Volume 1

Goulburn Broken Native Vegetation Management Strategy

Catchment Response August 2000

GOULBURN
BROKEN
CATCHMENT
MANAGEMENT
AUTHORITY

Prepared by Goulburn Broken Vegetation Plan Steering Committee and Goulburn Broken Biodiversity Committee on behalf of
Goulburn Broken Catchment Management Authority
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Foreword

This Strategy (Volume 1 of Goulburn Broken Catchment Management Authority's Native Vegetation Plan) is the result of an extensive process of community involvement in partnership with non-government organisations and government agencies. It defines our knowledge of the challenges facing our Catchment in managing native vegetation.

I am extremely pleased that the Draft Strategy was received so favourably by a broad cross-section of our community, including State and local governments when it was released for public comment.

There has been no need to modify any statements in the Draft. Submissions have highlighted the need for clarification of a few issues and additional information on others. The Catchment Response addresses these issues and provides updated information on progress with managing native vegetation since the Draft was released one year ago. The Goulburn Broken Catchment Management Authority's intent is to collectively and continually move forward, building our knowledge and refining approaches as we proceed. Achievement of the Strategy's goals will depend on strong partnerships between the community, implementation groups and government and non-government organisations.

Clearly defined and complementary institutional arrangements are critical for successful implementation. The Authority is working with partner agencies to improve these arrangements by identifying where things are working well and where they are not. Two areas of concern to the community and the Authority are implementation in the dryland parts of the Catchment and the outcomes of Native Vegetation Retention regulations. It is vital that we get these right. Significant foundations have been built since the Draft was released. We have arranged for an increased presence of expert extension staff in the Upper and Mid Goulburn Broken Implementation Committee areas. We have also expanded our pioneering approach in waterways grants to include terrestrial native vegetation: we can now offer landholders much greater levels of incentive where multiple benefits from managing native vegetation can be demonstrated.

The accompanying Volume 2: Native Vegetation Retention Controls – Regional Guidelines for the Goulburn Broken (still a Draft at this stage) details the approach to be taken to ensure any clearing of native vegetation within the Catchment is in accordance with broader community expectations. The Authority initiated significant progress in interpreting the principle of "no net loss" and has worked with VicRoads and NRE to develop a greater scientific and applied understanding of how 'Net Gain' can be achieved where native vegetation removal is unavoidable.

Timelines given are indicative: the ability to perform tasks depends on availability of resources. Many tasks can be performed opportunistically using existing resources and many others will need new investment. Tasks being performed by Authority Committees are being included in Authority Business Plans. There has been significant progress of many tasks already, reflecting the commitment to continually move forward.

It is essential that active management of native vegetation becomes a mainstream activity. We need to capitalise on the will (or momentum) that we now have and focus on what is going to make a difference - not be distracted by the things that won't.

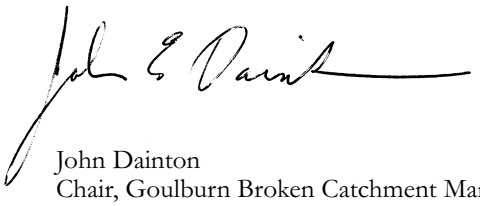
A gap identified is to develop a better understanding of the full range of benefits and costs (including economic benefits) of the implementation of the Strategy so that a better-balanced approach to native vegetation can be made. Since the Draft Strategy was released, the Authority has been fortunate to be working in partnership with the CSIRO, the Land and Water Resources Research and Development Corporation and the Myer Foundation on a new project of national consequence that is identifying more appropriate cost-sharing and policy approaches. The project is called "The Nature and Value of Australia's Ecosystem Services".

The scale of the damage that has been done to our natural ecosystems since European settlement is enormous and they are continuing to degrade. Sustainability will only be achieved with the commitment of all concerned – this includes a significant increase in public investment.

Development of agriculture, driven by a demand for agricultural products, is adding to the stress on biodiversity. It is essential that our understanding of biodiversity particularly its relationship with sustainable systems grows rapidly. Hence this Strategy is an important step towards a Catchment Biodiversity, or Catchment Ecosystems Strategy.

I must thank members of our former Vegetation Plan Steering Committee and the new Biodiversity Committee for your efforts in developing the Strategy. It is only with the involvement of conscientious and capable people such as yourselves that the Authority is able to set directions that will make a real difference. Congratulations in particular to Rod McLennan for the excellent way in which you have pulled the Strategy together and to Dianne McPherson for the leadership you have provided in your role as the Chair of the two Committees.

I have pleasure in presenting the Strategy to the Victorian Government for endorsement and inclusion as part of the Regional Catchment Strategy.



John Dainton
Chair, Goulburn Broken Catchment Management Authority, 1997 - 2003

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Catchment Response to Draft Native Vegetation Management Strategy 1999 and progress since

1. Finalisation Process

1.1 Consultation

Throughout development of this Strategy, open and consistent communication has been encouraged, within the limits of available resources.

Key stakeholder groups have been represented on the Steering Committee, and representatives have been communicating with their respective groups.

The Draft was released on 27 May 1999 and this was accompanied by promotion in regional electronic and print media. The consultation period ended on 9 July 1999.

Copies of the Draft and a Summary document were sent to every key stakeholder group. Invitations were extended to key stakeholders for a presentation of the Draft. Presentations were conducted for different stakeholder groups during and immediately after the consultation period.

A list of the groups presented to, a copy of the submissions received, and the process for analysing the submissions, are on the Authority's files.

1.2 Submissions received

37 submissions were received from a broad range of organisations and individuals (see list below). This indicates widespread concern with native vegetation management issues.

