



lismore  city council

Guidelines for the preparation of Vegetation Management Plans



Published by

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These guidelines have been prepared with the assistance of a variety of similar guidelines. Of particular benefit were the:

- Vegetation Management Plan Guide – Blue Mountains City Council
- Guidelines for the preparation of Vegetation Management and Restoration Plans 2008 – Hornsby Shire Council
- Guidelines for controlled activities – Riparian Corridors (May 2022) – Department of Planning and Environment

Review and revision

From time to time this Guide will be revised to ensure it stays current and reflects staff feedback.

Change Record

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Table of contents

1	What is a Vegetation Management Plan?	4
2	When is a Vegetation Management Plan required?	4
3	Who can prepare a Vegetation Management Plan?	5
4	Who can implement a Vegetation Management Plan?	5
5	What is the structure and content of a Vegetation Management Plan?	6
Appendix 1 - Requirements for the annotated site map/aerial photograph		14
Appendix 2 - Summary of management zones, objectives, activities and performance criteria		17

1. What is a Vegetation Management Plan?

A Vegetation Management Plan (VMP) is a document that describes how existing native vegetation or other environmentally sensitive areas on a development site will be managed to ensure its protection and enhancement. It demonstrates to Council that the proposed development will comply with DCP Chapter 14 Vegetation Management and relevant Local Environment Plan (LEP) objectives.

It provides a concise, site-specific description of the vegetation and impacts of the proposed development and it describes the immediate and long-term management of native vegetation on the subject site to ensure its protection and enhancement. The report includes site maps, schedules of activities with milestones and performance criteria to be met for bond refunds, and a description of monitoring and reporting methods.

A VMP is implemented over an agreed time period (typically 5 years) to manage the native vegetation on a development site and to remediate land clearing and land modification activities associated with development. The aim is for the native vegetation to be self-sustaining after the management period so that it continues to grow and evolve with minimal future input or threat of future disturbance.

Implementation of a VMP ensures ongoing sustainable management of native vegetation on the subject site, and that land clearing and land modification activities associated with a development are effectively remediated.

2. When is a Vegetation Management Plan required?

Vegetation Management Plans are needed to mitigate unavoidable impacts and where necessary offset residual impacts of development on the functions of vegetation communities and ecosystems.

A Vegetation Management Plan (VMP) will be required in any of the following circumstances:

- To manage threatened species, populations and communities, and critical habitat which may be impacted directly or indirectly by development,
- To manage koala habitat that may be directly or indirectly impacted by development (see the Comprehensive Koala Plan of Management 2013 for specific requirements which can be incorporated into a single VMP),
- To manage other High Conservation Value vegetation and habitat including scattered remnant trees which may be directly or indirectly impacted by development,
- Where the development involves the subdivision of land into >3 lots,
- For development involving a Rural Landsharing Community (Multiple Occupancy development or Community Title subdivision),
- When Vegetation Offsets are required to compensate for impacts on native vegetation and habitats, including unauthorised clearing,
- Additional vegetation management areas may be required under a Controlled Activity Approval pursuant to the *Water Management Act 2000*¹. Refer to the Office of Water's Guidelines for Riparian Corridors on Waterfront Land,
- Where otherwise required by Council.

¹ Controlled activities refer to work done on waterfront land as defined in the *Water Management Act 2000*. More information is available at <https://water.dpie.nsw.gov.au/our-work/licensing-and-trade/controlled-activity-approvals> and in the Office of Water's Controlled activities - Guidelines for riparian corridors on waterfront land https://water.dpie.nsw.gov.au/_data/assets/pdf_file/0008/386207/licensing_approvals_controlled_activities_riparian_corridors.pdf

Two example cases where a VMP may be required by Council:

Case 1

For proposed developments or subdivisions that are on or adjacent to sites that support or contain:

- Remnant native vegetation (including scattered remnant trees)
- Threatened native flora and fauna species, endangered ecological communities or their habitats²
- Permanent or ephemeral watercourses³
- Priority weeds⁴ under the *Biosecurity Act 2015*

Case 2

Council may require a VMP following unauthorised clearing of native vegetation without the relevant approval (or where that approval is pending) and where damage to native vegetation has occurred on a subject site as a result of poor site management.

To ensure the protection and appropriate management of vegetation on the subject site, Council may incorporate recommendations provided in a VMP into the Conditions of Consent.

