

Native vegetation gain scoring manual

Version 2



December 2017

Cover image: Hattah-Kulkyne National Park, Victoria, DELWP (Penny Croucamp)

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Contents

1	Introduction.....	2
2	Gain.....	3
2.1	What is gain?	3
2.2	Types of vegetation that can generate gain	3
2.3	Types of gain	4
2.4	Gain scoring assessment	5
2.6	How is the gain score used?	7
3	Offset site eligibility	8
3.1	Security	8
3.2	Current land use and future land use.....	8
3.3	Existing offsets or existing agreements	8
3.4	Threats to native vegetation condition	8
3.5	Managing bushfire risk of offset sites.....	9
3.6	Freehold land transferred to the Crown.....	9
3.7	Existing Crown land	9
3.8	Minimum standards for protected vegetation	10
3.9	Offset management	11
4	Minimum commitments to generate gain	13
4.1	Prior management gain	13
4.2	Security gain	13
4.3	Maintenance gain and improvement gain.....	16
5	Description of management commitments	20
5.1	Large trees	20
5.2	Tree canopy cover.....	20
5.3	Understorey	21
5.4	Lack of weeds	25
5.5	Recruitment.....	25
5.6	Organic litter	25
5.7	Logs	26
5.8	Additional commitment for scattered trees	27
5.9	Additional commitments for revegetation	27
5.10	Additional commitments for Crown land	27
	Appendices	29
	Glossary	63

1 Introduction

This manual describes the approach for calculating the predicted improvement in native vegetation quality and quantity due to active management and increased security of the native vegetation. This improvement is referred to as 'gain'.

The approach in this manual is closely linked to the vegetation quality assessment method outlined in *Native vegetation: sustaining a living landscape. Vegetation Quality Assessment Manual – Guidelines for applying the habitat hectares scoring method, Version 1.3* (VQA manual). Users of this approach are expected to have a working knowledge of the vegetation quality assessment method in order to adequately calculate the gains due to active management and increased security.

The method described enables the user to calculate gains over a 10 year time frame. This approach assumes that the site will receive the required management and security for this period in order for the gains to be realised. In general, this will require the use of an appropriate management agreement that sets out the land management commitments and actions for the ten year period to achieve the predicted gains. Where required, it is possible to use the approach outlined in this manual to

proportionally calculate gains for other periods of management.

This document specifies:

- the considerations used in the prediction of the amount of gain at a site
- the information used to calculate the gain score
- when gain is available
- how much gain is generated from management and security commitments.

Where vegetation is to be protected as an offset to compensate for biodiversity loss from the removal of native vegetation, *Guidelines for the removal, destruction or lopping of native vegetation* (the Guidelines) describe the eligibility requirements for the offset site. Section 3 details these requirements for offset site eligibility.

The eligibility requirements for sites that are unrelated to offsets are generally specified in the specific incentive or grants program. However, it is likely the same eligibility criteria would be considered and applied for any program.

2 Gain

2.1 What is gain?

Gain results from commitments to protect, maintain and improve native vegetation condition. Gain is available at a site where the commitments are higher than the landowner's current legal management responsibilities (duty of care). This is known as 'additionality'. Activities that landowners undertake to meet their current duty of care will not generate gain.

A landowner's legal management responsibilities include:

- legislative requirements, particularly the *Catchment and Land Protection Act 1994*
- requirements of existing agreements or contracts that apply to the site
- planning scheme requirements to retain native vegetation.

On Crown land, the community expects Crown land managers to undertake a certain level of management to protect biodiversity values as funding is made available to undertake this management. Therefore, a stronger case for 'additionality' is required to generate gain on Crown land.

2.2 Types of vegetation that can generate gain

Native vegetation is defined in planning schemes as 'plants that are indigenous to Victoria, including trees, shrubs, herbs and grasses'¹. Native vegetation is further classified as a patch of native vegetation or a scattered tree.

Vegetation that can generate gain can be any or a combination of the following, provided it meets the eligibility requirements described in section 3:

- a patch of native vegetation
- scattered trees
- revegetation.

For the purposes of this manual, reference to 'vegetation' includes a patch of native vegetation, scattered trees or revegetation.

Patch of native vegetation

A patch of native vegetation is:

- an area of native vegetation where at least 25% of the total perennial understorey plant cover² is native, or
- any area with three or more native canopy trees³ where the drip line⁴ of each tree touches the drip line of at least one other tree, forming a continuous canopy.

Scattered tree

A scattered tree is:

- a native canopy tree that does not form part of a patch.

Revegetation

Revegetation is the establishment of native vegetation to a minimum prescribed standard, in areas that do not qualify as a patch or a scattered tree.

Where vegetation is to be protected as an offset to compensate for biodiversity loss from the removal of native vegetation, *Guidelines for the removal, destruction or lopping of native vegetation* (Guidelines) describe the eligibility requirements for the offset site, the type of vegetation, and the minimum security standards.

¹ Victoria Planning Provision – Definitions – Clause 72.

² Plant cover is the proportion of the ground that is shaded by vegetation foliage when lit from directly above. Areas that include non-vascular vegetation (such as mosses and lichens) but otherwise support no native vascular vegetation are not considered to be a patch for the purposes of the Guidelines. However, when non-vascular vegetation is present with vascular vegetation, it does contribute to cover when determining the percentage of perennial understorey plant cover.

³ A native canopy tree is a mature tree (i.e. it is able to flower) that is greater than 3 metres in height and is normally found in the upper layer of the relevant vegetation type.

⁴ The drip line is the outermost boundary of a tree canopy (leaves and/or branches) where the water drips on to the ground.

2.3 Types of gain

Different types of gain can be generated by landowners or land managers, these are described below.

On freehold land any security or management commitments must be agreed to by the landowner. On Crown land the agreement must be made by the Crown land manager. For the purposes of this manual, “landowner” includes both landowner and Crown land manager where information relates generally to both freehold and Crown land.

Prior management gain

Prior management gain acknowledges management undertaken by landowners on a freehold site since State-wide planning permit controls for native vegetation removal were introduced in 1989.

Security gain

Security gain results from increasing the protection of native vegetation on a specific site. Landowners can generate security gain by recording a security agreement on the land title (for example under Section 69 of the *Conservation Forests and Lands Act 1987* or a conservation covenant under Section 3A of the *Victorian Conservation Trust Act 1972*). Landowners can also generate security gain by transferring freehold land to a secure Crown land reserve managed for conservation purposes.

Maintenance gain

Maintenance gain results from avoiding the decline in vegetation condition that is predicted to occur over a 10 year period (Figure 1). The predicted decline in condition is based on the combined effect of allowable land uses and threats. Landowners can generate maintenance gain by agreeing to forgo currently allowed land uses and control threats that affect vegetation condition. A commitment to maintain the vegetation quality is required in perpetuity.

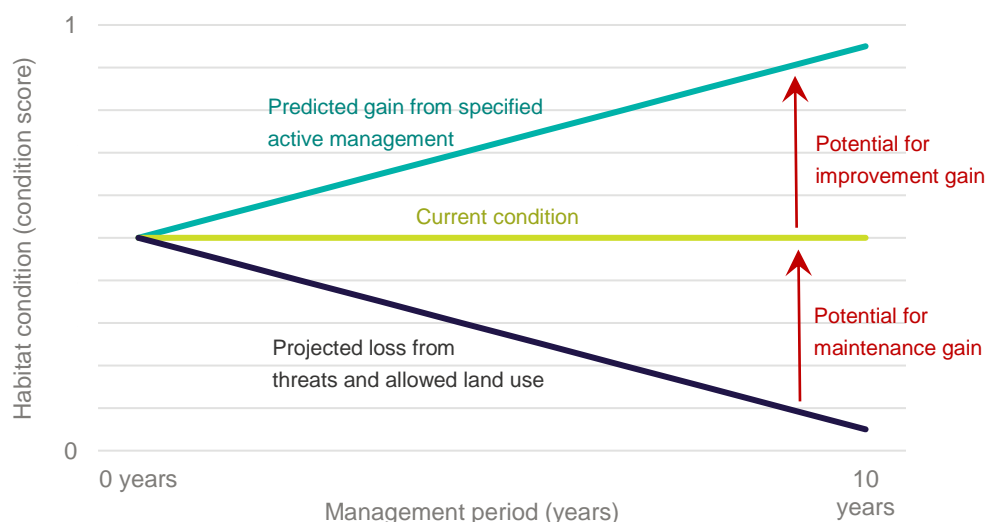
There are a number of management commitments landowners could undertake on a site to manage threats affecting vegetation condition. The Department of Environment, Land, Water and Planning (DELWP) predicts gain where there is known to be a high level of certainty that the commitments will be effective in managing threats.

Improvement gain

Improvement gain results from management commitments that improve the current vegetation condition (Figure 1). Landowners can generate improvement gain where they agree to commitments to improve the vegetation that are beyond their existing legal management responsibilities (duty of care).

Improvement gain commitments result in an improvement in the condition of native vegetation when the condition is below the benchmark for the vegetation type. Where vegetation condition is already at benchmark, no improvement gain is available.

Figure 1. Maintenance and improvement gains



2.4 Gain scoring assessment

The process of calculating the gain that can be generated at a site is called gain scoring. A gain scoring assessment includes:

- a site assessment, including an assessment of a site's eligibility, threatening processes and weed cover, and
- calculation of the gain score.

The *gain calculator* has been developed by DELWP to assist with determining the gain score in accordance with this manual. The calculator is available on the [DELWP website](#).

2.4.1 Site assessment

A site assessment must be completed by an accredited native vegetation assessor and includes:

- A habitat hectare assessment of any patches of native vegetation to be protected, including the 'habitat score', extent (in hectares), Ecological Vegetation Class (EVC) and bioregional conservation status. The habitat hectare assessment method is described in the *Native vegetation: sustaining a living landscape. Vegetation Quality Assessment Manual – Guidelines for applying the habitat hectares scoring method, Version 1.3* (VQA manual) (or its successor).
- Note:* For the purpose of assessing native vegetation removal and offsetting in Victoria, the advice within the VQA manual regarding habitat zone delineation has been superseded. See below.
- The location, number, circumference (in centimetres measured at 1.3 metres above ground level) and species of large trees within patches.
 - The location, number, circumference (in centimetres measured at 1.3 metres above ground

level) and species of scattered trees, and whether each tree is small or large.

- An assessment of a site's eligibility, including an assessment of significant threats (see section 3).

Accredited native vegetation assessors are listed on DELWP's Vegetation Quality Assessment Competency Register and have current accreditation (less than two years old at the time the site assessment is completed). A site assessment report must be current, as detailed in the *Assessor's handbook – applications to remove, destroy or lop native vegetation* (Assessor's handbook).

Habitat zone delineation

For the purpose of assessing native vegetation for removal or offsetting, *Chapter 5: Site Inspection - "Estimating the required number and size of habitat zones"* of the VQA manual has been superseded. The revised advice is:

- A Vegetation Quality Assessment (VQA) must be constrained to a single EVC.
- A habitat zone is a single continuous patch of vegetation of the same EVC.
- Changes in habitat condition should generally not influence how a habitat zone is defined.

In general, a habitat zone at an offset site should only be split based on the presence of a different EVC, not based on a change in the vegetation condition. However, a habitat zone must be split:

- when it cannot be reasonably represented by a single VQA because:
 - the site condition score (out of 75) varies by at least 15 points and
 - the extent of the continuous patch of vegetation is greater than 1 hectare; or
- to exclude areas of the habitat zone that do not meet the offset eligibility criteria detailed in section 9.1.3 of the Guidelines. That is, a minimum 'site condition score' of 30 out of 75 and any treeless EVC must also have a minimum 'lack of weeds score' of 7 out of 15.

2.4.3 Calculation of the gain score

Calculating a gain score is described below:

1. Review the eligibility criteria in section 3 to confirm the site is eligible to generate gain.
2. Undertake a site assessment, as described in section 2.4.1.
3. Confirm the landowner agrees to the minimum security and management commitments required to generate gain (see section 3).
4. Calculate the prior management gain, security gain, maintenance gain and improvement gain using the components of the habitat score (Appendix 2 and 3).
5. Calculate the gain score (Appendix 4). The gain score is the sum of prior management gain, security gain, maintenance gain and improvement gain to achieve a score out of 100.

Gain score = prior management gain + security gain + maintenance gain + improvement gain

2.4.4 Is a gain scoring assessment always required?

A gain scoring assessment must be undertaken in the following circumstances:

- all third party offset sites
- where first party offset sites are generating species habitat units, or are located within wetland vegetation types.

DELWP has systems and tools that calculate a simplified gain score. These tools allow a person who *is not* an accredited native vegetation assessors to assess their own property. The tools can be used instead of undertaking a gain scoring assessment in the following circumstances:

- a first party offset site generating general habitat units only, and that is not located within wetland vegetation types
- a Crown land offset site generating general habitat units only, that is not located within wetland vegetation types and the habitat units will not be traded.

The Guidelines further explain when a gain scoring assessment is required for offset sites.

2.6 How is the gain score used?

The gain score can be combined with other site attributes, values or metrics to give an overall predicted gain in a specific metric. For example, when the gain score is combined with the area in hectares of the site the gain at the site will be represented in habitat hectares.

To calculate 'habitat hectares of gain' the gain score is divided by 100 to obtain a score between 0 and 1. This number is multiplied by the extent (hectares) of native vegetation.

Habitat hectares of gain

$$= \text{extent of native vegetation} \times \frac{\text{gain score}}{100}$$

2.6.1 Incentive programs

Gain scoring can be used to measure predicted improvement in native vegetation from security and management commitments on sites unrelated to offsets. An example of this could be government incentive programs where landowners are required to demonstrate the gains that they can deliver. For these purposes the measure of improvement in the vegetation quality and quantity at a site is often expressed as 'habitat hectares of gain' (see Appendix 4B).

While the broad steps for calculating gain outlined in Section 3 are likely to be relevant, they may be differently applied. For example, incentive programs will have their own set of eligibility criteria, may choose a different measurement of landscape scale importance that suits the program's purpose or may weigh components differently to suit a range of objectives.

It should also be noted that incentive programs may consider whether prior management gain and security gain, and the related commitments, will be applicable.

2.6.2 Offset sites

The Guidelines are incorporated into the Victoria Planning Provisions and all planning schemes in Victoria. The Guidelines set out the state policy and process for the assessment of impacts from removing native vegetation. A native vegetation offset is required to compensate for the loss to biodiversity from approved removal of native vegetation. The offset must deliver a gain in biodiversity value that is equivalent to the loss in biodiversity value from the removal of native vegetation.

For the purpose of the Guidelines, the biodiversity value of an offset site incorporates landscape scale information (landscape factor) to measure the importance of one location relative to other locations in Victoria. The Guidelines provide further information about landscape information and offset requirements.

The biodiversity value of an offset site is measured in 'habitat units of gain'. A 'general habitat unit of gain' provides a measure of the improvement in the overall biodiversity value of native vegetation at the site. A 'species habitat unit of gain' provides a measure of the improvement in biodiversity value of native vegetation at the site for a particular rare or threatened species.

To calculate general habitat units of gain available at an offset site, the habitat hectares of gain is multiplied by a landscape factor (described in the Guidelines):

$$\text{General habitat unit of gain} = \text{habitat hectares of gain} \times \text{general landscape factor}$$

To calculate species habitat units of gain available at an offset site, the habitat hectares of gain is multiplied by a landscape factor (described in the Guidelines):

$$\text{Species habitat unit of gain} = \text{habitat hectares of gain} \times \text{species landscape factor}$$

3 Offset site eligibility

Where vegetation is to be protected as an offset to compensate for biodiversity loss from the removal of native vegetation, the Guidelines describe the eligibility requirements for the offset site. This section details these requirements. A site that does not meet eligibility requirements cannot be used as an offset.

The eligibility requirements for sites that are unrelated to offsets are generally specified in the specific incentive or grants program. However, it is likely the same eligibility criteria would be considered and applied for any program.

Eligibility criteria include consideration of:

- current land use and future land use (where known)
- existing offsets or other existing agreements
- Crown land
- threats to native vegetation condition
- security
- minimum management actions
- revegetation.

These criteria are described below.

For first party offsets the responsible authority will check a site's eligibility. For potential third party offset sites (where a landowner wishes to sell credits to another landowner who needs an offset), a site's eligibility will be checked by the native vegetation credit register (NVCR). The NVCR may have additional criteria for third party offset sites to those described below, refer to published NVCR information for further detail.