Landcare and Community Groups

Mid Goulburn Broken Implementation Committee
Environmental Alliance
Goulburn Valley Environmental Employment Project
Hughes Creek Catchment Collaborative & Highlands Landcare Inc.
BEAM-Mitchell Environmental Group Inc.
Timelines Project
Broken Creek Improvement Landcare
Hughes Creek Catchment Collaborative
Goulburn Valley Environment Group Inc.
Environment Victoria
Willowmavin Landcare Group
Kinglake Landcare
Merton Landcare
Sunday Creek/Dry Creek Landcare Group
Goulburn Murray Landcare Network
Yorta Yorta Nation Aboriginal Corporation

Industry Groups

Victorian Farmers Federation

Government Agencies

Goulburn–Murray Water
Country Fire Authority, Goulburn Murray Area
Country Fire Authority, North East Area
Parks Victoria
Forests Service, NRE
Department of Natural Resources and Environment
Shepparton Irrigation Region Implementation Committee

Local Government

Local Government Catchment Project (Delatite and Strathbogie Shire Councils)
Mitchell Shire Council
Moira Shire Council
Shire of Campaspe
City of Greater Shepparton

Individuals

Bill Probst
Mike Kerr
Charles Jones
Dr Andrew Bennett
Adrian Kelleher
Bill Baxter, MLC, Leader of the National Party – Legislative Council
Don Kilgour MP, Member for Shepparton
Dr Doug Robinson

1.3 Interim progress

Since the Draft Strategy was produced and the consultation process undertaken there has been a change of government in Victoria (September 1999). This Catchment Response represents an appropriate finalisation of the Strategy.

There have been several significant developments in managing native vegetation since the release of the Draft.
This Catchment Response therefore reflects the issues arising out of the consultation process and other

developments since.
This Catchment Response provides additional direction to address these challenges:

- Controlling clearing of native vegetation is critical – how do we get a better process in place?
- How do we implement 'no net loss' and ensure Net Gain?
- More is being asked of groups - how do we stop Landcare groups from burning out?
- Need for more technical support for Landcare groups – where does this expertise come from?
- The goals given do not cater for the complete suite of native vegetation issues – when will these other issues be addressed? How?
- Public land managers want to participate as key stakeholders in developing a Catchment perspective.
- Details given are broad – how do my concerns get addressed?
- Best Practices – what are they? How will we know they are effective?
- Reporting & Monitoring - how will we know?
- Why the concentration on private land?
- If issues are so urgent, why take 30 years to do it?
- How do you stop Priority Action Zones from being misinterpreted?
- Cost-sharing – who is benefiting, and therefore who is going to pay?
- Will use of more refined Ecological Vegetation Class (EVC) data change the priorities?
- How do we provide landholders with greater assistance?

2. Scope of Strategy

The nature of the submissions received indicates the extremely broad view different stakeholders have of what is important with respect to native vegetation. This reflects the fact that native vegetation is found right across the landscape and is valued highly by both the wide range of land managers and general members of the public for a variety of reasons.

The Strategy focuses on where realistic and dramatic change can be made: it works within the "realm of the possible", recognising that what is not possible today might be possible tomorrow with a change in circumstances. Therefore it is adaptive in nature.

It is important that the Catchment is not held back by delaying release of the final Strategy for the sake of details that are constantly being updated.

This Strategy is attempting something new - in terms of nature conservation. Very few attempts anywhere in the world have been made to develop a multi-institutional and multi-disciplinary approach to goal and priority setting at the landscape scale.

An outcome of the Strategy will be to make enhancing native vegetation a mainstream catchment management activity.

The Strategy is being presented to the State Government to become part of the Regional Catchment Strategy (the Goulburn Broken Catchment Strategy). It is expected that Government endorsement will commit government support for its implementation.

2.1 Level of implementation details

The Strategy has a regional, landscape scale approach and is therefore broad in scope. It provides the general direction needed to be taken in the Catchment. We are in our infancy of understanding nature conservation, broader biodiversity needs, and how we integrate these with other sometimes competing needs. The Strategy describes the challenges ahead, aiming to communicate to an extremely diverse suite of stakeholders.

It is clear from several submissions that more detailed information was expected. The Authority emphasises the fact that this is a Strategy and not an Implementation Plan - and that the Strategy needed to be developed first.

The comments in the submissions raise the importance of a number of issues that have been identified as implementation tasks in the Draft and also provide detailed suggestions on the process of implementation. For example, the Goulburn Broken Revegetation Guide, which NRE is producing, will contain information that will be of excellent value for implementation.

Best practice frameworks have been worked through in considerable detail, but do not appear in the Draft Strategy. (These details appear in the Background Papers.)

Completion of the tasks listed under Objective 4 ("Ensure local ownership of local problems and solutions") will provide the detailed information and consideration of most of the issues raised.

2.2 Land tenure and multiple benefits of managing native vegetation

The most urgent issues where the Authority and the general community can have greatest influence on management are on private land. Because of the historical need for the most fertile land to be used primarily for agriculture, the remaining vegetation types, (and the ecosystems of which they are a part), associated

with this agricultural land is now under severe threat. A solid foundation to address nature conservation issues – especially those involving native vegetation - is therefore seen as a critical short term need. From an ecological perspective, landscape scale planning is preferred - local level priority setting will be done within a broader landscape context.

The principles for goal and priority setting apply equally to all native vegetation, regardless of tenure of the land. Major public land managers (NRE's Forests Service, Parks Victoria, local government and Goulburn-Murray Water) and private landholders are represented on the Goulburn Broken Biodiversity Committee, which reflects this cross-tenure commitment.

The community is investing in native vegetation for many purposes. A major challenge reinforced in many submissions is to integrate native vegetation with salinity and water quality plans and develop a regional approach to provide incentives that maximise benefits to all programs.

However it must be recognised that the priorities for management of native vegetation for nature conservation often differ from priorities for land protection and greenhouse amelioration.

The Strategy recognises the likelihood that achieving goals for nature conservation will depend on developing a clear understanding of the other benefits of native vegetation – such as salinity, water quality and greenhouse gas control. Beneficiaries of native vegetation – both private individuals and general public – need to be determined more accurately so that a clearer idea of who should be paying can be gained. There has been significant progress since the Draft Strategy's release in integrating the benefits of native vegetation both at the broad Catchment scale and at the implementation (sub-Catchment) scale.

A major pioneering project – "The Nature and Value of Australia's Ecosystem Services" that the Authority is undertaking with the CSIRO, the Myer Foundation and Land and Water Resources Research and Development Corporation – is expected to significantly enhance integrated decision making at the broadest scale.

During implementation of the Strategy, priority areas for such native vegetation issues as salinity, greenhouse, waterways stability and private forestry are being identified.

The Authority is also successfully pioneering a multiple benefits approach to landholder incentives, which provides landholders who can demonstrate greater benefits with greater incentives.

