> on LHI.</li> <li>• Maintain and raise community awareness and participation in achieving the eradication of weeds from LHI.</li> <li>• Build and maintain networks with restoration / weed experts and island conservation programs using LHI project outcomes as a case study.</li> </ul> |
| <b>Activities completed during the reporting period:</b> | <ul style="list-style-type: none"> <li>• Continuation of weed grid search effort with focus commencing in the southern mountains.</li> <li>• Key note presentation to the 20<sup>th</sup> Australasian Weeds Conference in Perth in October. Presenting on the paper '<i>Breaking Bad – 10 years into a predicted 30 year weed eradication program on World Heritage Listed LHI</i>'.</li> <li>• Weed technical panel workshop held on island to provide advice on the review of the LHI Weed Management Strategy.</li> </ul>   |

|  |  |
|--|--|
| <b>Program Name:</b>                                     | Green Army   |
| <b>Project Name:</b>                                     | Accelerating the demise of the five worst weeds on LHI Project 1   |
| <b>Project Manager</b>                                   | Sue Bower  |
| <b>Grant Reference No:</b>                               | B0340031501G   |
| <b>Maximum Funding Amount:</b>                           | <p>\$30,000 (materials and supervisor)<br/> Skillset is the broker of the grant.<br/> \$27,000 provided by Skillset for LHIB to employ supervisor, which includes \$3,000 for materials/tools<br/> \$15,000 provided through LHIB to contribute to supervisor wage to meet Award.</p>  |
| <b>Expenditure of LHIB Recurrent towards position</b>    | \$16,198   |
| <b>Funding Term:</b>                                     | 25 <sup>th</sup> July 2013 to 31 <sup>st</sup> December 2017   |
| <b>Brief Description of Project:</b>                     | <p>The Green Army program aims to train and up-skill young people aged between 17 to 24 in meaningful environmental programs.</p> <p>The program aims to accelerate the eradication of high priority invasive weeds including an identified five worse weeds (asparagus weeds and woody weed species).</p> <p>Project activities include:</p> <ul style="list-style-type: none"> <li>• weed treatment (across 80 ha)</li> <li>• weed survey and assessment</li> <li>• community engagement and participation</li> <li>• seed collection</li> </ul> |
| <b>Activities completed during the reporting period:</b> | <p>Key outputs from this project include:</p> <ul style="list-style-type: none"> <li>• on ground weed control of target blocks.</li> <li>• plant propagation training.</li> </ul>  |

|  |   |
|--|---|
| <b>Program Name:</b>                                     | <b>Saving Our Species</b>   |
| <b>Project Name:</b>                                     | Lord Howe Island Saving Our Species Site Managed Species 2016-2017.   |
| <b>Project Manager</b>                                   | Dianne Brown (site coordinator - OEH) Hank Bower (species coordinator LHIB), Sue Bower (species coordinator LHIB)   |
| <b>Grant Reference No:</b>                               | Lord Howe Island Saving Our Species Site Managed Species 2016-2017.   |
| <b>Maximum Funding Amount:</b>                           | \$357,150 (+ GST  |
| <b>Expenditure of LHIB Recurrent towards position</b>    | Nil   |
| <b>Funding Term:</b>                                     | October 2016 – 31 May 2017  |
| <b>Brief Description of Project:</b>                     | <ul style="list-style-type: none"> <li>• to implement identified priority recovery actions for ten Lord Howe Island plant species as per the Saving Our Species prioritisation process for 2016-2017</li> <li>• targeted monitoring of identified threatened plants</li> <li>• targeted threat abatement including weed control, 0.5 hectare revegetation and stock exclusion.</li> </ul> |
| <b>Activities completed during the reporting period:</b> | <ul style="list-style-type: none"> <li>• Develop project brief and timeline</li> <li>• Develop project plan and budget breakdown</li> <li>• Undertake database entry training</li> <li>• Commence targeted threatened plant surveys</li> </ul>  |

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Island Clean Up Update

#### **RECOMMENDATION**

It is recommended that the Board note the report.

#### **BACKGROUND**

The Island clean up was initiated with the two objectives of removing hard waste from the Island and reducing the number of rodent harbours.

The clean up commenced in May 2016 and was initially planned to run through May, June, July and August, requiring 2 days a week from Board staff to collect and deliver hard waste to the Waste Management Facility (WMF) for processing, before leaving on the Island Trader for disposal in Port Macquarie.

The community was encouraged to take advantage of this one-off free service by registering for a site inspection of their properties by a Board staff member to identify and record the materials eligible to be removed from each property.

Ineligible items that would not be removed during this program included green waste, buildings for removal or building waste under approved DA arrangements, or old vehicles required to be removed as part of a vehicle importation approval.

Examples of materials that met the free removal criteria were:

1. All metal, including roofing, cars, trailers, engines, equipment, fridges and washing machines.
2. Any watercraft (both fibreglass and steel construction) and motors, tyres.
3. Rainwater tanks.
4. Paint cans, chemical drums and fuel containers.
5. Asbestos - providing that the leaseholder has engaged at their cost, licensed asbestos removers to legally remove and package the asbestos. Once appropriately packaged and safe, the asbestos will be eligible for free removal from the Island.

#### **CURRENT POSITION**

The clean up has extended beyond the expected August finish date, albeit with a smaller effort since September. A larger than expected effort has been required at the WMF to prepare the materials for efficient transport. Local Island contractors have also been employed to assist with hard waste collection.

Of the nearly 200 residences on the Island, there remain approximately 9 properties where there is a reasonable effort required to finalise their clean up. A small number of properties require the tele-handler or similar to remove heavy items, which will all be completed at the same time. In addition there are 5 properties where larger items of plant and equipment remain on-site, and will be removed later this year, and taken directly to the ship for loading.

Including Voyage 611 of 13 October, more than 400 m<sup>3</sup> or 150 tonnes of material has been removed from the Island. There is approximately another 100 m<sup>3</sup> of material at the WMF awaiting packing for shipping, and a similar amount again at the 9 remaining properties, and a similar amount again in plant and equipment at the other 5 properties. The total expected volume of material to be disposed of at the end of the project could be approximately 750 m<sup>3</sup>.

It is expected that the remaining properties can be completed by Christmas time. Removal of the material from the Island is subject to a decision on how to remove the remaining material, which is tied up with other issues related to the delivery of road base materials for the solar panels road project. Depending on the capacity of the Island Trader to deliver the material, there may be a need for another barge to bring road materials to the Island to allow the roads contractor to commence the work on schedule. The empty barge could then remove the larger waste items of plant and equipment, and any other remaining material. This decision will be made in December.

In terms of costs, the external costs to date have been:

- |  |                   |
|--|-------------------|
| • Contractors to assist with the clean up collection | - \$35,000        |
| • Sea freight (lump sum for 400 m <sup>3</sup> )     | - \$20,000        |
| • Additional transport & handling costs on mainland  | - \$12,000        |
| <b>Sub-Total</b>                                     | <b>- \$67,000</b> |

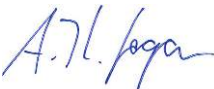
Future external costs to complete are expected to be:

- |  |                   |
|--|-------------------|
| • Contractors to assist with the clean up collection     | - \$10,000        |
| • Sea freight (350m <sup>3</sup> @ \$75/m <sup>3</sup> ) | - \$26,250        |
| • Additional transport & handling costs on mainland      | - \$12,000        |
| <b>Sub-Total</b>   | <b>- \$48,250</b> |

|                          |                    |
|--------------------------|--------------------|
| <b>Total (estimated)</b> | <b>- \$115,250</b> |
|--------------------------|--------------------|

## **RECOMMENDATION**

It is recommended that the Board note the report.

Prepared  Andrew Logan Manager Infrastructure & Engineering Services

Endorsed \_\_\_\_\_ Penny Holloway Chief Executive Officer

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Airport Terminal Upgrade Project Update.

#### **RECOMMENDATION**

It is recommended that the Board note the report.

#### **BACKGROUND**

The \$1,981,604 project has been underway since March 2016. The Project has been split into two distinct components being:

1. Project and Construction Management, and Design Services; and
2. Construction.

Infrastructure NSW has funded \$1.8M of the cost of the project through its Restart NSW fund. The Board is contributing \$181,604 through in-kind funding.

STEA Astute Architecture P/L were the successful tenderers for the Project and Construction Management, and Design Services Contract and commenced work on the project at the beginning of July 2016.

#### **CURRENT POSITION**

Following the presentation and acceptance of the concept plans in August / September, STEA progressed rapidly into the next phase of design, preparing plans for:

1. The Development Application submission on 5 October, and
2. Detailed Design drawings to support the tendering of the project for construction.

The demolition of the existing terminal, construction of the new terminal and provision of temporary terminal facilities remains difficult within the current project budget. Through avoiding some electrical network upgrades and reducing the size of the building, the shortfall in the budget has been reduced to approximately \$450,000.

To manage the budget shortfall, in August the Board applied for a \$750,000 grant from the NSW Department of Premier and Cabinet through the Tourism Demand – Driver Infrastructure (TDDI) Program. The outcome of the application should be known before the end of the year.

Depending on the outcome of the Development Application for consideration under Item 7(viii), the tender for the construction is expected to be advertised in mid-January 2017.



## **RECOMMENDATION**

It is recommended that the Board note the report.

**Prepared** \_\_\_\_\_ Andrew Logan Manager Infrastructure & Engineering Services

**Endorsed** \_\_\_\_\_ Penny Holloway Chief Executive Officer

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **ITEM**

Detection, containment and eradication of Myrtle Rust, Lord Howe Island

### **RECOMMENDATION**

It is recommended that the Board note the attached information.

### **BACKGROUND**

Myrtle Rust is an exotic fungus from the group of rusts in the *Puccinia psidii* complex (Eucalypt/Guava rust) which was first detected in Australia in 2010. Myrtle Rust is one of the most serious plant pathogen quarantine threats to Australia and has the potential to significantly impact on Lord Howe Island's World Heritage values.

Prior to October 2016, Lord Howe Island (LHI) was Myrtle Rust free.

### **CURRENT POSITION**

On 14 October 2016, myrtle rust was detected for the first time on Lord Howe Island on an exotic plant species (Rose Apple *Syzigium jambos*).

Lord Howe Island Board staff responded immediately in accordance with an approved rapid response plan (Tab A) with the aim to contain and eradicate myrtle rust from the Island. A copy of a report outlining the detection and response is provided in Tab B.

At this stage the Board have detected Myrtle Rust on three perpetual leases on the Island (Lot 285 DP48687, Lot 213 DP 45639 & Lot 361 DP 1101462). Myrtle Rust has been found on Rose Apple at these three leases, on two Callistemon plants (which were located under a heavily infected Rose Apple at one lease which showed early symptoms but with no spore development) at Lot 361 DP 1101462 and on one Fiji Fire *Metrosideros vitiensis* at Lot 361 DP 1101462. (Tab C).

With the consent of leaseholders, all known infestations have been sprayed with a registered systemic fungicide. All infected plants below three metres in height have been cut and painted with a registered herbicide, with cut material sprayed with fungicide and sealed in large bags and wrapped and sealed in black plastic to be solarised to kill any remaining spores. All infected plants above three metres in height have been stem injected with a registered herbicide and left in situ to die and break down to reduce disturbance to infected biomass. Following leaf drop, all leaves and fallen stems etc will be raked and bagged in sealed black plastic and solarised and the site sprayed with a registered fungicide. Dead standing trees will be felled once all leaves have dropped.

Individual Board staff have been appointed as Inspectors and have been issued with Certificates of Authority under section 13 of the *Plant Diseases Act 1924*.

At present it seems that the Myrtle Rust incursion is very limited and possibly has been contained with the immediate response. The Board will continue to seek technical advice from NSW DPI in aiming to eradicate Myrtle Rust from Lord Howe Island. Should this not be possible the Board will seek technical advice on containment and control options.

