**SUSTAINABLE ENVIRONMENT**

**Municipality Wide**

**Overview**

Strathbogie Shire contains a number of forests and parks of significant ecological value. These include the Heathcote-Graytown National Park, Mt Wombat Garden Range Flora and Fauna Reserve and the Rushworth-Heathcote State Forests. The Shire is home to many endangered flora and fauna species and ecological communities. The most extensive remnant vegetation within the Shire remains on elevated ridgelines, or in forests and parks set aside for timber production or conservation. Significant areas of remnant vegetation can also be found on private land, roadsides and along waterways.

The Shire is part of the Goulburn and Broken Basins and includes the following water courses Goulburn River, Honey Suckle Creek, Hughes Creek, Sheep Pen Creek, Seven Creeks, Faithful Creek, Castle Creek, Creighton’s Creek, Pranjip Creek, Broken River and Nine Mile Creek.

Major lakes within the Shire are Lake Nagambie and Reedy Lake which are constructed water supplies. Lake Nagambie supplies water to the Shepparton irrigation area through a series of gravity fed channels.

The Council recognises the significance of native flora and fauna, the health of soil and waterways and understands that these are resources that need to be protected and enhanced into the future. Strathbogie Shire believes that suitable and sustainable land use and development, combined with renewable energy technology, will contribute to a stronger future for all.

**Key Issues**

- Impacts of urban expansion on the natural environment
- Impact and increased risk of flooding
- Impact and increased risk of bushfire
- Impacts and increased risk of climate change
- Inappropriate development in proclaimed water supply catchments
- Water quality, usage, availability and long term security
- Aging infrastructure
- Riparian health
- Ongoing management of native flora and fauna
- Recreational use of waterways and competing interests

**Climate Change**

**Overview**

Climate change scenarios indicate that the Shire of Strathbogie is likely to be effected in the future, with rainfall becoming less reliable and more extreme increased rainfall variability and higher average and extreme temperatures. This may result in an increase in drought severity and possibly increased drought frequency for the Strathbogie Shire and conversely more flood events and storm damage from extreme weather events.

**Objective**

To anticipate and adapt to the effects of climate change.
Strategies

- Encourage drainage infrastructure in new urban subdivisions that will accommodate extreme rainfall events.
- Ensure flood strategies and emergency management plans are current.
- Encourage development to be responsive to potential environmental risks.
- Encourage and support sustainable development and use of renewable energy.

21.04-3 05/12/2013 C50

Water

Overview

The Strathbogie Shire has significant water assets including Goulburn River, Lake Nagambie, Seven Creeks and Hughes Creek. The many spring fed waterways start in the Strathbogie Ranges and subsequently flow down into the main creeks and rivers eventually running from the shire into the neighbouring shires and forming a part of the Murray Darling Basin. The Shire is also home to three water supply catchments Honeysuckle Creek in Violet Town, Seven Creeks which includes Mountain Hut Creek in Euroa and Nine Mile Creek in Longwood.

Objective

To manage our water resources.

Strategies

- Promote ‘best practice’ in efficient water usage across the region including recycling and grey water treatment, high value water use industries, environmental allocations and consideration of water use close to the water source.
- Protect proclaimed water supply catchments (and water quality) from inappropriate development.
- Encourage the expansion of towns with reliable water supply.
- Ensure new developments consider impacts on surface and ground water resources, wetlands, rivers and streams.

21.04-4 05/12/2013 C50

Native vegetation and biodiversity

Overview

The Strathbogie Shire includes endangered ecosystems, wetlands, significant remnant vegetation and many threatened species. Remaining native vegetation outside larger state managed public land areas occur mainly on roadsides and on private land, including waterways and steeper and less arable areas. Approximately 97% of the Longwood and Violet Town Plains area occurs on private land with over 95% of native vegetation cover already cleared.

Within the Shire these assets include box woodland remnants on roadsides in the gently sloping plains, peatlands and spring soaks on the tablelands and River Red Gum on the floodplains.

Past clearing of vast tracts of native vegetation and ongoing incremental losses have meant that many species of plants and animals are threatened with extinction.

There are 52 ecological vegetation classes represented in the Shire, with the most dominant classes being Dry Forest, Plains Woodland or Forest and Riverine Grassy Woodland or Forest. Almost 50% of the vegetated area is rated as ‘depleted’, with 7% considered ‘endangered’ and a further 6% considered ‘vulnerable’. Typically the level of concern increases moving from the highlands, for example at Boho South, on to the plains at Violet Town or Euroa where remnants of native vegetation are scattered and more fragmented.
Objective
To protect and enhance the natural environment.

Strategies
- Encourage the protection, restoration and management of biodiversity values.
- Encourage environmental connectivity between vegetation corridors such as roadsides and waterways.
- Encourage the protection of medium to very high quality roadside vegetation.

Renewable Energy

Overview
There are a number of concerns about the long-term use of fossil fuel energy sources within the Strathbogie Shire. Energy is primarily derived from fossil fuels that, upon burning, release greenhouse gases and contribute to climate change. Supplies of fossil fuels are falling, especially oil, which combined with the cost of infrastructure, is causing electricity and fuel prices to rise; which is likely to continue into the future.

