

# Natural Environment Sustainability Strategy 2014-2019





# Acknowledgement

Latrobe City Council would like to acknowledge the Gunaikurnai People, the Traditional Owners of this land, and pay respect to their Elders both past and present.

## *Environmental Sustainability*

*“Planning and providing for the needs of individuals and communities now and for future generations, creating resilient and prosperous communities and protecting the environment and ecosystem services”<sup>1</sup>*

## *Natural Environmental*

*Encompasses all living and non-living things that have evolved naturally; our landscapes, oceans, water, atmosphere and biodiversity. The natural environment both enables human life and is affected by human activity. The natural environment is essential to our wellbeing.*

### **Latrobe City Council 2014**

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<sup>1</sup> World Commission on Environment and Development, *Our Common Future*, 1987

# Executive Summary

The *Natural Environment Sustainability Strategy 2013 -2018* focuses on four themes for the sustainable management of the natural environment across Latrobe City for the next five years:

- ⇒ **Meeting statutory requirements.** Continuing to fulfil our regulatory responsibilities under the *Planning and Environment Act* and meet the environmental requirements of state and federal legislation.
- ⇒ **Building capacity to respond to change.** Helping our organisation and our community to make better environmental decisions and respond more effectively to environmental challenges.
- ⇒ **Improving resource use efficiency.** Working towards overall reductions in water use, energy use, waste generation and unsustainable purchases.
- ⇒ **Protecting natural assets.** Working cooperatively to better manage, and increase protection for the waterways, air, soil and biodiversity valued by Latrobe City.

Each of these four themes contains objectives relevant to the *Council Plan 2013 -17*, Latrobe City Council's operations, and to the community as a whole. While some objectives can be delivered independently by Latrobe City Council, the success of many will be dependent on them being delivered in partnership with the community and other agencies.

A full review of this Strategy and development of a new *Natural Environment Sustainability Strategy* will commence in late 2018 in response to a new Council Plan.



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## Introduction

Local governments have a close connection to their community and environment meaning they are well placed to work towards environmental sustainability – through policy, direct action and working in close partnership with the local community.

As the local planning authority, manager of reserves, parks and open space, and operator of community infrastructure, Council is responsible for many activities which impact upon the environment.

Local government also has the unique opportunity to be leaders by setting an example to the community, building community awareness through education, and promoting change in the way we utilise and conserve our environment.

The *Natural Environment Sustainability Strategy* will guide Latrobe City's approach to natural environment sustainability over the next five years (2014 – 2019).

The Strategy will help Council identify and prioritise environment sustainability activities across the municipality and will increase the capacity and understanding of environmental sustainability issues across Council and the community.

The Natural Environment Sustainability Strategy is based on practical and achievable actions within Council's jurisdiction and capacity.

## Purpose

Latrobe City Council seeks its direction from *Latrobe 2026: The Community Vision for Latrobe Valley* with the objective

*'In 2026, Latrobe Valley enjoys a beautiful natural environment that is managed and protected with respect to ensure a lasting legacy for future generations'*

This objective, together with the core principles of sustainability, liveability, leadership and organisational excellence provide the overarching framework under which the *Natural Environment Sustainability Strategy* has been developed.





The *Natural Environment Sustainability Strategy* focuses on four themes for the sustainable management of the natural environment across Latrobe City for the next five years:

- ⇒ **Meeting statutory requirements.** Continuing to fulfil our regulatory responsibilities under the *Planning and Environment Act* and meet the environmental requirements of state and federal legislation.
- ⇒ **Building capacity to respond to change.** Helping our organisation and our community to make better environmental decisions and respond more effectively to environmental challenges.
- ⇒ **Improving resource use efficiency.** Working towards overall reductions in water use, energy use, waste generation and unsustainable purchases.
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## Strategic Context

Local government operates within the context of a broader governance framework, including the international community, federal and state governments.

The *Natural Environment Sustainability Strategy* has been developed in line with relevant legislation and policies that have been adopted at both the Federal and State level. These documents include:

- *Environment Protection and Biodiversity Conservation Act 1999 (Fed)*
- *Environment Protection Act (EP ACT) 1970, with Amendment in 2006 (Vic.)*
- *National Greenhouse and Energy Reporting Act 2007 (Fed)*
- *Flora and Fauna Guarantee Act 1988 (Vic.)*
- *Permitted Clearing of Native Vegetation – Biodiversity Assessment Guidelines 2013 (Vic.)*
- *Climate Change Act 2010 (Vic.)*
- *Local Government (Finance and Reporting) Regulations 2004 (Vic.)*
- *Catchment and Land Protection Act 1994 (Vic.)*
- *Planning and Environment Act 1987 (Vic.)*
- *Local Government Act (Best Value Regulations) 1999 (Vic.)*



## **International**

In 1987, the United Nations' World Commission on Environment and Development published *Our Common Future*<sup>1</sup>, also known as 'the Brundtland Report'. The commission sought to unite nations on a sustainable development path and, for the first time, sustainable development was placed firmly on the world political agenda. In the report, sustainable activities were defined as ones where the needs of the present generation are met without compromising the needs of future generations.

In 1992, the United Nations Earth Summit in Rio de Janeiro brought together leaders from across the world to focus on the sustainability challenge. The Summit adopted *Agenda 21*, which was an action plan for all groups – the United Nations, governments, and major organisations – at all levels and in every area in which people directly affect the environment. This established a blueprint for sustainability, and created an awareness of the need to consider the environmental and social, as well as economic, implications of our decisions and actions. Political commitment to *Agenda 21* was renewed at the Rio+10 conference in 2002.

In 2012, Rio+20 provided further opportunity to re-direct and re-energise political commitment to the three dimensions of sustainable development: economic growth, social improvement and environmental protection. This was the largest event in the history of the United Nations.

Australia's commitment to *Agenda 21* is reflected in a strong national response to meet our obligations under this international agreement. Local governments also have an important role to play in helping society to become sustainable and protect the natural environment<sup>3</sup>.

Since the Earth Summit in 1992, working towards environmental sustainability has become an increasingly important goal for governments across Australia<sup>2</sup>.



<sup>1</sup> World Commission on Environment and Development, *Our Common Future*, 1987

<sup>2</sup> Department of Sustainability, Environment, Water Population and Communities (SEWPaC), "Commission on Sustainable Development", [www.environment.gov.au/about/International/uncsd/index.html](http://www.environment.gov.au/about/International/uncsd/index.html)

<sup>3</sup> Department of Environment, "National Strategy for Ecologically Sustainable Development"  
<http://www.environment.gov.au/about/esd/publications/strategy/index.html>

## **Australia**

In 1992, Australia developed the *National Strategy for Ecologically Sustainable Development* (NSED)<sup>3</sup>, which tackles many key areas for sustainability action highlighted in *Agenda 21*. The NSED directs governments to make policy and decisions which are more sustainable and which aim for long-term benefits over short-term gains. The NSED defines ecologically sustainable development as:

*'Using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased'.*

The Australian Government currently outlines its overarching environmental policy in the *Direct Action Plan*.

