



Bass Coast Shire Council Natural Environment Strategy 2016 to 2026

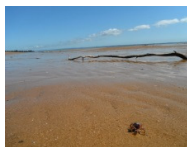
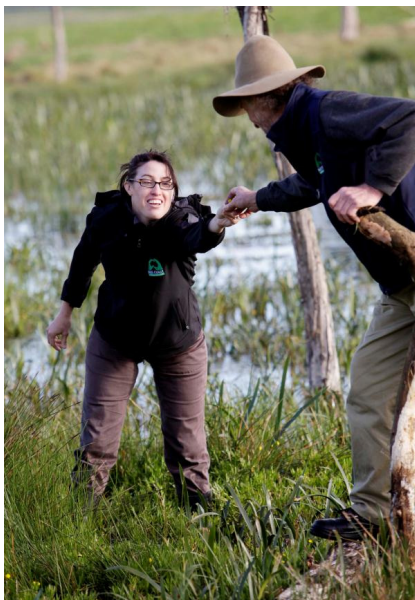


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Acknowledgement

Bass Coast Shire acknowledges Aboriginal and Torres Strait Islanders as the first Australians and recognises that they have a unique relationship with the land and water. The Shire also recognises that we are situated on the traditional lands of the Bunurong/Boonwurrung, members of the Kulin Nation who have lived here for thousands of years. We offer our respects to their elders past and present and through them, all Aboriginal and Torres Strait Islander people.

Adopted by Bass Coast Shire Council 20 April 2016.

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Executive Summary

The *Natural Environment Strategy 2016 -2026* is Council's commitment to preserve, protect, restore and enhance the natural environment across Bass Coast for the next 10 years.

Bass Coast Shire is a natural oasis in an increasingly crowded world and plays an important role in the lives of all Victorians. The unique environment is our most valuable asset and the reason that people make Bass Coast Shire their home, and the reason that we attract 3.4 million visitors every year. Visitors come to Bass Coast for the natural amenity and to see and enjoy the coast, hinterland, native birds and animals and indigenous plants and trees. The Shire has environmental and landscape values of regional and national significance, including Ramsar listed wetlands, marine parks, UNESCO Biosphere and remnant native vegetation.

The *Natural Environment Strategy* recognises that although we depend on our ecosystems and biodiversity for life, they are vulnerable to the choices we make. We are pushing our natural systems; our waterways, coasts, plants and animals, and trees- beyond their ability to cope. This is why it is increasingly important to achieve a balance between people and place.

Council understands that to protect the environment we need to work closely with our partners and our community. We are fortunate to have so many residents who are passionate about their local environment. Local conservation and environment volunteer groups make a significant contribution to maintaining and caring for our natural environment. This Strategy recognises the significant role of these groups and committees and commits Council to continuing to work with and support them.

The Strategy focuses on four strategic directions to achieve this;

- **Mitigating the forecast impacts of climate change by integrating the predictions into our decision making and planning for infrastructure, services and utilities.** We will improve climate change sustainability by helping our community and organisation to make better environmental decisions and respond more effectively to the challenges of our changing climate;
- **Facilitate appreciation of our unique natural environment through sustainable public access.** We will do this by maintaining coast and bushland management, and continuing to fulfil our responsibilities as a land manager under the *Planning and Environment Act (1987)*, *Coastal Management Act (1995)* and the *Crown Land (Reserves) Act (1978)*;
- **Improve health of the landscape through increased biodiversity and indigenous vegetation protection.** We will do this by improving land and catchment management, and working cooperatively to better protect, manage and increase our biodiversity, waterway health, and land management; and
- **Develop community partnerships that promote environmental awareness.** We will do this by building and maintaining our stakeholder

relationships, government and non-government partnerships and community partnerships that promote environmental awareness, on ground action and value.

Each of these four strategic directions contains objectives relevant to Council's operations and the community as a whole. While some objectives can be delivered by Bass Coast Shire Council, the success of many will be dependent on them being delivered in partnership with the community and in co-operation with government agencies and non-government organisations.

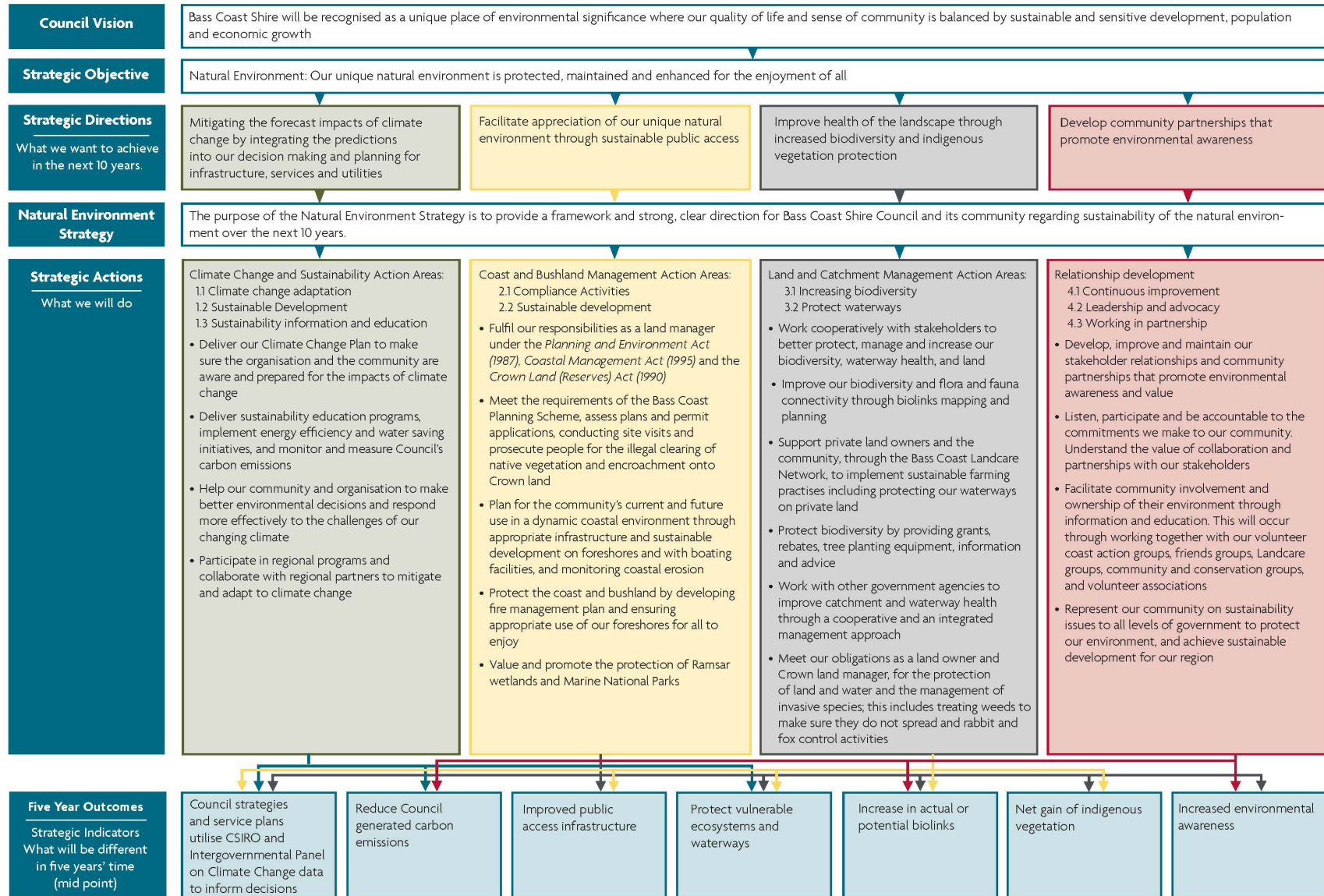
The Strategy will help successive Council's identify and prioritise environment sustainability activities across the Shire, and will increase the capacity and understanding of environmental sustainability issues in the community. The Strategy places emphasis on strategic objectives and action that form a local response to global issues such as the effects of climate change, decreasing biodiversity and environmental awareness and value.

This *Strategy* is our commitment to our community, our partners and to visitors to preserve the natural amenity of Bass Coast Shire for the next 10 years and beyond.



Natural Environment Strategy 2016-26

Strategic Alignment of Vision, Strategic Objective, Directions, Strategy, Actions and Outcomes



What do we mean?

Bass Coast Shire Council acknowledges that there are many meaning and interpretations for the words and phrases; therefore to assist the reader to understand the context of the Strategy the following definitions have been applied.

Environment Sustainability

“Planning and providing for the needs of individuals and communities now and for future generations, creating resilient and prosperous communities and protecting the environment and ecosystem services”¹ (World Commission on Environment and Development, Our Common Future, 1987)

Natural Environment

“The natural environment is essential to our wellbeing. Our landscapes, oceans, water, atmosphere, and biodiversity play an important role in the economy and are fundamental to our Australian identity and way of life.”² (Australian Government, Bureau of Meteorology, 2015)

Sustainable Development

“Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.”³ (Department of Natural Resources and Environment, Victoria’s Biodiversity Strategy, 1997)

Biodiversity

“The natural diversity of all life, the sum of all our native species of flora and fauna, the genetic variation within them, their habitat, and the ecosystem of which they are an integrated part.”⁴ (Department of Natural Resources and Environment, Victoria’s Biodiversity Strategy, 1997)

Wildlife Corridors

“Wildlife corridors are connections across the landscape that link up areas of habitat. They support natural processes that occur in a healthy environment, including the movement of species to find resources, such as food and water.”⁵ (Australian Government, Department of Environment, 2015)

Ecological Community

“An ecological community is a naturally occurring group of native plants, animals and other organisms that are interacting in a unique habitat. Its structure, composition and distribution are determined by environmental factors such as soil type, position in the landscape, altitude, climate and water availability.”⁶ (Australian Government, Department of Environment, 2015)



Introduction

Bass Coast Shire's prosperity comes from its environment which, in turn, drives its economy through liveability, tourism and agriculture. A sustainable environment with sustainable development is critical to our future.

Bass Coast Shire Council is the lead agency to moving our municipality towards a sustainable future, particularly during this period of growth and change. Council accepts that Climate Change is real and impacts our community and our organisation; and we will need to adapt.