3.1 Security

Offset sites must provide permanent compensation for the loss in biodiversity value from the removal of native vegetation. This is achieved via the security commitments described in section 4.2.

3.2 Current land use and future land use

Current and future land use(s) must be compatible with managing the native vegetation for conservation. Incompatible current and future land use may include:

- fuel reduction activities requiring removal of logs or trimming/clearing of understorey plants or trees
- horse-riding, cycling or motorised vehicle use of established tracks

- infrastructure easements
- areas identified for other uses that are incompatible with managing native vegetation for conservation. This includes those with a public acquisition overlay for creation of a road or with approval to undertake activities that will damage native vegetation (e.g. extractive industries works approvals)
- other ongoing land uses that are likely to degrade vegetation condition or restrict improvement in vegetation condition.

3.3 Existing offsets or existing agreements

An area of native vegetation is eligible to be an offset if the native vegetation to be protected is:

- not already being used to offset other clearance of native vegetation or species habitat required under Victorian or federal legislation
- not subject to a current agreement or initiative to generate carbon credits
- not subject to a current agreement under a biodiversity or native vegetation related incentive or grant program to undertake actions which are equivalent to the commitments specified in Section 4.

An area of land is eligible if it was formerly subject to an agreement and the agreement period has expired.

3.4 Threats to native vegetation condition

Significant threats to the condition of native vegetation impact on a landowner's ability to complete management commitments. An area of native vegetation is not eligible to be an offset if the landowner cannot control and manage significant threats to the condition of the native vegetation and ensure that over time the condition of the native vegetation does not decline.

Any threat that can't be controlled and prevents a site from being appropriately managed will result in an area of vegetation being ineligible to be used as an offset. The assessor should consider whether site management will be significantly affected by threats to the native vegetation condition and whether the management commitments agreed to by the landowner would control the threat.

The following is a list of common issues or threats that generally cannot be controlled:

- high levels of continued nutrient run off
- secondary salinity with a high likelihood of the effect increasing
- continuing significant erosion which is uncontrollable without affecting native vegetation
- significant invasion from introduced animals such as rabbits, deer, goats and pigs
- extensive die-back or other plant diseases
- planned disturbance regimes incompatible with native vegetation objectives such as fuel reduction burning or flooding
- lack of, or inappropriate flooding regime
- highly invasive weeds that are difficult to control at a site level.

3.5 Managing bushfire risk of offset sites

Managing an offset site for conservation objectives may be in conflict with managing native vegetation to reduce the risk to life and property from bushfire. To eliminate this conflict all offset sites must meet the following eligibility requirements in relation to managing bushfire risk. An offset cannot be established within:

- 150 metres of a dwelling⁵ or any area (building envelope) to be used as a dwelling in the future if the dwelling or area is within a Bushfire Management Overlay (BMO)
- 50 metres of a dwelling or any area (building envelope) that will or may be used as a dwelling in the future, when the dwelling or area is not within a BMO.

The distance can be reduced if the landowner or manager of the offset site has written approval from the Country Fire Authority, or relevant fire authority as defined by the planning schemes, that this distance can be safely reduced.

3.6 Freehold land transferred to the Crown

In addition to the eligibility requirements described above, freehold land transferred to the Crown must

meet the following eligibility requirements to be an offset:

- the land meets the assessment criteria for proposed regional conservation land acquisitions
- the minister responsible for administering the applicable Act has agreed that the land can be accepted into the Crown land estate
- the land is reserved in the parks and reserve system under either the *National Parks Act 1975* or *Crown land (Reserves) Act 1978*.

3.7 Existing Crown land

Crown land must meet the following eligibility requirements to be an offset:

- the site meets all other eligibility requirements described in this section
- a Crown land offset agreement is signed between the Crown land manager and the DELWP Secretary
- the offset site is reserved⁶ land, and can be managed for conservation objectives
- the offset is only used to either:
 - offset clearing on Crown land, OR
 - to provide species offsets that are not available on freehold land
- the site is highly unlikely to be used for another purpose
- the site is clearly identifiable to land managers
- the surrounding land use is compatible with an offset site in the long-term.

The process for establishing offsets on Crown land must be transparent and demonstrate that gains are real and that management actions are additional to what is required by legislation.

3.7.1 Transparency - Native Vegetation Offset Register

Crown land offset site managers are held to the same standard of accountability as private land offset site managers. Crown land offsets must be visible to all current and future Crown land managers and the public. All first and third party

⁵ Dwelling includes any building used for accommodation.

⁶ This means land of the Crown that has been reserved or set aside for a purpose under an Act.

Crown land offsets must be registered on the Native Vegetation Offset Register.

3.7.2 Additionality - Available gain

To ensure the objective of 'no net loss' is achieved, actions at the offset site must be additional to base-line management actions. On Crown land, the community expects Crown land managers to undertake a certain level of management to protect biodiversity values as funding is made available to undertake this management.

Demonstrable additionality constitutes actions that are above the expected role of a public land manager. For example basic weed management would be considered a base-line responsibility of a public land manager. Actions that are specifically targeted towards improving habitat requirements for a threatened species for which an offset is being established could be considered additional.

3.8 Minimum standards for protected vegetation

The minimum standards described below may be adapted for specific objectives determined under an incentive program.

3.8.1 Patches of native vegetation

A patch of native vegetation assessed by an accredited native vegetation assessor must meet the following eligibility requirements to be an offset:

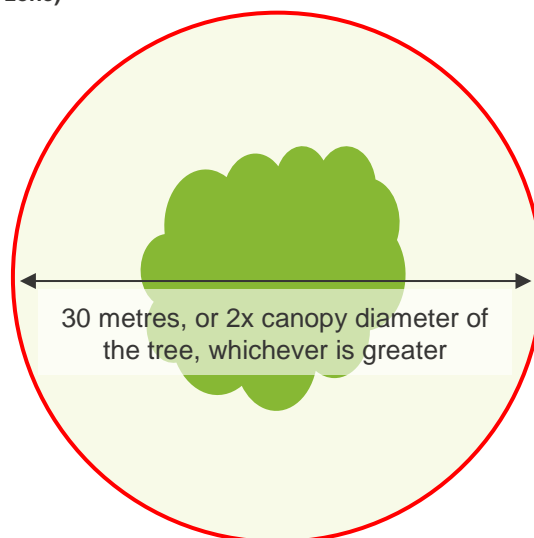
- have a minimum 'site condition score'⁷ of 30 out of 75
- any treeless⁸ EVCs must also have a minimum 'lack of weeds score'⁹ of 7 out of 15.

3.8.2 Scattered trees

A scattered tree must meet the following eligibility requirements to be an offset:

- the tree must have a Diameter at Breast Height (DBH) greater than or equal to 75% of the large tree DBH benchmark for the relevant bioregional EVC.
- each scattered tree must have an area of land secured around it to provide space for recruitment (Figure 2). The area protected around each scattered tree (scattered tree zone) must be a circle with a diameter of at least 30 metres, with the tree in the centre of the circle. When an accredited native vegetation assessor completes a gain scoring assessment, the area protected must be twice the canopy diameter of the scattered tree or the 30 metre circle, whichever is greater in area.

Figure 2. Protection area for a scattered tree (scattered tree zone)



7 This is the site condition score determined in accordance with the VQA Manual.

8 Treeless – refers to all vegetation types without a tree overstorey (although may include taller shrublands and scrubs) and structurally dominated by either woody or non-woody life forms. May also include vegetation types with occasional emergent trees. And as defined in the VQA Manual.

9 This is the lack of weeds score determined in accordance with the VQA Manual.

3.8.3 Revegetation

Revegetation must be done in accordance with the minimum planting standard specified in Appendix 1.

Revegetation of native vegetation must meet the following eligibility requirements to be an offset:

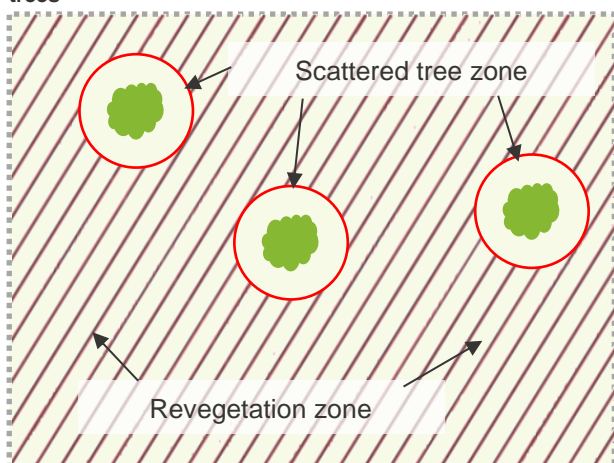
- revegetation must be for a woody vegetation type
- revegetation offset sites must meet the following size requirements:
 - for revegetation not abutting a patch of native vegetation the area of revegetation must have an area to perimeter ratio of at least 20
 - for revegetation abutting a patch of native vegetation the combined area of revegetation plus adjacent patch of native vegetation must have an area to perimeter ratio of at least 20.

The area to perimeter ratio is calculated by dividing the area (metres squared) by the perimeter (metres).

3.8.4 Revegetation combined with protection of scattered trees

Where revegetation and the protection of scattered trees is to occur in the same area, the scattered tree zone is not available for revegetation planting or revegetation gain. The scattered tree zone must be protected to enable recruitment of the tree and must be excluded from the revegetation zone (see Figure 3).

Figure 3. Revegetation combined with protection of scattered trees



3.9 Offset management

3.9.1 Minimum management commitments

The Guidelines outline the minimum management commitments that are required to be eligible as an offset site. Landowners or managers of offset sites must agree to the following management commitments:

- retain all trees, including dead trees that are standing
- exclude stock and other threats
- ensure that weed cover does not increase beyond the current level
- monitor for new and emerging weeds and eliminate to less than one percent
- retain all logs, fallen timber and organic litter
- control rabbits
- for grassland vegetation types biomass management may be a requirement
- when the offset is scattered trees, at least five recruits need to regenerate, or be planted in the area around each protected scattered tree
- for revegetation offsets, the revegetation must be in accordance with the minimum planting standards specified in the Appendix 1
- report annually on management actions.

3.9.2 Considerations for offset management

For each site, landowners should consider the following questions to ensure the site is appropriate and the landowner can commit to the required management actions.

Threats

- What existing threats must the landowner manage to achieve the commitment?
- Are there other threats that are likely to arise that will require management to achieve the commitment?
- What are the consequences of not managing the threats?
- Are there natural or man-made boundaries that prevent the site or areas of the site from being adequately protected from potential threats? For example areas of sites bordered by creeks or rivers or with steep embankments that can't be adequately fenced or protected from threats such as stock.

Practicality

- What are the costs to undertake the commitment?
- How difficult is it to achieve the commitment?
- What resources would the landowner require to achieve the commitment?
- Can the landowner undertake the commitment using standard approaches, given the timeframes, resources and difficulty?
- Can the landowner provide enough time and labour to achieve the commitment?
- Does the landowner require additional advice or guidance to achieve the commitment?
- Can the landowner undertake the commitment and minimise collateral damage to native vegetation?

3.9.3 Site management plan

The management of a site is detailed in a site management plan. At an offset site this is called an offset management plan. This plan includes 10 years of management commitments for the vegetation to be protected. It also includes ongoing management actions to maintain the vegetation at the improved condition, following the initial 10 year period.

All offset sites must have an offset management plan, except for freehold land transferred to the Crown. Offset sites to be registered on the Native Vegetation Credit Register (NVCR) must have a management plan that also complies with the standards of the NVCR.

A site management plan should be developed to manage the specific requirements of the vegetation to be protected, and should clearly identify the following:

- the location of the vegetation to be protected
- security commitments agreed to by the landowner to permanently protect the vegetation
- management commitments agreed to by the landowner
- the gain to be achieved by the management commitments
- activities that will be forgone within the offset area, such as grazing, removal of all fallen timber and standing trees
- persons responsible for implementing and monitoring the offset management plan. If someone other than the owner of the land is

expected to be responsible for management actions (and associated costs) then this should be clearly stated in the offset management plan

- time frame for implementing the offset management plan. If the action is to be undertaken in perpetuity, then the management plan should state this
- annual reporting.

Templates for standard 10 year offset management plans for first and third party offset sites are available on the DELWP website

<https://www.environment.vic.gov.au/native-vegetation/native-vegetation>.

If a landowner or land manager has committed to controlling all high threats, the site management plan must contain the following additional information:

- identification of all on-site threats (e.g. threats from introduced animals including deer, wild pigs and goats or overgrazing by native herbivores including kangaroos, wallabies and possums, inappropriate fire or flood regime, other threats as identified)
- the level of risk of each threat to improvement in the tree canopy recruitment and condition, understorey cover, diversity and recruitment and organic litter cover improvement
- ongoing monitoring for presence, activity and disturbance from introduced animals and overgrazing by native herbivores
- a strategic and integrated program of management and control actions to effectively eliminate all introduced animals and adequately control overgrazing by native herbivores. The program must be integrated to ensure all identified threats are addressed and managed through coordinated actions and at multiple times throughout each management year to ensure the control of all threats is sustained. The land manager must be able to demonstrate that the control actions can be maintained in the long-term
- controlling introduced animals and native herbivores must be through the necessary approvals required under relevant legislation
- control actions must be appropriate for the threat and location (e.g. for introduced animals and native herbivores shooting may be inappropriate in some locations, extensive exclusion fencing is likely not practical or achievable in the long term).

4 Minimum commitments to generate gain

To generate gain at a site, landowners must agree to minimum commitments for security and land management. This section summarises the minimum commitments for prior management, security, maintenance and improvement gains.

The requirements for offset site eligibility (section 3) generally coincide with the minimum commitments required to generate prior management, security and maintenance gain, along with some improvement gain. If a proposed offset site meets the eligibility requirements to be an offset, then it is likely that gain can be achieved.

Before entering in to an agreement to secure and manage a site, landowners should have an understanding of what the commitments entail, and whether they are appropriate for their site (see section 5).

It is particularly important that landowners understand their security and land management obligations as the agreed commitments will form part of the security agreement. Failure to undertake the commitments would breach the security agreement and could result in enforcement action to rectify the breach.

The commitments to generate gain for protected vegetation depend on the vegetation type. The following vegetation types are considered when calculating gain:

- Patch of native vegetation. A patch of native vegetation is further broken down in to four broad vegetation types:
 - Woody vegetation
 - High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation
 - Other grassland vegetation
 - Non-woody wetland vegetation
- Scattered tree
- Revegetation.

4.1 Prior management gain

4.1.1 Freehold land

The minimum commitment to generate prior management gain on freehold land is to protect the vegetation using one of the approved security options described in section 4.2.1.

Appendix 2A explains how to calculate the amount of prior management gain that can be generated on freehold land.

4.1.2 Crown land

Crown land is required to be protected and managed in accordance with its reserve status. Therefore, prior management gain is not available on Crown land.

4.2 Security gain

4.2.1 Freehold land

Options to generate security gain on freehold land are described in Table 1. Appendix 2B explains how to calculate the amount of security gain that can be generated on freehold land.

All third party offset sites must be recorded on the Native Vegetation Credit Register (NVCR). Third party offset sites transferred to the Crown must be recorded on the DELWP Offset Register.

4.2.2 Crown land

The amount of security gain available on Crown land depends on the current Crown land category of the site. Crown land can be in any of three categories depending on the legal management responsibilities for conservation. These categories are described in Table 2 and include:

- conservation as primary purpose
- multiple purposes which includes conservation (but not primary purpose)
- other purposes.

Minimum commitment options to generate security gain on Crown land are described in Table 3. Appendix 3 explains how to calculate the amount of security gain that can be generated on Crown land.

Table 1. Security commitment options for freehold land

Security commitment	Requirements
Recorded on-title security agreement	<ul style="list-style-type: none"> • Entering into a security agreement with a relevant statutory body that: <ul style="list-style-type: none"> – contains a legally enforceable provision – has no termination date – is recorded on the land title – contains a site management plan as detailed in section 3.9.3. • Agreements that can comply with these requirements include: <ul style="list-style-type: none"> – an agreement with DELWP under section 69 of the <i>Conservation Forest and Lands Act 1987</i> – an agreement with a responsible authority under section 173 of the <i>Planning and Environment Act 1987</i> (not available for third party offsets) – an agreement with Trust for Nature as an offset covenant under Section 3A of the <i>Victorian Conservation Trust Act 1972</i>.
Transfer freehold land to the Crown	<ul style="list-style-type: none"> • Transferring freehold land to the Crown, with conservation as the primary purpose. Crown land reserve categories are described in Table 2. • For native vegetation offset sites a Crown land offset agreement must be signed between the Crown land manager and the DELWP Secretary and meet the Crown land offset security standards detailed in the Guidelines. • Recorded on the Crown land titles register. <p><i>Note:</i></p> <ul style="list-style-type: none"> • A landowner transferring freehold land to the Crown is only entitled to receive maintenance and improvement gains (where available) if they provide sufficient funding to implement a 10 year management plan endorsed by the future Crown land manager and where the area of vegetation on Crown land meets the Crown land eligibility requirements.

