

Delivering the strategy

This strategy sets out the high level direction and approaches for Melbourne Water's role in protecting and improving the Port Phillip and Westernport region's waterways and waterway values over the next five years. Detailed planning is required to translate the strategy direction into on-ground works – this is known as implementation planning. The implementation planning process emphasises the importance of working closely with our stakeholders and partners in everything we do.

Implementation planning is an integrated process that takes the direction set in this and other related strategies (such as the *Stormwater Strategy*) and uses it to develop detailed plans for undertaking works. It outlines how targets for a system will be met, and how regional programs will be applied locally. For example, the strategy has identified priority actions and broad priority locations for some on-ground works programs, such as vegetation management. For other programs, such as advocacy, the strategy has identified the types of actions that will be applicable, but not the program detail. In both cases, implementation planning is required to identify program specifications, location and actions.

The foundation of implementation planning is:

- > Working with stakeholders, from state to local level, to develop complementary plans for on-ground works
- > Establishing a clear plan that demonstrates how the expected outcomes and targets will be met
- > Applying our management approaches and ecological principles to ensure that on-ground works are effective.

Implementation planning during the life of the strategy

Melbourne Water undertakes implementation planning regularly throughout the life of the strategy to ensure we review, reassess and respond to changing climatic conditions, changing stakeholder expectations and to take advantage of emerging opportunities.

Our current expectations of implementation planning are that:

- > It will occur annually
- > It will involve collaboration with stakeholders as appropriate including community groups, local government and water authorities in the region
- > The timing may vary but ideally it will be aligned with budgetary processes with a view to define the plans for the following financial year and beyond
- > It will identify and inform the location and type of works that will be undertaken at the local scale to meet system targets and objectives.

Working with stakeholders

The *Healthy Waterways Strategy* is a Melbourne Water document outlining the management actions and programs for which we are responsible. Central to the strategy is recognition of the substantial contribution made by the community and stakeholders to healthy waterways, and an understanding that the vision and targets in this strategy will be met only with this continuing collaboration. We will work together with stakeholders including community groups, local government and water authorities in the region throughout the life of the strategy.

We incorporated the views of stakeholders in developing the strategy via a consultation process (see Section 2.5: Consultation on the strategy). The next step is to understand what our stakeholders and partners value and are doing at a more localised scale, in order to:

- > Optimise our planning and on-ground works
- > Develop complementary plans
- > Deliver the best outcomes for waterways.

Sharing information: the Healthy Waterways Visions

An important element of working collaboratively is ensuring our stakeholders have access to information about current waterway and value condition and aims for their area of interest. The *Healthy Waterways Visions* will communicate information about current conditions and Melbourne Water's medium-term aims for the form and function of waterways in the Port Phillip and Westernport region. The visions cover the major waterways in the Port Phillip and Westernport region (about 5500km) and consider five characteristics of a healthy waterway:

- > Stream form
- > Streamside vegetation (quality and species)
- > Flow
- > Fauna (streamside and aquatic)
- > Water quality.

The visions convey an agreed and consistent outcome for waterways to people involved in managing waterways across agencies, industry and the community. Melbourne Water employees will use the information in the visions to guide the design of on-ground works, respond to referrals, and to use as a benchmark of service levels when monitoring and evaluating the success of projects.

The visions are being finalised and will be published on the Melbourne Water website. The vegetation component is due to be available at the end of 2012 (see Appendix 2) and the other components will follow.

Clear plan for meeting targets

Annual implementation planning will outline:

- > Location of proposed waterway improvement works
- > Management actions that will be undertaken at each location
- > Targets that will be met
- > Timeframe
- > High level budget.

Management approaches and ecological principles

Chapter 4 outlines several approaches that can be used when managing waterways, along with principles for Melbourne Water's application of each approach. It is important to strategically apply these approaches and principles and incorporate local knowledge to manage waterways effectively and achieve expected outcomes. Implementation planning determines which approaches to use when, and where, as well as how to best apply principles and knowledge at a local scale.

An important part of implementation planning is to ensure that on-ground works to improve particular environmental or social values do not negatively impact other values and, where possible, maximise benefit to other values. Part of Melbourne Water's project management system requires consideration of potential stakeholder, environmental and public health impacts, and risk mitigation measures to be developed where appropriate.

In particular, cultural heritage values must be considered. The Melbourne Water *Cultural Heritage Strategy* operates across waterways and all other parts of the business such as sewerage and water supply. It provides guidance about managing heritage values.

