

City of Joondalup Submission to the Department of Water and Environmental Regulation's Climate Change in Western Australia Issues Paper, November 2019

The City of Joondalup thanks the Department of Water and Environmental Regulation (DWER) for the opportunity to comment on the *Climate Change in Western Australia Issues Paper*.

In general, the City is strongly supportive of the State Government's:

- announcement of a State-wide target for net-zero greenhouse gas emissions by 2050,
- intent to develop a State Climate Policy to provide greater direction for the transition to a low carbon economy and enhance the State's resilience to unavoidable climate change,
- release of the *Climate Change in Western Australia's Issues Paper* to provide opportunity for the community and stakeholders to inform the development of the proposed State Climate Policy.

Climate change is a key issue for local government with both current and future climate change impacts likely to impact on many areas of local government operations and activities. Local government has been acting to reduce their greenhouse gas emissions for many years, including the setting of mitigation targets. The City of Joondalup developed its first Greenhouse Action Plan in 2007 as part of the Cities for Climate Protection Program. More recently local governments have also been acting to increase their resilience and ability to adapt to future climate change impacts.

Whilst the City recognises that local government has an important role in both mitigation and adaptation, it is also important to recognise that many strategies for mitigation and adaptation are outside of the statutory responsibility or influence of local government.

Climate change adaptation and mitigation is the responsibility of all spheres of government as well as businesses, the community and individuals. For the last decade local government has largely been working in a policy vacuum in relation to climate change with limited opportunities for funding or access to programs or support from either the State or Federal governments.

General Comments

The below general comments are made in relation to the City's approach to climate change:

- The City is a signatory to the Local Government Climate Change Declaration developed by WALGA.
- The City is compliant in the Global Covenant of Mayors for Climate and Energy.
- The City is committed to both climate change adaptation and climate change mitigation through the *City of Joondalup Climate Change Strategy 2014 – 2019*.
- The City strongly supports increased action and commitment from State and Federal Governments towards climate change adaptation and mitigation.
- The City strongly supports the need for increased support from State and Federal Governments to local government in their response to climate change mitigation and adaptation.
- The City strongly supports improved collaboration between all spheres of government in developing an effective approach to climate change mitigation and adaptation.
- The City has particular concerns regarding the response from State and Federal Governments in relation to coastal adaptation and bushfire risk and strongly

recommends greater collaboration, support, guidance and coordination is needed in these areas.

City of Joondalup Climate Change Strategy 2014 - 2019

The [City of Joondalup Climate Change Strategy 2014 – 2019](#) provides strategic guidance to the City's climate change activities and has a dual purpose of both *mitigation* (continuing to reduce greenhouse gas emissions to minimise the severity of climate change) and *adaptation* (implementing strategies to ensure the City is prepared and able to adapt to current and future impacts of climate change).

The *Climate Change Strategy* has a corporate and community focus and covers six key focus areas: infrastructure and assets, parks and reserves, land use planning and development, natural environment, corporate responsibility and good governance and community wellbeing. Across the key focus areas forty-three projects were identified for implementation.

Significant progress has been made in the implementation of these projects over the life of the Strategy. Between 2012-13 and 2018-19 the City has reduced its total corporate emissions by 32%. Implementation of the City's *Climate Change Strategy* will continue during 2019-20.

The existing Strategy is also currently being reviewed and the development of a new Strategy is scheduled to commence. The new Strategy will be developed in consultation with the community and will be informed by the latest research, science and policy including the proposed State Climate Policy.

Specific comments on the Issues Paper

Specific comments on the Issues Paper have been provided below for DWER's consideration. Please note that not all aspects of the Issues Paper have been addressed, the City's comments have been limited to those aspects that affect local government activities or responsibilities.

Transforming energy generation

- Street lighting has always represented a significant proportion of a local government's energy use and greenhouse gas emissions. The potential for local government to reduce energy use from street lighting has been limited due to street lighting infrastructure being owned by Western Power (or Horizon Power) and limited options available from Western Power to upgrade. In 2018-19 Western Power owned lighting represented 42% of the City's greenhouse gas emissions.