Table 2. Crown land reserve categories

Crown land category	Tenures of Crown land within category
Conservation as primary purpose	<ul style="list-style-type: none"> National Parks, State Parks, Wilderness Parks, Coastal Parks reserved under the <i>National Parks Act 1975</i> Crown land reserved for the purpose of conservation under the <i>Crown Land (Reserves) Act 1978</i>. This is either: <ul style="list-style-type: none"> the following land referred to in paragraphs within subsection 4(1): <ul style="list-style-type: none"> (l) the preservation of areas of ecological significance; (m) the conservation of areas of natural interest or beauty or of scientific historic or archaeological interest; (ma) carbon sequestration in vegetation and soil; (n) the preservation of species of native plants; (o) the propagation or management of wildlife or the preservation of wildlife habitat; OR any land referred to in sections 44 or 46.
Multiple purposes (may include conservation but not as the primary purpose)	<ul style="list-style-type: none"> Forest Parks, Regional Parks, Natural Features Reserves, Historic and Cultural Features Reserves reserved under <i>Crown land (Reserves) Act 1978</i> Crown land reserved for the purpose of public recreation including areas for camping under the <i>Crown Land (Reserves) Act 1978</i> Crown land reserved under the <i>Water Act 1989</i> and managed as an environmental or recreational area by a water authority.
Other purposes	<ul style="list-style-type: none"> Crown land reserved for the purpose of infrastructure under the <i>Crown Land (Reserves) Act 1978</i> Crown land managed by a water authority for infrastructure purposes reserved under the <i>Water Act 1989</i> State forest managed under the <i>Forests Act 1958</i> Unreserved Crown land managed under the <i>Land Act 1958</i> Crown land not fitting into one of the above types.

Table 3. Security commitment options for Crown land

Security commitment	Requirement
Reclassify to <i>Crown land - conservation as primary purpose</i>	<ul style="list-style-type: none"> Crown land classified as multiple or other purposes can be reclassified to 'Conservation as primary purpose'. For native vegetation offset sites a Crown land offset agreement must be signed between the Crown land manager and the DELWP Secretary and meet the Crown land offset security standards detailed in the Guidelines. <i>Note:</i> Crown land that is already classified as 'conservation as the primary purpose' cannot generate security gain.
Sign Crown land offset MOU	<ul style="list-style-type: none"> A Crown land offset Memorandum of Understanding (MOU) must be signed between the Crown land manager and the DELWP Secretary.

4.3 Maintenance gain and improvement gain

4.3.1 Freehold land

To generate maintenance and improvement gains, landowners must first agree to protect the vegetation using one of the approved security options described in Table 1.

The minimum commitments required to generate maintenance gain and improvement gain on freehold land are listed in Table 4. To generate maintenance gain, landowners must agree to all maintenance gain minimum commitments for the relevant vegetation type. Landowners can also generate improvement gain by agreeing to the improvement gain minimum commitments. To generate gain, all commitments must be implemented as described in section 5.

Appendix 2C explains how to calculate the amount of maintenance gain and improvement gain that can be generated in each vegetation type on freehold land.

Overlays

Gain is only available where the commitments are higher than the landowner's current legal management responsibilities (duty of care). Overlays increase the legal management responsibilities and therefore affect the availability of maintenance gain.

For example, under an Environmental Significance Overlay (ESO) the landowner has a duty of care to retain all standing trees. Therefore, this commitment does not generate maintenance gain for the 'tree canopy cover' component of the habitat score. Maintenance gains are available for the 'large trees' component of the habitat score, including where an overlay is present. This is to recognise the important role large trees contribute to habitat and services for biodiversity, their age that they are difficult to replace in the short term.

To determine the availability of maintenance gains on freehold land, first determine whether the area is covered by one of the following overlays: Environmental Significance Overlay (ESO), Vegetation Protection Overlay (VPO), Significant Landscape Overlay (SLO), Erosion Management

Overlay (EMO), Salinity Management Overlay (SMO), Bushfire Management Overlay (BMO).

Check the management restrictions that apply to land under the overlay. The following lists the management restrictions that may apply and how the restriction affects the availability of maintenance and improvement gain for components of the habitat score:

- Restriction 1: Not permitted to graze with domestic stock – no maintenance gain for 'understorey' or 'recruitment'.
- Restriction 2: Not permitted to remove trees - no maintenance gain for 'tree canopy cover'.
- Restriction 3: Not permitted to remove dead vegetation – no maintenance gain for 'organic litter' or 'logs'.
- Restriction 4: Requirement for regular fuel reduction - no maintenance or improvement gain for 'understorey', 'recruitment', 'organic litter' or 'logs'.

Transferring freehold land to the Crown

If transferring freehold land to the Crown is the chosen security option, a landowner is only entitled to receive maintenance and improvement gains (where available) if they provide sufficient funding to implement a 10 year management plan endorsed by the future Crown land manager and where the area of vegetation on Crown land meets standards detailed in the Guidelines.

If a funded management plan is not provided, the future Crown land manager can generate maintenance and improvement gains by funding and implementing a 10 year management plan incorporated into the Crown land offset MOU, at the time the Crown land offset MOU is signed.

Table 4. Management commitments to generate maintenance and/or improvement gain on freehold land

Vegetation type	Minimum commitments to generate maintenance gain	Minimum commitments to generate improvement gain
<p>Woody vegetation</p> <p>Heathlands, shrublands (including samphire shrubland), scrubs, thickets, woodlands, swamps where tree canopy or shrub cover is naturally present (including lignum swamp), forests and rainforests.</p>	<p>ALL OF</p> <ul style="list-style-type: none"> • Ensure that weed cover does not increase beyond the current level • Monitor for any new and emerging high threat weeds and eliminate to < 1% cover. • Exclude stock • Retain all standing trees (dead or alive) • Retain logs and fallen timber • Retain leaf litter. 	<p>ALL OF</p> <ul style="list-style-type: none"> • All maintenance gain commitments • Control rabbits • Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, inappropriate fire or flooding regime, other threats as identified). <p>AND EITHER</p> <ul style="list-style-type: none"> • Eliminate all woody weeds to < 1% cover, or • Eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover. <p>AND (OPTIONAL)</p> <ul style="list-style-type: none"> • Undertake supplementary planting in accordance with the minimum standard (see Appendix 1), or • Introduce logs from a DELWP approved source.
<p>High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation</p> <p>Grassland vegetation with an annual rainfall above 500mm and where Kangaroo Grass is naturally dominant.</p>	<p>ALL OF</p> <ul style="list-style-type: none"> • Ensure that weed cover does not increase beyond the current level • Monitor for any new and emerging high threat weeds and eliminate to < 1% cover. <p>AND EITHER</p> <ul style="list-style-type: none"> • Undertake periodic biomass management at agreed timing/frequency to maintain/improve native vegetation condition, or • Undertake biomass management with no periodic schedule. 	<p>ALL OF</p> <ul style="list-style-type: none"> • All maintenance gain commitments • Control rabbits • Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, high threat herb / grass weeds, other threats as identified). <p>AND EITHER</p> <ul style="list-style-type: none"> • Eliminate all woody weeds to < 1% cover, or • Eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover.
<p>Other grassland vegetation</p> <p>Terrestrial grassland vegetation where Kangaroo Grass is not naturally the dominant species (includes vegetation with an annual rainfall above 500mm)</p> <p>Terrestrial grassland vegetation with an annual rainfall below 500mm.</p>	<p>ALL OF</p> <ul style="list-style-type: none"> • Ensure that perennial weed cover does not increase beyond the current level • Monitor for any new and emerging high threat weeds and eliminate to < 1% cover. <p>AND EITHER</p> <ul style="list-style-type: none"> • Exclude stock and ensure that annual weed cover does not increase beyond the current level, or • Exclude stock and monitor annual weed cover. If proportion of annual weeds is ≥ 25% of the total vegetation cover, control by strategic grazing. 	<p>ALL OF</p> <ul style="list-style-type: none"> • All maintenance gain commitments • Control rabbits • Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, high threat herb / grass weeds, other threats as identified). <p>AND EITHER</p> <ul style="list-style-type: none"> • Eliminate all woody weeds to < 1% cover, or • Eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover.

Vegetation type	Minimum commitments to generate maintenance gain	Minimum commitments to generate improvement gain
<p>Non-woody wetland vegetation</p> <p>Swamps where tree canopy or shrub cover is naturally absent salt marshes, grasslands reliant on flooding, grassy or sedge wetlands and herblands.</p>	<p>ALL OF</p> <ul style="list-style-type: none"> • Ensure that weed cover does not increase beyond the current level • Monitor for any new and emerging high threat weeds and eliminate to < 1% cover • Exclude stock • Retain leaf litter. 	<p>ALL OF</p> <ul style="list-style-type: none"> • All maintenance gain commitments • Control rabbits • Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, high threat herb / grass weeds, other threats as identified). <p>AND EITHER</p> <ul style="list-style-type: none"> • Eliminate all woody weeds to < 1% cover, or • Eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover. <p>AND (OPTIONAL)</p> <ul style="list-style-type: none"> • Undertake supplementary planting to the minimum standard where past performance can be demonstrated (see Appendix 1).
<p>Scattered trees</p> <p>Protection of scattered trees will only generate gain for trees with a DBH equal to or greater than 0.75 of the large tree benchmark DBH in the relevant bioregional EVC.</p>	<p>ALL OF</p> <ul style="list-style-type: none"> • Ensure that weed cover does not increase beyond the current level • Monitor for any new and emerging high threat weeds and eliminate to < 1% cover • Control rabbits • Exclude stock • Retain all standing trees (dead or alive) • Retain logs and fallen timber • Retain leaf litter • Recruit at least five new canopy species plants. 	<p>N/A</p>

Vegetation type	Minimum commitments to generate maintenance gain	Minimum commitments to generate improvement gain
Revegetation Revegetation will only generate gain for woody vegetation types: Heathlands, shrublands (including samphire shrubland), scrubs, thickets, woodlands, swamps where tree canopy or shrub cover is naturally present (including lignum swamp), forests and rainforests.	<ul style="list-style-type: none"> Retain logs and fallen timber. 	ALL OF <ul style="list-style-type: none"> All maintenance gain commitments Undertake revegetation in accordance with the minimum standard (see Appendix 1) Retain all standing trees (dead or alive) Ensure that weed cover does not increase beyond the current level Monitor for any new and emerging high threat weeds and eliminate to < 1% cover Control rabbits Exclude stock Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, inappropriate fire or flooding regime, other threats as identified) Eliminate all woody weeds to < 1% cover. AND (OPTIONAL) <ul style="list-style-type: none"> Undertake revegetation to the higher standard where past performance can be demonstrated (see Appendix 1).

4.3.2 Crown land

To generate maintenance gain, land managers must agree to *all* minimum commitments for Crown land (Table 5). Crown land managers can also agree to the minimum commitments to generate improvement gain, as well as optional commitments to generate additional improvement gain.

Appendix 3 explains how to calculate the amount of maintenance gain and improvement gain that can be generated in each vegetation type on Crown land.

Table 5. Management commitments to generate maintenance and/or improvement gain on Crown land

Vegetation type	Minimum commitments to generate maintenance gain	Minimum commitments to generate improvement gain
Patch: <ul style="list-style-type: none"> Woody vegetation High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation Other grassland vegetation Non-woody wetland vegetation. 	ALL OF Minimum commitments for the relevant vegetation type on freehold land, as per Table 4. <ul style="list-style-type: none"> Restrict public access to the land and prevent lopping or pruning of native vegetation. 	ALL OF <ul style="list-style-type: none"> All maintenance gain commitments Control <i>all</i> high threats (including high threat woody, herbaceous and grassy weeds and threats to native vegetation condition due to native and introduced herbivores). <i>Optional commitments to generate additional improvement gain:</i> <ul style="list-style-type: none"> Supplementary planting Introduce missing or depauperate habitat features Restoring ecological processes - ecological burning or flooding.
Scattered tree		N/A
Revegetation		Additional commitments for revegetation on freehold land as per Table 4.

5 Description of management commitments

Maintenance and improvement gains are calculated separately for each component of the habitat score: large trees, tree canopy cover, understorey, lack of weeds, recruitment, organic litter and logs.

The following sections provide information on how the relevant management commitments contribute to the generation of gain in each habitat component.

Proposing other management commitments

Other management commitments may require further study through scientific research to determine their effectiveness and certainty. This may include commitments for offsets of particular threatened species. The commitments listed in this document will improve the condition of vegetation, which in turn will increase the condition of the habitat for the majority of species. However, some other commitments may be particularly effective in increasing the condition of rare or threatened species habitat. This habitat may be a particular habitat component or another habitat attribute which is not recorded in the vegetation quality assessment. If it is not recorded in the vegetation quality assessment, a clear method of assessing the gain and the relationship with vegetation quality assessment method would be required.

5.1 Large trees

Retain all standing trees

Maintenance gains can be generated for the large tree component where a land manager is currently entitled to remove large trees and where the land manager is prepared to forego this entitlement for the 10 year management period or in the case of offsets, where this entitlement is permanently surrendered.

Although under Clause 52.17 of the Victoria Planning Provisions a permit is required to remove standing living and dead large trees, without permanent protection their ongoing security and persistence is not guaranteed. Therefore, to recognise the important role large trees contribute to habitat and services for biodiversity and the age and difficulty to replace them in the short term, maintenance gains are available for large trees on freehold land, where they are permanently protected.

In *woody vegetation*, maintenance gain scoring for the large tree component is risk and proportionate based and recognises the risk of loss of large trees is greatest where there are fewer large trees within smaller areas. Therefore, the amount of

maintenance gain available for a habitat zone depends on the total number of hectares of native vegetation (patch only) on the same property (including the habitat zone to be protected).

Due to the time taken to 'grow a large tree', no improvement gains are possible for large trees over the 10 year management period.

5.2 Tree canopy cover

Retain all standing trees

Maintenance gains can be generated for the tree canopy cover component by retaining all standing trees. See section 5.1 for more information.

In *woody vegetation*, maintenance gain scoring for the tree canopy cover component is risk and proportionate based and recognises the risk of loss of large trees is greatest where there are fewer large trees within smaller areas. Section 5.1 provides further detail.

Maintenance gain for tree canopy cover is only available where the site is on contiguous land in the same ownership with an area equal to or more than 10 hectares.

Control all high threats

Improvement gain can be generated for the tree canopy cover component if a landowner commits to controlling all high threats. This recognises that 10 years of threat management may result in partial recovery of the tree canopy cover where this is currently below benchmark cover.

Under most of the gain scoring scenarios outlined in Appendix 2 the qualification for improvement gains is predicated on landowners committing to controlling all high threats to native vegetation condition improvement. This includes typical high threats to soil structure, natural water flow, vegetation condition and the recruitment cycle. Examples of typical high threats to improvement includes, but is not limited to grazing and disturbance threats from introduced animals (non-domestic animals) such as deer, goats, wild pigs and horses or overgrazing by native herbivores including kangaroos, wallabies and possums, high threats weeds, threats from inappropriate fire or flood regime and other threats as identified. For example:

- sites where deer are known to be in high numbers including in the surrounding landscape and pose a significant threat to improvement in habitat components including the tree canopy cover and

woody species recruitment, understorey life forms and organic litter cover, then it is unlikely that improvement in these components will be achievable or sustainable in the long term at the site. As such improvement gains is not available for these habitat components.

- sites where deer may be present, but are in quite low numbers and the risk from deer is a much lower threat, then where the landowner can commit to monitor and manage the threat adequately in the long-term through a management plan that outlines an integrated program of ongoing monitoring, management and control actions as outlined above, improvement gains can be assessed as being available for these habitat components.

Improvement gain in the tree canopy cover component is only available where *all* high threats can be adequately controlled. Where the threat is assessed as too great and unlikely to be able to be controlled, or the landowner cannot commit to managing the threat in the long-term, then improvement in tree canopy cover is unlikely and improvement gain is not available.