The Strathbogie Shire supports appropriate renewable energy sources with Strathbogie Ranges having been identified as one of Victoria’s windiest locations.

Objective
To encourage renewable energy sources, the reduction of greenhouse gas emissions and innovative waste management practices.

Strategies
- Support renewable energy resource opportunities across the region.
- Promote Strathbogie Shire as a centre of excellence for renewable energy technology and infrastructure.
- Encourage developments which are energy-efficient and greenhouse friendly.
- Encourage new residential developments which minimise energy and water consumption through efficient subdivision and building design.
- Encourage the expansion of the natural gas network to all towns especially Nagambie, Avenel and Violet Town.
- Promote co-location of development, where appropriate, so as to maximise cost effective provision of energy infrastructure.
- Support, as appropriate, trial wind energy projects.

Flooding

Overview
The catchments of the various rivers and streams within the Municipality include areas of flood prone land, where flooding has historically caused substantial damage to the natural and built environment.

Floodplains provide natural flow paths and storage areas, where floodwaters remain for slow release, reducing erosion from high energy flows. Nutrients, debris and sediment settle during this process, protecting waterways from high sediment and nutrient loads, and contributing to floodplain productivity.
Sound floodplain management in the Municipality is the critical means by which the economic, social and environmental risks associated with floodplain use and development can be minimised. This level of management is to be provided by two “Local Floodplain Development Plans” which have been prepared to provide a performance-based approach for decision making, reflecting local issues and best practice in floodplain management.

Flooding is a natural event and the inherent functions of the floodplains, to convey and store floodwater, should be recognised and preserved to minimise the deterioration of environmental values.

Flooding imposes substantial costs on individuals and the community. While significant costs are incurred by direct damage to public and private property, indirect costs to the community such as loss of productivity, displacement of residents, closure of roads, trauma and ill health is also significant. Notwithstanding these significant impacts, natural flooding of floodplains and their associated wetlands provide essential breeding habitats for bird and aquatic species, and promotes the health of rivers and floodplains.

**Objective**

To protect and manage floodplains.

**Strategies**

- Discourage development and subdivision of land subject to significant flooding.
- Ensure all new development maintains the free passage and temporary storage of floodwater, minimises flood damage, is compatible with flood hazard and local drainage conditions, and minimises soil erosion, sedimentation and silting.
- Ensure the Local Floodplain Development Plans are current and development proposals are consistent with these plans.

---

**Bushfire**

**Overview**

Areas of the Shire are identified as being prone to bushfires, particularly the Strathbogie Ranges. The impacts of a bushfire on life and property are influenced by factors including the subdivision pattern, availability of reticulated water, proximity to vegetation and community capacity.

**Objective**

To minimise the risk to life, property and the environment from bushfire.

**Strategies**

- Discourage development of areas that are known to pose an unacceptable bushfire risk, including isolated areas of the Shire.
- Encourage the siting of dwellings to minimise bushfire risk, regardless of available views or desire to locate elsewhere.
- Discourage development requiring native vegetation removal for fire safety.
- Discourage development in high risk bushfire areas where alternative all weather road access is not available.
Heritage

Overview

Strathbogie Shire has a number of places of heritage significance. These heritage places are diverse in nature and range from bridges, buildings, historic mining sites and riparian areas. Strathbogie’s heritage is of value in community, cultural and economic terms. It gives the Shire’s towns and regions distinctive amenity and character as well as a cultural identity and sense of place. It is also a basis for building tourism and business opportunities.

Objective

To recognise and protect places of heritage, cultural and social significance.

Strategies

- Ensure development is sympathetic to existing heritage buildings and sites including the streetscape and character of the neighbourhood.
- Encourage the retention, adaptation and restoration of significant historic buildings and works, gardens, and other areas, as a viable alternative to demolition.
- Retain places of heritage significance for their social and economic benefits.

Implementation

The strategies will be implemented through the planning scheme by:

Policy Guidelines

- Require development to provide drainage management in accordance with Councils Infrastructure Design Manual.
- Require applicants to consider safe access routes for future development in high risk areas i.e. flooding and bushfire.
- Consider environmental limitations and constraints of proposed development/planning scheme amendments.
- Require applicants to consider alternative renewable energy options for large scale development proposals.

Scheme Implementation

- Review the application of the Erosion Management Overlay.
- Apply an Environmental Significance Overlay to the proclaimed water supply catchments (Honeysuckle Creek, Seven Creeks [including Mountain Hut Creek] and Nine Mile Creek) in conjunction with Goulburn-Murray Water.
- Review the application of the ‘Urban Floodway Zone’, ‘Floodway Overlay’ and ‘Land Subject to Inundation Overlay’.
- Review the application of the Bushfire Management Overlay.
- Prepare a Schedule to the Bushfire Management Overlay exempting development in appropriate locations.
- Complete and implement relevant recommendations in the Heritage Study.

Others actions of Council

- Pursue funding opportunities for the design, planning and construction of reticulated sewer systems, or alternative technology sewerage solutions, in Longwood, Strathbogie and Kirwans Bridge.
Future strategic work

- Investigate the application of an appropriate overlay and/or Native Vegetation Precinct Plans over significant native vegetation area.
- Identify places of Aboriginal cultural heritage significance.
- Investigate if the Strathbogie Ranges are suitable for wind power generation development.