

5.0 STRATEGIES AND ACTIONS SUMMARY

Major Projects - Objective		
1. To reduce the levels of consumption and waste for improved environmental outcomes		
Strategy	Action	Timeline
1.1 Reduce waste and improve efficiency in the planning approvals process.	1.1.1 Implement online building and planning approval processes to reduce paper waste, provide transparency, and streamline approvals.	Priority: Medium Timeframe: 2-3 years Partners: WALGA Indicator: Online approvals and tracking are utilised for all development applications.
Basic Raw Materials - Objective		
2. To manage natural resources, land use, and development proposals to maintain the health and viability of geological soil systems in coordination with other ecosystem functions.		
Strategy	Action	Timeline
2.1 Facilitate the extraction of basic raw materials, subject to appropriate safeguards to minimise any adverse impact on adjacent property or on the natural environmental resource.	2.1.1 Identify and map Basic Raw Materials areas which may be subject to future extraction and ensure current zoning is consistent with resource protection.	Priority: Low Timeframe: Ongoing Partners: Department of Mines, Industry Regulation and Safety Indicator: As necessary update scheme map to show amended zoning of identified Basic Raw Materials protection areas.
Energy Production - Objective		
3. To support clean energy production without adversely impacting on established residential, conservation or agricultural regions.		
Strategy	Action	Timeline
3.1 Improve and promote eco-friendly built form outcomes to reduce the footprint of urban development on the natural environment.	3.1.1 Investigate the preparation of a planning policy and, if necessary Scheme provisions, to promote and provide incentives for energy efficient built form and renewable energy options. As part of investigations consider methods to incentivise renewable energy for commercial and industrial developments.	Priority: Low Timeframe: 1-2 years Partners: Synergy, Western Power, Infrastructure WA, Federal Department of Environment and Energy Indicator: Decision made to implement a local planning policy identifying criteria and objectives for implementation of renewable energy infrastructure within urban and rural zones.

	3.1.2 Investigate the preparation of a planning policy and, if necessary Scheme provisions, to address the large scale commercial generation of renewable energy eg; by way of solar or wind power; generally supportive of such proposals except where there are overwhelming amenity, safety or environmental concerns with a particular proposal.	Priority: Low Timeframe: 1-3 years Partners: Synergy, Western Power, Infrastructure WA, Federal Department of Environment and Energy Indicator: Recommendation made regarding local planning policy identifying criteria and objectives for implementation of renewable energy infrastructure within urban and rural zones.
	3.1.3 Investigate the potential for renewable energy project opportunities in the City.	Priority: Low Timeframe: 1-3 years Partners: Synergy, Western Power, Infrastructure WA, Federal Department of Environment and Energy Indicator: Recommendation made regarding sites which provide an opportunity to facilitate a renewable energy facility.
Acid Sulfate Soils - Objective		
4. To guide and manage development appropriate to the presence of acid sulfate soils.		
Strategy	Action	Timeline
4.1 Identify and map the presence of acid sulfate soils	4.1.1 Require management of acid sulfate soils as part of ongoing land development	Priority: Medium Timeframe: Ongoing Partners: DWER Indicator: Intramaps updated to show a warning where properties may be subject to exposing of Acid Sulfate Soils.
Soil and Geology - Objective		
5. To guide and manage development appropriate to the presence of contamination		
Strategy	Action	Timeline
5.1 Identify and map the presence of contaminated sites	5.1.1 Consider contaminated sites classification as appropriate when assessing development applications and to provide comment on subdivision proposals	Priority: Medium Timeframe: Ongoing Partners: DWER Indicator: Intramaps updated to show a warning

		where properties may be subject to contamination.
5.2 Identify, rehabilitate and manage contaminated sites for health and safety, and potential future development.	5.2.1 Undertake detailed site investigations with an intention to remediate Brand Road landfill site for sporting fields as part of the Forrestfield North development.	Priority: Medium Timeframe: 1-2 years Partners: Strategic planning Indicator: Progress on investigations.
Water - Objective		
6. To support water sensitive urban design initiatives and streamline administrative processes relating to key waterways, public drinking water source areas, and water catchment areas		
Strategy	Action	Timeline
6.1 Protect and enhance waterways, wetlands and the groundwater and ensure sustainable use and management of water resources.	<p>6.1.1 Develop a local planning policy for waterways, flood prone areas (the floodway and flood fringe) and wetlands to protect the environmental value of the waterbody and provide parameters for development in susceptible areas.</p> <p>The local planning policy to include guidelines for management of stormwater prior to discharge into waterways, wetland areas or flood prone areas as well as establish minimum buffers.</p> <p>Stormwater management is to have due regard to the Department of Water and Environmental Regulation's Stormwater Management Manual for Western Australia and Decision Process for Stormwater Management in WA, DBCA's Policy 49 – Planning for Stormwater Management Affecting the Swan Canning Development Control Area and Water Sensitive Urban Design principles.</p>	<p>Priority: High Timeframe: 1-2 years Partners: Department of Water and Environmental Regulation, Environmental Services Indicator: Decision made to implement Flood Prone Areas Policy and/or recommend referral to the WAPC for endorsement.</p>