If a land manager has committed to controlling all high threats, the site management plan must contain the additional information described in section 3.9.3.

Control rabbits

Improvement gain can be generated for the tree canopy cover component if a land manager commits to management of rabbits. The *Catchment and Land Protection Act 1994* lists rabbits as an established pest animal and requires that all landowners take reasonable steps to prevent the spread of, and as far as possible eradicate, established pest animals on their land. It should be noted that landowners cannot rely on myxomatosis and the rabbit calicivirus diseases alone to effectively control rabbits. Integrated rabbit control should be implemented to control rabbits in native vegetation. In native vegetation integrated rabbit control should include a combination of:

- fumigating and hand collapsing warrens
- destruction of surface harbour
- baiting
- shooting where appropriate.

Integrated rabbit control must be carefully implemented in native vegetation to ensure that the condition of native vegetation or habitat for indigenous species is not degraded.

Supplementary planting

A land manager can commit to supplementary planting of native vegetation to generate improvement gain, but only if supplementary planting is appropriate for the specific site conditions. In some cases, it may be considered desirable to introduce life forms and/or species that would have occurred on a site but are now absent.

To determine if supplementary planting is appropriate, assessors should consider whether key woody life-forms such as small shrubs, medium shrubs, understorey trees or canopy trees are missing, and if there is available space for planting (bare ground outside drip line of canopy trees).

Supplementary planting must meet the standards outlined in the minimum standard for revegetation and supplementary planting (Appendix 1), calculated for the available space for supplementary planting in the zone. The species, plant numbers and areas to be planted must be detailed in the site management plan.

Supplementary planting is only available where benchmark life forms are missing, and can reasonably be re-introduced, as determined by DELWP on a case-by-case basis.

Improvement gain for supplementary planting is generally only available in woody vegetation and can be generated for planting canopy tree species where there is no tree canopy cover (score is 0), or understorey species where the understorey score is low (0 or 5).

5.3 Understorey

Exclude stock

Maintenance gain can be generated for the understorey component where a land manager is currently entitled to graze the area with domestic stock and where they are prepared to forego this entitlement for the 10 year management period or in the case of offsets, where this entitlement is permanently surrendered. Land managers will also need to ensure that the weed cover does not increase beyond current levels following grazing control in order to qualify for understorey maintenance gain. Weed control is discussed below.

Control weeds

Control weeds (general)

To generate maintenance gain, land managers must undertake weed control. The focus of weed control varies depending on the vegetation type. Specific controls for woody weeds and annual weeds are discussed below.

Landowners must meet their obligations under the *Catchment and Land Protection Act 1994* with respect to eradicating regionally prohibited weeds and preventing the growth and spread of regionally controlled weeds.

Control of *Catchment and Land Protection Act 1994* weeds is part of the landowner's legal management responsibilities (duty of care), even without an offset site agreement. In the context of managing native vegetation, weeds are not restricted to those listed under the Act. As such, eradication of regionally prohibited and control of regionally controlled *Catchment and Land Protection Act 1994* weeds alone does not generate site gain.

Landowners and assessors should consider how the proposed method for managing weeds may impact native plants and animals. In some instances, a landowner may not be able to commit to eliminating weed species if there is potential to cause significant damage to native plants and animals. On some sites, weeds provide habitat for native animals and therefore removal of weed species can be detrimental. In most cases, the preferred approach is to remove the weeds and progressively plant suitable indigenous species in their place. The management plan should describe how habitat will be progressively replaced as the weeds are removed.

In some cases, high threat weeds may be particularly difficult to eliminate or control. This could be due to the species being well-established on a site or due to its biology. For example, it is often difficult to control Chilean Needle-grass once it has become established. To determine if elimination to less than 1% cover will be feasible, the assessor should consider the:

- current cover of the high threat weed species
- predicted response of the species to the control methods
- size of the area to be managed
- extent of high threat weeds in the vicinity and their potential to invade the site

- landowner's capacity to effectively implement the control method.

Where a landowner has committed to eliminating all high threat weeds, all high threat weeds observed on site must be listed in the site management plan with a description about how they will be eliminated. High threat weeds are determined as per a Vegetation Quality Assessment. That is, any introduced species (including non-indigenous natives) with the ability to out-compete and substantially reduce one or more indigenous life forms in the longer term. **All perennial weeds and those listed as high impact in the bioregional EVC benchmarks should be considered high threat, and in some cases annual weeds may also be considered high threat.**

Control woody weeds

Improvement gain can also be generated by agreeing to manage woody weeds and high threat herbaceous and grassy weeds. The amount of improvement gain available will depend on the current lack of weeds score and the commitment that the landowner agrees to. For habitat zones where the cover of high threat weeds is higher (lack of weeds score of < 9) landowners are unlikely to be able to eliminate all high threat herbaceous and grassy weeds, but generally should be able to eliminate all woody weeds. Consequently, landowners only have a choice of one commitment where the lack of weeds score is < 9: Eliminate all woody weeds to < 1% cover.

The option to *eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover* is not considered feasible if the current 'Lack of weeds' score is <9.

Control annual weeds

In *Other grassland vegetation*, improvement gain can be generated by agreeing to manage annual weeds. Control of annual grassy weeds may be difficult in other grassland vegetation (< 500 mm rainfall) where the existing seed bank of annual weeds may be considerable. Landowners may use strategic grazing as a tool to control annual weeds and supplement it with targeted weed control. Strategic grazing can be particularly useful in reducing flowering of annual weeds when applied at the right time. When successfully applied, strategic grazing can deplete the seed source of annual weeds to the point where the landowner can control the annual weeds by targeted weed control alone. This is also the long-term goal and preferred

approach to managing and maintaining the native vegetation condition at the site.

The general strategy for reducing flowering of annual weeds is to introduce a high density of sheep for a short period before flowering and seeding. It should be noted that strategic grazing is less desirable than targeted weed control, as it carries a much higher risk of irreversible damage from stock. Many native species also flower at the same time as annual weeds. As such, strategic grazing will inevitably reduce seed set of native species as well as annual weeds.

Strategic grazing should only be implemented when cover of annual weeds is above 25% and where native species won't be adversely impacted over the long term.

When deciding whether to use strategic grazing for control of annual weeds in other grassland vegetation, assessors should carefully analyse the positive and negative effects of grazing on habitat condition and species diversity. In particular, they should consider:

- the tolerance of both exotic and native species to grazing
- the palatability of the exotic species compared to native species found on site
- the flowering season and the seed source of exotic and native species
- the likely response to grazing of exotic and native species (particularly native herbs and smaller life forms)
- when strategic grazing is likely to be required
- the capacity of the landowner and the resources required to undertake strategic grazing
- the methods for monitoring changes in weed cover and identifying when cover of annual weeds reaches 25%
- monitoring and keeping records of the number of sheep and duration of grazing as well as impact on native species.

Biomass management

In *High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation*, maintenance gain can be generated by agreeing to manage biomass. In this vegetation type, thatching by Kangaroo Grass (*Themeda triandra*) can lead to reductions in plant populations and species diversity. As Kangaroo Grass leaves wither and dry they

thatch over the surrounding open spaces, reducing the amount of area available for recruitment of other native species. As a result, biomass management is generally required in high rainfall grasslands where Kangaroo Grass is dominant.

The objective of biomass management is to maintain inter-tussock spaces for herb recruitment, and improve species richness, diversity of life forms and variety of habitats.

Grazing and burning are the most common techniques to manage biomass. Slashing and removal of thatch is also an option provided there is strict slasher hygiene to ensure that no weeds are transferred. Where highly invasive environmental weeds such as *Nassella* species are present slashing should not occur. The choice of technique should take into account the past management of the site. For example, a grassland community that was periodically burnt in the past may contain species that are sensitive to grazing.

Landowners should monitor the effects of biomass management to allow for management approaches to be modified to ensure species diversity is maintained and structural diversity is improved.

When deciding which biomass management technique to use, assessors should consider:

- the potential for 'thatching over' of Kangaroo Grass
- the past management of the grassland
- the tolerance of both exotic and native species to grazing or burning
- the flowering season and the seed source of both exotic and native species
- the optimum frequency or timing of biomass management
- the capacity of the landowner and the resources required to undertake the biomass management technique
- the methods for monitoring changes in vegetation cover due to grazing to identify when it is approaching 70%.

Most native species in a high rainfall grassland environment require biomass management to open up available space (bare ground) to enable germination. However, native plants benefit from a break in grazing while flowering and seeding. For most *high rainfall volcanic plains or Gippsland plains grasslands* the best time to graze is usually from late summer to late winter, on an annual basis. However,

this will depend on site conditions and rainfall patterns. In some high rainfall volcanic plains or Gippsland plains grassland sites, the vegetation may have been modified to the point where Kangaroo Grass is absent or only a minor component. On these sites, introducing stock on an annual basis for biomass management may be detrimental to vegetation condition and species diversity because grazing animals may selectively graze the smaller (more palatable) native species. When deciding whether to use grazing for biomass management where Kangaroo Grass is not clearly dominant, assessors should carefully assess the potential positive and negative effects of grazing on habitat condition and species diversity and decide if an alternative biomass management technique may be more appropriate.

Where grazing is the method used for biomass management, to minimise significant impacts on native plants and animals from grazing, landowners must maintain the total vegetation cover above 70%.

If it is determined that biomass management is still important in maintaining diversity and reducing Kangaroo Grass thatch, but annual grazing is likely to result in a decline in diversity, the following options should be considered:

- irregular grazing to control biomass build-up (two to five years between grazing events) after monitoring by a suitably qualified ecologist
- mosaic burning (scheduled every two to five years) after monitoring by a suitably qualified ecologist
- slashing and removing thatch, after monitoring by a suitably qualified ecologist.

If using burning, landowners must only undertake mosaic burns. Mosaic burning is when only a section of the site is burned at a time, so that each section is burned only once every two to five years. When burning, landowners must abide by local laws and Country Fire Authority (CFA) restrictions, obtaining appropriate permits as necessary.

The optimal season and frequency for burning high rainfall volcanic plains or Gippsland plains grasslands can vary and depends on the dominant species. For sites dominated by Kangaroo Grass burning every one to two years may be suitable. For sites dominated by species not prone to thatching every two to five years may be suitable. In general, burning in autumn is preferred to minimise the impact on native species flowering and setting seed (although burning in spring can sometimes be beneficial). The timing and frequency of burns will vary on each site and must be decided on a case by

case basis. Landowners should also consider the impacts of burning the grassland on habitat for native animals including threatened species where present.

Landowners may generate site gain if they undertake biomass management (by grazing, mosaic burning or slashing and removal of thatch) at an agreed time and frequency. A reduced amount of site gain may be generated if biomass management is undertaken without an agreed schedule. If the landowner is considering managing biomass without a schedule, the assessor and landowner should discuss:

- the relative benefits of periodic biomass management at an agreed timing and frequency compared with biomass management with no schedule
- the methods for monitoring changes in vegetation cover and determining when biomass management should begin or end
- where using grazing, monitoring to ensure that total vegetation cover does not fall below 70% and a strategy for removing and excluding stock when this occurs
- the strategy for biomass management.

Control all high threats

Improvement gain can be generated for the understorey component if a land manager commits to management of all high threats. See section 5.2 for more details.

Improvement gain in the understorey component is only available where *all* high threats can be adequately controlled. Where the threat is assessed as too great and unlikely to be able to be controlled, or the landowner cannot commit to managing the threat in the long-term, then improvement in the understorey is unlikely and improvement gain is not available.

If a land manager has committed to controlling all high threats, the site management plan must contain the additional information described in section 3.9.3.

Control rabbits

In some vegetation types, improvement gain can be generated for the understorey component if a land manager commits to management of rabbits. See section 5.2 for more details.

Supplementary planting

A land manager can commit to supplementary planting of native vegetation to generate

improvement gain for the understorey component, but only if supplementary planting is appropriate for the specific site conditions. See section 5.2 for more information.

5.4 Lack of weeds

Maintenance gain is not applicable to the 'lack of weeds' component although ensuring that weed cover does not increase beyond current levels is a requirement to qualify for maintenance gains for other habitat components.

Control weeds

Improvement gain can be generated for the lack of weeds component if a land manager commits to management of weeds, including woody weeds and high threat herbaceous and grassy weeds. See section 5.3 for more details about weed control.

5.5 Recruitment

Exclude stock

Maintenance gain can be generated for the recruitment component where a land manager is currently entitled to graze the area with domestic stock and where they are prepared to forego this entitlement for the 10 year management period or in the case of offsets, where this entitlement is permanently surrendered. Land managers will also need to ensure that the weed cover does not increase beyond current levels following grazing control in order to qualify for recruitment maintenance gain.

Control weeds

To generate maintenance gain for the recruitment component, land managers must undertake weed control.

Improvement gain can be generated if a land manager commits to management of woody weeds and high threat herbaceous and grassy weeds.

Improvement gain can be generated in *Other grassland vegetation* for the recruitment component if a land manager commits to management of annual weeds.

See section 5.3 for more details about weed control.

Biomass management

In *High rainfall Victorian Volcanic Plains* or *Gippsland Plains grassland vegetation*, maintenance gain can be generated by agreeing to manage biomass. See section 5.3 for more details.

Control all high threats

Improvement gain can be generated for the recruitment component if a land manager commits to management of all high threats. See section 5.2 for more details.

Improvement gain in the recruitment component is only available where *all* high threats can be adequately controlled. Where the threat is assessed as too great and unlikely to be able to be controlled, or the landowner cannot commit to managing the threat in the long-term, then improvement in recruitment is unlikely and improvement gain is not available.

If a land manager has committed to controlling all high threats, the site management plan must contain the additional information described in section 3.9.3.

Control rabbits

Improvement gain can be generated for the recruitment component if a land manager commits to management of rabbits. See section 5.2 for more details.

5.6 Organic litter

Exclude stock

Maintenance gain can be generated for the organic litter component where a land manager is currently entitled to graze the area with domestic stock and where they are prepared to forego this entitlement for the 10 year management period or in the case of offsets, where this entitlement is permanently surrendered. Land managers will also need to ensure that the weed cover does not increase beyond current levels following grazing control in order to qualify for understorey maintenance gain.

Control weeds

To generate maintenance gain for the organic litter component, land managers must undertake weed control. See section 5.3 for more details about weed control.

Retain leaf litter

Maintenance gain can be scored for organic litter where a land manager is entitled to remove fallen branches/twigs/leaf litter and agrees to forego this entitlement and retain them on the ground for the 10 year management period or in the case of offsets, where these entitlements are permanently surrendered.

If a site is covered by an overlay, such as an Environmental Significance Overlay, that specifies that a permit is required to remove dead native vegetation, then the land manager is not entitled to remove fallen branches, twigs or leaf litter. Therefore, maintenance gain is not available for organic litter.

Biomass management

In *High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation*, maintenance gain can be generated by agreeing to manage biomass. See section 5.3 for more details.

Control all high threats

Improvement gain can be generated for the organic litter component if a land manager commits to management of all high threats. See section 5.2 for more details.

Improvement gain in the organic litter component is only available where *all* high threats can be adequately controlled. Where the threat is assessed as too great and unlikely to be able to be controlled, or the landowner cannot commit to managing the threat in the long-term, then improvement in organic litter is unlikely and improvement gain is not available.

If a land manager has committed to controlling all high threats, the site management plan must contain the additional information described in section 3.9.3.

Control rabbits

Improvement gain can be generated for the organic litter component if a land manager commits to management of rabbits. See section 5.2 for more details.

5.7 Logs

Retain logs and fallen timber

Maintenance gains can be scored for the logs component where a land manager is currently entitled to remove fallen timber and is prepared to forego this entitlement for the 10 year management period or in the case of offsets, where this entitlement is permanently surrendered. Under such

circumstances the land manager qualifies for 100% of the current log score as a gain.

In the case of offsets, the area needs to be appropriately secured from the risk of illegal collection of firewood to qualify for maintenance gain. If a land manager agrees to retaining all logs and fallen timber but illegal firewood collection occurs, it is the responsibility of the land manager to replace all logs removed with appropriate logs from a DELWP approved source (see guidelines below).

If a site is covered by an overlay, such as an Environmental Significance Overlay, that specifies that a permit is required to remove dead native vegetation, then the land manager is not entitled to remove fallen timber. Therefore, maintenance gain is not available for logs.

