

# Cobaki Planning Agreement

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The Minister for the Environment and Heritage

Secretary of the Department of Planning and  
Environment

Cobaki Estates Pty Limited



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# Cobaki Planning Agreement

Dated 15 September 2022

## Parties

1. **The Minister for the Environment and Heritage** and the **Secretary of the Department of Planning and Environment** (ABN 20 770 707 468) of 4 Parramatta Square, 12 Darcy Street, Parramatta New South Wales (*together the Minister*)
2. **Cobaki Estates Pty Limited** (ACN 058 793 114) of Suite 14, Level 1, 46 Cavill Avenue, Surfers Paradise, Queensland (**the Developer**)

## Background

- A. The Developer owns the Land.
- B. The Land is the subject of the Concept Plan Approval.
- C. Commitment 4.8.1 of Schedule 3 to the Concept Plan Approval envisages that the Minister will enter into a planning agreement to offset the impact of the Development on existing trees within the Scribbly Gum Reserve on the Land.
- D. The Minister has agreed to enter into this Agreement because the Minister is satisfied that the relevant terms of commitment 4.8.1 of Schedule 3 to Concept Plan Approval are fulfilled by this Agreement.

## Operative provisions

### 1. Defined meanings

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Words used in this Agreement and the rules of interpretation that apply are set out and explained in the definitions and interpretation clause at the back of this Agreement.

### 2. Status of this Agreement

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#### 2.1 Planning Agreement

This Agreement is a planning agreement within the meaning of section 7.4(1) of the Act.

#### 2.2 Land

This Agreement applies to the Land.

### **2.3 Development**

This Agreement applies to the Development.

### **2.4 Operation**

This Agreement commences on the date that it is signed by all the parties.

### **2.5 No obligation**

Despite any other provision of this Agreement, the Developer is under no obligation to make any Development Contribution in accordance with this Agreement unless the relevant circumstances set out in this Agreement as to when the Development Contribution must be made have arisen.

### **2.6 Enforcement of the Agreement**

The Minister is satisfied this Agreement provides for the enforcement of this Agreement by a suitable means.

### **2.7 Kings Forest Planning Agreement**

The parties acknowledge that the Minister will not enter into this Agreement unless the Minister also concurrently enters into the Kings Forest Planning Agreement.

## **3. Application of other development contribution provisions**

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### **3.1 Local infrastructure contributions - general**

- (a) This Agreement does not exclude the application of section 7.11 of the Act to the Development.
- (b) The benefits under this Agreement are not to be taken into consideration in determining a development contribution under section 7.11 of the Act.

### **3.2 Local infrastructure contributions - fixed levies**

This Agreement does not exclude the application of section 7.12 of the Act to the Development.

### **3.3 Special infrastructure contributions**

This Agreement does not exclude the application of section 7.24 of the Act.

## **4. Development Contributions**

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### **4.1 Developer to provide Development Contribution**

The Developer must make the Development Contribution in Column 3 of the Table at the point in time set out in Column 5 of the Table.



## **4.2 Public purpose of the Development Contributions**

- (a) The Development Contribution must be used for or applied towards the relevant public purpose set out in Column 4 of the Table.
- (b) Despite clause 4.2(a), the Minister may apply the Development Contribution made under this Agreement towards a public purpose other than the relevant public purpose set out in Column 4 of the Table if:
  - (i) at least five years has elapsed since the Development Contribution has been made; and
  - (ii) the Minister reasonably considers that the public interest would be better served by applying the Development Contribution towards that other purpose.
- (c) This clause 4.2 has effect after the termination of this Agreement.

## **5. Making of a monetary Development Contribution**

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A monetary Development Contribution is taken to have been made by the Developer when the Minister receives the full amount of the contribution payable:

- (a) in cash; or
- (b) by an unendorsed bank cheque; or
- (c) by a deposit, by means of electronic funds transfer, of cleared funds into a bank account nominated by the Minister.

## **6. Minister's warranty**

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### **6.1 The Minister's warranty in relation to the trees within the Scribbly Gum Reserve on the Land**

The Minister represents and warrants that:

- (a) the actions that the Developer has taken to plant and maintain Scribbly Gum species within the Kings Forest site;
- (b) any further actions required under the Scribbly Gum Restoration Plan (as applied under the Kings Forest Planning Agreement); and
- (c) the payment of a monetary contribution towards offsetting the loss of hollow-bearing trees within the Scribbly Gum Reserve on the Land,

are sufficient to offset the impact that the Development will have on existing trees within the Scribbly Gum Reserve on the Land.

Note: The parties recognise that prior to the date of this Agreement work was already carried out by the Developer generally in accordance with the Scribbly Gum Restoration Plan (as applied under the Kings Forest Planning Agreement). The parties do not intend that the Developer need to carry out the work merely because work (that has already been carried out) is referred to prospectively in the Scribbly Gum Restoration Plan. The parties acknowledge that as at the date of this Agreement the Developer has not completed the works required under the Scribbly Gum Restoration Plan.

## **7. Dispute resolution**

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### **7.1 Not commence**

- (a) A party must not commence any court proceedings relating to a dispute unless it complies with this clause 7.
- (b) For avoidance of doubt, clause 7.1(a) does not prevent class 1 proceedings (as set out in section 17 of the *Land and Environment Court Act 1979*) being commenced, maintained and concluded.

### **7.2 Written notice of dispute**

A party claiming that a dispute has arisen under or in relation to this Agreement must give written notice to the other party specifying the nature of the dispute.

### **7.3 Attempt to resolve**

On receipt of notice under clause 7.2, the parties must endeavour in good faith to resolve the dispute expeditiously using informal dispute resolution techniques such as mediation, expert evaluation or other techniques agreed by them.

### **7.4 Mediation**

If the parties do not agree within 21 days of receipt of notice under clause 7.2 (or any further period agreed in writing by them) as to:

- (a) the dispute resolution technique and procedures to be adopted;
- (b) the timetable for all steps in those procedures; or
- (c) the selection and compensation of the independent person required for such technique,

the parties must mediate the dispute in accordance with the Mediation Rules of the Law Society of NSW. The parties must request the president of the Law Society of NSW or the president's nominee to select the mediator and determine the mediator's remuneration.

### **7.5 Court proceedings**

If the dispute is not resolved within 60 days after notice is given under clause 7.2 then any party which has complied with the provisions of this clause 7 may in writing terminate any dispute resolution process undertaken under this clause and may then commence court proceedings in relation to the dispute.