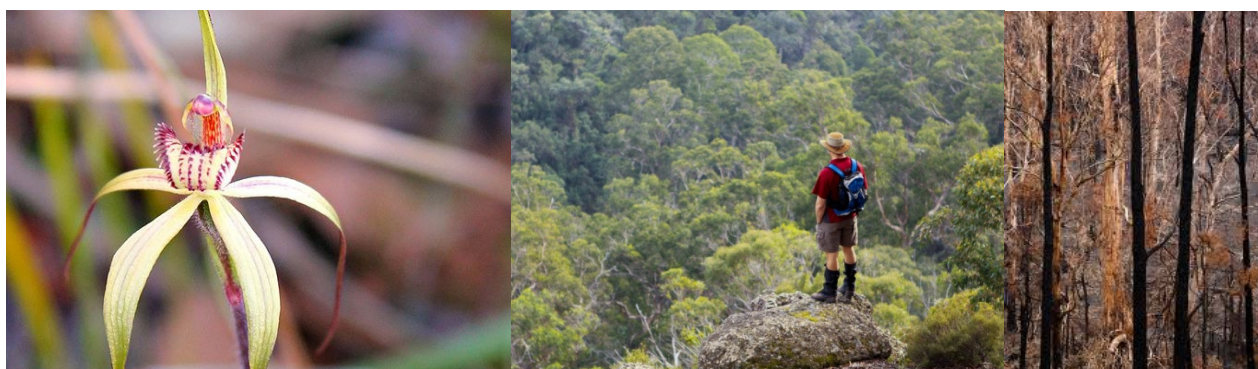
## **Victoria**

The Victorian Government outlines its overarching key sustainability objectives in *Environmental Partnerships*<sup>4</sup>. This document is built on three aspirations:

- Value the environment and what it has to offer;
- Act to protect, conserve and maintain the environment; and
- Enjoy the wide range of benefits of a healthy environment now and into the future.

It also identifies eight priorities to help strengthen environmental partnerships and achieve the vision of a healthy Victorian environment that supports prosperity and wellbeing. The *Victorian Adaptation and Sustainability Partnership*<sup>5</sup> is an established partnership between Victoria's 79 Councils and the State Government, previously known as the Victorian Local Sustainability Accord. The principles of Partnership are to:

- build shared understanding; establish shared local goals and priorities;
- develop long term strategic resource allocation and funding;
- pursue alignment and cooperation in service delivery; and
- improve procedures for regular, effective evaluation and review.



<sup>3</sup> Department of Environment, "National Strategy for Ecologically Sustainable Development" <http://www.environment.gov.au/about/esd/publications/strategy/index.html>

<sup>4</sup> Department of Environment and Primary Industries, State Government Victoria, "Environmental Partnerships" <http://www.depi.vic.gov.au/environment-and-wildlife/environmental-partnerships>

<sup>5</sup> Department of Environment and Primary Industries, State Government Victoria, "Victorian Adaptation and Sustainability Partnership" <http://www.dse.vic.gov.au/conservation-and-environment/sustainability/victorian-adaptation-and-sustainability-partnership>



## Latrobe City Council

Through the *Council Plan* and the *Natural Environment Sustainability Strategy*, Latrobe City Council identifies a range of objectives and actions to achieving the wider environmental aspirations of our community.

The *Council Plan 2013-2017* recognises natural environment sustainability within the themes:

- *Appropriate, Affordable and Sustainable Facilities, Services & Recreation;*
- *Advocacy for and Consultation with Our Community; and*
- *Planning for the Future.*

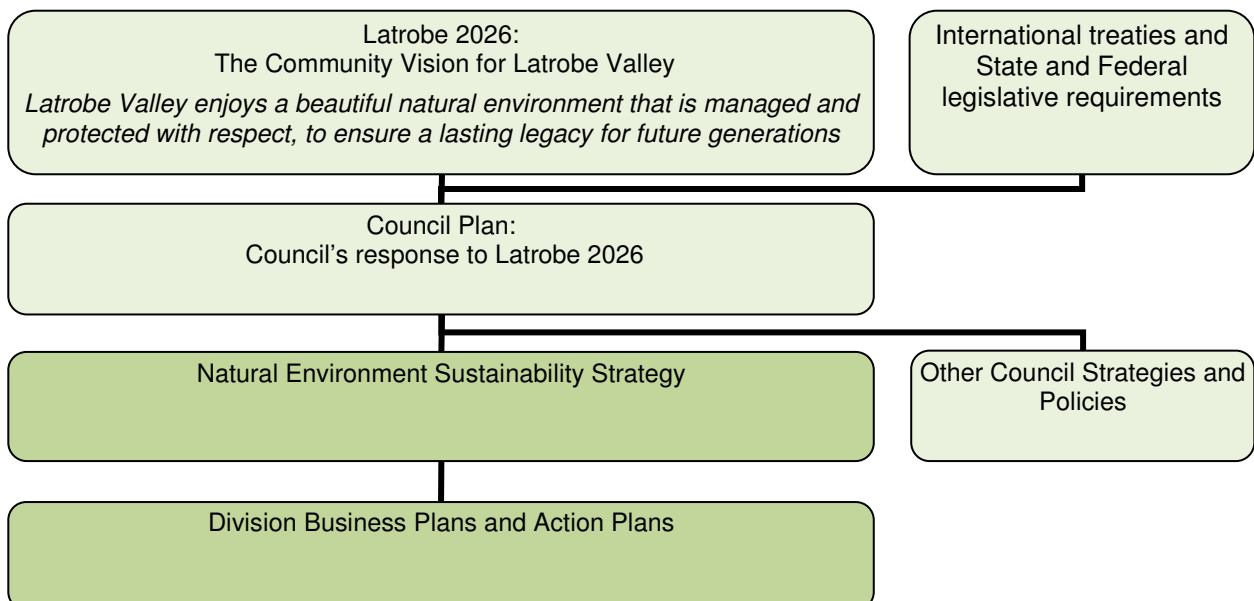
Strategic directions specific to the *Natural Environment Sustainability Strategy* within *Council Plan 2013-2017*:

- *Work with stakeholders to maintain and enhance the natural environment and biodiversity of Latrobe City and the region; and*
- *Advocate for and support our partners to improve air and water quality in Latrobe City.*

Latrobe City Council recognises waste management as a fundamental element of caring for our natural environment and has adopted a separate *Latrobe City Council Waste Management Strategy 2010-2017* to provide sustainable solutions to the collection, disposal and resource recovery of waste.

Latrobe City's *Ecologically Sustainable Development Policy (11 POL-4)* provides a basis for a series of outline policies and strategies to assist Latrobe City to achieve sustainability in various sectors of environmental protection, major land-use, business and industry, waste disposal and people and equity.