An adaptive management approach is critical to managing for healthy waterways, and it is vital that we use the best available knowledge to inform our programs to ensure they continue to be undertaken as effectively and efficiently as possible. Ongoing monitoring and evaluation supports implementation planning because it provides critical information that enables management approaches to be updated throughout the life of the strategy.

Glossary

Term	Definition
Adaptive management	Systematic process of continually improving management policies and practices, taking account of new data and emerging technologies.
Amenity	The pleasantness of a waterway to visitors and the ability of the waterway to provide a restorative escape from the urban landscape.
Asset	Biophysical or constructed features that are of value including natural assets such as waterways or constructed assets such as bridges.
Biodiversity	Also known as biological diversity. The variety of life found within an environment, including plants, animals and microorganisms.
Capacity building	Improving the ability of individuals, groups and organisations to achieve desired outcomes in an effective, efficient and sustainable manner.
Catchment	An area of land where runoff from rainfall flows into one river system.
Catch per unit effort	A measurement used to estimate platypus populations based on the number of individual platypus captured and the survey effort (number of traps).
Community	The people who live, work or visit the Port Phillip and Westernport region.
Connectivity	The degree of interconnectedness between habitat, waterways and plant and animal populations in a landscape.
Customer	Any individual or group who receives services from Melbourne Water. In terms of waterway, drainage and floodplain management, our customers include local government, land developers, businesses that divert river water and the 1.8 million households who receive waterways and drainage services. Individual community members and community groups are among our customers and stakeholders.
Ecological Vegetation Classes (EVCs)	Native vegetation in Victoria has been classified according to Ecological Vegetation Classes (EVCs). Each EVC represents one or more plant communities that occur in similar types of environments.
Ecosystem	A dynamic complex of plant, animal, fungal and microorganism communities and the associated non-living environment interacting as an ecological unit.
Ecosystem service	The benefits to humans that come from plants, animals and microorganisms interacting as an ecological system or 'ecosystem'. The functioning of natural ecosystems provides 'services' that are essential for human health and survival. Examples of the kinds of services we receive from ecosystems include water filtration, maintenance of soil fertility, pollination, pest control, and cultural and spiritual fulfilment.
Environmental water	A regime of designated flows in a waterway needed to satisfy specified ecological requirements.
Environmental Water Reserve (EWR)	The share of water resources set aside to maintain the environmental values of waterways.
Ephemeral	A waterway that flows intermittently (is often dry).
Estuary	The section of some coastal rivers and creeks where freshwater from the river meets the tidal inflow from the sea or bay, and where the freshwater and saltwater interact.
Expected outcome	The condition rating we expect to see for each key value community in each system within the specified timeframe (20-year expected outcomes and long-term expected outcomes).
Fish barrier	An obstacle in a stream, such as a dam wall or weir, that halts or restricts fish movement up or down the waterway.
Fish passage	Provision for the movement or migration of fish past obstacles or barriers.
Fishway	Structure to permit the movement of fish upstream by allowing them to pass through or around a barrier.
Floodplain	Low-lying land beside a river that is subject to natural flooding.
Floodplain connectivity	Describes the connection between the waterway and the low-lying land around it, as well as connection with other low-lying land nearby.