### **7.6 Not use information**

The parties acknowledge the purpose of any exchange of information or documents or the making of any offer of settlement under this clause 7 is to attempt to settle the dispute. No party may use any information or documents obtained through any dispute resolution process undertaken under this clause 7 for any purpose other than in an attempt to settle the dispute.

## **7.7 No prejudice**

This clause 7 does not prejudice the right of a party to institute court proceedings for urgent injunctive or declaratory relief in relation to any matter arising out of or relating to this Deed.

## **8. GST**

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### **8.1 Interpretation**

In this clause 8:

- (a) except where the context suggests otherwise, terms used in this clause 8 have the meanings given to those terms by the GST Act (as amended from time to time);
- (b) any part of a supply that is treated as a separate supply for GST purposes (including attributing GST payable to tax periods) will be treated as a separate supply for the purposes of this clause 8; and
- (c) a reference to something done (including a supply made) by a party includes a reference to something done by any entity through which that party acts.

### **8.2 Intention of the parties**

Without limiting the operation of this clause 8, the parties intend that:

- (a) Divisions 81 and 82 of the GST Act apply to the supplies made under and in respect of this Agreement;
- (b) no tax invoices will be exchanged between the parties; and
- (c) no additional amounts will be payable on account of GST.

### **8.3 Reimbursement**

Any payment or reimbursement required to be made under this Agreement that is calculated by reference to a cost, expense, or other amount paid or incurred will be limited to the total cost, expense or amount less the amount of any input tax credit to which any entity is entitled for the acquisition to which the cost, expense or amount relates.

### **8.4 Consideration GST exclusive**

Unless otherwise expressly stated, all prices or other sums payable or consideration to be provided under this Agreement are exclusive of GST. Any consideration that is specified to be inclusive of GST must not be taken into account in calculating the GST payable in relation to a supply for the purposes of this clause 8.

### **8.5 Additional amount of GST payable**

Subject to clause 8.7, if GST becomes payable on any supply made by a party ("**Supplier**") under or in connection with this Agreement:

- (a) any party ("**Recipient**") that is required to provide consideration to the Supplier for that supply must pay an additional amount to the Supplier equal to the amount of GST payable on that supply ("**GST Amount**"), and:



- (i) where that GST Amount is payable by the Minister, the GST Amount will be limited to the amount of the input tax credit (if any) to which the Minister (or the representative member of any GST group of which the is a member) is entitled in relation to the Minister's acquisition of that supply and is payable within 5 Business Days after the Minister, in any capacity, is a member) has received the benefit of that input tax credit; and
  - (ii) in any other case, the GST Amount is payable at the same time as any other consideration is to be first provided for that supply; and
- (b) the Supplier must provide a tax invoice to the Recipient for that supply, no later than the time at which the GST Amount for that supply is to be paid in accordance with clause (a).

## 8.6 Variation

- (a) If the GST Amount properly payable in relation to a supply (as determined in accordance with clause 8.5 and clause 8.7), varies from the additional amount paid by the Recipient under clause 8.5, then the Supplier will provide a corresponding refund or credit to, or will be entitled to receive the amount of that variation from, the Recipient. Any payment, credit or refund under this clause 8.7(a) is deemed to be a payment, credit or refund of the GST Amount payable under clause 8.5(a).
- (b) The Supplier must issue an adjustment note to the Recipient in respect of any adjustment event occurring in relation to a supply made under or in connection with this Agreement as soon as reasonably practicable after the Supplier becomes aware of the adjustment event.

## 8.7 Exchange of non-monetary consideration

- (a) To the extent that the consideration provided for the Supplier's taxable supply to which clause 8.5 applies is a taxable supply made by the Recipient (the **"Recipient Supply"**), the GST Amount that would be otherwise be payable by the Recipient to the Supplier in accordance with clause 8.5 shall:
  - (i) if the Supplier is the Minister, be reduced by the amount of the input tax credit (if any) to which the Minister (or the representative member of any GST group of which the Minister, in any capacity, is a member) is entitled in relation to the Minister's acquisition of the Recipient Supply; and
  - (ii) in any other case, be reduced by the amount of GST payable by the Recipient on the Recipient Supply.
- (b) The Recipient must issue to the Supplier an invoice for any Recipient Supply on or before the time at which the Recipient must pay the GST Amount in accordance with clause 8.5 (or the time at which such GST Amount would have been payable in accordance with clause 8.5 but for the operation of clause 8.7(a)).

## 8.8 No merger

This clause will not merge on completion or termination of this Agreement.

## **9. General provisions**

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### **9.1 Costs**

- (a) The Developer is to pay to the Minister the Minister's reasonable costs of negotiating, preparing, notifying, executing this Agreement, and any document related to this Agreement within 7 days of a written demand by the Minister for such payment.
- (b) These costs cannot exceed the specific amount(s) disclosed to the Developer prior to the execution of this Agreement by the Developer.
- (c) The Developer is also to pay to the Minister the Minister's reasonable costs of enforcing this Agreement (where there has been an actual breach of the Agreement) within 7 days of a written demand by the Minister for such payment.

### **9.2 Duties**

The party at law to pay stamp duty, must promptly, within the initial applicable period prescribed by law, pay any duty payable in relation to the execution, performance and registration of this Agreement, or any agreement or document executed or effected under this Agreement.

### **9.3 Notices**

- (a) Any notice to or by a party under this Agreement must be in writing and signed by the sender or, if a corporate party, an authorised officer of the sender.
- (b) Any notice, document or thing may be given or served by post or email to the address of the recipient specified in this provision or most recently notified by the recipient to the sender.

Addresses for notices, documents or things:

**The Minister for the Environment and Heritage and the Secretary of the Department of Planning and Environment:**

[npws.northcoastbranch@environment.nsw.gov.au](mailto:npws.northcoastbranch@environment.nsw.gov.au); or  
The Minister for the Environment and Heritage  
Locked Bay 5022  
Parramatta NSW 2124

**The Developer**

[brandon.yeats@ledaholdings.com.au](mailto:brandon.yeats@ledaholdings.com.au); or  
Cobaki Estates Pty Limited  
PO Box 1914  
Surfers Paradise QLD 4217

### **9.4 Governing law and jurisdiction**

- (a) This Agreement is governed by and construed under the law in the State of New South Wales.

- (b) Any legal action in relation to this Agreement against any party or its property may be brought in any court of competent jurisdiction in the State of New South Wales.
- (c) Each party by execution of this Agreement irrevocably, generally and unconditionally submits to the non-exclusive jurisdiction of any court specified in this provision in relation to both itself and its property.

#### **9.5 Third parties**

This Agreement confers rights only upon a person expressed to be a party and not upon any other person.