### **RECOMMENDATION**

It is recommended that the Board note the attached information.

**Prepared** \_\_\_\_\_ David Kelly      Manager Environment  
& Community Development

**Endorsed** \_\_\_\_\_ Penny Holloway      Chief Executive Officer

**Attachments:**

Tab A: Myrtle Rust Response Plan

Tab B: Report of the detection of myrtle Rust on Lord Howe Island and planned response

Tab C: Maps showing the location of extent of affected properties

## Lord Howe Island

### Myrtle Rust Response Plan 2015



### Contain and eradicate

- The LHIB will aim to contain and eradicate incursions of Myrtle Rust on the island to prevent its spread and impact.
- Depending on the future extent and spread of Myrtle Rust the LHIB will decide whether to step back to control and management of high priority assets. The initial response however will be contain and eradicate Myrtle Rust.

### Reporting an outbreak

In the event of a suspected sighting:

- Do not touch, move or collect samples from the infected plant
- Record location with GPS if possible if not, note how to get to infected area
- Leave the plant/ site undisturbed
- Immediately contact Lord Howe Island Board (6563 2066) to inform the Flora Management Officer or World Heritage Manager

- You may be asked to show LHIB officers the location of the plant

## Immediate response to a report of an outbreak

- Retrieve the rapid response Myrtle Rust kit located in LHIB chemical shed and take to the site; with the intent of treating the site.
- Clean spray kits and equipment that will be entering the site with 70% ethanol (metho): water solution.
- Wear full PPE
- If confirmed as Myrtle Rust, apply fungicide (Mirador 250 SC) at an application rate of 4mL to 10L water.
- Mix enough only for use on the site.
- Spray the infected host, the ground below the host as well as the surrounding area.
- Set up exclusion tape, to quarantine the perimeter. Close area to public access.
- All equipment, clothing and other objects that entered the infected site must be disposed of or thoroughly washed and sprayed with 70% ethanol:water solution before leaving the site.
- Spray suits in garbage bags.
- Spray all remaining gear with 70% ethanol: water solution
- Take record of location, host species, extent of infestation and chemical use records; persons on site.
- Monitor plants 3-4 days post fungicide application. SEEKING ADVICE FROM TASMANIA RE: IF THEY REMOVED INFECTED PLANTS POST TREATMENT WITH FUNGACIDE. Noting that they have contained outbreaks of Myrtle Rust
- Hygiene protocols for staff working in the PPP and visitors will be adopted.

## Surveillance on island following a confirmed outbreak

- Make a community announcement and inform all stakeholders.
- Advise the quarantined perimeter is out of bounds without permission until further notice.
- Investigate the surrounding area to determine the extent of the infection. Using minimal staff following strict PPE protocols to reduce the spread of infection.
- Undertake inspections for 'infected host species' in the Settlement, and on tracks in the Permanent Park Preserve.
- Undertake inspections with binoculars to avoid close contact, and GPS track log search effort.
- Focus survey effort on sentinel species (e.g. Rose Apples *Syzygium jambos* and areas known to have concentrations of Myrtaceous species). See list of leases for priority inspection with susceptible species.

## Community preparedness in the event of an outbreak

- There are numerous introduced Myrtaceae species in gardens in the Settlement that are prone to Myrtle Rust. Rose Apple *Syzygium jambos* is quite common and is highly susceptible and may pose an immediate dispersal point. These plants are of a tall stature and should be lopped/pruned to at least 2 to 3 m; in the event of infection they can be readily and safely treated with fungicide. This will avoid the scenario of having to treat an 8m tall tree, which would be near impossible and will increase risk of spread due to its height and exposure to winds.
- It is recommended that a survey of leases is undertaken to identify 'high risk' sites which will form an immediate inspection response in the event of an outbreak.
- Leaseholders will be invited to participate in monitoring and awareness.



### **Rapid Response Kit checklist:**

- X2 respirators
- X2 rubber glove sets
- X2 glasses/protective eyewear
- X1 5L Mirador (Azoxystrobin) 250 SC fungicide
- X2 full bodied disposable suits
- X1 roll of exclusion or pink tape
- X2 garbage bags to contain infected clothing and equipment
- X1 bottle of methylated spirits (ethanol) (70% ethanol: water ratio) to clean gear.

### **Approved Fungicides**

- Mirador (Azoxystrobin) 250 SC fungicide

# **REPORT ON THE DETECTION OF MYRTLE RUST ON LORD HOWE ISLAND AND PLANNED RESPONSE**

## **INTRODUCTION**

In October 2016, Myrtle Rust was detected for the first time on Lord Howe Island. The Lord Howe Island Board is seeking to contain and eradicate myrtle rust from the Island.

## **BACKGROUND**

Myrtle Rust is an exotic fungus from the group of rusts in the *Puccinia psidii* complex (Eucalypt/Guava rust) which was first detected in Australia in 2010. It has spread through eastern Australia and has affected a very wide range of Australian native plants in the Myrtaceae family. The rust was previously designated as *Uredo rangelii* but is now recognised as *Puccinia psidii* sens. lat. ANPC (2012) and Carnegie A.J and Coor K (2011).

Myrtle Rust is one of the most serious plant pathogen quarantine threats to Australia (Grgurinovic C.A. et al 2006) and has the potential to significantly impact on Lord Howe Island's World Heritage values. The introduction and establishment of exotic rust fungi of the order *Pucciniales* (Myrtle Rust) that are pathogenic on plants of the family Myrtaceae is identified as a key threatening process under the NSW *Threatened Species Conservation Act 1995* (TSC Act) (<http://www.environment.nsw.gov.au/determinations/exoticrustfungiFD.htm>).

Prior to October 2016, Lord Howe Island (LHI) was Myrtle Rust free.

All of LHIs endemic Myrtaceae plant species are considered at risk from myrtle rust. Four out of five of LHI's endemic Myrtaceae plant species have tested susceptible to the rust in laboratory conditions (Morin 2011- unpublished report). *Leptospermum polygalifolium*, a mainland ecological equivalent to the LHI endemic *Leptospermum polygalifolium* subsp *howense* has tested susceptible to the rust (Morin et al 2011) and is regarded as a reliable surrogate. The impact of Myrtle Rust to the islands terrestrial ecosystems is of concern as the endemic Myrtaceae species are dominant species in many of the plant communities on LHI including the Critically Endangered Ecological Community – Gnarled Mossy Cloud Forest. Lord Howe Melaleuca is the only food tree for the wild population of the LHI Phasmid on Balls Pyramid.

Myrtle Rust can be spread by wind or by people – moving spores on contaminated clothing, contaminated products or infected plants. The LHIB Plant Importation Policy prohibits the import of Myrtaceae species and has strict protocols in place which aim to reduce the risk of introduction of Myrtle Rust to Lord Howe Island. The Board also has a Myrtle Rust Response Plan (2015) which aims to contain and eradicate incursions of Myrtle Rust in the early stages (Tab A). The plan has been reviewed and endorsed by NSW DPI and the Royal Botanic Gardens, Sydney.

There are many introduced Myrtaceae species in gardens in the Settlement that are prone to Myrtle Rust (about 33 Myrtaceae species recorded to date). Rose Apple *Syzygium jambos* is an exotic plant to Australia and Lord Howe Island and is known from five gardens on Lord Howe Island. Rose Apple is highly susceptible to Myrtle Rust and develops high spore loads on Lord Howe Island; increasing risk for dispersal of spore into the environment.

In June 2015 the LHIB prepared a Myrtle Rust response plan and kit (fungicide and PPE) in preparation for any unforeseen incursion. Community awareness and training was delivered on island in February 2013 by Bob Makinson from Sydney's Royal Botanic Gardens with periodic articles presented in local newsletters since. At this training an avid gardener on LHI who has a Rose Apple in their orchard was advised to retain this plant, but to trim it down, so to act as a sentinel plant in the event of an incursion.



## **DETECTION & RESPONSE**

On 14 October 2016, the local resident provided the Board with a cutting of Rose Apple thought to be infected by Myrtle Rust. Board staff responded immediately and sprayed the single infected host tree with a registered fungicide in accordance with the rapid response plan and with the consent of the leaseholder. All other known locations of Rose Apple on the Island were inspected for Myrtle Rust infection.

On the 15<sup>th</sup> October 2016 an additional two perpetual leases (neighbouring leases adjacent to each other) with infected plants were sprayed with a systemic fungicide.

Samples were collected of affected plants which were later confirmed by NSW DPI Plant Health Diagnostic Service as Myrtle Rust.

The Board have carried out systematic searches of all leases and collated data on myrtaceous plants per lease and plant health as per Myrtle Rust symptoms. All track networks and roadsides have been surveyed, yielding no new confirmed infection sites.

At this stage the Board have detected Myrtle Rust on three perpetual leases on the Island (Lot 285 DP48687, Lot 213 DP 45639 & Lot 361 DP 1101462). Myrtle Rust has been found on Rose Apple at these three leases, on two Callistemon plants (which were located under a heavily infected Rose Apple at one lease which showed early symptoms but with no spore development) at Lot 361 DP 1101462 and on one Fiji Fire *Metrosideros vitiensis* at Lot 361 DP 1101462. (Tab B). The number of infected plants sprayed and controlled is approximately 100 shrubs (< 3m tall) and 68 matures / trees (4 to 8m tall). To date at least 300 LHIB staff hours have been involved in undertaking communications, surveillance and treatment.

There are two other leases on LHI with Rose Apple however with no infection.

With the consent of leaseholders, all known infestations have been sprayed with a registered systemic fungicide. All infected plants below three metres in height have been cut and painted with a registered herbicide, with cut material sprayed with fungicide and sealed in large bags and wrapped and sealed in black plastic to be solarised to kill any remaining spores. All infected large trees have been stem injected with a registered herbicide and left intact to break down to reduce disturbance to infected biomass. Following leaf drop, all leaves and fallen stems etc will be raked and bagged in sealed black plastic and solarised and the site sprayed with a registered fungicide. A few other plant species from the Myrtaceae family that presented early infection stage blemishes have been sprayed with a registered fungicide as a precaution and preventative. Specimens of all infected plants or plants with potential symptoms (with purple blemishes) have been sent to NSW DPI Plant Health Diagnostic Service, for diagnosis.

The Board has sprayed susceptible Myrtaceous plants in gardens located in proximity to the infection sites, as a precaution. Uninfected Rose Apples (from the remaining two leases) have been lopped and foliage sprayed with fungicide. Lopped foliage has been treated and contained in bags.

Individual Board staff have been appointed as Inspectors and have been issued with Certificates of Authority under section 13 of the *Plant Diseases Act 1924*.

The Board has received advise from NSW DPI Plant Health Diagnostic Service to remove all Rose Apple plants from the Island regardless of whether they are infected or not as they produce heavy spore loads that could spread spore widely across the island and infect other Myrtaceae plants when conditions are suitable. It is possible that some leaseholders may not want their uninfected Rose Apples removed. In this instance leaseholders will be served a notice under Section 14 of the *Plant Diseases Act 1924* directing them to undertake specific actions to treat and remove Rose

Apple plants from Lord Howe Island. The Board will offer to undertake any works specified in a Section 14 Notice to reduce any economic burden to the leaseholder.

The Board is recommending that all Rose Apple plants are eradicated from LHI. The Board are not recommending ongoing fungicide treatment of this highly susceptible plant as it requires treatment every 2 or 3 weeks and the risk of allowing highly susceptible plants to develop spore load poses an unacceptable risk to the islands plant communities and World Heritage Values.

A householder and pamphlet has been sent to all residents and guest lodges.

