

# Dandenong Catchment

The Dandenong catchment lies southeast of Melbourne and has an area of 855 square kilometres and some 485 kilometres of rivers and creeks. Dandenong Creek is the major creek in the catchment. The creek originates in the Dandenong Ranges National Park and discharges into Port Phillip Bay via both Mordialloc Creek and Patterson River. Major tributaries include Bungalook Creek, Blind Creek, Eumemmerring Creek, Corhanwarrabul Creek and Mile Creek.

Approximately 45% of the catchment is now urbanised, although farmland (mainly grazing, but also horticulture and poultry) is widespread in areas such as Bangholme and Narre Warren East. Some forest pockets remain, particularly in the Dandenong Ranges and along middle Dandenong Creek. Industrial activity occupies large areas around Dandenong, Bayswater and Moorabbin.

Modifications to rivers and creeks for flood protection (e.g. piping, concrete lining and channel straightening) have also been extensive. Most notably, the Carrum swamplands were drained in the late 1800s with the construction of Patterson River. These swamplands previously covered an area of around 45 square kilometres.

The health of rivers and creeks in the catchment closely match land use. In general, condition is moderate to poor throughout, although some areas are still in relatively good condition, especially the forested source of Dandenong Creek and parts of the Corhanwarrabul-Monbulk Creek system.

Water quality is generally fair to poor throughout, with better quality tending to occur in the forested hills. There have been significant improvements in water quality in the last 30 years as the sewerage system has been extended and industrial discharges to rivers and creeks have been phased out. Risks to the health of rivers and creeks in the catchment include urban stormwater, barriers to the migration of aquatic life, weeds and lack of streamside vegetation.

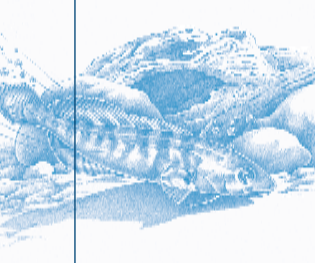
## Five-year program objective

The Dandenong Creek catchment river health program will improve and protect the high value environmental, social and economic assets. All environmental assets will be protected in the forested section of the upper Dandenong and riparian vegetation will be enhanced in middle and lower sections to increase the amenity value of the Dandenong Creek and Patterson River. Although maintenance of high social value and a pleasant environment will drive streamside management along modified rivers and creeks, some improvement to environmental assets is also expected.

A network of open space and recreational facilities will be widespread along the rivers and creeks. These will support a wide range of passive recreation pursuits and boating activities.

In the upper forested reaches of the Dandenong Creek, the seven ecologically healthy river reaches will be maintained. Approximately 100 kilometres of river and creeks will have an improved streamside zone and 120 kilometres of rivers and creeks will have an improved channel form. Water quality for many parameters including *E. coli* and nitrogen will continue to improve, and algal blooms in the Patterson Lakes will decrease in intensity and frequency.

The aquatic life IRC sub index ratings for rivers and creeks will be maintained. The nationally significant dwarf galaxias and growling grass frog will be protected as will isolated populations of platypus.

