



Draft

# Golden Plains Shire Council Environment Strategy 2019-2027



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## Statement of acknowledgement

Golden Plains Shire Council acknowledges the Australian Aboriginal and Torres Strait Islander peoples of this nation. We acknowledge the traditional Wadawurrung custodians of the lands on which Council is located and where we conduct our business. We pay our respects to Wadawurrung ancestors and Elders, past and present. Golden Plains Shire Council is committed to honouring Australian Aboriginal and Torres Strait Islander peoples' unique culture and their rich contribution to society.

# Executive Summary

## Introduction

*The Draft Golden Plains Shire Council Environment Strategy 2019-2027 (The Strategy) sets the strategic direction for environmental sustainability in the Golden Plains Shire over the next eight years.*

It is presented to two parts. Part A: The Strategic Direction and Part B: The Background Report.

Part A outlines our strategic direction and sets targets and key mechanisms to support the implementation of these strategic directions.

Part B provides detailed information regarding the development of the Strategy, including guiding principles and legislative framework, the Golden Plains environment, key drivers of environmental change, and their challenges and strategy implementation action options.

The Strategy is strongly aligned to the Council Plan 2017-21, reflects feedback from our community and stakeholders and builds on the success of the *Golden Plains Shire Environment Strategy 2011-16*. In order to provide flexibility, the delivery of on-the-ground actions will be captured in a number of Implementation Plans throughout the life of the Strategy.

## Our Vision:

### ***‘Environmental sustainability underpins life in Golden Plains Shire’***

This vision is supported by five Strategic Directions that align with the Council Plan. Due to the breadth of the Strategy each Strategic Direction has been divided into a number of themes. In order to achieve our vision, each theme has an aim and clear targets, Key Performance Indicators (KPIs) and Key Implementation Mechanisms (KIMs).

### **ENVIRONMENTAL SUSTAINABILITY**

- *ENVIRONMENTAL SUSTAINABILITY IS THE PROCESS OF MAINTAINING CHANGE IN A BALANCED FASHION, WHERE OUR PATTERNS OF LIVING MEET THE NEEDS OF THE PRESENT WITHOUT COMPROMISING THE ABILITY TO MEET THE NEEDS OF FUTURE GENERATIONS.*

### **RESILIENCE**

- *RESILIENCE IS THE CAPACITY OF INDIVIDUALS, COMMUNITIES AND SYSTEMS TO SURVIVE, ADAPT AND GROW NO MATTER WHAT KINDS OF CHRONIC STRESSES AND ACUTE SHOCKS THEY EXPERIENCE. IT IS ABOUT BEING ABLE TO ‘BOUNCE FORWARD,’ TO TURN VULNERABILITIES INTO OPPORTUNITIES.*

### **ENVIRONMENT**

- *OUR ENVIRONMENT IS NOT ONLY THE PHYSICAL AND BIOLOGICAL SURROUNDINGS IN WHICH PLANTS, ANIMALS AND PEOPLE LIVE AND INTERACT, IT IS ALSO THE CONDITIONS IN WHICH PEOPLE LIVE AND WORK AND THE WAY THOSE CONDITIONS INFLUENCE HOW PEOPLE FEEL.*



# Part A: Strategic Direction



## Introduction

*The Draft Golden Plains Shire Council Environment Strategy 2019-2027 (The Strategy) sets the strategic direction for environmental sustainability in the Golden Plains Shire over the next eight years.*

The Strategy is both high-level and forward thinking. It offers a framework that clearly identifies the Council's vision and five Strategic Directions for the future. It sets targets and key mechanisms to support the implementation of these Strategic Directions. In order to provide flexibility, the delivery of on the ground actions will be captured in a number of Implementation Plans throughout the life of the Strategy.

The Strategic Directions outlined in the Strategy will help to shape the Golden Plains Shire by: connecting the community to their environment; supporting environmentally sustainable economies; protecting and enhancing thriving ecosystems; and providing well-designed built environments. The Strategy also identifies ways Council can provide and support the transformational change required to maintain a healthy environment and liveable Golden Plains Shire through leadership and good governance.

The Strategy builds on the success of the *Golden Plains Shire Council Environment Strategy 2011-16*. It is strongly aligned to the Council Plan 2017-21 and reflects feedback from our community and stakeholders.

## About our Environment

The Golden Plains Shire (Golden Plains) is located in south-western Victoria and covers an area of 2,702 square kilometres. Golden Plains is a predominantly rural area with its population residing in a number of townships and small villages and communities across the landscape. The majority of residents look to Ballarat and Geelong for schooling, employment and access to goods and services.

Golden Plains is comprised of two distinct environments or bioregions; the Central Victoria Uplands and the Victorian Volcanic Plains. These bioregions support 372 flora species and 191 fauna species. Major threats to flora and fauna communities in Golden Plains include land use change from native pasture to cropping, subdivision for urban growth, illegal clearing, weed invasion, continued removal and fragmentation of habitat, altered fire regimes and ongoing reduction in rainfall.

The three major river systems flowing through Golden Plains include; the Moorabool, Leigh and Woody Yaloak rivers. Major threats to our rivers, streams and wetlands include; low flowrates, limited flow regimes, dams and water storage lowering environmental flows, poor quality streamside zones due to weed infestation, contaminated runoff from agriculture and urbanised areas.

Golden Plains provides many opportunities for business, investment, sustainable development and employment and sustains more than 1,700 businesses in farming, retail and home-based businesses.

Golden Plains has a strong agricultural sector with a large portion of rural land used for wool, beef, chicken, pork, lamb, eggs and grain production, as well as viticulture. Development of the Golden Plains Food Production Precinct positions Golden Plains as one of Victoria's premier areas for intensive agriculture.

## How the Strategy was developed

The Strategy was developed through a comprehensive process of community, stakeholder and staff engagement, with a number of stakeholder and community workshops held across the Golden Plains. It also involved the review and analysis of current State, Federal, Regional and Council strategies and plans that influence or guide environmental sustainability, including the *Golden Plains Council Environment Strategy 2011-16*.

A number of guiding principles were used during the development of the Strategy. These, together with the key environmental drivers of change in Victoria, as outlined in the State of the Environment Report and current local environmental challenges, have all informed the Strategy's development. The guiding principles, key drivers of change and environmental challenges are listed in the table below.

Guiding principles, key drivers of change and environmental challenges	
<b>Guiding principles</b>	<p><b>All areas of Council are responsible for the management of our environment</b></p> <p><b>Environmental Sustainability</b></p> <p><b>Levels of Control Approach</b></p> <p><b>Community and stakeholder partnerships</b></p> <p><b>Leadership and good governance drive environmental sustainability</b></p>
<b>Key drivers of change</b>	<p><b>Population growth</b></p> <p><b>Our economy</b></p>
<b>Key environmental challenges</b>	<p><b>Climate change and increased vulnerability</b></p> <p><b>Resource overuse</b></p> <p><b>Ecosystem health</b></p> <p><b>Managing our agricultural sector for the environment</b></p> <p><b>Community wellbeing and connectedness to the environment</b></p>

OUR  
REGION IN  
NUMBERS

RIVERS &  
WATERWAYS

253 km

of major rivers



HEAT

Over 7 days per year over

35°C

BUSHLAND, PARKS &  
OPENSACES



>19,000ha

of National Parks and State Forest

~120ha

of Council reserves for passive recreation

~100ha

of sports grounds

1800km

of road network

PLANTS & ANIMALS



372

species of flora



191

species of fauna

Average Australian ecological footprint is 6.87 ha equivalent to 4 planets



Social



MORE PEOPLE

21,680+

people live in the Golden Plains Shire

By 2036, this is estimate to increase to

32,450

4,500

people work in the Golden Plains Shire

72.4%

people travel outside of the Shire to work

>1,800

businesses call Golden Plains home



MORE DEVELOPMENT

50%

more dwellings to reach 12,696 dwellings in 2026

Economic

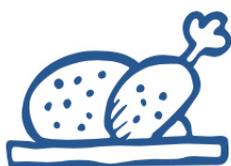
Each week Golden Plains Shire produces

4,000,000



eggs

600,000



meat chickens

1,000



pigs

28,000 L



goat's milk

26%

of the Shire's workforce employed by the agriculture sector and is worth

\$159 million

in economic output, or 20% of the Shires economy of

\$0.56

billion

GRP



# Strategic Direction

## Our Vision

***Environmental sustainability underpins life in Golden Plains Shire***

**This vision is supported by five strategic directions that align with the Council Plan.**



# Our Strategic Directions

1		<b>Environmentally connected communities</b> To create a culture where the Golden Plains Shire community is connected (to their environment), engaged (with Council), and empowered to improve their personal and collective environmental sustainability practices.
2		<b>Greener economies</b> To foster and support environmentally sustainable industries, business, agriculture and tourism, by working in partnership with local business, government and community.
3		<b>Thriving natural environments</b> To protect and enhance the natural environment by reducing environmental impacts and supporting ecosystems to thrive.
4		<b>Sustainable urban and rural design</b> To provide a well-designed built environment that minimises environmental impacts, improves liveability and supports community resilience.
5		<b>Council Leadership</b> To provide good governance and leadership through the integration of environmentally sustainable practices across Council and in the community.

## Our Themes



### Strategic Direction One: Environmentally connected communities

1.1	<b>Environmentally active and resilient communities</b>	Support the community to improve their environmentally sustainable practices and build their capacity to respond to environmental changes.
1.2	<b>Communities connected to the environment</b>	Increase the Golden Plains Shire community's connection with nature enabling them to draw from the benefits of improved physical and mental wellbeing.



### Strategic Direction Two: Greener economies

2.1	<b>Environmentally engaged businesses</b>	Foster a thriving green business economy in the Golden Plains Shire by attracting new sustainable industries and encouraging existing businesses to reduce the environmental impact of their operations.
2.2	<b>Nature-based tourism sector</b>	Promote and support nature-based tourism within the Golden Plains Shire that foster, promote and actively implement environmentally sustainable practices.
2.3	<b>Regenerative agriculture sector</b>	Holistically manage landscape functions to grow Golden Plains Shire's food, fuel and fibre.



### Strategic Direction Three: Thriving natural environments

3.1	<b>Biodiversity</b>	Protect, restore and increase the health of our natural ecosystems, biodiversity and natural habitats to ensure they survive and thrive in the Golden Plains Shire.
3.2	<b>Invasive species</b>	Reduce the impact of invasive species on agriculture, natural systems and the community.
3.3	<b>Water security</b>	Protect the ecological health of our waterways and wetlands and facilitate sustainable water use in the GPS community.
3.4	<b>Fire and planned burning</b>	Land management practices by Council, fire agencies and the community minimise the risk of wildfire in the landscape.
3.5	<b>Aboriginal Cultural heritage land management</b>	Preserve and protect Aboriginal heritage values and culture through sensitive land management practices and community education and appreciation.



## Strategic Direction Four: Sustainable urban and rural design

4.1	<b>Environmentally responsive infrastructure design</b>	Provide well-designed built environments that minimise environmental impacts, improve liveability and support community resilience.
4.2	<b>Climate adaptation and climate mitigation</b>	Foster a community that understands the impacts of climate change, responds positively to future climatic conditions and actively reduces their greenhouse emissions.
4.3	<b>Parks and green places</b>	Protect, enhance and increase our parks and green spaces to ensure a network of land and water that supports recreation and sport, trails and paths, nature conservation and visual relief from the urban environment.
4.4	<b>Waste management</b>	Reduce waste to landfill through innovative waste management and resource recovery, changed community behaviours and fit for purpose infrastructure.



## Strategic Direction Five: Council Leadership

5.1	<b>Governance</b>	Environmentally sustainable practices are integrated into all levels of Council and staff is empowered to deliver them as part of their core business.
5.2	<b>Leadership</b>	Demonstrate leadership in environmental sustainability and empower action with community groups, industry, other agencies and the wider community.

## Theme measurables.

In order to track performance, each theme has a number of measurables. These include; targets, Key Performance Indicators and Key Implementation Mechanisms.

### ➤ *Targets*

Targets provide a measurable way in which to gauge how well the aim is being achieved. Where applicable SMART (Specific, Measurable, Attainable, Realistic, Time bound) targets have been set against each theme.

### ➤ *Key Performance Indicators*

A Key Performance Indicator (KPI) is a measure that enables monitoring of performance in terms of progress towards a specific, defined objective or target. KPIs identify the measures required throughout the delivery of the Strategy in order to achieve future targets.

### ➤ *Key Implementation Mechanisms*

Key Implementation Mechanisms (KIM's) provide overarching desired outcomes and processes for delivery. They are strategic in nature and have been used to provide general/wide-ranging/overall/universal/broad spectrum statements. They identify what the Strategy aims to achieve at a strategic level. Each KIM will generate a group of actions or tasks to be delivered.

### *Actions*

A wide range of actions have been identified for each theme. These have come from a number of sources, including; actions from the existing Environment Strategy 2011-2016, community and stakeholder workshops, internal staff workshops, Project Steering Committee and Technical Reference Group, and examples of best management practice across the world. These actions have driven the development of the Key Implementation Mechanisms and are listed in Part B as actions to be considered in the development of the Strategy's Implementation Plans.

### *Supporting documents*

These are Council documents that support or influence the Strategy. They include: policies, strategies and plans that exist within the Council, and elsewhere, that influence environmental sustainability.





## Strategic Direction One: Environmentally connected communities

### Theme 1.1: Environmentally active and resilient communities

Support the community to improve their environmentally sustainable practices and build their capacity to respond to environmental changes.

#### Targets

T 1.1.1: The Golden Plains Shire community improves their environmentally sustainable practices and awareness of their ecological footprint.

T 1.1.2: Golden Plains Shire community is informed and able to respond to fluctuations in climate.

#### Key Performance Indicators

- The number of community forums and activities held on environmental sustainability and resilience per year.
- Adaptation and Resilience Policy developed by 2020.
- Climate Resilient Adaptation Plan developed by 2023.

#### Key Implementation Mechanisms

1. Empower the community to improve their personal and collective environmentally sustainable practices.
2. Build community resilience by strengthening community capacity to effectively respond to current and future challenges related to climate change and the natural environment.
3. Establish and support community partnerships that develop resilience and work towards living sustainably.
4. Educate and empower the community about ways to live more sustainably.

#### Supporting policies and plans

- Community Engagement Action Plan.
- Community Development Strategy.
- Community Engagement Strategy .



## Strategic Direction One: Environmentally connected communities

### Theme 1.2: Communities connected to the environment

Increase the Golden Plains Shire community's connection with nature enabling them to draw from the benefits of improved physical and mental wellbeing.

#### Targets

T 1.2.1: By 2027 the GPS community are better connected to their environment with a 50% increase in visitation to parks and open spaces.

T 1.2.2: By 2027 participation in environmental events and activities has increased by 50 %.

T 1.2.3: By 2027 people using natural places to support their physical health and wellbeing has increased by 50%.

#### Key Performance Indicators

- Review and implement the Path and Trails Strategy in line with Town Structure Plans by 2023.
- Review and implement the Open Space Strategy in line with Town Structure Plans by 2023.
- By 2023 25% use natural places to support their physical health and wellbeing.
- By 2023 participation in environmental events and activities has increased by 25%.

#### Key Implementation Mechanisms

1. Support and provide opportunities for community to connect with their environment.
2. Establish and support community partnerships that encourage connection to and advocacy for their environment.
3. Educate and empower the community about ways to connect with their environment.

#### Supporting policies and plans

- Path and Trails Strategy.
- Open space strategy.
- Town Structure Plans.



## Strategic Direction Two: Greener economies

### Theme 2.1: Environmentally engaged businesses

Foster a thriving green business economy in the Golden Plains Shire by attracting new sustainable industries and encouraging existing businesses to reduce the environmental impact of their operations.

#### Targets

T 2.1.1: 25% of existing businesses in GPS are registered to monitor their environmental sustainability through measures of energy, waste & water usage by 2027.

T 2.1.2: 75% of engaged businesses demonstrate an increase in environmental sustainability through measures of energy, waste & water usage by 2027.

T 2.1.3: There is a 25% increase in green industries within the GPS by 2027.

#### Key Performance Indicators

- Establish an environmental scorecard to use with businesses to identify their performance in environmentally sustainable practices by 2020.
- 25% of existing businesses in GPS are sustainable in energy, waste & water usage by 2023.
- The number of new businesses within the environment sector established in GPS per year.
- The number of large-scale renewable energy projects.
- The number of grants received by businesses for sustainability projects per year.
- The number of sustainability projects undertaken by Council per year.
- The number of training/information sessions run by Council with a focus on sustainability for business per year.

#### Key Implementation Mechanisms

1. Support and encourage new and existing local industries and businesses to implement environmentally sustainable practices.
2. Encourage environmentally sustainable businesses into the Golden Plains Shire.
3. Establish and support partnerships with regional and broader businesses to encourage and promote environmentally sustainable business practices.
4. Educate and empower regional and broader businesses to encourage and promote environmentally sustainable business practices.

#### Supporting policies and plans

- Economic Development & Tourism Strategy.
- Community First and Business Improvement Strategy.



## Strategic Direction Two: Greener economies

### Theme 2.2: Nature-based tourism sector

Promote and support nature-based tourism within the Golden Plains Shire that foster, promote and actively implement environmentally sustainable practices

#### Targets

T 2.2.1: Educate and promote programs that improve the impacts of tourism on the environment.

#### Key Performance Indicators

- The number of education programs and events run each year that promote the improvement of impacts of tourism on the environment.

#### Key Implementation Mechanisms

1. Support and encourage new and existing tourism providers to implement environmentally sustainable practices.
2. Encourage and foster nature-based tourism that preserves the distinct landscape, character and heritage values of the Golden Plains Shire.
3. Establish and support partnerships with regional and broader businesses to encourage and promote environmentally sustainable nature-based tourism.
4. Educate and empower regional and broader businesses to encourage and promote environmentally sustainable nature-based tourism.

#### Supporting policies and plans

- Economic Development & Tourism Strategy.



## Strategic Direction Two: Greener economies

### Theme 2.3: Regenerative agriculture

Holistically manage landscape functions to grow Golden Plains Shire's food, fuel and fibre.

#### Targets

T 2.3.1: By 2027 25% primary producers in the GPS holistically manage landscape function to grow GPS food, fuel and fibre.

#### Key Performance Indicators

- Each industry is mapped with the specific criteria for regenerative agriculture.
- All industries are benchmarked against environmentally sustainable best management practices with actions plans noting how they can improve.
- The number of primary producers participating in regenerative farming education programs per year.
- The number of new organically certified farms in the GPS per year.