The *Natural Environment Sustainability Strategy* will guide Latrobe City's approach to sustainably managing our natural environment over the next five years (2014 – 2019), with flexibility to adapt to changes in government policy and new opportunities that may arise.



# Development and implementation

## Development

### ***Natural Environment Sustainability Strategy 2008-2013***

This is the second Latrobe City Council Natural Environment Sustainability Strategy, with the first published in 2008. The 2008 Strategy provided a clear direction for natural environment sustainability action, with a wide array of council, community groups and other stakeholders involved in the delivery of the actions. It remains an important reference document regarding the development of a common understanding of the natural environment in Latrobe City and detailed information on our natural assets.

### ***Natural Environment Sustainability Strategy 2014-2019***

The 2013 Strategy builds on the work achieved through the previous strategy and focuses clearly on the issues and responsibilities under the jurisdiction of Latrobe City Council. Themes and objectives have been developed with an emphasis on the *Council Plan 2013-2017*, council operations, and management and planning responsibilities. Emphasis has also been placed on Council's role in working with other organisations, agencies and the community to deliver natural environment sustainability outcomes for areas outside the direct influence of Council.

## Implementation

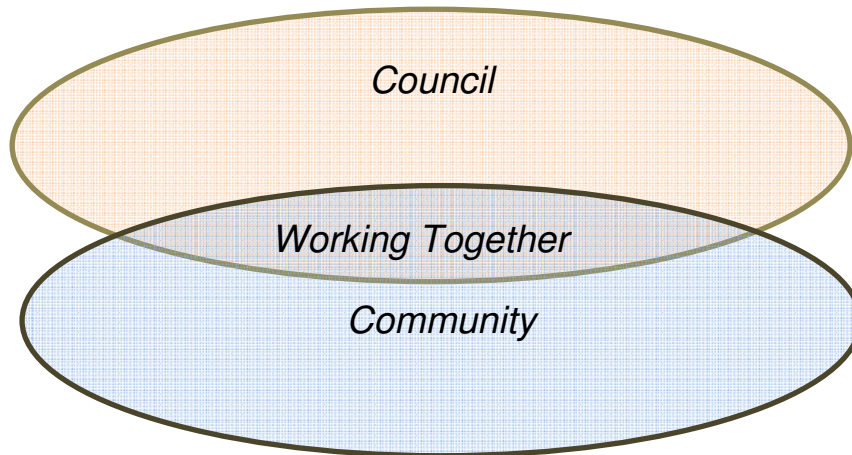
The 2014 Strategy has identified four themes for the sustainable management of the natural environment across Latrobe City for the next five years.

Each of these four themes contains strategic objectives relevant to Latrobe City Council's operations, and to the community as a whole. While some objectives can be delivered independently by Latrobe City Council, the success of many will be dependent on them being delivered in partnership with the community and other agencies.





To demonstrate how we will deliver the strategic objectives several flagship projects have been identified that have high interest within the community, are a particular focus of the Strategy and have a strong resource and funding commitment.



Council is responsible for implementing the Strategy by ensuring that it is incorporated into its annual business planning process.

### **1. Meeting statutory requirements**

*Continuing to fulfil our regulatory responsibilities under the Planning and Environment Act 1987 and meeting the environmental requirements of state and federal legislation.*

We will do this by providing advice on meeting the requirements of the Latrobe planning scheme, assessing plans and permit applications, conducting site visits, auditing forestry coupes and prosecuting people for the illegal clearing of native vegetation.

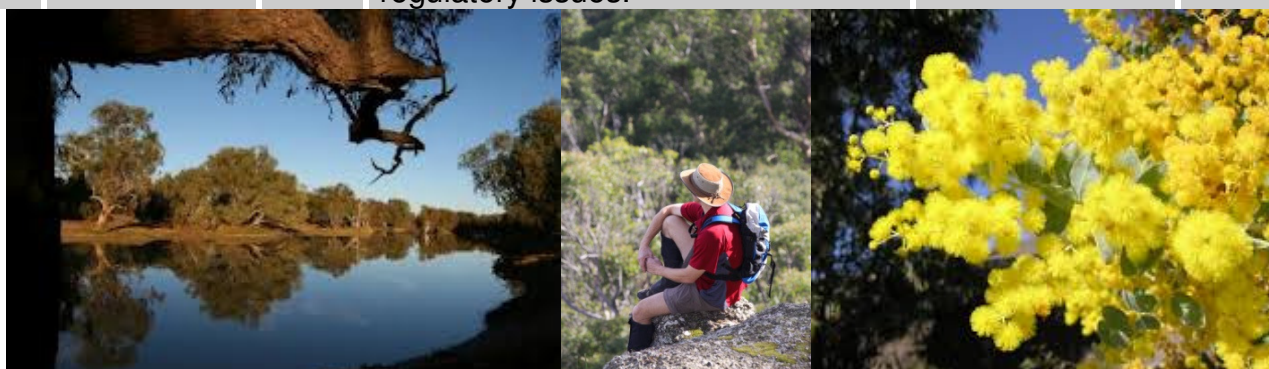
We will also work to meet our legal obligations as a land owner, for the protection of land and water and the management of invasive species; this includes treating weeds on Council land to make sure they do not spread.



# 1. Meeting statutory requirements

***Continuing to fulfil our regulatory responsibilities under the Planning and Environment Act 1987 and meeting the environmental requirements of state and federal legislation.***

<b>Action Area</b>		<b>Objective</b>		<b>Responsibility</b>	<b>Timing</b>
1.1	Compliance activities	1.1.1	Continue to fulfil Council's regulatory responsibility in ensuring compliance with permitted clearing and the Code of Practice for Timber Production under the Latrobe Planning Scheme.	Statutory Planning/ Environment Sustainability	Ongoing
		1.1.2	Maintain Council's enforcement capacity and capability regarding our natural environment sustainability regulatory responsibilities.	Statutory Planning/ Environment Sustainability	Ongoing
	<i>Flagship project (pg. 22)</i>	1.1.3	Work cooperatively to control and reduce the spread of weeds on Council rural roadsides and other Council-managed land.	Environment Sustainability/ Recreational Liveability/ External Stakeholders	Ongoing
1.2	Sustainable future	1.2.1	Utilise Council's role as the responsible planning authority to encourage environmentally sustainable design principles in public and private developments including open space.	Statutory Planning/ Future Planning	Ongoing
		1.2.2	Work cooperatively with relevant community, industry and agency groups to develop shared understanding and agreed action on natural environment sustainability regulatory issues.	Statutory Planning/ Environment Sustainability	Ongoing





## 2. Building capacity to respond to change

*Helping our organisation and our community to make better environmental decisions and respond more effectively to environmental challenges.*

We will do this by planning future Council infrastructure and services around expected changes in climate and extreme weather, replacing aging and inefficient Council vehicles, lighting and hot water systems with more efficient units to reduce emissions, and planting native trees, shrubs and grasses to offset the emissions of our vehicle fleet. We will also provide targeted environmental information and environmental recovery programs following natural disasters, keep informed by publishing a State of Environment report for the Latrobe City Council area, and running education programs for schools, businesses and households to enable them to improve their energy efficiency and reduce their environmental impacts.