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

Council is responsible for many activities that influence and impact our local environment. As the local planning authority, manager of reserves, foreshores, parks and open space, as well as the operator of community infrastructure.

Local government responds to local community needs and has the unique opportunity to be leaders by building community awareness and encouraging sustainable behaviour through education and promoting change in the way we use and care for our environment.

Within Bass Coast Shire, the community values the natural environment in which it lives. The community have a high expectation of their participation and involvement in the natural environment. This brings significant benefits such as increased levels of engagement and diverse input, however these expectations must be managed against legislation and regulation, and ensuring sound evidence based decision making is used in a time where the built and natural environment competes for resources.

The *Natural Environment Strategy* will guide Bass Coast Shire's approach to preserve, protect and enhance the natural environment sustainability over the next ten years. It will help successive Council's identify and prioritise environment sustainability activities across the Shire. The *Strategy* will increase the capacity and understanding of environmental sustainability issues in the community. This *Strategy* places emphasis on the strategic objective and directions, and action that form a local response to global issues such as climate change, decreasing biodiversity and environmental awareness and value.

The *Natural Environment Strategy* is based on practical and achievable actions within Council's remit, capability and capacity.

Beyond this Council will take up its role to lobby, advocate and influence environmental issues, on behalf of the community through its existing networks, and by building new relationships. Recognising all stakeholders and engaging with all levels of government and the community will be crucial to achieving enduring sustainable outcomes for our natural environment.

Purpose and Scope

The purpose of the *Strategy* is to provide a framework and strong, clear direction for Bass Coast Shire Council and its community regarding sustainability of the natural environment over the next 10 years.

The *Strategy* directly supports the vision articulated in the *Council Plan 2013 -2017*:

“Bass Coast Shire will be recognised as a unique place of environmental significance where our quality of life and sense of community is balanced by sustainable and sensitive development, population and economic growth.”⁷

This vision, together with the corporate principles of performance management, financial management and relationship development and management provide the overarching framework under which the *Natural Environment Strategy* has been developed.

The *Natural Environment Strategy 2016 - 2026* focuses on four strategic directions for the sustainable management of the natural environment across Bass Coast for the next ten years:

- **Mitigating the forecast impacts of climate change by integrating the predictions into our decision making and planning for infrastructure, services and utilities.** We will improve climate change sustainability by helping our community and organisation to make better environmental decisions and respond more effectively to the challenges of our changing climate;
- **Facilitate appreciation of our unique natural environment through sustainable public access.** We will do this by maintaining coast and bushland management, and continuing to fulfil our responsibilities as a land manager under the *Planning and Environment Act (1987)*, *Coastal Management Act (1995)* and the *Crown Land (Reserves) Act (1978)*;
- **Improve health of the landscape through increased biodiversity and indigenous vegetation protection.** We will do this by improving land and catchment management, and working cooperatively to better protect, manage and increase our biodiversity, waterway health, and land management; and
- **Develop community partnerships that promote environmental awareness.** We will do this by building, developing and maintaining our stakeholder relationships and community partnerships that promote environmental awareness and value.

The scope of the activities performed under this *Strategy* is limited to the physical boundaries of the Shire, however we acknowledge that our actions have an effect on neighbouring Councils, landowners and environment, both land and water.

Council also wishes to influence discussion and decision making via its relationships and networks, at a regional, national and global level to align with its strategic direction and objectives where possible.

At a practical operational level the *Strategy* will:

- Deliver the community and Council's vision and objectives to manage and protect our natural environment;
- Provide direction for Council to identify and prioritise activity across the municipality;
- Provide clear, practical and achievable actions; and
- Clearly articulate and communicate Councils direction with stakeholder agencies and the community.

“Maintaining a healthy coast is a shared responsibility – the community, all levels of government, and businesses have a role to play.”⁸ Victorian Coastal Strategy 2014



Strategic Context within Council

Bass Coast Shire Council seeks its direction from the community vision, *Bass Coast 2030* with aspirational statements under the following four themes:

In 2030, Bass Coast is a showcase. It is recognised as:

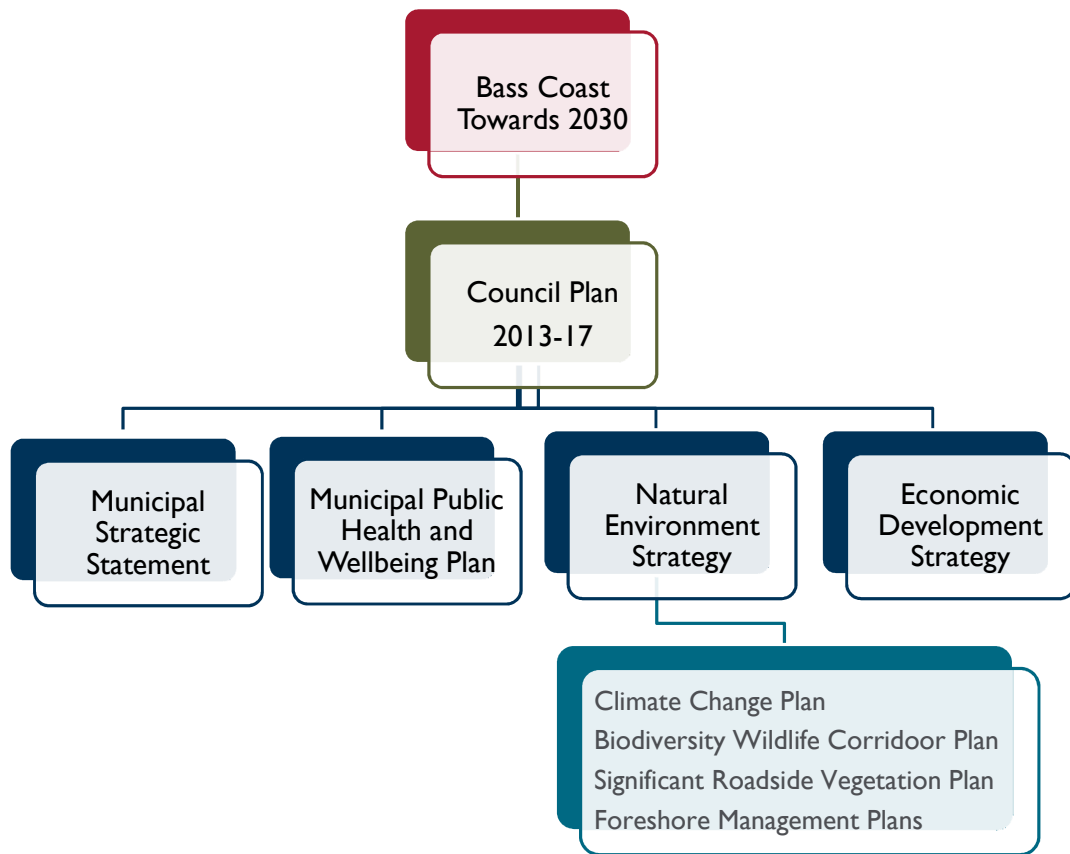
- *A celebration of natural assets;*
- *A window on the history of Victoria;*
- *A village in a technology world; and*
- *A food bowl for Victoria.*



From these aspirations Council's vision for its community is that:

“Bass Coast Shire will be recognised as a unique place of environmental significance where our quality of life and sense of community is balanced by sustainable and sensitive development, population and economic growth.”⁷ Council Plan 2013 -17





Flowchart 2: Strategic document hierarchy

Council’s Vision is further supported by the strategic objective set for the *Natural Environment*, one of five key objectives in the *Council Plan 2013 - 17*:

“Our unique natural environment is protected, maintained and enhanced for the enjoyment of all.”⁷

The *Natural Environment Strategy* will guide Bass Coast Shire’s approach to natural environment sustainability over the next ten years. The *Strategy* strategic directions serve to have strong links to deliver the community vision.

The scope of this *Strategy* is confined to the natural environment; however it shares direct links with many other Council strategies, policies and plans.

The *Bass Coast Shire Waste Management Strategy 2016 – 2026*, in particular impacts the environment and Bass Coast Shire Council recognises waste management as a fundamental element in caring for our natural environment and as such has a separate

Waste Management Strategy to provide sustainable solutions to the collection, disposal, resource recovery and aftercare of waste.

Local government also operates within a broader policy context and governance framework, including the international community, and Federal and State government.

The *Natural Environment Strategy* has been developed in line with relevant legislation and policies that have been adopted at both the Federal and State level. Further detail on this broader strategic policy context can be found in Annex I.

Through this document there are text boxes designed to highlight particular works of interest, provide an example of how the strategic objective can be delivered, and provide the reader further information and explanation about a particular strategic objective. Text boxes have not been provided for all strategic objectives. The number within the text box relates to the action area and tables.

“Local governments have an important role to play in assisting communities to understand the impacts of climate change and in implementing options to address climate risk.”⁹ Productivity Commission 2013

Strategy Objective 4.3.4 - Facilitate the activities of volunteer community coastal action groups and friends groups to achieve agreed environmental outcomes.

Volunteer groups help Council manage 42 kilometres of foreshore and approximately 150 hectares bushland reserves in Bass Coast. They help with revegetation, weed removal, remnant vegetation protection, and environmental awareness and education - work which Council values and supports.

Council provides coast action groups, friends groups and conservation groups with funding and equipment for their activities. Groups also apply for grants for small infrastructure projects such as boardwalks, walking tracks, bird housing and recreational facilities, which enhance and protect our environment.

There are many volunteer groups across Bass Coast Shire that meet and undertake works to protect our owned and managed foreshores and bushland reserves all year round. New volunteers are always welcome to join these friendly, community-minded groups.

Established volunteer groups include, but are not limited to, Ventnor Coastcare, Saltwater Creek Coastcare, Red Rocks Coastcare, Silverleaves Conservation Society, Rhyll Coast Action, Cape Woolamai Coast Action, Friends of Tenby Point Foreshore, Cape Paterson Residents and Ratepayers Association, Newhaven Coast Action, Coronet Bay Reserves Committee, Three Creeks Landcare, South Gippsland Conservation Society, Phillip Island Conservation Society, Friends of Scenic Estate and Friends of the Hooded Plover.

Our Biggest Challenges

We acknowledge that we live in a dynamic environment, subject to social, economic and environmental influences. Changes in climate, biodiversity, land use, economy, and lifestyle all place demands on our natural environment.