The City does have ownership over some of the street lighting infrastructure within the Joondalup CBD area. The City is implementing the third stage of its Joondalup City Centre Lighting Program which installs multi-function light poles incorporating LED energy saving luminaires that are monitored and controlled by the City's wireless lighting control system. This project is achieving significant reductions in energy use and emissions. In one area of upgrades the City has experienced a 61% reduction in energy use in the financial year following the upgrades.

Bulk replacement of old inefficient Western Power street lighting infrastructure with new efficient LED luminaires would provide substantial greenhouse gas emission reductions.

- The City of Joondalup also supports the use of smart metering on un-metered street lighting infrastructure. The City owns and maintains over 4000 street lights, but as the

majority are on unmetered supplies, there is no current benefit to convert to energy efficient LED street lights for Western power owned street lighting infrastructure. LED efficient lighting combined with smart lighting (trimming, dimming and maintenance factor harvesting) can significantly reduce energy consumption. The City would like to utilise the many aspects of smart lighting to reduce energy consumption, however, due to the current system with unmetered streetlighting there is no financial incentive to do so. The City also continues to monitor options for the use of LED for sports lighting.

- To date the City has installed photovoltaic cells on 17 of its buildings and has recently installed battery back up systems in two of those buildings. Funding programs for the installation of renewable energy systems and energy storage would accelerate the ability of local governments (including the City of Joondalup) to generate renewable energy through its building infrastructure.
- The City installed in 2005 a geothermal heating system at Craigie Leisure Centre to heat the Centre's two swimming pools. Geothermal heating involves extracting hot water from Yarragadee Aquifer at a depth of 830m and pumping the water through heat exchangers that capture the heat. The water is then returned to the Aquifer at a depth of 450m. The system is expected to save approximately 28,000 tonnes of carbon dioxide over the 30 years life expectancy of the system.
- There is limited mention within the Issues Paper relating to opportunities to reduce emissions through increased energy efficiency. The City's Climate Change Strategy includes a Climate Change Mitigation Framework which identifies three approaches for reducing emissions: firstly, reducing energy use, secondly using lower emission energy sources and lastly purchasing offsets.

In 2016 the City reduced the number of offsets it purchased and reallocated this budget to improving energy efficiency. This along with ensuring that all scheduled renovations, upgrades and new buildings include energy efficient fixtures and fittings has made a significant contribution to the City's greenhouse gas emission reductions and will create sustained cost savings for the City. Building optimisation on community facilities that connect the building lights and air-conditioning to the alarm system has also decreased energy usage.

Programs or funding to improve the efficiency of new and old built infrastructure will reduce the burden on the energy sector, reduce the need to invest in new energy infrastructure and will create long term energy and greenhouse reductions. The provision of renewable energy infrastructure on public buildings also provides education opportunities for the community and demonstrates government leading by example.

Future Mobility

- The City provides a publicly available electric vehicle charging station within its multi-storey carpark (Boas Ave, Joondalup). To encourage the uptake of electric vehicles it is important that the State Government facilitates a coordinated state-wide approach to the installation of electric vehicle charging stations rather than an ad-hoc approach by local government. This should be supported by the decarbonisation of the electricity grid to maximise the potential greenhouse gas emission savings.
- There are several significant barriers to the inclusion of electric vehicles within the City's vehicle fleet including:

- The high purchase price of electric vehicles and relatively low kms travelled means they are currently not cost effective.
- The bulk of the City's fleet are utes, vans and trucks and at this stage there are limited suppliers of commercial electric vehicles.
- Only the high-end electric vehicle sedans are rated for towing.
- The City currently has limited infrastructure for charging and City officers with commuting rights would have to charge at home.

State Government could support the inclusion of electric vehicles within local government fleets through rebates or incentives.

