NSW **National Parks and Wildlife Service**

[redacted]
Anderson Road
Lord Howe Island NSW 2898

Reference Number **DOC11/26726**
File number **LI 003**
Date 8 June 2011

DELIVERED BY HAND

DIRECTION TO CARRY OUT REMEDIAL WORK

BACKGROUND

A. The Office of Environment and Heritage (**OEH**) within the Department of Premier and Cabinet (**DPC**) has responsibility for the administration and enforcement of the *National Parks and Wildlife Act 1974* (**the Act**) and associated Regulations.

B. Alistair Henchman, holds the position of Director Parks and Wildlife Group Metropolitan Branch within OEH.

C. Director Parks and Wildlife Group Metropolitan Branch holds delegated authority on behalf of the Director-General of DPC for the purposes of section 91K of the Act.

D. [redacted] is the leaseholder of the land (**the Leaseholder**) identified as Lot 2 of Deposited Plan number 1151473 (**the land**). The land is identified in Attachment 1 of this Direction.

E. *Placostylus bivaricosus* (**Lord Howe Island Placostylus**) is listed as an endangered species in Part 1 of Schedule 1 of the *Threatened Species Conservation Act 1995* (**TSC Act**).

F. *Puffinus carneipes* (**Flesh-footed Shearwater**) is listed as a vulnerable species in Part 1 of Schedule 2 of the TSC Act.

G. An initial owner consent application OC2008-02 was lodged by[redacted] n 28 February 2008 seeking to subdivide Lot 3 DP 1118574. At the time [redacted] held lease number 2007/01. This application was refused by the Lord Howe Island Board (**LHIB**). Following this, on 28 March 2008 Mr Hank Bower from the LHIB conducted a site inspection of Lot 3 DP 1118574. The inspection found nest burrows of the Flesh-footed Shearwater and spent shells of the *Placostylus bivaricosus*. On 17 June 2008 the LHIB received a further owner consent application from [redacted] again seeking to subdivide the land. This application is identified as OC2008-11. Consent was given regarding this application.

H. On 29 September 2008 [redacted] lodged an application (**development application**) DA2008/13 with the LHIB to subdivide Lot 3 DP 1118574. The development application included a Statement of Environmental Effects (**SEE**) and an accompanying Environmental Impact Report which identified the land as habitat for a number of threatened species including *Placostylus bivaricosus* and *Puffinus carneipes.*

I. On 6 January 2010 the development application was approved by the LHIB subject to the condition that the leaseholder prepare an Ecological Restoration Plan (**ERP**) for approval by the LHIB. As part of the subdivision, the land the subject of this remediation direction was created as Lot 2 of DP 1151473.

J. At the LHIB meeting on 1 March 2010 the LHIB approved the ERP dated 11 February 2010 prepared by the Leaseholder. This ERP set limits on weed control techniques to be used on the land.

K. On 25 June 2010 the LHIB notified the leaseholder that the plan DP1151473 was registered by the Department of Lands on 16 June 2010 as a result of the subdivision of Lot 3 DP 1118574 approved by DA2008/13. The Leaseholder, [redacted] was advised that Perpetual Lease 1971/09 comprises Lot 2 of DP1151473 being a total area of 15,190 metres.

L. On or about 7 July 2010, at the direction of the Leaseholder, [redacted] and [redacted] used a 4 tonne excavator to clear an area of the land approximately 120 metres by 8 metres. This part of the land forms the "cleared area" and is marked by red outline on Attachment 2 of this Direction. The cleared area was cleared back to bare dirt.

M. On 13 July 2010, the LHIB became aware of the clearing. As a result LHIB Officers Mr Hank Bower and Mr Chris Haselden carried out a site inspection on the land on 13 July 2010 with the Leaseholder present. During the inspection spent shells of the *Placostylus bivaricosus* were found within the cleared area.

N. The Leaseholder stated the reason for the clearing was to improve access to a part of the land so two water tanks could be transported there without damage.

O. The clearing of the area to bare dirt caused damage to the habitat of both the *Placostylus bivaricosus* and *Puffinus carneipes.*

P. The clearing resulted in damage to the habitat of the *Placostylus bivaricosus* by removing the preferred habitat conditions of the species. These preferred habitat conditions are set out in Attachment 3 to this Direction. As a result of the clearing the area is affected by increased solar radiation, wind penetration, soil temperatures, and moisture fluctuations resulting in reduced humidity.

Q. The clearing resulted in damage to the habitat of the *Puffinus carneipes* by removing the preferred habitat conditions of the species. The preferred habitat conditions are set out in Attachment 3 to this Direction. The clearing has prevented forest regeneration. This limits the development of a tangled root layer and promotes grass which is not as favoured by *Puffinus carneipes* for nest selection. Mowing activities promote a dense grass sward and are a persistent disturbance to *Puffinus carneipes.* Continued disturbance can result in nest abandonment and reduced nest success. Such an impact is expected from the cleared area and is likely to influence the whole land.

R. The land runs east west so is subject to weather conditions from east, north and west, which are generally the most intense in terms of increasing solar radiation, soil temperatures and wind penetration during the hottest time of the year, all of which impact on micro-climate variables that are important for *Placostylus bivaricosus*. The area of *Placostylus bivaricosus* habitat impacted by the clearing on the land is considered to extend beyond the actual cleared area as a result of incursion of edge effects into the surrounding bushland.

S. The cleared area has regrown with exotic grasses that have been periodically mowed, which prevents forest regeneration. This limits the development of a dense well structured canopy of native trees. Such a canopy promotes the establishment of a deep moisture retaining leaf litter. These habitat features are critical for the *Placostylus bivaricosus* and are essential to enable movement between forest remnants either side of the cleared area. Habitat fragmentation is a substantial threat to *Placostylus bivaricosus*. Without forest regeneration the development of a tangled root layer is limited and grass grows easily. This reduces *Puffinus carneipes* ability to excavate nest burrows. The expansion of grassed areas results in the decline of suitable nesting habitat which leads to the incremental decline of the breeding population.

T. The area marked by yellow hatching on Attachment 4 to this Direction forms the **"Remediation Area"**. The Remediation Area extends 25 metres beyond the actual cleared area on each side of the clearing (except where the property boundary is located closer). The Remediation Area is larger than the cleared area to restore and remediate lost habitat features resulting from the clearing. Harmful edge effects have impacted on essential habitat features for both the *Placostylus bivaricosus* and *Puffinus carneipes.* The Remediation Area is bounded by existing native vegetation to the north and south, comprising habitat for *Placostylus bivaricosus* and *Puffinus carneipes.* Restoration within the Remediation Area will restore habitat connectivity and redress internal habitat fragmentation resulting from the unapproved clearing.

OPINION

A. I, Alistair Henchman, Director Parks and Wildlife Group Metropolitan Branch am of the opinion that:

a) damage has been caused to habitat of a threatened species on the land.

DIRECTION TO CARRY OUT REMEDIAL WORKS

B. I, Alistair Henchman, Director Parks and Wildlife Group Metropolitan Branch, in order to:

a) control, abate or mitigate the damage to the habitat concerned; and
b) maintain, remediate or restore the damaged habitat.

require the Leaseholder perform the following works to control, abate or mitigate the damage and to remediate or restore the damaged habitat in the Remediation Area within the time specified, if any, for each work, or where no time is specified, **for a period of 5 years.**

1. Fencing

Access fence

1.1 On or before 18 July 2011 the Leaseholder must construct a 5 metre wide access fence across the access points to the Remediation Area as shown as points A and B on the

map at Attachment 4 to this Direction shown in pink. The purpose of this is to prevent vehicle access to the Remediation Area. The access point at point A is located 9 metres east of the adjacent concrete path. It then extends 9 metres in a south east direction, then extends 7 metres west, then extends 11 metres in a south east direction, and then extends 2.5 metres west (this includes parts comprising the permanent fence).

1.2 The access fencing must be constructed of capped galvanised star pickets spaced 5 metres apart with 2 strand plain wire.

1.3 Upon construction of the access fencing, two signs must immediately be affixed to the fences at the points marked in pink line and with the letters A and B on Attachment 4 to this Direction.

1.4 Each sign in Direction Number 1.3 is to be a minimum size of 40 cm by 30 cm and to have the words "No Vehicle Access" permanently marked on it. Both signs are to be made of weather-proof material.

1.5 This access fencing must be maintained until 8 June 2016.

Permanent fence

1.6 On or before 18 July 2011, the Leaseholder must construct a permanent fence around the boundary of the Remediation Area. The Remediation Area is marked by yellow hatching on Attachment 4 to this Direction.

1.7 The part of the permanent fence as marked with red dashes on Attachment 4 must be constructed of capped galvanised star pickets spaced 5 metres apart with 2 strand plain wire. The remainder of the fence must be constructed of capped galvanised star pickets spaced at 10 metre intervals without any strand wire as marked with blue dashes on Attachment 4.

1.8 The Leaseholder must inspect the permanent fence at least once every 2 months after the date of completion of the construction of the permanent fence to find out if the permanent fence is in a condition sufficient to prevent vehicular access to the Remediation Area.

1.9 If at any time the Leaseholder becomes aware that any part of the permanent fence is in a condition that would not prevent vehicles from entering the Remediation Area, the Leaseholder must immediately repair or replace that part of the permanent fence so that the fence is in a condition sufficient to prevent vehicles from entering the Remediation Area.