2.3 Best available information

Several of the submissions highlighted the need to use Ecological Vegetation Class rather than Broad Vegetation Type data during preparation of the Draft Strategy. Broad Vegetation Type mapping was the best available information at a catchment-wide level. Ecological Vegetation Class data have very recently become available in a usable form. The "Classification by Depletion Level" and "Priority Action Zones" maps and "Goulburn Broken Broad Vegetation Types – BVT Coverage: Pre-European and 1993" data (pages 21, 43 and 59) of the Draft Strategy have been updated using this data and have been included as Appendices 2, 3 and 4.

2.4 Biodiversity or ecosystems strategy

This Strategy is a significant step towards implementing Victoria's Biodiversity Strategy 1997, which has an emphasis on nature conservation.

We cannot afford to delay addressing native vegetation and nature conservation issues until a complete Biodiversity (or Ecosystems) Strategy is completed for the Catchment. A Biodiversity (or Ecosystems) Strategy that will consider a suite of complex issues is more appropriate to develop as our understanding of these issues, especially the relationship between biodiversity and sustainable farming systems, evolves over the next few years.

2.5 Controlling loss of native vegetation

The Strategy recognises the need to more effectively control the loss of native vegetation. The Authority will work with its partners including local government to ensure that where removal of native vegetation is not avoidable that any losses are off-set by gains in extent and quality in keeping with the principle of Net Gain that is listed in Goal 1. Volume 2 will provide the details of dealing with this issue.

3. Major Issues Raised in Submissions

3.1 Controlling clearing

The control of clearing was the most identified issue in the submissions. The Authority agrees with many of the submissions that the current system is not working effectively and efficiently. This issue is dealt with specifically in Volume 2, Native Vegetation Retention Controls – Regional Guidelines for the Goulburn Broken.

The Strategy accepts the concept of "No Net Loss" as given in Victoria's Biodiversity Strategy 1997 even though a practical definition has been lacking. This point was raised in many submissions. The Authority now prefers the term Net Gain rather than "no net loss". The Authority has made a great contribution with partners VicRoads and NRE to pioneer a practical approach to implementing the concept. This takes into account "quality" as well as "quantity" issues.
Of particular concern to the community and the Authority is the incremental loss of older isolated trees occurring across the landscape.

3.2 Resourcing

3.2.1 Landcare support

The need for continued support for the community to enable the goals of the Strategy to be achieved was one of the most common issues in submissions. The Authority acknowledges the need for continuing financial and technical support for Landcare groups and will use its influence to support and enhance the process.

The existence of active local communities is vital for implementation. The Catchment has many examples of community groups that are effectively achieving on-ground works.

3.2.2 Sharing the costs

Equitable systems of cost sharing, incentives and compensation are raised in a number of submissions, especially by the Victorian Farmers Federation. The Authority agrees that developing equitable mechanisms is critical to successful implementation, and this is listed as a key strategy (Strategy 9.1).

The identification of private and community (public) benefits and the equitable sharing of the costs are listed as tasks for the Authority's Biodiversity Committee. The "Ecosystem Services Project" will help complete this task (refer also to 2.2).

To achieve goals and targets, additional funding and a co-ordinated approach will be necessary. The integration of the Strategy with other natural resource programs undertaken by Government and the community will be required to provide support and this includes the need for partnerships with industry groups and non-government organisations.

Easily accessed information on native vegetation management within the Catchment is recognised as a vital component of implementation. The availability of extension staff and other technical support is therefore a key need. The provision of extension services will be by Government as well as private sources (including non-government organisations).

The recent appointment of community-oriented "Links" officers and a "Nature Conservation Co-ordinator" in the Goulburn Broken Dryland demonstrates the Catchment community's response to this need.

The multi-objective integrated approach to incentives taken by the Authority in managing riparian vegetation has now been expanded to include terrestrial vegetation on dryland areas of farms (refer also to 2.2)

3.2.3 Organisational participation

Support by agencies and organisations for the Strategy was indicated in all submissions. This reflects a change in the broader community view of the importance of native vegetation. Many offers of assistance and involvement in the implementation phase were received. Opportunities for involving community groups and individuals and agencies and non-government organisations in developing implementation strategies are actively encouraged.

The Authority recognises the opportunity to forge greater links with some organisations where there has been little interaction. The Authority is developing ongoing agreements with public land managers in the Catchment. It is appropriate for the Authority to develop a formal linkage with all organisations that impact on native vegetation and other natural resources. Several appropriate organisations are represented on the Authority's Biodiversity Committee.

The Authority acknowledges the necessity of considering heritage issues as they relate to native vegetation. Tasks 1.1.1 and 3.1.4 will include additional emphasis on providing the Indigenous community with opportunities to be involved in the Strategy refinement process and implementation.

3.3 Goals and principles

The Principles for Native Vegetation as developed by NRE are accepted as part of and an enhancement to the guiding principles listed in the Draft Strategy.

3.3.1 Goal 1

Maintain extent of all native vegetation types at 1999 levels in keeping with the goal of 'no net loss' listed in Victoria's Biodiversity Strategy 1997.

This goal refers to all vegetation types. It necessitates a landscape-scale accounting of progress of each vegetation type, and the 'no net loss' goal implies full ecological function. In future communication, the term Net Gain will replace 'no net loss' to more adequately reflect Government policy of the approach to reversing the decline.

Modified Goal 1 becomes:

Maintain or increase the extent of all native vegetation types, using 1999 extent as the base, in keeping with the goal of Net Gain listed in Victoria's Biodiversity Strategy 1997.

3.3.2 Goal 2

Enhance the quality of existing native vegetation by managing 90% of native vegetation cover according to Best Management Practices by 2010.

The goal applies to all tenures of land – public and private. It is especially critical that private land is managed according to Best Management Practices because of the lesser degree of security (lesser degree of control over activities that can be reasonably expected). The term "Best Practices" will replace "Best Management Practices" in future communication.

The Authority is currently negotiating operational agreements with public land managers. It is encouraged by the desire of these managers to participate in developing a complete Catchment perspective. Although the longer-term aim is for all land to be managed according to Best Practices, 90% is considered a reasonable target for 2010.