#### Key Implementation Mechanisms

1. Support and encourage new and existing businesses in the agriculture sector to implement environmentally sustainable practices.
2. Encourage and promote regenerative agriculture models into the Golden Plains Shire.
3. Establish and support partnerships with other agencies, community groups and education facilities to promote, support and implement environmentally sustainable projects in the agriculture sector.
4. Educate and empower local farming industries and community groups to promote, support and implement environmentally sustainable practices in the agriculture sector.

#### Supporting policies and plans

- Golden Plains Food Production Precinct Concept Plan.
- Golden Plains Rural Land Use Strategy (2008).



## Strategic Direction Three: Thriving natural environments

### Theme 3.1: Biodiversity

Protect, restore and increase the health of our natural ecosystems, biodiversity and natural habitats to ensure they survive and thrive in the Golden Plains Shire.

#### Targets

T 3.1.1: Increase the number of properties under an environmental covenant by 50% by 2027 using the 2019 baseline.

T3.1.2: Develop and implement management plans for Council owned and managed reserves.

#### Key Performance Indicators

- Net gain in native vegetation for Council activities and planning approvals reported annually.
- 100% of major development proposals are referred for review
- The number of management plans written for Council owned and managed reserves.
- Establish and implement monitoring protocols for Council owned and managed reserves.

#### Key Implementation Mechanisms

1. Preserve and increase biodiversity and native vegetation on Council owned and managed land.
2. Implement the Roadside Environmental Management Plan and Action Plan.
3. Preserve and protect biodiversity and native vegetation through effective land use planning.
4. Protect biodiversity and native vegetation on private land through community engagement and enforcement.
5. Increase biodiversity and native vegetation on private land through community engagement and incentives.
6. Establish and support partnerships with other agencies, community groups and education facilities to preserve and protect biodiversity and native vegetation.
7. Educate and empower the community about biodiversity values and ways to preserve and protect biodiversity and native vegetation.

#### Supporting policies and plans

- Redgum reserve Management Plan
- Teesdale Grassy Woodland Management Plan.
- Roadside Environment Management Plan.
- Golden Plains Biodiversity Strategy 2016
- Central Victorian Bio links.
- Native Vegetation Removal planning referrals.
- Bruce's Creek Management Plan.
- Protecting Victoria's Environment: Biodiversity 2037.
- Old Batesford Cemetery Management Plan (pending).



## Strategic Direction Three: Thriving natural environments

### Theme 3.2: Invasive Species

Reduce the impact of invasive species on agriculture, natural systems and the community.

#### Targets

T 3.2.1: Reduction in the coverage of declared weeds and environmental weeds on Council owned or managed land by 70% by 2027.

T 3.2.2: Develop and implement an Invasive Species Program by 2027.

#### Key Performance Indicators

- Invasive Species Program guidelines developed by 2019.
- Invasive Species Program developed by 2020.
- Invasive Species Program implementation 2021-2027.
- % invasive species reduced on crown land.
- % invasive species reduced on roadsides.
- The number of annual educational activities regarding control and eradication of invasive species.

#### Key Implementation Mechanisms

1. Manage invasive species and their impacts on Council owned and managed land.
2. Reduce invasive species and their impacts on privately owned land through community engagement and enforcement by the responsible agency.
3. Manage invasive species and their impacts through effective land use planning.
4. Establish and support partnerships with other agencies, community groups and education facilities to facilitate cross-boundary invasive species management.
5. Educate and empower the community, community groups and landholders about the impacts of invasive species and ways to manage them.

#### Supporting policies and plans

- Pest plant and Animal Management Plan.
- Roadside Weed Management Plan.
- Domestic Animal Management Plan.
- Roadside Environmental Management Plan.



## Strategic Direction Three: Thriving natural environments

### Theme 3.3: Water security

Protect the ecological health of our waterways and wetlands and facilitate sustainable water use in the GPS community.

#### Targets

T 3.3.1: Apply a 50% increase in the minimum width requirements for native vegetation buffers at the top of the batter, adjacent to waterways in new developments for environmentally significant areas.

T 3.3.2: Stormwater management meets State environment protection policy minimum requirements.

T 3.3.3: Reduce Council's potable water consumption by 20% by 2027 against a 2018 baseline.

T 3.3.4: Develop Integrated Water Management Guidelines for rural and township areas by 2023.

#### Key Performance Indicators

- The number of infrastructure placed to manage stormwater and flooding events.
- The number of Water Sensitive Urban Design (WSUD) projects initiated.
- The number of Integrated Water Management Guidelines developed per year.
- Councils potable water consumption reduced by 20% by 2023.

#### Key Implementation Mechanisms

1. Preserve and enhance natural waterways and wetlands on Council owned and managed land to support healthy and diverse aquatic habitats and species.
2. Protect waterways and wetlands through effective land use and planning.
3. Protect waterways and wetlands through the implementation of effective drainage and stormwater infrastructure.
4. Mitigate and manage stormwater and flooding events through integrated water management processes,
6. Minimise Council water use through adoption of sustainable water practices across Council operations.
7. Establish and support partnerships with other agencies, community groups and education facilities to protect waterways and wetlands and facilitate sustainable water use
8. Educate and empower the community about sustainable water use and ways to preserve and protect waterways and wetlands.

#### Supporting policies and plans

- Domestic Waste Water Management Plan.
- Stormwater Management Plan.
- Planning Green Blue City.



## Strategic Direction Three: Thriving natural environments

### Theme 3.4: Fire and planned burning

Land management practices by Council, fire agencies and the community minimise the risk of wildfire in the landscape.

#### Targets

T 3.4.1: Reduction of 25% of Fire Prevention Notices issued per capita by 2027.

T 3.4.2: Reduction of 10% of second round Fire Prevention Notices issued per capita by 2027.

T 3.4.3: Implement a minimum of five burns a year in Council owned and managed land.

T 3.4.4: Increase the length in km of roadside burns on Council roadsides by 10% using the 2018 baseline by 2027.

#### Key Performance Indicators

- The number of Fire Prevention Notices.
- The number of second round Fire Prevention Notices.
- Five burns implemented per year on crowned and managed land.
- Kilometres in length of roadside burns.

#### Key Implementation Mechanisms

1. Manage Council land to mitigate the risk of wildfire.
2. Promote and enforce management actions that reduce the risk of wildfire on private land.
3. Promote and encourage ecological and fuel reduction burning on roadsides and reserves.
4. Mitigate the rise of wildfire through effective land use planning.
5. Establish and support partnerships with fire management agencies, other land managers and the community to manage and reduce the risk of wildfire and to utilise fire as a way of managing our natural environment.
6. Educate and empower the community, community groups and landholders about fire in the landscape and ways to reduce the risk of wildfire on their properties.

#### Supporting policies and plans

- Prescribed burning program.
- Municipal Fire Management Plan.



## Strategic Direction Three: Thriving natural environments

### Theme 3.5: Aboriginal cultural heritage land management

Preserve and protect Aboriginal heritage values and culture through sensitive land management practices and community education and appreciation.

#### Targets

T 3.5.1: 50% of Council owned and managed reserves incorporate traditional owner naming conventions and cultural interpretations developed in collaboration with Wadawurrung people.

T3.5.2: In partnership with Wadawurrung and CFA develop a cultural burning program that delivers eight cultural burns by 2027.

#### Key Performance Indicators

- The number of newly named reserves or their features that incorporate traditional owner names.
- The number of cultural burns delivered in partnership with the Wadawurrung per year.

#### Key Implementation Mechanisms

1. Manage Council owned and managed land to preserve and protect known Aboriginal heritage values and culture.
2. Promote land management actions on private land that reduce impacts to Aboriginal heritage values and culture.
3. Council leads in promoting appreciation of Aboriginal heritage values and culture.
4. Establish and support partnerships with the Wathaurung Regional Aboriginal Party (RAP), trading as Wadawurrung to protect Aboriginal heritage values and culture.
5. Support education of the community about Aboriginal heritage values and culture and build awareness of ways to celebrate and participate in its protection.

#### Supporting policies and plans

- Council Plan 2017-2021.



## Strategic Direction Four: Sustainable urban and rural design

### Theme 4.1: Environmentally responsive infrastructure design

Provide well-designed built environments that minimise environmental impacts, improve liveability and support community resilience.

#### Targets

T 4.1.1: Increase awareness and understanding of environmentally sustainable design for homeowners and developers.

T 4.1.2: Council development and construction designs are reviewed to reflect Environmentally Sustainable Design principles and energy star ratings of 6 or above, by 2023.

T 4.1.3: Existing Council buildings are audited for environmental impacts and these impacts are reduced by 50% by 2027.

T 4.1.4: Council construction designs and Procurement to support the use of recycled materials where clear benefit is demonstrated by 2023.

#### Key Performance Indicators

- Results of annual environmental impact audits of Council facilities.
- Energy star ratings and number of environmentally sustainable design features in new Council buildings and developments.
- Number of education programs and products delivered per year.
- Audit of construction and designs to report on the use of recycled materials and demonstrated benefits.

#### Key Implementation Mechanisms

1. Develop a built environment that supports environmentally sustainable design (ESD) and carbon draw down initiatives.
2. Promote environmentally sustainable design (ESD) in residential and commercial buildings.
3. Establish and support partnerships with other agencies, community groups and industry that encourage environmentally responsive infrastructure design.
4. Educate the community, developers and businesses about environmentally responsive infrastructure design and ways to implement it.

#### Supporting policies and plans

- Community Solar Program.
- Solar Installations & upgrade.
- Old Batesford Cemetery Management Plan.
- Urban design frameworks/Town Structure Plans.
- Urban forest diversity guidelines.



## Strategic Direction Four: Sustainable urban and rural design

### Theme 4.2: Climate change adaptation and mitigation

Foster a community that understands the impacts of climate change, responds positively to future climatic conditions and actively reduces their greenhouse emissions.

#### Targets

T 4.2.1: Council is a zero-net emissions organisation and the community is low carbon by 2040.

T 4.2.2: Develop and implement the Climate Change Action Plan.

T 4.2.3: A reduction of 50% in Council emissions by 2023.

#### Key Performance Indicators

- Climate Change Action Plan developed and implemented by 2020.
- Carbon emissions reduced by 25% by 2021.

#### Key Implementation Mechanisms

1. Identify and implement actions that support Council carbon draw down to address climate change and reduce Council's carbon footprint.
2. Strengthen community capacity to effectively respond to current and future challenges related to climate change.
3. Establish and support partnerships with other agencies, community groups and education facilities to improve understanding and action on climate adaptation.
4. Educate and empower the community, community groups and landholders about the impacts of climate change and actions on climate adaptation.

#### Supporting policies and plans

- Climate Adaptation Plan.
- Municipal Emergency Management Plan.
- Victoria's Climate Change Adaptation Plan 2017-2020.



## Strategic Direction Four: Sustainable urban and rural design

### Theme 4.3: Parks and green places

Protect, enhance and increase our parks and green spaces to ensure a network of land and water that supports recreation and sport, trails and paths, nature conservation and visual relief from the urban environment.

#### Targets

T 4.3.1: Increase the canopy cover in built areas to 40% by 2040.

T 4.3.2: Review and implement the Open Space Strategy

T 4.3.3: Increase community participation in land use planning processes that involve securing land assets for future public open space.

#### Key Performance Indicators

- Review and implement the Open Space Strategy by 2023.
- Increase in canopy cover in built areas by 20% by 2030.
- Review and implement the Paths and Trails Strategy by 2025.

#### Key Implementation Mechanisms

1. Protect and expand a diverse and green network of open spaces and parks under Council management.
2. Identify, establish and protect public open space that meets environment, community and Council needs through effective land use planning.
3. Provide urban landscapes that promote community connection to the environment and nature and encourages the use of green network of open spaces and parks.
4. Establish and support community partnerships that encourage the protection, enhancement and utilisation of parks and green spaces.
5. Educate and empower the community about the benefits of parks and green spaces and ways to utilise them.

#### Supporting policies and plans

- Open Space Strategy.
- Paths & Trails Strategy.
- Recreation Strategy.
- The 2020 Vision Plan.



## Strategic Direction Four: Sustainable urban and rural design

### Theme 4.4: Waste management

Reduce waste to landfill through innovative waste management and resource recovery, changed community behaviours and fit for purpose infrastructure.

#### Targets

T 4.4.1: Develop a Waste Management Strategy by 2019.

T 4.4. 2: Greenwaste removed from the community waste stream (Targets to be defined in Waste Management Strategy 2019).

T 4.4.3: 100% Organic waste removed from waste stream of Council facilities by 2040.

T 4.4.4: 25% reduction of existing roadside stockpiles removed and remediated by 2027.

T 4.4.5: 50% reduction in reported incidents of litter dumping on Council owned and managed land by 2027.

#### Key Performance Indicators

- Waste Management Strategy written and adopted Council by 2019.
- Council waste, recycling and greenwaste audited and reduced by 50% by 2030.
- 10% reduction of existing roadside stockpiles removed and remediated by 2023.

#### Key Implementation Mechanisms

1. Provide resource recovery and waste management and minimisation practices that are innovative, effective and reflect best practice.
2. Empower the community to understand and take responsibility for their own waste creation and act to minimise it.
3. Establish and support partnerships with other agencies, our community and industry to further reduce the volume of waste going to landfill and explore innovative waste management and resource recovery mechanism.
4. Educate the community, community groups, businesses and landholders about ways to reduce the volume of waste going to landfill.

#### Supporting policies and plans

- Waste Management Strategy (Currently being revised).



## Strategic Direction Five: Council Leadership

### Theme 5.1: Governance

**Demonstrate leadership in environmental sustainability and empower action with community groups, industry, other agencies and the wider community.**

#### Targets

T 5.1.1: Measure and reduce Council's ecological footprint by 25% by 2027.

T 5.1.2: Develop and implement an Environmentally Sustainable Governance Action Plan by 2019.

T 5.1.3: 50% of goods and services utilised by Council are from sustainable sources.

#### Key Performance Indicators

- GPS Environmentally Sustainable Governance Action Plan developed by 2019 and implemented by 2020.
- GPS Environmental Footprint measured by 2020.
- GPS Environmental Footprint reduced by 10% by 2023.
- The number of goods & services that are from sustainable sources.

#### Key Implementation Mechanisms

1. Develop and implement governance processes that support and facilitate environmentally sustainable practices within the Council.
2. Establish and support internal partnerships within the organisation that facilitate knowledge exchange and understanding regarding environmentally sustainable practices.
3. Educate and empower staff about environmentally sustainable practices in the workplace to facilitate practice change across the organisation.

#### Supporting policies and plans

- Procurement Strategy.
- Events, Marketing & communication Strategy.
- Customer Service Strategy.
- Organisation Development Strategy.



## Strategic Direction Five: Council Leadership

### Theme 5.1: Governance

#### Governance targets from other themes

<b>3.1 Biodiversity</b>	Develop and implement management plans for Council owned and managed conservation reserves.
<b>3.2 Invasive species</b>	<p>Reduction in the coverage of declared weeds and environmental weeds on Council owned or managed land by 70% by 2027.</p> <p>Develop and implement an Invasive Species Program by 2027.</p>
<b>3.3 Water security</b>	Reduce Council's potable water consumption by 20% by 2027 against a 2018 baseline.
<b>3.4 Fire and planned burning</b>	<p>Implement a minimum of five burns a year in Council owned and managed land.</p> <p>Increase the length in km of roadside burns on Council roadsides by 10% using the 2018 baseline by 2027.</p>
<b>3.5 Aboriginal cultural heritage land management</b>	<p>50% of Council owned and managed reserves incorporate traditional owner naming conventions and cultural interpretations developed in collaboration with Wadawurrung people.</p> <p>In partnership with Wadawurrung and CFA develop a cultural burning program that delivers eight cultural burns by 2027.</p>
<b>4.1 Environmentally responsive infrastructure design</b>	<p>All new Council developments are designed within Environmentally Sustainable Design principles and are verified as achieving an energy star rating of 6 or above, by 2023.</p> <p>Existing Council buildings are audited for environmental impacts and these impacts are reduced by 50% by 2027.</p>



## Strategic Direction Five: Council Leadership

### Theme 5.1: Governance

#### Governance targets from other themes

<b>4.2 Climate change adaptation and mitigation</b>	<p>Council is a zero-net emissions organisation and the community is low carbon by 2040.</p> <p>Develop and implement the Climate Change Action Plan.</p> <p>A reduction of 50% in Council emissions by 2023.</p>
<b>4.3 Parks and green places</b>	<p>Review and implement the Open Space Strategy.</p>
<b>4.4 Waste Management</b>	<p>Develop a Waste Management Strategy by 2019.</p> <p>100% Organic waste removed from waste stream of Council facilities by 2040.</p> <p>0% reduction in reported incidents of litter dumping on Council owned and managed land by 2027.</p>
<b>5.2 Leadership</b>	<p>Council participates in five environmental partnership projects annually.</p> <p>Council leads in the delivery of three environmental sustainability programs by 2027.</p>



## Strategic Direction Five: Council Leadership

### Theme 5.2: Leadership

Demonstrate leadership in environmental sustainability and empower action with community groups, industry, other agencies and the wider community.

#### Targets

T 5.2.1: Increase the community satisfaction rating for overall performance in environmental sustainability (Annual Local Government Community Satisfaction Survey) -Meet or exceed Victorian Council average - 2014

T 5.2.2: Council participates in five environmental partnership projects annually.

T 5.2.3: Council leads in the delivery of three environmental sustainability programs by 2027.

#### Key Performance Indicators

- Number of environmental partnership projects participated in per year.
- Satisfaction rating for environmental sustainability.
- Number of environmental sustainability programs delivered by Council by 2027.
- Facilitates GPSC Environment Advisory Committee

#### Key Implementation Mechanisms

1. Demonstrate leadership in the community by facilitating engagement in environmental issues and solutions.
2. Empower community action through advocacy and support of environmental groups, activities and programs.
3. Establish and lead partnerships with other agencies, surrounding shires, community groups, industry and the wider community that encourage environmentally sustainable practices in the community.
4. Educate the community, community groups, businesses and industry about Council-led environmentally sustainable programs and the ways they can be involved.

#### Supporting policies and plans

Council Plan 2017- 2021

## Strategy Implementation

Our Strategic Directions will be achieved through the delivery of an Environment Strategy Implementation Plan (the Implementation Plan). The Implementation Plan will be developed in consultation with key stakeholders and will be reviewed every two years. The Implementation Plan will identify;

- actions that align to the Strategic Directions, Themes and Key Implementation Mechanisms outlined in this Strategy;
- timelines for delivery of each action;
- Council's business units responsible for delivery of these actions; and
- Council's progress against any actions identified in the previous two- year Implementation Plan.