- The City strongly supports State Government investment in public transport, walking and cycling infrastructure. The City welcomes opportunities to partner with the State Government in projects that improve opportunities for the City's residents and visitors to utilise sustainable transport options. Connectivity between local government and State government sustainable transport infrastructure (i.e. between train stations and local bike networks) are important. In recent years the City has received grant funding from the Public Transport Authority for construction of dual use paths connecting to train stations. This Program should be continued (or expanded) into the future.
- Under the State Governments WA Bicycle Network Grants Program the City has undertaken numerous bike infrastructure projects over the years improving the connectivity and legibility of the City's bike network. This Program should be continued (or expanded) into the future. The City's *Bike Plan* can be accessed [here](#).

Waste Reduction

- Local government has a significant role to play in waste management and waste reduction. The City has undertaken significant steps to reduce the amount of waste going to landfill including introducing a containerised on-demand skip bin service for bulk waste, white goods and mattress collection services. In 2018-19 the City introduced a three-bin system for household waste collection introducing a green organics bin and reducing the general waste bin with formalised services for collection of car batteries and oil. The City's *Waste Management Plan* can be accessed [here](#).
- The City is supportive of the State Government's recent initiatives in relation to waste management such as banning single-use plastic bags and the future introduction of the container deposit scheme. It is the City's belief that the most effective way to create wide-spread behaviour change is through a State or Federal-based approach rather than having different local governments undertaking different approaches which create inconsistencies and confusion across local government boundaries.
- Given the announcement at the 9 August 2019 COAG meeting that Australia will ban the exporting of waste plastic, paper, glass and tyres, the State Government (in partnership with local government and other key stakeholders) needs to take a proactive approach to ensuring Western Australia has the necessary waste processing infrastructure and reliable waste markets to ensure recyclable materials do not end up in landfill.

Safe and Healthy Communities

- Education of the community is critical for preventative health. As part of preparedness, it is important for educational campaign materials to be developed, maintained and shared with local government. As an example, the Department of Health is the responsible agency for the Heatwave State Hazard Plan. This Plan includes education

strategies. It is important that local governments are provided with promotional materials that can be used for educational purposes. This can allow consistent messaging throughout the community, particularly through digital and social media.

- It is important that local government is kept informed on issues that may affect the health of our communities. This includes statistics or trends on public health issues that are related to climate change, such as reportable illness associated with vector-borne disease, or other information including research on intervention strategies that might be relevant to local government. State government should maintain a hub of experts that is accessible to local government.
- It is acknowledged that local governments may be well positioned to engage with the community on climate change issues and their wellbeing, however, actions may sit outside its legislative role. Funding provided to local government is necessary to have an influence on the health and wellbeing impacts of climate change.
- Emergency management planning is essential to ensure the ongoing safety and welfare of residents and visitors to the City in the event of an emergency. The City's Local Emergency Management Arrangements (LEMA) guides the response to emergency management situations in the City and has been developed in partnership with the Wanneroo/Joondalup Local Emergency Management Committee (LEMC) and key emergency responders. Within the LEMA is the Community Risk Register which identifies the five most probable risks that the City of Joondalup may have to deal with in an emergency (storm, PTA (rail incident), heat, earthquake & fire). We are still waiting for the Hazard Management Agencies (HMA) to complete the treatments for these risks. The State Emergency Management Committee (SEMC) is currently looking at a plan or program to resolve this.
- Programs around prevention and preparedness will become increasingly important in a changing climate. Currently most funding programs focus on response and recovery. Climate change is likely to impact communities at a local level i.e. bushfires, coastal erosion and extreme weather events. Programs and funding to support local governments in undertaking localised and targeted climate resilience programs will be necessary for addressing risk to community health and wellbeing as a result of climate change.
- The City has a Bushfire Risk Management Plan which has been endorsed by the Office of Risk Management which enables the City to access funding through the State Mitigation Activity Fund – Emergency Services Levy. Funding received through this Fund has allowed the City to undertake additional fuel load reduction activities in its high-risk reserves reducing fire risk within the City. Continuation and expansion of this funding will enable local governments to reduce fire risk and will reduce pressure on the Department of Fire and Emergency Services (DFES) who are responsible for responding to bushfire emergencies.
- For many metropolitan local governments (including the City) bushfire risk and bushfire management have become a greater focus in recent years. Metropolitan local governments (except for those on the urban fringe) do not have a history of undertaking hazard reduction burning and therefore do not have the skills or capabilities to conduct these programs. The City has been fortunate to have the support of DFES in establishing a hazard reduction grass tree burning program for the City with DFES conducting the first hazard reduction grass tree burn on behalf of the City in September 2019. DFES's available resourcing to support local governments in undertaking fuel load reduction activities is severely limited. As bushfire risk within urban areas