2. Preventing entry to the remediation area

2.1 From 8 June 2011 vehicles are not permitted to enter, travel through or remain on the Remediation Area at any time unless permission is given in writing from the Director-General of DPC.

2.2 If the Leaseholder requires any machinery to carry out the Directions in this notice, an application in writing must be submitted to the Director-General of DPC care of PO Box 5 Lord Howe Island NSW 2898 seeking permission to bring that machinery into the Remediation Area.

3. Removal of structures or works

3.1 On or before 18 July 2011, the Leaseholder must remove the stock-piled building materials labelled on Attachment 5 to this Direction from the Remediation Area.

3.2 On or before 18 July 2011, the Leaseholder must remove the hills hoist clothes line labelled on Attachment 5 to this Direction from the Remediation Area.

3.3 On the day(s) in which the infrastructure listed in Direction Numbers 3.1 to 3.2 is to be removed the access fencing marked as "A" on Attachment 4 to this Direction may be temporarily removed to enable access to the Remediation Area. The access fencing must be re-constructed by 8pm on each day it is temporarily removed.

4. Weed control

4.1 The Leaseholder must engage a suitably qualified bush regeneration contractor to conduct all systematic sweeps of the Remediation Area to control and remove exotic plant species in accordance with this Direction.

4.2 At least three systematic sweeps must be conducted in the period 15 July 2011 to 31 December 2011.

4.3 A sweep must be conducted within the period 15 July 2011 to 30 July 2011 and after the *Puffinus carneipes* leave the Remediation Area but before any revegetation work is carried out.

4.4 A sweep must be conducted within the period 1 August 2011 to 31 August 2011.

4.5 A sweep must be conducted within the period 1 September 2011 to 30 September 2011, prior to the return of the *Puffinus carneipes*.

4.6 For the period 25 May 2012 to 25 May 2016, systematic sweeps must be conducted in the Remediation Area twice a year.

4.7 The first sweeps must occur in the periods 1 June to 31 July 2012, 1 June to 31 July 2013, 1 June to 31 July 2014, and 1 June to 31 July 2015.

4.8 The second sweeps must occur in the periods 1 August to 30 September 2012, 1 August to 30 September 2013, 1 August to 30 September 2014, and 1 August to 30 September 2015.

4.9 For each systematic sweep set out in Direction Numbers 4.2 to 4.9 above, the Leaseholder must engage a suitably qualified bush regeneration contractor to identify each exotic species specified in Column 1 (common name) of Table 1 (Attachment 6 to this Direction) and:

(a) confirm the plant is the exotic species with the scientific name as set out in Column 2;
(b) make note of whether the plant is known from the site as set out in Column 3; and
(c) remove the plant using the control method for that exotic species as set out in Column 4.

4.10 Systematic sweeps must not be carried out while the *Puffinus carneipes* are present in the Remediation Area.

4.11 In the instance *Puffinus carneipes* are present during the dates specified in Direction Numbers 4.2 to 4.9 above the Leaseholder must notify the Director-General of DPC care of PO Box 5 Lord Howe Island NSW 2898 in writing before carrying out any activity. Notification must be made 7 days before any activity is proposed to take place.

5. Felling of *Cryptocarya triplinervis* var. *triplinervis*

5.1 In the period 8 June 2011 to 30 September 2011, before restoration works are started, and after the *Puffinus carneipes* leave the Remediation Area, the Leaseholder is to fell the large *Cryptocarya triplinervis var triplinervis* with a split trunk (marked as photos 1 & 3 on Attachment 12) and leave the tree in the position it falls. Photos of this tree are attached to this Direction as Attachment 12.

5.2 The crown of the *Cryptocarya triplinervis* var. *triplinervis* is to be dismantled where it falls and spread as course mulch.

5.3 Fourteen days prior to Direction Number 5.1 being carried out, the Leaseholder must notify the Director-General of DPC care of PO Box 5 Lord Howe Island NSW 2898 in writing of their intention to fell the tree in compliance with Direction Number 5.1. This notification must be provided by either express registered post, facsimile 02 6563 2127, or delivery receipt required email to administration@lhib.nsw.gov.au.

6. Assisted bush regeneration

6.1 Within the period 15 July 2011 to 31 August 2011 the Leaseholder must engage a suitably qualified bush regeneration contractor to plant at least 250 trees in the area marked by cross hatching in Attachment 7.

6.2 The trees planted must be of a species listed in Column 1 (common name) and Column 2 (scientific name) of Table 2 (Attachment 8 to this Direction). Column 3 sets out the number of each species that must be planted. The species selected include representative species from the vegetation association *Drypetes deplanchei-Cryptocarya triplinervis* or other local pioneer species that will assist in the development of this vegetation association.

6.3 Each tree must be spaced 1.5 metres from the nearest tree.

6.4 All bush regeneration works must only use seedlings sourced from seed grown stock in tubes or pots. Native plants must be sourced locally; however trees must not be taken from any native bushland on Lord Howe Island.

6.5 The Leaseholder must provide an invoice for the purchase of the trees bought to comply with Direction Number 6.1 to DPC by 31 August 2011.

6.6 The Leaseholder must engage a suitably qualified bush regeneration contractor to:

6.6.1 Fertilise each tree when it is planted;

6.6.2 Water each tree when it is planted;

6.6.3 Water each tree daily for a period of 7 days from when it was planted unless rainfall of more than 20mm has occurred on that day; and

6.6.4 After the 7 day period in Direction Number 6.6.3, water each tree on a weekly basis for a period of 4 weeks.

6.7 Any trees that die on or before 8 June 2013 must be replaced by the Leaseholder in accordance with Direction 6.

7. Prohibition on removal or damage of native vegetation

7.1 The Leaseholder must not remove: native vegetation; dead fallen timber or logs; soil or rocks from the Remediation Area on or before 8 June 2016. This Direction is in addition to any restrictions or obligations under the *Lord Howe Island Regulation 2004.*

7.2 The Leaseholder must not damage: native vegetation; dead fallen timber or logs; soil or rocks in the Remediation Area on or before 8 June 2016. This Direction is in addition to any restrictions or obligations under the *Lord Howe Island Regulation 2004.*

7.3 Direction Number 7.2 does not apply to the activities required by Direction Numbers 5.1 and 5.2 of this Direction.

8. Reporting

8.1 The Leaseholder must engage a suitably qualified bush regeneration contractor to prepare monthly work sheets in accordance with "Attachment 9: Monthly Work Sheet" for every day on which works in accordance with this Direction are undertaken in the Remediation Area.

8.2 The Leaseholder must obtain invoices from the suitably qualified bush regeneration contractor for the work they are engaged to carry out under Direction Numbers 4 and 6.

8.3 The Leaseholder must prepare a Monitoring Report including, but not limited to permanent photo points as identified in Attachment 10 and attaching each monthly work sheet prepared under Direction 8.1, and each invoice under Direction Number 8.2 for the reporting period.

8.4 The Leaseholder must submit a Monitoring Report to the DG of DPC care of PO Box 5 Lord Howe Island NSW 2898 every 6 months in the first year of this Direction by registered post. The first Monitoring Report must be provided by 30 October 2011. The second Monitoring Report must be submitted by 30 April 2012. Each report thereafter must be submitted at the end of each 12 month reporting period.

8.5 The Monitoring Report must include the items listed in "Attachment 10: Monitoring Report".

9. Records

9.1 The Leaseholder must keep a copy of all the records that are required to be made under Direction Number 8:
(a) in a legible form, or in a form that can readily be reduced to a legible form; and
(b) for at least 5 years from the date of this Direction.

9.2 All records required to be kept by Direction Number 8 must be true, accurate and correct.

10. Rodent bait station

10.1 On or before 15 July 2011 the Leaseholder must establish rodent bait stations at 40 metre intervals over the Remediation Area. The Leaseholder must use rodenticide distributed by the Lord Howe Island Board in accordance with the Lord Howe Island Board rodent baiting schedule attached to this Direction as Attachment 11.

11. Fire

11.1 The Leaseholder must not light a fire in the Remediation Area, or authorise any other individual to do so on or before 8 June 2016.

12. Waste

12.1 The Leaseholder must not put or leave waste, including garden waste in the Remediation Area on or before 8 June 2016.

13. Change in Leaseholder

13.1 The Leaseholder must notify the DG of DPC care of PO Box 5 Lord Howe Island NSW 2898 in writing of any change in ownership or occupancy of the land that the Leaseholder becomes aware of. This notification must be provided within 14 days of the Leaseholder becoming aware of the change and be made by either express registered post, facsimile 02 6563 2127, or delivery receipt required email to administration@lhib.nsw.gov.au.