This approach ensures the Strategy is a living document that offers flexibility through a cycle of planning and implementation. The plan will remain relevant by responding to influences such as:

- key drivers of change in the environmental sector;
- community expectations;
- Council's annual budget processes;
- changes in Council's priorities and programs; and
- changes in Federal and State policies and programs and those from other key stakeholders.



# PART B: Background Report



## Introduction

*The Draft Golden Plains Shire Council Environment Strategy 2019-2027 (The Strategy) sets the strategic direction for environmental sustainability in the Golden Plains Shire over the next eight years.*

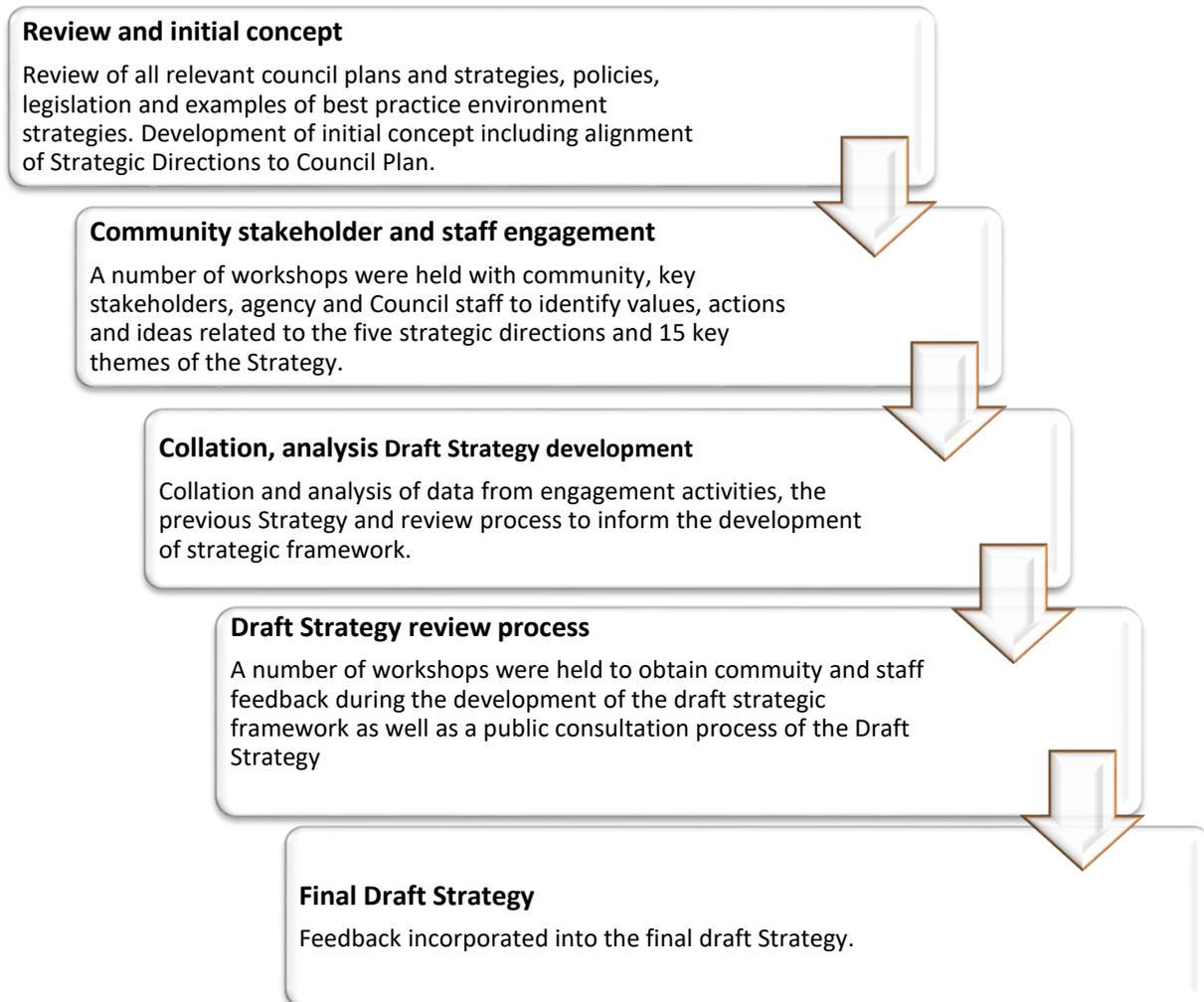
The Strategy clearly identifies the vision and five Strategic Directions for the future and sets targets and key mechanisms to support the implementation of these strategic directions.

It provides long-term strategic direction to shape the region by connecting the community to their environment, supporting environmentally sustainable economies, protecting and enhancing thriving ecosystems and providing well-designed built environments. The Strategy also identifies that through leadership and good governance, Council can provide and support the transformational change required to maintain a healthy environment and liveable region.

The Strategy builds on the success of the *Golden Plains Shire Environment Strategy 2011-16*, is strongly aligned to the Council Plan 2017-21 and reflects feedback from our community and stakeholders.

## Strategy development

The below diagram outlines the process undertaken during the development of the Strategy.

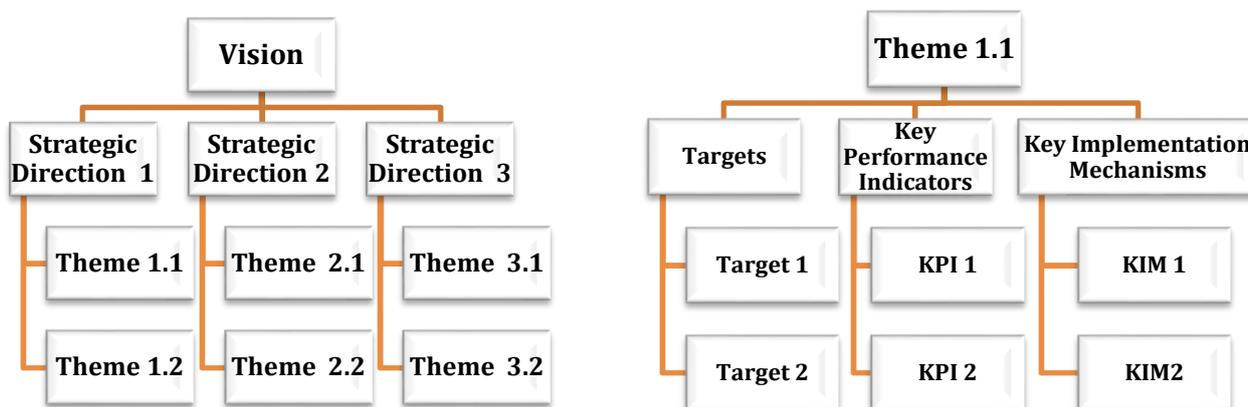


# About the Strategy

## Strategic Framework

This eight-year Strategy aims to provide an overarching strategic direction to the Golden Plains Shire Council, regarding environmental sustainability. The Strategic Directions and Key Implementation Mechanisms identified are both high-level and forward thinking and provide a framework over the eight-year period. In order to provide flexibility, the delivery of on the ground actions will be captured in a number of Implementation Plans throughout the life of the Strategy.

The Strategy includes a clear vision, supported by five Strategic Directions. Due to the breadth of the Strategy each Strategic Direction has been divided into a number of themes. In order to achieve our vision, each theme has an aim and clear targets, Key Performance Indicators (KPIs) and Key Implementation Mechanisms (KIMs).



## Alignment to the Council Plan

The Strategy has been developed to align closely to the Council Plan. For each strategic priority set in the Council Plan, the Strategy has corresponding environmental Strategic Directions. Due to its complexity, the Strategy has expanded the Council Plan's third Strategic Direction, 'Maintaining natural and built environments'; into two separate environmental Strategic Directions: 'Thriving natural environments'; and 'Sustainable rural and urban design'.

## Strategy Implementation

Our Strategic Directions will be achieved through the delivery of an Environment Strategy Implementation Plan (the Implementation Plan). The Implementation Plan will be developed in consultation with key stakeholders and will be reviewed every two years. The Implementation Plan will identify;

- actions that align to the Strategic Directions, Themes and Key Implementation Mechanisms outlined in this Strategy;
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This approach ensures the Strategy is a living document that offers flexibility through a cycle of planning and implementation. It will remain relevant by responding to influences such as:

- key drivers of change in the environmental sector;
- community expectations;
- Council's annual budget processes;
- changes in Council's priorities and programs; and
- changes in Federal and State policies and programs and those from other key stakeholders.

### Review of this Strategy

This Strategy will be reviewed in 2027. Development of an Implementation Plan every two years will ensure it maintains its relevance and continues to deliver. Not all Key Implementation Mechanisms in this Strategy have an established baseline, therefore, where appropriate, some indicators and targets may be updated as further information becomes available and when relevant policies are developed prior to the 2027 review.

### Annual budget

Council's ability to realise the Strategic Directions of this Strategy will be significantly affected by the availability of the resources dedicated to its implementation. The budget and resource implications for this Strategy will be subject to Council's approval on an annual basis. A budget and resource submission for implementation of key actions identified in the Implementation Plan will be reviewed as part of the Council's annual budget process.

### Relationship to existing local strategies and plans

The Strategy forms the long-term strategic policy position on the Environment for Council. It is informed and supported by a variety of Council internal documents that, together inform corporate and operational planning and delivery. These include:

- Golden Plains Shire Council Plan 2017-21;
- Community Engagement Action Plan;
- Community Development Strategy;
- Community Engagement Strategy;
- Path and Trails Strategy;
- Open space strategy;
- Economic Development & Tourism Strategy;
- Golden Plains Rural Land Use Strategy (2008);
- Redgum reserve Management Plan;
- Teesdale Grassy Woodland Management Plan;
- Roadside Environment Management Plan;
- Golden Plains Biodiversity Strategy 2016;
- Native Vegetation Removal planning referrals;
- Bruce's Creek Management Plan;
- Old Batesford Cemetery Management Plan (pending);
- Roadside Weed Management Plan;
- Domestic Animal Management Plan;
- Roadside Environmental Management Plan;
- Urban design frameworks/Town Structure plans;
- Municipal Fire Management Plan;
- Municipal Emergency Management Plan;
- Procurement Strategy;
- Waste Management Strategy (currently being revised); and
- Recreation Strategy.

## Guiding principles

### All areas of Council are responsible for the management of our environment

Our environment is not only the physical and biological surroundings in which plants, animals and people live and interact, it is also the conditions in which people live and work and the way those conditions influence how people feel. It encompasses the natural environment, the built environment we create and how we live in such environments. All areas of Council are responsible for its management and it is embedded in all aspects of Council governance.

**OUR ENVIRONMENT DEFINES HOW WE LIVE AND WHAT WE DO. IT'S THE SPACES WE PLAY IN, AND THE PLACES WE BUILD. IT'S HOW WE GET AROUND, AND THE COMMUNITY AROUND US. IT'S WHERE WE WORK AND WHERE WE CALL HOME.**

### Environmental Sustainability

Environmental sustainability is the process of maintaining change in a balanced fashion, where our patterns of living meet the needs of the present without compromising the ability to meet the needs of future generations. Environmental sustainability considers three pillars: economic development, social development and environmental protection.

Environmental sustainability requires proactive and responsible innovation and decision-making that minimizes negative impact and maintains balance between ecological protection and resilience, economic prosperity, political and social justice and cultural vibrancy to ensure a liveable and desirable planet for all species now and in the future.

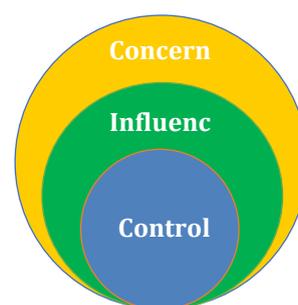
**ENVIRONMENTAL SUSTAINABILITY IS 'SOMETHING THAT IMPROVES THE QUALITY OF HUMAN LIFE WHILE LIVING WITHIN THE CARRYING CAPACITY OF SUPPORTING ECO-SYSTEMS'**

**"CARING FOR THE EARTH: A STRATEGY FOR SUSTAINABLE LIVING." IUCN/UNEP/WWF (1991).**

### Levels of Control Approach

The Strategy was developed using the Levels of Control approach. This approach considers three levels as outlined below.

- The level of control - those things Council has direct control over through direct action. An example may be the control of invasive species on Council owned and managed land.
- The level of influence - those things that, although not in their direct control, Council can influence the outcome of through partnerships and advocacy. An example may be where Council advocates to the State Government for an increase in invasive species control on Crown Land.
- The level of concern - those things that Council can neither control, or influence.



The approach ensures the development of an effective Strategy by focusing on what sits within the Council's direct area of control or influence.

**THE STRATEGIC DIRECTIONS, TARGETS AND IMPLEMENTATION MECHANISMS WITHIN THIS STRATEGY SIT WITHIN THE COUNCIL'S DIRECT AREA OF CONTROL OR INFLUENCE.**

### Community and stakeholder partnerships

The Council Plan identifies the need to advocate for and work in partnership with our community to address social, economic and environmental challenges. This includes identifying strategic partnerships with government agencies, community groups, industry, education providers, business and the community. The Strategy has embedded Key Implementation Mechanisms within each theme that identify and enhance community and stakeholder partnerships.



### Leadership and good governance

The Strategy recognises the importance of strong leadership and good governance and these form one of the five Strategic Directions within the Strategy. While leadership focuses on how Council can guide and lead within the community in order to achieve environmental sustainability outcomes, governance outlines how Council governs itself, through targets and policies. The Council will strive to work in partnership with our community, other agencies, business and industry to achieve the strategic directions and targets set out in this strategy.

**THROUGH DIRECT ACTION, ADVOCACY AND WORKING IN PARTNERSHIPS WITH OUR COMMUNITY, INDUSTRY AND OTHER AGENCIES COUNCIL WILL ACHIEVE BOTH THE VISION OF THIS STRATEGY AND THE VISION OF THE COUNCIL PLAN, MAKING GOLDEN PLAINS SHIRE A TRULY EXTRAORDINARY PLACE TO LIVE, WORK AND PLAY.**

### Legislation and Policy Framework

A wide range of legislation, strategies and policies control and direct activities and programs with regard to environmental sustainability. These sit at Federal, State and local levels. In many cases, Councils are governed by policy directions established by others. These documents, as well as a number of internal documents have informed the development of the Strategy. Key legislation, strategies, policies and initiatives relevant to environmental sustainability in the Golden Plains Shire are listed below.

#### Australian Government legislation

- Clean Energy Act 2011
- Environment Protection and Biodiversity Conservation Act 1999
- Environment Protection and Biodiversity Conservation Amendment (Wildlife Protection) Act 2001
- Murray Darling Basin Agreement Act 1992
- Water Act 2007
- Water Amendment Act 2008.

## Victorian Government

### Legislation

- Catchment and Land Protection Act 1994
- Commissioner for Sustainability Act 2003
- Conservation, Forests and Lands Act 1987
- Country Fire Authority Act 1958
- Crown Land (Reserves) Act 1978
- Energy Efficiency Target Act 2007
- Environment Protection Act 1970
- Fisheries Act 1995
- Forest Act 1958
- Flora and Fauna Guarantee Act 1988
- Heritage Rivers Act 1992
- Local Government Act 1989
- National Parks Act 1975
- Planning and Environment Act 1987
- Public Health & Wellbeing Act 2008
- Water Act 1989
- Water (Resources Management) Act 2005.

### Supporting documents

- Protecting Victoria's Environment – Biodiversity 2036
- Our Catchments our Communities Strategy 2016
- Victoria's Climate Change Framework 2017
- State-wide Waste and Resource Recovery Infrastructure Plan 2015
- Water for Victoria 2016.
- Review of the Victorian Climate Change Act 2010
- Victorian Government Take2 multi sector, state- wide pledging program
- Permitted clearing of native vegetation, Biodiversity Assessment Guidelines 2013 (currently under review).
- State of the Environment Report, CSIRO, BOM, and the Australian Government 2014
- Victoria's Climate Change Adaptation Plan 2017-2020
- The 2020 Vision Plan
- Urban forest diversity guidelines
- Planning Green Blue City
- Protecting Victoria's Environment: Biodiversity 2037.

### Golden Plains Shire Council

- Local Government Act 1989
- Victorian Constitution Act 1975
- Local Government (General) Regulations 2015
- Local Government (Planning and Reporting) Regulations 2014
- Golden Plains Shire Local Laws.

# Golden Plains Shire Environment

## About our Environment

The Golden Plains Shire (Golden Plains) is located in south-western Victoria and covers an area of 2,702 square kilometres. The Golden Plains is bounded by the City of Ballarat and Moorabool Shire in the north, the City of Greater Geelong in the east, Surf Coast Shire and Colac Otway Shire in the south, and Corangamite Shire and Pyrenees Shire in the west. Golden Plains is a predominantly rural area with an estimated resident population of 22,480 residing in a number of townships and small villages and communities across the landscape. These townships and small communities are connected by an extensive road network covering 1800 km. The majority of land in Golden Plains is in private ownership. Major features of the Golden Plains include Brisbane Ranges National Park, Enfield State Park, Steiglitz Historic Park, Devils Kitchen Geological Reserve, several state forests, the Moorabool River, the Ballarat-Skipton Rail Trail, Jubilee Mine Historic Area and numerous wineries. Majority of residents look to Ballarat and Geelong for schooling, employment and access to goods and services.

Golden Plains provides many opportunities for businesses, investment, sustainable development and employment and sustains more than 1,700 businesses in farming, retail and home-based businesses. However, 72.4% of Golden Plains' working residents travel outside of the area to work, with the majority travelling to either Geelong or Ballarat.

Golden Plains has a strong agricultural sector with a large portion of rural land used for wool and grain production. The Golden Plains is a leading producer of prime lamb. There has been an increase in intensive animal farming, including: goat dairy; beef; chicken and pork production, as well as viticulture. Development of the Golden Plains Food Production Precinct as one of Victoria's premier areas for intensive agriculture supports Golden Plains as one of the leading egg producers in Victoria. This area is attracting new investment in free-range egg production.

## Environmental Context

### Bioregions and supported flora and fauna

Golden Plains is comprised of two distinct environments or bioregions; the Central Victoria Uplands and the Victorian Volcanic Plains. The Central Victoria Uplands can be found in the north and eastern areas of the Golden Plains are characterised by very old soils that are poor in nutrients and are dominated by open eucalypt forests. The Victorian Volcanic Plains in the southern part of the Golden Plains consist of extensive undulating basaltic plains with stony rises, lava flows, volcanic cones and old eruption points interspersed by shallow saline and freshwater lakes.