“To ensure a strong economy in future years, it is important to understand the links between the economy and the environment, and the risks and opportunities ahead.”¹⁰ The Future Economy Group, June 2014.

The following threats and opportunities to the natural environment have been recognised within the Shire. Further information on Bass Coast Shire natural environment and biodiversity landscape is provided in Annex 2.

Climate Change

Climate change and climate variation have emerged as key issues for biodiversity and environmental management throughout the world. The Bass Coast Shire environment is exposed to the effects of climate variability and we will need to employ long-term adaptation and sustainable development processes to care for it.

Under the majority of likely predicted climate futures, Bass Coast will experience increases in extreme weather events, more coastal flooding, increased erosion and coastal recession, increased frequency of heatwaves, bushfires, drought, floods and changes to rainfall patterns, greater risks to water supply, and greater impacts on human health, particularly the elderly, rural and indigenous communities and those with existing medical conditions.

Increased erosion and temperatures will fundamentally change the nature of recreational areas such as beaches, heathlands and woodlands. Loss of beaches and dunes by erosion will change the way people can use them and the infrastructure that can be built. Changes in vegetation may make areas more fire prone or more fragile and increasing storms will make lightning strikes more common.

Rapidly increasing costs of utilities are driving resource efficiency in both industry and the community. Increased responsibility under environmental legislation and the increased cost penalties associated with non-compliance are also driving improved practices across business. However, some legislative changes are threatening our environment as we attempt to mitigate risks, rather than adapt to change (e.g. clearance of native vegetation in response to bushfires).

The changes in climate also present new opportunities for the Bass Coast Shire community. These include expansion of the renewable energy market, increased sustainable business practices, increased focus on ecotourism, sustainable transport and buildings, better environmental waste management practices, the sustainable growing, sharing and marketing of food, and Federal and State government funding opportunities driving mitigation, adaptation and education projects.

Council and the community have started to ready themselves for the impacts of climate change. Council is doing this through the development, implementation and ongoing review of its Climate Change Plan, and the community through projects lead by community organisations such as the Energy innovation Co-operative, Landcare, Ground Swell Bass Coast and Clean Ocean Foundation.

Council has recognised climate change as a corporate risk and is adapting its operations and business planning. Informing and empowering the community to prepare for the impacts of climate change will continue through adaptation programs and ongoing education.

Erosion

Coastal managers and communities face the ongoing challenges of future climate change, sea-level rise and increases in the frequency and intensity of natural disaster events concurrently with increased development demands and environmental protection.¹¹

Coastal infrastructure and foreshore access, such as staircases and boardwalks, are at risk from increased frequency and magnitude of weather events and sea level rise. The impact of climate variation on the Shire means an increasing risk of loss of some beaches, cliff erosion and slumping, and loss of mud flats.

These changes are already evident within the Shire's natural environment through increased erosion events resulting from storm surges and king tides at Anderson Inlet, Cowes East, San Remo, Grantville and Rhyll foreshores, and high rainfall and flooding causing landslips and tunnel erosion in the Bass Hills.

“The coast is the interface between the land and the sea. It is not static; it changes with the influence of the tides, wind, waves, and weather systems such as storms”¹² Gippsland Regional Coastal Plan 2015 - 2020

Much of the hinterland beyond the coastal plains consists of large de-vegetated rolling hills, part of which is the Western end of the Strzelecki Ranges. There is approximately 8% of the original Damp Forest EVC remaining in the Strzelecki Ranges. Most of this is in the eastern end of the ranges and virtually none remains in Bass Coast Shire. These steep slopes are prone to erosion and land slips. Much of the steeper slopes have poor productivity and contribute significant amounts of sediment and nutrients into the sea.¹³

The increased sediments from catchment erosion also effects river and stream health through increases turbidity and nutrient loads. This has a flow on effect on the health of our ports and bays to natural values such as fish and birds. Loss of fringing vegetation could then lead to more erosion.

Indigenous revegetation programs on our foreshore dunes and hinterland areas present the greatest non-engineering opportunity to mitigate against erosion. However adaptation to more sustainable agricultural practices, and work with our dynamic coastal processes offers a better long term sustainable solution.

Urbanisation and Industrialisation

Predicted population growth from both permanent residents and holiday makers in the Shire means a growing demand for land availability and development. The losses of agricultural land as settlement boundaries have been established to accommodate growth result in changes to the economy and amenity. Sustainable land-use practises and planning are critical to protecting biodiversity and minimising habitat disturbance. Urbanisation directly removes or modifies habitat and reduces the quality and diversity of remaining habitat, simplifying its structure by fragmentation and modification of the natural environment processes¹⁴

To support the growing infrastructure demands of our communities and providing services at a global level, we are increasing the industrial landscape and placing a higher strain and stress our environment and natural resources to survive. Industrialisation within Australia generally involves the types of enterprises that move people and goods around, and maintain contact in the context of an expanding social and economic life. Recent issues such as construction of the Victorian Desalination Plant, regulating and legislating of an unconventional gas mining industry, erection of wind turbines and the slated development of a container port in Westernport have potentially significant impacts on the Bass Coast natural environment.

Over the last four decades Victorians have increasingly valued biodiversity for its intrinsic and utilitarian values (e.g. sustainability, ecosystem services). It is fundamental to our evolving sense of place and the interconnectedness of life.¹⁵

The predicted population growth presents an opportunity to increase the involvement of our community in their environment. Many of our volunteer groups are aging and group sizes likely to decrease accordingly. Engaging our young people in volunteer activities through information and increased awareness of the value of the environment, to attract them to volunteer will increase the sustainability of the groups, as well as social capital and networks.



A balance can be achieved in land-use planning between urbanisation, agriculture and rural character through structure plans and the Rural Land Use Strategy, and the application of Environmentally Sustainable Design (ESD) principles and Water Sensitive Urban Design (WSUD) principle to meet our community's needs. The impact of industrialised activity on ground (e.g. aquifers) and surface (e.g. catchment runoff) waters must be known and considered prior to industry legislation and regulation.

Tourism places stress on our natural environment and built infrastructure, particularly our beaches and reserves. Educational opportunities present through partnering with our stakeholder organisations, such as Phillip Island Nature Parks to increase environmental awareness and care, managing distribution and placement of infrastructure to protect our natural assets. This includes walking paths, educational signage and conservation protection areas.

The opportunity for local government to advocate for its community at a state and federal level, and for the community to mobilise around issues that will forever change our environment should be embraced. Council submissions to Senate Inquiries and Parliamentary Bills, appearances at panel hearings and strong relationships with our state and federal representatives enable our community to be heard. Collaboration at a regional level with our neighbouring Councils via membership organisations, creates a social license through a critical mass of opinion that cannot be ignored.

Activities such as increased community and business connectivity can be approached in a more sustainable manner through the use of new technology in an increasing digital age. The economic development of National Broadband Network will assist us to work smarter, overcome geographic barriers and decrease our need to travel, and hence our reliance on fossil fuels to connect us.

Strategy Objective 1.2.2 - Develop an Environmentally Sustainable Design (ESD) Policy and join as a Council Alliance for a Sustainable Built Environment (CASBE) member.

The Council Alliance for a Sustainable Built Environment (CASBE) is a collection of Victorian municipal governments committed to the creation of a more sustainable built environment both within and beyond their municipalities. The Alliance became known as CASBE in 2007 with the focus around the joint implementation, promotion and support of the Sustainable Design Assessment in the Planning Process (SDAPP) programme. In 2011 a membership structure was established, formalised by a Memorandum of Understanding (MoU) between CASBE Councils and the MAV. That MoU operated for a three year period until June 2014. CASBE membership is now open to any Victorian local government.

The Municipal Association of Victoria is the statutory peak body for local government in Victoria. It is incorporated by the Municipal Association Act 1907, which defines the MAV's purpose and how the organisation operates. The MAV is governed by a State Council comprised of representatives of member councils.

Biodiversity

Loss of biodiversity caused by human induced climate change is formally listed as an endangering process under the *Environment Protection and Biodiversity Conservation Act 1999*.

Land clearing practises for settlement, farming and mineral mining in the 1800 and 1900's has resulted in land degradation issues such as salinity, soil acidification and loss of soil carbon. European settlement introduced plant and animal pest species that we continue to manage, including rabbits, deer, boxthorn, blackberry and gorse. Today less than 10% of indigenous vegetation remains from pre 1700 in Bass Coast Shire.

Over ten Victorian Ecological Vegetation Classes (EVC's) found in the Shire are considered endangered, three are vulnerable and three severely depleted. There are records for 23 rare or threatened native flora (VROT) species on Phillip Island alone¹⁶.

Provisions in Bass Coast planning scheme can assist with the protection, retention and offset of native vegetation losses. Where native vegetation is removed unlawfully enforcement action can be undertaken. With reviews of the local planning scheme, Federal and State government legislation and regulation comes opportunities to further protect our native vegetation and biodiversity. Existing controls are in place for the removal of native vegetation and if a permit is issued for the removal of native vegetation on private land, the permit often includes a replanting program to not only replace, but add/increase the number of plants and species.

“Corridors and linkages, for which there is real community support, are pivotal for biodiversity protection across fragmented and privately owned landscapes”¹⁷ Commissioner for Environmental Sustainability Victoria, 2012.

Protection and enhancement of indigenous vegetation can be promoted through innovative programs, such as Native Vegetation Offset Schemes where remnant vegetation is protected and enhanced into perpetuity under legislation and regulation, and partnering with the community through the Bass Coast Landcare Network to gain social capital to increase biodiversity and wildlife corridors on private property.

Considerable biodiversity mapping, using a validated data and weighing criteria, has recently been undertaken across the region and Shire identifying existing biolinks and wildlife corridors. This mapping, along with other information, will inform a Biodiversity Biolinks Plan for the Shire to enable the greatest return on investment of resources to increase biodiversity in a sustainable way.

An established and agreed principle for creating a biolink is to achieve 30% or more vegetation cover between areas of remnant vegetation that have a high biodiversity value¹⁸. Working to this principle the most effective action to undertake is to form links between key biodiversity asset areas. This data can be measured to give a total extent of

native vegetation cover in the Shire, and can then be re-calculated after five years to give a percent change in cover.