The recommendations accepted by Council may also form the basis for restricting the land use or applying a positive covenant under Section 88B or 88E respectively of the *Conveyancing Act 1919*, which will subsequently fall into effect when the conditions of consent are issued and works onsite commence.

It is important to note that the VMP is linked³ to the subject site and applies to that specific site for the life of the proposed development for works commencing, during construction and following the completion of works.

3. Who can prepare a Vegetation Management Plan?

The VMP must be prepared by an environmental consultant or bush regenerator with theoretical and practical experience in native vegetation restoration and management, including weed control. In addition, the person preparing the plan would preferably have substantial experience relevant to the Lismore Local Government Area.

As a guide, an environmental consultant would need to hold relevant tertiary qualifications in ecology, environmental management or related discipline as well as considerable experience in the preparation of VMPs.

A bush regenerator would need to hold a Certificate III in Conservation and Ecosystem Management or equivalent, a minimum of 1000 hours of bush regeneration experience and preferably a higher qualification in ecology, environmental management or associated field.

4. Who can implement a Vegetation Management Plan?

Owing to the complexity of the regeneration/revegetation activities to be undertaken, the environmental sensitivity of the site or the necessity for works to be completed within a restricted time frame, suitably qualified personnel with relevant specialist skills are required to implement the VMP. Details of the experience and qualifications of the personnel would need to be provided to Council.

As a guide, Supervisors would be required to have a minimum of the Conservation and Ecosystem Management Certificate III, plus a minimum of 700 hours of practical bushland regeneration experience, significant supervisory experience and preferably a relevant higher qualification.

² Currently applicable threatened species and Endangered Ecological Communities are listed in the schedules of the *Biodiversity Conservation Act 2016* and the *Environmental Protection and Biodiversity Conservation Act 1999*.

³ *The Water Management Act 2000* states that watercourses and dependent ecosystems should be protected and restored.

⁴ As listed in the Local Land Services [Weeds of the North Coast of NSW – A guide to identification and control](#)

Those employed as trained regenerators would require a minimum of a Certificate II in Conservation and Ecosystem Management and 500 hours of practical bushland regeneration experience under an experienced supervisor.

All workers engaged in chemical weed control would be expected to have attained a minimum of AQF Level III in Chemical Application.

In some cases, the landholder may undertake some or all of the work with appropriate guidance, particularly when a plan establishes a strategy that runs over a number of years. This option should be identified in the plan and determinations can be made on a case-by-case basis. The landholder or proponent must be able to demonstrate relevant knowledge and experience in order to carry out the works.

5. What is the structure and content of a Vegetation Management Plan?

A VMP must address the following items (details of each are in the sections below):

1. Site description
2. Identify links to legislation, other plans and documents
3. Identify proposed management zones on the subject site
4. Determine aims, quantifiable objectives, activities to meet objectives and the performance criteria of the plan
5. Prepare a project work plan, schedule and budget
6. Define monitoring and reporting methods for each proposed management zone

Additional information may be required according to the nature of the proposed development and the requirements of key stakeholders. All VMPs are assessed by Council based on individual site-specific requirements.

The information included in a VMP should be presented in manageable sections that have a logical flow from one section to the next. The content of the plan needs to be concise, yet detailed enough to communicate all aspects of the plan to those people who will be implementing the plan and those who will be reviewing and approving the VMP's implementation. To improve readability, it is recommended that technical information (e.g. proposed weed control techniques or product specifications) is presented in appendices.

The suggested structure for a VMP is provided below. For each section, there is a table of minimum requirements with explanatory notes below. The information is presented as a checklist to assist in the preparation of a VMP and indicates how the VMP will be evaluated by Council.

Section 1: Site description

1.0	Site description	Completed
1.1	Briefly describe the nature of the proposed development.	<input type="checkbox"/>
1.2	Identify the location and extent of the site of the proposed development (subject site) to be covered by the VMP and any adjacent areas that are relevant to the plan.	<input type="checkbox"/>
1.3	Identify the Local Environment Plan zoning(s) of the subject site and adjacent areas.	<input type="checkbox"/>
1.4	Describe the type, extent and current condition of existing vegetation on the subject site. Describe the broader context of the existing vegetation on the subject site within its catchment and the landscape in general.	<input type="checkbox"/>
1.5	Detail any environmental constraints and any significant or sensitive environmental features of the subject site.	<input type="checkbox"/>

Include a map of the area covered in the VMP in relation to the development and surrounding area. The mapping tool on the Lismore City Council website⁵ is helpful in developing the site map.