### **Flagship Project - Latrobe City's 'State of the Environment'.**

*2.3.2 Maintain data and publish a 'State of the Environment' report to measure progress and indicate priorities and developing issues.*

*Latrobe City's local 'State of the Environment' report, first published in 2010 and again in 2013, provides an objective basis for assessing whether the natural environment, resource use and the capacity for sustainability in the municipality are stable, improving or deteriorating. It also provides a basis for identifying priorities and evaluating the success or failure of actions aimed at sustainability.*

*The data which is used to create the 'State of the Environment' report is collected regularly as it becomes available from a range of sources. These sources include, among others, data sets from the Bureau of Meteorology, Australian Bureau of Statistics, Office of the Clean Energy Regulator, Victorian Water Data Warehouse, Latrobe Valley Air Monitoring Network, Trust for Nature, and Parks Victoria.*

*The 2013 publication indicated that while climate stability and ecosystem health were predominantly still deteriorating, capacity building and sustainability interventions were generally improving and natural resource extraction and consumption have remained generally stable. This points to the need for more effort to be put into maintaining and enhancing ecosystem health, which includes things like air, water, soil and biodiversity.*

*Data will continue to be collated, shared and trends monitored for change.*



## 2. Building capacity to respond to change

*Helping our organisation and our community to make better environmental decisions and respond more effectively to environmental challenges.*

<b>Action Area</b>		<b>Objective</b>		<b>Responsibility</b>	<b>Timing</b>
2.1	Emissions reduction and climate change adaptation	2.1.1	Participate in regional climate change forums and networks to share information and develop better strategies for emissions reduction and climate change adaptation.	Regional Partnerships/ Environment Sustainability	Ongoing
		2.1.2	Pursue emissions reduction and climate change adaptation actions that provide a net social, economic or environmental benefit.	Environment Sustainability/ All Units	Ongoing
	<i>Flagship project (pg. 28)</i>	2.1.3	Continue to offset Council's annual vehicle emissions through revegetation programs and pursue an overall reduction in vehicle emissions.	Environment Sustainability/ Finance	Ongoing
2.2	Environmental recovery	2.2.1	Utilise Council's ongoing natural environment sustainability programs to complement other disaster recovery efforts where appropriate.	Environment Sustainability	As needed
		2.2.2	Support relevant authorities and community groups to undertake environmental recovery works in disaster affected areas.	External Stakeholders/ Environment Sustainability	As needed
2.3	Sustainability information and education	2.3.1	Engage with schools, businesses and households to improve energy efficiency and reduce environmental impacts.	Environment Sustainability	Ongoing
	<i>Flagship project (pg. 12)</i>	2.3.2	Maintain data and publish a 'State of Environment' report to measure progress and indicate priorities and developing issues.	Environment Sustainability	2-4 yrs
		2.3.3	Encourage, support and promote local community sustainability initiatives.	Environment Sustainability/ Community Development	Ongoing



		2.3.4	Demonstrate leadership in environmental sustainability through regular information to the community about Council's sustainability actions and achievements.	Environment Sustainability	Ongoing
2.4	Continuous improvement	2.4.1	Regularly measure and report on Latrobe City's progress against the Natural Environment Sustainability Strategy.	Environment Sustainability	Annually
		2.4.2	Improve internal communications to better inform staff of current trends and developments in natural environment sustainability, to encourage informed debate and co-operation across Council.	Environment Sustainability	Ongoing
	<i>Flagship project (pg. 30)</i>	2.4.3	Participate in regional networks and forums and work cooperatively to ensure alignment with regional and state environmental sustainability strategies, policies and programs.	Environment Sustainability	Ongoing



### **3. Improving resource use efficiency**

*Working towards overall reductions in water use, energy use, waste generation and unsustainable purchasing.*

We will do this by monitoring and reviewing the water and energy use at Council facilities, and reporting this to the facility managers to identify improvement. We will also do this by designing energy efficient buildings; installing energy efficient products; and installing water conservation and water re-use systems, such as rainwater tanks, low flow shower heads and taps. We also work towards needing fewer office supplies and increasing the amount that have better sustainability credentials, such as 100% recycled copy paper.

#### **Flagship Project – Energy efficiency upgrades**

*3.2.2 Work towards an overall reduction in Latrobe City corporate energy consumption to improve energy efficiency.*

*Every year, we monitor corporate energy consumption and try to reduce the amount used. This has benefits for the environment, through reduced greenhouse gas emissions, and also for Council budgets, through reduced electricity, gas and fuel charges. Council's biggest single energy user is street lighting, which accounts for about 40% of all our energy use. Council's leisure centres, regional gallery and HQ building are also major users of energy. Between 2013-2016, with the assistance of the Australian Government, Council will be embarking on the single greatest greenhouse reduction project we have ever implemented; upgrading residential street lights and a number of internal building lights to highly energy efficient LEDs.*

*Between 2013 – 2016 Council plans to:*

- Upgrade approximately 6000 residential street lights from mercury vapour to LED lights.*
- Upgrade internal building lights in five of Council's community facilities, approximately 2000 lights, to mostly LED lights.*
- Save 41 million kWh of electricity, 56,000 tonnes of greenhouse gas emissions and \$11.1 million in costs over the 20 year lifespan of the new LED lights.*

*Other projects currently underway to improve energy efficiency include:*

- changing over to solar hot water systems in four of Council's community facilities,*
- improving the energy efficiency of theatrical stage lighting in Council's performing arts venue, and*
- reducing the amount of time that air conditioning and security lighting needs to remain on in Council's HQ building.*

### 3. Improving resource use efficiency

*Working towards overall reductions in water use, energy use, waste production and unsustainable purchases.*

