# Environment Strategy 2016-2021





## Mayor's Message

The Busselton City Council has an important role in the care and enhancement of our natural environment and surrounds for the enjoyment of current and future generations.

The City's natural areas have been and will continue to be integral to the development of the region and the challenge for Council is to ensure a balance between delivering new infrastructure for our rapidly growing community and the protection of the environment for the future.

The development of the Strategy explored the major local environmental pressures that threaten our environment and provides a set of strategic actions that are considered robust, worthwhile and appropriate for delivering strong community benefits. The Environment Strategy has been prepared following consultation with the community and key stakeholder government agencies to ensure the approach outlined in the Strategy aligns with community expectations.

The protection and enhancement of the natural environment is a shared responsibility within our community and the Strategy acknowledges that fundamental to increased community engagement is the provision of opportunity and new ways for the community to be involved in caring for our natural environment.

The initiates outlined in the Strategy bring community and partners together and with the right balance of leadership, collaboration, direct action, advocacy, consultation and education, help us all work together to preserve our unique environment.

**Grant Henley** 

City of Busselton Mayor



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### Introduction



Environmental considerations are an integral part of all decision making and planning processes and the City's integrated planning framework ensures this Environment Strategy integrates and aligns with other City strategies, plans and programmes and identifies with community objectives through transparent, accountable community engagement and reporting processes.

The release of this Strategy represents outcomes of a major review of the actions and achievements of the 2004 Environment Strategy.

This strategy is one of the City's key guiding documents for managing natural assets.

### Strategic Community Plan

The City has an important role in environmental management and protection of natural areas and this commitment is a key pillar of the City's vision:

## The Environment Strategy aims to provide opportunities and solutions to protect and care for the environment.

"A vibrant and cohesive community that protects its natural environment, meets the needs of it's population and ensures that future development maintains the City's unique character, lifestyle and community values".

A key goal towards this vision and guiding the Environment Strategy is that the 'environment is cared for and enhanced as the City's key asset', through the achievement of the following community objectives:

- Our natural environment is cared for and enhanced for the enjoyment of the community and visitors;
- Growth is managed sustainably and our environment is protected and enhanced as we develop; and
- Environment and climate change risks and impacts are understood and managed.

### **Environmental Themes**

The Environmental Strategy provides the City's response to local environmental pressures under 5 key environmental themes, being: Biodiversity, Water, Community, Sustainability and Governance. The Environment Strategy focuses on the major environmental issues under each theme, to guide the development and implementation of environmental actions and strategies.

### Implementation

The City recognises the necessity for contemporary social, cultural and economic perspectives in environmental management to generate local economic, social and cultural benefits to the community. The City will work closely with the community to implement the strategic actions. Strategies with the highest priority and most beneficial activities will be developed as flagship projects. Example key priority flagship projects have been outlined in Appendix 2.

The following criteria guides the identification of priority strategic actions for implementation:

- Level of risk to key environmental assets
- Legislative requirements
- Maintenance of momentum on existing projects
- Commitments to the community
- Opportunities to work with other stakeholders
- Availability of resources

### Implementation Tools

Environmental management will be incorporated into the diverse activities the City is responsible for and implemented through multiple tools to achieve strategic outcomes.

TOOLS	EXPLANATION / EXAMPLE
Policy or planning development	A strategic method to address environmental issues that may be affected by other City business, such as development. The creation and implementation of a policy may resolve complex ecological issues, such as retention of remaining habitat meeting certain criteria for protection of endangered species.
Management	The recognition that an action of some kind is required to address a threat or problem. Management methods may be varied and will depend on the issue. For example, preparation of a management plan for a foreshore area with recommendations for action.
Evidence based science, trials as evidence for decision making	City undertakes scientific research trial or project to determine a management outcome and or obtain evidence to support management decisions. The City may partner with other organisations to undertake the trial. For example monitoring of water quality; possum habitat and/or trialling weed control methods for revegetation projects.
Community engagement and leadership	Community engagement to address a human induced threat to the environment is a recognised tool for implementation because most environmental 'issues' or problems requiring management stem from a human induced cause. Lack of education or understanding for the impacts of the activity on an environmental system can often result in the generation of an environmental problem, then requiring future management. By increasing education/engagement and training, the City can help manage environmental threats.
On-ground works	On-ground works is a practical way to address a direct threat or environmental issue. Such activities often help to engage the community and or might address a specific threat or need. Often grant money can be sourced to undertake this form of management. Staff resources are also required to administer these and to continue to manage them after implementation to ensure ongoing success.
Partnerships or consultation	Working closely with other groups/organisations can be a way to expand capacity and manage resources. Funding bodies often look for partnership projects because they garner wider scientific expertise to support management actions, engage a broader cross section of the community and establish best practice outcomes.
Resourcing	Applying for additional resources, and funds to develop new projects or to support an existing idea, project or concept. This might involve applying for grants or finding sponsorship projects.



### Introduction



## Assumptions that sit behind the Strategy

This Environment Strategy and the strategic actions listed are underpinned by the following assumptions:

- Many strategic actions will be delivered through partnerships with others.
- Environmental risk will be considered during implementation of all projects.
- Natural Resource Management is recognised as a long-term process. The ongoing maintenance of all activities is acknowledged as being as important as new projects because 'protection and conservation' are considered best practice management techniques.
- Where possible, the precautionary principle is applied to all actions and projects.
- Methodologies for implementation of Strategic Actions may change

according to adaptive management principles/best practice dictates.

- Strategic actions are pitched at a broad, strategic level to allow flexibility and to address economic, and social values as well as environmental issues.
- Projects and programs derived from the strategies shall be Specific, Measurable, Achievable, Realistic and Timely.

## Link to Local Environmental Planning Strategy

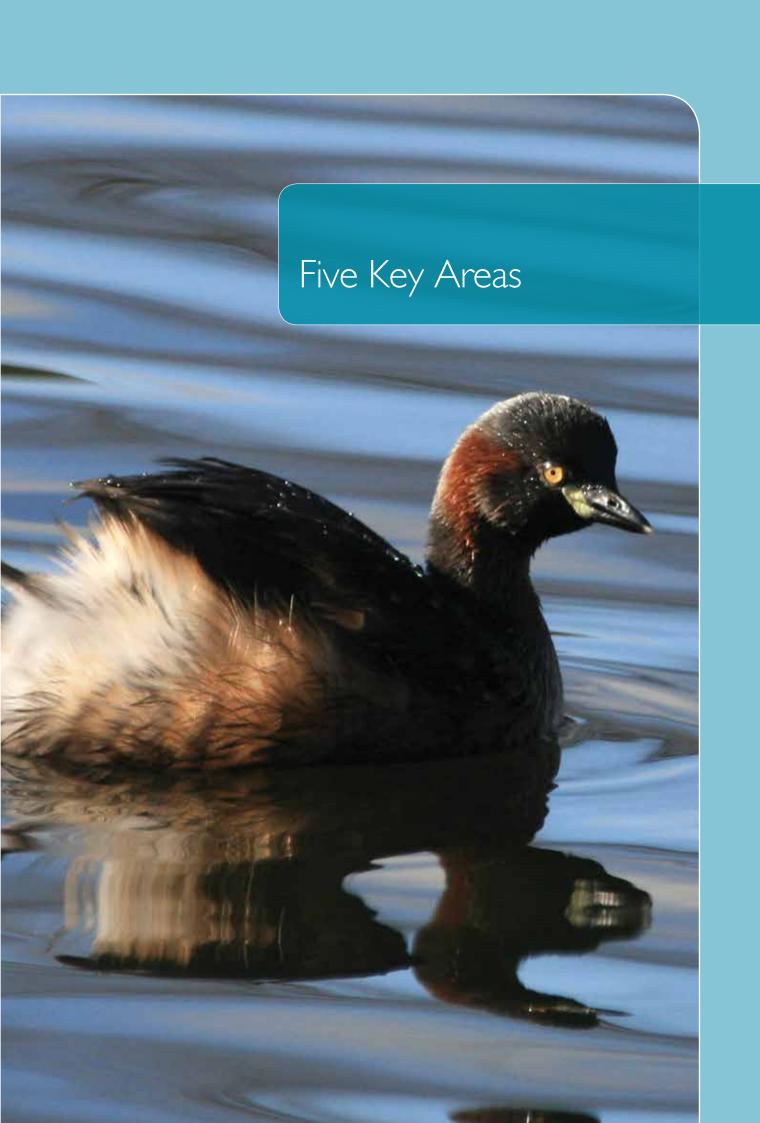
The town planning framework and Local Environmental Planning Strategy guides development and integrates environmental conservation, preservation and protection of key natural assets through the planning and development process and is a significant component of the City's implementation of environmental management at a strategic level.

### Monitoring and Reporting

Information will be provided to the community on progress towards implementation of strategic actions on a periodic basis.

Flagship projects will be reviewed annually in order to keep implementation of the Strategy relevant and engaging.