At present it seems that the Myrtle Rust incursion is very limited and possibly has been contained with the immediate response. The Board will continue to seek technical advice from NSW DPI in aiming to eradicate Myrtle Rust from Lord Howe Island. Should this not be possible the Board will seek technical advice on containment and control options.





Scale: 1:12,000





Scale: 1:500



# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **ITEM**

Proposed introduction of a new 'Eco Pass' licensing system for commercial recreation and tour operators operating in the Lord Howe Island Permanent Park Preserve

### **RECOMMENDATION**

It is recommended that the Board:

1. Adopt the proposed 'Eco Pass' licensing system for commercial recreation and tour operators in the LHI Permanent Park Preserve.
2. Liaise with NSW Industry & Investment in order to establish a single licensing system which applies to all commercial operators operating on Lord Howe Island.

### **BACKGROUND**

The Board licences several commercial operators conducting guided walks to Mt Gower and activities in the North Bay area within the LHI Permanent Park Preserve. These licences have now expired.

It is proposed that the existing licensing system be replaced through the introduction of a new 'Eco Pass' licensing system. The proposed licensing system aims to:

- Provide certainty and security to commercial recreation and tour operators;
- Improve the performance and standards of commercial recreation and tour operators;
- Improve enforcement of and compliance with legislation, policy and procedures;
- Improve visitor experience;
- Encourage appropriate and sustainable use; and
- Increase the return to government.

The proposed Eco-Pass licensing system is consistent with the LHI Permanent Park Preserve Plan of Management, LHI Destination Management Plan, The Strategic Plan for Lord Howe Island Group World Heritage Property and the Mt Gower Walking Track Risk Assessment.

## **CURRENT POSITION**

Discussion has been held with existing operators for the Mt Gower Walk and they are aware of the possible changes to the licensing system.

The key characteristics that differentiate the new system from the previous system are:

### **Licence Term**

Licences for up to 5 years will be considered for commercial recreation and tour operators, with an annual review to ensure that operators are meeting the conditions of their licence, and have adequate insurance cover and indemnification of the Board against claims.

### **Licence Conditions**

General licence conditions will be applied to all commercial recreation and tour operator licenses operating in the PPP. These conditions will relate to issues including compliance with legislation, reasonable directions, risk and safety, approved activities, damage to the environment, accreditation, insurance, licence transferability, and conflict resolution.

The Board will encourage licensees to adhere, as a minimum, with relevant adventure activity industry standards and the LHIB may require licensees to meet additional activity conditions. An example of standard and specific conditions is shown in Attachment A.

The system will require monitoring by the Board to ensure licence conditions have been met. This may be in the form of random patrols, inspections or installation of track counters.

### **Licence Fees**

The proposed fee structure is shown in Schedule 1 of Attachment A.

## **Operating Standards, Accreditation and Training**

All licensed operators must comply with the requirements set out in their licence conditions regarding safety, public liability insurance and environment protection, as per the Outdoor Recreation Industry Council of NSW Adventure Activities Standards (NSW AAS).

Licensees are required to have prepared a written manual detailing all operational procedures relating to safety management, accident prevention, first aid, incident management, emergency response, equipment, communication and contact procedures, weather contingency, guide responsibilities and environmental protection.

The PPP Plan of Management and the LHI Destination Management Plan have recognised the need for improved standards and levels of professionalism. Accreditation is considered to be a major mechanism for improving the performance, professionalism and standards of commercial recreation and tour operators. To encourage higher operating standards, obtaining a longer licence is conditional on the licence holder obtaining and maintaining an endorsed accreditation. Relevant accreditation is a requirement for obtaining a 5 year licence. Within 3 years of the adoption of the licensing system all operators will be required to meet minimum qualifications.

## **Other**

The new system does not currently apply to commercial activities in NSW marine parks. The Board will negotiate with NSW Industry and Investment (formerly LHI Marine Parks Authority) to establish a single licensing system which applies to both terrestrial and marine based activities on Lord Howe Island.

## **RECOMMENDATION**

1. Adopt the proposed 'Eco Pass' licensing system for commercial recreation and tour operators in the LHI Permanent Park Preserve.
2. Liaise with NSW Industry & Investment in order to establish a single licensing system which applies to all commercial operators operating on Lord Howe Island.

**Prepared** \_\_\_\_\_ David Kelly      Manager Environment  
& Community Development

**Endorsed** \_\_\_\_\_ Penny Holloway      Chief Executive Officer

Attachments:

Attachment A: Template Eco Pass Licence



# Lord Howe Island Commercial Recreation and Tour Operator Licence

## ***ECO-PASS***

**The Chief Executive Officer of the Lord Howe Island Board (Licensor)**

**AND**

**Operator Name (Licensee)**



## CONTENTS

|      |   |    |
|------|---|----|
| 1    | INTERPRETATION.....                         | 1  |
| 1.1  | Definitions .....                           | 1  |
| 1.2  | Interpretation.....                         | 3  |
| 1.3  | Headings .....                              | 4  |
| 1.4  | Currency.....                               | 4  |
| 1.5  | Governing Law .....                         | 4  |
| 1.6  | Entire Agreement .....                      | 4  |
| 1.7  | Performance on Next Working Day .....       | 4  |
| 1.8  | Joint and Several Liability.....            | 4  |
| 1.9  | Counterparts .....                          | 5  |
| 1.10 | Licensee's Employees and Agents.....        | 5  |
| 2    | GRANT OF LICENCE.....                       | 5  |
| 2.1  | Grant .....                                 | 5  |
| 2.2  | Term.....                                   | 5  |
| 2.3  | Representations .....                       | 5  |
| 3    | LICENCE PAYMENTS.....                       | 6  |
| 3.1  | Licence Fee .....                           | 6  |
| 3.2  | Manner of Payment of Licence Fee.....       | 6  |
| 4    | USE OF the Permanent Park Preserve .....    | 6  |
| 4.1  | Licensed Activities .....                   | 6  |
| 4.2  | Reasonable Directions .....                 | 7  |
| 4.3  | Onus of Proof as to Usage .....             | 7  |
| 4.4  | Compliance with Statutory Requirements..... | 7  |
| 4.5  | No Noxious Use .....                        | 7  |
| 4.6  | Pollution .....                             | 8  |
| 4.7  | Fire Safety.....                            | 8  |
| 4.8  | No Livestock or Domestic Pets .....         | 9  |
| 4.9  | Flora and Fauna.....                        | 9  |
| 4.10 | Removal of Trees .....                      | 9  |
| 4.11 | Fixtures and Signs .....                    | 9  |
| 4.12 | Liquor Licence .....                        | 10 |
| 4.13 | Amplified Sound.....                        | 10 |
| 4.14 | Public Protection .....                     | 10 |
| 4.15 | Permanent Park Preserve Closure.....        | 10 |
| 4.16 | Access .....                                | 10 |
| 4.17 | Litter.....                                 | 11 |
| 4.18 | Commercial filming and photography .....    | 11 |
| 4.19 | Subcontractors .....                        | 11 |
| 5    | OPERATIONAL PROVISIONS.....                 | 11 |
| 5.1  | Public Safety .....                         | 11 |
| 5.2  | Emergency Response Plan .....               | 12 |
| 5.3  | Guides and Instructors .....                | 12 |
| 5.4  | First Aid Qualifications .....              | 12 |
| 5.5  | Environmental Sustainability .....          | 13 |
| 5.6  | Accreditation and Training.....             | 13 |
| 5.7  | Licence Transferability .....               | 13 |
| 5.8  | Performance Monitoring .....                | 13 |
| 6    | INSURANCES.....                             | 14 |
| 6.1  | Required Insurances .....                   | 14 |
| 6.2  | Required Arrangements.....                  | 15 |
| 6.3  | Licensors May Insure .....                  | 16 |
| 6.4  | Abatement for Park Closure.....             | 16 |
| 7    | INDEMNITIES.....                            | 16 |
| 7.1  | Acknowledgment .....                        | 16 |
| 7.2  | Release.....                                | 16 |
| 7.3  | Indemnity .....                             | 17 |
| 8    | DEFAULT AND TERMINATION.....                | 18 |
| 8.1  | Essential Terms .....                       | 18 |
| 8.2  | Events of Default .....                     | 19 |

|                                |   |     |
|--------------------------------|---|-----|
| 8.3                            | Licensor's Right to Terminate .....                     | 19  |
| 8.4                            | Opportunity to Remedy .....                             | 20  |
| 8.5                            | Licensor May Remedy .....                               | 20  |
| 8.6                            | Licensee to Accept Responsibility for Agents, etc ..... | 20  |
| 8.7                            | Termination for Public or Community Purposes .....      | 20  |
| 8.8                            | Variation of Licence .....                              | 20  |
| 9                              | PROCEDURAL MATTERS .....                                | 21  |
| 9.1                            | Time for Determining Rights and Obligations .....       | 21  |
| 9.2                            | Variation or Waiver .....                               | 21  |
| 9.3                            | Consents or Approvals .....                             | 21  |
| 9.4                            | Opinions by Licensor .....                              | 21  |
| 9.5                            | Licensee Not Agent of Licensor .....                    | 21  |
| 9.6                            | Communication with Licensee .....                       | 21  |
| 9.7                            | Notices .....   | 21  |
| 9.8                            | Licences .....  | 22  |
| 9.9                            | No Partnership .....                                    | 22  |
| 10                             | GOODS AND SERVICES TAX .....                            | 23  |
| 10.1                           | Consideration .....                                     | 23  |
| 10.2                           | GST Terms .....   | 23  |
| 11                             | HISTORIC OBJECTS AND RELICs .....                       | 23  |
| 11.1                           | Discovery of Objects .....                              | 23  |
| 11.2                           | Definition of Objects .....                             | 23  |
| 12                             | ADDITIONAL COVENANTS .....                              | 23  |
| SCHEDULE 1 i                   |   |     |
| SCHEDULE 2 ii                  |   |     |
| 1                              | LICENSED ACTIVITES AND LOCATIONS .....                  | ii  |
| 2                              | RELEVANT STANDARDS .....                                | ii  |
| SCHEDULE 3 iv                  |   |     |
| Site Specific CONDITIONS ..... |   |     |
| 3                              | Site Specific Conditions .....                          | iv  |
| SCHEDULE 4 vii                 |   |     |
| ACCREDITATION .....            |   |     |
| 4                              | RECOGNITION & RESPONSIBILITIES OF LEADERS .....         | vii |
| EXECUTED as a Deed .....       |   |     |
| ix                             |   |     |

**DEED OF LICENCE** dated the X day of XXX

## **PARTIES**

**The Lord Howe Island Board** administering the *Lord Howe Island Act 1953* and the *Lord Howe Island Regulation 2014* (Licensor)

and

**THE PARTY IDENTIFIED AT ITEM 1 OF THE REFERENCE SCHEDULE** (Licensee)

## **BACKGROUND**

- A** The Licensor licences commercial recreation and tour operators, through the 'LHIB Eco-Pass' licensing system, to conduct guided tours, instructional and/or educational courses, and other leisure activities in the Lord Howe Island (LHI) Permanent Park Preserve (PPP).
- B** The Licensor has agreed to grant a licence to conduct the Licensed Activities to The Licensee on the terms and conditions contained in this Deed.

## **THE PARTIES AGREE**

### **1 INTERPRETATION**

#### **1.1 Definitions**

In this Deed unless the contrary intention appears:

**AAS** means a NSW Adventure Activity Standard.

**Accreditation Schedule** means Schedule 4 of this Licence.

**Act** means the *Lord Howe Island Act 1953* as amended from time to time and any Act replacing the same.

**Authorised Officer** means any of those persons holding the positions in the LHIB identified at Item 6 of the Reference Schedule.

**CEO** means Lord Howe Island Board Chief Executive Officer.

**Client** means any person participating in the Licensed Activities within the LHI Permanent Park Preserve other than an Employee or Agent of The Licensee.

