

VEGETATION MANAGEMENT PLAN GUIDELINE

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1. INTRODUCTION

1.1 WHAT IS A VEGETATION MANAGEMENT PLAN AND WHY IS IT REQUIRED?

A Vegetation Management Plan (VMP) is a map-based report intended to assist the landowner to manage a site to ensure that biodiversity on the site is protected, maintained and enhanced. VMPs are required to assure the on-going maintenance of important natural areas resulting from development for:

- The formal five-year maintenance period covered by the security bond; and
- In perpetuity or other period stated in a development consent.

1.2 WHO CAN PREPARE A VEGETATION MANAGEMENT PLAN?

An appropriately qualified person must prepare the VMP with theoretical and practical experience in bushland restoration and management (minimum Certificate III Natural Area Restoration or equivalent) and preferably with experience relevant to The Hills Shire Council Local Government Area.

1.3 WHO CAN CARRY OUT WORKS REQUIRED BY A VEGETATION MANAGEMENT PLAN?

Personnel undertaking bush regeneration work must have a minimum of a Certificate II Bushland Regeneration or a Certificate III Natural Area Restoration (or equivalent). Landowners may undertake weed control and rehabilitation work under the guidance/supervision of an appropriately qualified bush regenerator. Supervisors must have a relevant Certificate IV or Diploma

2. CONTENTS OF A VMP

level qualification in bush regeneration.

Vegetation Management Plans are to include the following;

2.1 SITE DESCRIPTION

- Define the location and extent of the area affected by the Vegetation Management Plan (the subject site) and any adjoining areas considered relevant to the VMP.
- Describe the current type, condition and extent of vegetation on site and describe the broader context of the site within its catchment.
- Describe any significant or sensitive environmental features including any biota listed under the Threatened Species Conservation Act 1995 (TSC Act).

2.2 AIMS OF THE VMP

The aim for a VMP is to provide a working document that will successfully protect, maintain and enhance the subject site's native vegetation both for immediate rehabilitation purposes and also for maintenance into the future. The VMP must provide quantifiable goals and strategies on how this can be achieved.

The VMP's aims are to include to:

- achieve the relevant objectives identified within Council's Local Environmental Plan;
- be consistent with other related environmental legislation and policies, for example *Threatened* Species Conservation Act 1995, the Noxious Weeds Act 1993 and Water Management Act 2002;
- follow guidelines such as the Rural Fire Services Planning for Bushfire Protection 2006; and
- mitigate development impacts on bushland/natural areas.

2.3 OBJECTIVES OF THE VMP

The VMP must contain sufficient detail on how the aims can be achieved. The objectives should be related to ensuring that biodiversity values on the site are improved or maintained and ensuring that the development does not result in an overall decline. The objectives will include to:

- conserve and preserve the existing vegetation;
- undertake rehabilitation works in degraded native vegetation areas;
- undertake native vegetation protection measures;
- restore native vegetation to a level that reflects the cover, diversity and density of the indigenous vegetation; and
- provide educational material to promote responsible management of native vegetation areas.

2.4 IDENTIFICATION OF MANAGEMENT ZONES

All areas within the area covered by the VMP must be covered by a relevant management zone and be reflected on a map. There is no limit to the number of zones identified, but zones must reflect either site features or intended land use of the development. Management zones that may be applicable include:

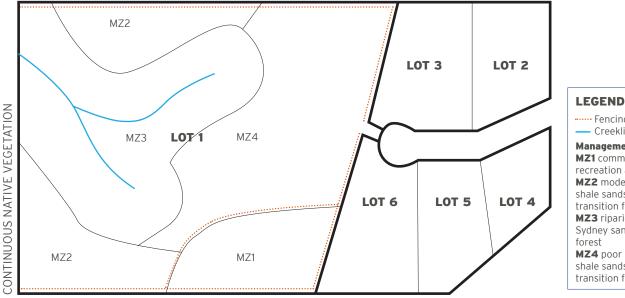
- conservation zones, including riparian or wildlife corridors;
- weed management zones (include method of weed management);
- rehabilitation zones (include method of rehabilitation e.g. natural or assisted);
- · recreation zones; and
- · tracks, access ways and fire trails.

Details must be provided regarding which zones form part of the Restricted Development Area.

An example of the management zones can be seen in the figure below.



EXAMPLE - CLUSTER SUBDIVISION



----- Fencing

Creekline

Management Zones MZ1 community

recreation area MZ2 moderate condition shale sandstone transition forest

MZ3 riparion zone Sydney sandstone gully forest

MZ4 poor condition shale sandstone transition forest

2.5 DEFINE MANAGEMENT TASKS BY **MANAGEMENT ZONE**

Describe with sufficient detail each task necessary for the implementation of the plan, where each task is to be carried out (the relevant management zone) and how each task will be done. Also include duration and completion dates and who will be responsible for undertaking each task.