Whilst this document is expected to have a ten year life expectancy, the strategic actions within the document will be reviewed every three years. This ensures the strategic directions of the document, City business, local, national and international trends and the influence of evolving issues such as sustainability and climate change, are on target, relevant and align with priorities within the City's Community Strategic Plan. At the three year review, a report will be provided to Council on opportunities for the Strategy's future strategic direction to continue to deliver the strategic actions and Flagship projects.





## Biodiversity

### Vision

The City's exceptionally high biodiversity values are recognised and protected in the long term

### **Objectives**

- To strategically manage natural areas under the City's care in order to maximise the long term conservation of high priority biodiversity assets.
- To identify and actively pursue effective methods to protect biodiversity as part of the strategic planning and land tenure framework.
- To proactively address threats to biodiversity assets as per best practice natural resource management practices.
- To work with the community and stakeholders to combine resources and provide opportunities to maximise successful biodiversity conservation outcomes.

For the purposes of this plan, Biodiversity is defined as the 'richness of life', the number and variety of organisms within the Busselton district and recognises the variability across and within ecosystems and species, as well as the threatening processes which affect the conservation of them. The City sits within a globally recognised 'Biological Hotspot', an area of such high diversity and unique species not found anywhere else in the world. Threatening processes that affect long-term biodiversity in the City include weeds, pests, disease, vegetation clearing associated with land use and development, lack of understanding and resources, unmanaged access and human activities.

The impact of climate change on biodiversity of coastal reserves is recognised and is addressed through ongoing monitoring and appropriate management to continue to protect and enhance biodiversity values in coastal areas.

This chapter is focussed on strategic actions the City can implement to protected species, native vegetation, coastal management and threatening processes such as phytophthora dieback, weed control and recreation.

Management actions identified in this plan aim to recognise, conserve, protect and celebrate our rich biodiversity through implementation of a range of management tools. Coordination of appropriate strategies and actions will continue to ensure biodiversity in Busselton is maintained and, improved as greater understanding and best practice techniques are applied to determine sustainable solutions.

Biodiversity of local national, international significance are:

#### Flora:

- The City has 28 declared rare flora species.
- 9 Priority 1, 20 Priority 2,
   38 Priority 3 and 26 Priority 4.
- I Species presumed extinct.

### Threatened Ecological Communities and Priority Ecological Communities:

Threatened Ecological
 Communities – | |

- P1 Priority Ecological
   Communities 12
- P2 Priority Ecological
   Communities I
- P3 Priority Ecological
   Communities I

#### Fauna:

#### Threatened Fauna

- Terrestrial = 19 species
- Marine = 18 species (Turtles, Whales, Seabirds)

### **Priority Species**

• All categories = 19 species

## Internationally protected (various treaties)

- 30 species (note that some of these species are also protected under the above categories).
- Bush reserves- Ambergate Reserve, Meelup Regional Park, Ruabon reserve and Carbunup Reserve.
- Meelup Regional Park, Leeuwin-Naturaliste National Park, Ngari Capes Marine Park, Yelverton, Whicher and Tuart National Parks.
- Internationally recognised Wetlands: Vasse Wonnerup Wetlands (Ramsar).

### **Previous Achievements**

The following is a summary of the major achievements during the term of the 2004 Environment Strategy.

 Developed and implemented Reserves Vegetation Protection Policy (240) to provide direction

- for investigation of incidents of unauthorised damage vegetation on City managed land.
- Busselton Biodiversity Strategy
  reviewed and adopted by Council
  and endorsed by WAPC in
  February 2011. There has been
  renewed interest in the program
  with subdivisions and rate rebate
  concessions steadily being
  processed. 689ha of bushland
  has been protected through
  29 properties being re-zoned
  to Bushland Protection. 281ha
  of bushland has been protected
  through the rates concession
  incentive on 18 properties.
- Strategic Ecological assessment
   of 52 bushland reserves funded
   through the South West
   Biodiversity Project, which led to
   the development of a Natural
   Area Management Action Plan that
   prioritises management actions for
   2000 ha of natural areas managed
   by the City.
- Western Ringtail Possum Habitat Protection Strategy completed in 2009, detailing how WRP habitat can be protected and enhanced.
- Offset planting program initiated to manage requirements of native vegetation clearing permits.
- Surveyed vegetation condition, and selected weed species, on all rural roadsides with support from volunteers using Roadside Conservation Committee (DPaW) methodology.

### Biodiversity

- Assisted the South West
  Biodiversity Project in identifying
  Regional Ecological Linkages
  (SWREL). The SWREL mapping/
  information was also incorporated
  into the Local Environmental
  Planning Strategy (LEPS) and
  is used in the assessment of
  development applications.
- Initiated a Street Tree Planting program to improve streetscape amenity and habitat values for Western Ringtail Possum in urban areas.
- Initiated the Nature Verge program to encourage urban residents to plant local native vegetation on their verges to reduce water use, provide shade, improve amenity and habitat values.

- Developed and implemented management plans for the following reserves:
  - Bushland Management Plans:
     Ambergate Reserve, Blythe
     Reserve, Carbunup Reserve,
     Creekview Reserve, Marri and
     Armstrong Reserves, Meelup
     Regional Park Management Plan,
     Minion Reserve, Peron Reserve,
     Ruabon Tutunup Rail Reserves,
     Vintners Ridge Reserve.
  - Foreshore Reserves: Broadwater Reserve, East Busselton Reserve, Quindalup Reserve 34111, Toby Inlet, West Street Reserve, Quindalup Reserve 46, Dugalup Brook, Dunsborough Foreshore, Busselton Central East and Yallingup foreshore.

- Locke Estate Environmental
   Fire Management Plan adopted
   by Council.
- Fire Management Plans developed for 30 bushland reserves.
- State Planning Policy 3.7 Planning in Bushfire Prone Areas and the associated Guidelines updated in 2010 and now greater adherence is being given in planning considerations for development. Where possible development is only being allowed in cleared areas.
- Dieback survey completed in Meelup Regional Park, Big Rock Reserve, Ambergate Reserve and Carbunup reserves.
- Implementation of maintenance protocols for the strategic firebreak network in order to prevent the spread of Phytophthora dieback.







### Strategic Actions - Biodiversity

ACTION No.	STRATEGIC ACTION
1.1	Continue to develop and review management plans for natural areas under the City's care, including application of fire management.
1.2	Continue improvement of planning mechanisms for the protection of biodiversity and habitat. Review and finalise the draft Western Ringtail Possum Habitat Protection and Enhancement Strategy.
1.3	Work in partnership with other agencies and organisations to identify opportunities for implementation of recovery plans for protection of endangered species.
1.4	Assess and provide recommendations for strategic approaches to control dieback through prevention, education and management.
1.5	Identify sites of high environmental value which may require conservation outcomes to be secured via changes to land tenure.
1.6	Develop opportunities to improve planning for the protection of vegetation in City reserves to balance potential conflicting values such as fire, biodiversity, public open space and amenity.
1.7	Develop initiatives to raise awareness and protect endangered fauna.
1.8	Continue to promote the opportunities for conservation through the Biodiversity Incentives Strategy, the Leeuwin Naturaliste Statement of Planning policy, the Busselton Wetlands Conservation Strategy and voluntary conservation covenants.
1.9	Develop guidelines to encourage voluntary retention and protection of significant vegetation including habitat trees.
1.10	Develop a program to strategically address the loss of vegetation in foreshore areas.
1.11	Continue to manage weeds and feral animals on City land.



## 2 Water Resources

### Vision

Water assets are actively managed, protected and valued by the community

### **Objectives**

- To ensure proactive management of water assets within the Geographe catchment.
- To provide opportunities for the community to engage with and learn about water assets, and practical ways to minimise impacts at the individual level.
- To embed sustainable water management practises throughout the City's operations. To cultivate new ways to improve urban water management.
- To implement the urban water management planning framework.

Human activities and land use within water catchment areas across Western Australia and in the South West have had a major impact on wetlands and waterways through vegetation clearing, pollution, water use and encroaching development. Agricultural land uses have historically had the largest effect on water catchments, wetlands and water quality, however,

recent urban expansion and development is increasingly impacting on water quality in wetland environments.

The City contains a number of complex water catchments, with modified drainage networks some of which drain to coastal wetlands including the Ramsar listed Vasse-Wonnerup wetlands.

### Water Resources

Most wetlands in Busselton have been greatly affected by land clearing and land use activities. The major water courses, except for the Carbunup River, have been heavily modified as part of the rural drainage network that was constructed to reduce inundation of farm land. Poor land use practices and drainage of excess water have increased erosion and sedimentation in the drainage system, increased the loss of nutrients from the land and resulted in loss of biodiversity from the natural creeks and rivers. Sediment and nutrient lost from the catchment is contributing to eutrophication of the City's waterways and wetlands.

Management of water resources is very much a shared responsibility. This chapter contains strategic actions that the City will aim to achieve, however the table on page 14 illustrates the broader responsibilities of the many agencies and organisations involved in management of water.