#### **9.6 Pre-contractual negotiation**

This Agreement:

- (a) expresses and incorporates the entire agreement between the parties in relation to its subject matter, and all the terms of that agreement; and
- (b) supersedes and excludes any prior or collateral negotiation, understanding, communication or agreement by or between the parties in relation to that subject matter or any term of that agreement.

#### **9.7 Further assurance**

Each party must execute any document and perform any action necessary to give full effect to this Agreement, whether before or after performance of this Agreement.

#### **9.8 Continuing performance**

- (a) The provisions of this Agreement do not merge with any action performed or document executed by any party for the purposes of performance of this Agreement.
- (b) Any representation in this Agreement survives the execution of any document for the purposes of, and continues after, performance of this Agreement.
- (c) Any indemnity agreed by any party under this Agreement:
  - (i) constitutes a liability of that party separate and independent from any other liability of that party under this Agreement or any other agreement; and
  - (ii) survives and continues after performance of this Agreement.

#### **9.9 Waivers**

Any failure by any party to exercise any right under this Agreement does not operate as a waiver and the single or partial exercise of any right by that party does not preclude any other or further exercise of that or any other right by that party.

#### **9.10 Remedies**

The rights of a party under this Agreement are cumulative and not exclusive of any rights provided by law.



#### **9.11 Severability**

Any provision of this Agreement which is invalid in any jurisdiction is invalid in that jurisdiction to that extent, without invalidating or affecting the remaining provisions of this Agreement or the validity of that provision in any other jurisdiction.

#### **9.12 Counterparts**

This Agreement may be executed in any number of counterparts, all of which taken together are deemed to constitute one and the same document.

#### **9.13 Party acting as trustee**

If a party enters into this Agreement as trustee of a trust, that party and its successors as trustee of the trust will be liable under this Agreement in its own right and as trustee of the trust. Nothing releases the party from any liability in its personal capacity. The party warrants that at the date of this Agreement:

- (a) all the powers and discretions conferred by the deed establishing the trust are capable of being validly exercised by the party as trustee and have not been varied or revoked and the trust is a valid and subsisting trust;
- (b) the party is the sole trustee of the trust and has full and unfettered power under the terms of the deed establishing the trust to enter into and be bound by this Agreement on behalf of the trust and that this Agreement is being executed and entered into as part of the due and proper administration of the trust and for the benefit of the beneficiaries of the trust;
- (c) no restriction on the party's right of indemnity out of, or lien over, the trust's assets exists or will be created or permitted to exist and that right will have priority over the right of the beneficiaries to the trust's assets.

#### **9.14 Validity of this Agreement**

- (a) No party is to commence or maintain, or cause to be commenced or maintained, any proceedings in the Land and Environment Court concerning:
  - (i) the validity of this Agreement; or
  - (ii) the granting or modifying of any Development Consent to the extent that the Development Consent was granted or modified having regard to the existence of this Agreement.
- (b) If this Agreement or any part of it becomes unenforceable or invalid as a result of any change to a law, the parties are to co-operate and do all things necessary to ensure that an enforceable agreement of the same or similar effect to this Agreement is entered into.

#### **9.15 Electronic Execution**

- (a) Each party consents to this Agreement and any variations of this Agreement being signed by electronic signature by the methods set out in this clause.
- (b) This clause applies regardless of the type of legal entity of the parties. If this Agreement or any subsequent variations are signed on behalf of a legal entity, the persons signing warrant that they have the authority to sign.

- (c) For the purposes of this clause, the parties agree that the following methods validly identify the person signing and indicate that person's intention to sign this Agreement and any variation of it:
- (i) insertion of an image (including a scanned image) of the person's own unique signature on to the Agreement;
  - (ii) insertion of the person's name on to the Agreement; or
  - (iii) use of a stylus or touch finger or a touch screen to sign the Agreement,
- provided that in each of the above cases, words to the effect of 'Electronic signature of me, [NAME], affixed by me on [DATE]' are also included on the Agreement;
- (iv) use of a reliable electronic signature and exchange platform (such as DocuSign or AdobeSign) to sign the Agreement; or
  - (v) as otherwise agreed in writing (including via email) between the parties.
- (d) The parties agree that the above methods are reliable as appropriate for the purpose of signing this Agreement and that electronic signing of this Agreement by or on behalf of a party indicates that party's intention to be bound.
- (e) A signed copy of this Agreement transmitted by email or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original executed copy of this Agreement for all purposes.

## 10. Definitions and interpretation

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### 10.1 Definitions

In this Agreement unless the context otherwise requires:

**Act** means the *Environmental Planning and Assessment Act 1979*;

**Agreement** or **this Agreement** means this Deed and includes any schedules, annexures and appendices to this Deed;

**Approval** includes approval, consent, licence, permission or the like as in force for the time being;

**Authority** means the Commonwealth or New South Wales government, a Minister of the Crown, a government department, a public authority established by or under any Act, a council or county council constituted under the *Local Government Act 1993*, or a person or body exercising functions under any Act including a commission, panel, court, tribunal and the like;

**Business Day** means a day that is not a Saturday, Sunday, public holiday or bank holiday in New South Wales;

**Claims** includes actions, proceedings, suits, causes of action, arbitration, verdicts and judgments either at law or in equity or arising under a statute, debts, dues, demands, claims of any nature, costs and expenses;

**Concept Plan Approval** means concept plan approval 06\_0316 granted by the Minister for Planning on 19 August 2010 for the time being;

**Development** means the development of the Land for urban purposes;

**Development Consent** means:

- (a) a development consent (within the meaning of the Act); and
- (b) a project approval given under the former Part 3A provisions of the Act;

for the Development;

**Development Contribution** means any of the following:

- (a) a monetary contribution;
- (b) a dedication of land free of cost; or
- (c) the provision of any other material public benefit,

provided for in this Agreement and described in Schedule 1;

**GST** has the meaning given in the GST Act;

**GST Act** means *A New Tax System (Goods and Services Tax) Act (1999)* (Cth);

**Item** means the relevant or indicated item in the Table;

**Kings Forest Planning Agreement** means the draft planning agreement that has been negotiated between the Minister and Kings Forest Estates Pty Ltd (in relation to land known as the Kings Forest) and publicly notified in parallel with this Agreement;

**Land** means:

- (a) Lot 1 DP 570076;
- (b) Lot 2 DP 566529;
- (c) Lot 1 DP 562222;
- (d) Lot 1 DP 570077;
- (e) Lot 1 DP 823679;
- (f) Lot 1 DP 1169394; and
- (g) Lots 46, 54, 55, 199, 200, 201, 202, 205, 206, 209, 228 and 305 DP 755740;