6.2 Investigate and develop opportunities to implement efficiencies in the City's groundwater management, stormwater aquifer recharge, and use.	6.2.1 Council to determine an amendment to the Local Planning Scheme map to rezone PDWSA's to be consistent with MRS water catchment zoning (with agreement from DWER and WAPC), and intramaps to be updated to reflect the changes.	Priority: Medium Timeframe: 1-2 years Partners: Department of Water and Environmental Regulation, WaterCorp, WAPC Indicator: Recommendations finalised and necessary amendments made to the Local Planning Scheme map.
6.3 Utilise Managed Aquifer Recharge to secure sustainable water irrigation supply	6.3.1 Undertake investigations into the feasibility of a second MAR site within the City.	Priority: Low Timeframe: 2-4 years Partners: Department of Water and Environmental Regulation and WaterCorp Indicator: Preparation of the feasibility investigation.
6.4 Promote sustainable catchment management, based on the need to protect the quality of surface and groundwater from intensification of development, and provide equitable access to water resources for productive rural purposes.	6.4.1 Prepare a local planning policy outlining criteria to manage compatibility between rural and agri-tourism developments, taking into consideration protection of identified priority agricultural areas, rural conservation zones, protection of water catchment areas, PDWSA's, and watercourse hierarchy buffers	Priority: Medium Timeframe: 1-2 years Partners: Department of Water and Environmental Regulation, WaterCorp, WAPC Indicator: Council adopts a local planning policy to guide intensity of agri-tourism development in rural areas when located in a water catchment or PDWS area.

Bushfire - Objective

7. To preserve, enhance, connect and rehabilitate natural areas and protect biodiversity values.

Strategy	Action	Timeline
7.1 Where there is a conflict between bushfire guidelines and existing biodiversity values provide appropriate design alternatives to maintain effective ecosystem functions and resident safety.	7.2.1 Develop criteria within a vegetation protection local planning policy to outline performance objectives where biodiversity is seen to conflict with bushfire management requirements, with regard to State Planning Policy and guidelines.	Priority: High Timeframe: 1-2 years Partners: DFES. WAPC Indicator: Bushfire and biodiversity criteria incorporated as part of a vegetation protection policy.
7.2 Review the Biodiversity Strategy to consider any	7.3.1 Prepare an updated Local Biodiversity Strategy to	Priority: High Timeframe: 1-2 years

conflicts between biodiversity protection and the new bushfire requirements.	assess risk to biodiversity through implementation of the bushfire regulations and determine appropriate planning mechanisms for balancing biodiversity protection and protection of life and property.	Partners: DFES. WAPC Indicator: Local Biodiversity Strategy updated and implemented.
Biodiversity - Objective		
8. To establish a sustainable urban environment.		
Strategy	Action	Timeline
8.1 Identify opportunities for linkages between existing green space	8.1.1 A Green Links Masterplan is to be prepared in conjunction with the Street Tree Masterplan and develop actions to improve linkages between existing nature reserves, POS, road reserves and local natural areas (LNA's).	Priority: High Timeframe: 1-2 years Partners: DBCA Indicator: The Green Links Masterplan and a staged planting schedule is implemented and periodically reviewed and improved.
	8.1.2 As part of the Green Links Masterplan investigate opportunities to incentivise residents to plant verges with native gardens to improve plant species diversity and habitat for local fauna. This includes: <ul style="list-style-type: none"> • Promoting native verge planting as part of the 'Plants for Residents' program. • Developing information brochures for residents within an identified Green Link and encouraging their participation and management of the verge. • Invite residents to participate in local street tree planting working bees to promote a sense of ownership and pride of place. 	Priority: Medium Timeframe: 1-2 years Partners: DBCA Indicator: As part of the development and implementation of the Green Links Masterplan undertake community engagement to provide information and encourage residents to increase native planting on the verge.