DEFINITIONS

In this direction the following definitions apply:

"Exotic species"	means species introduced from outside of the area concerned; in the case of New South Wales, from overseas and/or interstate. **Note:** The source of this definition is Harden, G.W. ed. 1990-2002. *Flora of New South Wales: Volumes 1 – 4*, University of NSW Press.
"Leaseholder"	means [redacted]
"Noxious weeds"	means any plant declared under the *Noxious Weeds Act 1993* to be a noxious weed for New South Wales or the local government area within which the property is located
"Remediation Area"	means the area located on the property shown schematically on the map in Attachment 4 being parts of Lot 2 DP 1151473 and marked by yellow hatching
"Reporting period"	means from the date of issue of this Direction up to 30 October 2011, the period from 30 October 2011 up to 30 April 2012, and each twelve month period commencing from 30 April 2012 for the duration of this Direction.
"Suitably qualified bush regeneration contractor"	means a person approved by OEH who has either bush regeneration qualifications or proven ecological restoration skills.
"Vehicle"	means motor vehicles, earth moving equipment, push lawn mowers, and ride on lawn mowers.
"Weed"	means a plant growing in an area where it is not wanted. See: http://www.dpi.nsw.gov.au/agriculture/pests-weeds/weeds/definition/faqs

WARNING AND INFORMATION ABOUT THIS DIRECTION

- It is an offence against section 91Q of the Act to fail to comply with this Direction. The maximum penalty that a court may impose for this offence is, for a corporation, $220,000 plus $22,000 for each day the offence continues and for an individual, $110,000 plus $11,000 for each day the offence continues.
- If you fail to comply with this Direction DPC may authorise any other person to carry out the works and may then recover the cost from you (section 91O of the Act).
- This Direction is issued under section 91K of the Act.
- Under section 91K(3) of the Act this Direction may be varied or revoked by a further notice.
- Under section 91T(1) of the Act, if you are aggrieved by the decision to make this Direction you may appeal to the Land and Environment Court within 30 days of this Direction being served on you. However, even if an appeal is lodged, you must comply with this Direction, unless the Court orders otherwise.
- Under section 188E of the Act, your obligation to comply with the requirements of this direction continues until the direction is complied with, even if the due date for compliance is passed.
- DPC may conduct inspections to determine whether this Direction is being complied with.
- Words and expressions have the same meaning as words and expressions used in the Act, except where a word is specifically defined in this Direction.
- For the purposes of this Direction, "national parks legislation" means the Act and the regulations under the Act.
- A Remediation Direction will not negate the potential for prosecution. A Remediation Direction is separate to any potential prosecution.

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Alistair Henchman

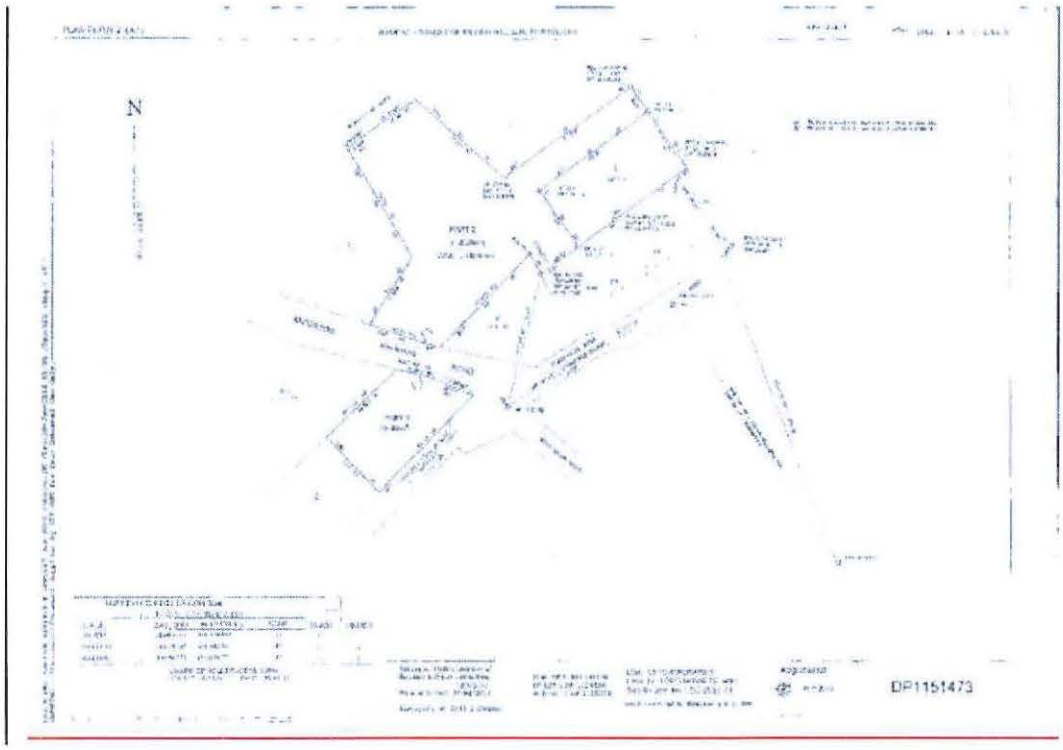
Director National Parks and Wildlife Service
Metropolitan Branch
(by Delegation)

Attachments:

1. Map of Lot 2 DP 1151473
2. Map of the cleared area
3. Guiding Principles for Direction
4. Map of the Remediation Area and location of access fence and signs
5. Map of particular points in the Remediation Area (stock piled building materials and hills hoist removal)
6. Table 1 Exotic species to be controlled, outlining species known from the site and recommended control methods
7. Map of cleared area identifying revegetation area
8. Table 2 Species for planting in revegetation area
9. Daily Works Record Sheet Pro-forma
10. Monitoring Report Format
11. LHIB Rodent Baiting Schedule
12. Location and photos of the *Cryptocarya triplinervis* va.r *triplinervis* tree to be felled as per Direction 5.

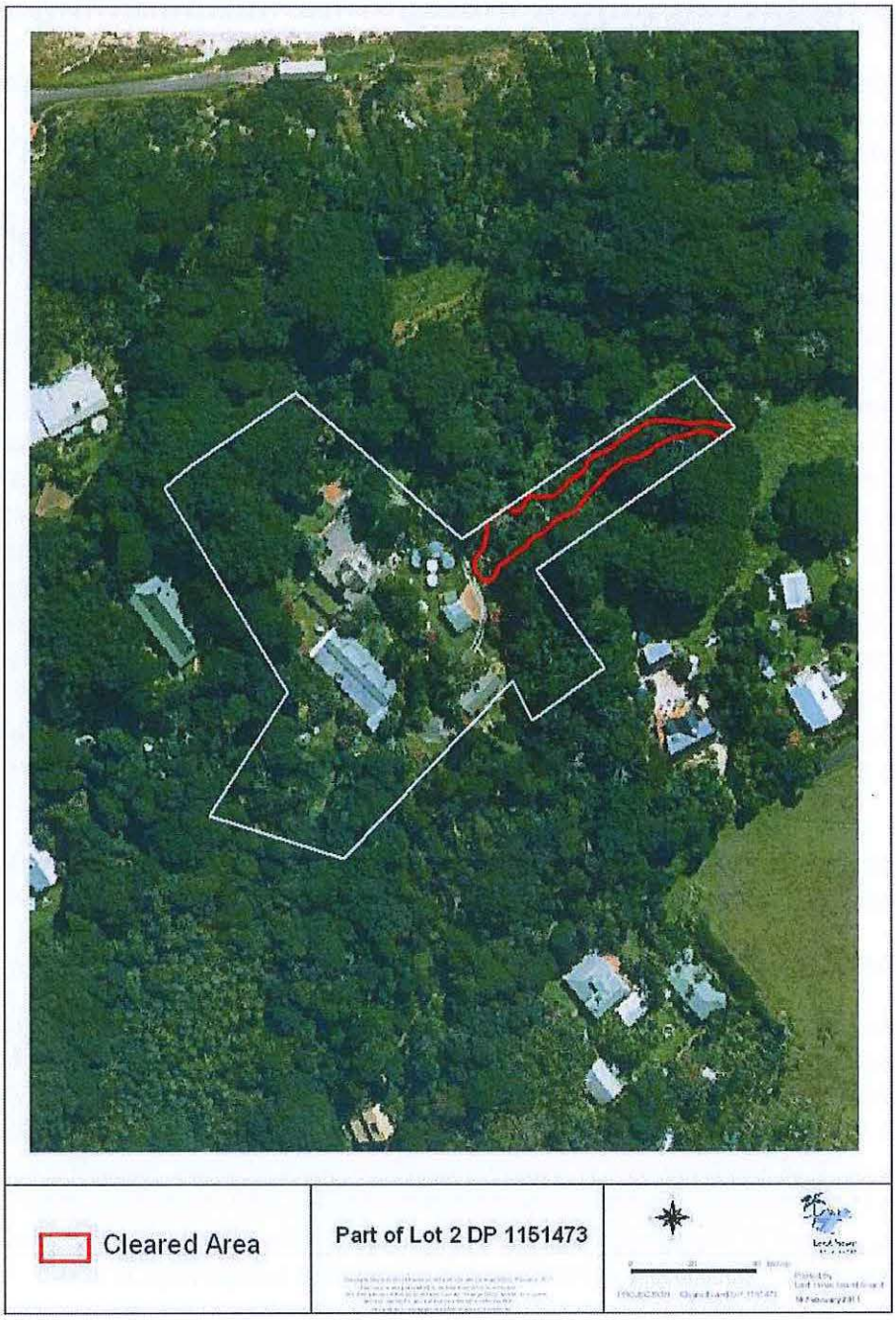
Attachment 1

Map of Lot 2 DP 1151473



Attachment 2

Map of the cleared area



Attachment 3

Guiding Principles for Direction

The Remediation Area is to be restored to the vegetation association *Drypetes deplanchei-Cryptocarya triplinervis* as described by Pickard 1983.