The Victorian Volcanic Plains support treeless grasslands and grassy woodlands with scattered eucalypts. Due to their relatively young, nutrient rich soils, the plains have been extensively developed for grazing and cropping which has contributed to the gradual loss of native grasslands. Consequently, the plains grassland communities are amongst the most significant flora in the Golden Plains and are now listed as 'nationally endangered'. Some of the best examples of these communities are found on roadsides within the Golden Plains, where their persistence is aided by regular fuel reduction burning.

Golden Plains supports 372 flora species including the critically endangered Spiny Rice-Flower (*Pimelea spinescens subsp. spinescens*), and many endangered species including: Maroon Leek-orchid (*Prasophyllum frenchii*); Button Wrinklewort (*Rutidosis leptorhynchoides*); White Sunray (*Leucochrysum albicans subsp. tricolor*); and the Basalt Sun-orchid (*Thelymitra gregaria*).

Golden Plains supports 191 fauna species including the critically endangered Golden Sun Moth (*Synemon plana*) and the Plains-wanderer (*Pedionomus torquatus*), and many endangered species including: the Striped Legless Lizard (*Delma impar*); Growling Grass Frog (*Litoria raniformis*); and the Blue-billed Duck (*Oxyura australis*).

### ➤ *Threats and Impacts*

Major threats to flora and fauna communities in Golden Plains include land use change from native pasture to cropping, subdivision for urban growth, illegal clearing, weed invasion, continued removal and fragmentation of habitat, altered fire regimes and ongoing reduction in rainfall.

### **Rivers, streams and wetlands**

The three major river systems flowing through Golden Plains include; the Moorabool, Leigh and Woady Yaloak rivers. Combined, these rivers cover 253 kilometres. The Moorabool River in the east has been identified as one of the most severely flow stressed waterways in Victoria. Flowing through the centre of the Golden Plains, the Leigh River provides steady flowrates as it is an outlet for Ballarat's treated sewerage. Water from the upper Moorabool River is diverted through Ballarat's water supply system, used, treated and released via the Yarrowee River into the Leigh River from where it flows into the Barwon River at Inverleigh. The Woady Yaloak River flows along the western edge of the Golden Plains and feeds Lake Corangamite which is internationally recognised as a Ramsar wetland.

### ➤ *Threats and impacts*

Major threats to our rivers, streams and wetlands include; low flow rates, limited flow regimes, dams and water storage lowering environmental flows, poor quality streamside zones due to weed infestation, contaminated runoff from agriculture and urbanised areas.

**GOLDEN PLAINS COMMUNITIES HAVE 'IDENTIFIED THE NEED TO PLAN AND MANAGE THE COMPETING INTERESTS OF A GROWING POPULATION WHILST MAINTAINING THE SHIRE'S HIGHLY VALUED RURAL CHARACTER, MEET COMMUNITY SERVICE AND INFRASTRUCTURE NEEDS AND MAINTAIN AND IMPROVE THE SHIRE'S EXTENSIVE ROAD NETWORK'. (COUNCIL PLAN 2017- 2021)**

### **Key drivers of change and their challenges**

Drivers of change are the underlying natural and human-caused forces that generate pressures on the environment. These drivers generate a range of pressures that have a direct impact on the environment, presenting environmental sustainability challenges for communities around the world. Globally, the challenges of population growth, pollution, energy use, carbon emissions and climate change, urbanisation, loss of biodiversity, water resource management, waste management and resource consumption affect our environment. The State of the Environment Report 2016 identifies population (including population growth and demographic change) and economic activity as the major drivers of change likely to shape Australia's environmental challenges in the coming decades. Population and economic activity drivers have many environmental impacts and cause many environmental challenges including climate change. The Strategy has been developed through the lens of the major drivers of change and a number of environmental challenges.

## Drivers of Change

### ➤ Population Growth

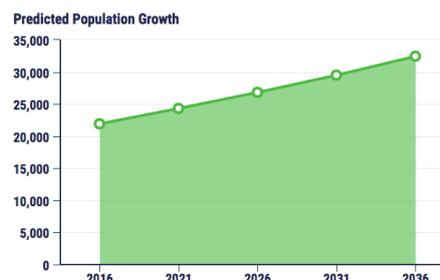
In Australia, one of the key drivers shaping environmental challenges in coming decades is population growth, distribution and composition. The population of Australia is estimated to be 25,022,600 as of August 2018. Our population is expected to exceed 28 million by 2030. Population drivers lead to a range of specific pressures globally, nationally, regionally and locally. Growth and change in our population directly affect the Australian environment through the space we require to live, the resources we use and the waste we produce.

New population growth figures released by the Australian Bureau of Statistics in July, 2018 show that Golden Plains Shire Council is currently one of the fastest growing areas in regional Victoria.



## Growth in Population

Forecasting population figures indicates a growth of 4,900 by 2026 and over 10,000 people by 2036. This poses as significant challenge and pressure on the environment with increasing demand for land, infrastructure and services.



Data source: Bureau of Statistics 2016 census Golden Plains

Forecast population figures for the Golden Plains suggest a population increase of almost 4,900 people by 2026 and over 10,000 people by 2036. These predictions also indicate pressure on the housing industry with a predicted increase of over 4000 households in the Golden Plains by 2036.

One of the biggest challenges is to provide land, infrastructure and services for population growth without negatively impacting the Golden Plains' natural environment.

### ➤ Our economy

In Australia the second key driver which will shape environmental challenges in coming decades is economic activity. The production of goods and services to maintain our growing population requires energy and materials, all of which come from the environment. Resource extraction, production, transport, use and waste generation all have impacts on the environment.

In order to create a global sustainable future, it is critical to understand the relationships between economic activity, social wellbeing and environmental degradation. This includes understanding how ecosystem modification; resource extraction, production and consumption; and waste disposal, affect the health and resilience of natural capital, and the ecosystem services provided.

At a local level it is important to foster a thriving environmentally sustainable economy in the Golden Plains Shire by attracting new environmentally sustainable industries and encouraging existing businesses to reduce the environmental impact of their operations.

**UNDERSTANDING THE RELATIONSHIPS BETWEEN ECONOMIC ACTIVITY, SOCIAL WELLBEING AND ENVIRONMENTAL DEGRADATION IS CRITICAL TO CREATING A SUSTAINABLE FUTURE.  
THE STATE OF THE ENVIRONMENT REPORT 2016.**

An environmentally sustainable local economy can be defined as an economy that is:

- able to achieve growth into the future from its local area and does not rely on too many external inputs and outputs;
- resilient to the current and future pressures of peak oil, climate change and the need to move to a low carbon economy;
- able to limit waste and uses resources efficiently;
- built on a whole of community approach; and
- able to support living and working locally.

An environmentally sustainable local economy will be a significant driver of jobs and wealth. In 2017 businesses were driving a \$5.5 trillion global market in low carbon technologies and products. If we capitalise upon the opportunities presented by this market we can sustain the prosperity of our communities. This Strategy aims to provide guidance to ensure our local economy is prosperous, equitable and environmentally sustainable.

**“ SAVING OUR PLANET, LIFTING PEOPLE OUT OF POVERTY, ADVANCING ECONOMIC GROWTH... THESE ARE ONE AND THE SAME FIGHT. WE MUST CONNECT THE DOTS BETWEEN CLIMATE CHANGE, WATER SCARCITY, ENERGY SHORTAGES, GLOBAL HEALTH, FOOD SECURITY AND WOMEN'S EMPOWERMENT. SOLUTIONS TO ONE PROBLEM MUST BE SOLUTIONS FOR ALL.” BAN KI-MOON, UNITED NATIONS SECRETARY GENERAL**

### Key environmental challenges

#### ➤ *Climate change and increased vulnerability*

Climate change refers to a change in the climate system when considered over long periods of time, that can be attributed to human activity. Human influence on the climate system has resulted in an increase of concentrated greenhouse gases in the atmosphere. These increases may be attributed to burning fossil fuels, deforestation, and agricultural production. This concentration has led to an increase in global temperatures, known as global warming.

Globally, rising temperatures result in hotter, drier conditions that increase the risk of bushfires which may result in injury, or loss of life, assets, homes or livelihoods. Heatwaves, a sustained increase in average temperatures, not only affects the population's liveability and accessibility but interrupts the labour force, adversely affecting work productivity and impacting on the local economy. The changing variability of rainfall either drastically reduces water availability for households, business and farming communities, or conversely, causes floods which result in damage to, and loss of, existing infrastructure including, commercial and residential buildings, energy, water, communications utilities, and transport systems. The variability of climate change challenges the support systems required to maintain a healthy population, including communication and emergency services.

Nationally, the climate has already changed and continued change is unavoidable as it is locked in to the climate system from past emissions. Examples of this change include:

- 0.9°C - increase in average surface temperature in Australia since 1910;
- 0.19m - increase in global average sea level between 1901 and 2010; and
- an observed decrease in rainfall in south-west Australia since 1970s.

The Australian Government released a National Climate Resilience and Adaptation Strategy in December 2015. The Strategy articulates how Australia is managing the risks of a variable and changing climate. It identifies a set of principles to guide effective adaptation practice and resilience building, and outlines the Government's vision for a climate-resilient future. This Strategy highlights the need to

adopt a dual approach when managing a changing climate. This includes climate change mitigation measures and climate change adaptation measures.

#### Climate change mitigation

Climate change mitigation refers to efforts made to avoid the risks of a changing climate by reducing the emission of greenhouse gases and preventing more severe climate change. Mitigation can mean using new technologies and renewable energies, making older equipment more energy efficient, or changing management practices or consumer behaviour. It can be as complex as a plan for a new city, or as a simple as improvements to bicycle paths and walkways.

#### Climate adaptation

Climate change adaptation refers to efforts made to manage the risks already caused by climate change, including those that are already locked in by past practices, together with the potential risks of severe changes in the future. Many countries accept that it is time to start adjusting to a warming world, as it is evident that reducing carbon emissions alone is no longer sufficient to halt the effects of climate change. The 2015 Paris Agreement includes a Global Adaptation Goal. Similarly, the 2017 United Nations Climate Conference in Bonn reinforced the same objective. Nations spanning all continents are developing National Adaptation Plans.

The G21 Regional Growth Plan (2013) identified 'planning for and adapting to climate change' as one of its eight critical challenges for the G21 Region, a region that part of Golden Plains Shire Council sits within.

Locally, Golden Plains is faced with many challenges associated with climate change mitigation and adaptation. Some of these include:

- Reducing carbon emissions;
- Preparing for and managing bushfire;
- Managing climate change impacts on the agricultural sector;
- Managing extreme weather events;
  - damage to infrastructure and buildings;
  - increased pressure on health and emergency services;
  - assisting our population to adapt to extreme heat conditions - particularly those with limited access to services and facilities;
  - flood management; and
- Managing for water security in an already water stressed systems.

Although climate change is one of the key themes, climate change mitigation and adaptation measures appear in many other themes throughout the Strategy. This Strategy demonstrates a commitment to reducing carbon emissions across the Golden Plains through good governance and by influencing the community and local businesses to embrace environmentally sustainable practices.

**CLIMATE CHANGE IS ONE OF THE MOST PERVASIVE AND THREATENING ISSUES OF OUR TIME, WITH FAR-REACHING IMPACTS IN THE TWENTY-FIRST CENTURY. UNITED NATIONS**

➤ *Resource overuse*

The consumption of natural resources varies widely across the world, with some countries consuming more of the world's resources than others. Our consumption of natural resources can be measured using ecological foot-printing that assess the number of global hectares of land required to support our consumption and waste production. The number of global hectares can be used to determine how many planets would be required to support the world's population if they all lived a specific lifestyle.

The average Australian has an ecological footprint of 6.87 gha (global hectares) per year. This translates to the equivalent of a four-planet lifestyle. In other words, if everyone in the world lived like the average Australian, we would need almost four planets worth of resources to sustain the global population.

*Earth overshoot day*

Earth Overshoot Day marks the date when humanity's demand for ecological resources and services in a given year exceeds what Earth can regenerate within that year. We maintain this deficit by liquidating stocks of ecological resources and accumulating waste, primarily carbon dioxide in the atmosphere. Earth Overshoot Day is hosted and calculated by Global Footprint Network, an international think tank that coordinates research, develops methodological standards and provides decision-makers with a suite of tools to help the human economy operate within Earth's ecological limits.

The date of Earth Overshoot Day for each year is determine by calculating the number of days of that year that Earth's biocapacity suffices to provide for humanity's Ecological Footprint. The remainder of the year corresponds to global overshoot. In 2018 our Earth's Overshoot Day occurred on August 1<sup>st</sup>. Evidently, due to the current consumption of resources, our planet cannot sustain our current way of living.

Resource overuse is a global challenge, which, although not addressed specifically in this Strategy, is an environmental challenge for the Golden Plains.

➤ *Biodiversity and ecosystem health*

Biodiversity can be defined as the variety of all living organisms on Earth at all levels of organisation. The concept of biodiversity is complex and includes all organisms that occur on land, in the sea and in fresh water including; bacteria, viruses, fungi, plants, and invertebrate and vertebrate animals. It also includes the diversity of ecosystems these organisms inhabit and the diversity of ecological and evolutionary processes that are performed by them.

Australia's biodiversity is highly regarded for its diversity, endemism and evolutionary adaptations and is considered one of the world's 17 megadiverse countries, which together account for 70 per cent of the world's biological diversity across less than 10 per cent of the world's surface. Approximately 150,000 species have been formally described in Australia.

Victoria has experienced extensive biodiversity loss over the past two centuries. This can be attributed to land clearing and removal of native vegetation, changed fire regimes, the introduction of invasive species, development of land for housing and infrastructure, water pollution and, more recently, reduced resilience under climate change. Native vegetation continues to be lost at approximately 4,000 habitat hectares per year.

Loss of biodiversity, particularly though native vegetation clearing has resulted in fragmented and degraded habitats across Victoria. This in turn impacts on the supply of essential ecosystem services, creating risk to sectors dependent on functioning ecosystems, and the future health, wellbeing and prosperity of all Victorian communities. It also increases risk, vulnerability and exposure of native animals and plants to other pressures and threats.

Biodiversity and ecosystem health face several key environmental challenges in the Golden Plains now and into the future. Some of these include:

- protecting native vegetation to halt habitat loss, reduce habitat fragmentation and degradation, especially on private land;
- reducing the impacts of invasive species, including weeds and feral predation on wildlife;
- management of small reserves close to built-up areas to minimise edge effect and linear reserves such as roadsides;
- Protecting water ways and wetlands for water quality and to secure environmental flows;
- Increased frequency of fire in the landscape through warmer conditions; and
- assisting environmental adaptation to climate change pressures.

**‘HEALTHY LAND, WATER AND BIODIVERSITY ARE ESSENTIAL FOR THE HEALTH AND WELLBEING OF ALL VICTORIANS – PROVIDING ECOSYSTEM SERVICES, SUCH AS CLEAN AIR, DRINKING WATER AND IMPROVED SOIL HEALTH FOR FOOD PRODUCTION.’ VICTORIAN INTERIM STATE OF THE ENVIRONMENT REPORT, 2018**

➤ *Managing our agricultural sector for the environment*

As the Golden Plains Shire Council continues to grow, this Strategy aims to ensure we are well positioned to respond to the drivers of change that will present both environmental challenges and opportunities for our future. This change may have the potential to impact on the health of our environment, our lifestyles and the resilience of our community.

Land is essential for agricultural production. Since European settlement of Australia around 100 million hectares (ha) of forest and woodland have been cleared, mostly for agricultural production, and land continues to be cleared for agriculture. Currently, it is the dominant land use in Australia with around 456 million ha, or 59% of land under agricultural production.

The agriculture sector is also the largest water consumer in Australia. Nationally, the total volume of water applied for irrigation increased 9% to 9.1 million megalitres in 2016-17. Water sourced from rivers creeks and lakes also increase 20% (to 2.9 million megalitres) and water sourced from on-farm dams was up 35% to 1.3 million megalitres. In Australia, the majority of water was taken from irrigation channels and rivers, creeks and lakes, at 37% and 29% of the national total respectively in 2016-17. This use of water takes one system to supply another, impacting on environmental flows and river and waterway health.

**REGENERATIVE AGRICULTURE IS THE APPROACH TO GROWING FOOD AND FIBRE BY SUPPORTING AND PROMOTING SOIL LIFE AND HOLISTICALLY MANAGING LANDSCAPE FUNCTIONS**

### Regenerative agricultural systems

It is important to manage our agricultural sector in a way that ensures its impacts are not detrimental to the environment. If natural resources such as soil, nutrients and water are used up at a rate faster than they are replenished, then the farming system is environmentally unsustainable.

Regenerative agriculture is an approach to food and farming systems that aims to regenerate topsoil, increase biodiversity, improve water cycles, enhance ecosystem services, increase resilience to climate fluctuation and strengthen the health and vitality of farming communities. It is based on applied research and thinking that integrates a number of farming models including:

- organic farming;
- permaculture;
- agroecology;
- agroforestry;
- restoration ecology;
- Keyline design; and
- holistic management.

On a regenerative farm, biological production and ecological structure grow more complex over time. Yields increase while external inputs decrease.

Golden Plains has a strong agricultural sector with a large portion of rural land used for wool and grain production. The Shire is a leading producer of prime lambs. There has been an increase in intensive animal farming, including: goat dairy; beef; chicken and pork production, as well as viticulture.

### Intensive agriculture

Development of the Golden Plains Food Production Precinct (the Precinct) as one of Victoria's premier areas for intensive agriculture supports the Shire as one of the leading egg producers in Victoria. This area is attracting new investment in free-range egg production. The Golden Plains Food Production Precinct is Victoria's first designated precinct for intensive food production. Located between Ballarat and Geelong near the town of Lethbridge, the Golden Plains Food Production Precinct is made up of 4,000 hectares of privately owned, farm zoned land. Current Council policy supports the growth of intensive agriculture in the Precinct, with over a decade of strategic work undertaken to establish an area where intensive agriculture can invest and expand.

The pressures of population growth will likely result in an increase in demand for food, both in Australia and globally, leading to an increase in export demand for Australian food. Higher food demands will lead to increased pressure on the environment from: conversion of native habitat to areas under agricultural production; increased intensity of use; and increased nutrient loads.

To achieve environmentally sustainable agriculture, we must deal both with issues involving environmental impacts and productivity of the land. Promoting and supporting regenerative farming systems within Golden Plains through a mix of policy, effective management, technology and education will lessen the impact of agriculture on the environment into the future.