The ‘current’ condition of the site should be detailed within a statement describing the current form, diversity, complexity, health and resilience of the native vegetation and environmentally sensitive areas covered by the VMP. The statement should be accompanied by a series of colour photographs taken at established reference points prior to works commencing.

Section 2 Links to legislation

2.0	Links to legislation, other plans and documents	Completed
2.1	Demonstrate how the VMP links to legislation, other plans and document that relate to the proposed development.	<input type="checkbox"/>

Recommendations contained within the VMP must be consistent with both State and Commonwealth legislation as well as local planning instruments, including the:

- *Environmental Planning and Assessment Act 1979*
- *Water Management Act 2000*
- *Biodiversity Conservation Act 2016*
- *Biosecurity Act 2015*
- *Fisheries Management Act 1994*
- *Rural Fires Act 1997*
- *Coastal Management Act 2016*
- State Environmental Planning Policy (Resilience and Hazards) 2021
- State Environmental Planning Policy (Biodiversity and Conservation) 2021
- State Environmental Planning Policy (Koala Habitat Protection) 2020
- *Environment Protection and Biodiversity Conservation Act 1999*
- North Coast Regional Plan 2041
- Lismore Local Environment Plan 2012 (LEP 2012)
- Lismore Local Environment Plan 2000 (LEP 2000)
- Lismore Development Control Plan
- Koala Plan of Management for South-East Lismore 2013
- Lismore Biodiversity Management Strategy 2015 - 2035

Examples of other plans and documents include, but are not limited to:

- Lismore Floodplain Risk Management Plan
- Lismore Urban Green Corridors Plan
- Coastal Zone Management Plan for the Richmond River Estuary
- Landscape Plan (for the subject site)
- Threatened species recovery plans
- Weed biosecurity information and guides

⁵ Intramaps mapping tool and guidance can be found here <https://www.lismore.nsw.gov.au/Building-and-planning/How-to-use-our-online-maps>



Section 3: Management Zones

3.0	Management Zones	Completed
3.1	Identify, describe and name all the proposed management zones on the subject site.	<input type="checkbox"/>
3.2	For each proposed management zone, identify and state the vegetation management issues that apply prior to works commencing, during construction and following the completion of works.	<input type="checkbox"/>
3.3	Prepare and include an annotated map/ aerial photograph that identifies all the proposed management zones on the subject site (see Appendix 1).	<input type="checkbox"/>

The management zones reflect features of the subject site or aspects of the proposed development. Examples include, but are not limited to:

- Remnant vegetation (include all vegetation communities, scattered trees, threatened species and associated buffer zones)
- Vegetation proposed to be retained and/or removed
- Proposed revegetation areas
- Watercourses (including the footprint of the riparian corridor and associated buffer zones⁶)
- Construction zone
- Inner and outer Asset Protection Zone (APZ)
- On-site effluent disposal infrastructure and wastewater disposal areas

⁶ An appropriate width for the riparian corridor should be identified in accordance with the guidelines for the *Water Management Act 2000, Controlled activities - Guidelines for riparian corridors on waterfront land (May 2022)*, NSW Department of Planning and Environment.

Section 4: Aims, objectives, activities and performance criteria

4.0	Aims, objectives, activities and performance criteria of the VMP	Completed
4.1	For each of the proposed management zones, determine and state the current condition of vegetation prior to works commencing and the target condition of vegetation following the full implementation of the VMP. The target condition for each of the proposed management zone becomes the aims of the project.	<input type="checkbox"/>
4.2	Determine and state the objectives for each of the proposed management zones (see Appendix 2).	<input type="checkbox"/>
4.3	Accomplishing each stated objective identified in the previous step generally requires specific project activities within each proposed management zone. For each objective, determine and describe the specific activities that will be undertaken to accomplish each stated objective (see Appendix 2).	<input type="checkbox"/>
4.4	For each objective, identify specific and measurable performance criteria and then state how the success of the activities proposed in the VMP will be assessed according to specific performance criteria (see Appendix 2).	<input type="checkbox"/>

Generally, the main objective of a VMP is to protect threatened species, endangered ecological communities and environmentally sensitive areas. However, objectives may also relate to the mitigation of the environmental impacts of the proposed development as well as a range of other management issues.