Habitat of the Placostylus bivaricosus

Placostylus bivaricosus prefer well developed moisture retaining leaf litter layer in closed forest with a dense well structured canopy comprised of native trees and vines on calcarenite-derived soils (NPWS 2001). *Placostylus bivaricosus* is prone to desiccation which is exacerbated where a moist micro-climate is reduced through the opening up of a dense shady canopy and the removal of a well developed leaf litter. Ponder and Chapman (1999) noted freshly dead shells in areas subject to recent damage by drought or storms. Clearing activities are similarly expected to increase the incidence of desiccation to *Placostylus bivaricosus* by increasing solar radiation, wind penetration, soil temperatures and moisture fluctuations resulting in reduced humidity. Loss of habitat through clearing of lowland forest is identified as a threat in the Lord Howe Island Biodiversity Management Plan Appendices (DECC 2007). Clearing activities exacerbate natural impacts such as drought and storm damage to vegetation. The distance to which edge effects penetrate into a forest edge can be used to indicate the intensity of habitat modification (Turton and Freiburger 1997, Murcia 1995). Internal linear clearings such as those incurred by construction of roads result in twice the length in edges, allowing edge effects to penetrate into adjacent habitat on both sides of the clearing (Goosem 1997). Edge effects vary in their degree of ingress and impact on species. The effect of edge effects is strongly influenced by edge orientation and forest physiognomy (structural complexity/condition etc) Turton and Freiburger 1997. In a study in a Northern Australian rainforest Turton and Freiburger 1997 found that microclimatic edge effects generally penetrate about 30 m into the edge and are also influenced by aspect.

Habitat fragmentation also disrupts movement between bushland remnants which impacts gene flow between populations. This can result in reduced breeding vigour.

Habitat of the Puffinus carneipes

Puffinus carneipes excavate their nesting burrows amongst the roots of trees within densely vegetated forest areas in lowland areas of Lord Howe Island on deep calcarenite soils. This habitat is favoured as tree roots assist in maintaining burrow profiles (DECC 2007). Although nest sites of *Puffinus carneipes* persist in some grazed paddock and mown lawn areas on LHI, maintenance of these burrows is compromised by ingress of grass, trampling by livestock and lawn mowing, diminishing nest success (DECC 2007, Nicholas Carlile pers comm.). A key threat to this species on Lord Howe Island is development activities within the settlement area that encroaches on Flesh-footed Shearwater habitat (DECC 2007).

Other edge effects include changes in plant regeneration responses and an increase in light demanding weed species, increased incidence of treefall due to increased wind penetration (up to 70 m from a forest edge) and increased access to forest interior species by generalist species and pests (Laurance 1997).

References

Department of Environment and Climate Change (NSW) 2007, *Lord Howe Island Biodiversity Management Plan Appendices*, Department of Environment and Climate Change (NSW) Sydney

Goosem, M. 1997. Internal fragmentation: The Effects of Roads, Highways, and Powerline Clearings on Movements and Mortality of Rainforest Vertebrates. Pages 241-255 in W.F. Laurence and R.O. Bierregaard, Jr.,eds., *Tropical forest remnants: ecology, management, and conservation of fragmented communities.* The University of Chicago Press, Chicago.

Laurance, W.F. 1997. Introduction. SECTION II: Physical Processes and Edge Effects. Pages 29 - 31 in W.F. Laurence and R.O. Bierregaard, Jr.,eds., *Tropical forest remnants: ecology, management, and conservation of fragmented communities.* The University of Chicago Press, Chicago.

Murcia, C. 1995. Edge effects in fragmented forests: Implications for conservation. *Trends in Ecology and Evolution* 10:58 – 62.

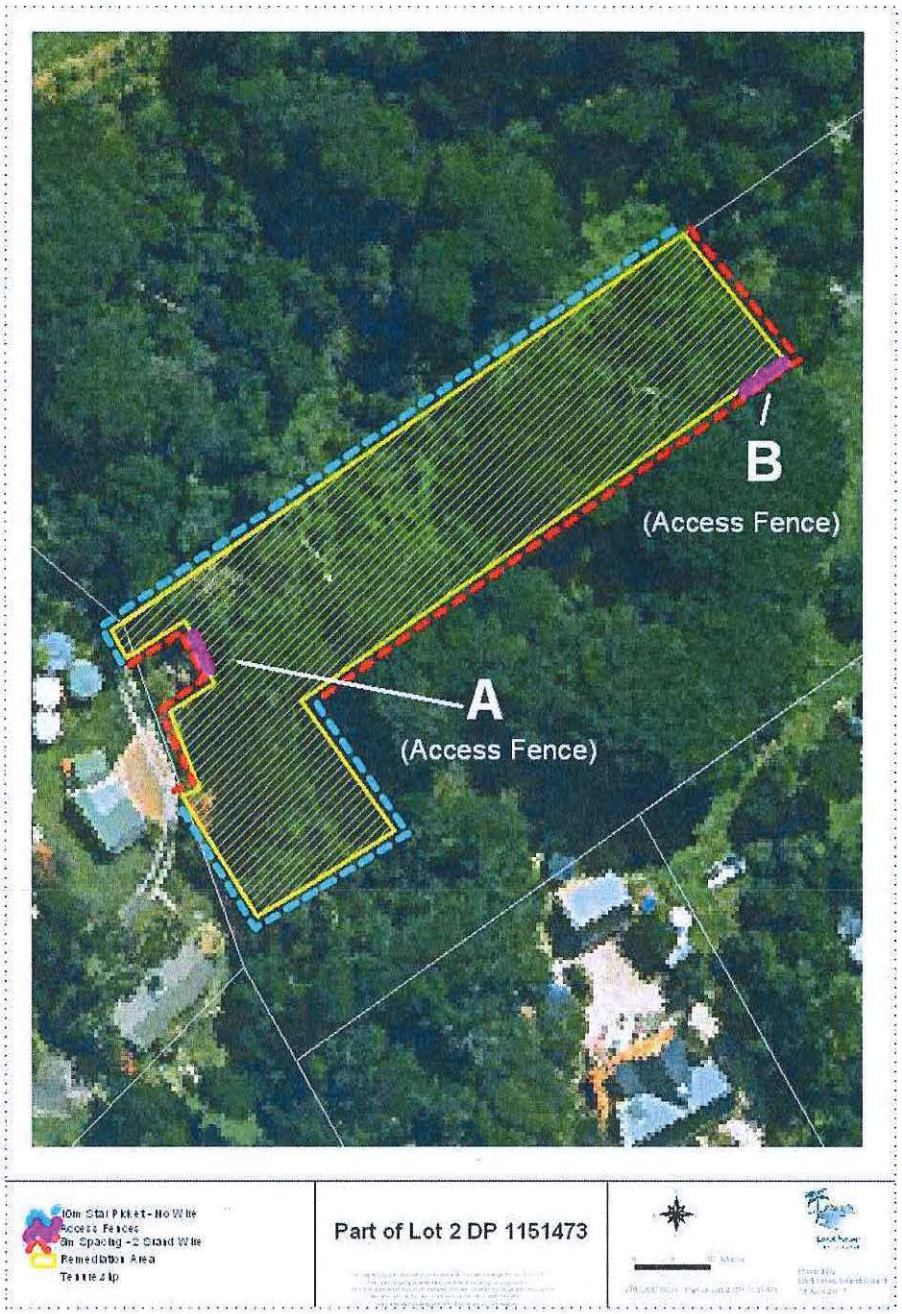
NSW National Parks and Wildlife Service, 2001. Lord Howe Island Placostylus *Placostylus bivaricosus* Recovery Plan. NPWS, Hurstville, NSW.

Ponder, W. and Chapman, R. 1999. Survey of the Land Snail *Placostylus bivaricosus* on Lord Howe Island. Unpublished report to NSW National Parks and Wildlife Service.

Turton, S.M. and Freiburger, H.J. 1997. Edge and Aspect Effects on the Microclimate of a Small Tropical Forest Remnant on the Atherton Tableland, Northeastern Australia. Pages 45 - 54 in W.F. Laurence and R.O. Bierregaard, Jr.,eds., *Tropical forest remnants: ecology, management, and conservation of fragmented communities.* The University of Chicago Press, Chicago.