**Commencement Date** means the commencement date of the Term set out at Item 3 of the Reference Schedule.

**Commercial filming** means any filming or photography "for sale, hire or profit"

**Consumer Price Index** means the Consumer Price Index (All Groups) for the Capital City of Sydney from time to time compiled calculated and published by the Australian Statistician and any index or measure replacing the same.

**Contamination** means any toxic or hazardous substance, gas, liquid or material, any waste or discharge (other than properly and lawfully discharged sewerage) or any pollutant.

**Further Licence** means a licence granted by the Licensor pursuant to the exercise of the Option by The Licensee.

**Guide** includes any person acting for The Licensee in conducting the Licensed Activities within the Permanent Park Preserve whether receiving remuneration or otherwise.

**Law** means any law whether common law or any law under any statute, ordinance, regulation or code.

**LHI** means Lord Howe Island.

**LHIB** means the Lord Howe Island Board.

**Licence** means this LHIB Eco-Pass Licence and all schedules to and variations of this Licence.

**Licence Fee** means the amount payable by The Licensee in accordance with clause 3.1 and specified in the Reference Schedule.

**Licensed Activity or Licensed Activities** means an activity or the activities specified in Schedule 2 that may be conducted by the Licensor in the Permanent Park Preserve pursuant to this Licence.

**Licensed Activities Schedule** means Schedule 2 of this Licence which specifies Licensed Activities and any AAS relevant to the activities carried out under this Licence.

**Licensee** means The Licensee and where not repugnant to the context includes The Licensee's Employees and Agents.

**Licensee's Employees and Agents** means each of The Licensee's employees, agents, officers, subcontractors, service suppliers, sub licensees, concessionaires and invitees (expressed or implied).

**Licensing Coordinator** means the LHIB Eco-Pass Licensing Coordinator, LHIB.

**Licensor** means the Chief Executive Officer of the LHIB and includes any person for the time being acting as such or in such alternative position or office as the Licensor may notify from time-to-time, including servants and agents of the Licensor.

**Eco-Pass** means a commercial recreation and tour operator licence issued by the LHIB to an operator to conduct commercial activities in the Permanent Park Preserve on LHI.

**Non-Remote** means areas of the Permanent Park Preserve that include built features and infrastructure and are accessed via a maintained walking track system (except Mt Gower walking track) and where two-way communications with emergency services may be established within a time frame determined as appropriate by a risk management process.

**Plan of Management** means the plan(s) of management prepared and adopted for the Permanent Park Preserve by the Licensor as amended from time to time pursuant to the Act or such other plan that replaces it and fulfils in substance the same functions.

**Prescribed Rate** means the rate prescribed under the Act for overdue monies payable in respect to licences.

**PPP** means the area of land permanently reserved under the Act and named at Item 2 of the Reference Schedule named the Permanent Park Preserve.

**Reference Schedule** means Schedule 1 of this Licence.

**Regulations** mean the Regulations, from time to time, made under the LHI Act 1953.

**Relevant Authority** means, in respect to a particular context or circumstances, any government or any governmental, semi-governmental, quasi-governmental, administrative or judicial body, LHIB, commission, authority, tribunal or entity having jurisdiction and responsibility in respect to that context or circumstance and which may include the Licensor.

**Remote** means Mt Gower walking track and areas in the Permanent Park Preserve that do not include any built features or infrastructure and cannot be accessed via a maintained walking track.

**Site Specific Conditions** means the conditions set out in the Site Specific Conditions Schedule 3.

**Site Specific Conditions Schedule** means Schedule 3 of this Licence.

**Very Low Risk filming** means filming or photography that involves a maximum of one camera operator and one assistant; requires only low level equipment use (i.e. backpackable equipment; single tripod); does not use structures, film sets or professional talent; does not exclude an area from use by other users and has negligible potential to impact on a park environment.

**Taxes** means taxes, levies, imposts, deductions, charges, withholdings and duties imposed by any authority (including stamp and transaction duties), (together with any related interest, penalties, fines and expenses in connection with them), except if imposed on the overall net income or capital gains of the Licensor.

**Term** means the term of this Licence set out at Item 3 of the Reference Schedule.

**Termination Date** means the termination date of the Term set out at Item 3 of the Reference Schedule.

**Tour** means any organised tourism and/or recreation commercial activity undertaken in the PPP as part of the Licensed Activities.

## **1.2 Interpretation**

In this Deed unless the context otherwise requires:

- 1.2.1 Words denoting the singular number shall include the plural and vice versa;
- 1.2.2 Words denoting any gender shall include all genders;
- 1.2.3 Words denoting individuals shall include corporations and vice versa;
- 1.2.4 Reference to any Act of Parliament or regulation or ordinance or to any section or provision thereof shall include any statutory modification or re-enactment thereof or any statutory provision substituted therefore and ordinances, by-laws, Regulations and other statutory instruments issued there under;
- 1.2.5 References to clauses, annexures and schedules are references to clauses, annexures and schedules of this Licence;

- 1.2.6 References to any deed, agreement, licence or instrument shall be deemed to include references to that deed, agreement, licence or instrument as amended, supplemented or replaced from time to time;
- 1.2.7 Where a Schedule contains covenants or obligations of The Licensee or the Licensor then the covenant or obligation so expressed shall be read and construed and shall constitute a covenant or obligation on the part of The Licensee or the Licensor, as the case may be, to be performed or observed under this Licence;
- 1.2.8 A reference to any party or to a Relevant Authority or to any other person, corporation or association shall be a reference to them as so constituted from time to time and shall include their successors and Licenced assigns and in the case of a Relevant Authority means the body which at the relevant time substantially fulfils the functions of the Relevant Authority; and
- 1.2.9 A reference to anything (including any amount) is a reference to the whole and each part of it and a reference to a group of persons is a reference to all of them collectively, to any two or more of them collectively and to each of them individually.

### **1.3 Headings**

Headings are for ease of reference only and shall not affect the construction of this Deed.

### **1.4 Currency**

Unless otherwise stated all currencies referred to in this Deed are in Australian dollars.

### **1.5 Governing Law**

This Deed shall be governed by and construed in accordance with the law of New South Wales and the parties submit to the jurisdiction of the Courts of New South Wales.

### **1.6 Entire Agreement**

This Deed constitutes the entire agreement between the parties pertaining to the subject matter hereof and supersedes all prior negotiations, understandings and discussions between the parties. No modifications to this Deed shall be effective unless in writing signed by the parties.

### **1.7 Performance on Next Working Day**

Where under or pursuant to this Deed or anything done hereunder the day on or by which any act, matter or thing is to be done is a Saturday, a Sunday or a public holiday in New South Wales, such act, matter or thing may be done on the next succeeding day which is not a Saturday, Sunday or public holiday.

### **1.8 Joint and Several Liability**

Any covenant or agreement on the part of or in favour of two or more persons shall be deemed to bind them or be in favour of them jointly and each of them severally.

## **1.9 Counterparts**

This Licence may consist of counterparts and the counterparts taken together constitute one and the same instrument.

## **1.10 Licensee's Employees and Agents**

If this Licence prohibits The Licensee from doing a thing, then:

1.10.1 The Licensee must do everything necessary to ensure that The Licensee 's Employees and Agents do not do that thing; and

1.10.2 The Licensee may not allow or cause any person to do that thing.

## **2 GRANT OF LICENCE**

### **2.1 Grant**

2.1.1 Pursuant to the provisions of the Regulation, and in particular Part 4 Section 49 (1), the Licensor grants to The Licensee a licence to conduct the Licensed Activities in the PPP pursuant to the Licensed Activities Schedule and The Licensee hereby accepts the licence subject to the provisions of this Deed.

### **2.2 Term**

The Licence Term is stated at Item 3 of the Reference Schedule.

### **2.3 Representations**

The Licensee represents and warrants that:

2.3.1 it has power to enter into and observe its obligations under this Licence; and

2.3.2 it has in full force and effect the authorisations necessary to enter into this Licence, observe obligations under it, and allow it to be enforced; and

2.3.3 its obligations under this Licence are valid and binding and are enforceable against it in accordance with its terms; and

2.3.4 this Licence does not contravene its constituent documents (when The Licensee is a company) or any Laws or any of its obligations or undertakings by which it or any of its assets are bound or cause a limitation on its powers or, when The Licensee is a company, the powers of its directors, to be exceeded.

### **3 LICENCE PAYMENTS**

#### **3.1 Licence Fee**

3.1.1 The Licensee will pay the Licence Fee on an annual basis (Annual Licence Fee) as specified in the Reference Schedule.

3.1.2 Where the Licence Fee is specified as payable on an annual basis then the Annual Licence Fee for the first year of the Term, commencing on the Commencement Date is the amount specified in the Reference Schedule. For the second and each subsequent year of the Term the Annual Licence Fee may be reviewed on each or any anniversary of the Commencement Date of the Licence and derived by multiplying the Annual Licence Fee payable for the year last concluded by the fraction A/B where:

A = the CPI figure last published prior to the first day of the year under review;

B = the CPI figure last publicised prior to the Commencement Date or the first day of the year for which the Licence Fee was last reviewed, whichever is the later.

**CPI** means the Consumer Price Index for Sydney (All Groups) published by the Australian Bureau of Statistics. If the Consumer Price Index is suspended or discontinued the index to be used shall be the index advised by the Australian Statistician which reflects the basic changes in the cost of living in Sydney during the year.

3.1.3 If the Annual Licence Fee determined in accordance with clause 3.1.3 is less than the Licence Fee for the immediately preceding year the Licence Fee for the year under review shall be equivalent to the Licence Fee paid for the immediately preceding year.

3.1.4 Any reference to the Licence Fee in this Deed is a reference to the Annual Licence Fee at any given time as adjusted for CPI from time to time in accordance with this clause 3.1.

#### **3.2 Manner of Payment of Licence Fee**

The Licensee shall pay the Licence Fee and other monies payable by The Licensee to the Licensor at the address nominated by the Licensor from time to time and in such manner as the Licensor shall in writing direct.

### **4 USE OF THE PERMANENT PARK PRESERVE**

#### **4.1 Licensed Activities**

The Licensee shall only conduct such Licensed Activities in such areas within the PPP as are specified in the Licensed Activity Schedule (Schedule 2), the Site Specific Conditions (Schedule 3) and in accordance with the terms of this Licence.



The Licensee must comply with any standards, codes, principles relevant to the Licensed Activities specified in the Licensed Activities Schedule, any Site Specific Conditions and/or any additional activity conditions listed in the Licensed Activities Schedule 2 or Site Specific Conditions Schedule 3.

The Licensee shall not have exclusive use or occupancy of any area or other location or facility within the PPP.

#### **4.2 Reasonable Directions**

The Licensee and The Licensee's employees and agents and The Licensee's clients will comply with all reasonable directions given by any authorised officer of the LHIB.

#### **4.3 Onus of Proof as to Usage**

The Licensee acknowledges that in the matter of proof of whether The Licensee is complying or has complied with the provisions of this Licence as to the Licensed Activities the onus of proof shall be on The Licensee.

#### **4.4 Compliance with Statutory Requirements**

4.4.1 The Licensee will at The Licensee's expense observe and comply with and cause to be observed and complied with in respect to the conduct of the Licensed Activities:

- a) the requirements of all Laws, including workers' compensation requirements, and of any Relevant Authority and all notices, orders and directions which may be given under the Law or by any Relevant Authority;
- b) any Plan of Management for the PPP; and
- c) the requirements of all planning instruments, controls and policies whether federal, state or local.