# What does our community want?

## PROTECT THE CREEKS AND WATERWAYS

People want adequate buffers around rivers to protect them and promote biodiversity. They believe it is important to establish bio-corridors that connect our fragmented ecosystems. They recognise the challenges of rivers and streams receiving less rainfall under climate change.



## RESTORE AND MANAGE OUR BUSHLAND

Community value the Golden Plains Shire ecosystem services and desire to promote them. They want a healthy bushland and would like to enhance and restore ecosystems on private land, in new developments and residents' backyards.



Recent community consultation undertaken by the Golden Plains Shire Council told us that the following are the most important issues for our community.



## INCREASE RECYCLING AND REDUCE WASTE GOING TO LANDFILL

Community regard waste as a resource. They want the community and Council to focus on the top section of the waste hierarchy. People would like to see 'fix it cafes', container deposit schemes and plastic bag free stores.



## REDUCE ENERGY AND INCREASE THE UPTAKE OF RENEWABLE ENERGY

People want the Council to: become fossil fuel free; help them establish community grids; and provide education on how the community can reduce their energy consumption.

To have extensive rural walking paths along river and wildlife corridors that divert tourists to points of interest that are a showcase of our sustainable rural industries

100% of the community surveyed believe it is important to very important to act on climate change

Set and renewable energy or emission reduction target for the entire GPS

Educate, inform, and inspire the community

The environment is the world we live in and need to sustain our life

Develop an ongoing strategy to deal with weeds, show leadership, and work with individual, groups and landholders

### What you told us

Hold/host regular/biennial cross-pollinating opportunities for the community about environmental topics

Create a bike track along the Moorabool river valley and river trail that extends from Batesford to Maude

Neat well-designed streetscape with safe well used pathways that are used by walkers, bike riders and in passing a welcoming greeting is the norm

Make eco-design mandatory for new houses and buildings

The environment is our home and we are the only living creature on earth that produces waste. It is our responsibility to educated on ways to severely reduce our impact on our earth and home

## Strategy Implementation

Our Strategic Directions will be achieved through the delivery of an Environment Strategy Implementation Plan (the Implementation Plan). The Implementation Plan will be developed in consultation with key stakeholders and will be reviewed every two years. The Implementation Plan will identify;

- actions that align to the Strategic Directions, Themes and Key Implementation Mechanisms outlined in this Strategy;
- timelines for delivery of each action;
- Council's business units responsible for delivery of these actions; and
- Council's progress against any actions identified in the previous two- year Implementation Plan.

This approach ensures the Strategy is a living document that offers flexibility through a rolling plan of implementation that remains relevant by responding to influences such as:

- key drivers of change in the environmental sector;
- community expectations;
- Council's annual budget processes;
- changes in Council's priorities and programs; and
- changes in Federal and State policies and programs and those from other key stakeholders.

## Suggested Key Performance Indicators and Actions for the Implementation Plan

During the development of the Strategy, the consultation phase provided a wide range of valuable suggestions for Key Performance Indicators and actions. These have been captured and collated into relevant themes. See below codes for the source of actions.

**C = Community/Stakeholder Workshops**

**B = Best management practices**

**N = New**

**GPS = Golden Plains Shire strategic documents**

**S = Previous Strategy**

**ST = GPSC staff**

Strategic Direction 1		Environmentally connected communities
Theme 1.1		Environmentally active and resilient communities
Aim:		Support the community to improve their environmentally sustainable practices and build their capacity to respond to environmental changes.
Targets		Possible Key Performance Indicators
<p>T 1.1.1: The Golden Plains Shire community improves their environmentally sustainable practices and awareness of their ecological footprint.</p> <p>T 1.1.2: Golden Plains Shire community is informed and able to respond to fluctuations in climate.</p>		<ul style="list-style-type: none"> <li>The number of community forums and activities held on environmental sustainability and resilience per year.</li> <li>Adaptation and resilience policy written by 2020</li> <li>Climate Resilient adaptation plan written by 2023</li> </ul> <p>Number of community forums and activities held on environmental sustainability and resilience</p> <p>Develop the resilience roadmap</p> <p>Develop vulnerability map</p> <p>% of People use natural places to support their physical and mental health and wellbeing</p> <p>Golden Plains community is prepared and able to respond to fluctuations in climate exposures including temperature and precipitation</p>
Key Implementation Mechanisms		Suggested Actions
<p>1. Empower the community to improve their personal and collective environmentally sustainable practices.</p>		<p>Support the community to better understand the need and ability to act more sustainably and overcome cultural norms surrounding consumption (B/C)</p> <p>Support community in their endeavours to become sustainable in their practices and lives (e.g. plastic free) (C)</p> <p>Identify and provide a process for community to adopt a living sustainably model (C/B)</p> <p>Assist community groups to develop sustainability strategies and action plans (C/B)</p> <p>Empower the GPS community to become advocates and participants in becoming a 'One Planet' community (B/C)</p> <p>A community that shares knowledge and experience of nature to sustain future generations. (B)</p> <p>Annual Ecological Footprint survey of representative group of residents from GPS shire</p>
<p>2. Build community resilience by strengthening community capacity to effectively respond to current and future challenges</p>		<p>Adaptation and resilience policy written to include the following:</p> <ul style="list-style-type: none"> <li>Risk assessment, risk reduction, adaptation, and disaster management articulate how they are to be embedded into decision-making, systems and processes.</li> <li>Accurate and current models, mapping and other corporate datasets inform the understanding of the risk associated with climate change</li> </ul>

<p>related to the natural environment.</p>	<ul style="list-style-type: none"> <li>Adaptation and disaster risk reduction planning minimises economic, social, environment and infrastructure impacts. (B)</li> </ul> <p>Climate Resilience Adaptation Plan written (B/GPS)</p> <p>Develop the Resilience Roadmap (B)</p> <p>Develop Vulnerability Map (B)</p> <p>Support communities to adapt to climate change via development of a vulnerability map identifying areas of the most vulnerable populations and urban areas (B)</p> <p>Disruptions to energy, water and waste assets from climate risk are minimised (B)</p>
<p>3. Establish and support community partnerships that develop resilience and work towards living sustainably.</p>	<p>Develop a network of local hubs to disseminate sustainability information and support (N)</p> <p>Develop a tailored program to increase participation in Council’s sustainability programs for groups with specific needs (N)</p> <p>Identify and work with key partners to inform, educate and raise awareness in the community in regards to an environmentally sustainable future (B)</p>
<p>4. Educate and empower the community about ways to live more sustainably.</p>	<p>Collate all the specific environmentally sustainable education/awareness raising actions into 1 plan/document (N)</p> <p>Support and connect neighbors to take collective action for sustainable consumption and lifestyles (B/C)</p> <p>Promote energy conservation/emission reduction programs (B)</p> <p>Use Council media to educate and empower the Golden Plains Shire community about ways to live more sustainably (S/B)</p> <ul style="list-style-type: none"> <li>Develop Council branded resources for Council website and community events (S/B/C)</li> <li>Implement and promote sustainability resources pages on Council website</li> <li>Provide information to residents on ways to reduce and off-set their carbon footprint (S)</li> <li>Disseminate key sustainability information to our community (B)</li> </ul>

<b>Strategic Direction 1</b>	<b>Environmentally connected communities</b>	
<b>Theme 1.2</b>	<b>Communities connected to the environment</b>	
<b>Aim</b>	Increase the Golden Plains Shire community's connection with nature enabling them to draw from the benefits of improved physical and mental wellbeing.	
	<b>Targets</b>	<b>Possible Key Performance Indicators</b>
	<p>T 1.2.1: By 2027 the GPS community are better connected to their environment with a 50% increase in visitation to parks and open spaces.</p> <p>T 1.2.2: By 2027 participation in programmed environmental events and activities has increased by 50%.</p> <p>T 1.2.3: By 2027 people using natural places to support their physical health and wellbeing has increased by 50%.</p>	<ul style="list-style-type: none"> <li>Review and implement the Path and Trails Strategy in line with Town Structure Plans, by 2023.</li> <li>Review and implement the Open Space Strategy in line with Town Structure Plans by 2023.</li> <li>By 2023 25% use natural places to support their physical health and wellbeing.</li> <li>By 2023 participation in environmental events and activities has increased by 25%.</li> </ul> <p>Benchmark visitation and access to parks and open spaces and measure this annually.</p> <p>Information packs made available to households and updated as needed with new information.</p> <p>Kilometre of new infrastructure built (e.g. shared path, footpath, road cycle path, bicycle parking facilities etc).</p>
	<b>Key Implementation Mechanisms</b>	<b>Suggested Actions</b>
	1. Support and provide opportunities for community to connect with their environment.	<p>Encourage people to use natural environments to improve physical and mental wellbeing. (B)</p> <p>Connect people to nature by learning, growing and sharing together. (B)</p> <p>Support and promote ResourceSmart for schools to participate and achieve sound sustainable practices. (N)</p> <p>Work with the community to plan and provide natural and built environments that create safe, accessible, inclusive and inviting public spaces, social infrastructure, open space and destinations for all. (GPS)</p> <p>Implement the Paths and Trails Strategy to increase safety, connectivity, and active transport networks within and between townships. (GPS)</p> <p>Information packs made available and update annually to households containing information about the environment, sustainability, biodiversity, invasive species and their landholder duties and responsibilities. (C)</p>
	2. Establish and support community partnerships that encourage connection to and advocacy for their environment.	<p>Promote local conservation groups and initiatives. (C)</p> <p>Promote and encourage participation in conservation incentive schemes implemented by other organisations. (S)</p> <p>Council host a biennial environmentally sustainable forum to promote and encourage collaboration between various community groups and agencies. (S/B)</p>
	3. Educate and empower the community about ways to connect with their environment.	<p>Promote biodiversity values and programs such as Land for Wildlife and Trust for Nature through Council media. (S)</p> <p>Information packs for new and existing landholders in GPS to contain information about the environment, sustainability, biodiversity, invasive species and their landholder duties and responsibilities. (C/S)</p>

C = Community/Stakeholder Workshops

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<b>Strategic Direction 2:</b>	<b>Greener Economies</b>	
<b>Theme 2.1</b>	<b>Environmentally engaged businesses</b>	
<b>Aim</b>	Foster a thriving green business economy in the Golden Plains Shire by attracting new sustainable industries and encouraging existing businesses to reduce the environmental impact of their operations.	
	<b>Targets</b>	<b>Possible Key Performance Indicators</b>
	<p>T 2.1.1: 25% of existing businesses in GPS are registered to monitor their sustainability through measures of energy, waste &amp; water usage by 2027.</p> <p>T 2.1.2: 75% of engaged businesses demonstrate an increase in environmental sustainability through measures of energy, waste &amp; water usage by 2027.</p> <p>T 2.1.3: There is a 25% increase in green industries within the GPS by 2027.</p>	<ul style="list-style-type: none"> <li>Establish an environmental scorecard to use with businesses to identify their performance in environmentally sustainable practices by 2020.</li> <li>25% of existing businesses in GPS are sustainable in energy, waste &amp; water usage by 2023.</li> <li>The number of new businesses within the environment sector established in GPS per year.</li> <li>The number of large-scale renewable energy projects.</li> <li>The number of grants received by businesses for sustainability projects per year.</li> <li>The number of sustainability projects undertaken by Council per year.</li> <li>The number of training/information sessions run by Council with a focus on sustainability for business per year.</li> </ul> <p>Utilise environmental scorecard to benchmark number of existing businesses that are sustainable practisers in GPS.</p> <p>Number of new businesses within the environmental sector established in GPS.</p>
<b>Key Implementation Mechanisms</b>	<b>Suggested Actions</b>	
1. Support and encourage new and existing local industries and businesses to implement environmentally sustainable practices.	<p>Encourage and maintain sustainable industry, businesses and agriculture. (C/ GPS)</p> <p>Support the Golden Plains Farmers market and promote its organic accreditation. (GPS)</p> <p>Provide disincentives to businesses that are not engaged in sustainable practices. (S)</p> <p>Encourage large scale alternative energy generation projects within the Shire. (S)</p> <p>Investigate greenwaste recycling enterprise model. (S)</p> <p>Number of business that identify themselves as sustainable in their practices and reduce their consumption of energy, waste and water:</p> <ul style="list-style-type: none"> <li>* x% reduction in waste to landfill.</li> <li>* Water efficiency increased by "x"%.</li> <li>* Energy efficiency increased by "x"%.</li> </ul>	
2. Encourage environmentally sustainable businesses into the shire (through lobbying, incentives, etc).	<p>Identify and implement key drivers that encourage environmentally sustainable business models. (S)</p> <p>Work in partnership to support and encourage the establishment, relocation or expansion of suitable green businesses to GPS. (B)</p> <p>Develop annual award / certificate for best performing / best improved business with regards to environmental performance. (S)</p>	

<p>3. Establish and support partnerships with regional and broader businesses to encourage and promote environmentally sustainable business practices.</p>	<p>Promote local industry and business participation in sustainability programs and adoption of sustainable practices. (B)</p> <p>Present at business network events and forums on how they can be environmentally sustainable. (B/GPS)</p>
<p>4. Educate and empower regional and broader businesses to encourage and promote environmentally sustainable business practices.</p>	<p>Support and encourage pathways for education, training and lifelong learning in the environmentally sustainable sector. (GPS)</p> <p>Educational programs/courses offered to existing businesses to become environmentally sustainable by measuring their ecological footprint and reducing their energy and water consumption and waste production. (N/B)</p> <p>Work with education institutions, training providers, social enterprises and other businesses to help provide businesses with skills for an innovative and sustainable future. (B)</p>

<b>Strategic Direction 2:</b>	<b>Greener Economies</b>	
<b>Theme 2.2</b>	<b>Nature-based tourism sector</b>	
<b>Aim</b>	Promote and support nature-based tourism within the Golden Plains Shire that foster, promote and actively implement environmentally sustainable practices.	
<b>Targets</b>		<b>Possible Key Performance Indicators</b>
T 2.2.1: Educate and promote programs that improve the impacts of tourism on the environment.		<p>The number of education programs and events run each year that promote the improvement of impacts of tourism on the environment.</p> <p>Number of environmentally sustainable Tourism projects completed</p> <p>Environmentally sustainable Tourism sector economic output</p> <p>Number and growth of tourism jobs in environmentally sustainable areas</p>
<b>Key Implementation Mechanisms</b>	<b>Suggested Actions</b>	
1. Support and encourage new and existing tourism providers to implement environmentally sustainable practices.	Specific actions yet to be identified.	
2. Encourage and foster nature-based tourism that preserves the distinct landscape, character and heritage values of the Golden Plains Shire.	<p>Promote Golden Plains heritage. (C)</p> <p>Protect the aboriginal cultural heritage in GPS. (C/S)</p> <p>Encourage 'hands on in the environment' tourism with community groups e.g. intrepid. (S)</p> <p>Identify geological sites of significance and develop a GIS mapping layer to capture their location for planning and tourism purposes. (ST)</p>	

<p>3. Establish and support partnerships with regional and broader businesses to encourage and promote environmentally sustainable nature-based tourism.</p>	<p>Partner with regional and broader businesses and industry to develop our visitor economy as a key contributor to local economic sustainability. (GPS) Facilitate Federal and State Government Grants that promotes sustainable nature-based tourism. (GPS)</p>
<p>4. Educate and empower regional and broader businesses to encourage and promote environmentally sustainable nature-based tourism.</p>	<p>Specific actions yet to be identified.</p>

<b>Strategic Direction 2:</b>	<b>Greener Economies</b>	
<b>Theme 2.3</b>	<b>Regenerative farming sector</b>	
<b>Aim:</b>	Holistically manage landscape functions to grow Golden Plains Shire's food, fuel and fibre.	
	<b>Targets</b>	<b>Possible Key Performance Indicators</b>
	T 2.3.1: By 2027 25% primary producers in the GPS holistically manage landscape function to grow GPS food, fuel and fibre.	<ul style="list-style-type: none"> <li>• Each industry is mapped with the specific requirements of environmentally sustainable practices.</li> <li>• All industries are benchmarked against environmentally sustainable best management practices with actions plans noting how they can improve.</li> <li>• The number of primary producers participating in regenerative farming education programs per year.</li> <li>• The number of new organically certified farms in the GPS per year.</li> </ul> <p>Number of leaders in the field to discuss regenerative farming at GPS events.</p>
<b>Key Implementation Mechanisms</b>	<b>Suggested Actions</b>	
1. Support and encourage new and existing businesses in the agriculture sector to implement environmentally sustainable practices.	<p>Design and implement a 'Free Indigenous Seedling Program for farming landholders' (that aims to utilise local nurseries to provide free indigenous seedlings to suitable projects). (S)</p> <p>Promote, encourage and advocate for improved management of soils to improve effective rainfall absorption in all zones. (ST/B/C)</p> <p>Support a group that creates a 'community of practise.' (ST)</p>	
2. Encourage and promote regenerative agriculture models into the Golden Plains Shire.	<p>Develop relationships with local farmers practising regenerative farming techniques. (ST)</p> <p>Provide incentives for vegetation buffers and corridors on agricultural land and disincentives where they don't occur. (B/C)</p> <p>For farming industry sectors that operate in the Golden Plains promote best management practices for environmental sustainability. (B)</p> <p>Promote sales of locally and sustainably produced food products. (B)</p> <p>Agriculture and food production areas are protected and effectively managed, enabling an adaptive and flexible local food supply. (B)</p> <p>Resources and services are sustainably produced and sourced locally to support self-sufficiency and containment. (B)</p> <p>Investigate and promote 'Best practice' of local and state wide regenerative agricultural enterprises. (ST)</p> <p>Deliver educational programs to learn the benefits of regenerative farming and how it can increase productivity, longevity, reduce environmental impacts and how they can do it.</p>	
3. Establish and support partnerships with other agencies, community groups and education facilities to promote, support and implement	<p>Advocate on behalf of local Landcare groups for increased funding for co-ordinators and on ground works. (S)</p> <p>Seek opportunities to coordinate works with the Woody Yallock Catchment project, Leigh Catchment Group and Geelong Landcare Network. (S)</p> <p>Seek opportunities and partnerships to provide continued financial support to Landcare. (S)</p>	

<p>environmentally sustainable projects in the agriculture sector.</p>	
<p>4. Educate and empower local farming industries and community groups to promote, support and implement environmentally sustainable practices in the agriculture sector.</p>	<p>Promote the participation of Landcare to farming landholders. (S)  Promote the revegetation with indigenous species on farming land. (S)  Educate the Golden Plains Shire community about sustainable farming practices being undertaken across the shire. (C)  Partner with community groups to provide content for the GPSC's 'Now you are living in a rural landscape package'. (C)  The 'now you are living in a rural landscape' package to include a section on landholder responsibility and obligation highlighting how they could have impacts of the surrounding environment. (C)  Promote regenerative farming on Council website. (ST)  Facilitate regenerative farming presentations and 'open house' sessions. (ST)</p>