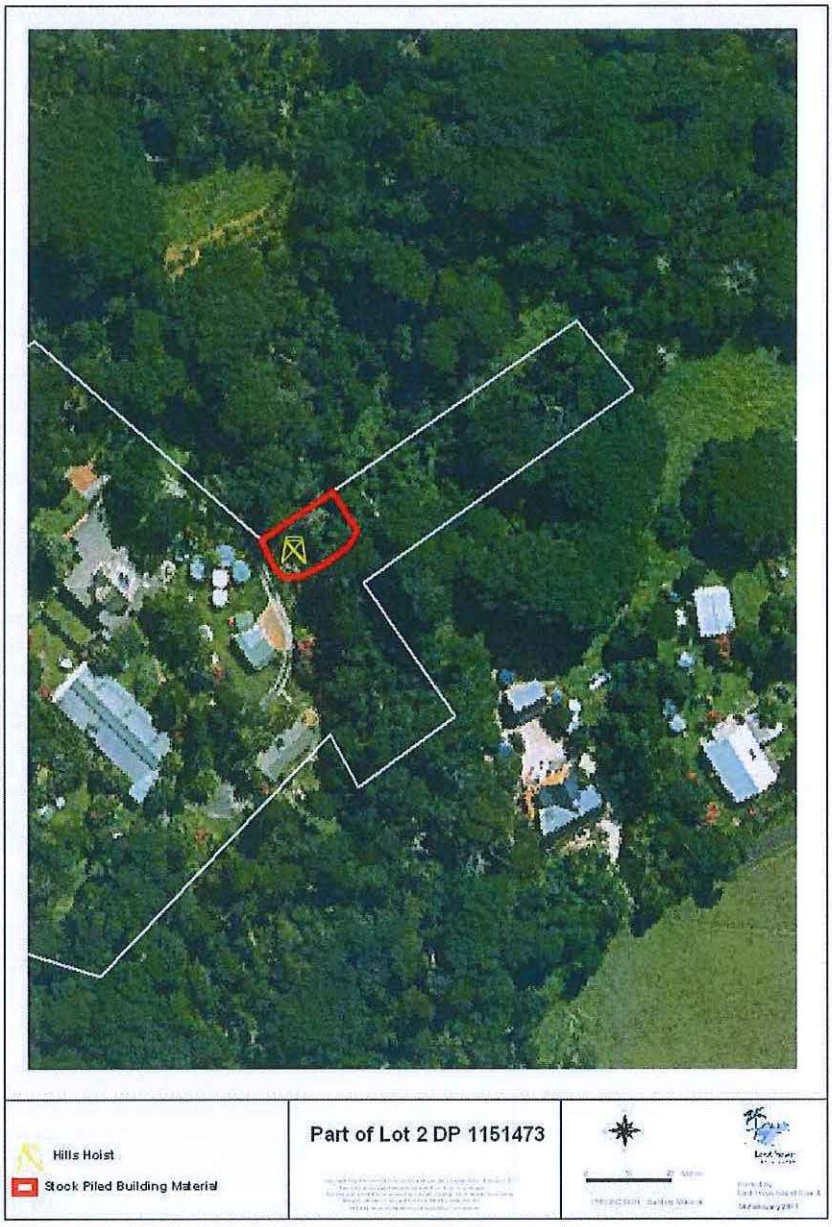
Attachment 4

Map of the Remediation Area and location of access fence and signs



Attachment 5

Map of particular points in the Remediation Area (stock piled building materials and hills hoist removal)



Attachment 6

Table 1: Exotic species to be controlled, outlining species known from the site and recommended control methods

Common Name	*Scientific Name*	known from site	Control methods
Bushmans Poison	*Acokanthera oblongifolia*		Cut, scrape & paint stump with Glyphosate and water 1:1. Cut stump as low to ground as possible and apply herbicide soon after cutting.
Crofton weed	*Ageratina adenophora*	Y	hand remove/knife out plant, ensure to remove all rootlets which can easily break and rapidly reshoot; or cut and paint stem with glyphosate & water at 1:1.5, or spot spray with glyphosate & water at 1:75 (13.3ml/L) or 1:100 (10ml/L) during good growing season, or metsulfuron methyl & water at 1.5g/10L.
Peruvian lily	*Alstroemeria pulchella*	Y	Hand dig up tuberous roots & rhizome & bag for disposal at tip. Foliar spray with glyphosate & water at 1:100 (10ml/L) & metsulfuron methyl & water at 1.5g/10L + non ionic surfactant (e.g. Pulse®). Can disperse vegetatively.
Madeira Vine	*Anredera cordifolia*	Y	**Tuberlings/tubers:** Hand remove tuber/tuberlings by carefully prizing up or excavating ground tuber. Bag all parts of the plant for disposal at tip. **Aerial vines:** Scrape vine to about 1/3 diameter of the stem and paint IMMEDIATELY with straight glyphosate (100%). Scrape from ground level working up the vine. Scrape at least 40cm sections at a time, scraping as much length of the vine as possible. This technique allows herbicide to translocate through the vine and impact the aerial tubers which will shrivel within a few months time. ***DO NOT sever the vine stem***, as it will stay alive in the tree, or will desiccate and the aerial tubers will remain alive, dropping to the ground over a period of time. ***Do not treat plant with herbicides when drought affected.*** **Ground tuber:** tubers attached to vines will regrow if they are not treated as part of the scrape and paint technique. Expose ground tuber and gouge or create wells and paint with glyphosate (100%). **Young plants and vines:** Foliar spray with glyphosate & water at 1:75 (13.3 ml/L) & metsulfuron methyl & water at 1.5g/10L + non ionic surfactant (e.g. Pulse®). (wet leaves and stems). Spraying of ground tuberlings may be undertaken as an initial step prior to vine treatment, to avoid trampling of tuberlings. Regular follow-up will be crucial for the effective control of Maderia Vine. In heavy infestations a 3 monthly treatment program will be required to address regrowth of tubers . Several years of regular follow up treatment is required to extirpate infestations. Can disperse vegetatively.

Ground Asparagus	*Asparagus aethiopicus*	**Y**	Crown out with knife or mattock. Remove foliage and water storage tubers and bag for composting or disposal off site. Foliar spray with glyphosate & water at 1:75 (13.3 ml/L) & metsulfuron methyl & water at 1.5g/10L + non ionic surfactant (e.g. Pulse®). Prior to spraying undertake site preparation and gather up or bundle loose foliage to reduce off target impacts. Spray foliage well and only spray when actively growing (not if drought stressed). NB: A few spray treatments may be required to effectively control large infestations. Spray applications are more effective between flower and fruit; and when actively growing. Corm can disperse vegetatively.
Bridal Creeper	*Asparagus asparegoides*		carefully dig up/prise up rhizome, ensure to remove all portions of the plant & compost. Foliar spray with glyphosate & water at 1:75 (13.3 ml/L) & metsulfuron methyl & water at 1.5g/10L + non ionic surfactant (e.g. Pulse®). Prior to spraying undertake site preparation and gather up or bundle loose foliage to reduce off target impacts. Spray foliage well and only spray when actively growing (not if drought stressed). NB: A few spray treatments may be required to effectively control large infestations. Spray applications are more effective between flower and fruit; and when actively growing. Corm can disperse vegetatively.
Climbing Asparagus	*Asparagus plumosus*	**Y**	**Seedlings/small plants:** hand weed by crowning out with knife ensuring to remove all sections of the rhizome and hang up to dry out or bag or compost off site. **Aerial vines:** foliar spray or snip & drip. **Snip & drip:** cut at head height then down low, cut and gouge rhizome and paint with glyphosate & water at 1:1.5. **Foliar Spray:** where practical bale up foliage for spraying. Foliar spray plant with glyphosate & water at 1:75 (13.3 ml/L) & metsulfuron methyl & water at 1.5g/10L + non ionic surfactant (e.g. Pulse®). NB: A few spray treatments may be required to effectively control large infestations. Spray applications are more effective between flower and fruit; and when actively growing. Corm can disperse vegetatively.
Mother of Millions	*Bryophyllum delagoense*		**Small infestations:** Hand pull, or as plant is in decline, cut and bag all foliage and desiccate. **Large infestations:** foliar spray with glyphosate & water at 1:50 (20ml/L) + surfactant &/ or metsulfuron methyl at 1.5gms/10L + non ionic surfactant. Spray foliage well. Propagation is known to occur from plantlets that develop on the leaves, and fall to the ground and establish. Regular follow-up required to control regeneration of small plantlets. Control plant prior to flowering. Can disperse vegetatively.
Resurrection Plant	*Bryophyllum pinnatum*	**Y**	**Small infestations:** Hand pull, or as

			plant is in decline, cut and bag all foliage and desiccate. **Large infestations:** foliar spray with glyphosate & water at 1:50 (20ml/L) + surfactant &/ or metsulfuron methyl at 1.5gms/10L + non ionic surfactant. Spray foliage well. Propagation is known to occur from plantlets that develop on the leaves, and fall to the ground and establish. Regular follow-up required to control regeneration of small plantlets. Control plant prior to flowering. Can disperse vegetatively.
Creeping Itchplant & Basket Plant	*Callisia repens & fragrans*		**Small infestations:** Hand remove, ensuring to prise up all rhizomes and rootlets, hangup to dry or dispose of material at tip. **Larger infestations:** Foliar spray with glyphosate & water at 1:50 (20ml/L) &/or metsulfuron methyl at 1.5g/10L + non ionic surfactant, cover foliage well. Repeated treatments may be required. As infestation declines, undertake hand removal of remaining segments. Can disperse vegetatively.
Canna Lilly	*Canna indica*		Dig up plant ensuring all seed is collected. Bag material for disposal at tip. Foliar spray with glyphosate & water at 1:100 (10ml/L) & metsulfuron methyl & water at 1.5g/10L + non ionic surfactant (e.g. Pulse®).
Night Jasmine/Lady of the night	*Cestrum nocturnum*	Y	Handpull or cut, scrape & paint stump, or stem inject with glyphosate & water at 1:1.5. Cut stump as low to ground as possible. Foliar spray small plants with glyphosate & water at 1:100 (10ml/L) + surfactant. Cover foliage well.
Cotoneaster	*Cotoneaster glaucophyllus*		Cut, scrape & paint stump with Glyphosate and water 1:1. Cut stump as low to ground as possible.
Cape Ivy	*Delairea odorata*		**Seedlings:** hand remove or spot spray. **Blanketing infestations:** foliar spray with glyphosate & water at 1:50 (20ml/L) + surfactant &/or metsulfuron methyl at 1.5g/10L + non ionic surfactant. **Aerial infestations:** Avoid severing stem as aerial portions can remain alive, trial spraying of lower foliage, where practical pull down all material and spray, or scrape and paint of stems with glyphosate at 1:1.5 + metsulfuron methyl & water at 10g/1L. NB: this plant readily propagates from segments of stem, therefore contain all vegetative material within management area. Can disperse vegetatively.
Coral Tree	*Erythrina X sykesii*		**Do not ringbark.** Drill & inject stump with Glyphosate & water at 1:4. Inject stump at waist height drilling holes at an angle. Spiral drill holes around the circumference of the stem, ensure the holes/ wells overlap. Refill holes if herbicide is being readily absorbed. Undertake stem injection when tree is in full foliage. Can disperse vegetatively.
Brazillian Cherry	*Eugenia uniflora*		**Seedlings:** Handpull or spot spray with metsulfuron methyl at 1.5g/10L of water