Introduce logs from a DELWP approved source

Logs affect soil moisture, structure and nutrition; enhance recruitment of some plant species; and provide habitat for many animals, from invertebrates to reptiles to ground-dwelling mammals and birds.

Landowners may generate site gain from introducing logs where the log score is below the bioregional EVC benchmark and the habitat zone has a low understorey score (less than 10) and it is considered that logs can be introduced in a way that will have a minimal impact on existing native vegetation. In addition, logs must be from tree genera indigenous to the introduction site (understorey or canopy trees) and must be from a DELWP approved source. In most circumstances this will be the native vegetation removal site, landowners cannot simply move logs from other patches of native vegetation. There may be situations where DELWP is aware of a log source that is not a native vegetation removal site, but is intended for destruction and if approved could be used at the offset site.

Introduction of logs is only available in woody vegetation where the benchmark length of logs is below the bioregional EVC benchmark and the understorey score is low (< 10), the logs are sourced from the native vegetation removal site or DELWP approved source, the genera of the trees is indigenous to the site, and logs can be introduced without damaging existing vegetation.

These limitations generally mean that this commitment is more feasible where the DELWP-approved source is located close to the offset site. Landowners who are thinking about introducing logs should consider:

- if logs can be sourced from a permitted clearing site or DELWP approved source
- whether the logs are from tree genera indigenous to the site
- the logistics of introducing logs without causing collateral damage.

The methods for introduction of logs must be outlined in the management plan.

5.8 Additional commitment for scattered trees

Recruit at least five new canopy species plants

When the offset is scattered trees, at least five recruits need to regenerate, or be planted in the area around each protected scattered tree. The recruits must be native canopy tree species as specified in the relevant bioregional EVC benchmark. Recruits should be established by at least year 5 of the active management period. If the recruits die during the life of the 10 year management plan they must continue to be replaced until at least five recruits are established.

5.9 Additional commitments for revegetation

Undertake revegetation in accordance with the minimum standard

Revegetation can create habitat for native plants and animals, assist wildlife movement and reduce soil erosion. Improvement gain can be generated by undertaking revegetation in accordance with the minimum standard, described in Appendix 1.

The minimum standard for revegetation requires revegetation of woody habitat components and large tufted graminoids only. This is because of the risk of failure associated with establishing smaller graminoids, herbs and prostrate shrubs.

Undertake revegetation to the higher standard

To generate additional improvement gain, a landowner may propose a higher standard of revegetation with a greater range of life forms or species than that required by the minimum standard.

Revegetation to the higher standard should only be considered where the landowner can demonstrate

past performance in achieving revegetation with a greater range of life forms or species, or success in establishing difficult species. If the landowner proposes to undertake revegetation to the higher standard, the assessor should consider:

- the landowner's past performance in revegetating a diversity of life forms or species
- the ability to source at least 10 understorey species indigenous to the EVC from stock of local provenance
- whether a staged approach to planting may be required.

Revegetation is considered to be of a higher standard where land managers establish a minimum of 10 understorey species indigenous to the EVC of the following life forms: medium shrub, small shrub and large tufted graminoid (where appropriate). Land managers must ensure that the 10 understorey species are established by the end of the 10 year management period.

Landscape context

The revegetation of a site acts to improve its landscape context by introducing native vegetation and habitat for flora and fauna where previously it was not present. Therefore, in addition to improvement gains in the site condition components, revegetation can generate improvement gains in landscape context where they meet the minimum size requirements as outlined in Section 3.8.3.

5.10 Additional commitments for Crown land

To generate maintenance or improvement gain, land management actions on Crown land must be *additional* to those expected as part of base-line public land management. Additionally, land managers must commit to all minimum commitments required to generate maintenance gain for the relevant vegetation type.

Restrict public access to the land and prevent lopping or pruning of native vegetation

Maintenance gain can be generated for vegetation protected on Crown land where public access to the land and lopping or pruning of native vegetation is currently permitted, and the land manager can commit to restricting public access and preventing lopping or pruning of native vegetation.

Control all high threats

Improvement gain can be generated on Crown land if a land manager commits to the management of all high threats. On Crown land this must include the control of high threat woody, herbaceous and grassy weeds, as well as threats to native vegetation condition due to native and introduced herbivores.

For more information on controlling high threats and weeds (including woody weeds) see section 5.3.

Improvement gain on Crown land is only available where *all* high threats can be adequately controlled. Where the threat is assessed as too great and unlikely to be able to be controlled, or the landowner cannot commit to managing the threat in the long-term, then improvement gain is not available.

If a land manager has committed to controlling all high threats, the site management plan must contain all information described in section 3.9.3.

The presence, activity and disturbance by native and introduced herbivores is a threat to improvement in the tree canopy and understorey cover, diversity and recruitment. This threat must be adequately controlled:

- For introduced animals (e.g. rabbits, pigs, goats, deer) this means eliminating all threats and by reducing the presence, activity and disturbance from the introduced animals to negligible levels.
- For native herbivores (e.g. kangaroos, wallabies, possums) that are having an impact to native vegetation condition and improvement from overgrazing. This means controlling native herbivores to the extent necessary to ensure improvements in vegetation condition including tree canopy and understorey cover, diversity and recruitment results.

Where possible, the management of high threats should be coordinated across the broader landscape

and public land estate to ensure a greater impact and chance of success.

Supplementary planting

A land manager can commit to supplementary planting of native vegetation to generate improvement gain, but only if supplementary planting is appropriate for the specific site conditions. See section 5.2 for more information.

Introduce missing or depauperate habitat features

Improvement gain can be generated by introducing missing or depauperate habitat features, such as hollows, rocks or logs, from a DELWP approved source.

See section 5.7 for the details and restrictions on introducing logs.

Only available where these features have been previously removed or lost from the location, are relevant habitat requirements for residing species and can be introduced with minimal disturbance to the native vegetation, as determined by DELWP.

Restore ecological processes - ecological burning or flooding

A land manager can commit to restoring ecological processes at the site to generate improvement gain. This could include ecological burning or flooding.

Contact DELWP for more information.

Only available where appropriate for the vegetation type and location and is conducted at the appropriate frequency, as approved by DELWP.

Appendices

Appendix 1.	Minimum standard for revegetation and supplementary planting.....	30
A.	Standard for survival targets	30
B.	Minimum standards for target diversity.....	31
Appendix 2.	Calculating gain on freehold land.....	32
A.	Calculating prior management gain	32
B.	Calculating security gain.....	32
C.	Calculating maintenance gain and improvement gain	33
i.	Woody vegetation	34
ii.	High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation.....	41
iii.	Other grassland vegetation.....	46
iv.	Non-woody wetland vegetation.....	51
v.	Revegetation.....	55
vi.	Scattered trees	57
Appendix 3.	Calculating gain on Crown land.....	58
A.	Calculating prior management gain	58
B.	Calculating security gain.....	58
C.	Calculating maintenance gain.....	59
D.	Calculating improvement gain	59
Appendix 4.	Gain score	60
A.	Calculate the gain score	60
B.	How is the gain score used?	62

1. Revegetation
min. standard

2. Calculating gain
- Freehold Land

i. M and I gain in
woody vegetation

ii. M and I gain in
HR VP or GP
grassland

iii. M and I gain in
other grassland

iv. M and I gain in
non-woody
wetland

v. M and I gain for
revegetation sites

vi. Maintenance
gain for scattered
tree sites

3 Calculating gain
- Crown Land

4 Calculating the
gain score

Appendix 1. Minimum standard for revegetation and supplementary planting

The standard outlines the minimum requirements for the proposed revegetation or supplementary planting to qualify to generate gain. This includes the appropriate 10 year survival target and the minimum diversity relevant to the vegetation type.

Revegetation and supplementary planting must occur outside of the tree drip-line and not harm or replace existing native vegetation.

The recommended range of species should be appropriate to the bioregional EVC of the site. In order to develop an appropriate revegetation species list for the site, consideration should also be given to the relevant floristic community, local environmental and site conditions, ease of propagation and likely availability from nurseries.

The planting standard does not require the planting of herbs, prostrate shrubs or medium or small grasses.

Generating site gain from revegetation of grassland vegetation is not currently an option provided. This is due to the difficulty and uncertainty in achieving a sufficient survival target to allow ongoing management.

The survival targets are the number of plants required to be surviving at the end of 10 years. To ensure they meet the survival target, landowners may need to establish a greater number of plants than the target survival number. Lower than expected germination rates or attrition of planted species within a habitat component category will require landowners to replant the necessary number within that habitat component to ensure that target survival numbers are met.

A. Standard for survival targets

10 year survival targets are based on the appropriate EVC benchmark.

Assessors should select the EVC that formerly occupied the site. This should be by reference to the pre-1750 EVC mapping layer unless on ground evidence suggests otherwise.

The target number of overstorey (trees) plants/ha are as follows:

- 50 plants/ha for woodlands
- 100 plants/ha for dry forests
- 150 plants/ha for riverine/lowland/foothill forests
- 200 plants/ha for damp/wet forests.

The required target number of understorey plants/ha for each habitat component are calculated according to Table 6 below. The benchmark per cent cover for each understorey habitat component is used.

Table 6. 10 year survival target number of plants for understorey habitat components

Understorey habitat component	Target no. of plants / ha (for each 5% cover in EVC benchmark)	Notes
Understorey tree > 5 m tall (T)	50 plants	Assume 10 plants / ha where benchmark cover is 1%
Medium shrub 1-5 m tall (MS)	200 plants	Assume 40 plants / ha where benchmark cover is 1%
Small shrub < 1 m tall (SS)	500 plants	Assume 100 plants / ha where benchmark cover is 1%
Large tufted graminoid (LTG) (grasses and grass-like tussocks > 1 m tall)	500 plants	Apply only where benchmark cover for LTG habitat component is 10% or greater

Target number of plants

If the required number of small shrub is not available, increasing the number of plants in other habitat components can then be considered.

Large tufted graminoids

Revegetation standards will generally require the use of woody species only although large, robust tussock-forming grasses/sedges/rushes may also be applicable in certain environments (e.g. streams, riparian areas). Large tufted graminoids planting can be increased in fertile environments to compete with weeds.

B. Minimum standards for target diversity

Species selection will be subject to site characteristics, ease of propagation and/or likely availability from regional nurseries. If the diversity of small shrub is not available increasing the number of plants in other habitat components should be considered.

The target diversity of overstorey and understorey plants/ha for each habitat component are calculated according to Table 7 below.

Table 7. 10 year survival target diversity of plants for overstorey and understorey habitat components

Habitat component	Target diversity minimum standard	Target diversity higher standard
Overstorey (canopy trees)	At least 1 species	n/a
Understorey tree > 5 m tall (T)	At least 6 species	At least 10 species
Medium shrub 1-5 m tall (MS)		
Small shrub < 1 m tall (SS)		
Large tufted graminoid (LTG) (grasses and grass-like tussocks > 1 m tall)		

Appendix 2. Calculating gain on freehold land

A. Calculating prior management gain

Prior management gain is calculated separately for each zone identified during the site assessment (see section 2.4). The amount of prior management gain available for a habitat zone at a site depends on whether security already exists at the site and the type of vegetation to be protected. The amount of prior management gain can be determined using Table 8. See section 4.1.1.

Prior management gain is not available if the site is already protected by a recorded on-title security agreement and the protection was a requirement of receiving grant or incentive funding. Prior management gain is available if the protection was a *voluntary* arrangement.

Prior management gain is not available for revegetation sites.

Table 8. Calculating prior management gain on freehold land

Existing security on site	Prior management gain		
	<i>Patch of native vegetation</i>	<i>Scattered tree</i>	<i>Revegetation</i>
None OR Recorded on-title security agreement (<i>voluntary</i>)	10% of current (standardised) habitat score	10% of standard habitat score ¹⁰	N/A
Recorded on-title security agreement (<i>requirement of funding</i>)	N/A	N/A	N/A

B. Calculating security gain

Security gain is calculated separately for each zone identified during the site assessment (see section 2.4). The amount of security gain available for a habitat zone depends on whether security already exists at the site, the security commitment agreed to by the landowner and the type of vegetation to be protected. The amount of security gain can be determined using Table 9. See section 4.2.1.

To generate security gain the protection of the vegetation must be *increased*. If the site is already protected by a recorded on-title security agreement, the amount of security gain available depends on the type of agreement, whether it was voluntary or a requirement of funding and the security commitment option chosen.

¹⁰ The standard habitat score for a large scattered tree is 20, and for a medium scattered tree is 12.

Table 9. Calculating security gain on freehold land

Existing security on site	Security commitment	Security gain		
		<i>Patch of native vegetation</i>	<i>Scattered tree</i>	<i>Revegetation</i>
None OR On-title security agreement (voluntary, non-funded)	Recorded on-title security agreement	10% of current (standardised) habitat score	10% of standard habitat score ¹¹	10% of (standardised) sum of maintenance and improvement gain
	Transfer freehold land to the Crown	20% of current (standardised) habitat score	20% of standard habitat score ¹¹	20% of (standardised) sum of maintenance and improvement gain
On-title security agreement (requirement of funding)	Recorded on-title security agreement	N/A	N/A	N/A
	Transfer freehold land to the Crown	10% of current (standardised) habitat score	10% of standard habitat score ¹¹	10% of (standardised) sum of maintenance and improvement gain

C. Calculating maintenance gain and improvement gain

Maintenance and improvement gains are calculated separately for each habitat zone identified during the site assessment (see section 2.4). To generate maintenance and improvement gains, landowners must first agree to protect the vegetation using one of the approved security options described in section 4.2.1.

Transferring freehold land to the Crown

If transferring freehold land to the Crown is the chosen security option, a landowner is only entitled to receive maintenance and improvement gains (where available) if they provide sufficient funding to implement a 10 year management plan endorsed by the future Crown land manager. See section 4.3.1 for more information.

To generate maintenance gain, landowners must agree to *all* maintenance gain minimum commitments for the relevant vegetation type. Landowners can also generate improvement gain by agreeing to the improvement gain minimum commitments. To generate gain, all commitments must be implemented as described in section 5.

Overlays

If a site is covered by an overlay, such as an Environmental Significance Overlay, then full maintenance and improvement gain may not be available (see section 4.3.1). The following lists the restrictions that may apply:

- Restriction 1: Not permitted to graze with domestic stock – no maintenance gain for ‘understorey’ or ‘recruitment’.
- Restriction 2: Not permitted to remove trees - no maintenance gain for ‘tree canopy cover’.
- Restriction 3: Not permitted to remove dead vegetation – no maintenance gain for ‘organic litter’ or ‘logs’.
- Restriction 4: Requirement for regular fuel reduction - no maintenance or improvement gain for ‘understorey’, ‘recruitment’, ‘organic litter’ or ‘logs’.

For each habitat zone, maintenance and improvement gains are calculated separately for each component of the habitat score: large trees, tree canopy cover, understorey, lack of weeds, recruitment, organic litter and logs. Revegetation sites can generate gain for improving the landscape context of the site.

The following sections explain how to calculate the amount of maintenance gain and improvement gain that can be generated for each component of the habitat score, within each vegetation type.

¹¹ The standard habitat score for a large scattered tree is 20, and for a medium scattered tree is 12.

i. Woody vegetation

Woody vegetation includes heathlands, shrublands (including samphire shrubland), scrubs, thickets, woodlands, swamps where tree canopy or shrub cover is naturally present (including lignum swamp), forests and rainforests.

The following sections explain how to calculate the amount of maintenance gain and improvement gain that can be generated for each component of the habitat score.

To generate maintenance and improvement gains, landowners must first agree to protect the vegetation using one of the approved security options described in section 4.2.1.

The following sections explain which commitments contribute to the generation of gain in each component of the habitat score. To generate maintenance gain, landowners must agree to *all* maintenance gain minimum commitments for woody vegetation. Landowners can also generate improvement gain by agreeing to the improvement gain minimum commitments. To generate gain, all commitments must be implemented as described in section 5.

a) Large trees

Large trees maintenance gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for large trees can be calculated using Table 10.

Table 10. Calculating maintenance gain for large trees in woody vegetation

Minimum commitment	Habitat score <i>Large trees</i>	Maintenance gain <i>Total hectares of native vegetation (patch only) on the property</i>		
		<i>< 5ha</i>	<i>≥ 5 to < 20ha</i>	<i>≥ 20ha</i>
Retain all standing trees (dead or alive)	0	0	0	0
	1	1	0.5	0.25
	2	2	1	0.5
	3	3	1.5	0.75
	4-6	2.5	1.25	0.63
	7-10	2	1	0.5

Large trees improvement gain

Improvement gain is not available for large trees over the 10 year management period. This is because the timeframe required to observe gains in large trees is longer than the management period.

b) Tree canopy cover

Tree canopy cover maintenance gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for tree canopy cover can be calculated using Table 11.