The VMP is to prescribe the most appropriate restoration method to meet the objectives for each management zone. This will be determined by existing vegetation condition and site resilience. Greater intervention may be required on sites in poor condition displaying low resilience.

Where native vegetation remains but is degraded, regeneration should be the primary goal. Even quite degraded areas can be capable of regenerating if given the right assistance.

Revegetation is only required in offset areas or where a site is unlikely to respond to natural and/or assisted regeneration techniques or there is little or no regeneration potential.

Include details regarding the following for each Management Zone:

- 1. SITE MANAGEMENT Soil remediation techniques, surface preparation, stabilisation of disturbed areas and erosion and sediment controls (type, location and maintenance).
- 2. TEMPORARY FENCING OF SENSITIVE FEATURES - show where fencing is required and what type (height and material).

- 3. SEED COLLECTION Collection of genetic floristic material (seeds and cuttings) from the development site prior to removal to be used for propagation where revegetation forms part of the VMP.
- 4. REGENERATION Identify bushland regeneration techniques required for each zone to be rehabilitated.
- 5. REVEGETATION Identify areas where regeneration techniques alone are not likely to be successful. Local provenance native plant material from the appropriate vegetation community must be used to re-establish the native vegetation communities. Requirements for minimum plant densities and diversity must be provided.
- 6. INFILL PLANTING Restoration of absent stratum elements (canopy, mid-storey or groundcover) where required to re-establish a fully structured vegetation
- 7. WEED CONTROL Methods of weed control in accordance with current guidelines and standards, including removal strategies, timing, constraints, herbicides to be used, waste disposal where relevant and the recommended qualifications of those undertaking the work.

2.6 FENCING

The VMP must provide details of all fencing required. Fencing requirements will differ from site to site. There are two fencing requirements that must be met. They are:

- 1. All boundaries between the development lots and the association lot must be fenced; and
- 2. Native vegetation areas are to be fenced where there is a need to protect them from potential degradation by unauthorised entry or adjoining land uses.

Where natural features (e.g. rock outcrops) on the site form a barrier which meet the objectives of a fence



(i.e. exclude unauthorised land use) there may be no requirement to provide fencing in this location.

A map must be provided that clearly shows the location and type of fencing required. Barbed wire is not permitted.

The table below provides a guide for the types of fencing required at different locations.

LOCATION	FENCE TYPE
Boundary between development lot & association lot.	Minimum 1.2 metre high standard rural fence e.g. star posts with four strands of plain wire. Fencing standard may be increased for privacy and for the keeping of animals.
Boundary along association lot and public access road.	Minimum 1.2 metre high standard rural fence e.g. star posts with four strands of plain wire.
Boundary of association lot and adjoining lot/s that form a continuous area of native vegetation.	No fencing is required unless adjoining bushland is subject to grazing activities or the like that would pose a threat to biodiversity. If fencing is proposed fauna friendly and fit for purpose fencing is to be provided. Details are to be provided within the VMP.
Within association lot boundary between management zone containing native vegetation and management zone used for any other purpose.	Fauna friendly and fit for purpose fencing is to be provided. Details are to be provided within the VMP.

2.7 DETERMINE PERFORMANCE CRITERIA

Performance criteria is required to objectively measure the success or otherwise of the methods employed in trying to achieve the stated aims and objectives of the VMP. Different management zones are likely to require different performance criteria.

Performance criteria for native vegetation management zones must include, but may not be limited to:

- the percentage survival rate for plantings 12 months after establishment;
- noxious weeds to be less than 2% cover by the end of each maintenance period;
- other weeds to be less than 4% cover by the end of each maintenance period; and
- the species diversity and density of a bushland regeneration zone at each reporting period, the

percentage of allowable weed coverage at established reference points upon the conclusion of specified management visits.

Site specific performance criteria are to be developed for management zones where management of native vegetation is not the objective (eg recreation areas). These may include:

- no encroachment of exotic lawn beyond management zone boundary; and/or
- no erosion or sedimentation beyond the boundary of the development lots.

The VMP must outline how defined performance criteria can be measured. This can be done by establishing reference monitoring points. Quadrats can be repeated as a quantitative measurement. Similarly the photographs can be taken to qualitatively measure performance.

2.8 DEFINE MONITORING AND REPORTING METHODS

Monitoring of key performance criteria and reporting on their effectiveness is required.