### **Previous Achievements**

- Busselton Wetlands Conservation
   Strategy 2005, developed in
   collaboration with government
   agencies and WAPC, to identify
   local wetlands considered to be
   most at risk from development
   and set incentives and protections
   in place to manage development
   around the Busselton Wetlands.
- Busselton Wetlands Project team implementation of wetland conservation, education and tourism initiatives.

- Development of Wetland Trails
   Development Plan (2007)
   and New River Demonstration
   Site concept plan (2010).
   Both plans are being
   progressively implemented.
- Preparation and implementation of Foreshore Management plans for Toby Inlet and Dugalup Brook.
- In partnership with Geocatch, installed stormwater retrofit systems in the Light Industrial Area and CBD of Busselton. Installations occurred at Barlee Street, Queen Street roundabout, Coles' car park, Albert Street bio-retention basins, College avenue living stream, Frederick Street wetland, Bunbury Street basin/wetland, Queen Street Cultural Precinct and the Busselton Community Resource Centre and the Busselton Foreshore.
- Adoption of Stormwater
  Management and Drainage Infill
  Contributions Local Planning
  Policy Provisions (October 2014).
  The policy provisions provide a
  requirement for all developments
  to use/infiltrate water on site, or to
  provide a developer contribution
  to the City for retrofit stormwater
  treatment systems within the
  stormwater drainage network.
  WSUD Guidelines have been
  drafted to guide implementation.
- Participation in the Vasse Estuary
  Technical Working Group,
  responsible for determining
  directions for management of the

- Vasse-Wonnerup Estuary and provided on-ground support for a variety of actions such as fish kill clean—ups.
- Formation of the Waterways
  Improvement Reference Group
  to investigate and provide
  leadership on water quality issues
  in the Lower Vasse River on behalf
  of the Busselton community.
  This Group lobbied the State
  government to investigate water
  quality issues associated with the
  waterways and wetlands of the
  Geographe catchment. This led to
  significant investment by the State
  to support development of Vasse
  Geographe Strategy.
- The City also implemented a
   Water Campaign in 2010 to
   managing corporate water use
   (ICLEI Water Campaign), reporting
   on water savings and operational
   initiatives to reduce water use for
   City buildings, parks and gardens.



## Water Resources

### Water Management Responsibilities of Agencies

RESPONSIBLE AGENCY / ORGANISATION	WATER ASSET	RESPONSIBILITIES
Department of Water	Proclaimed Ground and Surface Water Management Areas, estuary peripheral wetlands, and wetlands physically connected to waterways	<ul> <li>Water licencing (surface and groundwater extraction).</li> <li>Coordination of the Vasse -Wonnerup taskforce.</li> <li>Coordination of the Revitalising Geographe Waterways Initiative.</li> </ul>
Geocatch	Geographe Catchment	Catchment management Promoting best practices to improve water quality
Water Corporation	<ul> <li>Rural drains including natural waterways used for conveyance of flood water</li> <li>Mains water supply (Duns.)</li> <li>Sewerage</li> </ul>	<ul> <li>Maintenance of the drainage network to ensure rural land inundation is managed and facilitate community behaviour change for reducing water use.</li> <li>Supply potable water.</li> </ul>
Busselton Water	Mains water supply (Busselton)	Ensure safe drinking water for residents and facilitate community behaviour change for reducing water use.
Department of Parks and Wildlife	Water bodies in National Parks and wetlands, Marine Parks	Encouraging the conservation of natural resources and maintaining natural ecosystem function.
Department of Fisheries	Protection and regulation of aquatic fauna in waterways and ocean	<ul> <li>To manage fish stocks and ensure they are available for future generations.</li> <li>Biosecurity - prevent the introduction of exotic and potentially harmful plants and animals to natural waterways</li> </ul>
Department of Agriculture and Food	Irrigation Water	Extension of techniques to improve water use efficiencies and nutrient management in agriculture.
Department of Planning	Water Resource Planning	Implementation of Better Urban Water Management.
City of Busselton	<ul> <li>Vasse River and Toby Inlet</li> <li>Urban stormwater drainage</li> <li>Groundwater license for watering of Sports grounds, parks and gardens</li> </ul>	<ul> <li>Preparation and implementation of management plans for the Vasse River and Toby Inlet.</li> <li>Construction, and maintenance of drainage in residential areas</li> <li>Wise use of water in all public amenities.</li> <li>Effective use of planning tools to minimise water use in new buildings and developments</li> </ul>

The focus of this chapter is on strategic action the City can undertake or influence with respect to wetlands and waterways, water quality, stormwater and water sensitive urban design.

### Strategic Actions - Water

ACTION No.	STRATEGIC ACTION
2.1	Prepare management plans for the Lower Vasse River and Toby Inlet, in close consultation with the local community and stakeholders.
2.2	Continue to work with all partners of the Vasse Taskforce to develop strategic and integrated approaches to management of Water Quality in the wetlands and waterways of Geographe Catchment.
2.3	Apply Water Sensitive Urban Design principles in City stormwater management programs and upgrades, addressing both water quality and volume.
2.4	Prepare and manage district water management strategies for Busselton and Dunsborough.
2.5	In partnership with other water agencies continue to raise awareness about water quality and wetland values and strategies to reduce nutrients entering waterways and wetlands through the Busselton Wetlands Initiative.
2.6	Investigate opportunities for alternative fit for purpose water use options for city land and within new land developments.
2.7	Develop action plans and programmes to increase water use efficiency and water quality.
2.8	Support the consolidation of reserves around the Busselton Wetlands, including through appropriate zoning of land and management of environmental values through the Busselton Wetlands Conservation Strategy.
2.9	Continue to work with other agencies on strategies to manage groundwater and salt intrusion in the region.



### Community



## 3 Community

### Vision

An engaged and empowered community that positively contributes to the conservation, protection and enhancement of our natural environment for the long-term benefit of all.

### **Objectives**

- To develop and maintain effective relationships with the natural resource management community.
- To provide support and resources to assist community groups and individuals to protect and enhance the natural environment.
- To provide opportunities for the community to celebrate and appreciate the natural environment through positive experiences that encourage environmental stewardship.

This section of the Environment Strategy addresses the establishment and continued fostering of many different community relationships to protect, enhance and celebrate our natural environment.

The City recognises the close relationship between the natural environment and the community.

It is the natural environment that provides a backdrop to Busselton, Vasse, Yallingup and Dunsborough's international recognition as beautiful and valued places to visit and live. The natural environment and surrounds of the Busselton region have been integral to the economic and industrial development of the towns and localities, and for the development

and expansion of tourism in the region. This Environment Strategy recognises that with increased community use, these highly valued environmental assets are further compromised, and a balance must be established to manage community use and protect environmental values in the future.

Opportunities exist to engage, educate and encourage the community to appreciate and protect the environment, and to utilise these tools to ensure the beautiful and unique City environment is not compromised in the future by increased use, tourism, access, development and associated human induced impacts. Community engagement provides an opportunity to encourage greater appreciation and education of our natural resource values. It also provides new ways to help the local community participate in protection, enhancement and conservation of key environmental assets through on-ground projects, volunteering and natural resource management. Continuing to foster these relationships will help to promote collective ideas, implement projects and provide new ways to share and manage limited resources.

The City has a long history of engagement with other environmental agencies, departments and communities. Partnering with others can also encourage new innovations around community engagement, tourism and education across jurisdictions and responsibilities.

The City acknowledges the existing hard work and dedication of community groups already working on natural resource management on City owned reserves, wetlands, rivers and foreshores. Existing community groups working in natural resource management help to achieve annual successes in revegetation, weed control, education, dieback management and fire planning. The City recognises engagement and partnership with the community will help to ensure our natural assets are protected and improved for the long-term.

### **Previous Achievements**

- Initiation of Community
   Environment Grant scheme, to support NRM community group activities on City reserves from 2006-2011. This funding was replaced by the Community Bids scheme which has an NRM component.
- Establishment of the Environmental Reference Group which reviews implementation of the Environment Strategy and acts as a sounding board for environmental issues within the City district.
- Friends of Reserve Strategy, endorsed by Council in 1999, to support NRM group activities.
- Building community Environmental Awareness through Geocatch newsletter, Council for Community local newspaper and Bay to Bay Newsletter.

Supported many awareness raising projects through the Community Environment Grants (i.e. brochures, displays, signage, events) and community forums.

- Assist landowners with dieback management and feral animal control.
- In partnership with the South West Biodiversity Project the City;
  - Identified biodiversity values of City's reserves and prioritise management recommendations which culminated in the Natural Areas Management Action Plan.
  - Updated vegetation mapping for the revision of the Biodiversity Incentives Strategy.