C = Community/Stakeholder Workshops

B = Best management practices

N = New

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ST = GPSC staff

<b>Strategic Direction 3:</b>	<b>Thriving Natural Environments</b>
<b>Theme 3.1</b>	<b>Biodiversity</b>
<b>Aim:</b>	Protect, restore and increase the health of our natural ecosystems, biodiversity and natural habitats to ensure they survive and thrive in the Golden Plains Shire.
<b>Targets</b>	<b>Possible Key Performance Indicators</b>
<p>T 3.1.1 Increase the number of properties under an environmental covenant by 50% by 2027 using the 2019 baseline.</p> <p>T 3.1.2 Develop and implement management plans for Council owned and managed reserves.</p>	<ul style="list-style-type: none"> <li>• Net gain in native vegetation for Council activities and planning approvals reported annually.</li> <li>• 100% of major develop proposals are referred for review.</li> <li>• The number of management plans written for Council owned and managed reserves.</li> <li>• Establish and implement monitoring protocols for Council owned and managed reserves.</li> </ul>
<b>Key Implementation Mechanisms</b>	<b>Suggested Actions</b>
<p>1. Preserve and increase biodiversity and native vegetation on Council owned and managed land.</p>	<p>Identify, protect and enhance the ecological value of Council land within the Golden Plains, this includes prioritising areas for habitat protection and restoration (B)</p> <p>Enhance the diversity of plants by increasing the quality and quantity of vegetation on Council land. (B)</p> <p>Identify viable, achievable means of creating native vegetation biolinks by planning, promoting and protecting these significant bio-corridors. (C/B)</p> <p>Net gain in indigenous vegetation – grasses, shrubs and trees planted by Council (B)</p> <p>Provide annual incentive funding to schools for indigenous revegetation projects as part of National Tree Day. (B)</p> <p>Continue to implement Teesdale Grassy woodlands, Redgum Reserve and Bruces Creek Management plans. (N/S)</p> <p>Develop and maintain a GIS significant tree register derived from the National Trust Tree Register. (S)</p> <p>Significant and threatened native fauna are identified and their habitat is protected from degradation. (B)</p> <p>Illegal removal of wood for fires.</p> <p>Implement rate incentive for the protection of native vegetation. (C)</p> <p>Develop management plans for Council properties with significant biodiversity values. (S)</p> <p>Develop native strip guidelines for establishing and promoting appropriate local vegetation. (ST)</p>
<p>2. Implement the Roadside Environmental Management Plan and Action Plan</p>	<p>Implement Roadside Environmental Management Plan. (S)</p> <p>Environment team continues to work in conjunction with Works department. (S)</p> <p>Conduct roadside biodiversity management training for outdoor staff and contractors. (S)</p> <p>Manage grazing on roadsides with High or Very high conservation significance to promote biodiversity. (S)</p>

	Undertake audit of road construction and maintenance activities to ensure they follow the Standard Operating Procedure for protection of native vegetation during and after the road works. (S)
3. Protect biodiversity and native vegetation through effective land use planning.	<p>GPS strategic planning for future growth areas addresses the protection and ongoing management of the area's natural assets. (B)</p> <p>Work with regulators and policy makers to provide improved tools for local government to protect significant environmental assets. (B)</p> <p>Investigate and develop policy options that provide improved native vegetation protection and establishment outcomes via internal planning approval process leading to a greater level of overall net gain. (B)</p> <p>Ensure Environmental Team specifically consulted for development proposals (such as subdivision application and road developments) with significant environmental components to provide expert advice for the assessment. (B)</p> <p>Establish a process for auditing and enforcing planning permits that involved native vegetation removal. (B)</p> <p>Environmental Significance Overlay reviewed and update every x years (last completed in 2015) and investigate for standing and ephemeral wetlands. (S)</p> <p>Review and update the Vegetation Protection Overlay in the GPS Planning Scheme (every x years) include the significant changes to the identified high conservation roadsides from a complete mapping project. (S)</p> <p>New development within GPS to address biodiversity issues where appropriate. (C)</p> <p>Incorporate native vegetation and waterway frontages into Council ownership at time of subdivision and that adequate buffers are provided to promote biodiversity. (C)</p> <p>Incorporate conditions on Planning Permits for subdivisions that require protection of significant biodiversity and degraded land to be repaired (E.g. salinity, erosion, weeds). (B)</p> <p>Assess all significant planning applications to ensure positive environmental outcomes. (B)</p> <p>Establish a process for auditing and enforcing planning permits that involved native vegetation removal. (S)</p> <p>Mining.</p>
4. Protect biodiversity and native vegetation on private land through community engagement and enforcement.	<p>Support wildlife-friendly, native indigenous, and biodiversity focused gardening at home. (C)</p> <p>Establish revegetation guidelines for properties adjoining parks and reserve to minimize the risk of weed invasion. (S)</p> <p>Investigate a rate rebate for land subject to a conservation covenant. (S)</p> <p>Establish a policy on Councils response to illegal clearing of native vegetation. (S)</p>
5. Increase biodiversity and native vegetation on private land through community engagement and incentives.	<p>No more threatened species habitats reduced. (N)</p> <p>Support Biolink initiatives – increased connectivity between high quality remnant vegetation across the landscape including waterways. (C/B)</p> <p>Work with other managers of environmentally significant land to enhance biodiversity values. (S)</p>
6. Establish and support partnerships with other agencies, community groups	<p>Work with key stakeholders to protect and enhance the ecological value of significant biodiverse areas. (B)</p> <p>Seek and support investment in biodiversity conservation priority areas in GPS (B)</p>

<p>and education facilities to preserve and protect biodiversity and native vegetation.</p>	<p>Encourage private and public land stewardship and management practices which benefit biodiversity conservation. (B)</p> <p>Seek funding to implement actions for biodiversity enhancement on high conservation significant roadsides and properties. (S)</p> <p>Develop partnerships with state government agencies, other landowners and the private sector with a view to a coordinated and landscape scaled approach to waterway and land restoration and management. (B)</p>
<p>7. Educate and empower the community about biodiversity values and ways to preserve and protect biodiversity and native vegetation.</p>	<p>Provide strategic interpretive signage to promote the biodiversity values of Golden Plains Shire. (S)</p> <p>Increase the knowledge, understanding and appreciation of our natural environment and ecosystem function. (B)</p> <p>Information sheets on appropriate indigenous revegetation available on Council website. (B)</p> <p>Where and when appropriate provide strategic interpretive signage to promote the biodiversity values of the GPS. (S)</p> <p>Promote and utilise 'Nature kit' DELEPs biodiversity web mapping and reporting tool. (S)</p> <p>Strengthen the Council in environmental sustainability by providing targeted environmental education for Councillors and Council staff to understand context, values and impacts related to their roles and responsibilities. (B)</p> <p>Engage with the community, residents and businesses to increase their awareness on the value of parks, plants and wildlife. (B)</p> <p>Council website to promote benefits of agroforestry and native vegetation cover. (B)</p>

<b>Strategic Direction 3:</b>	<b>Thriving Natural Environments</b>	
<b>Theme 3.2</b>	<b>Invasive Species</b>	
<b>Aim</b>	Reduce the impact of invasive species on agriculture, natural systems and the community.	
	<b>Targets</b>	<b>Key Performance Indicators</b>
	<p>T 3.2.1 Reduction in the coverage of declared weeds and environmental weeds on Council owned or managed land by 70% by 2027.</p> <p>T 3.2.2 Develop and implement Invasive Species Program by 2027.</p>	<ul style="list-style-type: none"> <li>• Invasive Species Program guidelines developed by 2019</li> <li>• Invasive Species Program developed by 2020</li> <li>• Invasive Species Program implementation 2021-2027</li> <li>• % invasive species reduced on crown land</li> <li>• % invasive species reduced on roadsides</li> </ul> <p>The number of annual educational activities regarding control and eradication of invasive species.</p>
<b>Key Implementation Mechanisms</b>	<b>Suggested Actions</b>	
1. Manage invasive species and their impacts on Council owned and managed land.	<p>Update the Pest Plant and Animal Management Strategy to the Invasive Species Strategy for land owned or managed by Golden Plains Shire and establish a coordinated implementation. (S)</p> <p>Deliver annual Invasive Weed Program on roadside and Council reserves. (B/S)</p> <p>Provide access to Indian Myna traps for residents and community groups. (S)</p> <p>Continue to control weeds on Council owned or managed land (S):</p> <ul style="list-style-type: none"> <li>• Inspections and works undertaken by Natural Resource Officer on Council reserves.</li> <li>• Weed control works undertaken during annual roadside weed control program and on Council reserves.</li> </ul> <p>Continue annual rabbit harbour management on Council owned or managed land. (S):</p> <ul style="list-style-type: none"> <li>• Inspections and works undertaken by Natural Resource Officer on Council reserves.</li> <li>• Rabbit control works undertaken at several locations including: Inverleigh, Teesdale, Batesford and Rokewood.</li> </ul> <p>Continue annual inspections for pest plants and animals on Council owned or managed land (S):</p> <ul style="list-style-type: none"> <li>• Inspections and works undertaken by Natural Resource Officer on Council reserves.</li> </ul> <p>Key species prioritised, targeted and actioned. (C/B)</p> <p>Establish and apply documentation to all lessees to clarify terms, conditions and expectations associated with managing pest plants and animals while occupying Council properties. (S)</p> <p>Audit and promote weed hygiene SOP for Council owned and operated plant and equipment. (S)</p> <p>Systematically document land management information on weeds and rabbits and incorporate in to GIS mapping. (S)</p> <p>Develop a Stack site management standard operating procedure. (S)</p>	
2. Reduce invasive species and their impacts on privately	Encourage all landholders to more effectively manage the risk of pest and invasive plants across the municipality. (B)	

<p>owned land through community engagement and enforcement by the responsible agency.</p>	<p>Advocate to the State Government for an increase in pest plant and animal control compliance activities on private land within the Shire. (S)</p> <p>Seek funding to implement two part time Land Management Facilitator positions to improve weed control and land management within township and peri-urban boundaries. (S)</p> <p>Domestic animal control, cat curfew and stricter pet ownership laws. (C)</p>
<p>3. Manage invasive species and their impacts through effective land use planning.</p>	<p>Section 173's applied to legally require the management or eradication of pest plant and animals. (ST)</p> <p>Planning Permit conditions to include - Developers required to develop and implement 'Pest Plant and Animal Management Plans' for all new development and proposed (land banked) sites. (ST)</p> <p>MOU's with VicRoads and Vic Rail to provide resources to undertake control of invasive species in their areas of responsibility. (ST)</p>
<p>4. Establish and support partnerships with other agencies, community groups and education facilities to facilitate cross-boundary invasive species management.</p>	<p>Advocate to the State Government for an increase in pest plant and animal control on Crown Land. (S)</p> <p>Promote State Government pest plant and animal control programs (e.g. Weedbuster week) through Council media. (S)</p> <p>Report occurrences of new or emerging weeds (e.g. Mexican Feather Grass) on private land or public land to DELWP. (S)</p>
<p>5. Educate and empower the community, community groups and landholders about the impacts of invasive species and ways to manage them.</p>	<p>Educate and regulate to ensure responsible pet ownership. (C)</p> <p>Update and review existing, and write new environmental information sheets on an as needs basis and display them on the GPS internet and Gazette. (S)</p> <p>Provide and update as required the information on pest plant and animal control in the new resident's handbook and regularly in the gazette. (C/S)</p> <p>Provide weed eradication demonstrations and workshops. (B)</p> <p>Video footage to be used on Council website to highlight integrated weed control and eradication techniques. (S)</p> <p>Deliver 2 weed workshops each year on a variety of tenure (north and south). (C/S)</p>

<b>Strategic Direction 3:</b>	<b>Thriving Natural Environments</b>	
<b>Theme 3.3</b>	<b>Water Security</b>	
<b>Aim:</b>	Protect the ecological health of our waterways and wetlands and facilitate sustainable water use in the GPS community.	
	<b>Targets</b>	<b>Possible Key Performance Indicators</b>
	<p>T 3.3.1: Apply a 50% increase in the minimum width requirements for native vegetation buffers at the top of the batter, adjacent to waterways in new developments for environmentally significant areas.</p> <p>T 3.3.2: Stormwater management meets State environment protection policy minimum requirements.</p> <p>T 3.3.3: Reduce Council's potable water consumption by 20% by 2027 against a 2018 baseline.</p> <p>T 3.3.4: Develop Integrated Water Management Guidelines for rural and township areas by 2023.</p>	<ul style="list-style-type: none"> <li>• The number of infrastructure placed to manage stormwater &amp; flooding events.</li> <li>• The number of Water Sensitive Urban Design (WSUD) projects initiated.</li> <li>• The number of Integrated Water Management Guidelines developed per year.</li> <li>• Councils potable water consumption reduced by 20% by 2023.</li> </ul> <p>All urban areas have local area drainage models by 2041.</p> <p>Progress towards Council's use of alternative water source targets.</p> <p>People in Households Collecting Waste Water - % of adult population.</p> <p>Proportion of households harvesting water.</p> <p>Net gain in number of street trees.</p> <p>Trees planted minus trees removed.</p>
<b>Key Implementation Mechanisms</b>	<b>Suggested Actions</b>	
1. Preserve and enhance natural waterways and wetlands on Council owned and managed land to support healthy and diverse aquatic habitats and species.	<p>Improve Council contributions to in-stream and wetland water quality. (B)</p> <p>No Council operations are detrimental to water quality/flow/security. (B)</p> <p>Improve the water quality of local lakes and waterways by investing in additional infrastructure to improve water quality such as Gross Pollutant Traps and floating wetlands, reed beds and improve filtration systems. (B)</p> <p>Native vegetation in waterway and wetland riparian zones are protected and restored. (B)</p> <p>Aquatic and riparian invasive plants and animals are managed strategically to reduce impacts on native species and habitats. (B)</p> <p>The management of waterways and wetland incorporate the predicted impacts from climate change and natural hazards. (B)</p> <p>Natural waterways and wetlands are not diverted or modified. (B)</p> <p>Advocate for improved flows in the Moorabool River and other waterways in the Shire. (S)</p> <p>Advocate for the sustainable use of surface and groundwater resources. (S)</p> <p>Constructed water bodies (i.e. dams) are minimised and managed efficiently to provide social and economic outcomes and preserve environmental values and water flows. (B)</p>	
2. Protect waterways and wetlands through effective land use planning.	<p>All landscape plans for new developments are reviewed by the Environment team. (S)</p> <p>New development in the GPS to incorporate best practise water and stormwater measures. (B)</p>	

	<p>50% of Township Zone – LDRZ residential sites to have tank water available for supporting green spaces and to use grey water for supporting green spaces</p> <p>Encourage Water Sensitive Urban Design (stormwater traps, retention basins, drainage, litter traps) in all new developments as required. (S)</p>
<p>3. Protect waterways and wetlands through the implementation of effective drainage and stormwater infrastructure.</p>	<p>Establish design standard of WSUD for rural roadsides and rural township areas. (B)</p> <p>Implement appropriate and locally sensitive WSUD's as part of programmed works and new initiatives. (B)</p> <p>To improve rainwater harvesting on commercial premises for commercial production. (S)</p> <p>Encourage landowners to capture and use rain water. (B)</p> <p>Encourage businesses to conserve and minimise water usage. (B)</p>
<p>4. Mitigate and manage stormwater and flooding events through integrated water management processes.</p>	<p>Stormwater management plan. (B)</p> <p>Incorporate water sensitive urban design (WSUD) principles into residential and commercial development. (B)</p> <p>Flood risk is managed for the wellbeing and resilience of the community. (B)</p> <p>Flooding and stormwater assets are effective and responsive to a changing environment. (B)</p> <p>Flooding and stormwater management protects the natural and built environment. (S/B)</p>
<p>5. Minimise Council water use through adoption of sustainable water practices across Council operations.</p>	<p>Establish Council's water consumption baseline and reduce Councils water consumption in built and amenity areas.</p> <p>Improve water harvesting in Council owned buildings. (S)</p> <p>All Council assets have to have tank water available for supporting green spaces. (S)</p> <p>All Council assets to achieve efficient water supplies through technology and governance improvements. (B)</p> <p>Install water tanks into any new or redeveloped Council Facilities for on-site use. (S)</p> <p>Promote the use of local indigenous plants as low water use plants by using these in Council gardens and streetscapes. (S)</p> <p>Council to install Santa Ana Couch grass (low water usage grass type) at all the Council facilities. (S)</p> <p>Seek funding to continue to develop alternative water sources to irrigate parks, ovals and public space. (S)</p> <p>All Council assets have efficient water supplies through technology and governance improvements. (B)</p> <p>Install water efficient fittings and appliances when upgrading or building new Council facilities. (S)</p>
<p>6. Establish and support partnerships with other agencies, community groups and education facilities to protect waterways and wetlands and facilitate sustainable water use.</p>	<p>Work with partners to plan for Golden Plains long-term water security:</p> <ul style="list-style-type: none"> <li>• Work in partnership with water authorities and stakeholders to develop strategic plans to ensure water security for Golden Plains</li> <li>• Develop an integrated water cycle management plan for all areas of the Council's responsibilities</li> </ul> <p>Promote and support innovative and environmentally sustainable management of water resources through strategic partnerships. (GPSC)</p> <p>With the support of key partners, help the community both residents and businesses, to reduce mains water consumption. (B)</p> <p>Contribute to CMA partnerships and working groups to improve instream and wetland water quality. (B)</p>

	Advocate for the provision of recycled water from the Bannockburn Wastewater Treatment Plant for environmental, domestic, industrial, recreational and agricultural use. (S)
7. Educate and empower the community about sustainable water use and ways to preserve and protect waterways and wetlands.	<p>Partner with agencies to conduct educational programs and produce publications to support education about sustainable water use and ways to preserve and protect the waterway sand wetlands. (B)</p> <p>Support ResourceSmart and the implementation of the Water Module in schools. (N)</p> <p>Water Saving initiatives published on the Golden Plains Shire website. (S)</p> <p>Council to develop a water resources guides for un-serviced areas as part of Climate Resilient Communities Project. (GPS)</p> <p>Promote 'only rain down the drain' education programs to reduce the volume of litter reaching storm water drains - IWM / WSUD's Initiatives. (S)</p>