Monitoring and reporting of progress and success is to be provided on a 12 monthly basis for the formal maintenance period of the VMP and then every 3 years thereafter in perpetuty (or as otherwise specified by consent conditions).

2.9 PROVIDE A TIMEFRAME

- Prepare a Gantt chart or similar to reflect the staging of all VMP works required during the formal five year maintenance period.
- Address all tasks required by the VMP for each management zone including frequency of visits and number of hours required to complete the project.
- · Identify who is responsible for each task.

2.10 COSTING

The VMP must include an estimation of costs for the implementation of the five year works program provided. The security bond will be accepted enabling a Subdivision Certificate to be issued as an alternative to full implementation of the VMP. The value of the bond will be 100% of a cost estimate to implement the first 5 years of the VMP. Release of the bond will be staged subject to certification that milestones have been met as staged below. All price estimates are to be itemised.

The bond shall be progressively released:

- a. 12 months after the completion of primary weeding (50%);
- b. 36 months after the completion of primary weeding (25%):
- c. 60 months after the completion of primary weeding (25%).

2.11 IDENTIFY EXISTING AND POTENTIAL THREATS



TO THE VMP MANAGED AREA AND PROVIDE MITIGATION MEASURES

There are a number of potential threats that can impact areas subject to VMP management. These include:

- Construction impacts, including vegetation clearing, erosion and sedimentation, weed invasion and soil borne pathogens;
- Community/Residential threats, including impacts such as illegal dumping of waste and lawn clippings, firewood collection, high nutrient loads, weed invasion and inappropriate land use that have the potential to degrade an area; and
- Weed encroachment into native vegetation management zones from paddocks or cleared areas at the rear of development lots.

2.12 MAINTENANCE REQUIREMENTS INTO THE FUTURE

Where there is a requirement to register the Vegetation Management Plan on the 88B instrument for the property (e.g. all rural cluster subdivisions), the VMP is to include a section regarding maintenance requirements into the future.

The aims of this section of the report is to give the land owner guidance on how to adhere to their responsibilities under the *Noxious Weeds Act 1993* and to reduce weed infestations in perpetuity.

2.13 MAPPING

Provide maps displaying:

- the distribution of vegetation types and their current condition:
- 2. all identified management zones;
- 3. any permanent or temporary fencing requirements;
- 4. any signage locations;
- 5. monitoring points with an arrow to show the direction of photo if applicable;
- 6. threatened species found on site; and/or
- 7. location of all habitat supplementation.

All maps are to contain a scale, north arrow and legend.

3. ADDITIONAL INFORMATION

Some additional information may be required. Please refer to the consent conditions to determine if the items below are required as part of the Development Application.

3.1 SIGNAGE

Signage is required for rural cluster subdivisions or where properties are located adjacent to significant bushland. Signage is required at entries to native vegetation management areas. The sign must state the following, or an alternative agreed to by Council's Manager - Environment and Heath:

"The vegetation within bushland is protected. Activities

such as firewood collection, bushrock removal, picking of native flowers and dumping of garden waste are prohibited"

Signage is required in order to inform residents, public or construction workers that the area is a native vegetation area and under protection. Sign locations are to be identified on a map within the VMP. The sign is to be made of a durable material, be legible and permanent and a minimum A4 size (210mm x 297mm).

3.2 LOCAL PROVENANCE

Seed and cuttings from the same catchment is considered to constitute local provenance stock. It is also important to match habitat types by matching soil, type, slope position, aspect, altitude and rainfall to ensure the best outcomes. Local provenance stock, seed and cuttings are required for all rehabilitation projects where infill planting and revegetation is required.

3.3 HABITAT SUPPLEMENTATION

Where development is approved that impacts significant fauna habitat features, a habitat substitution strategy may be required and will be included within the VMP. There are various ways habitat supplementation can be achieved and include:

- The provision of nest/roost boxes (this must include the number, target species, design and location of installation);
- The placement of fallen timber or removed tree hollows on the ground;
- Creation of watering points;
- · Creation of artificial refuge sites; and
- Provision of food sources such as planting of food trees

3.4 INFORMATION FACT SHEET

An information fact sheet will be required for all rural cluster subdivisions but also where properties contain or are located close to significant or sensitive biodiversity such as a threatened ecological community, population, species or their habitats as listed under the *Threatened Species Conservation Act 1995*. The information fact sheet is to be distributed to all new residents by the community association and form an appendix within the VMP. The guideline for preparing Information Fact Sheets is located on Council's web site at www.thehills.nsw.gov.au.