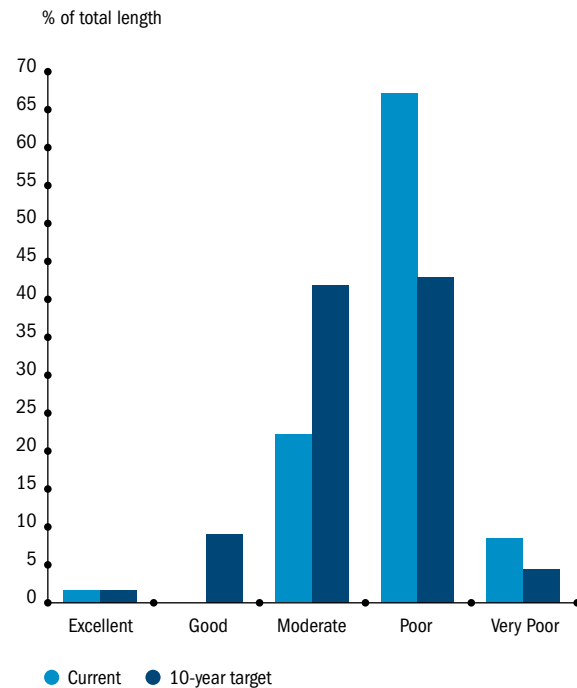


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Careful management of land use changes from rural to urban in the growth corridors will protect the natural structure of bed and banks, native fish and the presence of threatened species as well as reduce the risk of a decline in water quality and changes in flow. Because of the highly urbanised nature of this catchment, after the five-year program, only 34 kilometres of rivers and creeks are expected to be in good or excellent condition.

A summary of the five-year river health program and 10-year target condition for rivers and creeks within the Dandenong Catchment are described on the following pages. The highlighted red section of the maps indicates the catchment area for the individual rivers and creeks. A detailed description of all rivers and creeks and the five-year program as well as the long-term programs are contained in the attached Resource CD.

**Figure 10.**  
Current and 10-year condition targets for rivers and creeks in the Dandenong catchment



## Dandenong Creek

### Source

**Regional Importance: Very High**

**Management Objective: Improve condition and enhance social values**

**Current Condition: Excellent**

**Target: Excellent**

|           |           |               |              |                     |            |      |
|-----------|-----------|---------------|--------------|---------------------|------------|------|
|           |           | Water quality | Aquatic life | Habitat & stability | Vegetation | Flow |
|           | Excellent | ●             | ●            |                     | ●          | ●    |
|           | Good      |               | ●            | ●                   |            |      |
|           | Moderate  |               |              |                     |            |      |
|           | Poor      |               |              |                     |            |      |
| Very poor |           |               |              |                     |            |      |

**Current Social Value: Very High**

**Target: Very High**

The Dandenong Creek source is situated in Doongalla Forest near Mount Dandenong. These reaches are ecologically healthy, largely due to the surrounding forest. As well as generally good health, the upper Dandenong Creek system (including Dobsons Creek) and Monbulk Creek support the only substantial platypus populations in the Dandenong Valley. Powerful owls roost along upper Dobsons and Dandenong Creek. The Dandenong Creek source also has high social value associated with the National Park. Weeds and barriers to the movement of aquatic life are the key risks to river health.

**River Health Program:** Activities in the next five years will involve streamside revegetation, management of weeds and collecting additional river and creek health information.