<b>Action Area</b>		<b>Objective</b>		<b>Responsibility</b>	<b>Timing</b>
3.1	Water efficiency	3.1.1	Monitor and review Latrobe City Council's water use and make the information available to the community.	Environment Sustainability	Ongoing
		3.1.2	Work towards an overall reduction in Latrobe City corporate water usage and improve water re-use and water conservation.	All Departments	Ongoing
		3.1.3	Support and promote water re-use and water conservation within the community, industries, developers and other agencies to maximise the amount of water available for river health and human use.	Environment Sustainability/ Statutory Planning/ Future Planning	Ongoing
3.2	Energy efficiency	3.2.1	Monitor and review Latrobe City Council's energy consumption and make the information available to the community.	Environment Sustainability	Ongoing
	<i>Flagship project (pg. 15)</i>	3.2.2	Work towards an overall reduction in Latrobe City corporate energy consumption to improve energy efficiency.	Environment Sustainability/ All Departments	Ongoing
		3.2.3	Support and promote energy efficiency within the community, industries, developers and other agencies to minimise the amount of energy needed and maximise the efficiency of what is used.	Environment Sustainability/ Statutory Planning	Ongoing
3.3	Sustainable procurement	3.3.1	Increase the proportion of environmentally sustainable products and services purchased by Latrobe City.	Finance	2-4 yrs
		3.3.2	Encourage a reduction in Latrobe City's corporate consumption by identifying and investigating changes in quantity and cost of consumables purchased.	Environment Sustainability/ Finance	2-4 yrs
3.4	Waste minimisation	3.4.1	Implement and review the Latrobe City Council Waste Management	Environment Sustainability	2-4 yrs



			Strategy 2010-2017.		
		3.4.2	Implement and review the Latrobe City Council Waste Education Plan 2010-2015.	Environment Sustainability	2-4 yrs
		3.4.3	Ensure the socially, environmentally and economically responsible disposal of municipal waste.	Environment Sustainability	Ongoing
		3.4.4	Maintain and enhance community engagement over waste management services provided by Council.	Environment Sustainability	Ongoing
		3.4.5	Work cooperatively with other agencies to increase the amount of material recycled, and promote positive waste disposal behaviour, in the Latrobe City community.	Environment Sustainability/ External Stakeholders	Ongoing

#### **4. Protecting natural assets**

*Working cooperatively to better manage, and increase protection for the waterways, air, soil and biodiversity valued by Latrobe City.*

We will do this by providing gross pollutant traps to prevent litter entering our waterways, maintaining waterway vegetation to support biodiversity and regulate water flow, and developing plans and memorandums to ensure consistent waterway management between different land owners. We will support and advocate for local monitoring of air quality, cooperate with state government agencies to promote better management of land in erosion prone areas, particularly in the Strzelecki Ranges and encourage a triple bottom line approach to Council activities. Triple bottom line involves incorporating social and environmental values into decision making, in addition to traditional financial values. We will protect biodiversity and native vegetation in Council reserves and roadsides, run biodiversity restoration projects and support private landowners and community groups to protect biodiversity by providing grants, rate rebates, tree planting equipment, information and advice.



## 4. Protecting natural assets

*Working cooperatively to better manage, and increase protection for, the waterways, air, soil and biodiversity valued by Latrobe City.*

<b>Action Area</b>		<b>Objective</b>	<b>Responsibility</b>	<b>Timing</b>	
4.1	Waterway health	4.1.1	Advocate for and support our partners to improve water quality in Latrobe City.	Environment Sustainability/ External Stakeholders	Ongoing
		4.1.2	Continue to minimise the amount of litter and other pollutants entering the stormwater system through infrastructure and education.	Infrastructure Development/ Environment Sustainability	Ongoing
	<i>Flagship project (pg. 26)</i>	4.1.3	Continue to support Neighbourhood Environment Improvement Plans for Traralgon Creek and Morwell River, and encourage other cooperative action between industry, agencies and community.	Environment Sustainability	Ongoing
		4.1.4	Work in cooperation with the West Gippsland Catchment Management Authority to develop a Waterway Management Plan for Waterhole Creek.	External Stakeholders/ Environment Sustainability	>2 yrs
		4.1.5	Work cooperatively with relevant agencies to protect natural waterways within Latrobe City from threatening activities.	Environment Sustainability	Ongoing
		4.1.6	Work in cooperation with the West Gippsland Catchment Management Authority to develop a memorandum of understanding for the management of the urban section of Traralgon Creek.	External Stakeholders/ Environment Sustainability	>2 yrs
4.2	Air quality	4.2.1	Advocate for and support our partners to improve air quality in Latrobe City.	Environment Sustainability	Ongoing
		4.2.2	Support the continued monitoring of air quality and publication of information by the Latrobe Valley Air Monitoring Network Inc.	Environment Sustainability	Ongoing

		4.2.3	Encourage the reduction of pollution from Latrobe City Council activities as well as local domestic, transport and business sources.	Environment Sustainability	Ongoing
		4.2.4	Where particular local air quality issues are identified, explore the use of Local Laws to address them.	Local Laws/ Environment Sustainability	As needed
4.3	Soil conservation	4.3.1	In cooperation with relevant agencies, promote awareness of appropriate land management to landholders in high erosion risk-areas.	External Stakeholders/ Environment Sustainability	2-4 yrs
		4.3.2	Support actions to improve soil health where they contribute to whole-of-catchment sustainability.	Environment Sustainability	2-4 yrs
4.4	Biodiversity protection	4.4.1	Work cooperatively to protect existing biodiversity within Latrobe City from threatening processes, with a priority focus on remnant vegetation and protected species.	Environment Sustainability/ External Stakeholders	Ongoing
		4.4.2	Work cooperatively to plan, implement and maintain biodiversity restoration projects, with a priority focus on strategic landscape linkages and waterways.	Environment Sustainability/ External Stakeholders	Ongoing
		4.4.3	Support individuals and groups undertaking biodiversity management actions that are of benefit to the Latrobe City's natural environment and community.	Environment Sustainability	Ongoing
	<i>Flagship project (pg. 20)</i>	4.4.4	Demonstrate leadership in natural environment sustainability through appropriate management of biodiversity on Council managed land, particularly bushland reserves.	Recreational Liveability/ Environment Sustainability/ Statutory Planning	Ongoing
	<i>Flagship project (pg. 23)</i>	4.4.5	Develop a <i>Biolinks</i> paper highlighting areas of potential connectivity of habitat which can be used to prioritise revegetation and biodiversity restoration work.	Environment Sustainability	>2 yrs



### **Flagship Project - Threatened species**

*4.4.4 Demonstrate leadership in natural environment sustainability through appropriate management of biodiversity on Council managed land, particularly bushland reserves.*

*Many threatened species are found within the Council boundaries, including plants, mammals, birds, reptiles, amphibians, fish and invertebrates. Some well-known threatened species in Latrobe City include the Growling Grass Frog (*Litoria raniformis*), Yarra Gum (*Eucalyptus yarraensis*), Powerful Owl (*Ninox strenua*), Strzelecki Gum (*Eucalyptus strzeleckii*), Matted Flax-lily (*Dianella amoena*) and the small fish, Dwarf Galaxias (*Galaxiella pusilla*).*

*Threatened species are assigned a status, for example endangered, vulnerable or rare, under the federal Environment Protection and Biodiversity Conservation Act 1999 and National Action Plans; and the state Flora and Fauna Guarantee Act 1988 and Advisory Lists.*

*The Latrobe City Council Planning Scheme specifically makes reference to habitat protection measures for both Dwarf Galaxias and Growling Grass Frog when assessing sites within the municipality. Recent work to protect the Matted Flax-lily has also resulted in the Latrobe City Council collecting seed, propagating and planting many new Matted Flax-lily plants in Councils garden beds and reserves. Council also manages the Eric Lubcke Yarra Gum Conservation Reserve, considered to be the most important of the four localities in Gippsland where Yarra Gum can still be found.*



# About Latrobe City

## Our natural environment

Latrobe City is located in the Gippsland region of Victoria, about 150 kilometres south-east of Melbourne. It is the fourth largest Regional City in Victoria and the only Regional City in eastern Victoria. Latrobe City is an urban and rural area, with the majority of the population living in the urban areas. The City encompasses a total land area of about 1,422 square kilometres.