			+ non ionic surfactant & glyphosate & water at 1:50 (20ml/L). **Sapling/shrubs:** cut, scrape & paint or stem inject with glyphosate & water at 1:1.5 + metsulfuron methyl at 10g /1L.
Poincettia	*Euphorbia pulcherrima*	**Y**	Cut, scrape & paint stump with Glyphosate and water 1:1. Cut stump as low to ground as possible. Can disperse vegetatively.
Painted spurge	*Euphorbia cyathophora*		**Small infestations:** Handpull seedlings or saplings. **Large infestations:** spot spray with glyphosate & water at 1:100 (10ml/L) &/or metsulfuron methyl at 1.5g/10L + non ionic surfactant.
Glory Lily	*Gloriosa superba*		**Seed pods:** collect and destroy. **Seedlings and small infestations:** Carefully excavate/dig up all of the tubers and dispose at tip. Tubers are delicate and readily break up, therefore they must be excavated with caution, they are lateral growing and often form a network which can be well over 20cm deep. Spot spraying is also suitable for small infestation. **Large infestations:** foliar spray with glyphosate & water at 1:75 (13.3ml/L) + metsulfuron methyl at 1.5g/10L of water (with non ionic surfactant - Pulse®). NB: Two spray applications are advised for the growing season. Spray the new seasons regrowth in December and again in February, or later, prior to fruiting and seasonal decline. This is integral to impact the rhizome over time, exhausting the plants growth. Can disperse vegetatively from tubers.
Silky Oak	*Grevillea robusta*		Cut, scrape & paint stump with Glyphosate and water 1:1. Cut stump as low to ground as possible.
Hibiscus	*Hibiscus mutabilis*	**Y**	Cut, scrape & paint stump with Glyphosate and water 1:1. Cut stump as low to ground as possible.
Kahali Ginger	*Hedychium gardnerianum*		**Small infestations:** Bag seeds & destroy, cut back plant and dig up the rhizome and hang this up to dry. Larger infestations: trial foliar spray with glyphosate & water at 1:50 (20ml/L) &/or metsulfuron methyl (e.g. Brushkiller or Associate®) at 1.5g/10L + non ionic surfactant. Repeated treatments may be required. Spraying may weaken the plant to allow easier digging up of rhizomes. Trial slashing/cutting back dense foliage and scraping surface of rhizome, then spray or paint cut surfaces with metsulfuron methyl & water at 10g /1 L & / or glyphosate & water at 1:20 + sticker. Control before fruiting. Spray techniques may be more effective between flower and fruiting. Can disperse vegetatively from roots.
Freckle Face	*Hypoestes phyllostachya*		**Small infestations:** Hand remove by knifing out (avoid breaking lateral roots), or spot spray with metsulfuron methyl & water at 1.5g/10L + non ionic surfactant & glyphosate & water at 1:50 (20ml/L). **Large infestations:** foliar spray, cover foliage well. Follow up sprays in close

			succession will be required to control plant regrowth and the prolific regeneration of weed seed banks. Control prior to fruiting and when actively growing. Plant produces a prolific amount of tiny black seeds, which are readily dispersed by runoff and able to spread along drainage lines, and possibly spread by wind. Plants can reach reproductive maturity within a growing season.
Impatiens	*Impatiens walleriana*	**Y**	**Small infestations:** hand remove plants and dispose of at tip. NB: seed capsules are explosive, avoid spreading during hand removal, or spot spray. **Larger infestations:** foliar spray with glyphosate & water at 1:100 (10ml/L). Can disperse vegetatively.
Five-leaved Morning Glory	*Ipomea cairica*		Morning Glory/Ipomoea spp. infestations will require an integrated approach of treating aerial vines, blanketing foliage, runners and seedlings. In extensive blanketing infestations, foliar spray where practical then treat aerial vines (or visa-versa). Repeated treatments will be required which may include chasing up extensive lateral runners. **Seedlings:** carefully prise up or spot spray: **Runners:** gather and wind-up into bundles and hang up off the ground, spray regrowth. **Aerial vines:** cut vines at head height then down low to ground. Cut, scrape& paint basal portion of stem with metsulfuron methyl & water at 10g/L &/ or glyphosate & water at 1:1.5. **Blanketing infestations:** foliar spray well with metsulfuron methyl & water at 1.5g/10L &/ or glyphosate & water at 1:100 (10ml/L) with spray oil & non ionic surfactant.
Morning Glory	*Ipomoea indica*		Morning Glory/Ipomoea spp. infestations will require an integrated approach of treating aerial vines, blanketing foliage, runners and seedlings. In extensive blanketing infestations, foliar spray where practical then treat aerial vines (or visa-versa). Repeated treatments will be required which may include chasing up extensive lateral runners. **Seedlings:** carefully prise up or spot spray: **Runners:** gather and wind-up into bundles and hang up off the ground, spray regrowth. **Aerial vines:** cut vines at head height then down low to ground. Cut, scrape& paint basal portion of stem with metsulfuron methyl & water at 10g/L &/ or glyphosate & water at 1:1.5. **Blanketing infestations:** foliar spray well with metsulfuron methyl & water at 1.5g/10L &/ or glyphosate & water at 1:100 (10ml/L) with spray oil & non ionic surfactant.
Lantana	*Lantana camara*		Hand pull, or cut, scrape & paint stump with glyphosate & water at 1:1.5,

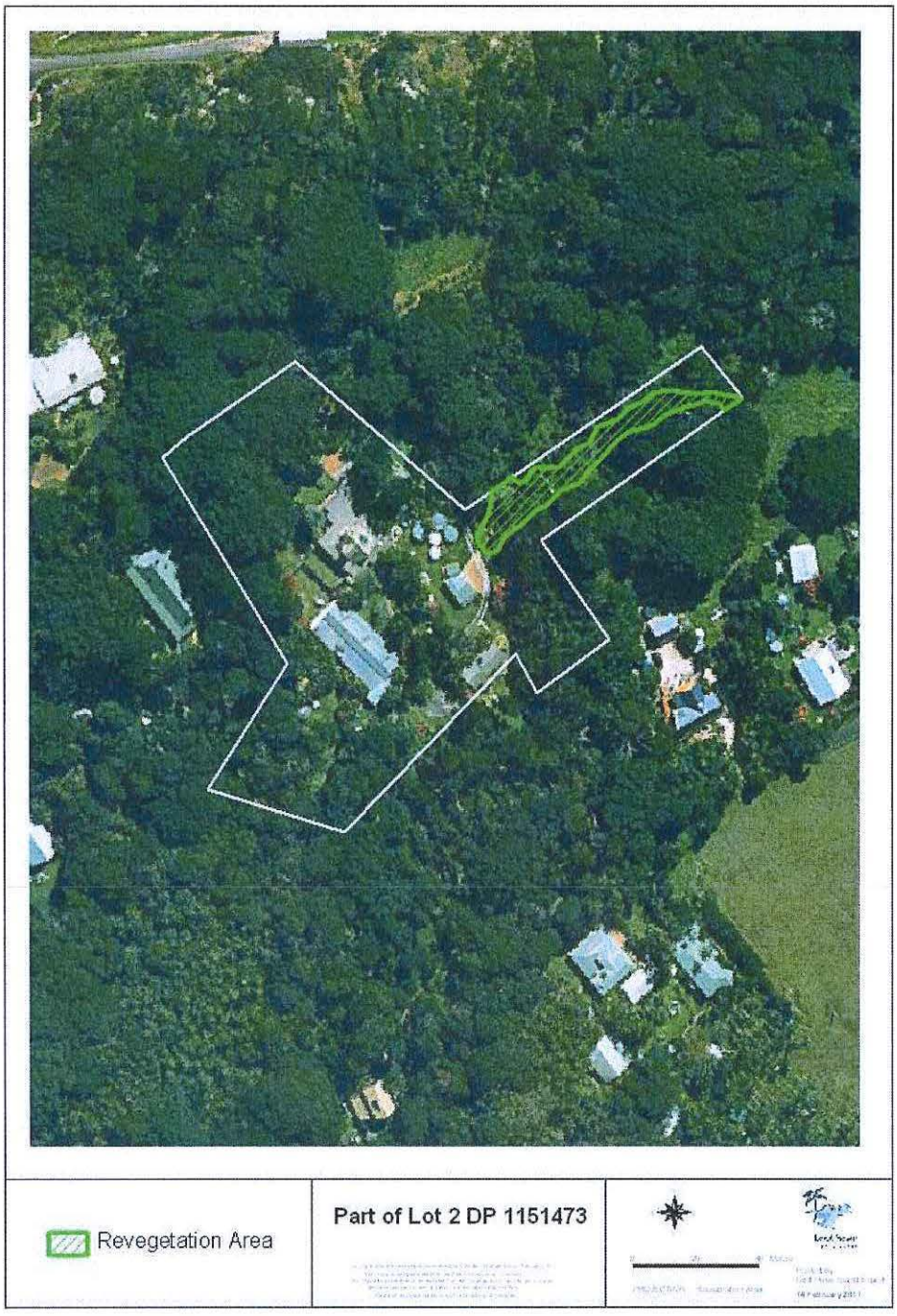
			Foliar spray: with glyphosate & water at 1:100 (10ml/L) + surfactant, ensure to cover foliage well. Can disperse vegetatively in moist conditions.
Small-leaved Privet	*Ligustrum sinense*		Cut, scrape & paint stump or stem inject with Glyphosate and water 1:1.5. Cut stump as low to ground as possible. Can disperse vegetatively in moist conditions.
Tiger Lily	*Lilium formosanum*		**Small infestations:** carefully dig out bulb and bulb segments, which can readily break apart from the main bulb. Collect seed capsules, bulbs and dispose at tip. Hand pulling does not control the plant as bulbs will remain in the soil, but it will prevent a seasons flowering. **Dense infestations:** Foliar spray plant with glyphosate & water at 1:50 (20ml/L) &/or metsulfuron methyl & water at 1.5g/10L with non ionic surfactant, or paint/drip applications of metsulfuron methyl & water at 10g/L or glyphosate & water at 1:20 (50ml/L). Can disperse vegetatively from bulb.
African Box Thorn	*Lycium ferocissimum*		Cut, scrape & paint stump or stem inject with glyphosate & water at 1:1.5 + metsulfuron methyl at 1.5g/10L of water. Young plants foliar spray with glyphosate & water at 7ml/L with spray oil & non ionic surfactant.
White Cedar	*Melia azederach var. australasica*		Cut, scrape & paint stump or stem inject with Glyphosate and water 1:1. Cut stump as low to ground as possible.
Fruit Salad Plant	*Monstera deliciosa*	**Y**	hand pull and dispose at tip Can disperse vegetatively.
Macho fern	*Nephrolepis biserrata*	**Y**	hand pull and dispose at tip or foliar spray with glyphosate & water at 1:75 (13.3ml/L) + metsulfuron methyl at 1.5g/10L of water (with non ionic surfactant - Pulse®). Can disperse vegetatively from roots.
Mickey Mouse Plant/Ochna	*Ochna serrulata*		Cut, scrape & paint stem with glyphosate and water 1:1.5 + metsulfuron methyl at 10g /1 L,
African Olive	*Olea europaea subsp. cuspidata*		Seedlings/saplings: carefully handpull or cut, scrape and paint stump with glyphosate & water at 1:1.5, or spot spray with metsulfuron methyl at 1.5g/10L + non ionic surfactant &/or glyphosate & water at 1:50 (20ml/L) + surfactant. Shrubs/trees: Cut ,scrape & paint or stem inject with glyphosate & water at 1:1.5. If stem injected plants sucker add metsulfuron methyl & water at 10g/L to injection mix.
Asthma Plant	*Parietaria judaica*	**Y**	hand pull and dispose at tip or foliar spray with glyphosate & water at 1:75 (13.3ml/L) + metsulfuron methyl at 1.5g/10L of water (with non ionic surfactant - Pulse®).
Holly Fern	*Phanerophlebia falcata*		hand pull and dispose at tip or foliar spray with glyphosate & water at 1:75 (13.3ml/L) + metsulfuron methyl at 1.5g/10L of water (with non ionic surfactant - Pulse®).
Cape gooseberry	*Physalis peruviana*	**Y**	hand pull or foliar spray with glyphosate

