

Development of the Western Australian Emergency Management Climate Change Adaptation Plan

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The Western Australia State Emergency Management Committee (SEMC) found, during the development of the State Emergency Management Sector Climate Change Adaptation Plan, that a pathway to climate resilience in the emergency management sector is to increase sectoral and community preparedness through adaptation.

It is internationally acknowledged that the effects of climate change include increased intensity, frequency and duration of extreme weather events including heatwaves, droughts, floods, storms and bushfires. The effects vary in character and scale across regions and types of events.^{1,2}

The Intergovernmental Panel on Climate Change (IPCC) published comments on the effects of climate change with stark projections regarding the future that these changes will bring.^{1,2} The IPCC has high confidence that, in Australia, the increased risks associated with climate change will partly manifest as:

- losses of natural and human systems in low-lying coastal areas from rising sea levels
- disruptions to, and declines in, agricultural production in southwestern, southern and eastern rural communities of Australia due to hotter and drier conditions
- increases in heat-related mortality and morbidity of people and wildlife due to heatwaves
- cascading and compounding consequences for cities, settlements, infrastructure, supply chains and services from bushfires, floods, droughts, heatwaves, storms and rising sea levels.

Importantly, the IPCC also indicated that Australia's increased risks associated with climate change will manifest, in part, due to an inability of institutions and government systems to manage climate risks.

National bodies that have undertaken research³ on the effects of climate change support international

publications^{1,2} and provide detail for an Australian context. Of note is the increased risk of disasters resulting from extreme weather events and instances where multiple extreme events occur simultaneously or sequentially, resulting in negative compounding effects.

The Australian Government *National Climate Resilience and Adaptation Strategy*⁴ outlines the implications of climate change and the government's plans to develop resilience within communities and the public and private sectors. The *Western Australia Climate Policy*⁵ is supported by the *Western Australian Climate Adaptation Strategy*⁶ and sets out the state's plan for climate-resilient communities and a prosperous low-carbon future. The government has also published its investigation into the effects of climate change on human health and has identified a path forward.⁷

There are some examples where organisations have strategies for the emergency management sector to adapt to climate change.^{8,9,10,11} The strategies propose modification to the traditional framework of prevention, preparedness, response and recovery (PPRR). That is, that additional emphasis be placed on preparedness and prevention to focus on building resilience and prosperity.

The compounding effects of climate change are being seen across natural, social and economic systems. The complexity of the connection between these systems creates risks previously not contended with, which is amplifying existing systemic pressures and constraining adaptation options.

Why is the SEMC involved?

In Australia, there are legislative controls, plans and agencies that provide emergency management guidance and support. However, under current national arrangements, state and territory governments have primary responsibility for emergency management within their jurisdiction.

In Western Australia, there is a suite of legislation and plans pertaining to emergency management, including the *Emergency Management Act 2005*.¹² The Act establishes the SEMC to, in part, provide advice to the Minister for Emergency Services on emergency management and the preparedness of the state to combat emergencies. The provision of advice extends to public authorities, industry, commerce and communities to plan and prepare for an efficient emergency management capability.

It is broadly accepted that we are in a climate emergency. As such, it is appropriate that the SEMC is leading the development and delivery of the Western Australian Emergency Management Sector Climate Change Adaptation Plan. The intent of the plan is to provide advice, direction and support to the emergency management sector on the mechanisms of adaptation to climate change.

The approach

The development and implementation of the plan is being undertaken to guide the emergency management sector when planning climate change adaptation activities for their agencies. This includes the consideration of systemic risk reduction. The work contributes to improving resilience and aims to reduce risks of climate change. It does this by providing guidance to the emergency management sector related to preparation and adaptation to climate change. It will also assist local governments

to identify and undertake preparatory work required to reduce community risk exposure.

Mechanisms for resilience are necessary to achieve long-term outcomes. The emergency management sector is acutely aware that the traditional PRR framework struggles to remain effective in the contemporary environment. To provide the emergency management sector with good guidance and a pathway for implementation, the SEMC established the Climate Change Subcommittee in October 2022 to provide leadership, advice and oversight.

To develop the Western Australia Emergency Management Sector Climate Change Adaptation Plan, a program of robust governance was established to clarify the scope and direction that support the development and delivery of the plan's objectives and the responsibilities of those contributing. This has been essential to the progress of the work. The Climate Change Adaptation Program was established in November 2022 and Figure 1 illustrates the process undertaken to date, and the activities planned to progress the development of the plan.

