

# Peel-Harvey Catchment Council

*People Working Together for a Healthy Environment*

## Adapting to climate change in the Peel region

Improving local government emergency  
management and biodiversity  
conservation services

### FACT SHEETS

Emergency  
Management

Biodiversity

Current Policy

Policy Review  
& Initiatives



[www.peel-harvey.org.au](http://www.peel-harvey.org.au)



## Climate Change Adaptation in the Peel Region

Climate change adaptation is one of two primary management responses to climate change. In this context, adaptation describes actions that can be carried out in response to actual or projected climate change impacts that lead to a reduction in risks or a realisation of benefits.

Examples of adaptation strategies include:

- Assessing the viability of civil works to withstand the impacts of storm surges
- Increasing the resilience of natural systems against reduced rainfall and increased fire risk
- Improving the preparedness of organisations to deal with emergency incidents.

The adaptive capacity of an organisation or system is a measure of the ability of communities to adjust to climate change (including changes in variability and extremes) so as to moderate potential damages, take advantage of opportunities, or cope with the consequences through changes in characteristics or behaviour.

While the drivers for climate change are global, adaptation options are often best achieved at the local level. Hence, local governments play an important role in climate change adaptation because they are closer to where the consequences of climate change will be felt and have greater potential to influence both adaptation and mitigation actions.

The Peel Climate Change Adaptation Project developed a number of strategies to assist local governments respond to the impacts of predicted climate change on emergency management and biodiversity.

The recommended strategies (refer to Fact Sheet No. 1 for Emergency Management and Fact Sheet No. 2 for Biodiversity) will reduce the risks, impacts and potential liabilities for local government created by climate change. However, many of the strategies also reinforce the importance of the activities and service standards that local governments may already provide, or are aiming to provide.

In Western Australia, the WA Local Government Association (WALGA) has developed a Climate Change Management Toolkit. The toolkit includes numerous resources including:

- LAND USE PLANNING GUIDELINES - *Draft Adaptation Planning Policy Guideline: Guidelines for Incorporating Climate Change impacts into the Local Government Planning* (Essential Environmental, undated);
- LEGAL ADVICE - *Climate change policy legal risks* – a report by Freehills lawyers to WALGA; includes a summary of potential legal ramifications for Local Government if they improperly consider climate change risks (Freehills, 2010);
- CLIMATE CHANGE POLICY STATEMENT – A template for a Local Government policy on climate change (WALGA, 2012a);
- CONSULTANCY PANEL for climate change (WALGA, 2012b); and
- CHECKLIST for local governments preparing a climate change adaptation plan.

For full details on the WALGA 'Toolkit' go to:

<http://www.walgaclimatechange.com.au/adaptation-plan-checklist.htm>

The Peel-Harvey Catchment Council (PHCC) is an incorporated, not-for-profit, community based Natural Resource Management organisation that promotes an integrated approach to catchment management and the way we protect and restore the environment within the Peel-Harvey catchment. The Peel-Harvey Catchment Council is working in partnership with the Local Governments in the Peel region to recognise and be ready to adapt to the effects of predicted climate change.



Figure 1: The Peel Region

## The Peel Region

The Peel region is located in the south west of Australia and is situated approximately one hour south of Perth, Western Australia (Figure 1). It covers 5600 square kilometres and includes the local government areas of Mandurah, Serpentine-Jarrahdale, Murray, Waroona and Boddington. The region has one of the fastest growing populations in Western Australia. Originally inhabited by the Pinjarup dialect group of the Nyungar people, the area attracted settlement from the earliest days of the WA colony and has a population of 108 606 (June 2012).

Geographically, the Peel region forms a large part of the Peel-Harvey catchment and extends from the coast, across the Swan Coastal Plain eastwards to the Darling Scarp and Ranges and inland to the Albany Highway (NB: the catchment extends east to Cuballing). The region boasts internationally significant environments including wetlands of national and international significance and includes the largest estuary in the south west of Western Australia (the Peel Inlet-Harvey Estuary is over 130 square km, more than twice the size of the Swan estuary system).

## Acknowledgements

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Australian Government  
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Serpentine  
Jarrahdale Shire