Areas of High Conservation Value, as described in the DCP Chapter 14, must generally be retained on-site. Removal of native trees requires a greater number of replacement trees to be planted, the number of trees required will be proportionate to the impact of the loss of mature trees including the time it takes to replace wildlife habitat, food and hollows. For sites within the Comprehensive Koala Plan of Management for southeast Lismore (CKPoM) area the VMP needs to be consistent with the requirements of the CKPoM, for example, maintaining and improving the quality of existing koala habitat. Excessive noise and light can affect ecologically sensitive areas and the design should aim to minimise these impacts.

Objectives for a VMP may include, but are not limited to:

- Limit human impacts on threatened flora and fauna species or ecological communities
- Retain native vegetation and trees that provide habitat for native fauna
- Retain and protect isolated paddock trees
- Protect and/or regenerate riparian areas
- Revegetate areas denuded of vegetation resulting from unauthorised clearing/ stormwater erosion/ overgrazing
- Stop grazing by stock in remnant native vegetation
- Remove priority weeds in a manner that is environmentally sustainable

Project activities and associated tasks (bulleted) relating to a VMP can include, but are not limited to:

General site management

- Erect temporary or permanent fence around vegetation and/or trees to be retained – include specifications of fence type.
- Remediate and/or prepare and/or stabilise soil prior to planting. Specify techniques e.g. scarifying, deep ripping, mulching, erosion matting, sterile cover crops, binding sprays etc.
- Stabilise soil and revegetate areas affected by temporary erosion and sedimentation controls.

Stormwater, wastewater and hydrological function management

- Erect erosion and sediment controls. Include specifications for type, location and maintenance, where relevant.
- Revegetate water sensitive urban design stormwater treatment areas or on-site effluent disposal areas. Specify the proposed schedule of local provenance⁷ nutrient tolerant species and planting density.
- Revegetate appropriately sized riparian zones emulating the ecotone of naturally occurring riparian vegetation⁸. Specify stabilisation measures, identify local provenance species to be planted and the planting density.

Regeneration, revegetation and weed control

- Regenerate vegetation through selective planting. Specify the proposed schedule of local provenance species and planting density.
- Revegetate buffer zone around ecologically sensitive vegetation. Specify the proposed schedule of local provenance nutrient and/or disturbance tolerant species and planting density.
- Restore and enhance fauna habitat and corridor connectivity by reinstating absent stratum elements. Specify canopy, mid-storey and/or groundcover to be planted.
- Control weeds in accordance with current guidelines and standards. Specify proposed control technique, removal strategies and priorities. Include details on timing, constraints, herbicides to be used and waste disposal.
- Enhance site recovery potential. Specify activities designed to enhance a site's recovery potential (e.g. brush matting, direct seeding, bushland regeneration techniques to stimulate spontaneous recovery).

Asset Protection Zone management

Outline detailed vegetation and soil management activities within an Asset Protection Zone. Include any ameliorative measures to limit impacts on threatened or locally significant flora or fauna species or ecological communities within the Asset Protection Zone. These activities include, but are not limited to:

- Remove/prune/slash/thin vegetation within the Asset Protection Zone. Specify the proposed extent of modification of existing vegetation being the minimum required to comply with Planning for Bushfire Protection 2019⁹.
- Retain elements of all stratum within the Asset Protection Zone. Specify how natural bushland values will be protected by representing all age classes and maintaining plant species diversity.
- Retain or provide fauna habitat features within the Asset Protection Zone. Specify the habitat features to be retained/provided (e.g. forage trees, habitat hollows and ground or shrub layer shelter) and how they will be identified and protected during site works.
- Retain native species and remove exotic species from Asset Protection Zone, where appropriate, specifying priority species for removal and retention.
- Reduce fuel load in Asset Protection Zone. Specify fuel reduction frequency, access management and method including machinery and equipment to be employed, and constraints to their use.
- Specify how mulch resulting from removal of native trees in Asset Protection Zone will be reused.
- Remove and dispose of mulch resulting from removal of exotic trees and weeds in Asset Protection Zone, indicating how mulch will be disposed of.