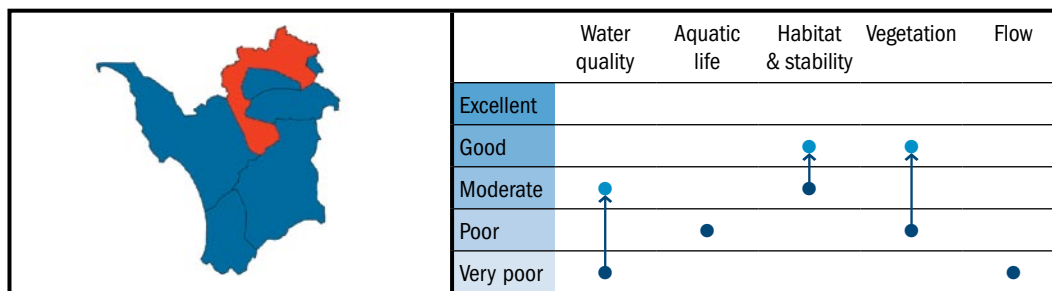
## Middle Dandenong Creek

**Regional Importance: High**

**Management Objective: Improve condition and enhance social values**

**Current Condition: Poor**

**Target: Moderate**



**Current Social Value: Very High**

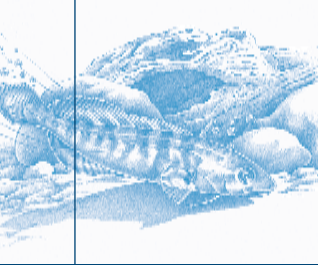
**Target: Very High**

Middle to upper Dandenong Creek includes the catchment upstream of Dandenong to upper Dandenong Creek and Dobsons Creek at The Basin. This catchment incorporates a number of other creeks, including Heatherdale, Bungalook, Tarralla and Old Joes. Upper Dandenong and Dobsons creeks support significant environmental values, including the threatened Dandenong freshwater amphipod, whereas river health tends to decline dramatically in the urban and industrial areas downstream. Despite the poor condition of rivers and creeks, the presence of threatened flora and fauna species including Yarra gums, dwarf galaxias, swamp skinks and growling grass frog represent important environmental values. The extensive network of bike paths, parks and reserves associated with rivers and creeks throughout the catchment contribute to a high social value. The Dandenong Valley Parklands are enjoyed by more than 700,000 visitors each year, and support a wide range of social amenities, bird habitat, remnant vegetation and conservation area. Key risks to river health include urban stormwater, barriers to the migration of aquatic life, weeds and a lack of streamside vegetation.

**River Health Program:** Activities in the next five years will involve weed control and planting 10 kilometres of vegetation, and the protection of heritage and recreation values. In the upper sections, activities to improve water quality will be undertaken. The long-term program will see water quality actions and other risks continue to be addressed throughout the creek.



Rehabilitation works along Old Joe's Creek in Boronia.



# Dandenong Catchment

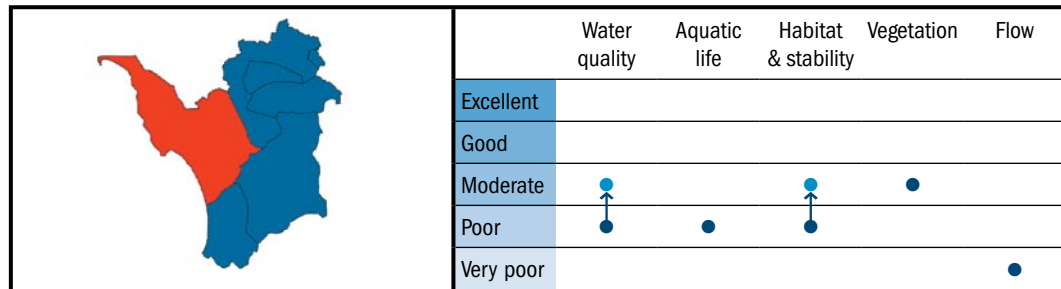
## Lower Dandenong Creek

**Regional Importance: High**

**Management Objective: Improve condition to sustain downstream values and enhance social values**

**Current Condition: Poor**

**Target: Moderate**



**Current Social Value: Very High**

**Target: Very High**

Lower Dandenong Creek commences at Dandenong. The catchment has a strong urban and industrial influence, although rural zones exist around Bangholme and Keysborough. While the environmental values are generally low, native fish populations are good in the lower reaches and a number of threatened flora and fauna species such as the growling grass frog are present. The Edithvale Wetlands are internationally significant for migratory birds under the Ramsar convention. The National Watersports Centre is popular for boating, fishing and passive recreation. The former Carrum swamp area also has Aboriginal heritage value. Key risks to river health include urban stormwater, barriers to the migration of aquatic life, weeds and a lack of streamside vegetation.

**River Health Program:** Activities in the next five years will involve the implementation of stormwater management plans, the removal of barriers to fish migration, controlling weeds and planting up to two kilometres of vegetation along the Patterson River, and maintaining recreation along Patterson River and Mordialloc Creek.