## Community

### Strategic Actions - Community

ACTION No.	STRATEGIC ACTION
3.1	Support and build capacity of volunteers to undertake bush care and other biodiversity conservation initiatives. Develop and implement an NRM and Community Engagement Strategy to support community involvement in managing City lands.
3.2	Develop and implement the NRM Community Group Manual to manage new and existing NRM volunteers.
3.3	Continue to support community environmental groups to access funding and resources for strategic and on-ground environmental projects.
3.4	Create a Strategic communication plan for undertaking environmental awareness with community in partnership with other agencies.
3.5	Provide support for event organisers with regards to environmental management.
3.6	Develop community programs to raise awareness and facilitate behaviour change in all areas of environmental sustainability.
3.7	Support, coordinate and promote environmental initiatives and projects to the community.
3.8	Work within the City Aboriginal Reconciliation Plan process to discuss proposed projects and management of natural areas.
3.9	Work with others to enhance ecotourism opportunities around Western Ringtail Possum and other endangered flora and fauna.
3.10	Provide and support community programs for habitat enhancement and protection of threatened species.
3.11	Support partnerships with universities and community interest groups (citizen science) to study environmental initiatives of relevance to the City.





### Environmental Sustainability



## 4 Environmental Sustainability

### Vision

An empowered local community and organisation that strives for an environmentally sustainable future, for all, and in perpetuity.

### **Objectives**

- To embed sustainability practices in City's core business.
- To reduce the organisation's use of non-renewable resources.
- To empower a resilient local community in making sustainable decisions for the future.
- To proactively plan for a changing climate.

Environmental sustainability is a state in which the demands placed on the environment can be met without reducing its capacity to allow all people to meet their needs, now and in the future. For the City, this means committing to managing resources appropriately for the benefit of current and future generations.

The City continues to monitor and report energy, water and waste use in line with local, national and international aspirations and targets,

and work with the community and stakeholders to develop new and innovative ways to reduce the environmental impact of our operations and services. Environmental sustainability is finding effective ways to engage with and empower the community to reduce their own resource consumption and to make the city a more sustainable place to live and appreciate.

Being environmentally sustainable also requires adapting to a changing

## Environmental Sustainability

climate and responding to the challenges of a coastal environment. Looking forward, the City will need to build its capacity for resilience and work with stakeholders and residents in futureproofing our communities and environment.

### **Previous Achievements**

- · Energy Action Plan reviewed and endorsed by Council in August 2014. The City joined the Cities for Climate Change Program (CCP) in June 2008. Achieved Milestone I (energy audit), Milestone 2 (setting of emissions reduction goals) and Milestone 3 (drafting of a corporate Energy Action Plan) of the CCP program. The CCP Australia Program and its milestone framework support ended on 30 June 2009 when the Federal Government discontinued its funding. However, the City resolved to continue basing its climate change mitigation work on the CCP framework due to its past success with other local governments across Australia.
- Implementation of a Water Action Plan. The City commenced a Water Campaign Program in June 2008. Achieved Milestone I (water audit), Milestone 2 (setting of water consumption and quality goals) and Milestone 3 (drafting of corporate Water Action Plan) of the Water Campaign. Implementation of the Water Action Plan is ongoing.

- Designed and incorporated sustainably sourced geothermal energy to heat the Geographe Leisure Centre and the pool to reduce building energy use.
- Installation of solar powered and wind powered street lighting.
- LED lighting upgrades for all City facilities to improve lighting and reduce energy use across City infrastructure.
- Annual Greenhouse gas emissions reporting in City Annual Report to continue to monitor emissions savings and new projects.
- Green waste stockpiled and mulched 2 times a year.
   A local composting company takes most of the material and a proportion is retained for use by residents at no charge.
- Installation of weighbridge at
   Dunsborough Waste Facility to
   monitor waste streams and assess
   new methods for reduction,
   recycling and reuse of waste.
   Design of new lined cell for
   Dunsborough Waste Facility.
   Conversion of Busselton landfill site to transfer station.
- School education programmes on waste issues and action they can take on recycling, saving energy, reducing land fill and reducing waste.
- A Coastal Scoping study completed in 2007 provided guidance and

- direction for high priority studies and works required in Geographe Bay. This and subsequent studies has led to development of coastal infrastructure such as Abbey and Quindalup Boat ramp upgrades and parking. Coastal protection works have been completed at Busselton and Dunsborough Foreshore, the Locke Estate and some experimental low key work has occurred at Norman Road in Broadwater.
- The City is involved in the Peron Naturaliste Partnership (PNP) looking at coastal adaptation strategies for coastal towns between Cape Peron and Cape Naturaliste. The PNP has delivered the Coastal Adaptation Decision Pathway Project and a Coastal Community Adaptation Awareness plan.



## Environmental Sustainability

### Strategic Actions - Environmental Sustainability

ACTION No.	STRATEGIC ACTION
4.1	Continue to implement and review City's Energy Action Plan.
4.2	Continue to implement and review City's Water action plan to agreed targets.
4.3	Continue to implement and review City's waste reduction strategy.
4.4	Develop a Corporate Sustainability Policy for the City.
4.6	Develop a climate change declaration for the City.
4.7	Implement the findings of the Coastal Adaptation Decision Pathway Project and a Coastal Community  Adaptation Awareness Plan developed by the Peron Naturaliste Partnership.
4.8	Develop and promote a strategic position on coastal risk areas through the PNP. Support the development of tools for community living in coastal risk areas.
4.9	Continue to support the Green Taskforce to reduce corporate emissions for energy water and waste.





## 5 Governance and Resourcing

### Vision

A resilient, resourceful and accountable organisation that seeks partnerships with its stakeholders to achieve mutual environment benefits.

### **Objectives**

- To seek creative and innovative funding solutions and resourcing opportunities
- To consider partnerships as adding value to our core business
- To strategically and proactively plan according to environmental priorities
- To communicate and consult with our stakeholders
- To be a leader in sustainable environmental management
- To drive sustainable development through planning tools and policies

As a large local government in the South West region, the City recognises the significance of the attractive, unique environment of Geographe Bay and surrounds as a destination of choice for many local, national and international visitors to visit and as a place to live. The City recognises good environmental management

requires appropriate resourcing across the organisation, to achieve best practice outcomes in the environment across all disciplines. Training and resourcing are regularly reviewed and appropriately managed to ensure the organisation maximises its opportunities and capabilities to service

## Governance and Resourcing

the community and protect the natural values of the region.

The organisation supports innovation, proactivity, critical review and adaptive management techniques within core business. The City recognises that environmental initiatives need to be adequately and appropriately delivered to protect and enhance the significant environmental values within the district.

The focus of this chapter is how the City as an organisation can continue to provide effective and appropriate resources and opportunities to manage these expectations successfully into the future.

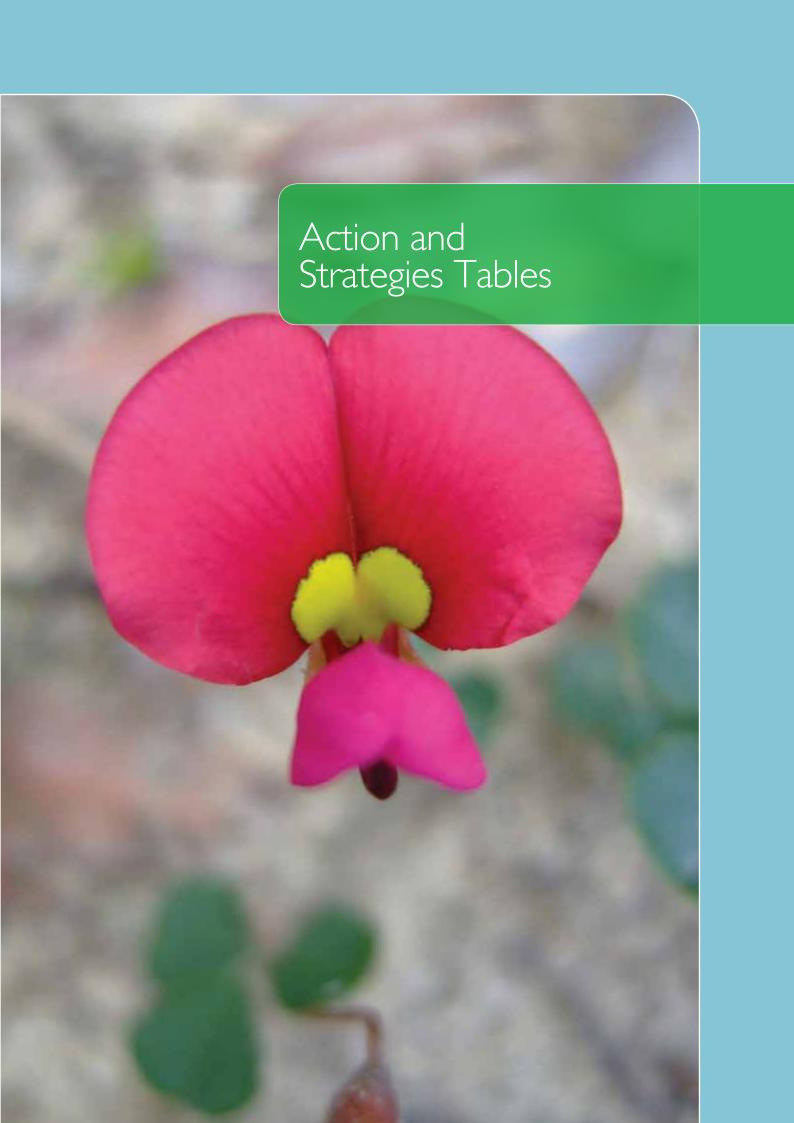
### **Previous Achievements**

 Preparation and implementation of the Reserve Vegetation
 Protection Policy  Provided training for relevant staff on Dieback management, Tree decline and treatment, Acid Sulphate Soils, vegetation management and sustainability practices

### Strategic Actions - Governance and Resourcing

ACTION No.	STRATEGIC ACTION
5.1	Investigate opportunities for increasing and improving sustainable future development.
5.2	Generate productive partnerships with private sector and community groups to resource environmental projects for community benefit.
5.3	Develop and implement environmental training for the organisation.
5.4	Develop an environmental offset policy.