Term	Definition
Floodplain quality	Describes the movement and effects of water, and the quality and amount of plant growth on the low-lying land beside the river.
Floodplain wetland vegetation	Refers to the submerged and semi-submerged aquatic species that exist in natural or constructed wetlands/lakes and which are periodically or permanently flooded.
Flow regime	The typical, predictable pattern of flows experienced by a waterway over many seasons and years.
Geology	The physical features of an area as defined by the types of rocks and soils.
Geomorphology	The topography of an area as defined by its geology. The shape and physical features of the landscape, such as hills, mountains, gorges, riverbeds etc.
Greenfield	A piece of usually semi-rural property that is undeveloped except for agricultural use, especially considered as a site for expanding urban development.
Groundwater	All subsurface water, filling the porous spaces in soils. It is the source of water for aquifers and springs, and contributes to the baseflow in waterways.
Groundwater dependent ecosystems	Ecosystems, such as wetlands, streams, estuaries and some plants that rely totally or partly on groundwater.
Habitat	The physical environment in which an organism can live.
Headwater	The most upstream, steepest parts of a catchment that deliver water to a river system.
Hotspots	Areas where current conditions are unacceptable due to acute risks to public health, safety or waterway values.
Hydraulic capacity	A measure of the volume and flow of water within a watercourse.
Implementation target	Activities that Melbourne Water commits to undertaking with our partners over the next five years to contribute towards achieving the <i>Healthy Waterways Strategy</i> vision.
Incised	A deeply eroded and/or widened river channel. Incision may be a result of recent or ancient erosion processes.
Influencing value	All waterway values outside the <i>Healthy Waterways Strategy</i> target-setting framework.
Index of River Condition (IRC)	IRC ratings are based on the Index of Stream Condition (ISC) developed by the then Department of Sustainability and Environment for rural rivers and creeks. They have been modified to account for urban rivers and creeks in Melbourne Water's operating area and include data for all the waterways that Melbourne Water manages.
Index of Stream Condition (ISC)	A statewide study of the environmental condition of rivers in Australia that brings together the condition of river hydrology, water quality, streamside zone (vegetation), physical form (bed and bank condition and instream habitat) and aquatic life.
In-stream vegetation	Submerged and semi-submerged aquatic plants that live in a waterway.
Introduced	Plant and animal species occurring in an area outside its historically known natural range as a result of intentional or accidental dispersal by human activities.
Invertebrates	Animals without backbones.
Key values	The seven indices (fish, platypus, frogs, macroinvertebrates, birds, vegetation and amenity) used to provide a basis for setting targets, implementing works and evaluating success of works in waterways through the <i>Healthy Waterways Strategy</i> .
Lagoon	A shallow pond-like body of water separated from the sea by low sandy dunes.
Macroinvertebrate	Animal without a backbone that is visible to the naked eye. Many macroinvertebrates live or spend some part of their lifecycle in water.
Management objective	A description of the main intent of management for a particular priority area.
Megalitre	One million litres.
Monitoring	Regular collection and analysis of information to assist decision making, ensure accountability and provide the basis for evaluation and learning.

Term	Definition
Native	A species is defined as native (or indigenous) to a given region or ecosystem if its presence there is the result of only natural processes.
Nativeness	The proportion of species that are native.
Outputs	The readily measurable and practical results of our work. Examples include kilometres of fencing constructed and hectares of vegetation established.
Point source	Discharge to receiving waters from a single point, such as a pipe or single property. Point sources of pollution enter receiving water at a discrete, identifiable location and can be measured.
Priority areas	The most important areas, from a regional perspective, where investment in key values will have the most beneficial outcome or that require urgent attention. Areas that are the highest priority for Melbourne Water to invest in waterway health improvement works from 2013/14–2017/18.
Raingarden	A constructed vegetation and soil medium system that filters polluted stormwater through a vegetated filter media layer. Water is retained, naturally treated and released to receiving waters (waterway, drain, groundwater) or to storage for reuse. Raingardens are also called bioretention systems.
Ramsar-listed wetlands	Wetlands listed as internationally significant under the Convention on Wetlands held in Ramsar, Iran in 1971.
Reach	A length or section of stream or river. Often used in reference to a relatively uniform section with regard to the hydrology, physical form, water quality and aquatic life.
Re-engage	Allow inundation of floodplain, billabong or wetland for duration of time needed to facilitate natural ecological processes to occur e.g. spawning of fish or transfer of leaf matter to a waterway.
Refuge	Area where special environmental circumstances enable a species or community of species to survive disturbances such as drought or fire.
Rehabilitation	Improving the most important aspects of the waterway environment to create a stream that, although only resembling its original condition, is an improvement on the degraded system and often a valuable environment in its own right.
Regulated river	A waterway that has structures such as dams or weirs which provide water for extraction.
Relative abundance	The number of organisms of a particular kind as a percentage of the total number of organisms of a given area or community.
Remnant vegetation	Indigenous vegetation that has not been cleared, modified or replanted.
Restoration	Active intervention and management of degraded communities and landscapes to restore biological character, ecological and physical processes and their cultural and visual qualities.
Risk assessment	The process of using available information to predict how often hazards or specified events may occur and the magnitude of their consequences.
River	This term refers to rivers, creeks and streams and their tributaries, and includes the bed, banks and streamside land. From a river management perspective, Melbourne Water's responsibility for waterway management includes all rivers and their tributaries in the Port Phillip and Westernport region (including waterways with catchments of less than 60 ha, which local government manages from a drainage perspective).
Riverine connectivity	Describes the amount of connection along a river and between a river and other waterways.
Riverine quality	Describes the standard and health of the key functioning parts of a river such as its physical form, water quality and the amount and timing of flow.