becomes more of a concern, dedicated resourcing within DFES to support and partner with local government to undertake hazard reduction activities including hazard reduction burning would significantly reduce bushfire risk within urban areas. This approach would be more efficient and effective than multiple local governments trying to establish multiple programs.

Water Security

- The [City Water Plan](#) identifies four key challenges for water management: a drying climate; meeting current and future groundwater allocations; protection of water bodies and meeting community expectations. Those challenges are only going to increase with a changing climate. The City Water Plan identifies targets to reduce the City's water consumption (scheme and groundwater) and increase water quality. In addition, the City is a Gold Waterwise Council and is now in its tenth year of participation in the Waterwise Council Program. Craigie Leisure Centre is an accredited Waterwise Aquatic Centre.
- The City's corporate groundwater use for 2018-19 was 3,783,554kL. This was a decrease of 1.2% compared to the previous year (2017-18) and is 9.9% below the current annual groundwater allocation limit set by DWER.

While the City is cognisant of the potential for future groundwater allocation reductions it needs to be recognised that the establishment of the City's allocation in 2009 of 4,117,550 KI was based on an inaccurate number of irrigated hectares. The number of irrigated hectares in the City has also increased since allocations were set, due to new subdivision development with no matching increase in allocation.

The City now has a growing population, increasing housing density due to infill development and has two iconic projects to be delivered over the next ten years which will require high quality open space (Edgewater Quarry site and Ocean Reef Marina). This will put greater pressure on the City's groundwater allocation and ability to meet community expectations regarding amenity of public open space.

Whilst the City does not support groundwater allocation reductions. If groundwater allocations were to be reduced the State Government would need to support this transition through provision of funding to help local governments improve their groundwater irrigation practices and reduce groundwater consumption. Programs to educate the broader community and manage community expectations relating to the provision of green open space are also important.

- The State Government has released "Water Wise Perth Action Plan" with its aim to build climate resilience to ensure Perth has healthy waterways and wetlands, attractive urban spaces and water security beyond 2030. The Plan's goals include:
 - Create more urban greenspaces.
 - Create climate resilient public open space, sporting grounds and recreational venues.

The City supports the financial assistance and resources the State Government will provide as actions within the Plan including:

- Invest in infrastructure to support local government and the not for profit sector to improve the water efficiency of aquatic facilities, sports grounds and other community infrastructure.

- Review groundwater allocation plans for Gnangara, Cockburn, Perth South and Jandakot and Serpentine to manage groundwater levels for wetlands, urban trees and for irrigation of green spaces.
 - Work with local governments to overcome barriers to implementing alternative water source schemes.
 - Determine feasibility of alternative water supplies for public open space in areas without groundwater available including the north east corridor.
- Wastewater as an alternative water source would reduce the burden on groundwater and provide broad-scale community benefit. It is recommended that State government investigate mechanisms to facilitate and support local government use of wastewater for irrigation of public open spaces.
 - The City has undertaken several initiatives over the past decade to ensure efficient use of groundwater including: utilising hydrozoning and ecozoning principles, groundwater monitoring, prioritising groundwater use dependent on park classification, use of soil moisture and rain sensors and most recently installation of weather stations that link with smart irrigation control software. The City is rolling out smart irrigation controllers and flow meters that link with the irrigation control software and can inform and control the City's irrigation practices. The City has 259 parks that it manages therefore the rollout of controllers and meters is an ongoing program to be completed over several financial years. Funding to enable local government to more quickly rollout these programs across their public open space and existing infrastructure would allow the benefits and savings to be realised more immediately.
 - The City also undertakes several initiatives to reduce its scheme water consumption through upgrading to water efficient fixtures and fittings when undertaking renovations in the City's existing buildings (community facilities, libraries, administration centre etc) and when constructing new community buildings and through efficiency measures at the City's aquatic centre. The City's overall scheme water consumption in 2018-19 was 80,088kL which is a 10.3% decrease from 2017-18. The City has 162 buildings that it owns or manages many of which are ageing and have inefficient water fixtures and fittings. Again, upgrading these buildings to meet current water efficiency standards is an ongoing process which could be accelerated if there were relevant funding opportunities.