As a Regional City, Latrobe City takes a leadership role in strategically planning for our future and that of our region by attempting to find a balance in advancing our City's built environment and liveability whilst planning for and protecting our natural environment.

Latrobe City contains a rich diversity of plants, birds and other wildlife, including fauna such as the Powerful Owl and Barking Owl, Strzelecki Koala and Tree Goanna. Grey Kangaroo, Swamp Wallaby, Wombat and Echidna are common and Platypus can be found in some of the creeks. Latrobe City extends over parts of three natural regions – separate bioregions recognised by State and Federal Government due to their unique assemblage of vegetation cover, natural physical features, climate and biodiversity.

### ***Highlands-Southern Fall bioregion***

To the north, Latrobe City contains rugged and heavily forested foothills of the Great Dividing Range, part of the Highlands – Southern Fall bioregion that extends across the whole southern fall of the Great Dividing Range. It consists largely of hard, very old, folded marine sediments dissected by rocky gorges through which flow the Tanjil East River, Tyers River, Rintouls Creek, Eaglehawk Creek, Toongabbie Creek and Fells Creek. The most common vegetation is Shrubby Dry Forest and Damp Forest on the upper slopes, with Wet Forest in the valleys and Cool Temperate Rainforest in the most protected gullies. Tyers Regional Park is located in this bioregion.

### ***Gippsland Plain bioregion***

Running through the centre of Latrobe City is the broad plain of the Latrobe Valley, part of the Gippsland Plain bioregion that extends from Melbourne to the Gippsland Lakes. It consists of younger sands and gravels and recent sedimentary deposits along the river floodplain through which the Latrobe River flows. It is broad, relatively flat and





bordered by low, rounded foothills. Stands of Lowland Forest including the saw-leaved Banksia occur in the foothills, with red gums and patches of rare Grassy Woodlands found in parts of the plain. The Traralgon South Flora and Fauna Reserve, Traralgon Railway Reservoir Conservation Reserve, Edward Hunter Heritage Bush Reserve Moe, Ollerton Avenue Newborough, Crinigan Bushland Reserve Morwell and Moe-Yallourn Rail Trail are located in this bioregion.

### **Flagship Project - Managing roadside weeds**

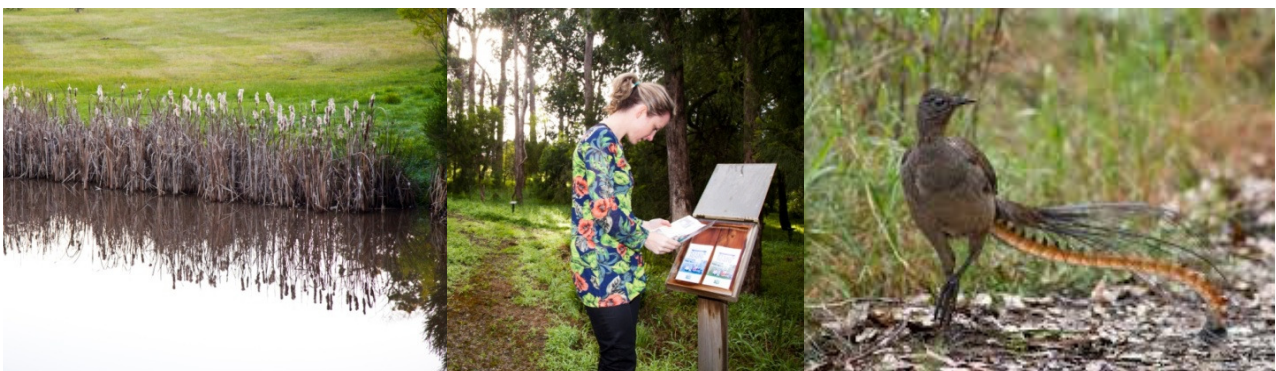
#### *1.1.3 Work cooperatively to control and reduce the spread of weeds on Council rural roadsides and other Council-managed land.*

*The responsibility for weed management, and actions taken, are spread across a wide variety of organisations and individuals in Latrobe City. Because weeds spread so easily, there are also major advantages in coordinating weed control across land tenures.*

*Of the 1800 km of maintained public roads in Latrobe City, approximately 1000 km are rural roads with road reserves which are the responsibility of Latrobe City Council. Since 2005, through the support of a range of State Government funding programs, Latrobe City Council has been managing weeds on these rural roadsides. This has included monitoring the presence and abundance of target weeds, herbicide spraying and a small amount of manual removal. Target weeds have been chosen in line with State and Catchment wide priorities, as well as local needs, and have included weeds such as Ragwort, Blackberry, Sweet Briar, Gorse, Cape Broom, English Broom, African Lovegrass and Prickly Pear.*

*In 2012/13*

- *Council targeted Blackberry, Gorse, African Lovegrass, Cape Broom, Flax-leaf Broom and English Broom.*
- *Conducted independent weed monitoring on 1942 km of roadside reserves.*
- *Treated 792 km of roadside reserves for Blackberry, Gorse and Broom.*
- *Treated isolated occurrences of African Lovegrass in roadside reserves.*





## **Strzelecki Ranges bioregion**

To the south, Latrobe City contains the northern slopes of the Strzelecki Ranges, part of the Strzelecki Ranges bioregion which extends towards Warragul in the west and Yarram in the East. It consists of soft, erosion prone Cretaceous sediments, overlain in places with more recent volcanics, which produce patches of fertile red soil. The hills are rounded with moderate to steep slopes and are deeply dissected by Flynn Creek, Traralgon Creek, Bennett's Creek, the Morwell River and Narracan Creek. Mountain Ash forests are the main native vegetation type, with Damp Forest frequent in the lower elevations, and Cool-temperate Rain forest in the steep sheltered gullies. Tarra Bulga National Park, Morwell National Park, Morwell River Falls Reserve and Yerrang Park are located in this bioregion.