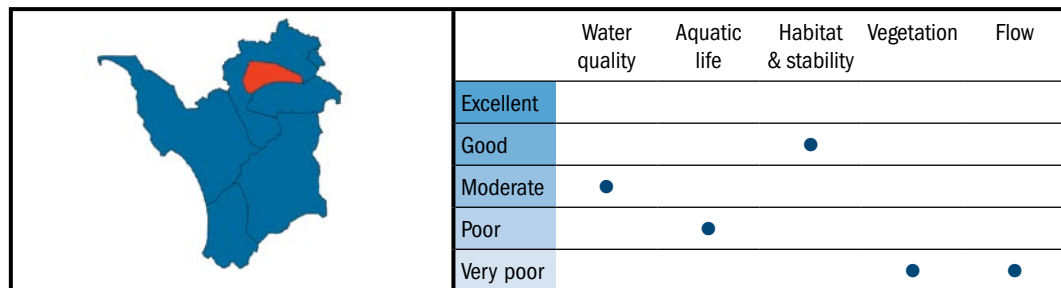
## Blind Creek

**Regional Importance: High**

**Management Objective: Improve condition to sustain downstream values and enhance social values**

**Current Condition: Very Poor**

**Target: Halt decline**



**Current Social Value: Very High**

**Target: Very High**

Blind Creek has a largely urban catchment, although its headwaters are within the Dandenong Ranges National Park. The creek flows through Ferntree Gully and Wantirna South before entering Dandenong Creek at Scoresby. The creek generally has low environmental value. However, significant species such as threatened Yarra gums and dwarf galaxias have been recorded in recent years. Notable social values include an extensive bike path along the creek between Ferntree Gully and Nortons Park, Wantirna South. Risks to river health include urban stormwater, barriers to the migration of aquatic life and lack of streamside vegetation.

**River Health Program:** Prospects for improving environmental condition are low because the creek has been heavily modified. In the next five years, work will return stream flows to the old creek channel through Boronia and Ferntree Gully. This is a demonstration project to assess the effectiveness of re-establishing old river and creek paths. The long-term program will address key risks and an improvement in condition is expected in the long-term.

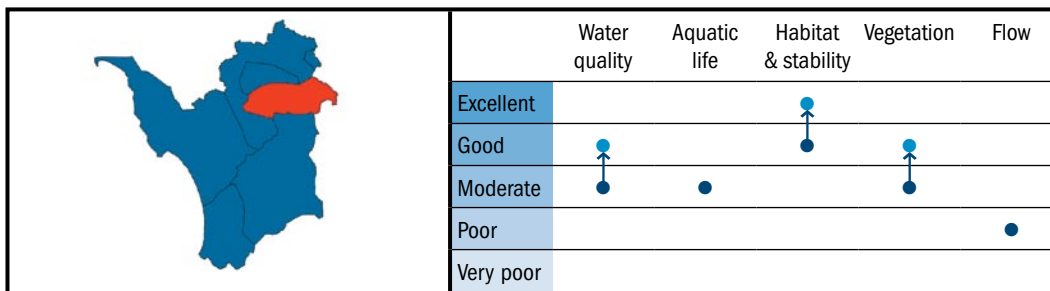
## Corhanwarrabul, Monbulk and Ferny Creeks