Maintenance gain for tree canopy cover is only available where the site is on contiguous land in the same ownership with an area equal to or more than 10 hectares.

Table 11. Calculating maintenance gain for tree canopy cover in woody vegetation

Minimum commitment	Habitat score <i>Tree canopy cover</i>	Maintenance gain <i>Total hectares of native vegetation (patch only) on the property</i>		
		< 5ha	≥ 5 to < 20ha	≥ 20ha
Retain all standing trees (dead or alive)	1	0.2	0.1	0.05
	2	0.4	0.2	0.1
	3	0.6	0.3	0.15
	4	0.8	0.4	0.2
	5	1	0.5	0.25

Tree canopy cover improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for tree canopy cover can be calculated using Table 12.

Improvement gain is not available if a land manager is unable to control *all* high threats. If a manager has committed to controlling all high threats, the site management plan must contain the additional information as per section 3.9.3.

Table 12. Calculating improvement gain for tree canopy cover in woody vegetation

Minimum commitment	Habitat score <i>Tree canopy cover</i>	Commitment option	Improvement gain
ALL OF	0	A	0.6
• Minimum commitments for maintenance gain	1-3	None	0.4
• Exclude stock	4-5	None	0
• Control rabbits			
• Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, inappropriate fire or flooding regime, other threats as identified)			
AND (OPTIONAL)			
• A. Undertake supplementary planting in accordance with the minimum planting standard.			

c) Understorey

Understorey maintenance gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for understorey can be calculated using Table 13.

Table 13. Calculating maintenance gain for understorey in woody vegetation

Minimum commitment	Habitat score <i>Understorey</i>	Maintenance gain
ALL OF	0	0
• Exclude stock	5	0.5
• Ensure that weed cover does not increase beyond the current level	10	1
• Monitor for any new and emerging high threat weeds and eliminate to < 1% cover.	15	1.5
	20	2
	25	2.5

Understorey improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for understorey can be calculated using Table 14.

Improvement gain is not available if a land manager is unable to control *all* high threats. If a manager has committed to controlling all high threats, the site management plan must contain the additional information as per section 3.9.3.

Table 14. Calculating improvement gain for understorey in woody vegetation

Minimum commitments	Habitat score		Commitment option	Improvement gain
	<i>Understorey</i>	<i>Lack of weeds</i>		
ALL OF	0-5	< 9	B	1.25
• Minimum commitments for maintenance gain		9-15	A	2.5
• Control rabbits			B	1.25
• Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, inappropriate fire or flooding regime, other threats as identified)			A AND C	3.5
			B AND C	2.25
AND EITHER	10-20	< 9	B	2.5
• A. Eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover ¹² , or		9-15	A	5
			B	2.5
• B. Eliminate all woody weeds to < 1% cover	25	0-15	N/A	0
AND (OPTIONAL)				
• C. Undertake supplementary planting in accordance with the minimum planting standard.				

¹² Not considered feasible if the current 'Lack of weeds' score is <9

d) Lack of weeds

Lack of weeds maintenance gain

Maintenance gain is not applicable for the lack of weeds component.

Lack of weeds improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for lack of weeds can be calculated using Table 15.

Table 15. Calculating improvement gain for lack of weeds in woody vegetation

Minimum commitment	Habitat score <i>Lack of weeds</i>	Commitment option	Improvement gain
ALL OF	< 9	B	2
<ul style="list-style-type: none"> Ensure that weed cover does not increase beyond the current level Monitor for any new and emerging high threat weeds and eliminate to < 1% cover 	9-15	A	4
		B	2
AND EITHER			
<ul style="list-style-type: none"> A. Eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover¹², or B. Eliminate all woody weeds to < 1% cover. 			

e) Recruitment

Recruitment maintenance gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for recruitment can be calculated using Table 16.

Table 16. Calculating maintenance gain for recruitment in woody vegetation

Minimum commitments	Habitat score <i>Recruitment</i>	Maintenance gain
ALL OF	0	0
<ul style="list-style-type: none"> Exclude stock 	1	0.1
<ul style="list-style-type: none"> Ensure that weed cover does not increase beyond the current level 	3	0.3
<ul style="list-style-type: none"> Monitor for any new and emerging high threat weeds and eliminate to < 1% cover. 	5	0.5
	6	0.6
	10	1

Recruitment improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for recruitment can be calculated using Table 17.

Improvement gain is not available if a land manager is unable to control *all* high threats. If a manager has committed to controlling all high threats, the site management plan must contain the additional information as per section 3.9.3.

Table 17. Calculating improvement gain for recruitment in woody vegetation

Minimum commitments	Habitat score			Commitment option	Improvement gain
	Recruitment	Understorey	Lack of weeds		
ALL OF	0-6	0-5	0-15	N/A	0
• Minimum commitments for maintenance gain		10-25	9-15	A	4
• Control rabbits			9-15	B	2
• Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, inappropriate fire or flooding regime, other threats as identified)			< 9	B	2
AND EITHER	10	0-25	0-15	N/A	0
• A. Eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover ¹³ , or					
• B. Eliminate all woody weeds to < 1% cover.					

¹³ Not considered feasible if the current 'Lack of weeds' score is <9

f) Organic litter

Organic litter maintenance gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for organic litter can be calculated using Table 18.

Maintenance gain is not available for organic litter if an overlay that applies to the site specifies that a permit is required to remove dead vegetation.

Table 18. Calculating maintenance gain for organic litter in woody vegetation

Minimum commitments	Habitat score <i>Organic litter</i>	Maintenance gain
ALL OF	0	0
• Exclude stock	2	0.2
• Ensure that weed cover does not increase beyond the current level	3	0.3
• Monitor for any new and emerging high threat weeds and eliminate to < 1% cover	4	0.4
• Retain leaf litter.	5	0.5

Organic litter improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for organic litter can be calculated using Table 19.

Improvement gain is not available if a land manager is unable to control *all* high threats. If a manager has committed to controlling all high threats, the site management plan must contain the additional information as per section 3.9.3.

Table 19. Calculating improvement gain for organic litter in woody vegetation

Minimum commitment	Habitat score <i>Organic litter</i>	Improvement gain
ALL OF	0-4	2
• Minimum commitments for maintenance gain	5	0
• Control rabbits		
• Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, inappropriate fire or flooding regime, other threats as identified).		

g) Logs

Log maintenance gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for logs can be calculated using Table 20.

Maintenance gain is not available for logs if an overlay that applies to the site specifies that a permit is required to remove dead vegetation.

Table 20. Calculating maintenance gain for logs in woody vegetation

Minimum commitment	Habitat score		Maintenance gain
	<i>Tree canopy</i>	<i>Logs</i>	
Retain logs and fallen timber	0	0	0
		2	2
		3	3
		4	4
		5	5
	1-5	0	0.4
		2	2.4
		3	3.4
		4	4.4
		5	5

Log improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for logs can be calculated using Table 21.

Table 21. Calculating improvement gain for logs in woody vegetation

Minimum commitment	Habitat score		Improvement gain
	<i>Understorey</i>	<i>Logs</i>	
ALL OF	0-5	0-3	2
• Minimum commitments for maintenance gain		4 or 5	0
• Introduce logs from a DELWP approved source ¹⁴ .	10-25	0-5	0

¹⁴ Only available in woody vegetation where the understorey score is <10, the logs are sourced from the native vegetation removal site or DELWP-approved source, the genera of the trees is indigenous to the site, and logs can be introduced without damaging existing vegetation.

ii. High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation

High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation includes grassland vegetation with an annual rainfall above 500mm and where Kangaroo Grass is naturally dominant. These vegetation communities occur in the volcanic plains (excepting Balliang – Melton – Werribee rainshadow area) and Gippsland plains.

The following sections explain how to calculate the amount of maintenance gain and improvement gain that can be generated for each component of the habitat score.

To generate maintenance and improvement gains, landowners must first agree to protect the vegetation using one of the approved security options described in section 4.2.1.

The following sections explain which commitments contribute to the generation of gain in each component of the habitat score. To generate maintenance gain, landowners must agree to *all* maintenance gain minimum commitments for High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation. Landowners can also generate improvement gain by agreeing to the improvement gain minimum commitments. To generate gain, all commitments must be implemented as described in section 5.

a) Understorey

Understorey maintenance gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for understorey can be calculated using Table 22.

Table 22. Calculating maintenance gain for understorey in High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation

Minimum commitment	Habitat score <i>Understorey</i>	Commitment option	Maintenance gain
ALL OF	0	N/A	0
<ul style="list-style-type: none"> Ensure that weed cover does not increase beyond the current level Monitor for any new and emerging high threat weeds and eliminate to < 1% cover AND EITHER	5	A	2.5
		B	1.25
	10	A	5
		B	2.5
	15	A	7.5
		B	3.75
	20	A	10
		B	5
	25	A	12.5
		B	6.25

¹⁵ Where grazing is the method used for biomass management, to minimise significant impacts on native plants and animals from grazing, landowners must maintain the total vegetation cover above 70%

Understorey improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for understorey can be calculated using Table 23.

Improvement gain is not available if a land manager is unable to control *all* high threats. If a manager has committed to controlling all high threats, the site management plan must contain the additional information as per section 3.9.3.

Table 23. Calculating improvement gain for understorey in High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation

Minimum commitment	Habitat score		Commitment option		Improvement gain
	Understorey	Lack of weeds			
ALL OF <ul style="list-style-type: none"> All minimum commitments for maintenance gain Control rabbits Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, high threat herb / grass weeds, other threats as identified) AND EITHER <ul style="list-style-type: none"> A. Undertake periodic biomass management at agreed timing/frequency to maintain/improve native vegetation condition, or B. Undertake biomass management with no periodic schedule AND EITHER <ul style="list-style-type: none"> C. Eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover¹⁶, or D. Eliminate all woody weeds to < 1% cover. 	0-5	< 9	A OR B	D	0.63
		9-15	A OR B	C	1.25
				D	0.63
	10-20	< 9	A	D	1.25
			B	D	0.63
		9-15	A	C	2.5
				D	1.25
			B	C	1.25
				D	0.63
	25	0-15	N/A	N/A	0

b) Lack of weeds

Lack of weeds maintenance gain

Maintenance gain is not applicable available for to the lack of weeds component.

Lack of weeds improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for lack of weeds can be calculated using Table 24.

¹⁶ Not considered feasible if the current 'Lack of weeds' score is <9

Table 24. Calculating improvement gain for lack of weeds in High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation

Minimum commitment	Habitat score <i>Lack of weeds</i>	Commitment option	Improvement gain
ALL OF	< 9	B	1
<ul style="list-style-type: none"> Ensure that weed cover does not increase beyond the current level Monitor for any new and emerging high threat weeds and eliminate to < 1% cover 	9-15	A	2
		B	1
AND EITHER			
<ul style="list-style-type: none"> A. Eliminate all woody weeds AND high threat herbaceous and grassy weeds to < 1% cover*, or B. Eliminate all woody weeds to < 1% cover. 			

c) Recruitment

Recruitment maintenance gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for recruitment can be calculated using Table 25.

Table 25. Calculating maintenance gain for recruitment in High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation

Minimum commitments	Habitat score <i>Recruitment</i>	Commitment option	Maintenance gain
ALL OF	0	N/A	0
<ul style="list-style-type: none"> Ensure that weed cover does not increase beyond the current level Monitor for any new and emerging high threat weeds and eliminate to < 1% cover 	1	A	1
		B	0.5
AND EITHER	3	A	1.5
		B	0.75
<ul style="list-style-type: none"> A. Undertake periodic biomass management at agreed timing/frequency to maintain/improve native vegetation condition, or B. Undertake biomass management with no periodic schedule¹⁷. 	5	A	2.5
		B	1.25
	6	A	3
		B	1.5
	10	A	5
		B	2.5

¹⁷ Where grazing is the method used for biomass management, to minimise significant impacts on native plants and animals from grazing, landowners must maintain the total vegetation cover above 70%

Recruitment improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for recruitment can be calculated using Table 26.

Improvement gain is not available if a land manager is unable to control *all* high threats. If a manager has committed to controlling all high threats, the site management plan must contain the additional information as per section 3.9.3.

Table 26. Calculating improvement gain for recruitment in High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation

Minimum commitments	Habitat score			Commitment option		Improvement gain
	Recruitment	Understorey	Lack of weeds			
ALL OF	0-6	0-5	0-15	N/A	N/A	0
• All minimum commitments for maintenance gain		10-25	< 9	A	D	1
• Control rabbits				B	D	0.5
• Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, high threat herb / grass weeds, other threats as identified)			9-15	A	C	2
					D	1
				B	C	1
					D	0.5
AND EITHER	10	0-25	0-15	N/A	N/A	0
• A. Undertake periodic biomass management at agreed timing/frequency to maintain/improve native vegetation condition, or						
• B. Undertake biomass management with no periodic schedule						
AND EITHER						
• C. Eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover ¹⁸ , or						
• D. Eliminate all woody weeds to < 1% cover.						

ii. M and I gain in HR VP or GP grassland

¹⁸ Not considered feasible if the current 'Lack of weeds' score is <9

d) Organic litter

Organic litter maintenance gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for organic litter can be calculated using Table 27.

Maintenance gain is not available for organic litter if an overlay that applies to the site specifies that a permit is required to remove dead vegetation.

Table 27. Calculating maintenance gain for organic litter in High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation

Minimum commitments	Habitat score <i>Organic litter</i>	Commitment option	Maintenance gain
ALL OF	0	N/A	0
<ul style="list-style-type: none"> Ensure that weed cover does not increase beyond the current level Monitor for any new and emerging high threat weeds and eliminate to < 1% cover AND EITHER <ul style="list-style-type: none"> A. Undertake periodic biomass management at agreed timing/frequency to maintain/improve native vegetation condition, or B. Undertake biomass management with no periodic schedule. 	2	A	1
		B	0.5
	3	A	1.5
		B	0.75
	4	A	2
		B	1
	5	A	2.5
		B	1.25

ii. M and I gain in HR VP or GP grassland

Organic litter improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for organic litter can be calculated using Table 28.

Improvement gain is not available if a land manager is unable to control *all* high threats. If a manager has committed to controlling all high threats, the site management plan must contain the additional information as per section 3.9.3.

Table 28. Calculating improvement gain for organic litter in High rainfall Victorian Volcanic Plains or Gippsland Plains grassland vegetation

Minimum commitments	Habitat score <i>Organic litter</i>	Commitment option	Improvement gain
ALL OF	0-4	A	1
<ul style="list-style-type: none">• All minimum commitments for maintenance gain• Control rabbits		B	0.5
<ul style="list-style-type: none">• Control ALL high threats (e.g grazing threats from introduced animals or overgrazing by native herbivores, high threat herb / grass weeds, lack of biomass management, other threats as identified)	5	A OR B	0
AND EITHER			
<ul style="list-style-type: none">• A. Undertake periodic biomass management at agreed timing/frequency to maintain/improve native vegetation condition• B. Undertake biomass management with no periodic schedule.			

iii. Other grassland vegetation

Other grassland vegetation includes terrestrial grassland vegetation where Kangaroo Grass is not naturally the dominant species (includes vegetation with an annual rainfall above 500mm) and terrestrial grassland vegetation with an annual rainfall below 500mm.

The following sections explain how to calculate the amount of maintenance gain and improvement gain that can be generated for each component of the habitat score.

To generate maintenance and improvement gains, landowners must first agree to protect the vegetation using one of the approved security options described in section 4.2.1.

The following sections explain which commitments contribute to the generation of gain in each component of the habitat score. To generate maintenance gain, landowners must agree to *all* maintenance gain minimum commitments for other grassland vegetation. Landowners can also generate improvement gain by agreeing to the improvement gain minimum commitments. To generate gain, all commitments must be implemented as described in section 5.

a) Understorey

Understorey maintenance gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for understorey can be calculated using Table 29.