⁷ Locally indigenous native plant species

⁸ The VMP should consider the full width of the riparian corridor and its functions including accommodating fully structured native vegetation. Plantings should emulate the ecotone of vegetation naturally occurring or previously occurring on riparian land. Refer to the guidelines *Good practice in riparian rehabilitation* (NSW DPIE and the Natural Resources Commission, 2020), the *Richmond catchment species selection guide* (Local Land Services June 2023) and *Landscape Guidelines 2024* (Lismore City Council, 2024).

⁹ *Planning for Rural Fire Protection 2019*, NSW Rural Fire Service.

Performance criteria are expressed as either qualitative or quantitative statements that define how the success of the VMP in achieving the stated objectives will be determined. Performance criteria are field-checked by LCC staff periodically and upon VMP completion as per the conditions of consent. For works done on public land, or land that will become public land, bond releases are linked to the performance criteria. Performance criteria for a VMP may include, but are not limited to:

- Minimum of 90% survival rate for all plantings 12 months after establishment.
- Maximum of 5% weed cover for regenerated and revegetated areas 12 months after primary weeding.
- Species diversity and density of a revegetation zone emulates that of native vegetation five years after establishment.
- Exclusion fence to be completed within three months of the VMP approval.
- Specify the number, location and condition of the threatened plant species that are to be retained following the completion of works.

A summary of the objectives, activities and performance criteria of the VMP are also to be provided as per Table 2 in Appendix 2.

Prioritising Habitat Trees in Development Applications

Habitat trees are vital for wildlife, providing nesting sites, shelter, and food, as well as contributing to biodiversity and ecological health. Older and larger trees are especially valuable as they form hollows which are vital for several native species¹⁰. They offer more consistent sources of nectar and fruit and provide nesting and perching sites. They also contribute to fallen timber and leaf litter for ground layer habitats¹¹.

Designing a Vegetation Management Plan with Habitat Trees

When preparing a vegetation management plan, especially in the context of development, it is crucial to integrate habitat trees thoughtfully. Here are key considerations:

Assessment and Identification

Conduct thorough ecological assessments to identify existing habitat trees and assess their ecological value. This includes determining tree age, presence of hollows, and potential as a nesting site or food source. Engage qualified ecologists and arborists to ensure accurate evaluation and to determine the species that depend on these trees for survival¹².

Retention Strategies

Retain habitat trees wherever possible, particularly those with hollows or other significant ecological features. Establish buffer zones around habitat trees to protect them from construction activities and ensure that their root systems and surrounding vegetation remain undisturbed.

Habitat Enhancement

Where full retention is not feasible, consider creating “habitat stag trees” by retaining the trunk and significant branches while removing sections that pose safety risks¹³. These modified trees can still provide important habitat for various species. For species dependent on specific types of hollows, installing nesting boxes can be a suitable alternative to natural hollows.

Monitoring and Maintenance

Implement a monitoring program to observe and track the use of the hollows and or nest boxes.

Regularly inspect retained habitat trees for structural integrity and make adjustments as needed to balance safety with ecological benefits.

Legislation and Compliance

Be aware of local regulations regarding vegetation management. The State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 (Vegetation SEPP) provides guidelines on exemptions and requirements for tree removal¹⁴.

10 NSW Government- Office of Environment & Heritage- Conservation Management Notes

11 NSW Government- Office of Environment & Heritage- Conservation Management Notes

12 Mosman Council- Habitat Creation (Kieren O’Neil- Tree Management Officer)

13 Mosman Council- Habitat Creation (Kieren O’Neil- Tree Management Officer)

14 NSW Government- <https://www.koala.nsw.gov.au/sites/default/files/2024-02/council-as-decision-maker-dead-dying-trees-no11-190366.pdf>

Section 5: Schedule and budget

5.0	Project work plan, schedule and budget	Completed
5.1	Prepare and include a project work plan based on the activities identified in section 4.3.	<input type="checkbox"/>
5.2	Prepare and include a project schedule and Gantt chart.	<input type="checkbox"/>
5.3	Prepare and include a budget/ costing for the project based on the project work plan identified in section 5.1 above.	<input type="checkbox"/>

Generally, a VMP is implemented as part of a formal project structure. A VMP implementation project consists of work items represented by smaller sub-projects for each management zone (identified in section 3.2), activities (identified in section 4.3), tasks and milestones.

An activity is a group of related tasks and milestones aggregated at a summary level. A task is the smallest identifiable and essential piece of a job that serves as a unit of work. A milestone is a measurable progress marker that indicates the completion of a major project deliverable. Project activities, tasks and milestones should be defined and described in sufficient detail to fully communicate the nature of the particular management action.