#### **4.5 No Noxious Use**

The Licensee will not:

- 4.5.1 carry on or Licence or suffer to be carried on, in connection with the conduct of the Licensed Activities, any unlawful, noxious or offensive use, act, trade, business, occupation or calling;
- 4.5.2 permit or suffer any riotous, disorderly, offensive or improper conduct in connection with the conduct of the Licensed Activities or permit or suffer any person who is drunk or behaving in a riotous, disorderly, offensive or improper manner to participate in the Licensed Activities;
- 4.5.3 cause, allow or suffer to occur any annoyance, nuisance, injury, disturbance or obstruction to the Licensor or other persons rightfully using or being in the PPP;

- 4.5.4 carry on or allow any activities of a standard or kind which are not in keeping with the purposes of this Licence, may adversely affect the use and enjoyment of the PPP, by the public, or in the Licensor's reasonable opinion are unsuitable or objectionable or may damage the image of the PPP, or the LHIB;
- 4.5.5 damage, deface, remove or otherwise interfere (or Licence or suffer any damage, defacing, removal or other interference) with any built asset, natural feature (including any new access trails).

Without affecting the liability of The Licensee for damages or in relation to any other remedy available to the Licensor, the Licensee shall remedy to the satisfaction of the Licensor at its own expense any damage caused to the PPP by The Licensee in breach of the provision of this clause or otherwise.

#### **4.6 Pollution**

The Licensee will not take any action which has the effect, whether direct or indirect, of causing any contamination or pollution of the PPP and in particular without limitation The Licensee will:

- 4.6.1 not place, tip or discharge (or allow or suffer to be placed, tipped or discharged) upon any land or in any water or watercourse within the PPP any refuse, garbage, petroleum products, trade waste, building material, earth fill or any offensive or polluting matter or liquid whatsoever; and
- 4.6.2 not place (or allow or suffer to be placed) any obstructing matter on any land or in any water or watercourse or otherwise act or fail to act so as to cause any flow of water to be restricted, obstructed or diverted and will act or comply with any requirement of the Licensor regarding a watercourse.
- 4.6.3 The Licensee must ensure that any waste is managed, transported, reused, stored, collected receipted and disposed of in an environmentally satisfactory manner pursuant to NSW Protection of the Environment Operations Act 1997, and that all reasonable measures regarding the control and prevention of pollution and waste from being introduced to LHI are implemented.

Without affecting the liability of The Licensee for damages or in relation to any other remedy available to the Licensor The Licensee shall remedy to the satisfaction of the Licensor at its own expense any damage caused to the PPP by The Licensee in breach of the provision of this clause or otherwise including by the spillage of petroleum products or other pollutants or the deposition of polluting or obstructive materials within the PPP.

#### **4.7 Fire Safety**

The Licensee will comply with all requirements of the Licensor and all other Relevant Authorities in relation to fire safety AND will in particular ensure that:

- 4.7.1 all reasonable precautions are taken to minimise the risk of fire when conducting the Licensed Activities;
- 4.7.2 The Licensee and the Licensee 's employees and agents must only light fires in designated LHIB BBQ's and will not do or suffer to be done any act, matter or

thing within the PPP whereby the risk of fire might be increased AND in the event of the PPP being damaged by fire which is shown to be the result of breach of the Licensee 's obligations under this Licence or of negligence in or arising from The Licensee 's activities The Licensee will meet all reasonable and proper costs associated with suppression of the fire and all costs of making good such damage and all costs incurred, paid or arising from the death of or injury to any person as a result of the fire;

- 4.7.3 it complies at its cost with all requirements imposed upon it as a licensee conducting the Licensed Activities under the *Rural Fires Act 1997*;

#### **4.8 No Livestock or Domestic Pets**

The Licensee shall not allow any poultry, horses or other livestock nor any dog or other domestic or exotic animal to be brought into the PPP, unless specifically authorised under this Licence or as an 'assistance animal' under the *Disability Discrimination Act 1992 (Clth)*.

#### **4.9 Flora and Fauna**

- 4.9.1 The Licensee must not damage, destroy, disrupt or remove any native flora (live or dead) or any native fauna (live or dead) from the PPP. Feeding or handling of wildlife is not permitted without the consent of the Licensors.
- 4.9.2 The Licensee must ensure all participants (including the guide), clean all equipment and clothing (e.g. footwear & hiking poles) with Quatsan or methylated spirits (70%) and be free of soil, plant matter and soil pathogens such as Phytophthora and Myrtle Rust before entry into the PPP. Boot scrubbing bays have been provided at the majority of walking tracks, and must be used before entry into the PPP. Boots & hiking poles must be cleaned at these bays prior to entry to the PPP at all times, in the event that boot scrub bays are not available, ensure that all participants(including the guide), clean their boots and walking poles, as identified above, prior to entering the PPP.
- 4.9.3 The Licensee must ensure that no plant, animal or soil material is imported to or exported from the PPP without prior approval from the Licensors.

#### **4.10 Removal of Trees**

The Licensee will not (and will ensure that The Licensee's employees and agents will not) cut down, fell, injure, lop or destroy any living trees in the PPP without the prior written consent of the Licensors.

#### **4.11 Fixtures and Signs**

The Licensee:

- 4.11.1 will not without the prior written approval of the Licensors erect, display, affix, paint or exhibit within the PPP any structure, sign, advertisement, notice or hoarding or allow or suffer any of the foregoing to be done, and any such approval may be revoked without notice by the Licensors at his or her discretion;
- 4.11.2 will not make any permanent marking upon any tree, plant or rock in the PPP;

- 4.11.3 at the request of the Licensor will remove any such structures, signs, advertisements, notices, hoarding or markings put in place by or on behalf of The Licensee ;
- 4.11.4 will make good any damage or disfigurement caused by the placement or removal of any such structure, sign, advertisement, notice, hoarding or marking.

#### **4.12 Liquor Licence**

The Licensee shall not without the prior written consent of the Licensor sell, offer for sale, supply or deliver any liquor in the PPP. Where the Licensor has given written consent to The Licensee to sell liquor in the PPP the Licensee must obtain all of the licences and approvals required by the *Liquor Act 1982* and any other relevant statute and must pay such fees including liquor licence fees as may be payable in order to obtain and maintain such licences and approvals.

#### **4.13 Amplified Sound**

The Licensee will not operate or Licence to be operated in the PPP any apparatus or device for the amplification of music, announcements or other sound to a degree which is objectionable in the opinion of the Licensor.

#### **4.14 Public Protection**

The Licensee will take all reasonable steps as the Licensor may consider necessary for the purposes of safeguarding members of the public and others against injury or accident arising from The Licensee's conduct of the Licensed Activities.

#### **4.15 Permanent Park Preserve Closure**

Under no circumstances will The Licensee conduct any activity within any part of the PPP which is closed to the public, as directed by the Licensing Coordinator or their representative or any duly authorized person, as a result of severe fire danger or any other reason, without the specific authority of the CEO or in any area of the PPP which the CEO may direct to be closed to the Licensed Activities from time to time for any reason.

#### **4.16 Access**

- 4.16.1 Unless otherwise provided for in Schedule 2, the Licensed Activities must be restricted to existing formed tracks and modified areas. At no time may The Licensee drive or permit an employee, agent or client to enter any site or area that is permanently, temporarily or seasonally closed by gates, signs or public notice, unless special conditions on the Licence grant such access.
- 4.16.2 The Licensor reserves the right to change the areas which The Licensee may use, for any reasonable cause including visitor safety and environmental reasons, without compensation for any such change to the Licence.
- 4.16.3 The Licensee must not drive or Licence an employee, agent or client to drive a vehicle in the PPP except on public access roads and tracks constructed for the

passage of vehicles with four or more wheels. The Licensee shall only park motor vehicles within the PPP in areas designated by the Licensor or any duly authorised officer of the LHIB

#### **4.17 Litter**

All rubbish originating from the Licensed Activities must be removed by The Licensee unless rubbish bins are provided.

#### **4.18 Commercial filming and photography**

The Licensee may undertake, permit, authorise or otherwise be involved in any commercial filming or photography within the PPP for the purposes of promotion of the Licensed Activities without the specific authority of the Licensing Coordinator.

#### **4.19 Subcontractors**

- 4.19.1 The Licensee may engage the subcontractors listed in the Reference Schedule to undertake the approved tasks specified in the Reference Schedule.
- 4.19.2 The engagement of a subcontractor will not relieve The Licensee of any of The Licensee's responsibilities or obligations under the Licence. The Licensee is liable to the Licensor for the acts, defaults and neglect of any subcontractors or any persons they employ, as fully as if they were The Licensee's acts, defaults or neglect.
- 4.19.3 If The Licensee wishes to replace a subcontractor or engage new or additional subcontractors The Licensee must first obtain the written approval of the LHIB.

### **5 OPERATIONAL PROVISIONS**

#### **5.1 Public Safety**

- 5.1.1 The Licensee acknowledges that it is an occupier of the PPP, within the meaning of the *Work Health and Safety Act 2011*.
- 5.1.2 The Licensee must carry out the Licensed Activities in a safe and reliable manner and must comply with the *Work Health and Safety Act 2011*, its amendments and regulations.
- 5.1.3 The Licensee must notify the Licensor of any natural events or activities in the PPP which it becomes aware of, which may endanger the public.
- 5.1.4 The Licensee must take all reasonable steps to protect the safety of all persons present in connection with the conduct of the Licensed Activities and shall, without limitation, take all reasonable steps to eliminate any dangers to persons that may arise as a result of the Licensed Activities and, subject to clause 4.11, erect signage warning the public of any dangers they may encounter as a result of The Licensee's activities where those dangers cannot be eliminated.

- 5.1.5 The Licensee must make all Clients aware before any Licensed Activity commences of:
- a) all potential hazards and conditions which may be encountered during the Licensed Activity (these may include, but are not limited to, heights, exposure to weather, rapid flowing water, fauna and flora); and
  - b) the experiences Clients may encounter during the Licensed Activity.
- 5.1.6 The Licensee must ensure that all procedures are in place to minimize the risk of potential hazards to Clients. These procedures may include, but are not limited to, pre-activity briefings, safety equipment and head counts.
- 5.1.7 The Licensee must ensure that the supervision during the Licensed Activity is appropriate to the differing clients' experiences and abilities.

## **5.2 Emergency Response Plan**

- 5.2.1 The Licensee must develop and maintain an emergency response plan for each Licensed Activity that outlines procedures to be followed in the event of natural or other disaster, injury, illness or delay. This must be developed for each Licensed Activity.
- 5.2.2 The Licensee must ensure the safe evacuation of clients and vehicles in the event of any natural disaster adjacent or near approved routes.
- 5.2.3 The Licensee must promptly notify the CEO of any natural or other disaster, injury, illness, vehicle accident or delay that may impact on the group.

## **5.3 Guides and Instructors**

The Licensee must ensure that all Guides and employees have and maintain the relevant competencies and skills for leading and guiding any Licensed Activity, including but not limited to any experience, knowledge and qualifications required pursuant to the Activity Conditions attached to this Licence, and in particular, any applicable Adventure Activity Standards (AAS). The Licensee must also ensure that the ratio of staff to clients meets the requirements specified in the Activity Conditions in Schedule 2 and Schedule 3 or by the LHIB from time to time.

The Licensee agrees to submit satisfactory evidence of any such experience, knowledge and qualifications on request by the Licensing Coordinator or the CEO.

## **5.4 First Aid Qualifications**

The Licensee must ensure that all Guides and instructors have current first aid qualifications. The minimum standard requirement is HLTF412A Apply advanced first aid and HLTF404C Apply advanced resuscitation techniques or equivalent from a Nationally Recognised Training Organisation. At least one employee or agent of The Licensee present with each group carrying out a Licensed Activity must have this qualification and have in their possession a suitable first aid kit at all times whilst conducting the Licensed Activity.

