

# WHAT SUCCESS WILL LOOK LIKE

Stream	Outcomes
Biodiversity management	Maintenance of ecological functionality that aligns with climatic and natural landscape conditions.
	Management strategies are coordinated within and across boundaries to reduce human induced threats and aid adaptation processes.
Water resources management	Water resources are shared in an integrated, prioritised and efficient manner to optimise potential benefits within adaptive sustainable limits.
Business and workforce	Existing businesses able to adapt to changing conditions.
development	New low carbon business development in the region to maintain economic
	growth.
	Business and community workforce needs met.
Infrastructure and planning	Infrastructure supports sustainable activity and provides adaptive capacity.
	Future developments occur in balance with risks and sustainable limits.
	Planning and decision making processes are integrated and include diverse
	strategies.
Health and wellbeing	Resilient individuals reflected in a 'well' community, with access to support
	services matching community needs.
Regional Coordination	Coordinated action and united, community-driven leadership across and
	between regions.
Community Engagement/Inclusion	All community members engaged, with the capacity to work together to
and Emergency Management	adapt, including being aware and prepared for climatic hazardous
	incidents.

Balston, J.M., Billington, K., Cowan, H., Hayman, P., Kosturjak, A., Milne, T., Rebbeck, M., Roughan, S., Townsend, M. (2011). Central local government region integrated climate change vulnerability assessment. Central Local Government Region of South Australia, Crystal Brook, SA. pp.331.

# YORKE AND MID NORTH REGIONAL CLIMATE CHANGE ACTION PLAN - SUMMARY





Adapting to a changing climate is about reducing risk, improving resilience and maximising emerging opportunities. As a result of an increasingly warmer and drier climate, our region faces more intense and frequent bushfires, droughts and heatwaves; a shift in rainfall seasonality and decrease in frost incidence. In addition, we will see increasing ocean temperature and acidification, more frequent coastal storm surge, inundation and erosion.

This will impact on our natural ecosystems, local communities, built-infrastructure and industry sectors in different ways.

#### For example:

- The native fauna, flora and water dependant ecosystems in our region are considered highly sensitive to the expected changes and have a low ability to adapt on their own (adaptive capacity). They will need the most support to survive the coming changes.
- Despite the expected climatic impacts, many industries in the region, like dryland agriculture, have a high level of adaptive capacity. However, industries like commercial fisheries, aquaculture and manufacturing, that rely heavily on inputs, utilities or infrastructure that are vulnerable to a change in climate and cannot transition quickly, may need assistance.
- Local towns and sectors of our community that are already under stress, have a lower socio-economic background, limited access to education, or are heavily reliant on volunteer effort for emergency services and healthcare may face increasing pressure from the impact of climate change in years ahead. These will require support to help build their long term resilience in decades ahead.

With support from the South Australian Government, the Yorke and Mid North Regional Climate Change Action Plan was prepared by the Central Region of Councils, Regional Development Australia Yorke and Mid North and the Northern and Yorke Natural Resources Management Board (the Regional Alliance).

It builds on the work of the regional climate change vulnerability assessment<sup>1</sup>, prioritising recommendations for implementation, identifying opportunities for transformation and setting out a clear pathway for coordinated and collaborative action and regional leadership.







# **REGIONAL ACTIONS**

#### **Regional Coordination and Leadership**

- Continue leadership and coordination through the Yorke and Mid North Regional Alliance.
- Undertake a business case for a Regional Sustainability Centre.
- Identify and promote local climate change initiatives.
- Establish a network of regional climate change decision makers and provide targeted information of climate change vulnerability at a local level.
- Regular review and update of regional climate change vulnerability assessment and adaptation priorities.

#### **Biodiversity**

- Develop and apply a model for adaptive NRM planning that incorporates resilience assessments and considers trajectory of landscapes.
- Provide clear direction on regional climate change adaptation through guiding principles in Regional NRM board planning and investment strategies.
- Engage with the NRM Climate Change Impact & Adaptation Research program to inform regional carbon farming policies through NRM board planning and risk assessment processes.