Liveable Towns and Cities

- Under the *Building Act 2011* and the Building Code of Australia (BCA) new buildings are required to incorporate energy efficiency requirements. Compliance with the BCA energy efficiency provisions are required to be documented and provided to an independent building surveyor, as part of the Building Permit process. However, at completion, there is no requirement for the Builder or independent Building Surveyor to confirm that the building has achieved the energy efficiency requirements that were submitted at the Building Permit stage. The City supports increased compliance to ensure that energy efficiency requirements are being met. The City notes that significant changes to current legislation would be necessary and that details regarding any mandatory inspection program would need to be considered further by the City.
- The State Government should also commit to the inclusion of energy efficiency in Government owned buildings including Department of Communities public housing, State government capital works and tenancy fit outs as has been done for water efficiency in the State Government's recently released Waterwise Perth Action Plan.

- The City's Leafy City Program was initiated in 2015-16 to increase leaf canopy throughout the City, providing shaded spaces in the urban environment. To date 3,660 trees have been planted as part of the Program. The Program aims to create resilient, cooler and more inviting green urban spaces in response to a changing climate. The Program focuses on tree planting within the City's suburban streetscapes, and includes:
 - Detailed mapping and data capture of existing vegetation to identify priority areas and assist with project prioritisation;
 - Investigation and establishment of supporting horticultural practices and processes for species selection and soil modification to ensure healthy development and longevity of the City's leafy canopy;
 - Planting of verge trees at selected locations over the life of the project; and
 - Development of a communication campaign to promote the project.
- The City also has a winter Urban Tree Planting Program which includes tree planting in parks, on request in residential verges and as part of landscaping projects. A total of 1,829 trees were planted across the City during the 2018 winter urban tree planting program.
- While local governments are taking significant steps to improve tree canopy and address urban heat through tree plantings on local government managed land there are several challenges for local governments seeking to retain canopy cover on private land.
 - The City recognises that Design WA has incorporated some measures for tree retention as part of the planning process and is currently progressing public consultation on its own draft new development standards for infill development in the 10 Housing Opportunity Areas of the City. These draft new development standards seek to reinforce and strengthen Design WA provisions around the provision of landscaped areas and incentives for tree retention. There may be further mechanisms that could be instigated through review of state planning policies and/or Design WA to reduce tree canopy loss resulting from new development areas and infill development.
 - The loss of trees can also occur on existing residential private property and there is limited measures local government can take to prevent private property owners removing trees on their property outside of the development application process. State Government could consider education or incentive programs to reduce tree canopy loss on existing residential properties.

Resilient infrastructure and businesses

- The updating of State Planning Policy 2.6 (SPP 2.6) in 2013 included requirements for greater consideration of future coastal hazard risk as part of the planning process. This has required coastal local governments to undertake significant work to identify and plan for future coastal hazard risk. To date the City has:
 - Completed coastal hazard mapping for a 100-year planning timeframe in accordance with SPP2.6.
 - Implemented an engagement campaign to inform the community about the City's identified coastal hazard areas, implications of SPP 2.6 and the City's planned response to coastal vulnerability.
 - Developed and is implementing a Coastal Local Planning Policy to guide the City's application of SPP 2.6.