Term	Definition
Seasonal watering plans	Major planning documents developed by the Victorian Environment Water Holder that set the priorities for where, when, how and why environmental water will be used annually across Victoria.
SIGNAL	Stream Invertebrate Grade Number – Average Level. SIGNAL is a simple scoring system for macroinvertebrate samples from Australian rivers. These scores are used as indicators of water quality.
Spatial	Relating to, occupying or having the character of space. Generally refers to information captured in maps.
Species richness	The number of types of species.
Stakeholder	An agency, organisation, group or individual with a direct or indirect interest in a project or program, or who positively or negatively affects or is affected by the implementation and outcome of it.
Stormwater	Rain that falls on roads, roofs and other impervious land surfaces and collects and flows overland or through drainage networks to waterways and the bays. This water can carry contaminants such as plastic bags, detergents, nutrients, heavy metals, pathogens and other toxicants. In rural and forested areas where soils are very dry, or already very saturated, rainfall cannot be absorbed and runs off the surface as stormwater.
Streamside	The land that adjoins, regularly influences, or is influenced by, a river, including regularly wetted floodplains.
Systems	Fourteen geographical areas in the Melbourne Water operating area in which management approaches and targets are set.
Target	A quantifiable performance level or change in level to be attained by a specified date.
Temporal	Relating to time.
Threats	Situations or objects (such as land use practices or pollution sources) that may harm waterway condition or individual species or populations of species.
Trajectory	The way in which the health of a population varies over time or its future course. The trend in condition of a value.
Tributary	A stream or streams that flow into a larger waterway.
Unregulated river	A waterway that does not have structures such as dams or weirs that would provide water for extraction.
Urban	Areas that are built up with human dwellings or buildings.
Water quality	The physical, chemical and biological characteristics of water in relation to a set of standards.
Water sensitive urban design (WSUD)	Embraces measures designed to minimise the environmental impacts of urbanisation. WSUD recognises all water streams in the urban water cycle as a resource: rainwater (collected from the roof), stormwater (collected from impervious surfaces), potable water (drinking water), greywater (from the bathroom, shower, and laundry) and blackwater (toilet and kitchen).
Wetlands	A wetland is any area of land that is waterlogged or inundated with water - that may be standing or running and fresh to saline – with sufficient frequency and / or duration for the water to influence the plant and animal communities and ecological processes that occur there.

Appendix 1: Implementation targets

Management approach	Target
Planning, strategy, guidelines	Review the <i>Healthy Waterway Strategy</i> by 2018, in accordance with Department of Sustainability and Environment guidelines
Advocacy	<p>Implement a program of advocacy for waterways and the values they support by seeking to collaborate and build meaningful relationships with stakeholders.</p> <p>The program will:</p> <ul style="list-style-type: none"> • provide clear and transparent information on waterway health • develop an understanding of the opportunities and constraints to the community becoming mutual caretakers of waterways • develop programs targeted to improve the capacity of stakeholders and community members to provide effective care of waterways • develop appropriate standards and influence policy development for the protection and improvement of waterway values
Enforcement	<p>Develop a risk-based enforcement program to assess waterway and drainage enforcement issues and take appropriate action on identified high priority issues.</p> <p>The program will:</p> <ul style="list-style-type: none"> • improve the process to identify and record potential enforcement issues • conduct a program of enforcement training for Waterways employees • develop a process to assess enforcement issues and identify high priority issues for action • work actively with stakeholders, other authorities and internally to ensure requirements of management arrangements such as leases and licences on Melbourne Water land are in place and understood
Building stewardship and sharing knowledge	Encourage stewardship by sharing knowledge, actively learning, supporting community-based monitoring and increasing community capacity through delivery of grants, targeted programs and education to landholders, community groups and land managers
Vegetation management	<p>Establish 803km vegetation to the required level to support waterway values</p> <p>Manage 7579km of vegetation to the required level to support waterway values</p> <p>Construct 545km of stock exclusion fencing</p>
Habitat management	<p>Improve 193ha of aquatic habitat to the required level to support waterway values</p> <p>Remove 16 fish barriers</p> <p>Manage Sites of Biodiversity Significance as guided by the SoBS Plan</p> <p>Manage high priority refuge sites as guided by Melbourne Water's Drought Refuge Plan</p>