A great range in understanding of how a Best Practice system works was demonstrated in the submissions received. Fundamentally, if the appropriateness of a practice can be measured, then it is expected that a practice that is measured as best will be contributing to the maximum possible positive change - given all circumstances. This expectation has to be reality checked regularly, and both the practice and the measurement process refined. Best Practices can apply equally to planning processes and to physical works.

Improving the management of a piece of land according to Best Practice usually results in an increase in the quality of native vegetation which means that the habitat value also increases. This can now be measured in habitat-hectares. Thus, the measurable input (practice) can be directly linked to a measurable outcome (habitat value). It should be noted that there might be situations where Best Practice does not have improved native vegetation as an outcome. There can only be one Best Practice for one piece of land, and the outcome being sought determines what that Best Practice is.

ANZECC released "The National Framework for the Management and Monitoring of Australia's Native Vegetation" in December 1999 and has identified "Best Practice Attributes" that the Authority will use as a key reference when reviewing progress.

The defining of what constitutes a land manager's duty of care is critical. This has implications for the quality of vegetation that can reasonably be expected within a land manager's control, and the point at which contributions from the general public towards improving the management might be expected.

3.3.3 Goal 3

Increase the cover of all depleted Broad Vegetation Types (BVTs) to at least 15% of their pre-European vegetation cover by 2030.

Several respondents indicated that the goal is optimistic, and several indicated that the resources required to invest in large revegetation projects implied by this goal would be better directed towards protecting key remnants. It is envisaged that most of the activities arising from working towards this goal will simultaneously work towards Goal 1 - the rebuilding of the landscape will protect existing remnants by using them as the base around which there will be significant revegetation/regeneration.

Although the Authority acknowledges the priority of protecting existing native vegetation from an ecological perspective, it also values highly the broad-scale learning that results from land managers participating in both revegetation and natural regeneration projects. Hence, the Authority views goals 1, 2 and 3 as being equally worthy of achievement and the figure of 15 % as an appropriate "raising of the bar".

As data on Ecological Vegetation Classes is available for the Catchment, this goal can now be written using Ecological Vegetation Classes rather than the coarser Broad Vegetation Types. There is a close similarity between the area of "Endangered" Ecological Vegetation Classes and "depleted" Broad Vegetation Types identified in the Draft.

Modified Goal 3 becomes:

Increase the cover of all 'Endangered' and applicable* 'Vulnerable' Ecological Vegetation Classes (EVCs) to at least 15% of their pre-European vegetation cover by 2030.

*All 'Endangered' EVCs are below 10% pre-European cover and some 'Vulnerable' EVCs are below 15%.

As with all goals, a critical task is to establish steps and targets to achieving them. This ultimately includes a consideration of what will be achieved in smaller geographic areas in shorter-term time frames. The Authority's Implementation Committees are driving this process.

A necessary additional task is the linking of these steps, targets and goals closely with the reporting and evaluation mechanisms to be established. The Implementation Committees and the Authority will reflect this in their Annual Reports, starting 1999-2000.

3.3.4 Goal 4

Increase the viability of threatened species and the extent and quality of threatened ecological communities.

This goal has been taken from Victoria's Biodiversity Strategy 1997. The Authority will work with the authors of Victoria's Biodiversity Strategy 1997 to establish performance measures. Significant progress has been made using bioregions as the basis for monitoring progress.

Progress towards achievement of Goals 1, 2 and 3 (above) is expected to result in progress towards this broader goal. It is difficult to identify the major direct causal links between actions resulting from attempts to achieve Goals 1, 2 and 3 and progress towards Goal 4. Goals 1, 2 and 3 represent part of an array of measurable native vegetation and nature conservation goals that need to be developed.

3.4 Reporting/monitoring

The Authority agrees with many of the submissions that rigorous monitoring and reporting is required. The Strategy highlighted reporting within the GBCMA process and also agrees that reporting and monitoring will be on a number of levels including the local. It is critical that reporting at all levels is complementary and relevant.

A legislative requirement of the Authority under the Catchment and Land Protection Act 1994 is to report on "catchment condition". Public land managers are keen to contribute and already undertake a number of monitoring aspects of catchment condition. This information will enable a more complete picture of the Catchment to be gained. Recent work on developing criteria for a measurement unit such as habitat-hectares will allow quantitative data to be collected.

It is pleasing that NRE's Bioregional Networks are becoming more closely aligned with implementation bodies such as the Catchment Management Authorities.

The use and ability of remote sensing for monitoring will increase. As the information improves, the detail of the established baseline against which monitoring is referred is likely to change. This inevitable progress does not stop us from using the best reference points available now - our picture of our progress will continue to improve.

3.5 Public land

The lack of firm recommendations on the management of native vegetation on public land was raised by a number of submissions.

There are a number of public processes in place that provide strategic direction to public land management. These include Regional Forest Area Management Plans, old-growth forest studies, the current Environment Conservation Council study of box-ironbark forests and woodlands, Parks Victoria guidelines, local government Roadside Management Plans and industry codes of practice.

Providing an appropriate reserve system on public land, including the possible changing of status of reserves, are important issues to address. The Authority would like to be involved with this process, although will not be responsible for driving it. Other organisations are much better placed.

It is expected that management strategies and plans developed for public land include the same concept of "best practice" as advanced in this Strategy. There are some types of public land that are closely linked to private land where the need to move towards best practice is urgent. These are the small reserves, leased crown land and roads within a general private land landscape. This is listed as a task as part of Strategy 6.

3.6 Timelines

A number of submissions suggested that the timeline of 2030 set for the implementation of the Strategy was too long and the timetable should be shortened. The need for the conservation and protection of native vegetation was considered as urgent by many within the community and agencies. However the Authority considers that the timelines included in the Strategy for its implementation must reflect a realistic balance between the ability to undertake works, the cost of the works and the continuing change in community attitude to native vegetation if the goals are to be achieved.

As part of the implementation process timelines are being set for components of the Strategy as they are undertaken. The timelines reflect the resources available to undertake each task. These resources include financial, community and landholder commitment and the availability of technical information.