#### **Water Resources Management**

- Provide a coordinated approach and common vision to water resources management in the region, including linkages between Water Security Plans, Integrated Water Management Plans, Water Allocation Plans, Catchment Plans, Development Plans and Technical Advisory Panels.
- Update the Clare and Baroota water resources investigation consistent with Goyder Institute climate projections.
- Develop a policy for re-apportioning the reduced capacity of water resources and incorporate into Water Allocation Planning processes and guidelines for non-prescribed areas.
- Undertake investigations to improve understanding of groundwater recharge processes in the region.
- Undertake assessment of climate change on the non-prescribed water resources of the region.

#### **Industry and Workforce Development**

- Investigate opportunities for low carbon industry development in the region and prepare a low carbon investor prospectus.
- Investigate options to stimulate adaptive action and long-term sustainability planning for agriculture in the region.

#### Infrastructure and Planning

- Extend Digital Elevation Modelling of the coast to inform regional planning strategies and asset risk assessments.
- Identify climate change hazards within the regional planning strategies and provide adaptation policies on land for food production, bushfire protection areas, coastal protection, biodiversity buffers and transition zones, community development and emergency management.
- Incorporate climate change vulnerability into Yorke & Mid North Zone Emergency Management Plan and regional risk assessments.
- Use climate scenarios to assess changes to bushfire intensity and frequency across region to inform regional planning and emergency management strategies.

#### Community Development and Emergency Management

- Prepare and implement a climate change community engagement strategy for the region.
- Undertake a local 'whole of community carbon reduction strategy' case study.

### STATE WIDE ACTIONS

- Resolve inconsistencies within government policies on the successful implementation of identified regional adaptation actions.
- Ongoing support for climate forecasting tools to improve certainty around scenarios.
- Establish and maintain a coordinated, state wide 'warehouse' for national climate change research, adaptation and support for regions and sectors.
- Provide state wide, sector based climate change knowledge brokers to work with regional decision makers and industry groups to identify research needs, required formats and opportunities for local case studies.
- Provide ongoing funding, support and coordination for adaptation research and implementation of regional priorities.
- Develop state wide policies for biodiversity management and other NRM adaptive management requirements under climate change.
- Provide support for national level sector research to develop adaptation pathways for biodiversity management and landholders relevant to region.
- Develop a framework for NRM/agricultural/small business extension services for climate change adaptation that considers the role of the private sector.
- Build state wide expertise in carbon farming and soils.
- Develop a state wide community engagement program.

## PRIORITY PROJECTS

#### **Regional Sustainability Centre**

The future of our region will continue to be based on sustainable agriculture and viticulture, along with emerging growth in low carbon technologies, underpinned by sustainable living and resilient rural communities.

Successful climate change adaptation in the region needs to be based on regionally relevant and accessible research and an engaged community with the information and skills to adapt.

The Regional Alliance is working with a number of research, educational and industry partners to progress a regional precinct style Sustainability Centre to help coordinate research effort, showcase innovation and provide a knowledge and educational hub and an adaptive industry cluster for the region.

#### Coastal Digital Elevation Modelling

The Yorke and Mid North Region has over 800km of coastline which supports a diversity of environmental systems, residential, recreational and industry pursuits that will be vulnerable as a result of sea level rise.

The Regional Alliance partners are supporting a proposal by the Government of South Australia to close the gaps in the digital elevation modelling for the whole of the South Australian coast and provide a comprehensive basis to understand sea level rise and storm surge impacts on or communities, industries and environment.

#### **Low Carbon Transition Prospectus**

The future economic and social prosperity of the Yorke and Mid North Region depends on its ability to adapt to a changing climate and attract new business and industry investment, securing new employment opportunities and community stability.

The Regional Alliance partners are working with University College London to investigate low carbon opportunities within a triple bottom line and regional context. The most feasible sites and options for a range of clean-tech and renewable energy development across the region, including micro-generation as well as large scale solar, wind, wave, geothermal, carbon farming and biomass will be analysed and mapped.