Management approach	Target
Asset protection and renewal	<p>Implement a risk-based program of asset protection and renewal to maintain in-stream connectivity, channel stability for community asset protection, 'systemic' river health outcomes and an appropriate hydraulic level of service.</p> <p>The program will:</p> <ul style="list-style-type: none"> • develop a process for assessing risk to built and natural assets • develop strategic asset management plans for critical asset classes and site management plans for key sites • target vegetation establishment for waterway stability where appropriate • undertake bed and bank intervention where appropriate • undertake desilting where appropriate • undertake vegetation management where appropriate
Environmental flows	<p>Environmental flows in major waterways and unregulated rivers will be improved through managing environmental entitlements in accordance with the Victorian Environmental Water Holder legislation and Melbourne Water programs respectively</p> <p>Groundwater dependent ecosystems will be protected or improved through the development and implementation of the groundwater dependent ecosystem program</p>
Diversions	<p>Diversions will be managed in accordance with rules specified in streamflow management plans, local management rules or drought response plans, and to meet the service requirement targets in Melbourne Water's customer charter for diversion services</p>
Adaptive management: monitoring, investigations, research and reporting	<p>Revise the waterway health monitoring, investigations, evaluation and reporting program by July 2013 and implement the program by July 2018</p> <p>Develop a research program to inform the management of waterways by July 2013 and implement the program by July 2018</p>

Appendix 2: Healthy Waterways Visions – a streamside vegetation case study

The *Healthy Waterways Visions* communicate Melbourne Water's longer-term aims for the form and function of waterways in the Port Phillip and Westernport region. The visions cover the 'major waterways' in the Port Phillip and Westernport region (about 5500km) and consider five characteristics of a healthy waterway:

- > Stream form
- > Streamside vegetation (quality and species)
- > Flow
- > Fauna (streamside and aquatic)
- > Water quality.

Streamside vegetation visions

Streamside vegetation is an important part of any vision for waterway form and function. The streamside vegetation visions are described in:

- > Vegetation quality
- > Vegetation species

Vegetation quality

The vegetation quality vision is designed to indicate the streamside vegetation quality that can be achieved and maintained along Melbourne Water's waterways¹. The 2009 and potential (2030) vegetation quality levels were assessed via a series of workshops with representatives from Melbourne water and independent experts.

The waterways are rated from 1 (very low) to 5 (very high) for current (2009) and potential (2030) vegetation quality using the following ratings:

- 1. Very low** Streamside vegetation is highly modified, predominantly comprising exotic species
- 2. Low** Streamside vegetation is highly modified, fragmented and meets social and amenity requirements
- 3. Medium** Streamside zone consists of fragmented vegetation
- 4. High** Streamside vegetation is relatively intact with structural elements present with high connectivity
- 5. Very high** Streamside vegetation is intact with all structural components present and very high connectivity.

¹ *Assuming current levels of revegetation and maintenance are continued*

For each vegetation quality vision, the following characteristics are described:

- > Vegetation structure
- > Species composition
- > Instream vegetation
- > Vegetation continuity and connectivity
- > Weediness
- > Regeneration
- > Typical land use setting
- > Suitable weed and vegetation management techniques to achieve the vision.

Vegetation species

Vegetation species visions have been developed for 70 ecological vegetation classes commonly found next to waterways in the Port Phillip and Westernport region. The vegetation species visions provide detail specific to the region, and applicable to each vegetation quality level.

For each vegetation species vision, the following characteristics are described:

- > EVC name, bioregion and description
- > Relevant planting zones for each species, including cross-section diagram
- > Vegetation species found in that EVC (including if the species are listed in the EVC Benchmark)
- > Dominance
- > Vegetation species expected in different vegetation quality levels
- > If the species is suitable for use in planting.

Example: Blind and Jacksons creeks at Sunbury

Figure 1 shows the current and future vegetation visions for the waterways through Sunbury (Blind and Jacksons creeks). Currently, vegetation quality for both waterways is rated as poor (level 2) as a result of low connectivity and continuity of vegetation, high level of weeds and a low capacity for natural regeneration.

The vision for future vegetation quality on Blind Creek is moderate (level 3) and high (level 4) on Jacksons Creek. In the future there will be wider vegetated corridors along the creeks, connection between remnant patches, and improved structural diversity in vegetation communities.

Where planting is required, vegetation species visions can be used to assist in developing appropriate planting lists to achieve the desired vegetation quality level. An example of a vegetation species vision for Herb-Rich Foothill Forest in the Central Victorian Uplands bioregion is provided below.

