Part B: What will we do?

4 Our approach through prior experience

The Goulburn Broken Catchment community has been addressing natural resource management issues in a co-ordinated manner for a number of years. Meeting the challenges of rising water tables, salinity and water quality has established a well-tested framework for tackling land and water management issues, often through complementary resource management programs.

We know from our experience with strategy development in the Catchment that we must include the following elements: empower the community; be science-based and adaptive; have a works focus; be integrated, targeted and accountable; minimise bureaucracy; and establish equitable cost-sharing arrangements.

The challenge is to target our greatest needs, including those of the next generations, which means we need to know where investment in native vegetation is going to have the greatest benefits. The whole community, both within the Catchment and outside it, receives the benefits of enhanced native vegetation.

The Goulburn Broken Vegetation Plan Steering Committee (established in August 1997 by the GBCMA) provided the first real opportunity for agency and community representatives from all parts of the Catchment to identify the many contributions of native vegetation and to develop solutions to the many problems associated with native vegetation.

The Catchment-scale is considered to be the most appropriate for dealing with native vegetation issues because national and state policies and legislation and scientific needs can be interpreted in the context of regional community needs.

The GBCMA is the organisation best placed to make the linkage between government policy and legislation and community will. It offers a leadership role for the large number of existing organisations and boards that are working towards ecologically sustainable development goals.
5 What are our goals?

This Strategy has an emphasis on native vegetation for nature conservation benefits and requires a common understanding of what we are trying to achieve in terms of biodiversity. The Goulburn Broken Vegetation Plan Steering Committee therefore developed a Biodiversity Mission Statement:

The community will work in partnership with Federal and State Governments and other agencies to protect and enhance ecological processes and genetic diversity to secure the future of native species of plants, animals and other organisms within the Catchment.

Goals refine this common sense of purpose. It is critical that the goals are easily measured and meaningful, so that we are aware of progress towards them. However, because of the complexities of natural ecosystems, it is difficult to set goals with the absolute certainty that achieving them will achieve our Mission. We need to adopt a precautionary but nevertheless active approach, focusing on the goals and understanding that achieving them is likely to achieve our Mission, but that further steps may be needed. This is the essence of the adaptive nature of this Strategy.

It is assumed that progress towards these goals will mean significant progress towards wider biodiversity needs, especially those listed in the Goulburn Broken Catchment Strategy 1997 and Victoria’s Biodiversity Strategy 1997. It is also expected that more refined goals will be added as our knowledge improves. To fulfil our Biodiversity Mission, we must ensure that current and future threats to native vegetation are addressed.

Principles for setting goals and priorities

The first step is to identify the principles that will underpin the goal and priority-setting process. It is important to recognise the difference between identifying ecological values (that is, the biodiversity or land protection values) and priorities for investment or action – a site with a high value does not necessarily translate to a high priority for large investment. Considerations that influence investment decisions include degree and imminence of threat, likelihood of sustained recovery from impact, cost-effectiveness, complementary opportunities and benefits, and social factors such as community ‘readiness’ and impact on community attitudes.

Given our knowledge of such considerations, a focus on depleted Broad Vegetation Types is deemed the most appropriate, initially, to achieve greatest gains. This focus recognises that the system of Broad Vegetation Types is coarse and has limitations in terms of reflecting nature conservation and broader biodiversity values. An improved focus based on new and/or more discriminating information will continue to be refined during the implementation of this Strategy.

From an ecological value perspective, principles for goal and priority-setting for managing depleted Broad Vegetation Types for nature conservation are:

- protection of existing remnants (such as reservation, covenants, management agreements, fencing, controlled grazing, de-stocking);
- management of existing remnants (including weed control and promoting or enhancing diversity in natural species, canopy structure, age class and size class);
- enhancement of connectivity and integrity through re-creation of habitat such as corridors and buffers along roadsides, waterways and significant linear remnants on private land;
- re-creation of isolated areas of habitat; and
- revegetation works.

More specific information, such as the presence of Victorian Rare or Threatened Species at a particular site, will influence the goal and priority-setting processes and strategic means to accommodate this information need to be developed.

Protection of remnant vegetation is the most important broad priority for nature conservation, but there is also a need to ensure that land protection priorities such as salinity control are addressed so that the landscapes in which remnants occur are sustainable. Allocation of
limited resources needs to achieve a balance between the need to protect and improve management of existing remnant vegetation and the imperative to increase the extent of native vegetation. In severely depleted areas, it will be necessary to simultaneously protect and improve management of remnants while substantially increasing the quantity of vegetation to ensure that processes that sustain ecosystems are restored.

To re-establish enough vegetation for both nature conservation and sustainability of the agricultural resource base, an enormous amount of revegetation must occur, in the order of hundreds of thousands of hectares. This is also an imperative for complementary issues such as salinity and water quality management. This revegetation will complement and enhance networks of existing remnant vegetation.

In some circumstances, cost-effective gains will come from improving management of existing areas of native vegetation. The most severely depleted BVTs are on private land or on small blocks of public land within a landscape that is predominantly privately owned.