A VMP implementation project work plan should be prepared based on the identified work items (i.e. sub-projects, activities, tasks and milestones). A project work plan is a hierarchical structure built of the work items that need to be carried out in order to meet the project’s objectives and schedule.

A budget for implementing the whole VMP should be prepared and included. The budget should reflect all sub-projects and the schedule of works for the duration of the VMP, including the cost of materials, labour, watering, maintenance, monitoring and reporting. The budget for each sub-project should be presented on an annual basis from the proposed commencement of the VMP.



Section 6: Monitoring and reporting

6.0	Monitoring and reporting	Completed
6.1	Specify the methods for evaluating the accomplishment of the objectives of the VMP according to the agreed performance criteria.	<input type="checkbox"/>
6.2	Describe the reporting frequency and content. Reports should include a brief description (with photographs) of progress against the performance criteria, and any difficulties encountered and corrective actions.	<input type="checkbox"/>

Describe the process for monitoring the progress toward accomplishing the VMP objectives. The process should include any remediation actions that may be needed in the case that performance criteria have not been met. For example, where survival of plantings is 80% and the target is 90%, replacing lost plants is an adaptive management action. Likewise adjusting weeding efforts, extra watering during drought, are examples of other adaptive management actions that may be undertaken to overcome difficulties in implementation. When reporting, include any adaptive management actions that were taken and justify why they were necessary.

Monitoring and reporting should be undertaken at 12-month intervals for the term of the VMP unless otherwise required by conditions of consent. For example, specific monitoring intervals may be required for season-dependant species such as Hairy Joint-Grass. This should be stipulated in the monitoring and evaluation plan.

Include photographs taken from predetermined photo points for each management zone. Identify these photo points by GPS coordinates for consistent monitoring and reporting purposes.

Council will assess the satisfactory completion of milestones in the VMP at mandatory inspections, including prior to issuing the Occupation or Subdivision Certificate and at other nominated times.



Appendix 1 – Requirements for the annotated site map/aerial photograph

The details that need to be included as part of the VMP's annotated site map/aerial photograph are described in Table 1, and an example of an annotated site map/aerial photograph is included in Figure 1. Lismore City Council has an online mapping tool for the Lismore Local Government Area to assist in developing the annotated site map.

Select the applicable items to be included on the annotated site map/aerial photograph. Items should relate to the VMP objectives and project tasks. Not all items will apply to all sites, however items marked with an asterisk must be included on all plans.

Table 1. Items to be identified on an annotated site map/aerial photograph.

Site definition	Completed
*Location and extent of the subject site for the purpose of the VMP	<input type="checkbox"/>
Map features	
*Legend, scale bar and north arrow	<input type="checkbox"/>
Site features	
*Management Zones as defined in section 2.0 of the VMP	<input type="checkbox"/>
Relevant environmental constraints and buffer areas	<input type="checkbox"/>
All areas of native vegetation on the subject site including the identity of each vegetation community, scattered trees, priority weeds, threatened species and associated buffer zones	<input type="checkbox"/>
Habitat features (e.g. watercourses, rock outcrops, soils, topography, biodiversity values?)	<input type="checkbox"/>
Adjacent areas where relevant (e.g. green corridors, ??)	<input type="checkbox"/>

Proposed construction and development works	
Footprint of structure and associated works (e.g. fencing, areas for storage of materials during construction)	<input type="checkbox"/>
Proposed location of exclusion fencing during the construction phase of the proposed development	<input type="checkbox"/>
Temporary access ways during construction	<input type="checkbox"/>
Location of any sediment and erosion control devices	<input type="checkbox"/>
On-site effluent disposal infrastructure and waste water disposal areas	<input type="checkbox"/>
Stormwater management features including proposed water tanks and overflow devices as well as any water sensitive urban design devices required or retention, filtration, infiltration and/or disposal	<input type="checkbox"/>
Extent of the Asset Protection Zone	<input type="checkbox"/>
Proposed vegetation management, regeneration and revegetation works	
Trees to be retained and protected and those to be removed	<input type="checkbox"/>
Areas of vegetation proposed to be managed	<input type="checkbox"/>
Areas for bush regeneration	<input type="checkbox"/>
Areas for revegetation	<input type="checkbox"/>
Areas of priority weeds requiring treatment	<input type="checkbox"/>
Areas for soil amendment and stabilisation	<input type="checkbox"/>
Areas of specific Asset Protection Zone maintenance activities	<input type="checkbox"/>
Other activities	<input type="checkbox"/>

*To be included on all plans

Figure 1. Example of an annotated site map/aerial photograph of the subject site, environmental features, management zones and proposed works. This figure is an example only and is not indicative of any specific project.