## Biodiversity

ACTION No.	STRATEGIC ACTIONS	CURRENT STAGE OF IMPLEMENTATION	IMPLEMENTATION TOOL/S FOR MANAGEMENT	WHO IS RESPONSIBLE
1.1	Continue to develop and review management plans for natural areas under the City's care, including application of fire management.	Ongoing	Management, Community engagement and leadership	Internal
1.2	Continue improvement of planning mechanisms for the protection of biodiversity and habitat. Review and finalise the draft Western Ringtail Possum Habitat Protection and Enhancement Strategy.	To be reviewed	Planning or Policy development	Internal
1.3	Work in partnership with other agencies and organisations to identify opportunities for implementation of recovery plans for protection of endangered species.	Ongoing	Planning development, Onground works, Management	Internal
1.4	Assess and provide recommendations for strategic approaches to control dieback through prevention, education and management.	Review and develop	Policy and Planning development, On-ground works, Community engagement and leadership, Evidence based science	Internal
1.5	Identify sites of high environmental value which may require conservation outcomes to be secured via changes to land tenure.	New	Planning and Policy development, Management.	Internal
1.6	Develop opportunities to improve planning for the protection of vegetation in City reserves to balance potential conflicting values such as fire, biodiversity, public open space and amenity.	New	Partnerships Policy and Planning development, Community engagement and leadership	Internal
1.7	Develop initiatives to raise awareness and protect endangered fauna.	Ongoing	Management, On-ground works, Planning and Policy Development	Internal
1.8	Continue to promote the opportunities for conservation through the Biodiversity Incentives Strategy, the Leeuwin Naturaliste Statement of Planning policy, the Busselton Wetlands Conservation Strategy and voluntary conservation covenants.	Ongoing	Community engagement and leadership, Policy and planning Development	Internal
1.9	Develop guidelines to encourage voluntary retention and protection of significant vegetation including habitat trees.	Ongoing	Policy and planning Development	Internal
1.10	Develop a program to strategically address the loss of vegetation in foreshore areas.	Ongoing	Management, On-ground works, Planning and Policy Development	Internal
1.11	Continue to manage weeds and feral animals on City land.	Ongoing	Natural area management, On-ground works	Internal

ACTION No.	STRATEGIC ACTIONS	CURRENT STAGE OF IMPLEMENTATION	IMPLEMENTATION TOOL/S FOR MANAGEMENT	WHO IS RESPONSIBLE
2.1	Prepare management plans for the Lower Vasse River and Toby Inlet, in close consultation with the local community and stakeholders.	Under development	Partnerships, Policy and Planning Development , Management and On-ground works	Internal and External stakeholders
2.2	Continue to work with all partners of the Vasse Taskforce to develop strategic and integrated approaches to management of Water Quality in the wetlands and waterways of Geographe Catchment.	Ongoing	Partnerships, Policy and Planning Development , Management and On-ground works	Internal and external stakeholders
2.3	Apply Water Sensitive Urban Design principles in City stormwater management programs and upgrades, addressing both water quality and volume.	Ongoing	Policy and Planning development, On-ground works	Internal
2.4	Prepare and manage district water management strategies for Busselton and Dunsborough.	New	Policy and Planning development, Partnerships, Management	Internal and external stakeholders
2.5	In partnership with other water agencies continue to raise awareness about water quality and wetland values and strategies to reduce nutrients entering waterways and wetlands through the Busselton Wetlands Initiative.	Ongoing	Management, Partnerships with others, Community engagement and leadership	Internal and External stakeholders
2.6	Investigate opportunities for alternative fit for purpose water use options for city land and within new land developments.	Ongoing	Policy and Planning development, Management,	Internal
2.7	Develop action plans and programmes to increase water use efficiency and water quality.	Ongoing	Policy and Planning development, Management and On-ground works	Internal
2.8	Support the consolidation of reserves around the Busselton Wetlands, including through appropriate zoning of land and management of environmental values through the Busselton Wetlands Conservation Strategy.	Ongoing	Policy and Planning development	Internal
2.9	Continue to work with other agencies on strategies to manage groundwater and salt intrusion in the region.	Ongoing	Policy and Planning development, Management and On-ground works	Internal

## Community

ACTION No.	STRATEGIC ACTIONS	CURRENT STAGE OF IMPLEMENTATION	IMPLEMENTATION TOOL/S FOR MANAGEMENT	WHO IS RESPONSIBLE
3.1	Support and build capacity of volunteers to undertake bush care and other biodiversity conservation initiatives. Develop and implement an NRM and Community Engagement Strategy to support community involvement in managing City lands.	In development	Policy and Planning development, Management, Community engagement and leadership	Internal
3.2	Develop and implement the NRM Community Group Manual to manage new and existing NRM volunteers.	In development	Policy and Planning development, Management, Community engagement and leadership, Resourcing	Internal
3.3	Continue to support community environmental groups to access funding and resources for strategic and on-ground environmental projects.	Ongoing	Community Engagement, Management	Internal
3.4	Create a Strategic communication plan for undertaking environmental awareness with community in partnership with other agencies.	New	Policy and Planning and Development, Partnerships, Resourcing	Internal and external stakeholders
3.5	Provide support for event organisers with regards to environmental management.	New	Management, Community engagement and leadership,	Internal
3.6	Develop community programs to raise awareness and facilitate behaviour change in all areas of environmental sustainability.	New	Community engagement and leaderships	
3.7	Support, coordinate and promote environmental initiatives and projects to the community.	New	Community engagement and leadership, On-ground works	Internal
3.8	Work within the City Aboriginal Reconciliation Plan process to discuss proposed projects and management of natural areas.	New	Community engagement and leadership, Partnerships	Internal
3.9	Work with others to enhance ecotourism opportunities around Western Ringtail Possum and other endangered flora and fauna.	Ongoing	Community engagement and leadership, Partnerships	Internal and External stakeholders
3.10	Provide and support community programs for habitat enhancement and protection of threatened species.	Ongoing	Community engagement and leadership, Management, Resourcing, On-ground works	Internal, partnerships with external stakeholders
3.11	Support partnerships with universities and community interest groups (citizen science) to study environmental initiatives of relevance to the City.	Ongoing	Policy and Planning development, partnerships and consultation, Resourcing, Evidence based science	Internal and external stakeholders