**Protecting and managing: all vegetation types**

The incremental loss of native vegetation is a critical problem to resolve. Implementation of this Strategy depends on developing mechanisms to achieve ‘no net loss’ across the Goulburn Broken Catchment (in keeping with *Victoria’s Biodiversity Strategy 1997* goal) in the context of current declining quality and quantity of native vegetation and the ongoing need for development.

Applying *Native Vegetation Retention Controls 1989* using the context of ‘no net loss’, defining and promoting land managers’ duty of care for native vegetation, and increasing reservation status are possible mechanisms.

The majority of native vegetation is on public land and there is considerable scope to improve its management. There are nationally agreed criteria (Australian and New Zealand Environment and Conservation Council and the Ministerial Council on Forestry, Fisheries and Aquaculture) that set benchmarks for ‘comprehensive’, ‘adequate’ and ‘representative’ (CAR) reserve systems. The CAR reserve system is applied to Ecological Vegetation Classes (EVCs). However, as these are not yet available for the Catchment, the broader and therefore less definitive BVTs must be used as a temporary measure.

The level of protection in dedicated conservation reserves varies widely for each BVT and the level of reservation for some BVTs in the Catchment is of serious concern. At least 10 BVTs fall below the benchmark for ‘adequate reservation’. Even though some of these vegetation types may be well protected elsewhere outside the Catchment, it is still important to capture as wide a range of distribution of BVTs as possible to ensure representative protection of BVTs and variations within these vegetation types. To this end, the maintenance of vegetation cover at 1999 levels is vitally important.

**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.*

**Enhancing: all vegetation types**

“The quality of a remnant is reflected in the level of retention of its structure and floristic composition and the degree of disturbance and weediness.” (NRE, 1998).

Anecdotal evidence suggests that the quality of remnants in some public land reserves and on private land is very poor. Measurement of a stand’s quality requires assessment of such attributes as levels of exotic species, composition and structure of the plant community, and the extent to which it represents the expected plant species. There are no current methods for measuring changes in vegetation quality at the Catchment-scale, although methods are being developed by NRE for Victoria in cooperation with the approach being developed by the National Land & Water Resources Audit for Australia.
An assessment of quality can be estimated at the broader landscape scale but needs confirmation by data collected at the individual stand level. Its inclusion in the planning process is a matter of developing suitable protocols and it is important for the information to be collected in such a way that it can contribute to a vegetation database. This will improve the information base for future decision-making and reporting. Ideally, a standard assessment form should be used across the State for comparison and reporting purposes and this is being developed by NRE’s Catchment Management and Sustainable Agriculture.

Developing a Best Management Practice (BMP) approach is one way to broadly promote adoption of sustainable management principles and ensure an integrated approach to managing and protecting native vegetation. The level of BMP adoption also provides a measure of progress in moving towards a sustainable future.

BMPs result from decisions based on the best available information that considers the needs of a land manager, the rest of the community and the capability of the resource. BMPs for native vegetation encompass objectives for production and on and off-site sustainability, and so might include consideration of issues of forestry, salinity, air and water quality, habitat, stock shelter and aesthetics/landscape.

The adoption rate of BMPs by land managers will be used as an interim measure of progress towards improved vegetation quality in the absence of any direct measurement process. This necessitates rigorous benchmarking exercises and ongoing monitoring and evaluation to ensure that BMP adoption is indeed translating through to improvements in native vegetation quality.

**Goal 2:**

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

**Revegetating and regenerating: depleted vegetation types**

To restore a minimum of 15% of pre-European cover for each of the depleted Broad Vegetation Types (those with less than 15% of pre-European extent remaining) by 2030 is a reasonable goal. At this level, some ecosystem breakdown (resulting in some loss in species) would be expected, but it will be a dramatic improvement on the present levels and is likely to arrest the decline of some species in the Catchment.

An early implementation task under the Strategy is to develop the steps that will enable this goal to be achieved for each depleted BVT. A 15% goal for the Plains Grassy Woodland BVT, from a 1987 level of 2%, represents an especially significant challenge we must face. The focus will be on widespread but uncommon or declining communities of native vegetation in locations in the best condition, using data from Ecological Vegetation Class mapping when available.

**Goal 3:**

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

**Increasing viability and extent and quality: threatened ecological communities**

While the Strategy’s focus is generally on the most depleted vegetation types, there must also be provision for individual species and communities in critical need. These are usually identified in government legislation such as the Flora and Fauna Guarantee Act 1988.

The relevant goal in Victoria’s Biodiversity Strategy 1997 is ‘an increase in the viability of threatened species and in the extent and quality of threatened ecological communities’. Threatened ecological communities are being determined as mapping is completed and ways to measure ‘viability’ will be developed as appropriate.

The focus will first be on developing a strategic approach to managing threatened species and ecological communities, with emphasis on those covered under existing legislative agreements and treaties. Monitoring and evaluation will be conducted on a bioregional basis once communities have been identified and ways of measuring viability has been determined.

**Goal 4:**

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

Trout Cod *Macullochella macquariensis*