**Regulation** means the *Environmental Planning and Assessment Regulation 2021*;

**Scribbly Gum Restoration Plan** means the document titled 'Scribbly Gum Offset Area Restoration Management Plan' prepared by Boyds Bay Environmental dated 6 December 2017, Ref 358C, version 3, as set out in Annexure A to this Agreement;

**Section 7.11 Contribution** means a development contribution under section 7.11 of the Act.

**Table** means the table set out in Schedule 1.



## 10.2 Interpretation

- (a) In this Agreement unless the context otherwise requires:
- (i) clause and subclause headings are for reference purposes only;
  - (ii) the singular includes the plural and vice versa;
  - (iii) words denoting any gender include all genders;
  - (iv) reference to a person includes any other entity recognised by law and vice versa;
  - (v) a reference to a party means a party to this Agreement, including their successors and assigns and a person bound by the Agreement under section 7.6(3) of the Act;
  - (vi) where a word or phrase is defined its other grammatical forms have a corresponding meaning;
  - (vii) any reference to any agreement or document includes that agreement or document as amended at any time;
  - (viii) the use of the word **includes** or **including** is not to be taken as limiting the meaning of the words preceding it;
  - (ix) the expression **at any time** includes reference to past, present and future time and the performance of any action from time to time;
  - (x) an agreement, representation or warranty on the part of two or more persons binds them jointly and severally;
  - (xi) an agreement, representation or warranty on the part of two or more persons is for the benefit of them jointly and severally;
  - (xii) any ambiguities in the interpretation of this Agreement shall not be construed against the drafting party.
  - (xiii) reference to an exhibit, annexure, attachment or schedule is a reference to the corresponding exhibit, annexure, attachment or schedule in this Agreement;
  - (xiv) reference to a provision described, prefaced or qualified by the name, heading or caption of a clause, subclause, paragraph, schedule, item, annexure, exhibit or attachment in this Agreement means a cross reference to that clause, subclause, paragraph, schedule, item, annexure, exhibit or attachment;
  - (xv) when a thing is required to be done or money required to be paid under this Agreement on a day which is not a Business Day, the thing must be done and the money paid on the immediately following Business Day; and
  - (xvi) reference to a statute includes all regulations and amendments to that statute and any statute passed in substitution for that statute or incorporating any of its provisions to the extent that they are incorporated.



- (b) Nothing in this Agreement is to be taken to require the Minister to do anything that would cause the Minister to be in breach of any of the Minister's statutory obligations.

### **10.3 No joint venture, etc**

Unless otherwise stated:

- (a) nothing in this Agreement creates a joint venture, partnership, or the relationship of principal and agent, or employee and employer between the parties; and
- (b) no party has the authority to bind any other party by any representation, declaration or admission, or to make any contract or commitment on behalf of any other party or to pledge any other party's credit.

### **10.4 No obligation to grant or modify a Development Consent**

- (a) This Agreement does not impose an obligation on any public authority to grant or modify any Development Consent.
- (b) For avoidance of doubt, clause 10.4(a) does not affect any obligation of a consent authority (under section 4.15(1)(a)(iiia) of the Act) to take this Agreement into consideration.

### **10.5 No breach, etc of a Development Consent**

Despite any other provision of this Agreement, this Agreement does not require, allow or preclude anything from being done if by so doing it would cause the Developer to:

- (a) be in breach; or
- (b) not fulfil a requirement,

of a Development Consent (or any applicable approval under the *Environment Protection and Biodiversity Conservation Act 1999*) in force and applying to the Land.

### **10.6 Explanatory Note**

In accordance with clause 205 of the Regulation the explanatory note must not be used to assist in construing this Agreement.

**Schedule 1 – Development Contributions**

(Clause 4 and Clause 10.1)

**Table**

| Column 1                                  | Column 2                                                                                    | Column 3                                                                                                         | Column 4                                                | Column 5                                                                                                                                                                 |
|-------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Item Number                               | Name                                                                                        | Description                                                                                                      | Public purpose                                          | When contribution is required                                                                                                                                            |
| <b>Payment of a monetary contribution</b> |                                                                                             |                                                                                                                  |                                                         |                                                                                                                                                                          |
| 1                                         | Offsetting of the loss of hollow-bearing trees within the Scribbly Gum Reserve on the Land. | 1.1 \$54,294.48 towards offsetting the loss of hollow-bearing trees within the Scribbly Gum Reserve on the Land. | Conservation or enhancement of the natural environment. | <ul style="list-style-type: none"><li>On the commencement of this Agreement and prior to the removal of any trees within the Scribbly Gum Reserve on the Land.</li></ul> |

Executed as a deed.

Signed, sealed and delivered by the Minister for the Environment and Heritage in the presence of:

K. T.  
Witness

KEIRAN THOMAS  
Print name

4 PARRAMATTA SQUARE, 12 DARCY STREET PARRAMATTA NSW 2150  
Print address

Sharon Molloy  
Minister Ministers Delegate

SHARON MOLLOY  
Print name

Signed, sealed and delivered by the Secretary of the Department of Planning and Environment (ABN 20 770 707 468) in the presence of:

K. T.  
Witness

KEIRAN THOMAS  
Print name

4 PARRAMATTA SQUARE, 12 DARCY STREET PARRAMATTA NSW 2150  
Print address

David Conrad  
Secretary Secretary Delegate

David Conrad  
Print name

Signed, sealed and delivered on behalf of Cobaki Estates Pty Limited (ACN 058 793 114) in accordance with s127(1) of the Corporations Act 2001 (Cth) by:

William Ell  
Secretary/Director

William Ell  
Print name

William Robert Ell  
WR Ell

Robert Ell  
Director

Robert Ell  
Print name

Robert John Ell

## **Annexure A – Scribbly Gum Offset Area Restoration Management Plan**

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# Scribbly Gum Offset Area Restoration Management Plan



Location: Kings Forest, NSW

Prepared for PROJECT 28 PTY LTD

REF: 358C

Date: 06/12/2017

## Document Control Register

Client: LEDA

Job Manager: Morgan Hamilton

| Version no. | Date       | by              | Nature of Document         |
|-------------|------------|-----------------|----------------------------|
| 1           | 8/1/2016   | Morgan Hamilton | Draft for client comment   |
| 1.1         | 20/1/2016  | Morgan Hamilton | Draft for OEH comment      |
| 2           | 15/02/2016 | Morgan Hamilton | Incorporating OEH comments |
| 3           | 06/12/2017 | Dmitri Medvedko | Incorporating OEH comments |

Date: 06/12/2017

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## 1. Introduction

This plan provides restoration measures for the Scribbly Gum (*Eucalyptus racemosa*) offset area located at Kings Forest, NSW.