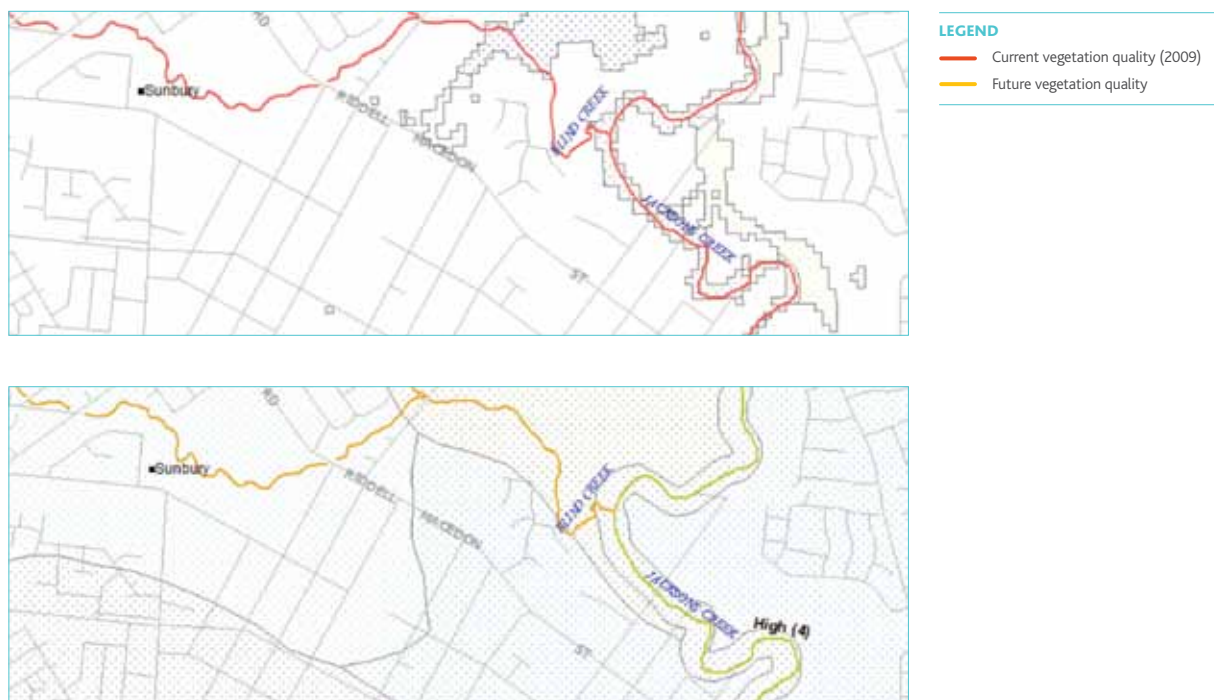


Figure 1: Blind Creek and Jacksons Creek at Sunbury – showing current (2009) vegetation quality (top) and future vegetation quality (bottom)

VEGETATION SPECIES

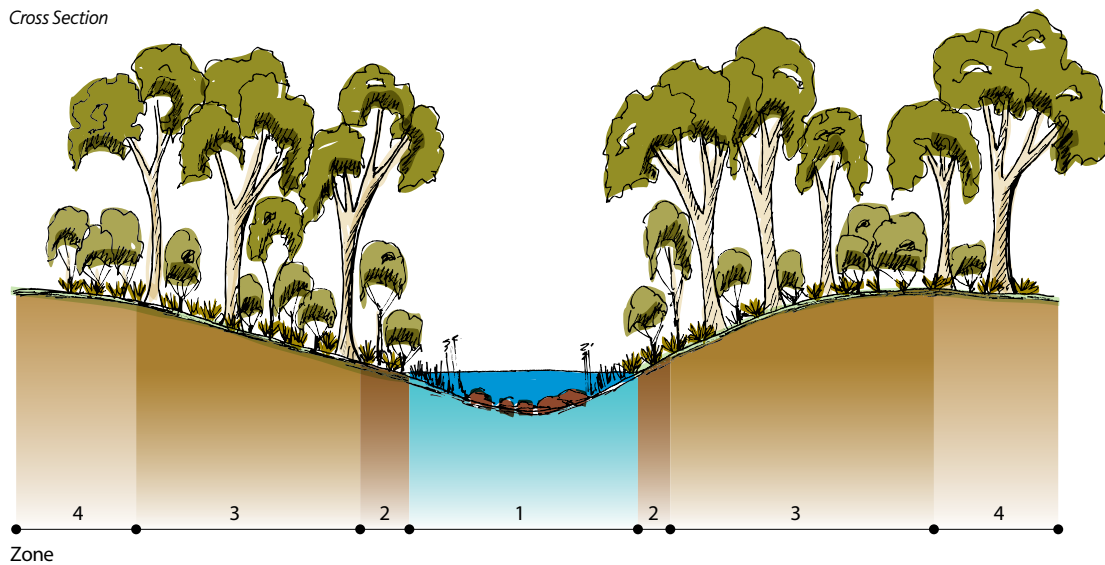
23CVU



EVC 23 HERB-RICH FOOTHILL FOREST CENTRAL VICTORIAN UPLANDS

Occurs on relatively fertile, moderately well-drained soils on an extremely wide range of geological types and in areas of moderate to high rainfall. Occupies easterly and southerly aspects mainly on lower slopes and in gullies. A medium to tall open forest or woodland to 25m tall with a small tree layer over a sparse to dense shrub layer. A high cover and diversity of herbs and grasses in the ground layer characterise this EVC.