### **Flagship Project - Connected biodiversity**

*4.4.5 Develop a biolinks paper highlighting areas of potential connectivity of habitat which can be used to prioritise biodiversity restoration work.*

*The aim of this project is to determine areas of potential connectivity for native habitat corridors across Latrobe City. By doing this, we can then encourage landholders of all kinds to work together on strategic biolinks across property boundaries - in order to support native biodiversity, improve the ecological resilience of the landscape, and secure the ecosystems on which many social and economic activities depend.*

*Biolinks areas of the landscape are managed primarily as habitat for native flora and fauna, which link other similar areas together. This project focuses on identifying biolinks at the whole of municipality scale.*

*Whilst native vegetation cover is high in the Highlands-Southern Fall bioregion in the north, it is far lower in the Strzelecki Ranges bioregion to the south, and extremely low in the Gippsland Plain bioregion which separates these two ranges. With the impacts of climate change, it is likely there will be an increasing need for connectivity to allow plants and animals to move about the landscape to find new habitats as their old ones become less habitable. In its current state, the area within the Gippsland Plain bioregion offers very little connectivity. Creating strategic biolinks across this area will provide significant benefits to biodiversity.*



## Our land use

Prior to European settlement, Latrobe City had a native vegetation cover of 100%, which was used to varying degrees by the traditional owners. Approximately 20% native vegetation cover remains scattered throughout the municipality today, the majority of it on private land. Some 2.5% of bushland in the municipality is formally protected.

Approximately 36% of the land in Latrobe City is used for agriculture, primarily dairy farming and livestock. The most agriculturally productive areas are located within the Gippsland Plain bioregion around the Latrobe River and its main tributaries.

Approximately 29% of the land is used for forestry, with private forestry concentrated in the Strzelecki Ranges bioregion and public forestry in the Highlands-Southern Fall bioregion. Much of the forest product produced from these areas is then used by the pulp and paper mill located in Maryvale.

Approximately 17% of the land is reserved for open-cut coal mining. The brown coal resource stretches eastward from Yallourn for about 50 kilometres beneath the Gippsland Plain and is used to feed the power stations at Yallourn, Hazelwood and Loy Yang.

Only some 6% of the municipality is under urban development (residential, business, industrial, roads etc. but including public parks), and 5% for rural living and hobby farms. This urban and industrial development is also concentrated in the Gippsland Plain bioregion.

## Our industry and economy

Natural resources are the focus of Latrobe City's economy. The City's rich brown coal reserves, forestry and agriculture all represent a major contribution to Victoria's economy. Latrobe City is an urban and rural area, built on one of the largest brown coal reserves in the world, and traditionally recognised as the centre of Victoria's electricity industry.

The electricity generated in the Latrobe Valley from brown coal resources has contributed significantly to the state's economic prosperity over the past 90 years. Latrobe City currently supplies over 90% of Victoria's electricity generation requirements; around 11% of the population is directly employed within the sector, with an additional eight percent of jobs indirectly supported within the local economy. The electricity generation sector accounts for 21 % of the area's Gross Regional Product.





Latrobe City is also at the centre of a large forestry industry which supplies timber to the largest pulp and paper mill in Australia. The agricultural industry in Latrobe City's worth some \$57 million a year and is based primarily on dairy farming (45% of the value of Latrobe's agricultural production in 2006) and livestock (a further 36% of the value).

Other industries in the area include hospital and health care, food processing, engineering, education and the service sector.

As the largest population centre in the Gippsland region, Latrobe City is the regional headquarters for both Government agencies and private operators.

## **Our diverse community**

Latrobe City is part of the region traditionally owned by the Braiakaulung people of the Gunai/Kurnai clan. European settlement began in the Gippsland Plain in the 1840s and extended to most of the Strzelecki Ranges after 1900.

The current (2012) population of Latrobe City is estimated at 77,365 people. The population is predicted to steadily increase over the next 24 years, reaching approximately 95,000 people by 2036.

The median age of the population is 39 years with 35% of residents in the 0 -24 age group and only 12% over 65 years. 38.7% of households have children with 26.3% of these being comprised of couples and 12.3% being single parent households. 10 % of households are comprised of older couples without children.

Latrobe is a vibrant area with a diversity of heritage and cultures. 13.2% of the population were born overseas and 7.3% are from a non-English speaking background. The dominant non-English speaking country of birth in the Latrobe City was Netherlands, where 1.2% of the population were born. Approximately 1.3 % of the population is indigenous.

Numerous community groups with an interest in the natural environment operate within the municipality. Community groups, along with businesses, philanthropic organisations and individuals, make an important and significant contribution to Latrobe City's environment through financial investment, business practices and volunteering.





**Flagship Project - Neighbourhood Environment Improvement Plans**

4.1.3 Continue to support Neighbourhood Environment Improvement Plans for Traralgon Creek and Morwell River, and encourage other cooperative action between industry, agencies and community.

*In 2006 and 2007, Neighbourhood Environment Improvement Plans were developed to improve the local environments of Traralgon Creek and Morwell River. Each of the plans included a vision for the area, and an action plan with detailed objectives, actions and targets, such as improving water quality, recreation and tourism facilities, biodiversity and partnerships.*

*The plans were developed by collaborative steering committees, which included representatives from government agencies, power and forestry industries, landowners, environmental groups, education providers and community organisations. Once completed, the plans then became incorporated into the Planning Scheme for Latrobe City.*

*Latrobe City Council has been a guiding body for both of the plans, providing co-ordination and secretariat support for both their development and implementation. Since their development the plans have facilitated riverside weed control and fencing, platypus monitoring, lobbying, the publication of catchment report cards, the development of a friends group, and in 2012, the re-opening of a tourist attraction, the Morwell River Falls.*



## Our changing climate

Overall the climate of Latrobe City is warm-temperate, with a warm dry summer and a cool, wet winter. Within Latrobe City, the climate of the Strzelecki Ranges is the coolest and wettest, the Gippsland Plain is the warmest and driest, and the climate of the Highlands-Southern Fall ranges between the two.

The Gippsland Plain averages some 40% more days over 25°C, compared to the Strzelecki Ranges, and 25% more than in the Highlands-Southern Fall. Rainfall in the high Strzelecki Ranges is around twice that in the Gippsland Plain, and the deep gullies and south-facing slopes of the Ranges can remain particularly cool and moist compared to north-facing slopes. The 1984-2006 data from the Latrobe Regional Airport in the Gippsland Plain show an annual average of 0.5 days over 40°C, 7 days over 35°C, 26 days over 30°C and 14 days below 0°C. However, we can no longer expect that past climate is an adequate guide to future climate.

In comparison to 1990, by the year 2070, under the influence of climate change, we can expect:

- Average temperatures to have increased by at least 2.6°C
- Average rainfall to have decreased by at least 11%
- Potential evaporation to have increased by at least 10%
- Relative humidity to have decreased by at least 1.7%
- Solar radiation to have increase by at least 2.6%

The decrease in average annual rainfall is likely to be most noticeable in spring. The number of rainy days will also decrease, but the rainfall intensity will increase. By 2030, runoff to the Latrobe River system is expected to have decreased by up to 20%.