The Biodiversity Biolinks Plan mapping can be used to support an amendment to the Bass Coast Planning Scheme that would apply the Environmental Significant Overlay to the areas identified as significant linkages. The intent is to use the maps to inform statutory planning where suitable revegetation works could take place to offset clearing losses in urban areas.

An outcome of creating significant biolinks and wildlife corridors is biodiversity protection and enhancement. Further biodiversity and specific habitat mapping exercises could be undertaken by community groups and organisations, such as Birdlife Australia and Phillip Island Nature Parks, as a measure of the impact these works are having.

It is predicted that higher temperatures will increase bushfire risk along the coast. The management of fire within a modified and fragmented landscape is extremely important to sustaining biodiversity. With the correct timing and frequency of fire, a positive outcome can be gained for maintenance of flora diversity, habitat structure and habitat resources for native animal species. Fire management plans, including prescribed burns where managed appropriately, can see a benefit to the environment and prevent the accumulation of biomass fuel.

However, with changes in climate plants that can grow within the Shire will change, it may not be possible to increase biodiversity if there are no areas of retreat for coastal vegetation types. Increased frequency of fire may fundamentally alter vegetation types and wildlife currently present in the Shire.

“With responsibility for over half of the Australian landmass, the management techniques used by farmers have significant implications for the health of our environment and natural resources.”¹⁹ National Sustainability Council, 2013



Strategy Objective 4.3.2 - Continue to work in a supportive partnership, and within a Memorandum of Understanding with Bass Coast Landcare Network to achieve agreed biodiversity outcomes.

One of the most critical local environmental issues for Bass Coast Shire is that there is less than 10% of indigenous bush remaining from pre 1700s. Council recognises that its natural environment, particularly its biodiversity, is the key to its economic prosperity into the future through tourism and sustainable agriculture.

Landcare is a respected brand in urban and regional communities, and is often able to reach landowners, educate and work with them towards more sustainable land management practices. Lasting positive relationships are built between Council and landowners through Landcare.

The Bass Coast Landcare Network is a successful network of ten local Landcare groups, with over 1,000 members.

Landcare activities build social capital in the Bass Coast community and promote sustainable agricultural practises and increase biodiversity.

The current gains made in increased biodiversity, weed management and community involvement and relationships have been achieved through accessing the knowledge, social capital and capability of its Landcare Network.

Bass Coast Shire Council has invested in the local Landcare Programs since 1990. A Memorandum of Understanding signed in 2006 and 2014 has strengthened this partnership, making Landcare part of Council's core business.

The Bass Coast Landcare Network/Bass Coast Shire Council partnership won the Local Government Landcare Partnership Award in 2010.



Invasive Species

Invasive species threaten native biodiversity through their ability to change and destroy habitats and ecosystems. They disrupt ecosystem functioning, threatening soil health, productivity of agricultural lands, river and stream areas, wetlands and foreshores.

Environmental weeds out-compete native plants for nutrients, water and space. Australian governments have agreed, based on an assessment of invasiveness, potential for spread and environmental, social and economic impact that 32 plants have been declared Weeds of National Significance in Australia.²⁰

Under the *Environment Protection and Biodiversity Conservation Act 1999*, a number of feral animals are recognised as threats to native animals and plants. Within Bass Coast Shire this includes the red fox, feral cats, rabbits, and bird species such as Indian Mynas and Starlings.

With all invasive species come disease, fungi and parasites that can affect native flora and fauna, and agricultural crops and livestock.

Strong relationships with our partners provide a platform for a collaborative approach across the Shire and neighbouring councils and land managers where resources can be combined to manage and abate invasive species. The control of rabbits and foxes across the Shire will have greater success with a collaborative and strategic approach as proposed in the Bass Coast Rabbit Strategy under development of which Council is a partner. This approach has demonstrated success with the near eradication of foxes from Phillip Island.

“Catchments are connected from top to bottom and what happens throughout the catchment has a strong influence on water quality in coastal wetlands, estuaries and marine waters.”²¹
Victorian Coastal Strategy 2014



Strategy Objective 4.3.1 - Continue to work in a supportive partnership, and within a Memorandum of Understanding with Phillip Island Nature Parks to achieve agreed environmental objectives.

The Little Penguins⁶

The world famous Penguin Parade is the Nature Parks' and the State of Victoria's major natural wildlife attraction. Little Penguin colonies at the Summerland Peninsula support a breeding population of an estimated 32,000 adult penguins - around 20 per cent of the estimated total breeding population of Little Penguins in Victoria.

The Penguin Parade provides the most accessible and reliable Little Penguin viewing in Australia. Little Penguin viewing occurs along the southern coast of Australia, Tasmania and in New Zealand, but on a much smaller scale than at the Penguin Parade. The conservation of the Little Penguin population on the Summerland Peninsula is one of the most critical tasks for the Nature Parks.

Short Tailed Shearwaters⁶

Short-tailed Shearwaters (also known as mutton birds) undertake an amazing annual migration leaving Phillip Island in April/May each year to fly to feeding grounds in the Bering Straits, Alaska, then to return to breed on Phillip Island in late September. Short-tailed Shearwaters are listed in Governmental agreements for the protection of migratory species. Approximately one million shearwaters breed within the Nature Parks.

The largest colony is located at Cape Woolamai with other smaller colonies found along the south coast and on the northwest coast of Phillip Island. Many colonies are threatened by problems associated with proximity to rural and urban land. Many juvenile shearwater deaths are recorded due to birds colliding with cars on Phillip Island roads and on the San Remo Bridge, as the young birds appear to be attracted to road lighting.

Phillip Island contains approximately eight per cent of the world's total population of Short-tailed Shearwaters, and is critical to their breeding success.



Development of this Strategy

The previous *Environment Sustainability Plan 2008 -2013*²² provided direction for a range of Council operations to preserve, protect and enhance our environment. The *Plan* has come to the end of its life, and it is appropriate to review and learn from it.

As part of the development of this *Strategy* a review was undertaken to identify what worked well and areas for improvement. It was acknowledged that the *Plan* had a strong environment focus and spirit and contained some excellent aspirations. However it was also recognised that the plan had too many layers and became confusing and inhibited a clear direction for the work being done. A document was required that could provide a clear, simple strategy, with significantly reduced layering to increase visibility of what is intended to be achieved and the flexibility to do it.

Plans tell us how, what and when we should be doing, and have actions and processes to achieve this. Strategies tell us why we are doing it, and have clear direction and objectives. A strategy drives a plan toward the goal, in our case flowing through to business plans and individual work plans.

Bass Coast Shire Council and community place a high priority on the natural environment as articulated in their visions and, as such, it is timely to move from the previous plan to a strategy.

Many of the successful programs and projects developed and implemented from the previous *Plan* are carried forward to form the basis of this new *Strategy*. Council will continue the approach of improving the sustainability of its own work practises but added emphasis will be placed on engaging with the community to encourage environmental awareness and value in local households, businesses and community activities.

The *Strategy* will then inform the:

- Climate Change Plan;
- Biodiversity Biolinks Plan;
- Roadside Vegetation Management Plan;
- Coastal management and foreshore Plans.



Consultation

This *Strategy* has been developed through a community consultation process involving internal and external stakeholders, environmental sustainability and conservation groups, government agencies and community members, all of whom have provided invaluable advice and feedback on the many strategic actions identified within the *Strategy*.

Opportunity was provided for feedback on the draft *Strategy* through surveys, presentations and discussions, and targeted stakeholder focus group sessions (representative from conservation groups, sustainability groups, Landcare groups, and environmental volunteer groups from across the Shire). Submissions were received over a 10 week period with over 210 separate interactions and direct contact with individuals and organisations.

Council has received considerable feedback at both a strategic and specific issue based level. The data was analysed, themed and amendments made to the draft *Strategy* to reflect the information and feedback received.

The following main themes came from the data and have influenced and informed changes to the *Strategy*:

- The need an increase focus on environmental education for the community;
- The inability of the Victorian Planning Scheme and local planning scheme to protect the environment (primarily native vegetation removal);
- Increase focus on the threat of industrialisation as well as urbanisation;
- Increase emphasis on measuring and monitoring to measure success;
- Recognition of other government agencies and organisation, particularly Parks Victoria
- Increased role of environmental volunteer groups; and
- The preferred titled being *The Natural Environment Strategy 2016 -26*.



What is Council's role?

Strategies are always at risk of being written and placed on a shelf. To prevent this happening and for Council to honour its commitment to the community the objectives within this document flow into Council document, department business plans and individual work plans. This ensures these actions become a part of Council's core business activities.

Council's role to make this *Strategy* a meaningful document includes:

- Driving its vision and strategic objective for the natural environment;
- Leading by example in decision making and practise;
- Educating, engaging, encouraging and empowering action within the community;
- Resourcing the actions required for the environmental management, projects and operational activities to deliver the *Strategy*;
- Facilitating change toward greater sustainable development;
- Delivering environmental education programs and information;
- Influence, lobby and advocating for local environmental initiatives and issues at regional, state and federal level;
- Developing and implementing policy;
- Complying with legislation and regulating where necessary;
- Striving for continuous improvement and learning; and

Collaborating with stakeholders and community to leverage action and outcomes.



Community Lead Activity

In 2015 Council directly supported more than 17 environmental sustainable focused community volunteer groups who have considerable knowledge, capacity and capability, and who are willing and able to make a contribution to the natural environment within which they live and play. This number continues to grow as the community population and environmental awareness grows.

To successfully deliver the *Strategy*, Council needs to collaborate with its community and leverage off this local knowledge and capacity, and the ability for community groups to attract funds and grants not accessible to Council, grow social capital to lobby government at state and federal levels.

There are four substantial environment conservation and sustainability focused organisations within the Shire; Phillip Island Conservation Society, South Gippsland Conservation Society, Bass Coast Landcare Network and the Energy Innovation Co-operative. Each of these groups has a different operational model, however all auspice and support multiple smaller and localised groups striving to achieve the same overall vision and outcomes; to protect and enhance our environment through community ownership and participation.

Council works with each of these organisations, providing a unique opportunity to empower others and grow its resource base to care for our natural environment. Council needs to explore new ways to work with the groups and gain the maximum multiplier effect, exponentially growing its resources.