### 1.1 Background

A Scribbly Gum reserve area within what is today Precinct 8 at Cobaki Estate had its origin in recommendations contained in a report "*Flora and Fauna Assessment, James Warren December 1994*". In about 2009, during the course of the preparation of a Part 3A Concept Plan application for Cobaki Estate, the significant impact on the trees of termites infestation was recognised by the then DECCW. Having regard also for the isolated situation of the reserve area, the eventual removal of the trees with the provision of appropriate offsets was foreshadowed. The Concept Plan approval of December 2010 accordingly contained the following commitment with the Statement of Commitments:

*The proponent will enter into separate planning Agreements with DECCW for the offset of the following impacts: (the list included)*

- *On existing trees within the Scribbly Gum Reserve should this occur."*

Anticipating the Concept Plan approval and having made this commitment, Project 28, the proprietor of the Kings Forest lands, obtained the in-principle approval of NPWS of an area within Kings Forest where Scribbly Gums would be planted to provide the offset. Subsequent to such planting monitoring reports were produce twice annually, commencing in April 2011 with the most recent being that of September 2015.

The site was inspected by OEH in June 2015 and noted that additional restoration work (weed control and planting) would be required to ensure the overall vegetation community is in a healthy and selfsustaining condition able to transition to National Parks with minimal long-term maintenance inputs.

### 1.2 Aim & Objectives

The aim and objectives of this plan are:

- Provide restoration measures to be applied to the 2.55ha Scribbly Gum offset site leading up to the acceptance of the site by National Parks
- Provide weed control and infill plantings to create canopy cover, limit potential for weed impacts and trigger native plant successions



- Ensure the vegetation community is in a healthy and self-sustaining condition, to the satisfaction of OEH and able to transition to National Parks with minimal long-term maintenance inputs

## 2. Site Description

### Topography & Soils

The landscape is generally low lying and very flat. Elevation is approximately ~5 AHD. Soils are generally sandy, well drained and highly leached.

### Vegetation Description

Canopy layer vegetation is generally heath and regrowth open woodland throughout the majority of project area. Isolated mature *Eucalyptus racemosa* provide disconnected canopy cover with a height between 8-14m. Other small regrowth canopy species include *Lophostemon suaveolens* (swamp box) *Melaleuca quinquinervia* (broad-leaved paperbark), *Eucalyptus robusta* (swamp mahogany) and *Pinus elliotii* (slash pine).

The ground layers are dominated by exotic species including *Axonopus compressus* (broad-leaved carpet grass) *Setaria sphacelata* (South African pigeon grass) and native species including *Imperata cylindrica* (blady grass). The project area also contains coastal heath species including *Babingtonia similis* (twiggy heath myrtle) *Banksia spinulosa* (hairpin banksia), *Hakea* sp. and *Leucopogon parviflorus* (coast beard-heath).

The dominant grass weeds are *Andropogon virginicus* (whisky grass) and *Setaria sphacelata* (pigeon grass). Other weeds present include *Pinus elliotii* (Slash pine) *Conyza sumatrensis* (Tall fleabane), *Ageratina adenophora* (Crofton's weed) and *Baccharis halimifolia* (Groundsel bush).

### Landscape Context & Connectivity

The location of the offset planting provides connectivity between the intact vegetation to the east and to the west. The restoration activities are reducing exotic species cover and building connectivity between planted scribbly gums and existing native species (figure 2-1).

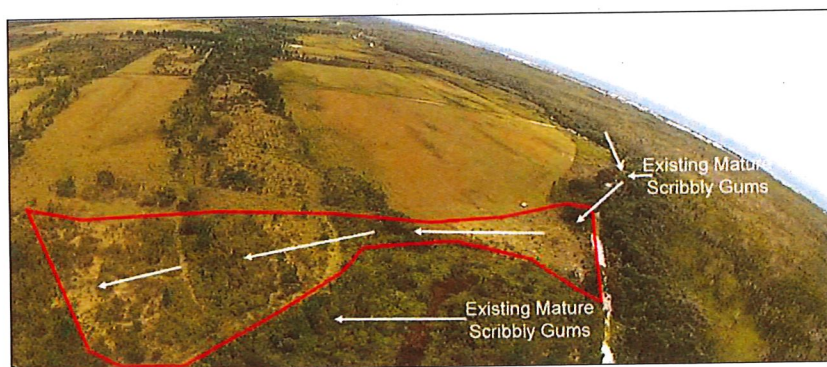


Figure 2-1: Connectivity between adjacent intact vegetation and the project area

### 3. Management Zones & Recommendations

Management zones have been allocated based on extent of disturbance, variations in vegetation and/or weed assemblages and variations in topography. Priority of management zones has been based on the distribution, density and diversity of weeds in each zone; seasonality, dispersal mechanisms and degree of invasiveness, statutory requirements and control difficulty.

The aim of the restoration management zones is to:

- Ensure the vegetation community is in a healthy and self-sustaining condition able to transition to National Parks with minimal long-term maintenance inputs.
- Treat all areas affected by exotic species;
- Maintain and create suitable conditions for native flora species successions;
- Improve habitat for native fauna; and
- Maintain conditions favourable for regeneration of natives;

Expected duration of works is 12 – 24 months from commencement, however results may vary based on weather patterns and rainfall received at the site. It is envisaged that the works will commence in April 2016 with expected completion by March 2019. An annual inspection by a representative of the Office of Environment and heritage will be undertaken to determine whether the vegetation community at the site has reached a healthy and self-sustaining condition.



### 3.1 Management zone 1

#### Description & works



Figure 3-1: Vegetation within management zone 1

- 0.66ha covering more open areas with appreciable exotic species cover (mostly grasses)
- Canopy weeds in this zone are mature (Slash Pine) *Pinus Elliotii* scattered through the zone in varying densities
- Mid-story weeds are mostly absent but scattered Crofton's Weed, juvenile Slash Pine and Groundsel Bush (*Baccharis halimifolia*) are present in minor patches.
- Ground layer weeds are mostly widespread mixed grasses exotic grasses including *Andropogon virginicus* (Whisky Grass), *Conyza sumatrensis* (Tall Fleabane) and *Setaria sphacelata* (Pigeon Grass)
- Access to management zone 1 is provided via the existing assess track/paddock via a locked gate.
- Commence works from the eastern boundary of the zone and systematically work through the zone treating all canopy, mid-storey and ground layer weeds by the appropriate methods outlined below.

## Planting

The restoration measures provided in this plan have been developed to ensure a healthy and self-sustaining vegetation community with minimal long term maintenance required.