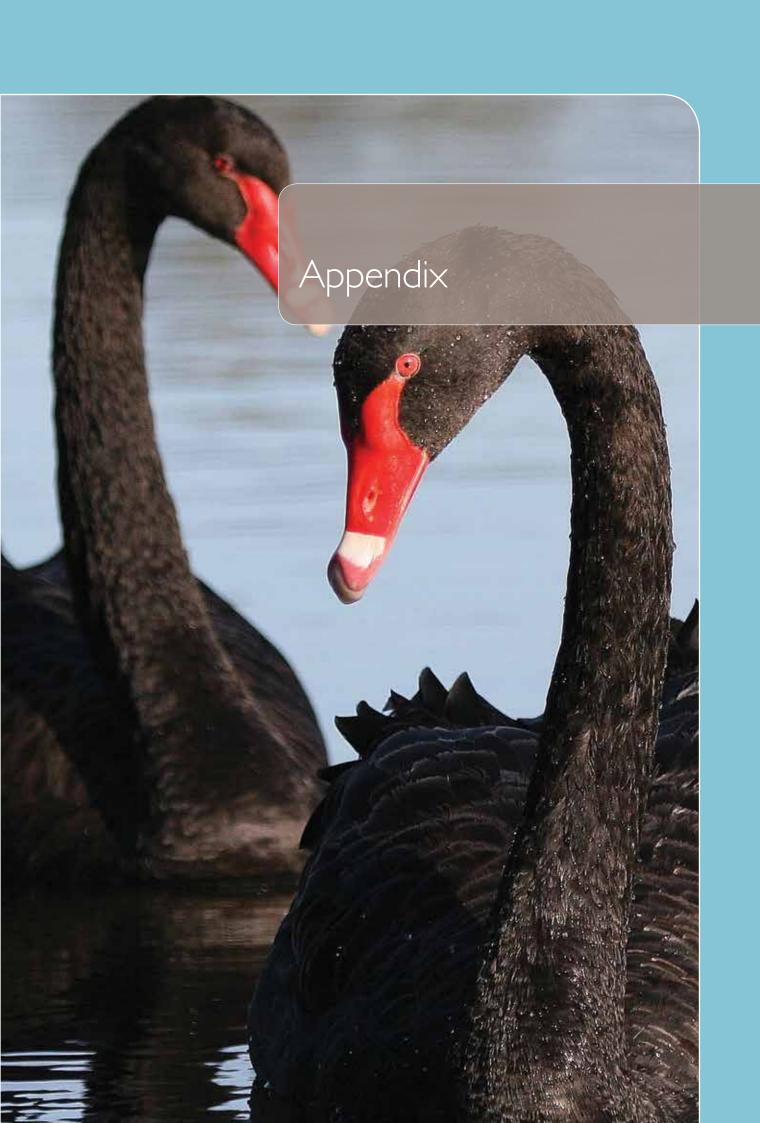
ACTION No.	STRATEGIC ACTIONS	CURRENT STAGE OF IMPLEMENTATION	IMPLEMENTATION TOOL/S FOR MANAGEMENT	WHO IS RESPONSIBLE
4.1	Continue to implement and review City's Energy Action Plan.	Ongoing	Management, Partnerships, Policy or Planning development	Internal
4.2	Continue to implement and review City's Water action plan to agreed targets.	Ongoing	Management, Partnerships, Policy or Planning development	Internal
4.3	Continue to implement and review City's waste reduction strategy	Ongoing	Management, Partnerships, Policy or Planning development	Internal
4.4	Develop a Corporate Sustainability Policy for the City.	New	Policy or Planning development, Management	Internal
4.6	Develop a climate change declaration for the City.	Under development	Policy and Planning development, Management	Internal
4.7	Implement the findings of the Coastal Adaptation Decision Pathway Project and a Coastal Community Adaptation Awareness Plan developed by the Peron Naturaliste Partnership.	New	On-ground works, Management, Partnerships	Internal
4.8	Develop and promote a strategic position on coastal risk areas through the PNP. Support the development of tools for community living in coastal risk areas.	New	Policy and planning development, Community engagement and leadership	Internal
4.9	Continue to support the Green Taskforce to reduce corporate emissions for energy water and waste.	Ongoing	Community engagement and leadership, Management	Internal



## Governance and Resourcing

ACTION No.	STRATEGIC ACTIONS	CURRENT STAGE OF IMPLEMENTATION	IMPLEMENTATION TOOL/S FOR MANAGEMENT	WHO IS RESPONSIBLE
5.1	Investigate opportunities for increasing and improving sustainable future development.	New	Policy and Planning development	Strategic Planning/ Environmental planning
5.2	Generate productive partnerships with private sector and community groups to resource environmental projects for community benefit.	Ongoing	Resourcing, Partnerships	
5.3	Develop and implement environmental training for the organisation.	New	Management, Evidence based Science	Environmental Planning
5.4	Develop an environmental offset policy.	New	Policy	Environmental and Strategic planning





## **Environment Policy**

### Policy Background

Policy Reference No. 30

Owner Unit
Environmental Planning

Originator
Environment
Strategy Consultant

Policy Approved By Council

Date Approved 9 March 2011

Review Frequency
As required

Related Documents
Environment Strategy

Background/History
Policy updated 2011
after adoption in 2004
as part of the
Environment Strategy

### **Purpose**

The City will undertake its activities and ensure its decision-making considers the impacts on the environment and identifies measures to adequately to actively manage them. The City will therefore obtain adequate levels of information required to properly assess proposals, activities and works programmes to achieve acceptable environmental standards and statutory compliance.

The City will demonstrate a commitment towards continuous improvement in environmental management and progress towards creating a sustainable balance between environmental, social and economic values in the City.

### Scope

Decisions and activities will have regard to relevant environmental legislation and will be based upon recognised best practice environmental management standards. The most up to date information on environmental impacts, and their management, will be used to assess the acceptability of proposals and activities. Where applicable it will be the responsibility of the proponent to provide sufficient information to enable this to occur.

Where information is not available, the Precautionary Principle will be used

by the City and the Council to assist in decision-making and advice will be sought from relevant government agencies or other recognised experts with suitable qualifications and experience on the environmental issues being considered.

### **Policy Content**

Implementation of the policy will be achieved through the following activities:

Manage natural areas under City ownership, management or control to retain and enhance their environmental values and functions by:

- implementing the Environment Strategy and adopted Management Plans;
- complying with all environmental legislation; and,
- conforming to best practice management standards.

Establish effective working relationships and partnerships with the community and other stakeholders to undertake environmental management activities;

Provide the opportunity for active stakeholder involvement, ownership and participation through:

 the provision of clear and consistent information to stakeholders;

### Appendix I

- consultation with the broader community where applicable; and
- participation in the City
   Environmental Reference Group.

Ensure that City activities do not lead to unacceptable environmental impacts and are undertaken in accordance with current best practice standards.

This will be achieved by:

good governance and sound decision making;

- providing opportunities for staff training;
- placing the onus on the proponent of any proposals, activities and work programs to identify and assess environmental impacts and propose measures to manage these or modify the proposal; and
- ensuring stakeholders are aware of the City's activities and how potential environmental impacts are being managed.

Plan, design, operate and conduct operations in a manner that minimises waste and the demand on natural resources and energy.

COUNCIL RESOLUTION	DATE	INFORMATION
C1103/070	9 March 2011	Policy updated after adoption in 2004 as part of the Environment Strategy
		Version 2



## Appendix 2

## Flagship Projects

The following Flagship Projects have been provided as examples to illustrate potential for future plans.

### Project Plan I

OPERATIONAL ACTION/STRATEGY	INTENT OF PROJECT:			
Relates to: Community Theme:  3.4 Create a Strategic communication plan for enhancing local community environmental awareness in partnership with other agencies  3.5 Provide support for event organisers with regards to environmental management  3.6 Develop community programs to raise awareness and facilitate behaviour change in all areas of environmental sustainability	Community Environmental Events. Promote events calendar to inform community of events/ activities. E.g. (Meelup moon walk, Possum night stalks, Wildflower show, Birdlife Australia.)  Develop a framework for assessment and promotion of environmental activities. Assist groups to ensure the events run according to environmental best practice. Link with organisations that can promote and deliver environmental activities and agreed outcomes.			
PROJECT NAME	COMMUNITY MEETS ENVIRONI	MENT		
<ul><li> What do we want to achieve with this project?</li><li> What are the key outcomes?</li></ul>	What are the main challenges/Obstacles with this kind of project	Who are the key stakeholders that would have a vested interest in a successful outcome for this project?      Which of these stakeholders can most influence our key decision makers?	<ul> <li>What benefits can these stakeholders derive from the achievement of this priority project?</li> <li>How could we involve these stakeholders in this project?</li> </ul>	
ACHIEVE?				
<ul> <li>Greater community appreciation for our natural assets</li> <li>More engaged community (visitors and local)</li> <li>Reduced environmental footprint for events</li> </ul>	Coordination – central repository for all information /events environmental  Pop-up events such as art at the wetlands, ballet by the bay etc.  Resources  Attracting new audiences  Volunteer fatigue	Wildlife care groups     Conservation     awareness groups     GBTA     Art Geo     Tour operators	Additional attractions for tourists     Winter program to extend visitor stays during off peak times	
OUTCOMES				
<ul> <li>Increased attendance for environmental activities</li> <li>Coordinated effort</li> <li>Seasonal variety and continuity of environmental events.</li> </ul>		<ul><li>MRBTA - Tourists</li><li>City webpage</li><li>Existing community groups</li><li>Naturalists Club</li><li>State agencies</li></ul>	Develop a network and promote regularly.      Half day seminars on managing environmental tourist attractions of Busselton for tour operators	

### Project Plan 2

OPERATIONAL ACTION/STRATEGY	SUSTAINABLE INITIATIVE WORKSHOP			
Relates to Sustainability theme:  3.6 Develop community programs to raise awareness and facilitate behaviour change in all areas of environmental sustainability.  4.1 Continue to implement and review City's Energy Action Plan.	Engagement with community on reduction of energy water and waste use in residences as part of the Energy Action plan community actions and engagement with external partners such as Geocatch.			
PROJECT NAME	COMMUNITY SUSTAINABILITY	INITIATIVES		
<ul><li>What do we want to achieve with this project?</li><li>What are the key outcomes?</li></ul>	What are the main challenges/Obstacles with this kind of project	Who are the key stakeholders that would have a vested interest in a successful outcome for this project?      Which of these stakeholders can most influence our key decision makers?	<ul> <li>What benefits can these stakeholders derive from the achievement of this priority project?</li> <li>How could we involve these stakeholders in this project?</li> </ul>	
ACHIEVE?				
<ul> <li>Engage new home buyers</li> <li>Engage existing home owners/ renters</li> <li>Linking the environment and sustainability</li> <li>More resources allocated to this</li> <li>Culture of best practice and a benchmark</li> <li>Efficiency</li> </ul>	Resourcing limitation     Buy-in from stakeholders     and level of importance	Energy Reference Group     General public	Target audience — BUILDERS  Community partnerships  Community gardens  Geographic locations  Geocatch	
OUTCOMES				
<ul><li>Sustainability Initiatives workshops</li><li>Efficient new builds</li><li>Efficient retro builds</li></ul>	Provision of incentives for less waste to landfill	Energy Reference Group     Sustainability champions	Worm farms     Bins     Verges/native plants	