			& water at 1:75 (13.3ml/L) + metsulfuron methyl at 1.5g/10L of water (with non ionic surfactant - Pulse®).
Sweet Pittosporum	*Pittosporum undulatum*		Cut, scrape & paint stump or stem inject with Glyphosate and water 1:1. Cut stump as low to ground as possible.
Cherry Guava	*Psidium cattleianum var. cattleianum*		Cut, scrape & paint stump with Garlon 100%
Guava	*Psidium guajava*		Cut, scrape & paint stump with Glyphosate and water 1:1.5+ metsulfuron methyl at 1.5g/10L of water. Cut stump as low to ground as possible.
Castor Oil Plant	*Ricinus communis*		Cut, scrape & paint stump with Glyphosate and water 1:1.5. Cut stump as low to ground as possible.
Roldana	*Roldana petasitis*		Cut, scrape & paint stump with Glyphosate and water 1:1. Cut stump as low to ground as possible. Foliar spray dense infestations with glyphosate & water at 1:75 (13.3ml/L) + metsulfuron methyl at 1.5g/10L of water (with non ionic surfactant - Pulse®). Can disperse vegetatively.
Mothers In Law Tongue	*Sanseviera trifasciata*		Hand pull and dispose at tip, or foliar spray with glyphosate & water at 1:50 (20ml/L) + surfactant &/ or metsulfuron methyl at 1.5gms/10L + non ionic surfactant. Spray foliage well. Can disperse vegetatively.
Umbrella Tree	*Schefflera actinophylla*		Cut, scrape & paint stump or inject with Glyphosate and water 1:1.5. Cut stump as low to ground as possible.
Winter Senna	*Senna pendula* var. *glabrata*		Cut, scrape & paint stump or inject large stems with Glyphosate and water 1:1.5. Cut stump as low to ground as possible.
Smooth Senna	*Senna septemtrionalis*		Cut, scrape & paint stump with Glyphosate and water 1:1. Cut stump as low to ground as possible.
Tobacco Bush	*Solanum mauritianum*		Cut, scrape & paint stump or inject large stems with Glyphosate and water 1:1.5. Cut stump as low to ground as possible.
Singapore Daisy	*Sphagneticola trilobata*		Foliar spray with glyphosate & water at 1:75 (13.3ml/L) + metsulfuron methyl at 1.5g/10L of water (with non ionic surfactant - Pulse®) when actively growing. Do not treat when drought stressed. Can disperse vegetatively.
Wandering Jew/Trad	*Tradescantia fluminensis*		Foliar spray with glyphosate & water at 1:75 (13.3ml/L) + metsulfuron methyl at 1.5g/10L of water (with non ionic surfactant - Pulse®) during winter or when actively growing. Do not treat when drought stressed. Repeated treatments will be required to extiropate infestations. Can disperse vegetatively.
Striped Wandering Jew/Striped Trad	*Tradescantia zebrina*		Foliar spray with glyphosate & water at 1:75 (13.3ml/L) + metsulfuron methyl at 1.5g/10L of water (with non ionic surfactant - Pulse®) during winter or when actively growing. Do not treat when drought stressed. Repeated treatments will be required to extiropate infestations. Can disperse vegetatively.
Periwinkle	*Vinca major*		Foliar spray with glyphosate & water at 1:75 (13.3ml/L) + metsulfuron methyl at 1.5g/10L of water (with non ionic surfactant - Pulse®) during winter or when actively growing. Do not treat when

			drought stressed. Repeated treatments will be required to extiropate infestations. Can disperse vegetatively.
Various exotic soft annuals	*Bidens, Conzya etc*	**Y**	Foliar spray with glyphosate & water at 1:100 (10ml/L).
Various exotic grasses (e.g. Kikuyu)	*Kikuyu, Buffalo, Erharta , Winter Grass etc*	**Y**	Foliar spray with glyphosate & water at 1:100 (10ml/L).

Attachment 7

Map of cleared area identifying revegetation area



Attachment 8

Table 2: Species for planting in revegetation area

Common Name	*Scientific Name*	number to be planted
Punkwood	*Pisonia brunoniana*	10
Berrywood	*Ochrosia elliptica*	25
Banyan	*Ficus macrophylla* subsp. *columnaris*	1
Green Plum	*Atractrocarpus stipularis*	5
Brush Bloodwood	*Baloghia inophylla*	5
Cottonwood	*Celtis conferta* subsp. *amblyphylla*	20
Blackbutt	*Cryptocarya triplinervis* var *triplinervis*	25
Greybark	*Drypetes delpanchei* subsp.*affinis*	25
Tamana	*Elaeodendron curtipendulum*	15
Maulwood	*Olea paniculuta*	20
Axe-handle wood	*Pouteria myrsinoides* subsp. *reticulata*	10
	Alyxia lindii	4
Prickly Alyxia/Christmas Bush	*Alyxia ruscifolia*	15
Goatwood	*Coprosma prisca*	5
Hopwood	*Dodonea viscose ssp. burmanniana*	10
Bleeding Heart/Dogwood	*Homolanthus populifolius*	10
Sallywood	*Lagunaria pattersonia* subsp. *pattersonia*	30
LHI Jasmine	*Jasminum didymium* subsp. *didymum*	10
Island Pine	*Polyscias cissodendron*	5

Attachment 9

Monthly Work Records Sheet Pro-forma

Location:

Dates worked:

Name of employees & hrs worked:

Weather conditions for each day worked:

Description of work/direction searched:

Weeds controlled:

Species controlled	Method used

Herbicide Use Records	Spraying Conditions
Date: Operators names: Start & finish time: Application method: (dripper bottle, spray pack, injector kit, splatter gun): Chemicals, ratios & total quantity: Comments/site description/area worked: Chemical batch number:	Wind direction Wind speed Temp Humidity Cloud cover Time since rain Time before rain Other comments

Herbicide Use Records	Spraying Conditions
Date: **Operators names:**	**Wind direction**
Start & finish time:	**Wind speed**
Application method: (dripper bottle, spray pack, injector kit, splatter gun):	**Temp**
	Humidity
Chemicals, ratios & total quantity:	**Cloud cover**
	Time since rain
Comments/site description/area worked:	**Time before rain**
	Other comments
Chemical batch number:	

Herbicide Use Records	Spraying Conditions
Date: **Operators names:**	**Wind direction**
Start & finish time:	**Wind speed**
Application method: (dripper bottle, spray pack, injector kit, splatter gun):	**Temp**
	Humidity
Chemicals, ratios & total quantity:	**Cloud cover**
	Time since rain
Comments/site description/area worked:	**Time before rain**
	Other comments
Chemical batch number:	

Herbicide Use Records	Spraying Conditions
Date: **Operators names:**	**Wind direction**
Start & finish time:	**Wind speed**
Application method: (dripper bottle, spray pack, injector kit, splatter gun):	**Temp**
	Humidity
Chemicals, ratios & total quantity:	**Cloud cover**
	Time since rain
Comments/site description/area worked:	**Time before rain**
	Other comments
Chemical batch number:	

Ecological notes:
Fruiting of weeds or natives:

Threatened plants (No. of seedlings, juveniles, matures) GPS records /general site description & note plant health

Sketch map of area/s worked and dominant weeds treated

Other notes:

Attachment 10

Monitoring Report Format.