Cross Section



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healthy waterways

Melbourne
Water

VEGETATION SPECIES 23CVU

Botanical name	Common name	Planting zone				Dominance	Vegetation Quality					Comments	Most suitable for replanting	EVC Benchmark
		1	2	3	4		5	4	3	2	1			
TREES														
<i>Eucalyptus globulus</i> ssp. <i>bicostata</i>	Eurabbie				■	L	●	●	●	●	●	Reliable and robust	●	●
<i>Eucalyptus obliqua</i>	Messmate Stringybark				■	D	●	●	●	●	●	Reliable and robust	●	●
<i>Eucalyptus dives</i>	Broad-leaved Peppermint				■	O	●	●	●	●	●	Reliable and robust	●	●
<i>Eucalyptus radiata</i> s.l.	Narrow leaf Peppermint			■	■	C	●	●	●	●	●	Reliable and robust	●	●
<i>Eucalyptus cypellocarpa</i>	Mountain Grey-gum			■	■	O	●	●	●	●	●	Reliable and robust	●	●
SMALL TREES/LARGE - MEDIUM SHRUBS & VINES														
<i>Acacia dealbata</i>	Silver Wattle	■	■	■	■	L	●	●	●	●	●	Reliable and robust. May require maintenance if planted in erosion prone areas	●	●
<i>Acacia melanoxylon</i>	Blackwood		■	■	■	D	●	●	●	●	●	Reliable and robust	●	●
<i>Acacia stricta</i>	Hop Wattle				■	O	●	●	●	●	●	Difficult to propagate		
<i>Acrotriche prostrata</i>	Trailing Ground-berry				■	C	●	●	●	●	●	Can be slow to establish.		
<i>Banksia marginata</i>	Silver Banksia				■	O	●	●	●	●	●	Reliable and robust	●	●
<i>Billardiera scandens</i> var. <i>scandens</i>	Common Apple-berry				■	O	●	●	●	●	●	Use only in high quality revegetation	●	●
<i>Cassinia aculeata</i>	Common Cassinia				■	C	●	●	●	●	●	Reliable and robust	●	●
<i>Clematis aristata</i>	Mountain Clematis				■	C	●	●	●	●	●	Use only in high quality revegetation	●	●
<i>Coprosma quadrifida</i>	Prickly Currant-bush				■	C	●	●	●	●	●	Reliable and robust	●	●
<i>Epacris impressa</i>	Common Heath				■	C	●	●	●	●	●	Difficult to propagate		
<i>Glycine clandestina</i>	Twining Glycine				■	O	●	●	●	●	●	Can be difficult to establish	●	●
<i>Hardenbergia violacea</i>	Purple Coral-pea				■	O	●	●	●	●	●	Use only in high quality revegetation	●	●
<i>Leptospermum continentale</i>	Prickly Tea-tree				■	O	●	●	●	●	●	Reliable and robust	●	●
<i>Olearia phlogopappa</i>	Dusty Daisy-bush				■	C	●	●	●	●	●			
GRASSES, SEDGES DICOT HERBS and FERNS														
<i>Acaena novae-zelandiae</i>	Bidgee-widgee		■	■	■	O	●	●	●	●	●	Useful for weed suppression with adequate site preparation	●	●
<i>Acrotriche prostrata</i>	Trailing Ground-berry				■	O	●	●	●	●	●	Difficult to propagate		●
<i>Adiantum aethiopicum</i>	Common Maidenhair		■	■	■	O	●	●	●	●	●	Difficult to propagate		●
<i>Asplenium flabellifolium</i>	Necklace Fern				■	L	●	●	●	●	●	Difficult to propagate		●
<i>Austrodanthonia pilosa</i>	Velvet Wallaby-grass				■	L	●	●	●	●	●			●
<i>Dianella tasmanica</i>	Tasman Flax-lily		■	■	■	C	●	●	●	●	●	Reliable, robust and easily propagated	●	●
<i>Dichondra repens</i>	Kidney-weed		■	■	■	D	●	●	●	●	●	Can be difficult to establish due to diminutive size	●	●
<i>Echinopogon ovatus</i>	Common Hedgehog-grass				■	L	●	●	●	●	●			●
<i>Gahnia radula</i>	Thatch Saw-sedge				■	L	●	●	●	●	●	Difficult to propagate		●
<i>Gahnia sieberiana</i>	Red-fruit Saw-sedge				■	C	●	●	●	●	●	Reliable and robust	●	●
<i>Galium prorepens</i>	Maori Bedstraw				■	D	●	●	●	●	●	Can be difficult to establish due to diminutive size		●
<i>Gonocarpus tetragynus</i>	Common Raspwort				■	C	●	●	●	●	●	Can be difficult to establish due to diminutive size		●