<b>Strategic Direction 3:</b>	<b>Thriving Natural Environments</b>	
<b>Theme 3.4</b>	<b>Fire and Planned Burning</b>	
<b>Aim:</b>	Land management practices by Council, fire agencies and the community minimise the risk of wildfire in the landscape.	
	<b>Targets</b>	<b>Possible Key Performance Indicators</b>
	<p>T 3.4.1: Reduction of 25% of Fire Prevention Notices issued per capita by 2027</p> <p>T 3.4.2: Reduction of 10% of second round Fire Prevention Notices issued per capita by 2027.</p> <p>T 3.4.3: Implement a minimum of five burns a year in Council owned and managed land.</p> <p>T 3.4.4: Increase the length in km of roadside burns on Council roadsides by 10% using the 2018 baseline by 2027.</p>	<ul style="list-style-type: none"> <li>• The number of Fire Prevention Notices.</li> <li>• The number of second round Fire Prevention Notices.</li> <li>• Five burns implemented per year on crowned and managed land.</li> <li>• Kilometres in length of roadside burns.</li> </ul>
<b>Key Implementation Mechanisms</b>	<b>Suggested Actions</b>	
1. Manage Council land to mitigate the risk of wildfire	<p>Implement the Municipal Fire Management Plan and other fire related statutory controls. (GPS)</p> <p>Implement the communication Strategy for fire related information. (B)</p> <p>Regularly review Municipal Strategic Firebreaks and their management in consultation with CFA. (S)</p> <p>Enforce the planning permit applications that have enacted the provisions of the Wildfire Management Overlay. (B)</p> <p>Develop a rolling Roadside Fuel Reduction Burning Plan for Municipal Strategic Fire Breaks. (S)</p>	
2. Promote and enforce management actions that reduce the risk of wildfire on private land.	<p>Manage development within and close to native bushland areas to minimise impact on native vegetation and reduce the impact of wildfire. (S)</p> <p>Work with the community and fire agencies to improve community preparedness and resilience. (B)</p> <p>Plan, resource and strengthen Council and community capacity to effectively respond to current and future challenges related fire related emergency management. (B)</p>	
3. Promote and encourage ecological and fuel reduction burning on roadsides and reserves.	<p>Continue to incorporate fuel reduction burning as part of a biodiversity enhancement program for forest and grassland areas under Council management. (S)</p> <p>Maintain and improve natural ecosystems on Council owned or managed land; including roadsides, through the application of appropriate burning regimes. (S)</p> <p>Develop and implement a prioritised program of ecological burns and Code of Practice to guide these. (B)</p> <p>Deliver two Local Government Planned Burn activities (minimum) per year. (B/S)</p>	
4. Mitigate the risk of wildfire through effective land use planning.	<p>Developments (all) precinct plans and landscape design to include separation between fire fuels/reserves and urban landscapes, residential and commercial areas.</p> <p>Road interface or formal path interface, or 10m buffer maintenance zones grassland reserve and 50m for forested verges, are to be established with all new parks interfaces. Formal tracks and paths to be developed to facilitate access and installed along perimeter breaks.</p> <p>Developments designed to facilitate safe egress by residents in wildfire scenarios.</p>	

<p>5. Establish and support partnerships with fire management agencies, other land managers and the community to manage and reduce the risk of wildfire and to utilise fire as a way of managing our natural environment.</p>	<p>Council works with CFA and DELWP when required, to continue to enhance grassland communities through application of prescribed burning. (S)</p> <p>Develop strengthened partnerships between Council, DSE and CFA to encourage controlled burning of local reserves. (S)</p> <p>Liaise with DSE, CMA, CFA, neighbouring landholders and research bodies to develop burning regimes to optimise roadside fuel load management and biodiversity outcomes. (S)</p> <p>Support Local Government Planned Burning (LGPB) Network initiatives. (B)</p> <p>Work with fire management agencies and the community to manage and reduce the risk of fire with a view to protecting life and property while maintaining our natural environment. (GPS)</p>
<p>6. Educate and empower the community, community groups and landholders about fire in the landscape and ways to reduce the risk of wildfire on their properties.</p>	<p>Educate residents about fire preparedness and appropriate fuel management in line with CFA guidelines and the Native Vegetation Management Framework. (S)</p> <p>Support training and skill development of other Local Government Planned Burn Network members. (B)</p> <p>Develop a communication strategy for relaying fire related information to new and existing residents including signage of no through roads'. (S)</p>

<b>Strategic Direction 3:</b>	<b>Thriving Natural Environments</b>	
<b>Theme 3.5</b>	<b>Aboriginal cultural heritage land management</b>	
<b>Aim:</b>	Preserve and protect Aboriginal heritage values and culture through sensitive land management practices and community education and appreciation.	
	<b>Targets</b>	<b>Possible Key Performance Indicators</b>
	<p>T3.5.1: 50% of Council owned and managed reserves incorporate traditional owner naming conventions and cultural interpretations developed in collaboration with Wadawurrung people.</p> <p>T3.5.2 In partnership with Wadawurrung and CFA develop a cultural burning program that delivers eight cultural burns by 2027.</p>	<ul style="list-style-type: none"> <li>• The number of newly named reserves or their features that incorporate traditional owner names.</li> <li>• The number of cultural burns delivered in partnership with the Wadawurrung per year.</li> </ul>
	<b>Key Implementation Mechanisms</b>	<b>Suggested Actions</b>
	1. Manage Council owned and managed land to preserve and protect known Aboriginal heritage values and culture.	Procurement processes - Identify Wadawurrung as providers of land management actions and ensure they are given procurement weighting. Naming of reserves/features/infrastructure – ensure it captures Aboriginal heritage values and culture. In partnership with Wadawurrung and CFA develop a cultural burning program that provides a platform for community education, appreciation and understanding.
	2. Promote land management actions on private land that reduce impacts to Aboriginal heritage values and culture.	Support and promote the ‘Yarns on Farms’ initiative.
	3. Council leads in promoting appreciation of Aboriginal heritage values and culture.	Investigate the option of partnering with other agencies to provide continuity of employment for Wadawurrung field officers and cultural heritage officers. Potential areas of work include cultural burning.
	4. Establish and support partnerships with the Wathaurung Regional Aboriginal Party (RAP), trading as Wadawurrung to protect Aboriginal heritage values and culture.	Work in partnership with Wadawurrung people to develop land management practices and cultural appreciation. Further develop and maintain relationship with Wadawurrung and Council through clearly defined internal processes. Develop an MOU with Wadawurrung – outline aspirations for land management. Partner with water authorities, Wadawurrung and other agencies to promote the importance of waterways and water to the Wadawurrung peoples.
	5. Support education of the community about Aboriginal heritage values and culture and build awareness of ways to celebrate and participate in its protection.	Investigate the option of interpretive signage developed in partnership with Wadawurrung.

C = Community/Stakeholder Workshops

B = Best management practices

N = New

GPS = Golden Plains Shire strategic documents

S = Previous Strategy

ST = GPSC staff

<b>Strategic Direction 4</b>		<b>Sustainable Urban and Rural Design</b>	
<b>Theme 4.1</b>		<b>Environmentally responsive infrastructure design</b>	
<b>Aim:</b>		Provide well-designed built environments that minimise environmental impacts, improve liveability and support community resilience.	
<b>Targets</b>		<b>Possible Key Performance Indicators</b>	
<p>T 4.1.1: Increase awareness and understanding of environmentally sustainable design for homeowners and developers.</p> <p>T 4.1.2: Council development and construction designs are reviewed to reflect Environmentally Sustainable Design principles and energy star ratings of 6 or above, by 2023.</p> <p>T 4.1.3: Existing Council buildings are audited for environmental impacts and these impacts are reduced by 50% by 2027.</p> <p>T 4.1.4: Council construction designs and Procurement to support the use of recycled materials where clear benefit is demonstrated by 2023.</p>		<ul style="list-style-type: none"> <li>• Results of annual environmental impact audits of Council facilities.</li> <li>• Energy star ratings and number of environmentally sustainable design features in new Council buildings and developments.</li> <li>• Number of education programs and products delivered per year.</li> <li>• Audit of construction and designs to report on the use of recycled materials and demonstrated benefits.</li> </ul> <p>Deliver 2 programs and 2 activities annually that promote residential and commercial buildings achieving above mandatory standards.</p> <p>emissions, mains water use - megalitres. establish baseline.</p> <p>Increase the number of developments, which are verified as achieving a minimum Green Star Rating of 5 and/or NABERS rating of 5, or equivalent nationally recognised sustainability rating, by 2041.</p> <p>All Council buildings to achieve low Carbon emissions by 2041.</p>	
<b>Key Implementation Mechanisms</b>		<b>Suggested Actions</b>	
<p>1. Develop a built environment that supports environmentally sustainable design (ESD) and carbon draw-down initiatives.</p>		<p>Develop clear policy on the effective management of the local road network and ensure community engagement in developing viable and sustainable solutions. (GPS)</p> <p>Improve access to safe and universally designed built environments including community facilities and spaces, open spaces and places for active recreation. (GPS)</p> <p>Progressively review township structure plans and urban design frameworks to effectively manage growth, encourage diversity and maintain township character. (GPS)</p> <p>Invest in maintenance, renewal and improvement of community infrastructure. (GPS)</p> <p>The built environment is designed to be low carbon, resilient, well connected, have minimal environmental impact and enhance liveability and local character. (B)</p> <p>Living infrastructure is integrated with the built form to create liveable neighbourhoods, support urban biodiversity and create great urban places. (B)</p> <p>Consider and incorporate ESD in all relevant strategic planning projects including master plans, design and development overlays and incorporated plans. (B)</p> <p>Continue to advocate to the State Government for the approval of the Environmentally Sustainable Design Local Planning Policy. (B)</p>	

	Embed ESD into the design, construction and demolition of Council buildings and infrastructure. (B)
1. Develop a built environment that supports environmentally sustainable design (ESD) and carbon draw-down initiatives. continued	<p>Assess planning applications to ensure they meet best practice environmental standards. (B)</p> <p>Energy and resource security, including business continuity is provided through a diversity of centralised and decentralised systems. (B)</p> <p>Incorporate native vegetation and waterway frontages into Council ownership at time of subdivision. (S)</p> <p>Design infrastructure to encourage sustainable transport via alternative means including cycling. (B)</p> <p>Investigate transport network improvements enabling a cleaner, more user-friendly environment where active transport options are encouraged. (B)</p>
2. Promote environmentally sustainable design (ESD) in residential and commercial buildings.	<p>Advocate for the development of a 'lighthouse' energy and water efficient subdivision within the Shire. (S)</p> <p>Implement local planning scheme amendment to increase number of private and development areas achieving Green Star rating of 5 and/or equivalent nationally recognised sustainability rating. (B)</p> <p>Incorporate ESD in all relevant strategic and statutory planning projects including the municipal strategic statement, master plans, design and development overlays and incorporated plans. (B)</p> <p>Increase the number of programs and activities that promote residential and commercial buildings achieving above mandatory standards. (B)</p>
3. Establish and support partnerships with other agencies, community groups and industry that encourage environmentally responsive infrastructure design.	<p>Investigate City of Yarra and City of Greater Bendigo concept 'Sustainable Design in the Planning Process' Program and Assessment that is cutting edge in placing ESD through the planning scheme and ascertain if it can be applied to GPS. (N)</p> <p>Develop partnerships with other Councils in Victoria to strengthen policy and guidance in the planning scheme to achieve more sustainable design outcomes. (N)</p> <p>Advocate in partnership with other Councils and key stakeholders for strengthening of Ecological Sustainable Development (ESD) principles in the state section of the planning scheme. (B)</p>
4. Educate the community, developers and businesses about environmentally responsive infrastructure design and ways to implement it.	<p>Deliver two programs and two activities annually that promote residential and commercial building achieving benchmark and mandatory standards. (B)</p> <p>Support the delivery of one (minimum) carbon draw down initiative per year. (S)</p> <p>Support and raise community awareness of the benefits of ESD policy standards and practices. (B)</p> <p>Develop educational material and programs promoting the benefits of ESD and promote existing programs and materials. (B)</p> <p>Develop and distribute a pre-purchase information pack and checklist to assist prospective vendors and purchases of properties in the Shire. (S)</p>

<b>Strategic Direction 4</b>	<b>Sustainable Urban and Rural Design</b>	
<b>Theme 4.2</b>	<b>Climate change adaptation and mitigation</b>	
<b>Aim:</b>	Foster a community that understands the impacts of climate change, responds positively to future climatic conditions and actively reduces their greenhouse emissions.	
	<b>Targets</b>	<b>Possible Key Performance Indicators</b>
	<p>T 4.2.1: Council is a zero-net emissions organisation and the community is low carbon by 2040.</p> <p>T 4.2.2: Develop and implement the Climate Change Action Plan.</p> <p>T 4.2.3: A reduction of 50% in Council emissions by 2023.</p>	<ul style="list-style-type: none"> <li>Climate Change Action Plan developed and implemented by 2020.</li> <li>Carbon emissions reduced by 25% by 2021.</li> </ul> <p>Carbon Neutral/Climate Change Strategy written.</p> <p>100% renewable energy generation from local and regional sources by 2027.</p> <p>Highly efficient systems and buildings installed by 2027.</p> <p>Carbon emissions from energy use is reduced by %.</p>
<b>Key Implementation Mechanisms</b>	<b>Suggested Actions</b>	
1. Identify and implement actions that support Council carbon draw down to address climate change and reduce Council's carbon footprint.	<p>Establish a whole of organisation approach to effective and efficient climate change action (could be one or more of the following options: climate change strategy, climate change action plan, emission reduction plan, greenhouse strategy, climate change adaptation strategy and toolkit). It will take into consideration mitigation, adaptation, risk management, innovation, and alternative energy sources. (B)</p> <p>Support the delivery of one (minimum) carbon draw down initiative per year. (B)</p> <p>Advocate for higher new building standards, new policy and technology for increased renewable energy, and rule changes for increased proliferation of local and micro-grid renewable energy sharing. (B)</p> <p>Support large scale renewable energy opportunities in the Golden Plains. (GPS)</p> <p>Develop a detailed and costed pathway for GPS to meet the targeted year of zero net carbon. (B)</p> <p>Utilise utility and audit data to prioritise and implement building energy efficiency works. (B)</p> <p>Establish an accurate inventory of the Councils carbon emissions. (B)</p> <p>Reduce average energy usage of the top 10 emitting Council buildings. (B)</p> <p>Undertake life-cycle assessments and costing for all significant building projects. (B)</p> <p>Feasibility study to determine an achievable greenhouse gas reduction target for Council and proved recommendations on how to achieve the target. (B)</p> <p>Feasibility study to determine an achievable renewable energy target for Council and identify Council assets suitable for alternative energy infrastructure including the analysis of life cycle costs and benefits of infrastructure. (B)</p> <p>Transport – change usage of fuel for Council vehicles to alternative suitable options. (B)</p>	
1. Identify and implement actions that support Council carbon draw down to	<p>Reduce Councils CO<sub>2</sub>e emissions from street lighting, buildings and facilitates. (B)</p> <p>Reduce the energy consumption of Council assets – including buildings and street lights. (B)</p>	

<p>address climate change and reduce Council's carbon footprint. Continued.</p>	<p>Increase the percentage of energy consumed by Council obtained renewable energy sources. (B)</p>
<p>2. Strengthen community capacity to effectively respond to current and future challenges related to climate change.</p>	<p>Identify and implement actions that enable GPS to support renewable energy for residents, businesses and other significant land users and partnership opportunities for large scale solar. (S)</p> <p>Support programs for households and businesses that facilitate improved energy efficiency, use of renewable energy and reduce costs. (B)</p> <p>Help the community reduce energy consumption within the built environment. (B)</p> <p>Help the community increase the use of renewable energy. (B)</p> <p>Help the community to incorporate best practise energy initiatives through planning processes. (B)</p> <p>Support and encourage community resilience to respond to a changing climate and the impact of natural disasters. (GPS)</p>
<p>3. Establish and support partnerships with other agencies, community groups and education facilities to improve understanding and action on climate adaptation.</p>	<p>Work with all levels of government, industry and education to identify future technology and infrastructure opportunities for the Golden Plains. (B)</p> <p>Engage with developers and utilities to encourage renewable and low carbon energy option across new developments and key growth precincts. (B)</p> <p>Collaborate with neighbouring Councils to inspire and learn from each other to successfully mitigate the impacts of climate change (e.g. G21). (B)</p> <p>Continue working in partnership with other local, state and federal governments and relevant organisations to achieve climate change adaptation and mitigation outcomes. (B)</p> <p>Participate in regional and Council specific energy efficiency, renewable energy and climate-ready programs that assist the community and businesses to understand and reduce their greenhouse gas emissions and increase their energy resilience. (B)</p> <p>Work with partners to increase community awareness on the benefits of energy efficiency and renewables. (S)</p>
<p>4. Educate and empower the community, community groups and landholders about the impacts of climate change and actions on climate adaptation.</p>	<p>Annual promotion of sustainable businesses and property initiatives. (B)</p> <p>“Open house’ and ‘Best Practise’ Tours. (C)</p> <p>Support all schools to implement the Energy Module of the ResourceSmart framework. (N)</p> <p>Develop in response to need 2 community-based energy efficiency and renewable energy projects. (B)</p> <p>Support and implement community and business education programs to increase understanding of the local impacts of climate change and how to be climate ready. (B/C)</p> <p>Engage with community on ways to adapt to future climate scenarios by disseminate climate change adaptation-related information to the GPS community. (B/C)</p>