The assistance required by each groups differs depending upon the self-sufficiency and longevity, membership and succession planning of each. Many Coast Action Groups and Friends Groups develop an annual work plan of activities and outcomes. Council assists and supports these activities through on ground preparation, materials and resources, and volunteer insurance.

Further assistance is provided to all groups by Council in the form of support for grant funding applications (local, state and federal), in-kind use of facilities and equipment, direct funding, officer time, networking and knowledge sharing.

“We don’t have to engage in grand, heroic actions to participate in the process of change. Small acts, when multiplied by millions of people, can transform the world.” Howard Zinn

Individual community members also have an important role to play in protecting and enhancing our natural environment. Personal responsibility must be taken by private land owners for control of weeds and pest animals, indigenous revegetation, and protection of waterways, remnant vegetation and habitat on their land. Council’s current reach to private land owners is predominantly through Bass Coast Landcare Network and other community volunteer groups to influence others to do the right thing.

An opportunity exists for Council to transform the way in which it undertakes environmental education for residents and visitors to learn about the value, uniqueness and vulnerability of our natural environment, biodiversity and landscape. Social media and a virtual presence via technology, together with more traditional methods of education and information sharing, is connecting groups, organisations and individuals to learn and is influencing their actions. Council needs to explore more innovative ways to educate its community, and engage and empower its environmental sustainability focused community volunteer groups to take a lead role in this task.

Strategy Objective 1.3.4 - Develop a knowledge base and networks to facilitate and support community energy initiatives.

Working in partnership, Council has participated in the establishment of a community energy Roundtable; ComMET (Communities Making Energy Together). ComMET is a group of local government, agency, community groups and individuals supporting development of Community Energy across Southern Gippsland. ComMET works through a collaborative governance arrangement that enables the interests of stakeholders to be represented in pursuit of its common purpose: *“To support and progress community energy that is strongly governed, financially viable, and socially and environmentally sustainable.”*

The ComMET Round Table currently comprises representatives from Bass Coast Shire Council, South Gippsland Shire Council, Energy Innovation Co-Operative, Mirboo North Energy Hub (through Mirboo North Community Shed Co-operative Ltd), Westernport Water, and individual community members.

ComMET is principally concerned with empowering and enabling community organisations and businesses to lead their own approach to community energy. ComMET will provide advice, recommendations and referrals that are well researched, to give the best chance for community options to proceed in southern Gippsland.



Working With Other Responsible Authorities

Responsible authorities are those who have a legislative or regulatory role in implementing the actions and to care for our natural environment.

Council works with other Crown land managers within the Shire including Parks Victoria, Department of Environment, Land, Water and Planning (DELWP), West Gippsland Catchment Management Authority (WGCMA), Melbourne Water, Port Phillip and Westernport Catchment Management Authority, Phillip Island Nature Parks and four Foreshore Committee's appointed by the Minister; Lang Lang, Corinella, Grantville and District and San Remo.

Some of these authorities are State government agencies (hence names are subject to change) and others have delegated powers from the State. Council wishes to acknowledge the other land managers within the Shire and their Management Plans and Strategies relevant to Council's work. Little can be achieved without strong working relationships, robust discussion and negotiation, and good collaborative partnerships to maximise limited, and at times competing, resources.

Park's Victoria is the largest single Crown land manager within Bass Coast Shire responsible for the management of many foreshores and bushland reserves and is also the Local Port Manager for Western Port. Parks Victoria is a statutory authority created by the *Parks Victoria Act 1998*. DELWP and Parks Victoria, under the *Catchment and Land Protection Act 1994 (CaLP Act)*, are responsible for the management of established weeds and pests on public land, including in parks with the ability to delegate to the land manager.

“Coming together is a beginning; keeping together is progress; working together is success.” Henry Ford

Strategy Objective 4.3.6 - Facilitate community networks and linkages to encourage and enable community participation in sustainable activity.

Birdlife Bass Coast has an active membership within the Shire and contributes to monitoring the health of our biodiversity and natural environment. This group was formed by a merging of Birdlife Australia and Western Port Bird Observation and Conservation (est. 1973). The group has been very involved in conservation issues, monitoring bird life in the Shire on land and waterways and continually strive for the conservation of birds and bird habitat. Birdlife Bass Coast often works in collaboration with many other conservation groups, such as Landcare, Friends of Koalas, Friends of the Hooded Plovers, Phillip Island Conservation Society and Phillip Island Nature Park.

Council consults with Birdlife Bass Coast members when seeking local knowledge and expertise on bird species and activities in the Shire. Birdlife Australia has custom atlas bird lists that have mapped the data from surveys of bird activity in the area.

Implementation

The *Strategy* maintains a sustainable development approach to implementation. It seeks to integrate the various strategies and plans across Council that collectively defines Councils drive to protect and improve the natural environment, health and wellbeing of the community and promote a sustainable local economy.

The action areas within this *Strategy* are further expressed in strategic objectives that define the desired outcome but provide some flexibility around the method of delivery or precise scope of the action. These are not intended to duplicate other Council strategies and plans, but integrate sustainable development principles included in the Local Planning Scheme, the Economic Development Strategy and the Health and Wellbeing Plan. As such, the responsibility of the action areas and objectives outlined in the tables have many owners.

The action areas and objectives have timing indicators which are intended to give over-arching timeframes and a sense of priority to actions. To assist with work planning and resource allocation within the first five years of the *Strategy* (to the mid point), the year(s) that the action area objective is to be a particular focus for resources has also been indicated. The extent to which the objective can be completed is dependent upon resource availability and allocation. To this end the resource, funding and function for each has also been shown.

The over-arching timing indicators should be read as:

- Immediate – action is required within the next one to two years
- Ongoing –Existing core activities and programs that need to continue for the life of the strategy. They need to be flexible, find efficiencies and improvements in the way they are implemented.
- Annually – The annual monitoring and reporting of activities. This is to include a continuous improvement focus over the next 10 years.

These timeframes recognise that technology will advance, best practise will shift, climate change effects will occur, and regulation and legislation will change; however our strategic objectives remain consistent. This will ensure Bass Coast Council continues to lead by example as a municipality that values its environment, and increasingly engages with others to implement practical, achievable and sustainable actions.

“As our population grows, the resources allocated to the environment will need to be increased but environmental affairs can be managed, they can be protected, it is a matter of will, policy and resources” Malcolm Fraser, former Prime Minister.

Measuring and Monitoring

Bass Coast Shire Council has mechanisms to measure and monitor environmental indicators and the Shire's progress over the next 10 years. However, not all of these indicators can be used directly to assess the implementation of the Strategy as there are many factors outside the control of Bass Coast Shire Council that impact on environmental sustainability. Hence, data will be expressed both a quantitative and qualitative way enabling Council to identify opportunities and issues, and to adapt and supplement business plan actions and resources accordingly.

The strategic indicators (i.e. measures) for the *Strategy* in the bottom ribbon of the Strategic alignment chart are taken directly from the *Council Plan 2013 -17*. In addition to these measures, more specific and stretch measures and targets are as follows:

- ✓ Achieve Council's corporate emissions reduction target (to be determined by Council in 2016), based on 2009/10 levels;
- ✓ Increase native vegetation cover and bio-links to over 15% of the Shire by 2026;
- ✓ Increase promotion of environmental education opportunities through Councils social media each year;
- ✓ Increase in number of environmental activities with community volunteer groups and school groups each year;
- ✓ Increase area of indigenous vegetation planted each year (ha);
- ✓ Increase the kilometres of roadsides treated annually for invasive plants;
- ✓ Undertake activities to increase the number of hooded plover eggs and chicks fledged within the Shire each year;
- ✓ Increase the meters of fenced creek lines within the Shire.



Review and Report

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

There are many ongoing routine activities and tasks undertaken by the Sustainable Environment Department, Council more broadly and the Bass Coast Shire community on a daily basis to meet the strategic objectives that can be reported within the snapshot report.

A full review of this *Strategy* and development of a new strategy will commence in 2023 in response to a new Council Plan.

Strategy Objective 1.3.5 - Continue to monitor legislative changes to identify opportunities for Council and the community to be more sustainable.

The Australia Government repealed the *Clean Energy Act 2011* and abolished the carbon pricing mechanism (Carbon Tax) from 1 July 2014.

The *Carbon Farming Initiative Amendment Bill 2014* was introduced to expand the *Carbon Credits (Carbon Farming Initiative) Act 2011* and to establish the Emissions Reduction Fund (ERF). This legislation replaces the carbon tax and transitions the scope of the Carbon Farming Initiative.

By repealing the *Clean Energy Act 2011* a number of other Acts were amended. The *National Greenhouse and Energy Reporting Act 2007* was amended, however no changes to the reporting methodology or reporting thresholds were made.

The Australian Federal Government remains committed to a five percent reduction in emissions by 2020 and the establishment of the Emissions Reduction Fund is designed to reduce carbon emissions. The Emissions Reduction Fund (ERF) is the centrepiece of the Federal Government's Direct Action policy around environmental sustainability (point 10: *Reduce Carbon Emissions*). The ERF will operate alongside existing emission reduction programs such as the Renewable Energy Target and energy efficiency standards on appliances, equipment and buildings.

Council may participate in The Emissions Reduction Fund if suitable projects offering low cost abatement and resulting in significant amounts of greenhouse gas reduction (minimum of 2,000 tonnes/year) can be committed too.

Council has recently responded to the MAV's survey to determine if there is a role for MAV and ICLEI Oceania to administer an aggregation process to enable Victorian councils to participate.