**Regional Importance: Very High**

**Management Objective: Improve condition and enhance social values**

**Current Condition: Moderate**

**Target: Good**

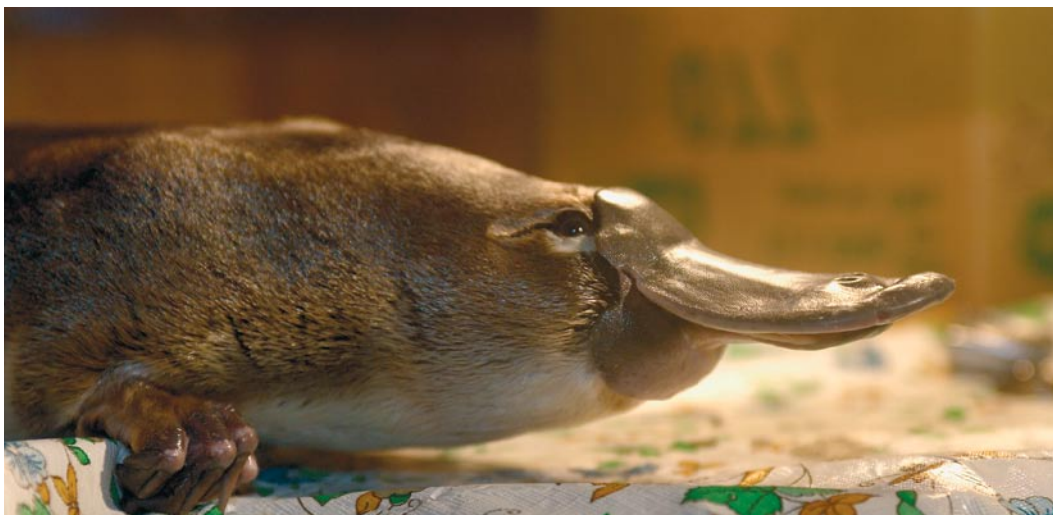


**Current Social Value: High**

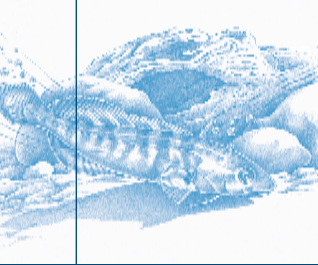
**Target: High**

Corhanwarrabul Creek is a major tributary of middle Dandenong Creek, originating in the Dandenong Ranges around Sherbrooke and meeting Dandenong Creek at the Police Road wetlands, Rowville. Major rivers and creeks include Monbulk, Ferny, Ferntree Gully and Clematis creeks. Much of the catchment is urbanised, although significant forested areas exist in the headwaters and some rural land use occurs along Monbulk Creek. Environmental values are moderate to good, with better reaches tending to be in the headwaters. Monbulk Creek is one of only two systems in the Dandenong Valley known to support platypus, and the threatened Dandenong freshwater amphipod is present in Ferny and Ferntree Gully creeks. Corhanwarrabul Creek and its tributaries also rate highly for social values such as the National Park, Birds Land Reserve and Belgrave Lake Park. Key risks to river health include urban stormwater, barriers to the migration of aquatic life and weeds.

**River Health Program:** Activities in the next five years will involve management of weeds and planting vegetation along five kilometres, stabilising river and creek banks, implementing activities to manage water quality, collecting additional river and creek health information, and protecting and maintaining social values.



Male platypus captured in Monbulk Creek. Monbulk Creek is one of only two systems in the Dandenong Valley known to support platypus.



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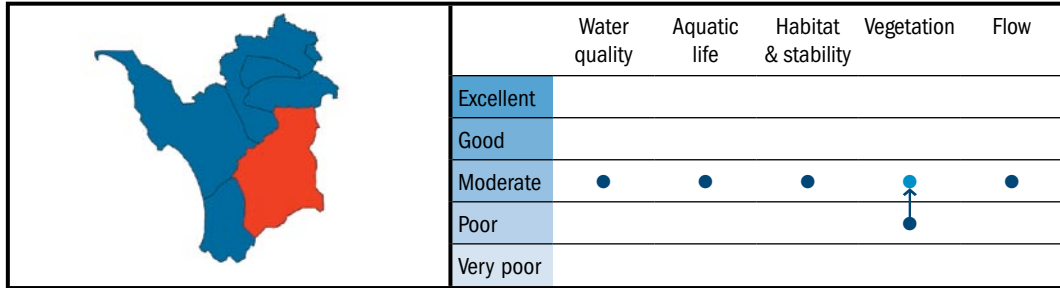
## Eumemmerring Creek

**Regional Importance: Low**

**Management Objective: Improve condition to sustain downstream values and enhance social values**

**Current Condition: Poor**

**Target: Moderate**



**Current Social Value: Very High**

**Target: Very High**

Rivers and creeks in this unit, including Eumemmerring, Troups, Ti Tree creeks, Hallam Main Drain and Eastern Contour Drain cover areas of Lyndhurst, Hampton Park and Endeavour Hills. Land use is principally urban and rapidly expanding. While environmental condition is generally low, the presence of threatened growling grass frog and dwarf galaxias is noteworthy. The recent construction of several water quality treatment wetlands to reduce pollutants entering Port Phillip Bay, such as the Hampton Park Wetlands, are also important environmental features. Lysterfield Park and several bike paths are among the notable values. Key risks to river health include urban stormwater, barriers to the migration of aquatic life, weeds and a lack of streamside vegetation.