3.7 Communicating technical complexity

The Strategy's success depends on extensive involvement of the broad community. Therefore, the Strategy needs to be understood by people with a broad range of backgrounds. This represents a significant challenge. How do you communicate something as inherently complex as biodiversity, given the infinite number of relationships between ecological entities? How do you then factor in the economic and social realities to determine priorities for action?

The messages must be simple. The assumptions inherent in making the messages simple can be tested in an environment of ongoing monitoring, reporting and evaluation. Visual communication, such as maps and priority areas, enables people to understand issues outside of their expertise, providing them with the framework to contribute to priority setting.
The Strategy is expected to be used by planning staff of relevant agencies while simultaneously providing the broader community with an understanding of how their local actions can contribute to broader outcomes.

The Strategy represents the first step in disentangling the plethora of issues concerning native vegetation This disentangling enables the benefits and costs to be identified so that informed and shared decisions can be made.

The first issue that the Strategy identifies as fundamental is to determine at a landscape (Catchment) scale where the greatest nature conservation gains can be made when precious resources are invested. By investing in protecting, enhancing and extending the existing best examples of the most scarce remnant vegetation types we are likely to be making the most appropriate choices. These sites give an indication of priority for action.

This involves both revegetation and regeneration, but it is critical to protect areas first – and that will take a huge investment initially. We cannot replace vegetation that is old and diverse, nor ensure that newly created habitats will be recolonised by the wide range of flora and fauna (including invertebrates and non vascular plants) typical of the native vegetation once found at the site.

Thus, Priority Action Zones have been produced – these were derived using maps of Broad Vegetation Types of native vegetation in the Draft Strategy and have since been updated using more refined Ecological Vegetation Class data (refer to Appendices to this Catchment Response).

Priority Action Zone maps provide an indication to the Catchment Community of the areas where action is needed most. They do not preclude the need for activity outside the highest priority zones – there is likely to be many justified cases where this will occur.

It is important to note that the priority action zone maps based on Broad Vegetation Types or Ecological Vegetation Classes do not show detail of rare and naturally restricted threatened species and communities and can only be taken as an indication of priorities.

Subsequent steps (articulated in the tasks of the Strategy) will identify Catchment-scale priority areas and benefits and costs of native vegetation action for other purposes. This will further enhance the decision making process.

Discussion over technical issues largely occurs outside of the Strategy document - in the Background and Meeting Papers.

3.8 Other

3.8.1 Local ownership

Many community submissions highlighted the need for local ownership. The Authority agrees that local ownership of decision-making, with transparent and equitable outcomes is a vital part of any long-term community-change process. The Authority is encouraging technological advances in mapping and scenario development that result in the community being able to participate more heavily in decision-making.

3.8.2 Local Area Plans

The issue of Local Area Plans at the group level and Whole Farm Plans at the individual level were part of a number of submissions. The Authority supports the use of these planning tools and expects them to be used as part of the implementation process, as described in Strategy 5.1.

3.8.3 Distribution of native vegetation in other catchments

During the consultation process, the need to consider importance of vegetation types using the broader context of the rest of Victoria was highlighted. The table included with this Catchment Response shows Ecological Vegetation Classes using conservation status that is based on Victorian bioregions (and not just the Goulburn Broken Catchment, which was the case in compiling the Broad Vegetation Type figures in the Draft Strategy.)

3.8.4 Biodiversity mission statement

The Authority formally adopts the Biodiversity Mission Statement advanced in the Draft. It provides a direction for the new Biodiversity Committee.

4. Future Directions

4.1 Initial implementation tasks

4.1.1 Implementation plans

Each of the three Implementation Committees is developing a preferred approach, tailored to its needs. This includes establishing targets and steps, and incorporating these approaches into the annual business planning process.

The Shepparton Irrigation Region Implementation Committee has been implementing native vegetation works successfully for many years across its Environment, Farm, Drainage and Waterways Programs. The transition to Strategy implementation will be relatively smooth, with implementation staff having been closely involved with Strategy development. NRE's Catchment and Agriculture Services have been providing extension support on behalf of the Committee to many active community driven works projects.

In the dryland, which covers the Upper Goulburn and Mid Goulburn Broken Implementation Committee areas, the Authority recognises the need for a vastly improved co-ordinated approach to implementing native vegetation works. Community-oriented "Links" positions and a Nature Conservation Co-ordinator have been appointed in response to this need.

There are great opportunities for aligning the delivery of services to landholders by several organisations. These include Trust for Nature, Greening Australia Victoria, NRE (Catchment and Agriculture Services and Flora and Fauna) and the Authority. These organisations are all represented on the Goulburn Broken Biodiversity Committee.

The Upper Goulburn and Mid Goulburn Broken Implementation Committees are developing Local Area Plans to provide the implementation framework. These Local Area Plans involve the landholder community in identifying issues and suggesting priorities for action on issues relating to the long term sustainability of the land and water and engage stakeholder groups in discussion with community representatives about how issues identified can be pursued.

4.1.2 Focus on outcomes

Previous experience in the Catchment has shown that best outcomes have been achieved where the programs are outcome focused and regionally co-ordinated. The Strategy's implementation is being co-ordinated by the Goulburn Broken Biodiversity Committee, with administrative support from the Authority, and is being driven by the Implementation Committees.

4.2 Funding

The Strategy identifies how we can make existing investment better and so ultimately achieve goals sooner. However, new investment is needed, although the total funds required have not yet been determined. Additional funding and resources are likely to come from the State and Federal governments through direct funding for nature conservation works and via complementary programs, as well as by the regional community through local government, private industry, and other programs and by direct funding.

Implementation of the Strategy in itself will not ensure sustainability of our natural ecosystems. The scale of damage done to them is enormous. A huge commitment is needed from all to achieve the landscape-scale changes that are required. This translates to large levels of public investment.

The "Priority Action Zones" map in the Draft Strategy has been used to broadly identify where funding levels need to be boosted. This has resulted in a focusing of new projects in several areas of the Mid Goulburn Broken and Upper Goulburn Implementation Committee areas.

The Biodiversity Committee will follow up further funding opportunities for implementing the Strategy.

Appendix 1a

Principles for Native Vegetation Management

Note: These have been provided by NRE Melbourne.