The increase in average annual temperatures is likely to be most noticeable by higher maximum temperatures in summer and milder winters. The frequency and intensity of extreme fire weather days will also increase, with longer fire seasons and a reduction in the number of days suitable for controlled burning.



The key impacts for Latrobe City include:

- changes in rainfall patterns that pose challenges for water supply and agriculture,
- more common intense rainfall events which increase the risk of severe flooding,
- higher temperatures which increase the likelihood of large and intense fires,
- increased number of hot days and heatwaves which place substantial pressure on our health services and infrastructure, and
- biodiversity changes.

Decisions about carbon emissions made from now to 2020 will determine the severity of climate change experienced by Latrobe City into the future.

### **Flagship Project - Offsetting vehicle emissions**

*2.1.3 Continue to offset Council's annual vehicle emissions through revegetation programs and pursue an overall reduction in vehicle emissions.*

*Every year, Latrobe City Council fully offsets the greenhouse gas emissions created by our vehicle fleet.*

*We do this by restoring bushland and revegetating cleared areas that soak up carbon dioxide from the atmosphere as they grow. Our bushland restoration projects are made up of a wide variety of locally native plants. The number of plants needed to create each year's offset is calculated based on how much greenhouse gas is created from the fuel used to drive our Council machinery, trucks and cars. As well as soaking up carbon dioxide, these plants also help to reduce soil erosion and salinity, improve water quality and provide habitat for native animals.*

*On National Tree Day, many Latrobe City staff get involved to help plant trees, shrubs and grasses for our offset. We also work with local contractors, Landcare Groups, community groups and school children to source seed, grow seedlings, do planting and look after the sites.*

*In 2012/13:*

- *Council owned 139 fleet vehicles*
- *Used 429,226 litres of fuel*
- *Released 1205 tonnes carbon dioxide equivalent into the atmosphere from fleet vehicles*
- *Planted 8330 locally native plants which will fully offset the year's fleet vehicle emissions*
- *Involved 87 staff and contractors in helping to plant the offset*



## Future directions

### Looking forward

The natural environment is in a state of constant change, subject to the influences of a full suite of social, economic and environmental processes. Trends in land use, demographics, economy and climate all have implications for the natural environment.

Predicted population growth in Latrobe City means a growing demand for land availability and housing development. The ageing population may threaten the viability of many of Latrobe's environmental volunteer groups unless opportunities are taken to engage our young people in volunteering activities.

The rapidly increasing costs of utilities are driving resource use efficiency in both industry and the community. Increased responsibilities under environmental legislation and the cost penalties associated with non-compliance are also driving improved practices across business and industry.

Of particular note, Latrobe City has been identified as a community likely to be exposed to significant structural adjustment pressures as a result of the introduction of more sustainable and clean energy technologies. Consequently, the long-term economic future of the Latrobe Valley will be very different from its immediate past.

It is anticipated that the community push for more sustainable and clean energy technologies will decrease the competitiveness of the brown coal fired generators that are located within the Latrobe Valley, which will in turn impact on the local economy and employment growth. A successful transition to a clean energy (low carbon) economy will be critical to Latrobe City's future.

A changing climate will affect biodiversity at varying scales and species may alter their distribution patterns, abundance, behaviour and the timing of migration and breeding.

The conditions for large and intense fires – low humidity, high winds and extreme temperatures – are likely to become more common in Latrobe City by mid-century. These were some of the contributing factors in the 2009 Black Saturday bushfires which devastated parts of the municipality, claiming lives, destroying homes, and native flora and fauna.



Lower runoff will reduce the flow of water in the Latrobe River system, which may reduce water quality within the catchment and increase the potential for algal blooms. The drying trend and reduced runoff may also have important consequences for the composition of ecosystems and their distribution; urban water supply and agriculture across municipality. While runoff will reduce, it will reduce by a much lesser extent than other areas of Victoria, which may lead to enterprises such as horticulture shifting into the municipality in the search for higher levels of water security.

In addition, the frequency and intensity of heavy rainfall events is likely to increase as the climate continues to warm. Intense rainfall events increase the risk of severe flooding with impacts for infrastructure, such as road washouts, biodiversity and agriculture, such as damage to soil, crops, livestock, loss of native flora and fauna and increased pressure from competitors, predators, disease and parasites.

Taking the unique context of Latrobe City, and these future directions and implications into account, the Natural Environment Sustainability Strategy focuses on four themes for the sustainable management of the natural environment across Latrobe City for the next five years.

### **Flagship Project - Partnerships**

*2.4.3 Participate in regional networks and forums and work cooperatively to ensure alignment with regional and state environmental sustainability strategies, policies and programs.*

*Latrobe City Council has the ability to influence our local environment directly, but by working in partnership with businesses, government agencies, individuals and organisations, we have the opportunity to influence and support our environment much more broadly.*

*For example, in recent years, Council has been working closely with Landcare, the Victorian Farmers Federation and the Department of Environment and Primary Industries to improve the management of private agricultural land. On air quality issues, Council has been working closely with the Environment Protection Authority and the Latrobe Valley Air Monitoring Network, which consists of a number of the Valley's power generators and big businesses. In the forestry sector, Council pools its resources with HVP Plantations to increase the number of coupes which are audited for compliance against the Code of Forest Practice. In waterway management, Council has been working with the West Gippsland Catchment Management Authority to improve the management of both Traralgon Creek and Waterhole Creek. In preventing and preparing for climate change, Council is working with the Gippsland Climate Change Network, Gippsland Local Government Network, state and federal governments on implementing projects. And in biodiversity conservation, Council works in partnership with numerous volunteers, friends groups and dedicated Committees of Management to ensure that our bushland reserves are protected well into the future.*

## Review and Report

Progress of this Strategy will be reviewed and presented to Council in an annual snapshot report to highlight the major achievements and activities against the strategy objectives.

There are many ongoing routine activities undertaken by the Environment Sustainability team, the organisation more broadly and the Latrobe City community on a daily basis, to meet the strategic objectives that can be captured within the snapshot report.

Latrobe City Council has mechanisms to measure and monitor environmental indicators and Latrobe City's environmental progress over the 2014-19 period. The data will enable Latrobe City Council to identify opportunities and issues, and to adapt or supplement business plan actions accordingly. However, not all of these indicators can be used directly to assess the implementation of this Strategy as there are many factors outside the control of Latrobe City Council that impact on environmental sustainability.

Latrobe City Council formulates four year rolling business plans each year, which will incorporate the identified Natural Environment Sustainability strategic themes and will detail specific actions, priorities and resourcing to deliver the Strategy.

Selected actions in this strategy will be measured and reported through the Council's corporate performance monitoring process. Achievements and work towards meeting targets will be reported as part of Council's Annual Report.

A full review of the Strategy and development of a new *Natural Environment Sustainability Strategy* will commence in 2018 in response to a new Council Plan.





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