**River Health Program:** The area is undergoing considerable development, which may provide opportunities to improve river health and amenity. As development occurs adjacent to waterways, there is an opportunity to work with the individual developer to present the waterway as an integral component of the development and achieve waterway protection or enhancement. Activities in the next five years will involve the implementation of stormwater management plans, developing a waterway management plan for upper Eumemmerring Creek and protecting heritage values. While stormwater actions will bring about improvements, water quality will remain moderate in the first five years. Further improvements are expected in the long-term.

The Seaford Wetlands, a site of international significance for migratory birds.



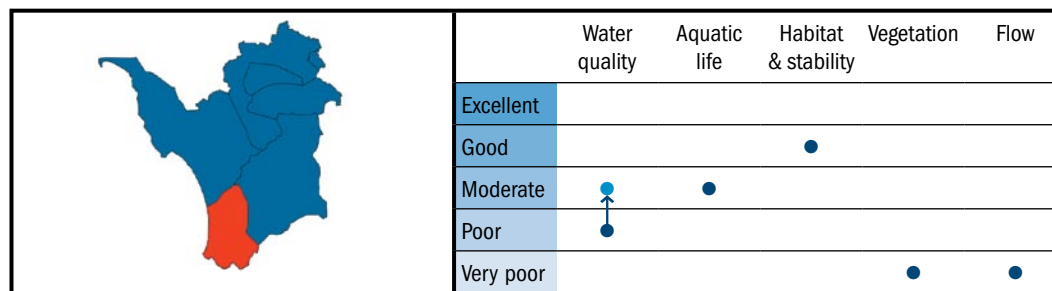
## Kananook Creek

**Regional Importance: High**

**Management Objective: Improve condition to sustain downstream values and enhance social values**

**Current Condition: Poor**

**Target: Halt further decline**



**Current Social Value: High**

**Target: High**

The Kananook Creek catchment incorporates areas such as Frankston, Seaford and Carrum Downs. Major tributaries are Boggy Creek, Tamarisk Creek and Eel Race Drain. The Seaford Wetlands, internationally significant for migratory birds under the Ramsar convention, are located in this catchment. The Langwarrin and Pines Flora and Fauna reserves are also important conservation reserves. Threatened flora and fauna species such as the swamp skink, growling grass frog and dwarf galaxias have been recorded and, overall, the catchment has moderate environmental value. The Kananook Creek estuary, parks, reserves and paths provide recreational opportunities. The creek precinct is captured as a priority within the State Government's Transit Cities Program.

The precinct has been identified as the greatest opportunity to re-establish links with the waterfront and to facilitate urban renewal in the form of new mixed use residential development. This will be orientated around a new pedestrian promenade to be created on the east bank of the creek within the city centre. This promenade will connect to a seven kilometre walking trail adjacent to the creek which links Frankston and Carrum.

Key risks to river health include urban stormwater, barriers to the migration of aquatic life, weeds and a lack of streamside vegetation.

**River Health Program:** Opportunities to improve the creek environment will be considered as part of the Transit Cities Program and in creating a new pedestrian promenade on the east bank of the creek within the city centre. However, prospects for improving environmental condition are low because the creek has been heavily modified. Activities in the next five years will involve the implementation of the local stormwater management plan, protection and enhancement of Seaford Wetlands, weed management and maintaining recreation. The long-term program will address other risks and an improvement in condition is expected in this timeframe.