1. The conservation of ecosystems in a landscape is dependent on the maintenance of ecological processes.
2. Retention and management of remnant native vegetation is the principal means available for conservation of natural terrestrial biodiversity across the landscape.
3. All viable habitats, and populations, of endangered species should be protected through voluntary or regulatory means.
4. Biodiversity values are not restricted to threatened and depleted vegetation communities. An adequate proportion of each non-threatened vegetation community must also be managed principally for conservation.
5. Native vegetation management strategies must be integrated with land protection and resource use, including productive agriculture, for long term success.
6. Large natural areas of remnant vegetation are of fundamental importance for nature conservation and are irreplaceable. All other things being equal, large remnants are inherently more valuable than the same area contained in smaller patches.
7. A landscape approach to planning native vegetation management is required.

   Goals/targets for native vegetation management will be based on bioregions, or sub-units, within the Catchment Management Authority region. Priorities for vegetation management should be specific for each bioregion.
8. Multiple patches of the same vegetation community should be retained or enhanced across their geographic range.

   This approach serves to; increase protection from chance events of destruction or degradation, provide for species requirements, allow evolutionary processes to occur, and conserve variations within the ecological vegetation class i.e. conservation at the community level and for a range of age classes across the landscape.
9. The position of remnants in the landscape affects their conservation value.

Some areas act as; refuges in times of environmental extremes; a 'stepping stone' for migration; or a corridor or link with other habitat; or may represent the edge of the geographic range for a species or community.

Appendix 1b

Hierarchy of Action

Note: These have been provided by NRE Melbourne.

Within a given vegetation category and for habitat of equal value, priority will be given to:

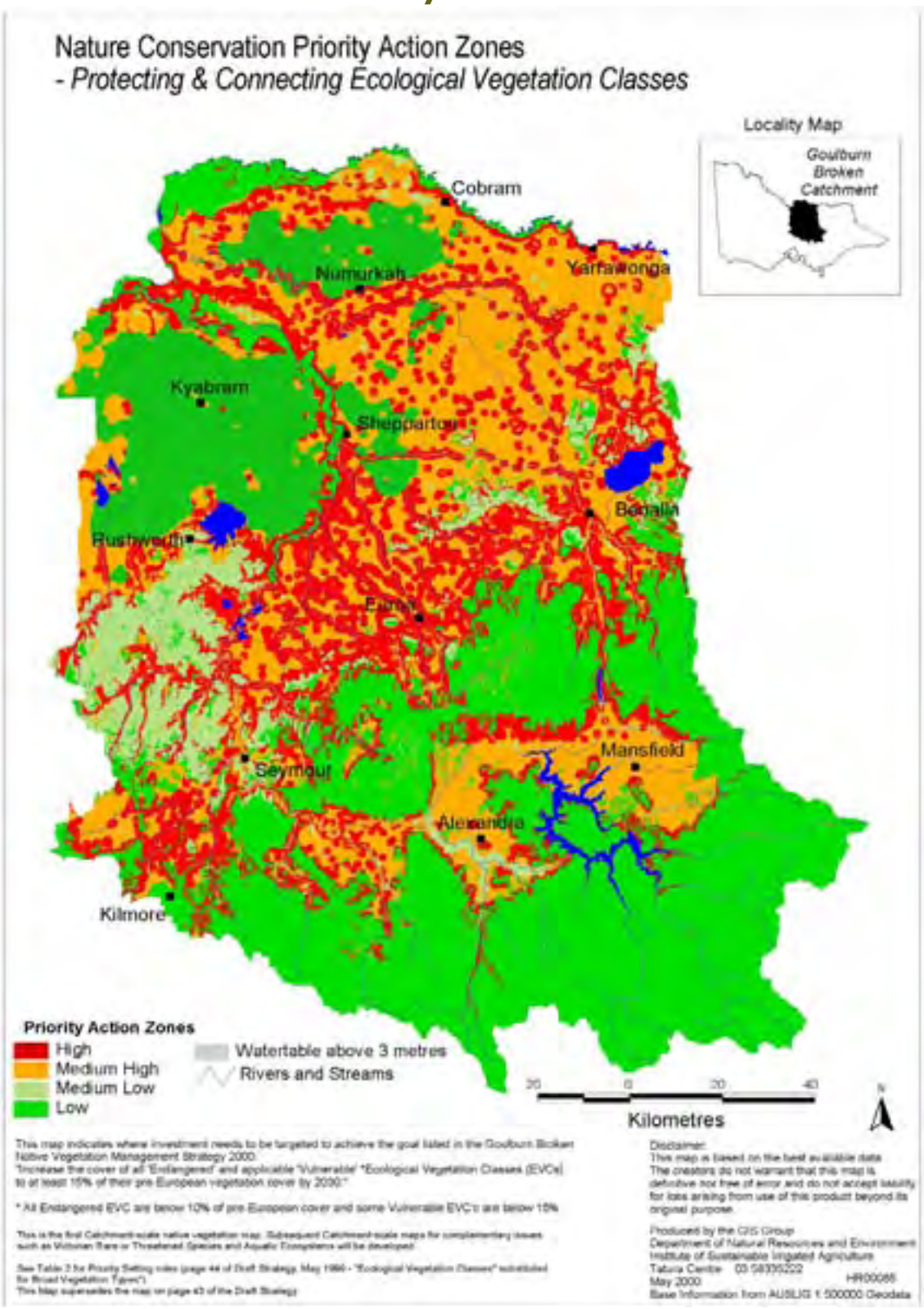
- Protection of remnants (e.g. reservation, covenants, management agreements, fencing, destocking),
- Management of existing remnants (weed control, maintenance of the hydrological regime, revegetation for buffering, promoting/enhancing natural species and/or structural and/or age class and/or size class diversity),
- Enhancement of degraded remnants,
- Enhancement of connectivity and integrity through recreation of habitat (including riparian re-vegetation) e.g. corridors, buffers, restoration of ecological processes,
- Revegetation for land degradation offset works,
- Re-creation of isolated areas of habitat, then
- Revegetation works of lower order than above.

Within the above hierarchy consideration will be given to the:

- Contribution to protection or enhancement of land and water resources;
- Viability of existing or proposed vegetation and habitat;
- Feasibility of the proposed actions (probability of success, need for ongoing management);
- Benefits in relation to the cost of the project.