## **5.5 Environmental Sustainability**

The Licensee should ensure the sustainable and culturally appropriate use of sites by, wherever possible and practicable, informing and educating clients and carrying out its operations in a sustainable manner. In particular, The Licensee will endeavour to:

- 5.5.1 Explain to customers how negative impacts on sites can be avoided;
- 5.5.2 Build an understanding of natural and cultural heritage conservation management;
- 5.5.3 Provide quality visitor experiences;
- 5.5.4 Provide good interpretation and education;
- 5.5.5 Honour historic places;
- 5.5.6 Promote respect for cultural sites;
- 5.5.7 Minimise visitor impacts on sites;
- 5.5.8 Observe rules to protect conservation values and public safety;
- 5.5.9 Encourage active involvement in conservation activities;
- 5.5.10 Adopt environmental practices which support environmental sustainability;
- 5.5.11 Adopt minimal impact practices for all activities; and
- 5.5.12 Report damage, illegal activities and potential problems to the LHIB.

## **5.6 Accreditation and Training**

The Licensee must obtain and maintain throughout the Term such additional certification as is required by the Licensor and specified in the Accreditation Schedule and must submit proof of any such certification annually to the Licensing Coordinator.

## **5.7 Licence Transferability**

- 5.9.1 Licences for a Term of one year are not transferable
- 5.9.2 Three (3) Year Licences and Premium Five (5) Year Licences may be transferred, subject to the written approval of the Licensor
- 5.9.3 The Term of the Licence may not be extended through a transfer of the Licence
- 5.9.4 The Licensor retains a discretionary power in relation to the approval of a transfer under clause 5.11.2
- 5.9.5 For the purposes of clause 5.11.2, the class of licence is specified in the Reference Schedule

## **5.8 Performance Monitoring**

- 5.10.1 Where the Term of the Licence is greater than one year an annual review will be conducted by the Licensing Coordinator to ensure compliance with the Licence conditions. The annual review will include a review of subcontractor performance.

5.10.2 The Licensors may engage appropriate third parties to conduct an audit of The Licensee's compliance with any applicable AAS from time to time to monitor compliance with the Licence.

## **5.11 Additional Licence**

5.11.1 After expiry of the Term the Licensors may, in its absolute discretion, grant an additional licence to The Licensee on such terms and conditions as the Licensors may reasonably determine provided that the Licensors are satisfied that:

- a) The Licence has not been terminated prior to the expiry of the term;
- b) There is no subsisting breach of any term or condition of the Licence;
- c) In the opinion of the Licensors (which opinion must be reasonably formed), the Licensed Activity continues to be appropriate and permissible in the Licensors' opinion having regard to any matter or thing including, without limitation, the environmental impact of the Licensed Activity; and
- d) The Plan of Management in force at the time does not prohibit the grant of an additional licence.

5.11.2 The holder of a three (3) year Licence may apply for a new licence up to one year prior to the expiration of the licence term and the holder of a Premium Five (5) year Licence may apply for a new licence up to two years prior to the expiration of the licence term.

## **5.12 Tour Schedules**

Additional Tour schedules and Tour variation forms are available from the LHIB. Applications for a new Tour or a variation to an existing Tour shall incur an amendment fee. Notification of approval from the Licensing Coordinator will be necessary prior to commencement of any new Tour.

Refer to Schedule 3 for further operational site specific conditions.

# **6 INSURANCES**

## **6.1 Required Insurances**

The Licensee shall effect and maintain in respect to the Licensed Activities from the commencement of this Licence the following insurances:

6.1.1 a public liability policy covering personal injury and property damage including financial, economic or consequential loss arising as a result of such personal injury or property damage (in an amount of not less than the amount noted at Item 4 of the Reference Schedule or such other higher amount as the Licensors may from time to time require being the amount which may be paid arising out of any one single accident or event) in connection with the activities of The



Licensee in relation to this Licence whereby the Licensor, the LHIB and the Crown in right of New South Wales shall be included as interested parties;

- 6.1.2 insurance against any liability which may arise at common law or by virtue of any relevant workers' compensation legislation in connection with the Licensed Activities; and
- 6.1.3 such other special insurances as may be appropriate and required by the Licensor from time to time, including but not limited to product liability insurance.

## **6.2 Required Arrangements**

The following provisions shall apply to all policies of insurance referred to in clause 6.1:

- 6.2.1 all such policies of insurance shall be effected with an Australian Prudential Regulation Authority (APRA) approved insurance company or a company approved in writing by the Licensor (which approval shall not be unreasonably withheld) and shall be for such amounts and cover such risks and contain such conditions, endorsements and exclusions as are reasonably acceptable to or required by the Licensor;
- 6.2.2 no exclusions, endorsements or alterations are to be made in or to any such policy of insurance unless first approved in writing by the Licensor (which approval shall not be unreasonably withheld);
- 6.2.3 all such policies are to be taken out in the names of the Licensor and The Licensee for their respective rights and interests;
- 6.2.4 duplicate or certified copies of all such policies and all renewal certificates and endorsement slips are to be lodged by The Licensee with the Licensor immediately on receipt by The Licensee ;
- 6.2.5 The Licensee shall provide full true and particular information to the office or company with which such policies are effected on all matters and things the non-disclosure of which might in any way prejudice or affect any such policy or payment of any monies thereunder;
- 6.2.6 The Licensee shall punctually pay all premiums and other monies payable in respect to all such policies on or before the due date for payment of the same and shall in respect to any such policy of insurance produce to the Licensor receipts for the payment of each premium and any other monies payable thereunder (or other proof of payment to the Licensor's satisfaction);
- 6.2.7 The Licensee shall not do or Licence to be done any act, matter or thing upon or in the vicinity of the PPP or when conducting the Licensed Activities whereby any insurance policy may be vitiated or rendered void or voidable or (except with the written approval of the Licensor) whereby the rate of premium for any such insurance shall be liable to be increased;

6.2.8 the Licenser shall be entitled in his or her own name and as the attorney of The Licensee in the name of The Licensee or otherwise to institute all proceedings against any such office or company to recover from it any amount for loss, damage, destruction or injury or other monies payable under any indemnity in favour of the Licenser or the Crown in right of New South Wales.

### **6.3 Licenser May Insure**

At the Licenser's discretion or in default of The Licensee so doing the Licenser may elect to effect all or any insurances referred to in clause 6.1 and charge The Licensee for the costs of the premiums and The Licensee shall upon demand reimburse the Licenser for the same.

### **6.4 Abatement for Park Closure**

The Licensee is not entitled to any reimbursement or waiver of its obligation to pay the Licence Fee that is attributable to any period during which the Licensed Activities cannot be carried out due to the closure of the PPP or part of the PPP by the Licenser. The Licensee shall not be entitled to any compensation from the Licenser, the LHIB or the Crown in right of New South Wales for any loss or damage attributable to any such period during which the PPP or any part of the PPP cannot be used under this Licence.

## **7 INDEMNITIES**

### **7.1 Acknowledgment**

The Licensee acknowledges that the exercise of its rights under this Licence is at the risk of The Licensee.

### **7.2 Release**

7.2.1 The Licensee releases to the full extent Licenced by law the protected persons from all claims and demands as set out in this clause arising out of, in connection with, in respect to or as a consequence of the conduct of the Licensed Activities.

7.2.2 The Licensee's obligations under this clause continue after the termination expiration or other determination of this Licence in respect to any matter or thing happening before such termination, expiration or determination.

7.2.3 In this clause:

'protected person(s)' means

- a) the Licenser;
- b) the employees or officers of the Licenser
- c) any other person acting under the direction or control of the Licenser for any purpose;

- d) The Crown in right of New South Wales.

‘Claims and demands’ means all actions, suits, claims, demands, proceedings, losses, damages, compensation, sums of money, costs, legal costs, charges and expenses to which the protected persons or any one thereof is or may become liable in respect to loss of or damage to the fixtures or property of The Licensee , financial or economic loss, loss of opportunity or other consequential loss of The Licensee , injury to or death of any person claiming through The Licensee of any kind and however sustained and whether sustained during the conduct of the Licensed Activities or in connection with the Licensed Activities.

7.2.4 It is immaterial to the obligations of The Licensee under this clause that a claim or demand arises out of any act, event or thing that The Licensee is authorised or obliged to do under this Licence or that any time waiver or other indulgence has been given to The Licensee in respect to any such obligation under this Licence.

7.2.5 The obligations of The Licensee under this clause do not apply to the extent that the loss, damage, injury or death arises from or is contributed to by any wilful or negligent act, default or omission on the part of any protected person except as provided in subclause 7.2.6.

7.2.6 The obligations of The Licensee under this clause do apply to loss, damage, injury or death arising from or contributed to or occurring in connection with:

- a) The carrying out of any fire management activity by or on behalf of the protected persons;
- b) The failure to carry out any fire management activity by or on behalf of the protected persons;
- c) Any other act or omission of the Licensor or any protected person, whether or not negligent, in respect to the management of fire hazards in the PPP.

### **7.3 Indemnity**

7.3.1 The Licensee indemnifies and will keep indemnified the protected persons from and against all claims and demands as set out in this clause arising out of, in connection with, in respect to or as a consequence of:

- a) The Licensee’s operation of the Licensed Activities the subject of this Licence; or
- b) Any wilful or negligent act, default or omission by The Licensee, The Licensee ’s employees or officers or any person acting under the control or at the direction of The Licensee during the operation of the Licensed Activities or in the PPP.

7.3.2 The Licensee’s obligations under this clause continue after the termination, expiration or other determination of this Licence in respect to any matter or thing happening before such termination, expiration or determination.

7.3.3 In this clause:

‘protected person(s)’ means

- a) The Licensor;
- b) The employees or officers of the Licensor;
- c) Any other person acting under the direction or control of the Licensor for any purpose;
- d) The Crown in right of New South Wales.

‘Claims and demands’ means all actions, suits, claims, demands, proceedings, losses, damages, compensation, sums of money, costs, legal costs, charges and expenses to which the protected persons or any one thereof is or may become liable in respect to loss of or damage to the fixtures or property of any person, financial or economic loss, loss of opportunity or other consequential loss of any person, injury to or death of any person of any kind and however sustained and whether sustained during the conduct of the Licensed Activities or in connection with the Licensed Activities.

7.3.4 It is immaterial to the obligations of The Licensee under this clause that a claim or demand arises out of any act, event or thing that The Licensee is authorised or obliged to do under this Licence or that any time waiver or other indulgence has been given to The Licensee in respect to any such obligation under this Licence.

7.3.5 The obligations of The Licensee under this clause do not apply to the extent that the loss, damage, injury or death arises from or is contributed to by any wilful or negligent act, default or omission on the part of any protected person except as provided by subclause 7.3.6.

7.3.6 The obligations of The Licensee under this clause do apply to loss, damage, injury or death arising from or contributed to or occurring in connection with:

- a) Carrying out of any fire management activity by or on behalf of the protected persons;
- b) The failure to carry out any fire management activity by or on behalf of the protected persons;
- c) Any other act or omission of any protected person, whether or not negligent, in respect to the management of fire hazards in the PPP.

## **8 DEFAULT AND TERMINATION**

### **8.1 Essential Terms**

The following obligations of The Licensee are essential terms of this Licence:

8.1.1 The obligations to pay money under clause 3;

8.1.2 The obligations under clauses 4.1, 4.6, 4.7, 6.1, 7 and 9.2.

This clause 8.1 does not prevent any other obligation under this Licence from being an essential term.