The infill planting areas will be prepared by overspray of the weed affected area (particularly grasses) and a follow up spray approximately a month later.

Plants will be at 1.5 – 2m avoiding planting within the dripline of any existing native species. Forest mulch is to be installed in a 1m ring to 100mm depth around each plant.

Planting is proposed for late summer or early autumn to coincide with rain and avoid hot summer conditions. Plants will be sun hardened prior to delivery. Plants will be thoroughly watered on site prior to being installed and again on planting with a minimum of 5 litres per plant. Watering will continue on a weekly basis for the first month then as required depending on weather conditions.

The plants selected are characteristic of the surrounding vegetation community and have been recorded on site or adjacent to the site. Scribbly gums have been included in the planting to provide further species to offset loss of habitat values from the mature trees to be cleared at Cobaki.

Tubestock consists of trees/shrubs only as native groundcover species are expected to colonise the site naturally. Native seed dispersion from forested areas surrounding the restoration area should increase the diversity species onsite after establishment of planting and weed control.



|                                |                |     |
|--------------------------------|----------------|-----|
| <i>Acacia melanoxylon</i>      | Blackwood      | 240 |
| <i>Banksia integrifolia</i>    | Coast banksia  | 120 |
| <i>Eucalyptus racemosa</i>     | Scribbly gum   | 240 |
| <i>Eucalyptus robusta</i>      | Swamp mahogany | 240 |
| <i>Glochidion ferdinani</i>    | Cheese tree    | 120 |
| <i>Macaranga tanarius</i>      | Macaranga      | 120 |
| <i>Melaleuca quinquenervia</i> | Paperbark      | 240 |
| <i>Dodonaea triquetra</i>      | Hop bush       | 120 |
| <i>Elaeocarpus reticulatus</i> | Blueberry ash  | 120 |

Note: additional plants may be necessary to meet rehabilitation standards.

#### Recommended management actions

The following schedule provides a prioritized list of recommended management actions for the zone.

| Sequence of work | Action detail/description                                                                                                                                                 | Target outcomes                                                                                                                                         | Works schedule         | Indicative labour and materials requirements   |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------------------------------|
| 1                | <b>Primary works 0.67 ha</b><br>Cut, Scrape and Paint woody weeds <10cm stem diameter. Stem inject woody weeds >10cm diameter. Hand pull/cut, scrape and paint vine weeds | Reduce area affected by exotic species. Maintain and create conditions for native flora including endangered species. Improve habitat for native fauna. | Spring/summer          | 2 person days.<br>Drill and generator required |
| 2                | <b>Follow-up 0.67 ha</b><br>Treat any woody weed re-growth. Spot spray all exotic seedlings, including ground covers                                                      | As above. Provide conditions favourable for recruitment of native species. Improved habitat suitable for native fauna                                   | Summer/autumn          | 1 person days                                  |
| 3                | <b>Planting 0.67 ha</b>                                                                                                                                                   | Planting as described for the management zone                                                                                                           | Summer/autumn          | 10 person days<br>1560 plants<br>150m3 Mulch   |
| 3                | <b>Maintenance 0.67 ha</b><br>Spot spray any exotic seedlings/ ground covers                                                                                              | Consolidate work area. Maintain conditions favourable for regeneration of natives. Manage bushfire risk                                                 | Year round as required | 1 person days per quarter                      |

### 3.2 Management zone 2

#### Description & works



Figure 3-2: Vegetation within management zone 2

- 1.88ha covering more intact vegetated areas with majority native species cover
- Canopy weeds in this zone are mature (Slash Pine) *Pinus Elliotii* scattered through the zone in varying densities
- Mid-story weeds are mostly scattered Crofton's Weed, juvenile Slash Pine and Groundsel Bush (*Baccharis halimifolia*) present in minor patches.
- Ground layer weeds are mostly mixed grasses exotic grasses including *Andropogon virginicus* (whisky grass) and *Setaria sphacelata* (pigeon grass) present in dense patches in more open areas
- Access to management zone 2 is provided via the existing assess track/paddock via a locked gate.
- Commence works from the eastern boundary of the zone and systematically work through the zone treating all canopy, mid-storey and ground layer weeds by the appropriate methods outlined below.

## Recommended management actions

The following schedule provides a prioritized list of recommended management actions for the zone.

| Sequence of work | Action detail/description                                                                                                                                                                                        | Target outcomes                                                                                                                                               | Works schedule         | Indicative labour and materials requirements   |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------------------------------|
| 1                | <b>Primary works 1.88 ha</b><br>Cut, Scrape and Paint woody weeds <10cm stem diameter. Stem inject woody weeds >10cm diameter. Hand pull/cut, scrape and paint vine weeds. Spot Spray all grasses and soft weeds | Treat all areas affected by exotic species. Maintain and create conditions for native flora including endangered species.<br>Improve habitat for native fauna | Spring/summer          | 4 person days.<br>Drill and generator required |
| 2                | <b>Follow-up 1.88 ha</b><br>Treat any woody weed re-growth. Spot spray all exotic seedlings, including ground covers                                                                                             | As above. Provide conditions favourable for recruitment of native species. Improved habitat suitable for native fauna                                         | Summer/autumn          | 2 person days                                  |
| 3                | <b>Maintenance 1.88 ha</b><br>Spot spray any exotic seedlings/ ground covers                                                                                                                                     | Consolidate work area. Maintain conditions favourable for regeneration of natives                                                                             | Year round as required | 2 person days per quarter                      |

## 3.3 Restoration Management Plan





Management Zone 1 (0.67 ha)

Management Zone 2 (1.88ha)

Project Boundary

Existing Access track to be retained

Regional Office  
Forest Health Team  
NSW 2468

CLIENT  
LEDA DEVELOPMENTS

PROJECT  
KINGS FOREST

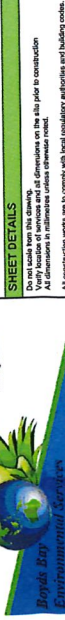
TITLE  
RESTORATION MANAGEMENT PLAN  
SCRIBBLY GUM OFFSET AREA

| REGISTER | Issue                     | Amendment | Date      | Checked |
|----------|---------------------------|-----------|-----------|---------|
| A        | Original                  |           | 14.1.2016 | BN      |
| B        | Include area calculations |           | 16.2.2016 | BN      |

DRAWING INFORMATION  
DESIGNER: MH  
DRAWN: MH  
DATE: 2.2.2016  
SCALE: Not to scale  
PROJECT NO: 359C  
DRAWING NO: 1  
ISSUE: B

NOTES

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### 3.4 Restoration Management Outcome

The measures provided in this restoration plan aim to create a healthy and self-sustaining vegetation community including a healthy population of *Eucalyptus racemosa* (Scribbly gum) with minimal long-term maintenance requirements. This will be achieved through various methods of weed control and planting of native species at densities that will aim to achieve canopy cover in the shortest possible time.