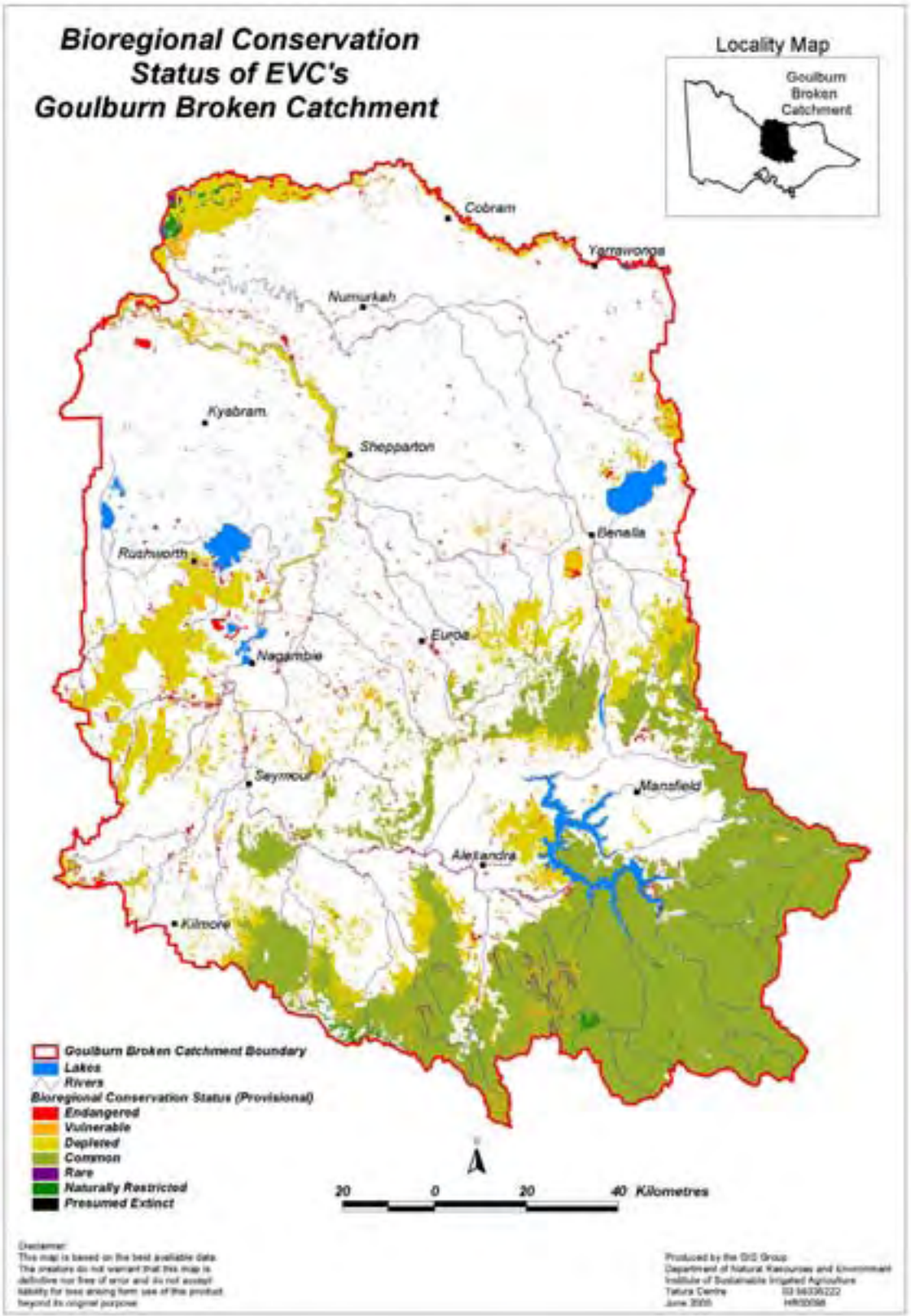
Appendix 2

Nature Conservation Priority Action Zones Based on EVCs



Appendix 3

Bioregional Conservation Status of EVCs – 1993



Appendix 4

Ecological Vegetation Classes – Areas and Targets

Table 1: EVC Coverage: Pre-European Settlement and 1993

	Ecological Vegetation Classes		Pre-European^	Vegetation Cover 1993				
			Total Area	Total Area				Other Land
Bioregion	No.	Conservation Status	Ha	Ha	%*	Ha	% of 1993 Cover that is Freehold	Ha
Central Victorian Uplands	30	Endangered	180027	6495	4	4272	66	2223
	6	Vulnerable	121285	9676	8	6081	63	3595
	3	Depleted	176200	76160	43	35090	46	41070
	9	Least Concern	12103	9211	76	1899	21	7312
Goldfields	36	Endangered	90245	3913	4	2600	66	1313
	12	Vulnerable	19477	2801	14	2207	79	594
	5	Depleted	122495	60275	49	10750	18	49525
Highlands - Northern Fall	7	Endangered	22948	2664	12	2427	91	237
	9	Vulnerable	9376	4737	51	885	19	3852
	3	Depleted	2043	592	29	355	60	237
	15	Least Concern	500168	407938	82	41540	10	366398
	8	Rare	8277	5332	64	1255	24	4077
Highlands - Southern Fall	1	Vulnerable	1880	1880	100	0	0	1880
	1	Depleted	60	60	100	0	0	60
	9	Least Concern	18284	18131	99	224	1	17907
	5	Naturally Restricted	151	151	100	0	0	151
Northern Inland Slopes	19	Endangered	83232	1685	2	1066	63	619
	1	Vulnerable	28100	2230	8	1270	57	960
	6	Depleted	15740	7530	48	3090	41	4440
Victorian Alps	1	Vulnerable	1050	1000	95	0	0	1000
	8	Least Concern	22007	21987	100	0	0	21987
	4	Rare	682	682	100	0	0	682
Victorian Riverina	42	Endangered	852462	15575	2	9264	59	6311
	10	Vulnerable	44846	9318	21	3134	34	6184
	3	Depleted	59700	42860	72	3600	8	39260
	2	Rare	2750	2430	88	0	0	2430

* percentage of original Ecological Vegetation Class remaining. NRE's 1993 Tree 100 layer used to calculate areas remaining.