Strategic Directions and Actions

<p>1. Mitigating the forecast impacts of climate change by integrating the predictions into our decision making and planning for infrastructure, services and utilities.</p> <p><i>We will improve climate change sustainability by helping our community and organisation to make better environmental decisions and respond more effectively to the challenges of our changing climate.</i></p>							
Action Area		Objective		Responsibility	Resources	Timing	Function
1.1	Climate change adaptation	1.1.1	Implement and deliver Council's <i>Climate Change Plan - Part One (internal action) and Part Two (external outreach)</i> .	Sustainable Environment	Internal Staff	Immediate Prioritise activities within capacity (Yr. 1&2)	Core business
		1.1.2	Continue to participate in the <i>Low Carbon Growth Plan for Gippsland</i> , regional climate change forums and networks to share information and develop better strategies for emissions reduction and climate change mitigation and adaptation at a local and regional level.	Sustainable Environment	Internal staff	Ongoing Subject to annual budget. Prioritise activities within capacity (Yr. 1-5)	Core business
		1.1.3	Identify and deliver projects to upgrade infrastructure and reduce Council's carbon emissions.	Sustainable Environment / Infrastructure	Internal staff, Capital works allocation	Ongoing As funding is made available (Yr. 3)	Prioritised list through Infrastructure Projects Team

		1.1.4	Identify and invest in environmentally sustainable waste technology, initiatives and options to increase materials efficiency and reduce consumables.	Sustainable Environment/ Governance	Internal staff. Capital works allocation	Ongoing As funding is made available (Yr. 4&5)	Prioritised list through Infrastructure Projects Team
		1.1.5	Set and action a corporate Emissions Reduction Target for the organisation and encourage community involvement.	Sustainable Environment / Infrastructure	Internal staff, Capital works allocation	Ongoing As funding is made available (Yr. 1-5)	Core business
		1.1.6	Work with local groups, businesses and developers to prioritise pedestrian and public transport use and reduce private motor vehicle use.	Sustainable Development and Growth/ Infrastructure/ community groups	Internal staff, Community groups, external stakeholders	Ongoing, subject to capacity (Yr. 1-5)	Core business, Prioritise activities within capacity.
1.2	Sustainable Development	1.2.1	Continue to utilise Council's role as the responsible planning authority to encourage environmentally sustainable design principles in public and private developments including open space.	Strategic Planning and Development Services/ Sustainable Environment	Internal staff	Ongoing (Yr. 2-5)	Core business
		1.2.2	Develop an Environmentally Sustainable Design (ESD) Policy and join as a Council Alliance for a Sustainable Built Environment (CASBE) member.	Strategic Planning/ Sustainable Environment	Internal staff, Membership p.a.	Immediate Subject to annual budget, and capacity (Yr. 1)	Prioritise activities within capacity
		1.2.3	Support and promote Integrated Water Cycle Management (IWCM), Water Sensitive Urban Design (WSUD) and water conservation within the community, industries, developers and other agencies to maximise 'fit for purpose' use.	Sustainable Development and Growth/ Infrastructure	Internal staff	Immediate (Yr. 1)	As infrastructure Drainage Asset Management Plan is developed

		1.2.4	Work to minimise and continue to ensure the social, environmental and economic responsible disposal of municipal waste.	Sustainable Development and Growth	Internal staff, Waste services contracts	Ongoing (Yr. 1-5)	Core business
		1.2.5	Investigate and promote clean energy initiatives and alternatives within the Shire, including community energy projects.	Sustainable Development and Growth	Internal staff,	Subject to annual budget, and capacity (Yr. 2)	Prioritise activities within capacity. Council resolution 10/12/14.
		1.2.6	Actively participate and support education, investigation, feasibility and development of community energy innovation and initiatives, led by the community.	Sustainable Environment	Internal staff,	Subject to annual budget, and capacity (Yr. 1&2)	Prioritise activities within capacity. Council resolution 10/12/14.
1.3	Sustainability information and education	1.3.1	Monitor and report on Council's corporate carbon emissions and water use annually and identify opportunities for reduction.	Sustainable Environment	Internal staff.	Annual, Subject to budget allocation, (Yr. 1-5)	Core business
		1.3.2	Engage with schools, businesses and households to improve energy efficiency and reduce environmental impacts.	Sustainable Environment	Internal staff,	Ongoing Subject to budget allocation (Yr. 2)	Core business
		1.3.3	Encourage the use of renewable energy supplies on Council buildings and within the community.	Sustainable Development and Growth/ Infrastructure	Internal staff, Capital works allocation	Ongoing As funding is made available (Yr. 3-5)	Prioritised list through Infrastructure Projects Team

	1.3.4	Develop a knowledge base and networks to facilitate and support community energy initiatives.	Sustainable Environment	Internal Staff	Ongoing (Yr. 2)	Core business
	1.3.5	Continue to monitor legislative changes to identify opportunities for Council and the community to be more sustainable.	Sustainable Environment	Internal Staff	Ongoing (Yr. 1-5)	Core business
	1.3.6	Minimise urban heat islands by increasing native vegetation cover in urban areas	Sustainable Environment/ Infrastructure	Internal Staff	Ongoing Subject to budget allocation (Yr. 4)	Core business
	1.3.7	Facilitate sustainability education with the community and businesses	Sustainable Environment	Internal Staff	Ongoing Subject to capacity (Yr. 1-5)	Core business. Prioritise activities within capacity.

“To minimise the cost of climate change in the future, sound scientific knowledge is needed to underpin decision making and solutions.”²³ CSIRO 2012.

2. Facilitate appreciation of our unique natural environment through sustainable public access.

We will do this by maintaining coast and bushland management, and continuing to fulfil our responsibilities as a land manager under the Planning and Environment Act (1987), Coastal Management Act (1995) and the Crown Land (Reserves) Act (1978).

Action Area		Objective	Responsibility	Resources	Timing	Function	
2.1	Compliance activities	2.1.1	Work in a co-operative approach with landowners, Landcare, DELWP, Parks Victoria and Phillip Island Nature Parks to reduce pest plants and animals in the Shire.	Sustainable Environment/ External stakeholders.	Internal staff and external stakeholders,	Ongoing, subject to capacity (Yr. 1-5)	Core business, Prioritise activities within capacity.
		2.1.2	Implement Councils Encroachment Policy with private land holders using a risk based approach, as identified through Council activities and community information.	Sustainable Environment/ Development Services/ Community Strengthening	Internal staff.	Ongoing, subject to capacity (Yr. 1-3)	Core business, Prioritise activities within capacity.
		2.1.3	Develop and implement fire management plans in Council's bushland reserves, as required, and review annually with the Country Fire Authority.	Sustainable Environment/ Community Strengthening/ External Stakeholders	Internal staff.	Ongoing (Yr. 1-3)	Core business

		2.1.4	Maintain Council's enforcement capacity and capability regarding protection of our flora and fauna regulatory responsibilities, and integrate inter-agency approaches.	Sustainable Environment / Development Services/ Community Strengthening/ External Stakeholders	Internal staff.	Ongoing, subject to capacity (Yr. 1-5)	Core business
		2.1.5	Implement Council's Foreshore Use Policy for sustainable activities and enjoyment for all.	Sustainable Environment	Internal staff.	Immediate (Yr. 1-5)	Core business
2.2	Sustainable development	2.2.1	Facilitate delivery and use of environmentally sensitive foreshore infrastructure, including paths, car parking, signs and access tracks working with the natural coastal processes.	Sustainable Environment/ Infrastructure	Capital Works Allocation	Ongoing Subject to budget allocation, (Yr. 3)	Prioritised list through Infrastructure Projects Team
		2.2.2	Facilitate delivery and use of recreational boating infrastructure within the Shire, as guided by the state government <i>Victorian Coastal Strategy 2014</i> , <i>Central Regional Coastal Plan 2015</i> and Boating Coastal Action Plan.	Development Services/ Sustainable Environment/ Infrastructure	Capital Works Allocation, Parks Victoria, DELWP	Ongoing As funding is made available (Yr. 3)	Prioritised list through Infrastructure Projects Team
		2.2.3	Deliver Council's adopted foreshore master plans and activity area plans, including identifying funding opportunities.	Sustainable Development and Growth/ Infrastructure/ External stakeholder	Capital Works Allocation	Immediate As funding is made available (Yr. 1-5)	Prioritised list through Infrastructure Projects Team
		2.2.4	Develop foreshore and bushland management master plans and activity area plans for identifying areas.	Sustainable Environment/ External stakeholders	Council	Subject to Annual Budget (Yr. 5)	Prioritised list through Coast and Bushland Management

	2.2.5	Develop and deliver the Scenic Estate Landscape Master Plan, including establishment and facilitation of a community Friends Group.	Sustainable Environment/ Infrastructure/ PINP, Parks Victoria	Capital Funding for Land Acquisition and Plan implementation, Stage 2 & 3	Immediate Subject to budget allocation, and funding (Yr. 1-4)	Prioritised list through Infrastructure Projects Team
	2.2.6	Investigate the feasibility of walking tracks along the coast and explore opportunities to link existing tracks in the Shire, take into account the implications of climate variation, coastal processes, protection of biodiversity and habitat, archaeological sites.	Sustainable Environment/ External stakeholders	Council	Immediate As funding is made available (Yr. 1-3)	Strategic Municipal wide pathway network plan development
	2.2.7	Implement actions to retreat or protect public infrastructure from foreshore erosion whilst working with the natural coastal processes.	Sustainable Environment/ External stakeholders	Council	Annual program, additional as funding is made available (Yr. 1-5)	Core business
	2.2.8	Promote responsible management and adhering to marine environment protection for Ramsar wetlands and Marine national parks within the Shire	Sustainable Environment/ External stakeholders	Internal staff	Ongoing (Yr. 1-5)	Core business

“Ensuring the benefits of coastal and marine ecosystems remain will require continued planning to maximise ecosystem resilience and allow of adaptation.”²⁴ Victorian Coastal Strategy 2014.