Table 29. Calculating maintenance gain for understorey in other grassland vegetation

Minimum commitment	Habitat score <i>Understorey</i>	Commitment option	Maintenance gain
ALL OF	0	N/A	0
<ul style="list-style-type: none"> Ensure that perennial weed cover does not increase beyond the current level Monitor for any new and emerging high threat weeds and eliminate to < 1% cover 	5	A	2.5
		B	1.25
AND EITHER	10	A	5
		B	2.5
<ul style="list-style-type: none"> A. Exclude stock and ensure that annual weed cover does not increase beyond the current level, or B. Exclude stock and monitor annual weed cover. If proportion of annual weeds $\geq 25\%$ of the total vegetation cover, control by strategic grazing. 	15	A	7.5
		B	3.75
	20	A	10
		B	5
	25	A	12.5
		B	6.25

Understorey improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for understorey can be calculated using Table 30.

Improvement gain is not available if a land manager is unable to control *all* high threats. If a manager has committed to controlling all high threats, the site management plan must contain the additional information as per section 3.9.3.

Table 30. Calculating improvement gain for understorey in other grassland vegetation

Minimum commitments	Habitat score		Commitment option		Improvement gain
	<i>Understorey</i>	<i>Lack of weeds</i>			
ALL OF	0-5	< 9	A or B	D	0.63
• All minimum commitments for maintenance gain		9-15	A or B	C	1.25
• Control rabbits				D	0.63
• Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, high threat herb / grass weeds, other threats as identified)	10-20	< 9	A	D	1.25
			B	D	0.63
AND EITHER		9-15	A	C	2.5
• A. Exclude stock and ensure that annual weed cover does not increase beyond the current level, or				D	1.25
• B. Exclude stock and monitor annual weed cover. If proportion of annual weeds \geq 25% of the total vegetation cover, control by strategic grazing. At all other times exclude stock			B	C	1.25
				D	0.63
AND EITHER	25	0-15	N/A	N/A	0
• C. Eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover ¹⁹ , or					
• D. Eliminate all woody weeds to < 1% cover.					

iii. M and I gain in other grassland

¹⁹ Not considered feasible if the current 'Lack of weeds' score is <9

b) Lack of weeds

Lack of weeds maintenance gain

Maintenance gain is not available for the lack of weeds component.

Lack of weeds improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for lack of weeds can be calculated using Table 31.

Table 31. Calculating improvement gain for lack of weeds in other grassland vegetation

Minimum commitment	Habitat score <i>Lack of weeds</i>	Commitment option	Improvement gain
ALL OF	< 9	B	1
<ul style="list-style-type: none"> Ensure that perennial weed cover does not increase beyond the current level Monitor for any new and emerging high threat weeds and eliminate to < 1% cover 	9-15	A	2
		B	1
AND EITHER			
<ul style="list-style-type: none"> A. Eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover²⁰, or B. Eliminate all woody weeds to < 1% cover. 			

c) Recruitment

Recruitment maintenance gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for recruitment can be calculated using Table 32.

Table 32. Calculating maintenance gain for recruitment in other grassland vegetation

Minimum commitments	Habitat score <i>Recruitment</i>	Commitment option	Maintenance gain
ALL OF	0	N/A	0
<ul style="list-style-type: none"> Ensure that perennial weed cover does not increase beyond the current level Monitor for any new and emerging high threat weeds and eliminate to < 1% cover 	1	A	1
		B	0.5
	3	A	1.5
AND EITHER		B	0.75
<ul style="list-style-type: none"> A. Exclude stock and ensure that annual weed cover does not increase beyond the current level, or B. Exclude stock and monitor annual weed cover. If proportion of annual weeds $\geq 25\%$ of the total vegetation cover, control by strategic grazing. 	5	A	2.5
		B	1.25
	6	A	3
		B	1.5
	10	A	5
		B	2.5

²⁰ Not considered feasible if the current 'Lack of weeds' score is <9

Recruitment improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for recruitment can be calculated using Table 33.

Improvement gain is not available if a land manager is unable to control *all* high threats. If a manager has committed to controlling all high threats, the site management plan must contain the additional information as per section 3.9.3.

Table 33. Calculating improvement gain for recruitment in other grassland vegetation

Minimum commitments	Habitat score			Commitment option	Improvement gain
	Recruitment	Understorey	Lack of weeds		
ALL OF	0-6	0-5	0-15	N/A	0
<ul style="list-style-type: none"> All minimum commitments for maintenance gain Control rabbits 		10-25	< 9	A and D or B and D	1
Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, high threat herb / grass weeds, other threats as identified)			9-15	A and C or B and C	2
				A and D or B and D	1
AND EITHER	10	0-25	0-15	None	0
<ul style="list-style-type: none"> A. Exclude stock and ensure that annual weed cover does not increase beyond the current level, or B. Exclude stock and monitor annual weed cover. If proportion of annual weeds \geq 25% of the total vegetation cover, control by strategic grazing. 					
AND EITHER					
<ul style="list-style-type: none"> C. Eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover²¹, or D. Eliminate all woody weeds to < 1% cover. 					

iii. M and I gain in other grassland

²¹ Not considered feasible if the current 'Lack of weeds' score is <9

d) Organic litter

Organic litter maintenance gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for organic litter can be calculated using Table 34.

Maintenance gain is not available for organic litter if an overlay that applies to the site specifies that a permit is required to remove dead vegetation.

Table 34. Calculating maintenance gain for organic litter in other grassland vegetation

Minimum commitments	Habitat score <i>Organic litter</i>	Commitment option	Maintenance gain
<ul style="list-style-type: none"> Ensure that perennial weed cover does not increase beyond the current level AND Monitor for any new and emerging high threat weeds and eliminate to < 1% cover AND EITHER A. Exclude stock and ensure that annual weed cover does not increase beyond the current level, or B. Exclude stock and monitor annual weed cover. If proportion of annual weeds $\geq 25\%$ of the total vegetation cover, control by strategic grazing. 	0	N/A	0
	2	A	1
		B	0.5
	3	A	1.5
		B	0.75
	4	A	2
		B	1
	5	A	2.5
		B	1.25

iii. M and I gain in other grassland

Organic litter improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for organic litter can be calculated using Table 35.

Improvement gain is not available if a land manager is unable to control *all* high threats. If a manager has committed to controlling all high threats, the site management plan must contain the additional information as per section 3.9.3.

Table 35. Calculating improvement gain for organic litter in other grassland vegetation

Minimum commitments	Habitat score <i>Organic litter</i>	Commitment option	Improvement gain
ALL OF <ul style="list-style-type: none"> All minimum commitments for maintenance gain Control rabbits Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, high threat herb / grass weeds, other threats as identified) AND EITHER <ul style="list-style-type: none"> A. Exclude stock and ensure that annual weed cover does not increase beyond the current level, or B. Exclude stock and monitor annual weed cover. If proportion of annual weeds $\geq 25\%$ of the total vegetation cover, control by strategic grazing. 	0-4	A	1
		B	0.5
	5	A OR B	0

iv. Non-woody wetland vegetation

Non-woody wetland vegetation includes swamps where tree canopy or shrub cover is naturally absent salt marshes, grasslands reliant on flooding, grassy or sedge wetlands and herblands.

The following sections explain how to calculate the amount of maintenance gain and improvement gain that can be generated for each component of the habitat score.

To generate maintenance and improvement gains, landowners must first agree to protect the vegetation using one of the approved security options described in section 4.2.1.

The following sections explain which commitments contribute to the generation of gain in each component of the habitat score. To generate maintenance gain, landowners must agree to *all* maintenance gain minimum commitments for non-woody wetland vegetation. Landowners can also generate improvement gain by agreeing to the improvement gain minimum commitments. To generate gain, all commitments must be implemented as described in section 5.

a) Understorey

Understorey maintenance gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for understorey can be calculated using Table 36.

Table 36. Calculating maintenance gain for understorey in non-woody wetland vegetation

Minimum commitments	Habitat score <i>Understorey</i>	Maintenance gain
ALL OF	0	0
• Exclude stock	5	2.5
• Ensure that weed cover does not increase beyond the current level	10	5
• Monitor for any new and emerging high threat weeds and eliminate to < 1% cover.	15	7.5
	20	10
	25	12.5

iv. M and I gain in
non-woody
wetland

Understorey improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for understorey can be calculated using Table 37.

Improvement gain is not available if a land manager is unable to control *all* high threats. If a manager has committed to controlling all high threats, the site management plan must contain the additional information as per section 3.9.3.

Table 37. Calculating improvement gain for understorey in non-woody wetland vegetation

Minimum commitments	Habitat score		Commitment option	Improvement gain
	<i>Understorey</i>	<i>Lack of weeds</i>		
ALL OF	0-5	< 9	B	0.63
• All minimum commitments for maintenance gain		9-15	A	1.25
• Control rabbits			B	0.63
• Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, high threat herb / grass weeds, other threats as identified)			A AND C	2.25
			B AND C	1.63
AND EITHER	10-20	< 9	B	1.25
• A. Eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover ²² , or		9-15	A	2.5
• B. Eliminate all woody weeds to < 1% cover			B	1.25
AND (OPTIONAL)	25	0-15	N/A	0
• C. Undertake supplementary planting to the minimum standard where past performance can be demonstrated.				

b) Lack of weeds

Lack of weeds maintenance gain

Maintenance gain is not available for the lack of weeds component.

Lack of weeds improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for lack of weeds can be calculated using Table 38.

Table 38. Calculating improvement gain for lack of weeds in non-woody wetland vegetation

Minimum commitments	Habitat score <i>Lack of weeds</i>	Commitment option	Improvement gain
ALL OF	< 9	B	1
• Ensure that weed cover does not increase beyond the current level	9-15	A	2
• Monitor for any new and emerging high threat weeds and eliminate to < 1% cover		B	1
AND EITHER			
• A. Eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover ²³ , or			
• B. Eliminate all woody weeds to < 1% cover.			

²² Not considered feasible if the current 'Lack of weeds' score is <9

²³ Not considered feasible if the current 'Lack of weeds' score is <9

c) Recruitment

Recruitment maintenance gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for recruitment can be calculated using Table 39.

Table 39. Calculating maintenance gain for recruitment in non-woody wetland vegetation

Minimum commitments	Habitat score <i>Recruitment</i>	Maintenance gain
ALL OF	0	0
• Exclude stock	1	0.5
• Ensure that weed cover does not increase beyond the current level	3	1.5
• Monitor for any new and emerging high threat weeds and eliminate to < 1% cover.	5	2.5
	6	3
	10	5

Recruitment improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for recruitment can be calculated using Table 40.

Improvement gain is not available if a land manager is unable to control *all* high threats. If a manager has committed to controlling all high threats, the site management plan must contain the additional information as per section 3.9.3.

Table 40. Calculating improvement gain for recruitment in non-woody wetland vegetation

Minimum commitments	Habitat score			Commitment option	Improvement gain
	<i>Recruitment</i>	<i>Understorey</i>	<i>Lack of weeds</i>		
ALL OF	0-6	0-5	0-15	N/A	0
• All minimum commitments for maintenance gain		10-25	< 9	B	1
• Control rabbits			9-15	A	2
• Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, high threat herb / grass weeds, other threats as identified)				B	1
AND EITHER	10	0-25	0-15	N/A	0
• A. Eliminate all woody weeds AND all high threat herbaceous and grassy weeds to < 1% cover ²⁴ , or					
• B. Eliminate all woody weeds to < 1% cover.					

iv. M and I gain in non-woody wetland

²⁴ Not considered feasible if the current 'Lack of weeds' score is <9

d) Organic litter

Organic litter maintenance gain

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for organic litter can be calculated using Table 41.

Maintenance gain is not available for organic litter if an overlay that applies to the site specifies that a permit is required to remove dead vegetation.

Table 41. Calculating maintenance gain for organic litter in non-woody wetland vegetation

Minimum commitments	Habitat score <i>Organic litter</i>	Maintenance gain
ALL OF	0	0
• Exclude stock	2	1
• Ensure that weed cover does not increase beyond the current level	3	1.5
• Monitor for any new and emerging high threat weeds and eliminate to < 1% cover	4	2
• Retain leaf litter.	5	2.5

Organic litter improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for organic litter can be calculated using Table 42.

Improvement gain is not available if a land manager is unable to control *all* high threats. If a manager has committed to controlling all high threats, the site management plan must contain the additional information as per section 3.9.3.

Table 42. Calculating improvement gain for organic litter in non-woody wetland vegetation

Minimum commitments	Habitat score <i>Organic litter</i>	Improvement gain
ALL OF	0-4	1
• All minimum commitments for maintenance gain	5	0
• Control rabbits		
• Control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, high threat herb / grass weeds, other threats as identified).		

v. Revegetation

Revegetation will only generate gain for woody vegetation types: Heathlands, shrublands (including samphire shrubland), scrubs, thickets, woodlands, swamps where tree canopy or shrub cover is naturally present (including lignum swamp), forests and rainforests.

The following sections explain how to calculate the amount of maintenance gain and improvement gain that can be generated for each component of the habitat score.

To generate maintenance and improvement gains, landowners must first agree to protect the vegetation using one of the approved security options described in section 4.2.1.

The following sections explain which commitments contribute to the generation of gain in each component of the habitat score. To generate maintenance gain, landowners must agree to *all* maintenance gain minimum commitments for revegetation. Landowners can also generate improvement gain by agreeing to the improvement gain minimum commitments. To generate gain, all commitments must be implemented as described in section 5.

a) Large trees, lack of weeds, recruitment and organic litter

Maintenance and improvement gains are not available for the large trees, lack of weeds, recruitment or organic litter components in revegetation sites.

b) Tree canopy cover and understorey (combined)

Tree canopy cover and understorey maintenance gain

Maintenance gain is not available for the tree canopy cover and understorey components in revegetation sites.

Tree canopy cover and understorey improvement gain

Once the landowner has agreed to the minimum commitments, the resulting combined amount of improvement gain for tree canopy cover and understorey can be calculated using Table 43.

Improvement gain is not available if a land manager is unable to control *all* high threats. If a manager has committed to controlling all high threats, the site management plan must contain the additional information as per section 3.9.3.

Table 43. Calculating the improvement gain for combined canopy and understorey components in revegetation sites

Minimum commitments	Commitment option	Improvement gain
ALL OF	A and B	7
<ul style="list-style-type: none"> Retain all standing trees (dead or alive) Exclude stock Ensure that weed cover does not increase beyond the current level Monitor for any new and emerging high threat weeds and eliminate to < 1% cover Retain logs and fallen timber Control rabbits Control ALL high threats (e.g. grazing threats from introduced animals or native herbivores, high threat herb / grass weeds, other threats as identified) 	A and C	10
AND		
<ul style="list-style-type: none"> A. Eliminate all woody weeds to < 1% cover 		
AND EITHER		
<ul style="list-style-type: none"> B. Undertake revegetation to the minimum standard, or C. Undertake revegetation to the higher standard where past performance can be demonstrated (see Appendix 1). 		

c) Logs

Logs maintenance gain

Once the landowner has agreed to the minimum commitment, the resulting amount of maintenance gain for logs can be calculated using Table 44.

Maintenance gain is not available for logs if an overlay that applies to the site specifies that a permit is required to remove dead vegetation.

Table 44. Calculating maintenance gain for logs for revegetation sites

Minimum commitment	Length of existing logs as proportion of benchmark length present	Large logs	Maintenance gain
Retain logs and fallen timber	< 10%	N/A	0
	< 50%	Absent	2
	≥ 50%	Absent	3
	< 50%	Present	4
	≥ 50%	Present	5

Logs improvement gain

Once the landowner has agreed to the minimum commitment, the resulting amount of maintenance gain for logs can be calculated using Table 45.

Table 45. Calculating improvement gain from introduction of logs into revegetation sites

Minimum commitments	Length of logs to be introduced as proportion of benchmark length present	Improvement gain
ALL OF	< 10%	0
• Retain logs and fallen timber	≥ 10%	2
• Introduce logs from DELWP approved source ²⁵ .		

d) Landscape context

Revegetation sites can generate gain for improving the landscape context of the site. Revegetation proposals that meet the minimum size requirement as outlined in Section 3.8 will receive an assigned landscape context gain score of three points per hectare as outline in Table 46.

Table 46. Calculating improvement gain for landscape context for revegetation sites

Minimum commitment	Maintenance gain	Improvement gain
Meet the minimum size requirements as outlined in Section 3.8.	N/A	3

²⁵ Only available in woody vegetation where the understorey score is < 10, the logs are sourced from the native vegetation removal site or DELWP-approved source, the genera of the trees is indigenous to the site, and logs can be introduced without damaging existing vegetation.

vi. Scattered trees

Protection of scattered trees will only generate gain for large or medium scattered trees:

- **Large scattered tree:** a scattered tree with a DBH equal to or greater than the large tree diameter as specified in the relevant bioregional EVC benchmark.
- **Medium scattered tree:** a scattered tree with a DBH equal to or greater than 0.75 of the large tree diameter in the relevant bioregional EVC benchmark but less than the DBH of a large tree.