- Established an annual coastal monitoring program to monitor shoreline movement.
 - Developed and is implementing a Coastal Infrastructure Adaptation Plan to guide the City's adaptation activities along the coastline.
 - Undertakes erosion management activities such as ongoing maintenance of beach access ways and fencing as required, dune stabilisation measures and implementation of the City's sand bypassing program.
- The City is also currently developing a Coastal Hazard Risk Management Adaptation Plan in accordance with SPP 2.6 to identify long term adaptation responses. SPP 2.6 and the WA Coastal Zone Strategy both identify a preferred adaptation hierarchy of *avoid*, *retreat*, *accommodate* and *protect*. In already developed areas opportunity to *avoid* is limited and *accommodate* options can largely just be considered as interim measures. *Retreat* and *protect* options are both likely to be cost-prohibitive for local government in the long term and are likely to create significant concern for coastal communities. Doing nothing is not a viable option and will be politically unpalatable for both State and local government. Further work is required by State Government to identify how Western Australia is going to adapt to future coastal hazard risk.
- In particular the City has concerns regarding the:
 - Lack of support available for the local government sector from the State Government due to insufficient resources (including staffing) allocated to this issue at the State Government level,
 - Lack of recognition of the funding needed to appropriately address this issue across the State,
 - Lack of recognition of the impact that coastal vulnerability will have on affected property owners and the broader community,
 - Need for a broader approach to coastal vulnerability that, in addition to Planning, includes the portfolios of Environment, Transport, Lands, Energy, Local Government and Regional Development,
 - Need for an open conversation with the community and stakeholders regarding coastal vulnerability and how as a society we should be responding to it, and
 - Need for improved collaboration between local government and the State Government on this issue.
- Western Australia's coastline and beaches are valued by all Western Australian's and adaptation to ensure the enjoyment and use of the coast by future generations is imperative. If responding to coastal hazard risk is solely the responsibility of local government this will result in different approaches being taken by different local governments resulting in inequity between residents and communities in different local government areas. The approach of the Western Australian Coastal Zone Strategy which states '*Private parties are responsible for managing risks to their private assets and incomes*' and '*Governments, on behalf of the community, are primarily responsible for managing risks and impacts to public goods and public assets which they own and manage*' is unlikely to create equitable and community accepted outcomes. In addition, coastal processes and the potential impacts from undertaking coastal adaptation measures will cross local government boundaries and therefore a broader approach is needed.
- There is a need for specific coastal management legislation in Western Australia to establish a strategic framework and define and establish the principles, objectives and actions, including roles and responsibilities for integrated coastal zone management. Greater funding is needed to support local governments coastal adaptation planning and coastal adaptation measures particularly as risks and impacts increase. Local

government also needs greater legislative protection and greater clarification on potential legal liabilities for local governments undertaking coastal adaptation measures. The City of Joondalup (as well as other local governments) are acting in accordance with State Planning Policy 2.6, however there is no legislation that provides a 'good faith' defence for local government. The introduction of legislation to reduce liability and provide protection to local government's that are responsible for coastal management is essential within the context of an uncertain climate.

- The City of Joondalup strongly supports the following statements in WALGA's submission to the DWER Climate Change in Western Australia Issues Paper.
 - WALGA proposes that Part 9, Division 4 of the *Local Government Act 1995* (Protection from liability) be amended to limit the liability of Local Governments with regard to flooding, erosion, accretion and other related consequences of climate change in coastal areas.
 - WALGA seeks the State Government's leadership and support to assist Local Governments in managing the legal and financial implications of the implementation of CHRMAPs, including the establishment of a similar program to the Queensland QCoast 2100 program.
 - WALGA recommends that the State Government consider enacting specific coastal management legislation and the establishment of a Coastal Council for Western Australia.
- The City of Joondalup will work with the Western Australian Local Government Association and other local governments to advocate for the State Government to provide greater recognition and improved resources to this issue and for improved collaboration with local government to ensure an equitable and effective response to coastal hazard risk.