## **8.2 Events of Default**

8.2.1 An Event of Default occurs if:

- a) The Licensee repudiates this Licence; or
- b) The Licensee does not comply with an essential term of this Licence; or
- c) The Licensee commits a fundamental breach of this Licence; or
- d) The Licensee does not comply with any of its obligations under this Licence which is not an essential term and, if the non-compliance can be remedied, it is not remedied within fourteen (14) days after the Licensor issues The Licensee with a written notice to remedy it; or
- e) The Licensee fails to comply with any notice given by the Licensor or an Authorised Officer under this Licence; or
- f) (The Licensee being a company) an order is made or a resolution is effectively passed for the winding up of The Licensee (except for the purpose of reconstruction or amalgamation with the written consent of the Licensor which consent shall not be unreasonably withheld); or
- g) The Licensee goes into liquidation or makes an assignment for the benefit of or enters into an arrangement or composition with its creditors or stops payment or is unable to pay its debts or if execution is levied against The Licensee and is not discharged within thirty (30) days; or
- h) The Licensee (being an individual) becomes bankrupt or commits an act of bankruptcy or brings his or her estate within the operation of any law relating to bankrupts.

8.2.2 The Licensee must ensure that no Event of Default occurs.

## **8.3 Licensor's Right to Terminate**

If an Event of Default occurs the Licensor may suspend or terminate this Licence by notice but without prejudice to any action or other remedy which the Licensor has or may have for arrears of the Licence Fee or breach of any covenant or damages or any other remedy as a result of any such event. The Licensee agrees that the Licensor is not liable for and releases the Licensor from liability or loss arising from, and costs, charges and expenses incurred in connection with, anything done by the Licensor under this clause.

#### **8.4 Opportunity to Remedy**

Notwithstanding anything in clause 8.2 the Licensors shall not terminate this Licence by notice unless The Licensee has failed to remedy the breach or default (if capable of remedy) within fourteen (14) days after written notice thereof has been given by the Licensors to The Licensee.

#### **8.5 Licensors May Remedy**

On each and every occasion on which The Licensee omits or neglects (for a period of not less than fourteen (14) days from the date on which The Licensee is obliged to do the same) to pay any money or to do or effect anything which The Licensee has herein covenanted to pay, do or effect then the Licensors may (without prejudice to any rights and powers arising from such default) pay such money or do or effect such thing as if he or she was The Licensee AND the Licensors may recover from The Licensee the amount of expenses and costs of any such action and a certificate or notice by the Licensors as to any amount payable by The Licensee pursuant to this clause and served upon The Licensee shall be prima facie evidence thereof.

#### **8.6 Licensee to Accept Responsibility for Agents, etc**

The Licensee accepts full responsibility for the acts and omissions of The Licensee 's employees and agents AND in the event of breach by any such person or body of any covenant, term or condition hereof the provisions of this Licence shall apply against The Licensee as if such breach was a breach by The Licensee itself AND The Licensee shall remedy any such breach or where applicable, indemnify the Licensors in respect to such breach.

#### **8.7 Termination for Public or Community Purposes**

If in the opinion of the Licensors it is essential for any public or community purpose or any works subsidiary or ancillary to any such work or for the purpose of the care, control and management of the PPP to put an end to this Licence and the Licensors give to The Licensee three (3) calendar months' notice of such opinion in writing expiring at any time then this Licence shall cease and determine without prejudice nevertheless to any than existing remedy which the Licensors may have against The Licensee for the breach of any covenant to be observed or performed by The Licensee .

#### **8.8 Variation of Licence**

The Licensors may vary the conditions of the Licence on the provision of fourteen (14) days written notice to The Licensee, where there are demonstrable and urgent concerns regarding visitor safety or environmental impact.

## **9 PROCEDURAL MATTERS**

### **9.1 Time for Determining Rights and Obligations**

This Licence for the purpose of determining the rights and obligations of the parties shall be construed as if it had been executed on the date from which the Term is expressed to run.

### **9.2 Variation or Waiver**

None of the provisions of this Licence shall be taken either at law or in equity to have been varied, waived, discharged or released by the Licensor unless by his or her express consent in writing. No waiver by the Licensor of any breach of any condition contained or implied in this Licence shall operate as a waiver of another breach of the same or of any other condition in this Licence.

### **9.3 Consents or Approvals**

Where anything in this Licence may be done with the approval or consent of the Licensor the Licensor may:

- 9.3.1 unless otherwise expressly provided in this Licence, give or withhold his or her approval or consent in his or her unfettered discretion; and
- 9.3.2 impose conditions on that approval or consent.

The consent or approval may be given by the Licensor or an Authorised Officer.

### **9.4 Opinions by Licensor**

Any opinion to be formed by the Licensor for the purposes of this Licence may be formed by the Licensor on such grounds and material as the Licensor determines to be sufficient.

### **9.5 Licensee Not Agent of Licensor**

The Licensee will not directly or indirectly hold out or Licence to be held out to any member of the public any statement, act, deed, matter or thing indicating or tending to indicate that the Licensed Activities are being conducted, managed or supervised by the Licensor, the LHIB or the Crown in right of New South Wales nor shall The Licensee act as or represent itself to be the servant or agent of the Licensor, the LHIB or the Crown in right of New South Wales.

### **9.6 Communication with Licensee**

The Licensee shall at all times keep the Licensor informed of names, addresses and telephone numbers sufficient for the purpose of communication with The Licensee.

### **9.7 Notices**

#### **9.7.1 Requirements of Effective Notice**

A notice or other communication connected with this Deed ('Notice') has no legal

effect unless it is in writing, in English and:

- a) delivered at the address for service of the addressee as set out in the Reference Schedule or as otherwise advised in writing to the other party from time to time (the 'address for service');
- b) sent by security post, certified mail or postage prepaid, to the address for service of the addressee; or

#### 9.7.2 Deemed Delivery

Where the Notice is delivered or sent in a manner provided by clause 9.7.1 it is deemed given to and received by the party to which it is addressed:

- a) if delivered, upon delivery;
- b) if mailed, on actual delivery to that address as evidenced by Australia Post documentation;

#### 9.7.3 Parties' Details

The parties' address for service as at the date of this Deed are:

- a) Licensor                      Item 5 of the Reference Schedule
- b) Licensee                     Item 1 of the Reference Schedule

#### 9.7.4 Notice by Licensor

Any Notice to be given under this Deed by the Licensor may be signed by an Authorised Officer.

### 9.8 Licences

The Licensee will apply for and take all steps required to obtain all such licences, Licences or authorisations and renewals thereof as may in the opinion of the Licensor be necessary for the proper conduct of the Licensed Activities and The Licensee will not do or suffer to be done any act, matter or thing whereby any such licence, Licence or authorisation may be or become liable to be forfeited or suspended or the renewal thereof refused.

### 9.9 No Partnership

Nothing contained in this Licence shall be deemed to constitute a partnership between the Licensor and the Licensee.



## **10 GOODS AND SERVICES TAX**

### **10.1 Consideration**

If a Supply made under or in connection with this Licence is a Taxable Supply then the consideration for the Supply is increased by an additional amount equal to the amount of that consideration multiplied by the relevant GST rate.

### **10.2 GST Terms**

In this clause

- a) GST means goods and services tax under the GST Law;
- b) GST Law has the same meaning as that expression has in *A New Tax System (Goods and Services Tax) Act 1999*; and
- c) a term or expression starting with a capital letter which is defined in the GST law but not defined in these terms has the same meaning as in the GST Law.

## **11 HISTORIC OBJECTS AND RELICS**

### **11.1 Discovery of Objects**

The Licensee shall immediately report to the Licensor the discovery of any Object or Historic Relic during the conduct of the Licensed Activities and The Licensee shall comply with all directions made by the Licensor in relation to the Objects in accordance with the *Heritage Act 1977*.

### **11.2 Definition of Objects**

For the purposes of this clause the terms:

**Historic Relic** shall have the same meaning as the term 'relic' as defined in the *Heritage Act 1977*; and

**Objects** shall mean historic relics.

## **12 ADDITIONAL COVENANTS**

The Licensee agrees that it shall comply with the covenants and obligations contained in Schedules 2 and 3.

## SCHEDULE 1

### REFERENCE SCHEDULE

|                                 |                                     |   |
|---------------------------------|-------------------------------------|---|
| Item 1<br>(clause 1.1)          | Name and address of<br>Licensee:    |   |
|                                 | Telephone:                          |   |
|                                 | Email:                              |   |
| Item 2<br>(clause 1.1)          | Name of Activity within the<br>PPP: |   |
| Item 3<br>(clause 2.2)          | Term of Licence:                    | (Insert Year) with a Commencement Date of XXX and Termination Date of XXX unless otherwise terminated or discontinued as provided herein and, without the Board foregoing of any right under Sec 90 (2) of the LHI Regulation 2014, this is an ongoing Licence. The Board reserves the right to review the Licence at any time. |
| Item 4<br>(clause 6)            | Insurance:                          | \$10,000,000 (ten million dollars) public liability policy  |
| Item 5<br>(clause 9.7)          | Licensor's address for service:     | Lord Howe Island Board<br>5 Lagoon Rd<br>Lord Howe Island NSW 2898<br>Ph: (02) 6563 2127<br>Fax:  |
| Item 6<br>(clause 1.1)          | Authorised Officer:                 | Penny Holloway<br>Chief Executive Officer<br>or any other position in the LHIB<br>authorised to act by the Licensor   |
| Item 7<br>(clauses 3.1 and 3.2) | Licence Fee payment type            | Annual Fee  |
|                                 | Annual Licence Fee                  | \$150.00  |
| Item 8<br>(clause 4.20)         | Subcontractor                       | (If none insert None).  |

## SCHEDULE 2

### LICENSED ACTIVITIES

#### 1 LICENSED ACTIVITIES AND LOCATIONS

- 1.1 The Licensee may conduct the activities listed in clause 1 of Schedule 2 in accordance with the conditions of this licence listed in Schedule 3.

Where no specific locations are described hereunder, The Licensee shall have access to all roads, tracks and areas available to the general public for the reserves listed in Schedule 1.

##### **Permanent Park Preserve**

##### Activity

- 1.2 The Licensee may in the Permanent Park Preserve undertake (name of activity) in/on/along (select as appropriate) the following (roads/tracks/canyons/areas/locations (select as appropriate):
- a) List Tracks...

(Repeat clause for each activity)

#### 2 RELEVANT STANDARDS

- 2.1 The following Policies, Standards, Codes and Practices must be complied with in accordance with clause 4.1 of this license:

##### **2.1.1 Commonwealth Government - legislation, plans and strategies**

- a) Australian/New Zealand Risk Management Standard AS4360:2004
- b) *Environment Protection and Biodiversity Act 1999*

##### **2.1.2 New South Wales State Government - legislation, plans and strategies**

- a) *Civil Liability Act 2002*
- b) *Environmental Planning and Assessment Act 1979*
- c) *Lord Howe Island Act 1953*
- d) *Lord Howe Island Regulations 2014*
- e) *Threatened Species Conservation Act 1995*
- f) *Work Health and Safety Act 2011*

### 2.1.3 **Lord Howe Island**

- a) Biodiversity Management Plan (DECC, 2007)
- b) Biosecurity Strategy (LHIB, 2016)
- c) Destination Management Plan 2014-2017 (LHITA, 2015)
- d) Lagoon Foreshore Management Plan (LHIB 2015)
- e) Permanent Park Preserve Plan of Management (DECCW, 2010)
- f) Strategic Plan for the Lord Howe Island Group World Heritage Property (LHIB, 2010)
- g) Dog importation and management policy (LHIB 2015)

**SCHEDULE 3**  
**SITE SPECIFIC CONDITIONS**

**3 SITE SPECIFIC CONDITIONS**

3.1.1 Commercial Guided Activities **REMOTE**

- a) The Licensee must ensure that the commercial guided activities do not occur in areas where they are inconsistent with management objectives or interfere with other activities.
- b) The Licensee must provide the LHIB copies of the following documents prior to commencing commercial guided walks in the PPP:
  - A communications plan, which identifies radio transmission “black spots” and the nearest radio transmission site ;
  - An emergency response plan;
  - A Quarantine Plan;
  - A Job Safety Analysis (JSA).
- c) The Licensee must be accredited to the standards outlined in Schedule 4.
- d) The Licensee must carry a suitable remote area first aid kit while conducting the activity.
- e) The Licensee must carry a two-way radio and operate on a channel that can be monitored by the LHIB while conducting the activity.
- f) The Licensee must limit the commercial activity to ten (10) participants plus one (1) guide in all areas of the PPP (except for Roach Island & Mt Gower walking track).
- g) The Licensee must not access any area of the PPP where there are active seabird nesting habitats as part of the commercial guided activities, particularly during the summer breeding season (Sept – May) except for Roach Island and during the winter breeding season (May-Mid-Nov) on Mt Gower except for Mt Gower walking track.
- h) The Licensee must not conduct guided walks above 450 meters elevation on Mt Lidgbird.
- i) The Licensee must not attach or install any permanent ropes or fixtures (such as rock bolts) or remove any ropes anywhere in the PPP without the consent of the Licensor.