<p style="text-align: center;">3. Improve health of the landscape through increased biodiversity and indigenous vegetation protection.</p> <p style="text-align: center;"><i>We will do this by improving land and catchment management, and working cooperatively to better protect, manage and increase our biodiversity, waterway health, and land management.</i></p>							
Action Area		Objective		Responsibility	Resources	Timing	Function
3.1	Increasing biodiversity	3.1.1	Develop a <i>Biodiversity Biolinks Plan</i> for Bass Coast Shire, including mapping, to focus on increased connectivity for flora and fauna.	Sustainable Environment	Council	Immediate Subject to budget allocation (Yr. 1)	Prioritise activities within capacity
		3.1.2	Encourage adjoining landowners and managers to develop wildlife corridors and shelter belts adjacent to, and linking areas.	Sustainable Environment/ Landcare	Internal Staff	Ongoing (Yr. 1-5)	Core Business
		3.1.3	Increase indigenous vegetation and biodiversity within the Shire through planting events.	Sustainable Environment,	Internal staff, Landcare, community	Annual Program (Yr. 1-5)	Priorities and working with volunteer groups
		3.1.4	Continue Council's Land Management Biodiversity Incentive Scheme and Land Management Rebate.	Sustainable Environment	Internal staff.	Annual Program (Yr. 1-5)	Administered Internally
		3.1.5	Continue to develop and implement Council's <i>Native Vegetation Offset Scheme</i> .	Sustainable Environment	Internal staff	Ongoing (Yr. 1-5)	Core business

		3.1.6	Review, promote and deliver Council's <i>Significant Roadside Vegetation Management Plan</i> .	Sustainable Environment	Internal Staff, Landcare	Immediate Subject to budget allocation (Yr. 1-2)	Subject to capacity
		3.1.7	Participate in the development and implementation of the Bass Coast Rabbit Strategy and extend the approach to fox control.	Sustainable Environment, PINP, Landcare.	Internal staff, external stakeholders, private property owners	Immediate Subject to budget allocation (Yr. 1-5)	Core business
		3.1.8	Continue to assess planning applications to protect native vegetation and biodiversity within the Shire, in accordance with the Bass Coast Planning Scheme.	Sustainable Environment/ Development Services	Internal Staff	Ongoing (Yr. 1-5)	Core Business
		3.1.9	Develop and implement a program to protect native wildlife including rare and threatened species within the Shire and its surrounds.	Sustainable Environment/ External Stakeholders	Internal Staff	Ongoing As funding is made available (Yr. 4)	Subject to capacity
3.2	Protect waterways	3.2.1	Continue to work with landowners, through WGCMA, Parks Victoria, Landcare and DELWP, to prevent stock accessing waterways.	Sustainable Environment/ Landcare	Internal Staff, external stakeholder	Ongoing (Yr. 1-5)	Prioritise activities within capacity
		3.2.2	Participate in the West Gippsland Catchment Management Authority Community Advisory Group and Coastal Agencies Liaison Group forums	Sustainable Environment	Internal Staff	Ongoing (Yr. 1-5)	Core Business
		3.2.3	Continue to minimise the amount of litter and other pollutants entering the stormwater system through infrastructure (e.g. gross pollutant traps), education and stormwater drainage works.	Sustainable Environment/ Infrastructure	Capital allocation	Ongoing Subject to budget allocation (Yr. 4)	Prioritised list through Infrastructure Projects Team

		3.2.4	Work in co-operation with private land holders and relevant agencies to protect natural waterways within the Shire from threatening activities, and increase river health.	Sustainable Environment/ Community Strengthening	Internal Staff, external stakeholder	Ongoing Subject to budget allocation, and funding (Yr. 1-3)	Prioritise activities within capacity
		3.2.5	Continue litter prevention and enforcement activities with the community.	Sustainable Environment/ Community Strengthening	Council waste services	Annual program (Yr. 1-5)	Core business
		3.2.6	Develop a waterway management plan for Ayr Creek and Screw Creek, together with WGCMA and community.	Sustainable Environment/ Infrastructure	Internal Staff, external stakeholders, community	Immediate (Yr. 1&2)	Prioritise activities within capacity
		3.2.7	Develop and implement a project for Bass Coast Shire Council to be plastic bag free to protect our waterways and oceans.	Sustainable Environment/ Economic Development/ External Stakeholders/ Community	Internal Staff, external stakeholders, community	Ongoing As funding is made available (Yr. 3 - 4)	Subject to capacity

“The Land Management Biodiversity Incentive Scheme is the greatest way to encourage landowners to think and care for the land. It reinforces the work we do with Landcare” Bass Coast Shire farmer.

4. *Develop community partnerships that promote environmental awareness.*

We will do this by building, developing and maintaining our stakeholder relationships and community partnerships that promote environmental awareness and value.

Action Area		Objective	Responsibility	Resources	Timing	Function	
4.1	Continuous improvement	4.1.1	Encourage, support and promote local community sustainability innovation and initiatives and assist by identify grant opportunities for agreed on ground works.	Sustainable Environment/ Community Strengthening	Internal staff, community groups, organisations.	Ongoing (Yr. 1-5)	Core business
		4.1.2	Encourage, support and promote local business economic sustainable development innovation and initiatives, and assist by identifying grant opportunities.	Sustainable Development and Growth	Internal staff	Ongoing Availability of grants (Yr. 1-5)	Core business
		4.1.3	Annually report on Bass Coast Shire Council's progress against the Natural Environment Strategy.	Sustainable Environment	Internal staff	Annual program (Yr. 1-5)	Core business
		4.1.4	Provide information and seek feedback on Council projects via the website and other social media forums as appropriate.	Sustainable Environment/ Governance	Internal staff	Ongoing (Yr. 1-5)	Core business
		4.1.5	Investigate new models to collaborate and work more productively with community conservation and sustainability volunteer groups within the Shire	Sustainable Environment/ Governance/ Community Groups	Internal Staff, external stakeholders, community	Immediate (Yr. 1&2)	Prioritise activities within capacity

		4.1.6	Investigate more innovative ways to educate its community, and engage and empower its environmental sustainability focused community volunteer groups to take a lead role in this task	Sustainable Environment/ Governance/ Community Groups	Internal Staff, external stakeholders, community	Immediate (Yr. 1&2)	Prioritise activities within capacity
4.2	Leadership and advocacy	4.2.1	Demonstrate leadership in environmental sustainability through regular information to the community about Council's sustainability actions and achievements.	Sustainable Environment/ Strategic Planning	Internal staff	Ongoing (Yr. 1-5)	Core business
		4.2.2	Participate in regional networks and forums, and work co-operatively to ensure alignment with regional, state and federal environmental sustainability strategies, policies and programs, and influence outcomes.	Sustainable Environment	Internal staff	Ongoing (Yr. 1-5)	Prioritise activities within capacity
		4.2.3	Continue to lobby and advocate for sustainable development that protects and enhances our region.	Sustainable Development and Growth	Internal staff	Immediate (Yr. 1-5)	Prioritise activities within capacity
		4.2.4	Respond to State and Federal government draft policies, strategies, plans and position papers regarding sustainable development, where relevant.	Sustainable Development and Growth	Internal staff	Ongoing (Yr. 1-5)	Core business
		4.2.5	Continue to lobby for any consideration of the expansion of the Port of Hastings as a secondary container port must be subject to an independent study of the impact on the coastal environment of Bass Coast, in particular Phillip Island.	Sustainable Development and Growth/ Community Groups	Internal Staff, external stakeholders, community	Immediate (Yr. 1-5)	Prioritise activities within capacity

4.3	Working in Partnership	4.3.1	Continue to work in a supportive partnership, and within a Memorandum of Understanding with Phillip Island Nature Parks to achieve agreed environmental objectives.	Sustainable Development and Growth/PINP	Internal staff	Ongoing. Subject to budget allocation (Yr. 1-5)	Administered via MoU
		4.3.2	Continue to work in a supportive partnership, and within a Memorandum of Understanding with Bass Coast Landcare Network to achieve agreed biodiversity outcomes.	Sustainable Environment/Landcare	Council	Ongoing (Yr. 1-5)	Administered via MoU
		4.3.3	Progress regional partnership projects and leverage value from collaboration with other Councils.	Sustainable Environment	Internal staff	Annual program (Yr. 1-5)	Administered via networks e.g. GLGN, VASP
		4.3.4	Facilitate the activities of volunteer community coast action groups, conservation societies and friends groups to achieve agreed environmental outcomes.	Sustainable Environment	Council	Annual program (Yr. 1-5)	Core business
		4.3.5	Help facilitate the Hooded Plover Watch and Friends of the Hooded Plover volunteer programs and community awareness.	Sustainable Environment/ External stakeholders	Internal staff	Immediate (Yr. 1-5)	Prioritise activities within capacity
		4.3.6	Facilitate community networks and linkages to encourage and enable community participation in sustainable activity, such as using the Sustainability Gippsland website.	Sustainable Environment/ Community Strengthening	Internal staff	Subject to capacity (Yr. 1-5)	Prioritise activities within capacity
		4.3.7	Work together with EPA Victoria and other stakeholder organisations to develop a better understanding of roles in pollution related events (e.g. noise) within the Shire, to protect the natural environment.	Sustainable Environment/ Community Strengthening/ External stakeholders	Internal staff	Immediate (Yr. 1)	Core business

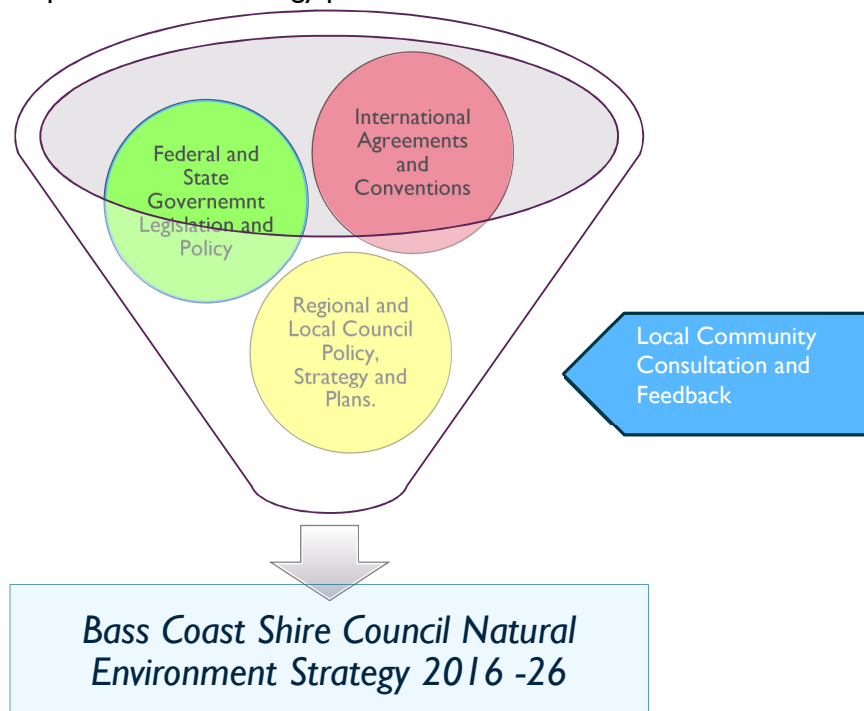
Annex 1 - Broader Strategic Policy Context

Local government operates within the context of a broader governance framework, including the international community, and federal and State government. Local government needs to be flexible and be able to adapt to changes within the legislation and regulation. This then allows it to assist its community to learn, understand and change.