Protecting biodiversity

- The City of Joondalup manages 104 natural areas across three different zones: bushland, coastal and wetland. The City actively manages its natural areas through ongoing activities such as weed control, fencing, pathogen hygiene, revegetation and bushfire risk management. In the City's major conservation areas, the City also facilitates community education by providing access trails, interpretive signage, walkability signage and biodiversity events and tours.
- Within the City is also Yellagonga Regional Park which is co-managed with the City of Wanneroo and Department of Biodiversity, Conservation and Attractions (DBCA). Between 2010 – 2020 the City has spent \$413,167 within Yellagonga Regional Park on water quality monitoring and reporting, acid sulphate soil investigations, feral animal control, flora surveys, weed control and revegetation projects. Equivalent funding has also been provided by the City of Wanneroo. The vast majority of this expenditure has occurred on DBCA managed land, and while DBCA have been involved in the planning of these projects they have been unable to provide funding or resourcing. Greater funding and resourcing needs to be allocated by the State Government for the management of its conservation reserve to ensure these areas are protected and managed for future generations as they will come under increasing threat with a changing climate.
- The City often seeks advice from State Government (including DBCA and DWER) on managing its natural areas i.e. fauna management, protection of TEC's etc. State Government departments are often limited in their capacity to provide this advice and

often they City may receive differing advice from different areas. State Government should provide a hub of research and experts that can provide advice and direction to local government. In particular guidance on how to manage natural areas in the context of a changing climate to ensure their resilience and maintenance of biodiversity.

- In 2015 the State Government commenced the development of a draft Green Growth Plan including the Strategic Assessment of the Perth and Peel Regions (SAPPR) to integrate land use planning and environmental protection. The City provided a submission to the draft Green Growth Plan and spent considerable resources identifying potential areas for inclusion in the conservation reserve and reviewing the documentation and mapping. In April 2018 the State Government established an independent review of the SAPPR which is still not complete. The State Government should progress the completion of this review and provide clarity on whether the development of the Green Growth Plan will continue and if not, how will State government will ensure the protection and conservation of biodiversity across the Perth and Peel regions. In the absence of legislative tools to protect native vegetation within Bush Forever and local natural areas further clearing and fragmentation will continue to degrade the biodiversity values and viability of urban bushland areas.

Strengthening adaptive capacity

- Local governments are not research bodies and do not generally have specific skills in climate change adaptation. Local government relies on State and Federal governments, research institutions and independent bodies for the latest in climate change science and best practice climate change mitigation and adaptation to inform their climate change planning and actions. State and Federal government investment in climate change research has decreased considerably in the past decade which has resulted in less climate-related information being available, particularly information specifically for Western Australia. The former Indian Ocean Climate Initiative used to conduct research on climate change projections and impacts for Western Australia, since this Initiative ceased there is limited research in the Western Australian context. Continued investment by the State Government in climate change research is required if the adaptive capacity of government, industry and the community are to be strengthened.
- Local government adaptive capacity would be strengthened if the State Government was to collate and distribute climate change science, emissions data and best practice climate change mitigation and adaptation actions and methodologies to inform and facilitate local governments climate change management activities. This could be done through provision of training, seminars, online website and other platforms, newsletters etc.
- The *Climate Change in Western Australia Issues Paper* recognises that local governments are on the frontline of climate change adaptation, however the shifting of responsibilities from State to local government in recent years (i.e. bushfire risk and coastal hazards) with limited funding, support or guidance will not provide effective outcomes. Local government does have an important role to play in both climate change mitigation and adaptation however there needs to be greater collaboration and support, from other spheres of government and industry bodies, in order to achieve the best outcomes for the community.

In addition to the above comments the City is supportive of the Western Australian Local Government Association's (WALGA) submission to DWER's Climate Change in Western Australia Issues Paper. The City notes that WALGA's draft submission is based on WALGA's *Climate Change Policy Statement* which the City provided general support for in April 2018. The City welcomes greater collaboration between WALGA, local governments and the State government on climate change issues.

For any questions in relation to this submission or the City's climate change activities please contact Dr Lucy Sheehy, Acting Principal Environmental Project Officer at [REDACTED] or [REDACTED]