<b>Strategic Direction 4</b>	<b>Sustainable Urban and Rural Design</b>	
<b>Theme 4.3</b>	<b>Parks and green places</b>	
<b>Aim:</b>	Protect, enhance and increase our parks and green spaces to ensure a network of land and water that supports recreation and sport, trails and paths, nature conservation and visual relief from the urban environment.	
	<b>Targets</b>	<b>Possible Key Performance Indicators</b>
	<p>T 4.3.1: Increase the canopy cover in built areas to 40% by 2040.</p> <p>T 4.3.2: Review and implement the Open Space Strategy.</p> <p>T 4.3.3: Increase community participation in land use planning processes that involve securing land assets for future public open space.</p>	<ul style="list-style-type: none"> <li>Review and implement the Open Space Strategy by 2023.</li> <li>Increase in canopy cover in built areas by 20% by 2030.</li> <li>Review and implement the Paths and Trails Strategy by 2025.</li> </ul> <p>Open space contribution policy written by 2019.</p> <p>Number of new major subdivisions that have &gt;10% public open space compared with those that have &lt;10% public open space.</p> <p>Increase hectares of open space/# resident (baseline x Ha/# resident).</p> <p>Increase the percentage of indigenous vegetation cover across municipality.</p> <p>Increase the amount of tree canopy cover in urban areas.</p> <p>Increase participation rates of residents using community gardens or home produce growing.</p>
<b>Key Implementation Mechanisms</b>	<b>Suggested Actions</b>	
1. Protect and expand a diverse and green network of open spaces and parks under Council management.	<p>Develop an Urban Forestry Strategy. (B)</p> <p>Write a Public Space plan (building on what Greater Bendigo has recently achieved). (N)</p> <p>Use water sensitive urban design (WSUD) principles in the construction and management of open space. (B)</p> <p>Maintain and manage the Significant Tree Register. (S)</p> <p>Identify, protect and enhance the ecological value of open spaces and parks throughout the Golden Plains. (B)</p> <p>Manage Council open spaces using best practice. (C/B)</p> <p>Preserve and enhance the mix of public space environments. (B/C)</p> <p>Open spaces are protected from urban expansion over embellishment and utility encroachment. (C/B)</p> <p>Cultural, heritage and historical values and space within our public open spaces are enhanced and preserved. (B/C)</p>	
2. Identify, establish and protect public open space that meets environment, community and Council needs	<p>Urban greening program to include but not limited to:</p> <ul style="list-style-type: none"> <li>Increase the % of indigenous vegetation cover across the Golden Plains. (B)</li> <li>Increase the amount of tree canopy in urban areas. (B)</li> <li>Increase the number or land area of community gardens. (B)</li> </ul> <p>Update and implement the path and trails strategy. (GPSC)</p>	

<p>through effective land use planning.</p>	<p>Deliver a range of public space environments that can cater for regional, municipal and local needs. (B)</p> <p>Maximise quality green and open space in new growth precincts. (B)</p> <p>Open space is flexible and adaptable to allow for diverse recreational, sporting and cultural experiences. (B)</p>
<p>3. Provide urban landscapes that promote community connection to the environment and nature and encourages the use of green network of open spaces and parks.</p>	<p>Program to deliver and maintain 2 street tree-planting projects per year. (B)</p> <p>Nature strip guidelines to promote biodiversity and invasive weed management. (B)</p> <p>Township and urban centre street trees. (B)</p> <p>Investigate our social infrastructure to understand our current and future space needs. (B)</p> <p>Walk/run/cycle path network. (B)</p> <p>Develop paths and trails along natural features like rivers, creeks and ridgelines where feasible. (B)</p> <p>Continue to activate the parks and open spaces via bike and walking networks. (B)</p> <p>Open space provides the green frame around and within our built form to connect us to the environment and create a strong sense of identity within a community of communities. (B)</p>
<p>4. Establish and support community partnerships that encourage the protection, enhancement and utilisation of parks and green spaces.</p>	<p>Work with all levels of government to protect and preserve significant parks and open spaces (e.g. Enfield State Forest etc). (B)</p>
<p>5. Educate and empower the community about the benefits of parks and green spaces and ways to utilise them.</p>	<p>Promote the use of shared green space by educating and engaging our community. (B)</p> <p>Engage with the community, residents and businesses, to increase their awareness on the value of parks, plant and wildlife. (C/B)</p> <p>Develop nature strip guidelines for establishment of food growing areas.</p> <p>Develop community orchard areas.</p>

<b>Strategic Direction 4</b>	<b>Sustainable Urban and Rural Design</b>	
<b>Theme 4.4</b>	<b>Waste management</b>	
<b>Aim:</b>	Reduce waste to landfill through innovative waste management and resource recovery, changed community behaviours and fit for purpose infrastructure.	
	<b>Targets</b>	<b>Possible Key Performance Indicators</b>
	<p>T 4.4.1: Develop a Waste Management Strategy by 2019.</p> <p>T 4.4.2: Greenwaste removed from the community waste stream (Targets to be defined in Waste Management Strategy 2019).</p> <p>T 4.4.3: 100% Organic waste removed from waste stream of Council facilities by 2040.</p> <p>T 4.4.4: 50% reduction in reported incidents of litter dumping on Council owned and managed land.</p> <p>T 4.4.5: 25% reduction of existing roadside stockpiles removed and remediated by 2027.</p>	<ul style="list-style-type: none"> <li>• Resource Recovery and Waste Management Strategy written by 2020.</li> <li>• Council waste, recycling and greenwaste audited and reduced by 50% by 2030.</li> <li>• 10% reduction of existing roadside stockpiles removed and remediated by 2023.</li> </ul>
	<b>Key Implementation Mechanisms</b>	<b>Suggested Actions</b>
	<p>1. Provide resource recovery and waste management and minimisation practices that are innovative, effective and reflect best practice.</p>	<p>Review and write the Resource Recovery and Waste Management Strategy. (GPS)</p> <p>Reduce contamination rates of kerbside recycling collection service. (B)</p> <p>Increase usage rate for transfer station/resource recovery centres. (B)</p> <p>Reduce waste (solid, green &amp; recyclables) being sent to landfill (kg/%). (B)</p> <p>Develop greenwaste-recycling facility by 2030 for intensive Ag industries and local residents. (B)</p> <p>Innovative solutions and technologies are tested and adopted to achieve waste and resource efficiencies and grow the economy. (B)</p> <p>Increase diversion from landfills across the 3 main waste streams. (B)</p> <ul style="list-style-type: none"> <li>• municipal solid waste,</li> <li>• commercial and industrial,</li> <li>• construction and demolition.</li> </ul> <p>Create public litter education and recycling programs and the strategic use of street sweeping, gross pollutant traps and enforcement that targets hotspots. (B)</p> <p>Implement waste and recycling infrastructure, signage and educational information at Council facilities including halls, community centres, sports facilities and other leased facilities. (B)</p> <p>New developments within the Golden Plains to incorporate best practice waste and resource recovery. (B)</p> <p>Develop a strategy for roadside litter collection. (S)</p> <p>Encourage development of sustainable waste management technologies within the Shire (e.g. Biochar, large scale composting). (S)</p>
	<p>2. Empower the community to understand and take responsibility for their own waste</p>	<p>Work with Grampians Central West Resource Recovery and Waste Management (GCWRRWM) Group to educate and reduce waste consumption. (B)</p> <p>Recycling program that reduces contamination. (B)</p>

<p>creation and act to minimise it.</p>	<p>Reduction on food waste going to landfill (investigate 'Food Know How' program from yarra, 'Love Food Hate Waste', Get it right on bin night education material). (B)</p> <p>Increase home recycling and diversion of organic waste. (B/C)</p> <p>Encourage the business community, commercial and industrial waste produces to seek opportunities to use waste as a resource and reduce waste generation. (B/C)</p> <p>Work with business and industry located in GPS to reduce plastics and packaging including plastic bags. (C/B)</p> <p>Create and implement a kerbside bin inspection and monitoring program to reduce contamination and raise awareness of waste and recycling, encourage correct use of bins and avoid contamination. (B)</p> <p>Work with the community to provide clean streets and waterways by reducing littering and dumped rubbish. (B)</p> <p>Discourage rubbish dumping at identified hotspots. (S)</p> <p>Provide and communication collection points for mobile phones and small batteries. (S)</p>
<p>3. Establish and support partnerships with other agencies, our community and industry to further reduce the volume of waste going to landfill and explore innovative waste management and resource recovery mechanism.</p>	<p>Work with other Councils and the GCWRRWMG on advocacy campaigns and to identify future opportunities utilising new technologies. (S)</p> <p>Consistently seek new models and partnership in waste management to maximise resource recovery. (B)</p> <p>Advocate for container deposit legislation and product stewardship. (C/B)</p> <p>Advocate for change in policy at state and federal level to create strong policy around product stewardship and reducing plastic and packaging. (B/C)</p> <p>Council to support Clean Up Australia Day and other community waste reduction /collection activities. (S)</p> <p>Work with stakeholders to recover resources from current waste streams. (B)</p> <ul style="list-style-type: none"> <li>• Implement kerbside organic waste collection</li> <li>• Identify opportunities with business and industry to recover waste and divert organic waste</li> </ul>
<p>4. Educate the community, community groups, businesses and landholders about ways to reduce the volume of waste going to landfill.</p>	<p>Develop a business Sustainable Consumption Program focused on waste avoidance, resource recovery, and reduced pollution to storm water. (B)</p> <p>Educate the community about the waste management hierarchy and that disposal is the last resort action. (B/C)</p> <p>Create awareness and promote the concept of 'close the loop' concept and circular economies by consuming less and recovering what we use. (B/C)</p> <p>Design and implement community education programs that target various waste streams from the perspective of avoidance, reuse, repair and recovery. (C/B)</p> <p>Implement education and behaviour change initiatives to increase the capacity of residents and businesses to correctly dispose of their waste and improve recycling. (B/C)</p> <p>Support schools to complete the Waste module from ResourceSmart. (N)</p> <p>Promote 'only rain down the drain' education programs to reduce the volume of litter reaching storm water drains - IWM / WSUD's Initiatives. (S)</p>

<b>Strategic Direction 5</b>		<b>Council Leadership</b>
<b>Theme 5.1</b>		<b>Governance</b>
<b>Aim:</b>		Demonstrate leadership in environmental sustainability and empower action with community groups, industry, other agencies and the wider community.
<b>Targets</b>		<b>Possible Key Performance Indicators</b>
<p>T 5.1.1: Measure and reduce Council's ecological footprint by 25% by 2027.</p> <p>T 5.1.2: Develop and implement an Environmentally Sustainable Governance Action Plan by 2019.</p> <p>T 5.1.3: 50% of goods and services utilised by Council are from sustainable sources.</p>		<ul style="list-style-type: none"> <li>• GPS Environmentally Sustainable Governance Action Plan developed by 2019 and implemented by 2020.</li> <li>• GPS Environmental Footprint measured by 2020.</li> <li>• GPS Environmental Footprint reduced by 10% by 2023.</li> <li>• The number of goods &amp; services that are from sustainable sources.</li> </ul>
<b>Previously mentioned in other themes:</b>		
3.1 Biodiversity	Develop and implement management plans for Council owned and managed conservation reserves.	
3.2 Invasive Species	Reduction in the coverage of declared weeds and environmental weeds on Council owned or managed land by 70% by 2027.	
	Develop and implement an Invasive Species Program by 2027.	
3.3 Water Security	Reduce Council's potable water consumption by 20% by 2027 against a 2018 baseline.	
3.4 Fire and planned Burning	Implement a minimum of five burns a year in Council owned and managed land.	
	Increase the length in km of roadside burns on Council roadsides by 10% using the 2018 baseline by 2027.	
3.5 Aboriginal cultural heritage land management	50% of Council owned and managed reserves incorporate traditional owner naming conventions and cultural interpretations developed in collaboration with Wadawurrung people.	
	In partnership with Wadawurrung and CFA develop a cultural burning program that delivers eight cultural burns by 2027.	
4.1 Environmentally responsive infrastructure design	All new Council developments are designed within Environmentally Sustainable Design principles and are verified as achieving an energy star rating of 6 or above, by 2023.	
	Existing Council buildings are audited for environmental impacts and these impacts are reduced by 50% by 2027.	
4.2 Climate change adaptation and mitigation	Council is a zero-net emissions organisation and the community is low carbon by 2040.	
	Develop and implement the Climate Change Action Plan.	
	A reduction of 50% in Council emissions by 2023.	
4.3 Parks and Green Spaces	Review and implement the Open Space Strategy.	
4.4 Waste Management	Develop a Waste Management Strategy by 2019.	
	100% Organic waste removed from waste stream of Council facilities by 2040.	
	50% reduction in reported incidents of litter dumping on Council owned and	

	managed land by 2027.
5.2 Leadership	Council participates in five environmental partnership projects annually. Council leads in the delivery of three environmental sustainability programs by 2027.
<b>Key Implementation Mechanisms</b>	<b>Suggested Actions</b>
1. Develop and implement governance processes that support and facilitate environmentally sustainable practices within the Council.	<p><b><u>Audit &amp; reporting:</u></b>  Minimise ecological footprint of Council operations. (B)  Improve environmental performance management and reporting. (B)  Identify, collect and report on environmental data that will inform future decision-making and achievement of all targets in this Strategy and Council Plan. (B)  Automate resource management (waste, water and energy) performance reporting for Council. (B/S)  Develop and apply a 'Sustainable Design Scorecard' for all Council developments. (S)</p> <p><b><u>Water:</u></b>  Develop a sustainable water use plan for city operations. (B)  Baseline assessment of water consumption. (B)</p> <p><b><u>Energy:</u></b>  Reduce greenhouse gas emissions by sector (waste, fleet, buildings) (B)  Increase use of renewable energy. (B)  Develop a policy on energy efficient lighting including support for the MAV Greenlight campaign. (S)  Investigate opportunities to offset fleet greenhouse emissions through Council implemented revegetation programs or existing structures such as Greenfleet. (S)  Investigate sourcing a portion of Council's energy needs from accredited green energy sources. (S)  Develop a policy that incorporates fuel efficiency considerations into the purchase of Council plant and equipment. (S)</p> <p><b><u>Waste:</u></b>  Review and update Councils Waste Strategy. (B/GPS)  Reduce Council produced waste (solid and green) being sent to landfill (kg and percentage). (B)  Undertake life-cycle assessments and costing for all significant building projects. (B)  Baseline assessment of waste generation. (B)  Develop and implement a waste and recycling audit, management and monitoring program for Identified Council buildings. (B)</p> <p><b><u>Policy:</u></b>  Green procurement policies and practices are embedded in all relevant policies and strategies. (B)  Increase sustainability integration across Council departments. (B)  New and existing building meet environmental performance requirements of ESD. (B)  At least three environmental improvements identified in each Departmental work plan. (B)</p>
1. Develop and implement governance processes that	Identify and implement projects to systematically embed sustainability across all Council systems, governance and deliverables. (B)

<p>support and facilitate environmentally sustainable practices within the Council. Continued.</p>	<p>Purchase environmental preferable good and services including clauses in service delivery contacts. (B)</p> <p>Paperless office at Council and use of smart devices for electronic data management and reporting of field activities. (B)</p> <p>Update contracts and tenders with best practice sustainability, social and ethical procurement clauses. (B)</p> <p>Conduct a review of Council owned and managed land to identify and categorise the asset. (S)</p> <p>Develop a Sustainable Purchasing policy to guide purchasing decisions. (S)</p> <p>Conduct a biodiversity audit of Council owned and managed land. (S)</p>
<p>2. Establish and support internal partnerships to facilitate environmentally sustainable practices.</p>	<p>Continue to participate in relevant activities from G21</p> <p>Collaborate and learn from with other Councils on how they manage their internal environmental and sustainable issues. (B)</p>
<p>3. Educate and empower staff to embed environmentally sustainable practices in the workplace.</p>	<p>Develop a staff engagement program that provides training, capacity building and opportunities to embed sustainability across the organisation. (B)</p> <p>Implement an employee recognition program for outstanding environmental initiatives. (B)</p> <p>Explain environmental policies and programs as part of new staff corporate induction. (B)</p>

<b>Strategic Direction 5</b>	<b>Council Leadership</b>	
<b>Theme 5.2</b>	<b>Leadership</b>	
<b>Aim:</b>	Demonstrate leadership in environmental sustainability and empower action with community groups, industry, other agencies and the wider community.	
	<b>Targets</b>	<b>Possible Key Performance Indicators</b>
	<p>T 5.2.1: Increase the community satisfaction rating for overall performance in environmental sustainability (Annual Local Government Community Satisfaction Survey) -Meet or exceed Victorian Council average - 2014</p> <p>T 5.2.2: Council participates in 5 environmental partnership projects annually.</p> <p>T 5.2.3: Council leads in the delivery of three environmental sustainability programs by 2027.</p>	<ul style="list-style-type: none"> <li>• Number of environmental partnership projects participated in per year.</li> <li>• Satisfaction rating for environmental sustainability.</li> <li>• Number of environmental sustainability programs delivered by Council by 2027.</li> </ul>
	<b>Key Implementation Mechanisms</b>	<b>Suggested Actions</b>
	1. Demonstrate leadership in the community by facilitating engagement in environmental issues and solutions.	<p>Facilitate an 'GPSC Environment Advisory Committee'. (C)</p> <p>Provide leadership to deliver positive environmental outcomes. (B)</p> <p>Promote and support community environment days. (B/c)</p> <p>Provide support to schools for events such as National School Tree Day, Arbor Week and World Environment Day. (S/c)</p> <p>Utilise existing community engagement processes and tools to provide ongoing, regular, proactive and engaging avenues for people to discuss environment sustainability. (B)</p> <p>Facilitate transfer of knowledge between local groups, agencies and relevant parties. (B/c)</p> <p>Actively participate in partnership groups and projects and take a lead role where appropriate. (B)</p>
	2. Empower community action through advocacy and support of environmental groups, activities and programs.	<p>Support local community groups involved in biodiversity enhancement projects. (S)</p> <p>Audit planning process to ascertain whether there is a consistent approach to community consultation on environmental issues. (B)</p> <p>Identify, prioritise and promote key environmental events and projects the Council can provide support to the community (e.g. trees, administration, advertising, grants). (B)</p> <p>Council and Councillors provide advocacy on behalf on the community on environmental issues. (B)</p>
	3. Establish and lead partnerships with other agencies, surrounding shires, community groups, industry and the wider community that encourage environmentally sustainable practices in the community.	<p>Establish and maintain forums where environment groups and Council (and other stakeholders) can discuss environmental and sustainability issues. (B)</p> <p>Provide support to Friends of Groups, Landcare and other environmental groups through funds or in-kind support or physical means (e.g. seedlings). (B)</p> <p>Support existing service providers to conduct public workshops on environmental management. (S)</p> <p>Identify and link in with existing programs/projects being delivered by other service providers. (B)</p> <p>Collaborate with surrounding shires/LGA's on environment sustainability issues that extend beyond the GPS shire boundary. (B)</p>

	Continue to foster and build strong partnerships with local, regional, State and Federal authorities and the wider community. (B)
4. Educate the community, community groups, businesses about Council-led environmentally sustainable programs and the ways they can be involved.	<p>Promote environmental and sustainability actions, activities and options on the telephone on-hold system. (B)</p> <p>Identify clear pathways and feedback mechanisms for community. (B)</p> <p>Ensure Council's Communications Strategy supports its sustainability agenda, in particular to (B):</p> <ul style="list-style-type: none"> <li>• Ensure a clear and consistent message for all its environmental engagement activities, particularly those that have a strategic impact</li> <li>• Provide stronger messages for low carbon growth, restoration of degraded landscapes and smart consumption</li> <li>• Engage with our stakeholders and community on Council's environmental leadership journey</li> <li>• Report regularly on Council's environmental performance</li> </ul>