## Appendix 2

### Project Plan 3

OPERATIONAL ACTION/STRATEGY	IN PARTNERSHIP WITH WATER	AGENCIES	
Relates to Water themes:  2.3 Apply Water Sensitive Design principles in to City Stormwater management programs and upgrades, addressing both water quality and volume.  2.5 In partnership with other water agencies continue to raise awareness about water quality and wetland values and strategies to reduce nutrients entering waterways and wetlands through the Busselton Wetlands Initiative	Undertake initiatives to encoura changing perceptions.	ge living drain projects for increas	ed habitat and
PROJECT NAME	LIVING DRAINS		
<ul><li> What do we want to achieve with this project?</li><li> What are the key outcomes?</li></ul>	What are the main challenges/Obstacles with this kind of project	<ul> <li>Who are the key stakeholders that would have a vested interest in a successful outcome for this project?</li> <li>Which of these stakeholders can most influence our key decision makers?</li> </ul>	What benefits can these stakeholders derive from the achievement of this priority project?      How could we involve these stakeholders in this project?
ACHIEVE?			
<ul> <li>Ecological linkages</li> <li>Better water quality</li> <li>Better looking water ways</li> <li>Better/more recreational spaces</li> <li>Education</li> <li>Maintain drainage function</li> <li>Community ownership of environmental assets</li> </ul>	Current management practices     Land tenure     Resources	Water Corporation     Busselton water     Geocatch/DOW     GLCN     Green Army     SWCC	Cut maintenance costs Good PR  Nutrient reductions Leverage funding from other sources
OUTCOMES			
<ul> <li>Ecological linkages, (Possums/Birds)</li> <li>Water quality</li> <li>Aesthetics</li> <li>Recreation</li> <li>Education, resource (demonstration)</li> <li>Inspiration</li> <li>Maintain drainage function</li> <li>"Living Drains"</li> </ul>	Current management practices/minds     Vesting/owners     Cost of implementation     On-going management conflict	Cut maintenance costs     Public relations     Nutrient reductions (offsets)     Lever future funding management approach     Direct engagement in project	

### Best Practice Tools for Environmental Management

These environmental methods will be applied where appropriate to assist implementation of the strategic actions of the strategy. Four best practice environmental methods are:

### Conservation

Conservation is 'doing no harm' to intact natural functioning systems and environments. It is the cheapest and most effective way to manage the environment. Conservation recognises that some environmental systems are not being adversely affected by threatening processes, and should be maintained without interference. Conservation methods may involve exclusion and installation of barriers. Areas that require protection are often the most pristine and valued environmental assets within a district. Ironically these areas are often the places people want to visit or utilise. Management considerations must balance environmental conservation and human use to conserve and maintain ecosystem function.

### **Protection**

This management method considers techniques to safeguard areas that are less impacted by environmental threats. Methods such as treating a susceptible area of vegetation against dieback on a regular basis to prevent an infestation from occurring would be a form of protection. Protection methods are often long-term and ongoing and may be perceived as being costly, as the outcome might not be a radical change in the condition of the environment. Protection methods are however critical to ensure more intensive methods are not required in the future. Resource allocations for protection projects are critical 'insurance policies' for the environment.

### Management

Management methods are applied once environmental threats have been identified and conservation or protection methods will not prevent degradation. Management techniques are ongoing and assist with protection or conservation of key values, but usually involve a more long-term program to help to control or keep in check an existing threat. Management options are expensive and can be seen as 'Band-Aids' as they rarely address the core problem or threat and rarely result in the restoration of a natural ecosystem. However, the City recognises that management techniques are necessary and that resources need to be committed to management to keep threatening processes at an acceptable level. Weed control and planting are ongoing tools used for environmental management. While management methods seldom result in a 'restored' environment they are proactive and effective tools to engage the community and to maintain natural values in a given area.

### Enhancement

Areas that have been identified as not adversely affected by threatening processes (I.e. areas set aside for conservation), can be modified in small ways to make these areas accessible without impacting them. This might involve providing formalised access to an attractive view in a nature reserve. Enhancement may also mean selective and strategic management, such as returning a native animal back to an area where it used to reside in order for that animal to help restore the natural processes. E.g. So that the flora will germinate naturally. Enhancement may also mean restoring a particular function, e.g. habitat, to a degraded environment. Enhancement projects need to be carefully considered to prevent them causing degradation.

## Informing Documents and References

These documents are tools to provide relevant background information on each theme.

### Federal/State/Local Objectives Concerning Biodiversity

ENVIRONMENT STRATEGIES/ PLANS	RELEVANT OBJECTIVES	FURTHER REFERENCE	HOW THIS RELATES TO THE ENVIRONMENT STRATEGY/ACTION?
Australia's Biodiversity Conservation Strategy 2010-2030	<ul> <li>Mainstreaming biodiversity in community.</li> <li>Increasing Indigenous peoples engagement</li> <li>Enhancing strategic investments and partnerships.</li> <li>Building ecosystem resilience in a changing climate by: protecting diversity, maintaining and re-establishing ecosystem functions, reducing threats to biodiversity.</li> <li>Getting measurable results through:</li> <li>Improving and sharing knowledge, delivering conservation initiatives efficiently</li> </ul>	www.environment. gov.au/biodiversity/ publications/ australias- biodiversity- conservation- strategy	The City's Environment Strategy acknowledges the intention of these objectives to achieve best practice outcomes. Principles of adaptive management are paramount and should be applied by those undertaking biodiversity management in the future
State of the Environment report 2007	<ul> <li>At a national level, Western Australia has eight of 12 Australian biodiversity hotspots.</li> <li>At a global level, the South West is recognised as one of the world's 34 biodiversity hotspots</li> <li>WA currently has 362 threatened plants, 199 threatened animals and 69 threatened ecological communities.</li> <li>Recovery plans have been developed for less than one-third of threatened species and ecological communities</li> <li>There is ongoing loss and degradation of biodiversity in WA</li> <li>Knowledge about many species and ecosystems and some threats to biodiversity remains inadequate.</li> </ul>	www.epa.wa.gov. au/AbouttheEPA/ SOE/2007/Pages/ default.aspx	Region has a number of threatened species and ecological communities-Western Ringtail Possum, Camaby's and other cockatoo species, plus threatened flora and several threatened communities. The City 's plan aims to implement recovery plans in partnership with other organisations and increase opportunities for protection of endangered species
WA Bush Forever 2000	General information about determining viable and sustainable reserve areas based on threat analysis and influence of size.	www.bushlandperth. org.au/bush-forever- overview	Provides a background and framework for long-term vegetation management and impact of most likely threats
Environment strategy 2004	All objectives are relevant	busselton.wa.gov.au/ Environment-Waste/ Environmental- Planning/ Environment- Strategy	Previous plan helps to inform the new Environment Strategy, some original recommendations still outstanding, intent of plan is the same as new plan

ENVIRONMENT STRATEGIES/ PLANS	RELEVANT OBJECTIVES	FURTHER REFERENCE	HOW THIS RELATES TO THE ENVIRONMENT STRATEGY/ACTION?
Local Government Guidelines for Bushland Management in the Perth and Coastal South-West NRM Regions of Western Australia 2009	Provide local government officers direction in prioritising management actions for natural areas and to ensure that management of these areas is in line with biodiversity principles.  Guidelines developed to assist local government environmental officers to holistically plan management actions by ensuring that reserves are prioritised for management according to their biodiversity values, the threats that may impact upon them and that the finite resources are used to achieve best long-term outcomes.	pbp.walga.asn.au /Publications/Local Government Guidelinesfor Bushland Management.aspx	Guidelines for community engagement, prioritising reserves for future management, relate to City strategy actions.
Local Government Biodiversity Planning Guidelines 2004	Strategy guides the development of a local planning policy for biodiversity conservation; an action plan for managing biodiversity on Local Government land; a strategy to provide incentives for conservation on private land; and amendment of the local planning strategy and town planning scheme.	pbp.walga.asn.au /Publications/Local Government BiodiversityPlanning Guidelines.aspx	Plan assists with environmental planning
State Local Planning Policy 2.6, and Guidelines	Recommendations for generic coastal planning and management, including specific objectives and pro forma for coastal management plans	www.planning.wa. gov.au/publications /1168.asp	Coastal management and planning documents are informed by this document. Management plans include this information
Local Environmental Planning strategy 2011 (City)	Helps guide development and environmental protection for the City for over 30 years. Vision to accommodate its current and future populations in environmentally sustainable communities characterised by settlements that recognise and embrace the physical and environmental features. Areas of environmental and cultural significance will be identified and protected by the City's planning framework, which will result in land use and development being environmentally sensitive.	See City website	Links planning policy with environmental values. Relates directly to policy decisions the City undertakes and therefore informs the Environment Strategy and implementation
Peron Naturaliste partnership (Alliance)	Network of other organisations and local governments committed to monitoring, identifying and managing coastal assets in relation to the impacts of climate change	www. peronnaturaliste. org.au/	Provides valuable baseline data on coastal reserves, assets and provides recommendations and action planning and policy on future coastal asset management that affects biodiversity.
South West Catchments Council Coastal Action Plan 2015	Identifies coastal nodes in the City that are of high environmental and community value and lists potential management actions for protecting, conserving or enhancing these areas.	www.swnrmstrategy. org.au/get-involved/ coastal-action-plan/	Identifies many of the coastal areas in Busselton of high value requiring coastal management. This information can be used to assist with the Environment Strategy implementation