OEH will determine when revegetation has reached a self-maintaining state requiring limited ongoing management.

### 3.5 Monitoring and reporting

One photo monitoring point is to be established in each work zone with the location marked with a timber stake painted with high visibility paint. A monitoring report is to be produced every six months generally outlining the following:

- A brief discussion of works completed to date;
- Comparative photos from each work zone; and
- Any recommendations for adaptive work to suit changing conditions or priorities

## APPENDIX I – Weed Control Methods

# Weed Control Methods

Current best practice methods for weed control are described below.

Please note: (1) It is the responsibility of the herbicide user to hold an off-label permit (obtained from the National Registration Authority for Agricultural and Veterinary Chemicals) for herbicide use that is not consistent with conditions specified on the label; and (2) The methods and herbicide use rates provided below are current best practice methods. It is the responsibility of the operator to ensure methods used are current best practice and are suitable for the site and any environmental constraints experienced at the site.

## Cut-scrape-paint

This weed control method applies to all woody shrubs, trees and some vines.

- Cut plant low to the ground at an angle.
- Apply Glyphosate immediately at the rate of 1 part Glyphosate to 1.5 parts water, with a paintbrush approximately 1.5 centimetres wide.
- Scrape sides lightly to reveal green tissue and apply the herbicide to the scraped area.
- Take care that the brush is not contaminated with soil.
- Note - all seed that has high viability and longevity, e.g. *Senna spp.* and other members of the Fabaceae family, or plants with a high invasive potential, such as Umbrella Tree *Schefflera actinophylla*, must be removed from the parent and either composted on site or removed from the site.

## Gouge-paint

This weed control method applies to those plant species that have a fleshy root system, such as rhizomes or large bulbs. It is particularly appropriate for the treatment of *Asparagus spp.*

- Gouge out sections of the fleshy base with a knife (if using on *Asparagus*, first cut the stems at shoulder height and also at the base).
- Apply 1 part Glyphosate to 1.5 parts water immediately, with a paint brush approximately 1.5 centimetres wide.

## Stem Injection

This weed control method applies to all woody trees and shrubs with a diameter of about six to ten centimetres or greater.

- With a tomahawk, make a cut the width of the blade, at a slight angle, into the trunk. Note - it is important not to make cuts too deep.
- Apply herbicide immediately into the cut using a tree-injecting device (if using Glyphosate, apply at the rate of 1 part Glyphosate to 1.5 parts water).
- Repeat this procedure in a brickwork pattern around the circumference of the tree, as close to the ground as possible. Where the presence of a crotch angle makes this difficult, make a cut above it. Note - two rows of cuts will be sufficient for trees with trunks of six to ten centimetres; larger trunk diameters will need correspondingly more.
- Treat all visible lateral roots as per dot point 1.

## Scrape-ditch-paint

This weed control method is applicable to many species of vines where it is desirable to treat the vines intact, particularly those with aerial tubers such as Madeira Vine *Anredera cordifolia* or those which will propagate from segments, e.g. Cape Ivy *Delairia odorata*.

- Scrape the stem tissue on one side of the stem only for at least 20-30 centimetres if possible. Note - on Madeira Vine, it is necessary to scrape heavily. Scrape as many sections of the stem as possible.
- Apply undiluted Glyphosate with a paintbrush.
- On stems that are thicker or horizontal, make a ditch into the stem with a knife and apply herbicide. Tubers and side roots should be treated the same way. Note - care must be taken not to sever the stem.



## Spraying

This weed control method is carried out using a 15 litre backpack spray unit with a modified spray nozzle that gives a solid spray pattern. Glyphosate is the main herbicide used with the addition of a marker dye. For plants that show some resistance (e.g. Madeira Vine) or where growing conditions are not optimal, an acidifying agent, LI700®, is added. Metsulfuron methyl can also be used for resistant species and grasses. It should be used with a surfactant, such as Agral®.

Where both Glyphosate and Metsulfuron methyl are recommended for a species, it may be possible to use a commercially available compound of these two herbicides. This approach is currently under trial and is not suitable for operators unskilled in precision spraying.

Dilution rates for Glyphosate and Metsulfuron methyl are in accordance with the manufacturer's recommendations and any variation requires a permit from the National Registration Authority.

Dilution rates for Glyphosate to water for treatment of some weed species are provided below:

- Plants with more or less succulent leaves, e.g. Wandering Jew *Tradescantia fluminensis*, Madeira Vine *Anredera cordifolia* (autumn to winter is the suggested time for spraying these plants), Spider/Ribbon Plants *Chlorophytum* spp. etc - 1 part Glyphosate to 50 parts water + LI700® 0.5%
- Lantana *Lantana camara* - 1 part Glyphosate to 100 parts water
- Other soft-leaved plants, annuals and grasses - 1 part Glyphosate to 100 parts water
- Bitou Bush *Chrysanthemoides monilifera* subsp. *rotundata* - 1 part Glyphosate to 150 parts water to 1 part Glyphosate to 400 parts water

Typical dilution rates for Metsulfuron methyl to water are - 1.5g Metsulfuron methyl to 10 litres water + 20 millilitres Agral® to 10 litres water.

## Overspray

This weed control method is applicable to large, dense infestations of such plants as *Lantana camara*, where it is desirable to leave the dead plants intact to prevent erosion and over-exposure of large areas, protect native seedlings from predators such as wallabies, and avoid trampling by humans.

- Spray over the top of the infestation, using a weak solution of Glyphosate.
- Any native plants that may be under the weed will be protected by the foliage cover of the weed.
- Leave the sprayed plants intact so that native seedlings can establish under the shelter provided.
- The rate for overspraying of Lantana is 1 part Glyphosate to 100 parts water.

Alternatively, weeds can be cut and flattened with bush-hooks or loppers and the subsequent regrowth sprayed with Glyphosate. In many cases it is preferable to overspray wherever practicable as this will cause less erosion and trampling of suppressed native plants, such as ferns and seedlings. However, handwork will be necessary to cut-scrape-paint any unsprayed Bitou Bush or Lantana that surrounds native plants.

## Crowning

This weed control method is applicable to weeds which have their growing points below the surface of the ground (corms, bulbs, rhizomes, clumped or fibrous root systems, etc. e.g. *Asparagus* spp., *Chlorophytum comosum* and grasses).