- j) The Licensee must exercise due diligence and best safety management practices to ensure the wellbeing of their clients.
- k) The Licensee must notify the LHIB in writing within 24 hours of any incident arising directly out of commercial guided activities which result in or may result in loss or damage or injury to whomever or whatsoever caused.
- l) The Licensee must not interfere, remove or relocate any living or non-living product.
- m) The Licensee must not leave any equipment or material in the PPP and must remove all equipment and material at the conclusion of the commercial guided activity or on expiry of the permit whichever is sooner.
- n) The Licensee must ensure all participants (including the guide), clean all equipment and clothing (e.g. footwear & hiking poles) with Quatsan or methylated spirits (70%) and be free of soil, plant matter and soil pathogens such as Phytophthora and Myrtle Rust before entry into the PPP. Boot scrubbing bays have been provided at the majority of walking tracks, and must be used before entry into the PPP. Boots & hiking poles must be cleaned at these bays prior to entry to the PPP at all times, in the event that boot scrub bays are not available, ensure that all participants(including the guide), clean their boots and walking poles, as identified above, prior to entering the PPP.
- o) The Licensee must ensure that no detrimental environmental impact will result from the commercial guided activities.
- p) The Licensee must ensure that adequate safeguard measures are adopted to minimise the exposure of the general public to any unnecessary risks.

### 3.1.2 Commercial Guided Activities - **ROACH ISLAND**

- a) The Licensee must ensure that the commercial guided activities do not occur in areas where they are inconsistent with management objectives or interfere with other activities.
- b) The Licensee must provide the LHIB copies of the following documents prior to commencing commercial guided walks in the PPP:
  - A communications plan, which identifies radio transmission “black spots” and the nearest radio transmission site ;
  - An emergency response plan;
  - A Quarantine Plan;
  - A Job Safety Analysis (JSA).
- c) The Licensee must be accredited to the standards outlined in Schedule 4.

- d) The Licensee must carry a suitable remote area first aid kit while conducting the activity.
- e) The Licensee must carry a two-way radio and operate on a channel that can be monitored by the LHIB while conducting the activity.
- f) The Licensee must limit the commercial activity on Roach Island to five (5) participants plus one (1) guide with a maximum of twelve (12) people landed on the Island at any one time (2 guides plus 10 participants).
- g) The Licensee must ensure that participants (including the guide) accessing Roach Island do not enter the immediate seabird nesting habitat and only view the seabirds from the rock platform above the boat launch and retrieval site.
- h) The Licensee must ensure that the boat used to transport participants (including the guide) to Roach Island and all carry-on bags are checked for pest species i.e. rodents, garden skinks, frogs, invertebrates, weed seeds etc. prior to departing from the main Island.
- i) The Licensee must provide the LHIB copies of the documents listed in 3.1.1 (b) prior to commencing commercial guided walks on Roach Island including:
  - A Quarantine Plan for Roach Island

### 3.1.3 Commercial Guided Activities – **MT GOWER**

- a) The Licensee must ensure that the commercial guided activities do not occur in areas where they are inconsistent with management objectives or interfere with other activities.
- b) The Licensee must provide the LHIB copies of the following documents prior to commencing commercial guided walks in the PPP:
  - A communications plan, which identifies radio transmission “black spots” and the nearest radio transmission site ;
  - An emergency response plan;
  - A Quarantine Plan;
  - A Job Safety Analysis (JSA).
- c) The Licensee must be accredited to the standards outlined in Schedule 4.
- d) The Licensee must carry a suitable remote area first aid kit while conducting the activity.
- e) The Licensee must carry a two-way radio and operate on a channel that can be monitored by the LHIB while conducting the activity.

- f) The Licensee must limit the commercial activity on Mt Gower to fifteen (15) participants plus one (1) guide with a maximum of twenty (20) participants plus 2 guides.

## **SCHEDULE 4**

### **ACCREDITATION**

#### **4 RECOGNITION & RESPONSIBILITIES OF LEADERS**

Leaders of Commercial Guided Activities are recognised in three areas.

- Guided Activity skills
- First aid qualifications
- NSW Working with Children Check (if child related).

Leaders of Adventure Activities are recognised using one or more of pathways detailed below.

##### **4.1.1 RECOGNITION OF LEADERS**

#### **CERTIFICATE III IN OUTDOOR RECREATION**

(For Adventure Activity Leaders only)

- Including Bushwalking competencies, electives and/or specialisations

#### **STATEMENT OF ATTAINMENT IN SKILL SETS (From SIS10)**

(For Adventure Activity Leaders only)

- Bushwalking Guide Controlled Environment

#### **NATIONAL OUTDOOR LEADER REGISTRATION SCHEME (NOLRS)**

(For Adventure Activity Leaders only)

- Restricted Bushwalking Guide or any level above

##### **4.1.2 FIRST AID**

#### **NON-REMOTE AREAS**

A 'NON REMOTE AREA' is an area of the Permanent Park Preserve that includes built features and infrastructure and is accessed via a maintained walking track system (except Mt Gower walking track) and where two-way communications with emergency services may be established within a time frame determined as appropriate by the LHIB.



Where a Commercial Guided Activity is conducted in a NON-REMOTE SITUATION the Leader/s must:

- hold a current Apply First Aid qualification (HLTAID003 - Provide first aid).

## **REMOTE AREAS**

A 'REMOTE AREA' is the Mt Gower walking track and other areas in the Permanent Park Preserve that do not include any built features or infrastructure, cannot be accessed via a maintained walking track and where two-way communications with emergency services may be delayed beyond an appropriate time frame as determined by the LHIB.

Where a Commercial Guided Activity is conducted in a REMOTE SITUATION the Leader/s must:

- hold a current SIS 10 Wilderness First Aid qualification or
- hold a statement of attainment that includes SIS OOPS 305A - Provide first aid in a remote location and/or
- participate in additional organisational training (not nationally recognised training) or skills development that includes aspects of remote area first aid specific to the organisational context.

### **4.1.3. NSW WORKING WITH CHILDREN CHECK**

In NSW, the NSW Child Protection (Working with Children) Regulation 2012 defines the obligations that individuals and employers/organisations have in relation to engaging individuals in child related activities.

Individuals (either in a paid or voluntary role) are required to maintain a current NSW Working With Children Check. Employers and Organisations (either paid employees or volunteer's workers) are required to:

- Conduct a verification check to determine an applicant's current "Working With Children Clearance Status"; individuals who have a 'Barred' status are not engaged in Child Related Roles
- Develop and maintain appropriate Child Protection policies and procedures

Provide staff training regarding Child Protection issues and reporting obligation appropriate to their organisational context.

## EXECUTED as a Deed

**Executed for and on behalf of the Licensor administering the *Lord Howe Island Act 1953* (LICENSOR)**

By: .....  
(name of authorised officer)

Position: .....

Signature: .....Date.....

Witness: .....  
(signature)

Witness: .....  
(printed name)

**Executed for and on behalf of INDIVIDUAL OR COMPANY NAME (LICENSEE)**

By: .....  
(Name)

Position: .....

Signature: .....Date.....

Witness: .....  
(signature)

Witness: .....  
(printed name)

(and, where applicable),

By: .....  
(Name)

Position: .....  
(eg Company Director or Secretary)

Signature: .....

Witness: .....  
(signature)

Witness: .....  
(printed name)

# **LORD HOWE ISLAND BOARD**

## **Business Paper**

### **OPEN SESSION**

#### **ITEM**

Work Health and Safety (WH&S) and Public Risk Management Update.

#### **RECOMMENDATION**

It is recommended that the Board note the information provided on WH&S and Public Risk matters.

#### **BACKGROUND**

The Board has requested information on WH&S and Public Risk matters be presented on a quarterly basis.

#### **CURRENT POSITION**

##### **Workplace Health and Safety**

The following reports period ending 31/10/2016, as compiled by NSW SICorp, are attached:

- Claim Statistics by Policy (by date claim Reported and date claim Occurred)
- Mechanism of Injury

As at end October 2016 eight new claims had been lodged for financial year 2016/17.

| 2016/17 |                |                               |                                    |                       |
|---------|----------------|-------------------------------|------------------------------------|-----------------------|
| No      | Date of Injury | Type of Injury                | Cause of Injury                    | Hours lost            |
| 1       | 07/07/2016     | Bruising R arm and R shoulder | Stuck by reversing vehicle         | Medical expenses only |
| 2       | 23/07/2016     | Foreign body R eye            | Hosing logs                        | Medical expenses only |
| 3       | 23/07/2016     | Head laceration               | Stuck by windborne piece of timber | Medical expenses only |
| 4       | 27/07/2016     | Muscle sprain L shoulder      | Lifting                            | Medical expenses only |
| 5       | 08/08/2016     | Severe sprain L knee          | Twisted knee weeding               | 192 Hrs               |

|   |            |   |                                 |                       |
|---|------------|---|---------------------------------|-----------------------|
| 6 | 11/08/2016 | Trauma to R ear canal/foreign body in R ear canal | Stick entered ear while weeding | Medical expenses only |
| 7 | 16/09/2016 | Partial tear medial collateral ligament R knee    | Slip                            | TBC                   |
| 8 | 29/9/2016  | Injured R foot                                    | Inversion of R ankle            | 56.8 Hrs              |

Actions taken to address the incidence of injury include Workplace WH&S matters being discussed and addressed at monthly staff meetings, including reviews of Job Safety Analysis and Hazard Identification.

- The Boards Uniform Policy was reviewed in May 2016 with WHSA considerations taking precedence in uniform design and requirements. Issue of the new uniforms has commenced.
- Fully enclosed safety goggles have been sourced to replace older style protective eyewear to address an increase in eye injury.
- Board staff undertook familiarisation with work vessel Shearwater and reviewed the Safety Management System as per AMSA regulations.
- A risk assessment in relation to vehicular and pedestrian access and movement within the Board's depot area has been undertaken and the feasibility of the installation of a boom gate is being investigated.

### **Public Risk Management**

- The stairs at the southern end of middle beach have been repaired following storm damage.
- Non-slip paint is currently being applied to walking track boardwalks.
- Emergency Sirens have been installed and are in the process of being tested.
- CASA undertook an airport safety audit in October 2016 the results of which are currently pending.
- Water quality testing undertaken by Public Health for high risk public access drinking water locations have confirmed excellent results following installation of triple fine micron filtration and UV disinfection at each source.
- An Oil Spill Response exercise and training will be undertaken 21/11/2016 and will be run by Transport for NSW.

### **RECOMMENDATION**

It is recommended that the Board note the information provided on WH&S and Public Risk matters.

**Prepared** \_\_\_\_\_ Jemima Spivey      Manager Administration

**Endorsed** \_\_\_\_\_ Penny Holloway      Chief Executive Officer