Legend

- | | |
|---|--------------------------------|
| Zone 1 - Camphor laurel (Removal and revegetation) | Subject Site |
| Zone 2 - Riparian Zone (Erect fence and revegetation) | Construction Zone |
| Zone 3 - Swamp Oak Forest (Retention and bush regeneration) | Proposed development footprint |
| Zone 4 - Open Pasture (Revegetation) | Effluent diffusion envelope |
| Zone 5 - Dry Sclerophyll Forest (Retention) | Bushfire APZ |
| Zone 6 - Wet Sclerophyll Forest (Retention) | Cattle exclusion fence |
| Retained habitat tree | |

Appendix 2 – Summary of management zones, objectives, activities and performance criteria

The management activities, performance criteria and estimated cost for each management zone needs to be summarised and presented as per Table 2 to allow the staff reviewing the VMP to quickly and accurately assess the information presented in the plan (see sections 3 and 4). Provide the table in an Excel or Word file format. A template of this table in Excel is available from Council upon request.

Table 2. The format required for presenting the works program and schedule. The table contains the management actions and their alignment with timing, performance criteria and estimated cost for project for Zones. Data in this table are examples only and are not indicative of any specific project.

Vegetation Management Works – schedule and performance criteria									
Year	Zone	Description	Area Ha	Management action	Timing	Criteria #	Performance criteria	Estimated cost	Bond amount ¹⁵
Year 1	1	Rainforest reconstruction and weed management	0.16	Planting preparation & weed control	Minimum 3 times a year	1	All woody weeds controlled and/or poisoned; exotic vines and groundcovers - Native groundcovers and regeneration retained & weed cover < 20%.	1,880.00	
				Planting rainforest species at 1.8m spacings	Late summer/autumn	2	480 Rainforest plants planted with mulch, ≥ 90% survival.	8,960.00	
	2	Koala habitat enhancement, bush regeneration and planting	0.14	Planting prep & bush regeneration - Primary and follow up	Minimum 3 times a year	3	Native ground cover and regeneration retained - weed Cover < 20%.	1,880.00	
				0.25	Enhancement planting understory species at 2.5m spacing	Late summer/autumn	4	Enhancement planting of 225 understory species installed with mulch and ≥ 90% survival.	4,190.00
	1 & 2	All zones	0.55	Establish exclusion/protection zones	Prior to work commencing	5	Temporary exclusion zone fencing in place during construction phase.	0	
				Annual monitoring and reporting	Establish points and conduct baseline prior to works beginning and then annually	6	Monitoring and evaluation complete and report submitted to Council Council inspection to validate works.	2,180.00	
Year one total cost and scheduled bond release								19,090.00	

¹⁵ Bonds are required for works on lands that are, or will become, public land. Bonds amount is calculated at 130% in accordance with The Northern Rivers Local Government Development Design and Construction Manual (Development and Subdivision of Land) Bonds are not required for work on land that will remain privately-owned.

Vegetation Management Works - schedule and performance criteria

Year	Zone	Description	Area Ha	Management action	Timing	Criteria #	Performance criteria	Estimated cost	Bond amount ¹⁵
Year 2	1	Rainforest reconstruction and weed management	0.16	Planting maintenance & weed control	Minimum 3 times a year	1	All woody weeds controlled and/or poisoned; exotic vines and groundcovers - Native groundcovers and regeneration retained & weed cover < 15%.	2,880.00	
				Rainforest planting	As required to achieve density	2	480 Rainforest plants maintained with mulch, ≥ 90% survival.	0	
	2	Koala habitat enhancement, bush regeneration and planting	0.14	Bush regeneration and planting with follow up	minimum 3 times a year	3	Native ground cover and regeneration retained, weed cover < 20%.	2,880.00	
				0.25	Enhancement planting understory	As required to achieve density	4	Enhancement planting of 225 understory species maintained with mulch and ≥ 90% survival.	0
	1 & 2	All zones	0.55	Maintain exclusion/ protection zones	At all times during construction phase	5	Temporary exclusion zone fencing in place during construction phase as required.	0	
				Annual monitoring and reporting	Annually	6	Monitoring and evaluation complete with report submitted to Council.	2,180.00	
Year two total cost and scheduled bond release								7,940.00	