The *Natural Environment Strategy* has been developed in line with current relevant legislation and policies that have been adopted at both the Federal and State level. These documents include but are not limited to:

- *Environment Protection and Biodiversity Conservation Act 1999 (Fed)*
- *National Greenhouse and Energy Reporting Act 2007 (Fed)*
- *Environment Protection Act (EP ACT) 1970, with Amendment in 2006 (Vic.)*
- *Flora and Fauna Guarantee Act 1988 (Vic.)*
- *Coastal Management Act 1995 (Vic)*
- *Crown Land (Reserve) Act 1978 (Vic)*
- *Catchment and Land Protection Act 1994 (Vic.)*
- *Conservation, Forests and Lands Act 1987 (Vic)*
- *Permitted Clearing of Native Vegetation – Biodiversity Assessment Guidelines 2013 (Vic.)*
- *Climate Change Act 2010 (Vic.)*
- *Local Government (Finance and Reporting) Regulations 2004 (Vic.)*
- *Planning and Environment Act 1987 (Vic.)*
- *Local Government Act (Best Value Regulations) 1999 (Vic.)*
- *Native Vegetation Framework 2003 (Vic)*

Figure 1: Relationship for broader strategy political context



International

In 1987, the United Nations' World Commission on Environment and Development published *Our Common Future*¹. The commission sought to unite nations on a sustainable development path and for the first time, sustainable development was placed firmly on the world political agenda. In the report, sustainable activities were defined as ones where *'the needs of the present generation are met without compromising the needs of future generations'*¹. The organisation Center for Our Common Future was started in April 1988 to take the place of the Commission.

In 1992, the *United Nations Earth Summit* in Rio de Janeiro brought together leaders from across the world to focus on the sustainability challenge, and where more concrete initiatives and goals could be mapped out, and forming the *Commission on Sustainable Development*²⁵. The Summit developed *Agenda 21*, a plan that entails actions to be taken globally, nationally, and locally for a more sustainable future. This established a blueprint for sustainability, and created an awareness of the need to consider the environmental and social, as well as economic, implications of our decisions and actions.

Political commitment to *Agenda 21* was renewed at the *World Summit on Sustainable Development*, also known as *Rio+10* conference in 2002.

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

In 2013, the High-level Political Forum on sustainable development, the current United Nations platform dealing with sustainable development met for the first time. It provides political leadership and guidance; follows up and reviews progress in implementing sustainable development commitments and addresses new and emerging sustainable development challenges; enhances the integration of economic, social and environmental dimensions of sustainable development.

The forum was held under the auspices of the Economic and Social Council (ECOSOC)⁸ and replaces the *Commission on Sustainable Development*.



Australia

In 1992, Australia developed the *National Strategy for Ecologically Sustainable Development (NSES)*²⁶, which tackles many key areas for sustainability action highlighted in *Agenda 21*. The NSES directs governments to make policy and decisions which are more sustainable and which aim for long-term benefits over short-term gains. The NSES defines ecologically sustainable development as:

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

Since 1992, the pursuit of ecologically sustainable development has been progressively incorporated into the policies and programs of Federal governments as a significant policy objective.

Australia's commitment to *Agenda 21* is reflected in a strong national response to meet our obligations under this international agreement. Local governments also have an important role to play in helping society to become sustainable and protect the natural environment²⁷.

Australia's *Environment Protection and Biodiversity Conservation Act (1999)* promotes ecologically sustainable development through the conservation and ecologically sustainable use of natural resources.



Victoria

The Victorian Government outlines its overarching key sustainability objectives in Environmental Partnerships²⁸. This document is built on three aspirations:

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

It also identifies eight priorities to help strengthen environmental partnerships and achieve the vision of a healthy Victorian environment that supports prosperity and wellbeing.

The *Victorian Adaptation and Sustainability Partnership*²⁹ (VASP) is an established partnership between Victoria's 79 Councils and the State Government, previously known as the Victorian Local Sustainability Accord. The principles of Partnership are to:

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



Picture: Reusable coffee cup made from recyclable materials

Annex 2 - Our Environment

Snapshot of Bass Coast Shire

Bass Coast Shire is located 130 kilometres south east of Melbourne, and is predominantly a coastal municipality with 177 kilometres of unique coastline complimented by a highly productive agricultural hinterland. The Shire covers over 860sq km spanning rich farmland, stunning coastline and tranquil hinterland.

The Shire has some of the most diverse well known and well visited coastline in Victoria with extensive waterlines, bounded by Westernport to the west and Bass Strait to the south. Bass Coast Shire's major natural assets including Western Port (a Ramsar listed wetland site), Anderson Inlet, Bass River, Powlett River, three Marine Parks, the Phillip Island Nature Park and other heath and bushland reserves. Bass Coast is also part of the internationally recognised Mornington Peninsula and Western Port Biosphere Reserve. A distinctive topographic feature of Bass Coast is Phillip Island, located to the west of the mainland at the entrance to Western Port.



Image 1: Map of Bass Coast Shire geographic area.

Many studies and reports have found that Bass Coast residents, businesses and visitors identify the natural local environment as a major lifestyle component and of paramount importance for living, working or visiting Bass Coast.

The *Development Options for Bass Coast Shire 2005-2030* report by the National Institute of Economic and Industry Research and the State Government's *Provincial Victoria – Emerging trends in jobs and population* have both identified that the main reason business and working families will relocate to Bass Coast Shire is for lifestyle, the natural environment being one of the major components of lifestyle.

Bass Coast Shire is home to over 30,000 permanent residents. However, its proximity to Melbourne makes it also very attractive to visitors and to people wanting to make a sea change. During peak periods, our population swells to over 70,000.

Bass Coast Shire's population is forecast to grow by 43% to 45,257 by 2031³⁰. The management of growth, the sustainable development and use of our natural environment and the provision of programs to protect and enhance significant environment areas is of paramount importance.

Council recognises that it must protect and enhance the natural and built environments if it wants a sustainable, productive and liveable future.



Natural Landscape of Bass Coast Shire

The geology within the area of Bass Coast Shire include pink granite and basalt that has formed the stacks and columns we know as the Pinnacles, Colonnades and Pyramid Rock on Phillip Island, and peat and coal formations within the hinterland.

Bass Coast Shire has significant fossil sites along the coastline at Inverloch Flat Rocks dating back to the prehistoric era. The most commonly found dinosaur at Flat Rocks is a small plant eater belonging to the Hypsilophodont family. This dinosaur was the size of a small wallaby and ran on its hind legs.

Until the 1800's 'the Great Forest of South Gippsland' was a barrier to settlement from the north. Eucalyptus such as Blue gum and Manna gum over 100 meters tall dominated the south west and Mountain Ash grew in the north and east of the Shire, with stands of cool and temperate rainforest in the gullies.

Land clearing practises for settlement, farming and mineral mining in the 1800 and 1900's has resulted in land degradation issues such as salinity, soil acidification and loss of soil carbon. European settlement introduced plant and animal pest species that we continue to manage, including rabbits, deer, boxthorn, blackberry and gorse. Today less than 10% of indigenous vegetation remains from pre 1700 in Bass Coast Shire.

Bass Coast Shire straddles both the West Gippsland Catchment Management Authority and the Port Phillip and Westernport Catchment Management Authority, and includes two catchments. The management of catchment assets is undertaken cooperatively across agencies and local government, and coordinated with economic and social planning and service delivery to provide efficiencies and results.

Western Port catchment includes the Lang Lang and Bass rivers. Work is being undertaken on private and public land to reduce sediments in waterways and to rehabilitate the coastline. Phillip Island and the steep country in the Bass Hills have been gradually reforested so that farmland paddocks are lined with belts of local eucalypts and acacias and with indigenous understorey plants, which will over time ease salinity problems. Widespread coastal and marine projects are being undertaken to help regenerate the seagrass beds in Western Port and restore healthy fish populations³¹.

The Bunurong Catchment Ecosystem includes the catchment areas of Anderson Inlet and the catchment area of the Powlett River. The area is important for tourism, water supply, agriculture (beef, dairy, snow peas and hay) and supports significant environmental values including, two wetlands of national significance (Anderson Inlet and Powlett River estuary), significant populations of EPBC listed Australian Grayling in the Tarwin River, spectacular Mountain Ash dominated wet forest and cool temperate rainforest areas, remnant Strzelecki Gums, and productive Gippsland red soils³².

Over ten Victorian Ecological Vegetation Classes (EVC's) found in the Shire that are considered endangered, three are vulnerable and three severely depleted. There are

records for 23 rare or threatened native flora (VROT) species on Phillip Island alone³³.

Species and EVC's of State significance, rare, endangered or threatened in the Bass Coast Shire area include:

- *Eastern Curlew – Numenius madagascariensis,*
- *Fairy Tern – Sternula nereis nereis*
- *Hooded Plover - Thinornis rubricollis*
- *Orange bellied Parrot - Neophema chrysogaster*
- *Swift Parrot - Lathamus discolor*
- *Shy Albatross - Thalassarche cauta*
- *Little Penguins - Eudyptula minor*
- *Short-tailed Shearwaters - Puffinus tenuirostris*
- *Pacific Gulls - Larus pacificus*
- *Growing Grass Frog - Litoria raniformis*
- *Glossy Grass Skink - Pseudemoia rawlinsoni*
- *Helmeted Honeyeater - Lichenostomus melanops cassidix*
- *Leadbeater's Possum - Gymnobelideus leadbeateri*
- *Southern Brown Bandicoot - Isoodon obesulus obesulus*
- *Merran's Sun-orchid – Themlymitra X merraniae*
- *Green Leek-orchid – Prasophyllum lindleyanum*
- *Leafy Twig-sedge - Cladium procerum,*
- *Coastal Moonah Woodland - Moonah Melaleuca lanceolata subsp. lanceolata,*
- *Dune Wood-sorrel - Oxalis rubens,*
- *Marsh Saltbush - Atriplex paludosa subsp. paludosa,*
- *Swamp Scrub EVC,*
- *Damp Sands Herb-rich Woodland EVC,*
- *Natural Damp Grasslands of the South East Coastal Plain Bioregion.*



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