To generate maintenance and improvement gains, landowners must first agree to protect the vegetation using one of the approved security options described in section 4.2.1.

The following sections explain which commitments contribute to the generation of gain in each component of the habitat score. To generate maintenance gain, landowners must agree to *all* maintenance gain minimum commitments for scattered trees. Landowners can also generate improvement gain by agreeing to the improvement gain minimum commitments. To generate gain, all commitments must be implemented as described in section 5.

Once the landowner has agreed to the minimum commitments, the resulting amount of maintenance gain for the protection of a large scattered tree can be calculated using Table 47.

Table 47. Calculating maintenance gain for large scattered trees

Minimum commitments	Scattered tree size	Standard habitat score	Maintenance gain	Improvement gain
ALL OF				
<ul style="list-style-type: none"> • Retain all standing trees (dead or alive) • Recruit at least five new canopy species plants • Ensure that weed cover does not increase beyond the current level 	Large	20	13.6	N/A
<ul style="list-style-type: none"> • Monitor for any new and emerging high threat weeds and eliminate to < 1% cover • Retain logs and fallen timber • Retain leaf litter • Exclude stock • Control rabbits. 	Medium	12	5.6	N/A

Appendix 3. Calculating gain on Crown land

A. Calculating prior management gain

Prior management gain is not available on Crown land.

B. Calculating security gain

The amount of security gain available on Crown land depends on the current Crown land category, the security commitment agreed to by the landowner and the type of vegetation to be protected.

To generate security gain on Crown land, the protection of native vegetation on a site must be *increased*. Crown land that is already classified as 'conservation as the primary purpose' cannot generate security gain.

Once the Crown land manager has agreed to the minimum commitments, the resulting amount of security gain for the protection of vegetation on Crown land can be calculated using Table 48. See section 4.2.2.

Table 48. Calculating security gain on Crown land

Current Crown land category	Security commitment	Security gain		
		Patch	Scattered tree ²⁶	Revegetation
Crown land - multiple purposes OR Crown land - other purposes	Reclassify to Crown land - conservation as primary purpose	10% of current (standardised) habitat score	10% of standard habitat score	10% of (standardised) sum of maintenance and improvement gain
	Sign a Crown land offset MOU			
	Reclassify to Crown land - conservation as primary purpose AND sign Crown land offset MOU			
Crown land - conservation as primary purpose	N/A	N/A	N/A	N/A

²⁶ The standard habitat score for a large scattered tree is 20, and for a medium scattered tree is 12.

C. Calculating maintenance gain

To generate gain, Crown land managers must first agree to protect the vegetation using one of the approved security options described in section 4.2.2.

To generate maintenance gain, land managers must agree to *all* maintenance gain minimum commitments for Crown land. This includes agreeing to *all* maintenance gain minimum commitments for the relevant vegetation type as required for freehold land (see section 4.3.1 and Appendix 2C). All commitments must be implemented as described in section 5. Once the Crown land manager has agreed to the minimum commitments, the resulting amount of maintenance gain for the protection of vegetation on Crown land can be calculated using Table 49.

Table 49. Calculating maintenance gain on Crown land

Minimum commitments	Maintenance gain		
	Patch	Scattered tree	Revegetation
ALL OF <ul style="list-style-type: none"> Meet all of the minimum commitments for maintenance gain for the relevant vegetation type as Appendix 2C Restrict public access to the land and prevent lopping or pruning of native vegetation. 	2	2	As per freehold (Appendix 2C(v))

D. Calculating improvement gain

Once the landowner has agreed to the minimum commitments, the resulting amount of improvement gain for understorey can be calculated using Table 37. All commitments must be implemented as described in section 5. Once the Crown land manager has agreed to the minimum commitments, the resulting amount of improvement gain for the protection of vegetation on Crown land can be calculated using Table 50.

Improvement gain is not available if the Crown land manager is unable to control *all* high threats. If a manager has committed to controlling all high threats, the site management plan must contain the additional information as per section 3.9.3.

Table 50. Calculating improvement gain on Crown land

Minimum commitments	Maintenance gain		
	Patch	Scattered tree	Revegetation
ALL OF <ul style="list-style-type: none"> All maintenance gain commitments Meet all of the minimum commitments for improvement gain for the relevant vegetation type as per Appendix 2C Control <i>all</i> high threats (including high threat woody, herbaceous and grassy weeds and threats to native vegetation condition due to native and introduced herbivores). 	15	N/A	As per freehold (Appendix 2C(v))
Optional commitments to generate additional improvement gain:			
Supplementary planting	1	N/A	N/A
Introduce missing or depauperate habitat features	2		
Logs ²⁷	5		
Other - e.g. hollows, rocks.	5		
Restore ecological processes - ecological burning or flooding ²⁸ .	10		

²⁷ Only available in woody vegetation where the understorey score is <10, the logs are sourced from the native vegetation removal site or DELWP-approved source, the genera of the trees is indigenous to the site, and logs can be introduced without damaging existing vegetation.

²⁸ Only available where appropriate for the vegetation type and location and is conducted at the appropriate frequency, as approved by DELWP.

Appendix 4. Gain score

This section outlines the steps to calculate the overall gain in biodiversity value of the native vegetation due to active management and increased security of the native vegetation.

A. Calculate the gain score

The gain score resulting from native vegetation management and protection will typically be between 10 and 30 out of 100.

1. Sum maintenance and improvement gain

Sum the maintenance gain for each habitat component to create an un-standardised subtotal of maintenance site gain.

Total maintenance gain (un-standardised)

= sum of maintenance gain for large trees + tree canopy cover + understorey + recruitment + organic litter + logs

Sum the improvement gain for each habitat component to create an un-standardised subtotal of improvement gain.

Total improvement gain (un-standardised)

= sum of improvement gain for tree canopy cover + understorey + lack of weeds + recruitment + organic litter + logs + special case commitments

2. Standardise the total maintenance and improvement gain

The gain score will require standardising if the EVC benchmark does not include all habitat components. If so, multiply the totals of the maintenance and improvement gain by the site condition standardiser (see Table 51). Note that prior management gain and security gain do not require standardising.

Total maintenance gain (standardised)

= total maintenance gain (un-standardised) × site condition standardiser

Total improvement gain (standardised)

= total improvement gain (un-standardised) × site condition standardiser

Table 51. Site condition standardisers

Habitat components not part of EVC benchmark	Standardiser
Large trees (75/65)	1.15
Large trees and logs (75/60)	1.25
Large trees, tree canopy cover and logs (75/55)	1.36

3. Shorter management periods (if applicable)

Maintenance and improvement gain are calculated on the basis of 10 years of active management. If the site has a management plan with a management period shorter than 10 years, divide the number of years of the management period by 10 to get a decimal. For example, for a 5 year management period this would be 5/10 equalling 0.5. To determine the gain score, multiply this decimal by the total maintenance gain and the total improvement gain.

Total maintenance gain (standardised) for shorter management period

$$= \text{total maintenance gain (standardised)} \times \frac{\text{management period}}{10}$$

Total improvement gain (standardised) for shorter management period

$$= \text{total improvement gain (standardised)} \times \frac{\text{management period}}{10}$$

4. Calculate the gain score

Sum the gains for prior management, security, maintenance and improvement to get the total gain score as a score out of 100.

GAIN SCORE (out of 100)

$$= \text{prior management gain} + \text{security gain} + \text{standardised subtotal of maintenance gain} + \text{standardised subtotal of improvement gain}$$

B. How is the gain score used?

The gain score can be combined with other site attributes, values or metrics to give an overall gain in a specific metric (see section 2.5).

Habitat hectares of gain

To calculate 'habitat hectares of gain' the gain score is divided by 100 to obtain a score between 0 and 1. This number is multiplied by the extent (hectares) of native vegetation. The extent of vegetation is the area of land covered by a patch, scattered tree or revegetation. Extent is measured in hectares:

- *Patch of native vegetation*: The extent of a patch is the area of the patch in hectares.
- *Scattered tree*: For the purposes of calculating gain, the extent of a scattered tree is the protected area around the scattered tree (the 'scattered tree zone' – see section 3.8.2).
- *Revegetation*: The extent of revegetation is the area of the revegetation zone (see section 3.8.3 and 3.8.4) in hectares.

$$\text{Habitat hectares of gain} = \text{extent (ha)} \times \frac{\text{gain score}}{100}$$

When calculating gain for protection of vegetation, overlaps between patches, scattered trees and revegetation sites are not counted twice. The area used to determine the boundary of the site and to calculate gain when these different native vegetation types overlap is determined as follows:

- patches cannot overlap with one another
- where the extent of a scattered tree overlaps with a patch, the area of overlap is regarded as patch
- where the extent of a medium scattered tree overlaps with a large scattered tree the area of overlap is regarded as large scattered tree
- the revegetation zone cannot overlap with a patch (habitat zone) or a scattered tree zone.

Habitat units

To calculate the amount of habitat units available at an offset site, the habitat hectares of gain is multiplied by a landscape score (described in the Guidelines).

$$\text{General habitat unit} = \text{Habitat hectares of gain} \times \text{General landscape factor}$$

$$\text{Species habitat unit} = \text{Habitat hectares of gain} \times \text{Species landscape factor}$$

Glossary

Accredited native vegetation assessor – A native vegetation assessor listed on DELWP's Vegetation Quality Assessment Competency Register. An accredited native vegetation assessor must have current accreditation (less than two years old at the time the site assessment is completed).

Bioregion – A landscape scale approach to classifying the environment using a range of attributes such as climate, geomorphology, geology, soils and vegetation. There are 28 bioregions identified within Victoria.

Canopy tree – A mature tree that is greater than 3 metres in height and is normally found in the upper layer of the relevant vegetation type.

Crown land – Land which is, or is deemed to be, unalienated land of the Crown, as per the definition under the *Conservation, Forests and Lands Act 1987*.

Diameter at Breast Height (DBH) – The diameter of the main trunk of a tree measured over bark at 1.3 metres above ground level.

Ecological Vegetation Class (EVC) – A native vegetation type classified on the basis of a combination of its floristics, lifeforms, and ecological characteristics.

Extent – The area of land covered by a patch, scattered tree or revegetation, measured in hectares.

First party offset – An offset located on land within the same ownership as the party who has an offset requirement either general or species.

Freehold land – Land over which the Crown has granted an interest, usually known as 'ownership' of land.

Gain – The predicted improvement in biodiversity value of native vegetation due to active management and increased security of the native vegetation.

Gain score – The sum of prior management gain, security gain, maintenance gain and improvement gain, as relevant.

Habitat hectare assessment – An assessment of native vegetation to determine its condition, extent (in hectares) and EVC. The assessment must be completed by an accredited native vegetation assessor following methodology described in the *Native vegetation: sustaining a living landscape. Vegetation Quality Assessment Manual – Guidelines for applying the habitat hectares scoring method, Version 1.3* (VQA manual) (or its successor) and updated in the Assessor's handbook.

Habitat hectares of gain – $\text{Habitat hectares of gain} = \text{extent} \times \text{gain score} / 100$.

Habitat units of gain – $\text{Habitat units of gain} = \text{habitat hectares of gain} \times \text{landscape factor}$. See *Guidelines for the removal, destruction or lopping of native vegetation* for information on landscape factors.

Habitat zone – A discrete area of a patch of native vegetation consisting of a single vegetation type (EVC) with an assumed similar averaged quality. This is the base spatial unit for conducting a habitat hectare assessment and for scoring gains from active management and increased security of a patch of native vegetation.

Habitat score – Describes how close native vegetation is to its mature natural state. It is the score assigned to a *habitat zone* that indicates the quality of vegetation relative to the EVC benchmark – sum of the site condition score and landscape context score represented as a score between 0 and 1, as described in *Native vegetation: sustaining a living landscape. Vegetation Quality Assessment Manual – Guidelines for applying the habitat hectares scoring method, Version 1.3* (VQA manual) (or its successor).

High threat weeds – Weed species that are introduced species (including non-indigenous 'natives') with the ability to outcompete and substantially reduce one or more indigenous habitat components in the longer term, assuming ongoing current site characteristics and disturbance regime. In the context of gain scoring all woody weeds are considered to be high threat.

Improvement gain – Improvement gain results from management commitments that improve the current vegetation condition. Landowners can generate improvement gain where they agree to commitments to improve the vegetation that are beyond their existing legal management obligations (duty of care).

Indigenous species – Indigenous species occur naturally within a particular area. While this particular area may be broad (e.g. indigenous to Australia), it is most often used to refer to the local area. For example, plants that occur naturally in a particular water catchment.

Landscape scale information – Mapped or modelled information based on data collected across the landscape rather than just on a particular site.

Large scattered tree – A tree with a DBH equal to or greater than the large tree diameter as specified in the relevant EVC benchmark.

Legal management responsibility – A landowner's legal management responsibilities are duties or obligations under legislation, the local planning scheme or agreements applying to a property.

Medium scattered tree – A tree with a DBH equal to or greater than 0.75 of the large tree diameter in the relevant EVC benchmark but less than the DBH of a large tree.

Native vegetation – Native vegetation is defined in the Victoria Planning Provisions as 'plants that are indigenous to Victoria, including trees, shrubs, herbs and grasses'.

Native Vegetation Credit Register (NVCR) – A statewide register of native vegetation credits that meet minimum standards for security and management of sites. The register is administered by the Department of Environment, Land, Water and Planning, and records the creation, trade and allocation of credits to meet offset requirements.

Native Vegetation Offset Register – A statewide register containing information relating to existing and potential offsets including the number of habitat units that an offset generates and when these offsets have been used to offset the removal of native vegetation. The Native Vegetation Offset Register is administered by the Department of Environment, Land, Water and Planning, and includes the Native Vegetation Credit Register.

Offset – Protection and management (including revegetation) of native vegetation at a site to generate a gain in the biodiversity, measured in habitat units. An offset is used to compensate for the loss to Victoria's biodiversity value from the removal of native vegetation.

Patch – A patch of native vegetation is defined as:

- An area of vegetation where at least 25% of the total perennial understorey plant cover²⁹ is native, or
- Any area with three or more native canopy trees³⁰ where the drip line³¹ of each tree touches the drip line of at least one other tree, forming a continuous canopy.

Perennial – A plant that lives for more than two years. Perennials include species that are always visible e.g. shrubs and trees, but also include species that are not always visible above ground.

Revegetation – Revegetation is the establishment of native vegetation to a prescribed minimum standard in formerly cleared areas outside a patch or scattered tree.

Revegetation zone – A discrete area of revegetation. This is the base spatial unit for scoring gains from active management and increased security of an area of revegetation.

Scattered tree – A native canopy tree that does not form part of a patch.

Scattered tree zone – A discrete area of a scattered tree(s). This is the base spatial unit for scoring gains from active management and increased security of a scattered tree(s).

Security agreement – An ongoing enforceable legal agreement between a landowner and a statutory body which places legal obligations on the landowner to protect and manage native vegetation. Includes agreements under:

- Section 69 of the *Conservation, Forests and Land Act 1987*
- Section 3A of the *Victorian Conservation Trust Act 1972*
- Section 173 of the *Planning and Environment Act 1987*.

Strategic grazing – A tool to aid in the control of annual weeds and supplement targeted weed control by reducing the seed set of annual weeds. Usually conducted by introducing high stocking rates of sheep for a short period just before or at the flowering period of annual weeds.

Statutory body – The statutory body is responsible for administration, monitoring and compliance of the security agreement. This includes:

- Department of Environment, Land, Water and Planning for agreements under Section 69 of the *Conservation, Forests and Land Act 1987*

29 Plant cover is the proportion of the ground that is shaded by vegetation foliage when lit from directly above. Areas that include non-vascular vegetation (such as mosses and lichens) but otherwise support no native vascular vegetation are not considered to be a patch for the purposes of these Assessment guidelines. However, when non-vascular vegetation is present with vascular vegetation, it does contribute to cover when determining the percentage of perennial understorey plant cover.

30 A native canopy tree is a mature tree (i.e. it is able to flower) that is greater than 3 metres in height and is normally found in the upper layer of the relevant vegetation type.

31 The drip line is the outermost boundary of a tree canopy (leaves and/or branches) where the water drips on to the ground.