Vegetation Management Works - schedule and performance criteria

Year	Zone	Description	Area Ha	Management action	Timing	Criteria #	Performance criteria	Estimated cost	Bond amount ¹⁵
Year 3	1	Rainforest reconstruction and weed management	0.16	Planting maintenance & weed control	Minimum 3 times a year	1	All woody weeds controlled and/or poisoned; exotic vines and groundcovers - Native groundcovers and regeneration retained & weed cover < 15%.	2,880.00	
				Rainforest planting	As required to achieve density	2	480 Rainforest plants maintained with mulch, ≥ 90 % survival.	0	
	2	Koala habitat enhancement, bush regeneration and planting	0.14	Bush regeneration and planting follow up	Minimum 3 times a year	3	Native ground cover and regeneration retained, weed cover < 20%.	2,880.00	
				0.25	Enhancement planting understory	As required to achieve density	4	Enhancement planting of 225 understory species maintained with mulch and ≥ 90% survival.	0
	1 & 2	All zones	0.55	Maintain exclusion/ protection zones	At all times during construction phase	5	Temporary exclusion zone fencing in place during construction phase as required.	0	
				Annual monitoring and reporting	Annually	6	Monitoring and evaluation complete with report submitted to Council.	2,180.00	
Year three total cost and scheduled bond release								7,940.00	

Vegetation Management Works - schedule and performance criteria

Year	Zone	Description	Area Ha	Management action	Timing	Criteria #	Performance criteria	Estimated cost	Bond amount ¹⁵
Year 4	1	Rainforest reconstruction and weed management	0.16	Planting maintenance & weed control	Minimum 3 times a year	1	All woody weeds controlled and/or poisoned; exotic vines and groundcovers - Native groundcovers and regeneration retained & weed cover < 10%.	1,800.00	
				Rainforest planting	As required to achieve density	2	480 Rainforest plants maintained with mulch, ≥ 90% survival.	0	
	2	Koala habitat enhancement, bush regeneration and planting	0.14	Bush regeneration and planting follow up	Minimum 3 times a year	3	Native ground cover and regeneration retained - weed Cover <10%.	1,800.00	
				0.25	Enhancement Planting understory	As required to achieve density	4	Enhancement Planting of 225 understory species maintained with mulch and ≥ 90% survival.	0
	1 & 2	All zones	0.55	Maintain exclusion/ protection zones	At all times during construction phase	5	Temporary exclusion zone fencing in place during construction phase as required.	0	
				Annual monitoring and reporting	Annually	6	Monitoring and evaluation complete with report submitted to Council.	2,180.00	
Year four total cost and scheduled bond release								5,780.00	

Vegetation Management Works - schedule and performance criteria

Year	Zone	Description	Area Ha	Management action	Timing	Criteria #	Performance criteria	Estimated cost	Bond amount ¹⁵
Year 5	1	Rainforest reconstruction and weed management	0.16	Planting maintenance & weed control	Minimum 3 times a year	1	All woody weeds controlled and/or poisoned; exotic vines and groundcovers - Native groundcovers and regeneration retained & weed cover <5%.	1,800.00	
				Rainforest planting	As required to achieve density	2	480 Rainforest plants maintained with mulch, ≥ 90% survival.	0	
	2	Koala habitat enhancement bush regeneration and planting	0.14	Bush regeneration and planting follow up	Minimum 3 times a year	3	Native ground cover and regeneration retained - weed cover <5%.	1,800.00	
				0.25	Enhancement planting understory	As required to achieve density	4	Enhancement planting of 225 understory species maintained with mulch and ≥ 90% survival.	0
	1 & 2	All zones	0.55	Maintain exclusion/ protection zones	At all times during construction phase	5	Temporary exclusion zone fencing in place during construction phase as required.	0	
				Annual monitoring and reporting	Annually	6	Monitoring and evaluation complete with report submitted to Council.	2,180.00	
Council inspection to validate works.									
Year five total cost and scheduled bond release								5,780.00	
Totals								46,530.00	