- Grasp the leaves or stems and hold them tightly so that the base of the plant is visible. Plants with sharp leaves or stems should be cut back first.
- Insert the knife close to the base of the plant at a slight angle, with the tip well under the root system.
- Cut through the roots close to the base. Depending on the size of the plant, two or more cuts may be needed to sever all the roots.
- Remove the plant. Make sure that the base of the plant where the roots begin is completely removed.

Adapted from Joseph (2001)

## WEED CONTROL METHODS

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Taken from "Environmental Weeds of the Gold Coast: an Identification Guide"

### Hand removal of weeds

Hand removal of weeds is an option when the infestation is clustered in one small area or scattered throughout native species. Hand removal can be used to prepare an area prior to spot spraying, for example where native seedlings or sensitive plants exist.

A walk through a site prior to spraying and hand weeding around natives can allow better visibility during spray activities, minimising off-target damage.

Hand weeding is suitable for seedlings, herbaceous weeds and some grasses and is best carried out when the soil is moist. Prior to working an area, seeds and fruits of weed species can be bagged and moved off site to prevent further spread.

Note that some weeds such as lantana, umbrella tree, mistflower, ground asparagus and coastal morning glory can re-establish if their roots or growing parts are left in contact with moist soil. These weeds need to be hung up or elevated off the ground to dry out. If you are hand pulling weeds that grow vegetatively from fleshy parts or tubers they need to be carefully removed and disposed of in the garbage. For example succulents, some groundcovers, and madeira vine. Hand removal may not be suitable along banks or areas where erosion could occur.

### Crowning method

This method is suitable for weeds that have their growing points at ground level or below the surface such as plants with corms, bulbs, rhizomes, clumped or fibrous root systems. For example Asparagus sp. and grasses.

1. Cut climbing vines at head height and remove them from native plants carefully before again trimming them near ground level. Leave enough plant intact to perform the next stage.
2. Grasp the leaves or stems and hold them tightly and close to the ground so that the base of the plant is visible.
3. Insert a knife close to the base of the plant at a slight angle with the tip well under the root system.
4. Cut through the roots close to the base. Depending on the size of the plant two or more cuts may be needed to sever all the roots.
5. Remove the plant. Make sure that the base of the plant where the roots begin is completely removed.
6. Shake off excess soil and hang the rhizome or bulb up off the ground to prevent it from reshooting or remove it totally from site and dispose of it in an appropriate manner. Some grasses can be left on the ground to act as mulch.

### Herbicide control methods

The following information describes different weed control techniques using herbicide as well as some general pointers for use in agricultural non-crop situations and environmentally sensitive areas.

When selecting a suitable herbicide control method there are a number of factors to consider including:

- the type of herbicide appropriate for the job
- the recommended rate of herbicide use
- the aim of your weed control program or project
- correct identification of the weed(s) you are targeting



- the growth habit of the weed. This is important in deciding the application technique and product for its control
- the size and density of weeds you are targeting
- the type of application equipment you have access to
- whether the infestation is in an environmentally sensitive area
- how regularly can you follow up or maintain the area

### **When to treat with herbicides**

For best results, the following rules generally apply.

- Apply herbicides when the plant is actively growing.
- Do not apply the herbicide when the plant is under stress, for example extreme heat or cold, drought, water logging or diseased.
- Do not spray when wet or windy weather are anticipated, particularly with techniques such as over-spraying.

### **Cut-scrape and paint method**

This method is an extension of the cut stump treatment and applies to all woody shrubs, trees and some vines that are too small to be injected. Examples include groundsel bush, broad-leaved pepper tree and smaller camphor laurels to name a few.

1. Cut the plant low (approximately 1-2 centimetres above soil level) and level to the ground so the herbicide does not run off the cut.
2. Apply the herbicide immediately, at the recommended rate, with a paintbrush.
3. Lightly scrape the sides of the remaining stump with a knife to reveal green tissues and apply the herbicide, to the scraped area.
4. Other methods of application include swabbing the cut or immediately spraying the cut and sides with the correct rate of herbicide. Take care that the brush is not contaminated with soil.

### **Scrape and paint method**

This method is applicable to a number of species of vines where it is desirable to treat the vines in position, particularly those with aerial tubers such as madeira vine (*Anredera cordifolia*) or those which will propagate from segments.

1. Remove and bag tubers before scraping to avoid dislodging them during treatment.
2. Scrape the stem tissue on one side starting at the base of the stem (up to one metre if possible) before leaving a small gap (approximately five centimetres) and changing sides and scraping another one metre. In the case of madeira vine it is necessary to scrape heavily to expose the white inner tissue. Scrape as much of the stem as possible.
3. Apply undiluted herbicide with a paintbrush within seven seconds of first scraping the stem, that is scrape and paint in sections.
4. In the case of madeira vine it is essential that ground tubers and lateral roots are also treated with a heavy scrape and paint. If the tuber is of substantial size a gouge can be made into the tuber with a knife and herbicide applied. Any side roots must also be scraped and painted.

### **Gouge-paint method**

This method applies to those plant species that have a fleshy root system of rhizomes or large bulbs such as kahili ginger or canna lily.

1. Cut the stems off at ground level.



2. Gouge out sections of the fleshy base with a knife and liberally apply an appropriate herbicide solution.

### **Stem injection (drilling) method**

To treat larger woody weeds and shrubs a cordless drill or tomahawk can be used.

1. Drill or chisel holes around the base of the tree into the sapwood at a 45 degree angle at 5–10 centimetre intervals. The holes should be approximately four centimetres deep, though deeper holes may be drilled on larger specimens.
2. Within a few seconds of drilling each hole fill it with herbicide at the recommended rate.

Use this method only when falling branches will not be a safety hazard as the tree dies. This is especially important with Chinese celtis as they are known to fall within 6-12 months of injection.

Note that residents and landowners should refer to information on tree removal on the following pages before carrying out works on large shrubs or trees. Restrictions apply and City of Gold Coast approval may be required.

### **Low volume foliar spraying / spot-spraying**

This method uses low pressure to apply a herbicide and water mixture to target weed plants. This method is applicable to a wide variety of plant species. The plants need to be actively growing and not under stress for the herbicide to have the best effect.

In a natural area, spot-spraying using a modified spray nozzle that gives an accurate and easily adjustable spray pattern should be used to minimise off-target damage. Ensure thorough coverage of the plants is achieved. Penetration into larger thickets, of lantana for example, can be achieved by increasing the pressure in the pack and adjusting the nozzle stream.

David Giffel  
Sharon Mealey  
Hobo

David Em