Table 2: Coverage and Targets for 'Endangered' and appropriate 'Vulnerable' Ecological Vegetation Classes#

	Ecological Vegetation Classes		Pre-European^	Vegetation Cover 1993					Target for Increasing to 15% of Original	
			Total Area	Total Area				Other Land	Total Area	Increase
Bioregion	No.	Conservation Status	Ha	Ha	%*	Ha	% of 1993 Cover that is Freehold	Ha	Ha	Ha
Central Victorian Uplands	49	Endangered	180027	6495	4	4272	66	2223	27004	20509
	3	Vulnerable	121283	9676	8	6081	63	3595	18192	8516
Goldfields	64	Endangered	90245	3913	4	2600	66	1313	13537	9624
	7	Vulnerable	19477	2801	14	2207	79	594	2922	121
Highlands - Northern Fall	11	Endangered	22948	2664	12	2427	91	237	3442	778
Northern Inland Slopes	33	Endangered	83232	1685	2	1066	63	619	12485	10800
	1	Vulnerable	28100	2230	8	1270	57	960	4215	1985
Victorian Riverina	59	Endangered	852462	15575	2	9264	59	6311	127869	112294
Total			1397774	45039		29187		15852		164627

#Relevant to Goal 3 of Strategy. All Endangered EVCs have below 10% existing cover, and some Vulnerable EVCs have below 15% - only those Vulnerable EVCs less than 15% are included in the target.

Appendix 5

Provisional Assessment of the Conservation Status of Ecological Vegetation Classes

Assessment of the conservation status of vegetation types is traditionally based on the broad concepts of inherent rarity, degree of threat (including consideration of historic and on-going impacts) and importance for supporting other significant features (for example, as a drought refuge for native fauna). These concepts have been expressed as more specific criteria in a number of processes at State and National levels. The Regional Forest Agreement process undertaken in partnership by Commonwealth and State agencies used National Forest Reserve Criteria which included a number of biodiversity criteria for establishing a Comprehensive Adequate and Representative reserve system (outlined in JANIS 1997). Some of these criteria can be used as the basis for assessing conservation status of vegetation types in the Native Vegetation Plan process, although there are inherent differences between the processes - RFAs focus primarily on establishing a reserve system for forests in largely natural landscapes across public land, while NVPs focus primarily on prioritising protection of all types of remnant in rural landscapes across private land – and this requires refinement of the criteria. The key refinements are as follows:

- depletion and rarity of occurrence assessments are made within a Victorian bioregional framework which is more informative than the RFA study area framework;
- combinations of depletion-degradation-rarity which give equivalent conservation status to depletion-only thresholds are more explicitly defined;
- a "depleted" category is added to allow identification of vegetation types which may become threatened if broad-scale depletion or degradation activities are not managed appropriately;
- a "significant" category is added to allow identification of vegetation types which are important for reasons other than restriction of occurrence, degree of depletion / degradation, or degree of risk.

The criteria are detailed in the following table and have been used to assign a provisional conservation status for each combination of EVC and bioregion. The status of each combination may be amended with time as more complete or better scale mapping of vegetation type and condition becomes available. Where an EVC is only a minor occurrence (M – see following table) in a bioregion it is assigned the conservation status from an appropriate neighbouring bioregion, unless the occurrence is considered to represent a threatened floristic community. Complexes/mosaics are assigned the conservation status of the most threatened component EVC. Similarly, where threatened EVCs / floristic communities are known to exist but mapping is not available at this level of discrimination, decision-making processes should be driven by the conservation status of the most threatened component likely to be present.

Definitions used in the criteria are:

subject to a threatening process	includes currently acting threats that will lead to degradation (moderate or severe) OR risk of significant rapid change (e.g. rising groundwater; change of land use)
majority	greater than 50% of area
minority	greater than 10% and up to 50% of area
severely degraded	floristic and/or structural diversity is greatly reduced (and/or subject to a threatening process which will lead to an equivalent reduction) and unlikely to recover naturally in medium to long term
moderately degraded	floristic and/or structural diversity is significantly reduced (and/or subject to a threatening process which will lead to an equivalent reduction) but may recover naturally with removal of threatening processes
little to no degradation	floristic and/or structural diversity is largely intact
range	area of smallest concave polygon which includes all occurrences

Conservation Status of Ecological Vegetation Classes at Bioregional Level

Status		Criteria
Presumed Extinct	X	• probably no longer present in the bioregion (the accuracy of this presumption is limited by the use of remotely-sensed 1:100 000 scale woody vegetation cover mapping to determine depletion - grassland, open woodland and wetland types are particularly affected)
Endangered	E1	• contracted to less than 10% of former range; or • less than 10% pre-European extent remains;
	E2	Combination of depletion, degradation, current threats and rarity is comparable overall to E1: • 10 to 30% pre-European extent remains and severely degraded over a majority of this area; or • naturally restricted EVC reduced to 30% or less of former range and moderately degraded over a majority of this area; or • rare EVC cleared and/or moderately degraded over a majority of former area.
Vulnerable	V1	10 to 30% pre-European extent remains;
	V2	Combination of depletion, degradation, current threats and rarity is comparable overall to V1: • greater than 30% and up to 50% pre-European extent remains and moderately degraded over a majority of this area; or • greater than 50% pre-European extent remains and severely degraded over a majority of this area; or • naturally restricted EVC where greater than 30% pre-European extent remains and moderately degraded over a majority of this area; or • rare EVC cleared and/or moderately degraded over a minority of former area.
Depleted	D1	• greater than 30% and up to 50% pre-European extent remains;
	D2	Combination of depletion, degradation and current threats is comparable overall to D1: • greater than 50% pre-European extent remains and moderately degraded over a majority of this area;
Least Concern	L C	• greater than 50% pre-European extent remains and subject to little to no degradation over a majority of this area
Rare	R1	total range generally less than 10 000ha; or
	R2	pre-European extent in Victorian bioregion less than 1000 ha; or
	R3	patch size generally less than 100 ha
Naturally Restricted	NR	pre-European extent in Victorian bioregion less than 10 000 ha.
Common	C	pre-European extent in Victorian bioregion greater than 10 000 ha.
Minor	M	pre-European extent in Victorian bioregion less than approximately 1% of Statewide extent