The monitoring report must provide the following.

- A sketch map of the remediation area showing extent of weed coverage at the commencement and end of each reporting period.
- An overview of works undertaken during the reporting period outlining success and failures and recommendations for rectifying failures for following reporting period.
- Compilation of all Daily Work Record Sheets for the reporting period in chronological order.
- Compilation of all invoices for works conducted for the reporting period.
- Compilation of photos at 3 permanent photo monitoring points and submission of pro-forma's for each photo point. A mud map showing the location of permanent photo points must be included. Permanent photo points must be marked with a capped galvanised star picket and left in place for the duration of the direction.
- Photo point # 1 is to be located in the clearing on the western edge of Lot 2 and take three photo's, 1 facing north east, 1 facing north west and 1 facing south east.
- Photo point # 2 is to be located in the centre of the clearing of Lot 2 and take 4 photo's, 1 facing north west, 1 facing north east, 1 facing south east & 1 facing south west, all focussed to the property boundaries.
- Photo point #3 is to be located in the clearing on the eastern edge of Lot 2 and take 4 photo's, 1 facing south west, 1 facing north west, 1 facing north east & 1 facing south east.
- All photos are to be taken from on top of the photo point picket and focus toward the property boundaries but include foreground elements. Photos must be taken on the same day and approximately the same time.

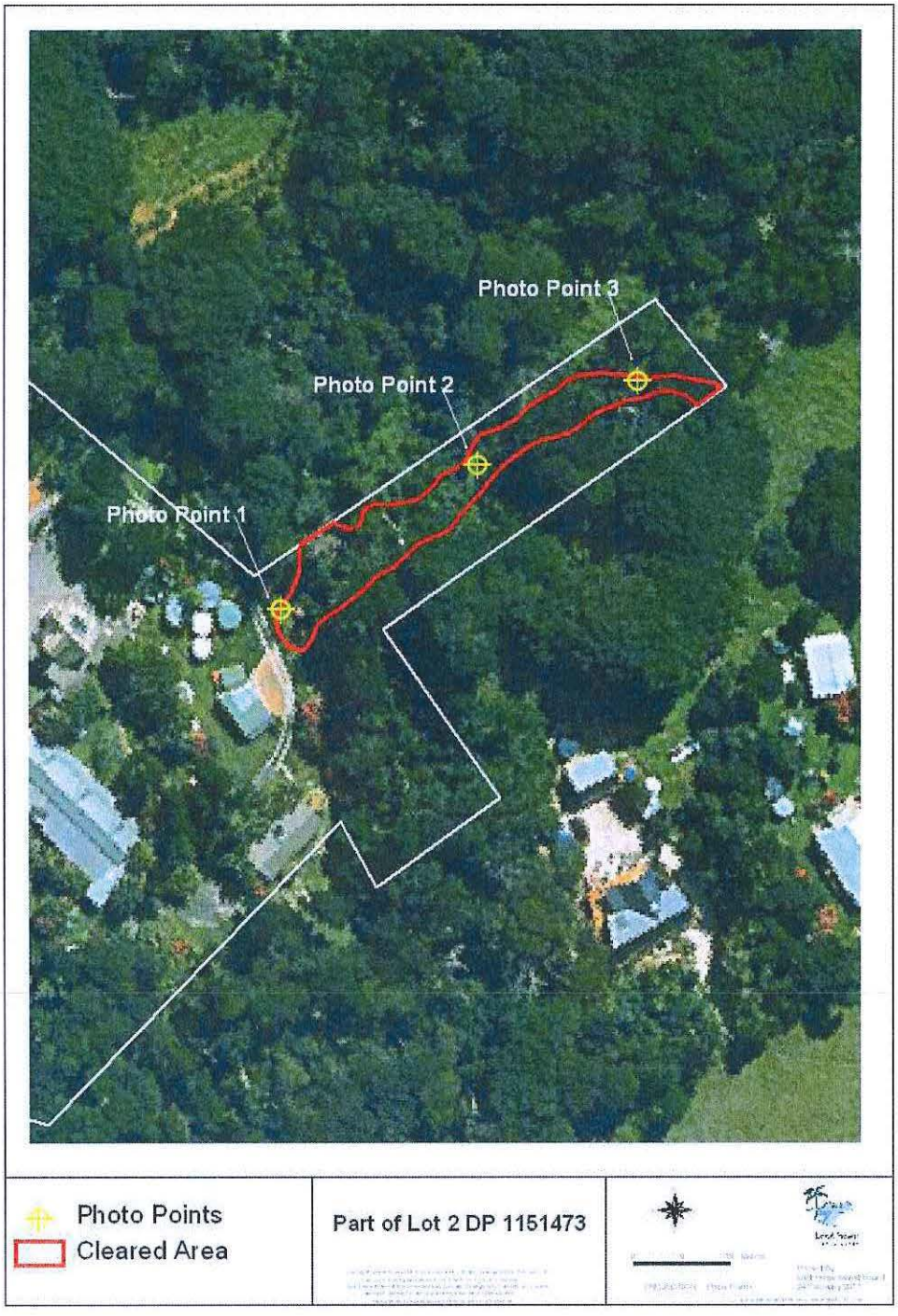


Photo Point 3
Photo Point 2
Photo Point 1
Photo Points
Cleared Area
Part of Lot 2 DP 1151473

Standardised label for Photo Points

Photo Point Number (#1, #2 or #3):

Photo number for each Photo Point:

Photo Point #1.

1- north east
2- north west
3- south east

Photo Point #2.

1-north west
2-north east
3-south east
4-south west

Photo Point #3.

1-south west
2-north west
3-north east
4-south east

Date:

Time:

Persons name.

Attachment 11

Lord Howe Island Board Rat Baiting Schedule 2011

The calendar below shows when rat stations will be serviced. In order to maximise the effectiveness of this program we are asking all people who place bait out to do so at the same time as the Board are servicing the stations.

Rat Bait will be provided from the Board one week prior to and during the scheduled baiting period. Please bring a container with you and we will provide the correct amount of bait for the number of stations that you have. For further information contact the Rangers at the Board.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Jan	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Feb	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28			
Mar	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
April	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
May	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
June	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
July	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Aug	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Sep	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Oct	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Nov	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Dec	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Remember : 1 cup of poison only per station each baiting period for maximum effect.

Attachment 12

Location and photos of the *Cryptocarya triplinervis* va.r *triplinervis* tree to be felled as per Direction 5.

Photo 1: *Cryptocarya triplinervis* var. *triplinervis* identified in Direction 5 for felling

Photo 2: *Cryptocarya triplinervis* var. *triplinervis* identified in Direction 5 for felling, red arrow showing direction the tree is to be felled.

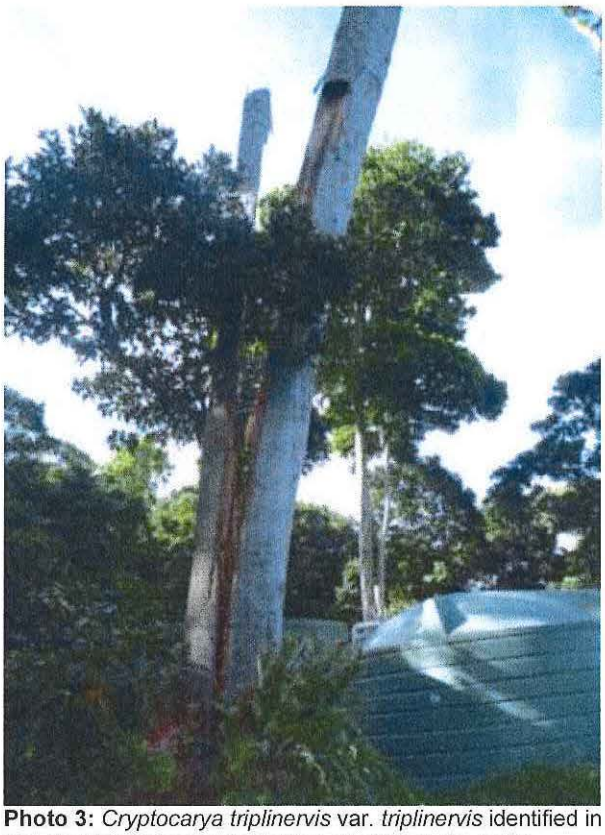


Photo 3: *Cryptocarya triplinervis* var. *triplinervis* identified in Direction 5 for felling, showing proximity to tanks. The weight of the tree is leaning away from the tanks.