The program's delivery is based on continuous improvement and draws on a culture of learning. That is, applying the principles of governance, methodology, consultation and engagement and the consideration of capability. Parallels can be drawn between this model and some of the themes being considered for inclusion in the Western Australia Emergency Management Sector Climate Change Adaptation Plan, specifically governance, capability, capacity and communities.

A program management plan was developed in February 2023 in consultation with the Climate Change Subcommittee to outline the governance and scope of the plan. Initial investigative work was undertaken to understand the progress made at state, territory and national levels that the emergency management

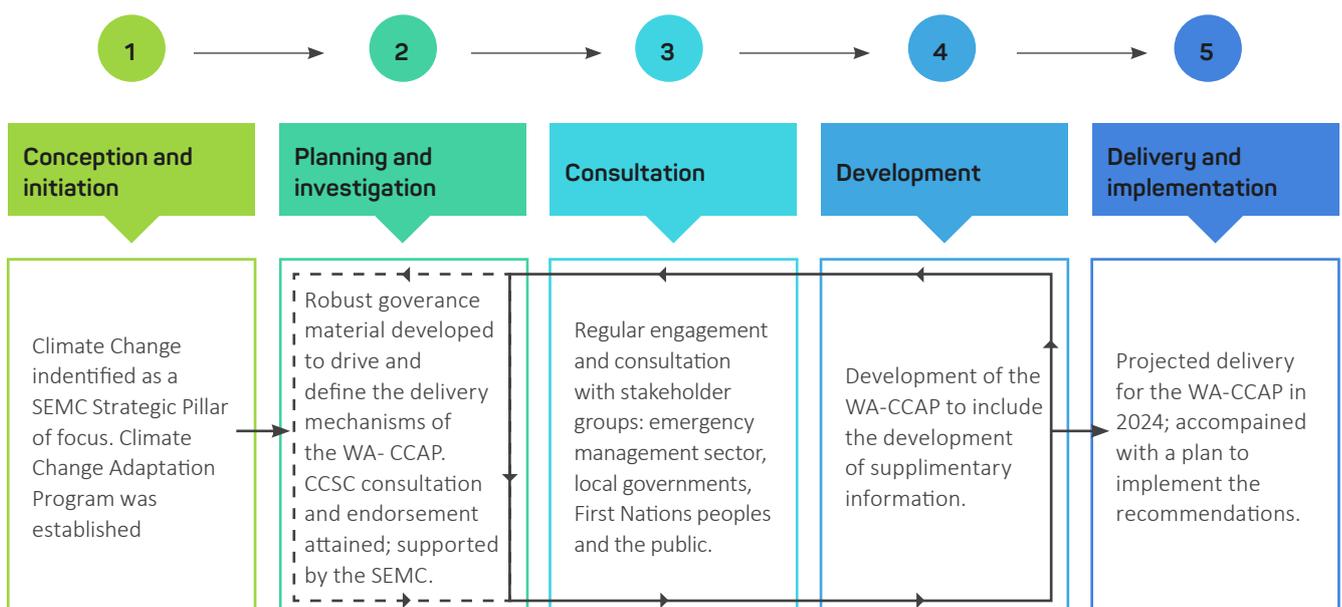


Figure 1: The WA-CCAP development process.

sector has made towards climate change adaptation. Work was also undertaken to identify the methods used to address any challenges reported when undertaking adaptation activities.

As the investigative aspects of the work progressed, other projects were identified to support the plan. One example was the development of a Climate Change Adaptation Actions Tracking Platform for the emergency management sector in Western Australia. This work is in its early design phase and was born from the need to understand what work was being undertaken to assist cross-sector engagement and to link agencies undertaking similar projects to identify collaboration opportunities. It is anticipated that the platform will assist agencies with reporting requirements regarding their progress in adaptations to climate change.

Lessons

During initial consultations with the emergency management sector, it was identified that there was a good understanding of the scope of the work and that clear and internationally accepted definitions about climate change and climate change adaptation (versus climate change mitigation) should be included. The plan will also include definitions that are generally accepted by the state as those published in the IPCC.¹

The program found, particularly with a large and multidisciplinary sector, that scope creep is inevitable. Constant review of the scope and rearticulation to stakeholders has been important, particularly to ensure the intent of the plan is maintained, remains serviceable and is relevant to the emergency management sector.

Next steps

A directions paper is being drafted and consultation with the emergency management sector, communities, local governments and communities of Aboriginal and Torres Strait Islander peoples is planned for late in 2023. The consultation is being undertaken in line with the program management plan and at the direction of the Climate Change Subcommittee. When consultation is complete, a final directions paper will inform the ongoing development of the plan that is expected to be finalised in 2024.

Endnotes

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