## Appendix 4

### Federal/State/Local Objectives Concerning Water

ENVIRONMENT STRATEGIES/ PLANS	RELEVANT OBJECTIVES	FURTHER REFERENCE	HOW THIS RELATES TO THE ENVIRONMENT STRATEGY/ACTION?
Department of environment Annual report 2013-2014	Reports such as this provide a snapshot/ baseline of water, a finite resource, in Australia.	www.environment. gov.au/about-us/ publications/annual- report-2013-14- environment	General knowledge and understanding about water cycles and statements about how water is managed federally can assist with planning water management at the City
Ramsar Convention- wetlands of international importance	The City works closely with Federal and state agencies with managing Ramsar wetlands in and around Busselton.	www.ramsar.org/ about/wetlands- of-international- importance	The Vasse-Wonnerup Estuary in Busselton is recognised as a Ramsar wetland. The City works closely with a number of agencies to manage, study and protect this internationally significant water body.
Rights in irrigation and Water Act WA and subsidiary legislation	The Act relates to rights in water resources, to make provision for the regulation, management, use and protection of water resources, and for related purposes.	www.slp.wa.gov. au/legislation/ statutes.nsf/ main_mrtitle_844_ homepage.html	The Department of Water has powers to regulate surface and groundwater use and to permit the interference with bed and banks of a waterway to construct a dam or a crossing.
Environmental Protection Act WA and subsidiary legislation	The Act provides for an Environmental Protection Authority, for the prevention, control and abatement of pollution and environmental harm, for the conservation, preservation, protection, enhancement and management of the environment and for matters incidental to or connected with the foregoing	www.slp.wa.gov. au/legislation/ statutes.nsf/ main_mrtitle_304_ homepage.html	The Department of Environmental Regulation is responsible for implementing the powers of the act. The act covers such matters as -  • Licencing of polluting processes, batching plants;  • Clearing of native vegetation;  • Controlled waste sites, Rural landfill;  • Noise; and  • Unauthorised discharges.
ICLEI Water Campaign	Launched in 2000, the overarching ICLEI Water Campaign promotes the development of local water action plans to achieve tangible improvements in local water quality, conservation and access. A wide range of local initiatives have been taken in different regions across the world.	www.iclei.org/ details/article/water- campaign.html	The City is part of the ICELI water reporting and reducing program for corporate water responsibility.  www.busselton.wa.gov.au/Environment-Waste/Environmental-Planning/Environmental-sustainability/Water-Campaign
Busselton wetlands conservation strategy	Guiding sustainable use and wise management of biodiversity and environmental values of the Busselton wetlands.	www.planning. wa.gov.au/ publications/756.asp	Supports planning strategies at the City and provides guidance for management of public lands where wetlands are present
Independent Review of the Current and Future Management of Water Assets in the Geographe Catchment 2014 (Prof Barry Hart for City)	Review was to strategically investigate issues, roles and responsibilities for managing water bodies such as lake, rivers and streams in the Busselton area. It has been long recognised that water in Busselton is polluted and requires a coordinated management approach. This document identified key roles and responsibilities.	Document available in-house	Document was delivered in November 2014. The report has been instrumental in the State government forming a Taskforce to investigate waterways and wetland management across the catchment.
Water Quality Improvement Treatment Trials In The Lower Vasse River 2014	Documents relating to the City's efforts to improve water quality in the Lower Vasse River. 2014. Such work is ongoing	www.busselton. wa.gov.au/files/ sharedassets/public/ ecm/envplan/ waterqualvasse/ discussion_ documentfinal_ jan_2014.pdf	City works with government agencies and Geocatch to improve water quality.

### Federal/State/Local Objectives Concerning Community

ENVIRONMENT STRATEGIES/ PLANS	RELEVANT OBJECTIVES	FURTHER REFERENCE	HOW THIS RELATES TO THE ENVIRONMENT STRATEGY/ACTION?
A Guide to managing Volunteers in WA Local Government (LGIS, 2012)	Legal responsibilities , volunteer insurance and OSH requirements.		Broadly relevant to managing community groups and for the development of a specific NRM community group manual.
City Friends of Reserves Strategy 1999	Outdated manual to provide information to individuals and groups that work on City managed land on NRM issues Provides framework for working with community groups	www.busselton. wa.gov.au/ Environmenta-Waste/ Environmental- Planning/ Community- participation-and- awareness	Managing community groups working on NRM is core business
NRM community Group Manual 2015	Manual to provide information to individuals and groups that work on City managed land on NRM issues Manage community involvement, insurances, training and obligations etc.	Plan not published yet, under development	Guide for management of community volunteer groups.
City Environment Strategy 2004	All of this document	www.busselton. wa.gov.au/ Environmental- Planning/ Environment- Strategy	This document was reviewed and a gap analysis undertaken to ensure actions from previous strategy were updated and considered

### Federal/State/Local Objectives Concerning Sustainability

ENVIRONMENT STRATEGIES/ PLANS	RELEVANT OBJECTIVES	FURTHER REFERENCE	HOW THIS RELATES TO THE ENVIRONMENT STRATEGY/ACTION?
Sustainable Australia report 2013 (Australian Government)	Broad overarching document that addresses the state of Australia in terms of sustainability and provides some recommendations on future sustainable priorities	www.environment. gov.au/sustainability/ publications/ sustainable-australia- report-2013- conversations-future	Many of the recommendations are broad but address local government programs and these can broadly be applied to the Environment Strategy
Western Australian State Sustainability Strategy 2003	Broadly identifies initiatives for considering sustainability across corporate objectives	www.nrm.wa.gov. au/nrm-in-wa/ key-publications/wa- state-sustainability- strategy.aspx	Some initiatives may be useful to consider during Strategy implementation

## Appendix 4

### Federal/State/Local Objectives Concerning Land

ENVIRONMENT LEGISLATION/ STRATEGIES/PLANS	RELEVANT OBJECTIVES	FURTHER REFERENCE	HOW THIS RELATES TO THE ENVIRONMENT STRATEGY/ACTION?
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	The EPBC Act enables the Australian Government to join with the states and territories in providing a national scheme of environment and heritage protection and biodiversity conservation. The EPBC Act focuses Australian Government interests on the protection of matters of national environmental significance, with the states and territories having responsibility for matters of state and local significance	www.comlaw. gov.au/Series/ C2004A00485	EPBC Act influences the management of land in WA and links to many state regulations and documents
Biosecurity and Agriculture Management Act 2007, which contains the Westem Australian Organism List (WAOL).	Considers agricultural weeds and pests and ongoing management	www.slp.wa.gov. au/legislation/ statutes.nsf/ main_mrtitle_2736_ homepage.html	Agricultural weeds and pests can and do affect management of the land and industry, increased costs for control and management or eradication. Such problematic flora and fauna can also be environmental weeds and pests and may greatly impact on environmental management activities especially in prone areas such as catchments, drains and bushland reserves.
Environmental Protection Act 1986, Contaminated Sites Act 2003, Environmental Protection regulations 1987 and Environmental protection, Clearing of Native Vegetation 2004	Various legislation and regulations relating to clearing and land management	www.der.wa.gov.au/ about-us/legislation Link to a number of documents provided here and listed adjacent.	Environmental governance for land use and management
Waste Avoidance and Resource Recovery Act	Issues relating to waste management and contamination which the City must address	www.slp.wa.gov. au/legislation/ statutes.nsf/ main_mrtitle_2758_ homepage.htm	Waste legislation required for management of local government business such as waste disposal. These may impact on soils and nature reserves and are also concerned with illegal dumping, a common occurrence in environmental management.
Bush Fires Act 1954, and associated:  • Fire and Emergency Services Act of 1998  • Fire Brigades Act 1942  • Bush Fires Act 1954  • Emergency Services Levy Act 2002	Fire management is complex and various acts in place to assist with long-term protection and hazard reduction.	www.slp.wa.gov.au/ legislation/agency. nsf/dfes_menu.htmlx	Fire management is important in rural areas such as Busselton. Generic fire regimes and guidelines can change vegetation complexes and introduce threats, such as weeds, that impact on the long term sustainability of bushland. Consideration of fire management adjacent to reserves is vital to ensure appropriate management decisions are undertaken and so they do not compromise integrity of bushland areas, but at the same time address life and property issues