<i>Hovea heterophylla</i>	Common Hovea		■	■	■	O	●	●	●	●	●	Can be difficult to establish due to diminutive size		●
<i>Hydrocotyle laxiflora</i>	Stinking Pennywort		■	■	■	O	●	●	●	●	●	Can be difficult to establish due to diminutive size		●
<i>Hypericum gramineum</i>	Small St. John's Wort				■	O	●	●	●	●	●	Can be difficult to establish due to diminutive size		●
<i>Lomandra filiformis</i> ssp. <i>coriacea</i>	Wattle Mat-rush				■	C	●	●	●	●	●			●
<i>Lomandra longifolia</i> ssp. <i>longifolia</i>	Spiny-headed Mat-rush				■	D	●	●	●	●	●	Reliable, robust and easily propagated	●	●
<i>Luzula meridionalis</i> var. <i>flaccida</i>	Common Woodrush				■	O	●	●	●	●	●			●
<i>Microlaena stipoides</i> var. <i>stipoides</i>	Weeping Grass		■	■	■	C	●	●	●	●	●	Can be useful for initial site colonisation. Manage remnants with appropriate weed control	●	●
<i>Olearia megalophylla</i>	Large-leaf Daisy-bush				■	O	●	●	●	●	●			
<i>Pimelea humilis</i>	Common Rice-flower				■	O	●	●	●	●	●	Difficult to propagate on large scale.		
<i>Poa ensiformis</i>	Sword Tussock-grass				■	C	●	●	●	●	●	Prefers moist shaded terraces	●	●
<i>Poa tenera</i>	Slender Tussock-grass				■	O	●	●	●	●	●			●
<i>Pteridium esculentum</i>	Austral Bracken		■	■	■	O	●	●	●	●	●	Difficult to propagate		●
<i>Senecio minimus</i>	Shrubby Fireweed				■	D	●	●	●	●	●			●
<i>Senecio quadridentatus</i>	Cotton Fireweed				■	C	●	●	●	●	●	Can be useful for initial site colonisation	●	●
<i>Senecio tenuiflorus</i>	Slender Fireweed				■	C	●	●	●	●	●			●
<i>Stellaria pungens</i>	Prickly Starwort				■	C	●	●	●	●	●	Can be difficult to establish due to diminutive size		●
<i>Styidium gaminifolium</i> s.l.	Grass Trigger-plant				■	O	●	●	●	●	●	Difficult to establish a self-perpetuating colony	●	●
<i>Themeda triandra</i>	Kangaroo Grass				■	C	●	●	●	●	●	Requires burning or heavy disturbance for regeneration	●	●
<i>Veronica calycina</i>	Hairy Speedwell				■	C	●	●	●	●	●	Can be difficult to establish due to diminutive size		●
<i>Viola hederacea</i> sensu <i>Willis (1972)</i>	Ivy-leaf Violet				■	C	●	●	●	●	●	Can be difficult to establish due to diminutive size		●
<i>Wahlenbergia gracilis</i> s.l.	Sprawling Bluebell				■	O	●	●	●	●	●	Easy to grow and establish, but small size. Can spread easily by seed.		●
<i>Wahlenbergia stricta</i>	Tall Bluebell				■	O	●	●	●	●	●	Use only in high quality revegetation	●	●

Planting Zone	Dominance	Vegetation Quality	Most suitable for replanting	EVC Benchmark
1 Bed	L Limited	1 Very low	Plants listed in this column are species which are readily cultivated in nurseries with indigenous plant propagation skills, reliable in revegetation with an expected survival rate of 95% or greater three years post-planting – assumes that a high quality plant was supplied (refer to plant standard) and that weed management and planting is undertaken with appropriate skill and diligence.	EVC benchmarks have been developed as standard reference points that are applied in carrying out vegetation assessments. An EVC benchmark represents the average characteristics of a mature and apparently long-undisturbed stand of the same vegetation type.
2 Lower Bank	O Occasional	2 Low		
3 Upper Bank	C Common	3 Medium		
4 Verge	D Dominant	4 High		
		5 Very high		

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