<p>8.2 Improve urban tree canopy cover to address urban heat island effect, WSUD principles and biodiversity linkages</p>	<p>8.2.1 Develop a Street Tree Masterplan, which analyses, identifies, and prioritises street tree plantings to improve Urban Forest canopy cover in conjunction with a Green Links Masterplan by the year 2020.</p>	<p>Priority: High Timeframe: 1-2 years Partners: Indicator: Street Tree Masterplan reviewed by Council and implemented to inform public plantings within the Green Links Masterplan.</p>
	<p>8.2.2 Develop a Street Tree Masterplan which incorporates a staged planting program targeting key high risk areas first.</p> <p>The following areas were identified by 2020 Vision as being an opportunity for greening, which can be used as a basis for further investigation:</p> <ul style="list-style-type: none"> • Corner of Abernethy Road and Kalamunda Road – commercial park home and industrial land uses. The border of City of Swan. • Corner of Reynolds Road and Tourmaline Gardens – a residential area currently R15 identified to have a Dual Density zone of R20/R30 • Corner of Arthur Road and Merlin Way – residential R20 area in Wattle Grove. 	<p>Priority: High Timeframe: 1-2 years Partners: Indicator: Street Tree Masterplan incorporating staged planting programs reviewed by Council and actioned. Trees planted in accordance with the staged planting program to the satisfaction of the City of Kalamunda.</p>
	<p>8.2.3 Identify areas where street trees have not yet been planted in accordance with an approved structure plan or development application, and ensure compliance.</p> <p>Adopted LDP, or Structure plans include:</p> <ul style="list-style-type: none"> • U2 ODP High Wycombe • Karingal Green • Lot 399 Sorensen Road 	<p>Priority: High Timeframe: 1-2 years Partners: Indicator: Street trees are planted in accordance with the approved plan and maintained for a minimum period of 3 years and thereafter to the satisfaction of the City of Kalamunda.</p>

	<ul style="list-style-type: none"> Cell 9 Wattle Grove Landscape Masterplan Dundas Detailed Area Plan – Mixed Business Site. Lot 121 Worrell Ave, High Wycombe. 	
	8.2.4 Prepare a local planning policy to address retention of significant trees on development sites.	Priority: High Timeframe: 2 years Partners: WAPC Indicator: Decision made whether to adopt a planning policy addressing significant trees on development sites.
	8.2.5 Investigate the implementation of a Natural Heritage Register as part of a Scheme amendment or local planning policy to register trees or local natural areas deemed to have a significant environmental, cultural or heritage value to the local community.	Priority: High Timeframe: 2 years Partners: WAPC/Minister for Planning Indicator: Decision made to determine the final scheme amendment or policy.
	8.2.6 Amend the Firebreak Notice to identify maximum widths and clearing parameters for the installations of firebreaks, to prevent unnecessary clearing of native vegetation. At the same time investigate the preparation of an Information Sheet regarding clearing parameters for Asset Protection Zones and recommendations made.	Priority: High Timeframe: 1 year Partners: DFES Indicator: The Firebreak Notice is amended.
8.3 Protect vegetation outside of reserves, bush forever sites, or local natural areas for its ecological, aesthetic and amenity values.	8.3.1 Investigate a provision in the Local Planning Scheme which can require rehabilitation of land where an owner or occupier has caused or allowed land to be intensively cleared, managed or degraded resulting in adverse effects to adjoining or nearby land. The potential provision is to apply where	Priority: High Timeframe: 1 year Partners: WAPC/Minister for Planning Indicator: A decision made on the recommendations of the Local Natural Areas report.

	environmental degradation has occurred as a result of non-compliance with a condition of planning approval or in contravention of the Local Planning Scheme	
	8.3.2 Prepare a report analysing the location and conservation or amenity value of existing local natural areas (LNA's- areas of vegetation worth conservation on private property). The report is to investigate opportunities to incentivise protection of LNA's through fiscal incentives, LPS3 provisions or a local planning policy and provide recommendations to Council.	<p>Priority: Low Timeframe: 2-3 years Partners: Kalamunda Environmental Advisory Committee, Landowners, DBCA. Indicator: Council to review and provide a determination on the recommendations of the Local Natural Areas report.</p>
Aboriginal and Post-European Heritage - Objective		
9. Identify and protect natural areas of Aboriginal and Post-European settlement cultural significance and local heritage value.		
Strategy	Action	Timeline
9.1 Map sites of Aboriginal heritage significance that need to be considered in subdivision and development of urban and rural land	9.1.1 Review and prepare a report for sites of Aboriginal heritage significance and any recommended changes to zoning of such sites to ensure appropriate protection and preservation.	<p>Priority: Medium Timeframe: 1-2 years Partners: DPLH. Indicator: Mapping updated to show sites of Aboriginal heritage significance and actions of the report implemented.</p>
9.2 Provide increased statutory protection to locally significant heritage sites	9.2.1 Review Municipal Inventory and if appropriate create a Heritage List for inclusion in Local Planning Scheme No.3, in particular considering the incorporation of significant natural assets.	<p>Priority: Medium Timeframe: 1-2 years Partners: DPLH, Heritage Council Indicator: Updated Municipal Inventory, creation of Heritage List, amendment to Local Planning Scheme</p>
9.3 Protect the avenue of trees near the intersection of Lewis Road and Welshpool Road East from future development.	9.3.1 Prepare a report for Council outlining the options to give the trees statutory protection.	<p>Priority: High Timeframe: 1-3 months Partners: Western Australia Heritage Council Indicator: Council to pass a resolution to protect trees from future development.</p>

