



Preparing for the impacts of climate change

Acknowledging the challenges and focusing on our opportunities to prepare

The development of the Barwon South West Climate Adaptation Strategy has been funded through the Supporting Our Regions to Adapt Program, a \$9.32m 4-year program funded by the Sustainability Fund.

May 2021

Traditional Owner acknowledgment

The Department of Environment Land Water and Planning (DELWP) acknowledges the Traditional Custodians of the land and waters where we work and pay our respects to their Elders past, present and emerging.

DELWP further acknowledges the enduring nature of Aboriginal culture in Australia and the generational lived experience of adapting to past climate shocks. We are committed to genuinely partner and engage with Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and broader aspirations in the 21st century and beyond.

Mirring – Country, artwork by Tom Day.

Mirring represents the diverse Countries and landscapes across Victoria and the "scars that have been left within the landscape by our people" while at the same time reminding us of "our inherent responsibility to protect Country."



Contents

Traditional Owner acknowledgment.....	2
Context to this discussion paper	3
Acknowledging our challenges	4
Preparing for climate change: opportunities to work together.....	6
This is what preparing for climate change looks like	8
Ways to be involved	9

Context to this discussion paper

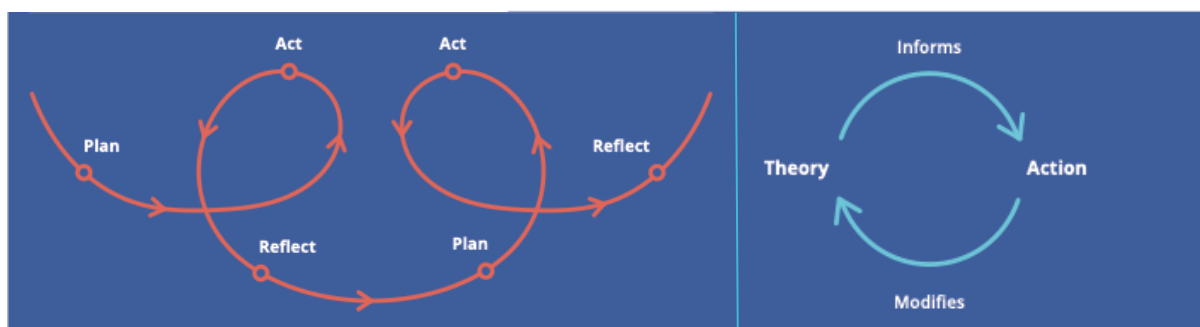
We are seeking your contribution towards the Barwon South West Regional Climate Adaptation Strategy.

Preparing the strategy: a snapshot in time, not an end point

This is the first regional scale Climate Adaptation Strategy for the Barwon South West region.

As we plan for and respond to the impacts of climate change, we are continually learning about what worked well, and ways to improve our responses. Given this, the strategy will be a snapshot of the regions current opportunities to prepare for climate change. These opportunities are a 'signpost' to direct collaborative efforts over the 5-year life of the strategy.

We are using an 'action learning' approach to develop the strategy, meaning we continually review what worked well and areas to improve. By doing so, we are building upon what we learn over time and can combine resources and knowledge of different organisations in the region.



The process of Action Learning (above figure).

Seeking your contribution

To guide your contribution towards this strategy, we have prepared this paper along with an accompanying survey.

The paper summarises the emerging focus areas to expand regional collaboration on climate change initiatives. The focus areas have been identified through a 7-part Climate Change Adaptation Workshop series. The workshops saw 38 regional agencies work together to share knowledge and identify opportunities to collaborate when planning for and responding to climate change.

By completing the accompany survey, you will help to identify opportunities to expand collaboration and ways to better support community driven climate change action that will make a difference to you and your community.



To complete the survey, visit: <https://engage.vic.gov.au/regional-climate-adaptation-strategy-barwon-south-west/survey-preparing-climate-change-barwon-south-west>

We will use your contribution to:

- Ensure the strategy reflects community expectations about how government and regional agencies should plan and respond to the impacts of climate change
- Identify our knowledge gaps about community driven climate action
- Identify opportunities for government to better support grassroots climate action.

Acknowledging our challenges

Climate change projections

The Barwon South West region has been getting warmer and drier, and in the future we can expect:

 Temperatures to continue to increase year round	 Harsher fire weather/ longer fire seasons	 More frequent and more intense downpours
 Less rainfall in autumn, winter and spring	 More hot days and warm spells and fewer frosts	 Rising sea level










To find out more about the region's future climate visit:

[Barwon Climate Projections](#)

[Great South Coast Climate Projections](#)

Residents in the Barwon South West region have observed the impacts of climate change – about two-thirds believe that more bushfires, storms/flooding, drought and coastal erosion have occurred in Victoria during the past 10 years. The majority know that climate change is influencing the occurrence of these events and are concerned about future impacts.

 Over 76% concerned about crop failures or declines in agriculture
 Over 60% concerned about heatwaves
 Over 71% concerned about water shortages & drought
 Over 77% concerned about severe bushfires
 Over 75% concerned about severe storms & floods
 Over 63% concerned about coastal erosion & changes to sea level
 Over 46% concerned about air pollution



To find out more about Victorian's perceptions of climate change, visit:

[Sustainability Victoria - Victorian's Perceptions of Climate Change](#)

Understanding our connected and shared climate risks

Individuals, communities and organisations rely on a number of highly connected systems that provide critical services in our region. Extreme events, like fire, flood, or heatwave, create shocks that disrupt these systems, which can overwhelm the social, economic and natural systems ability to cope. For example, consider the consequences to our communities if we were to lose access to critical services such as electricity, telecommunications, food, fuel and water supplies. We immediately become aware of our reliance on various people and services, and the importance of coordinating planning and recovery efforts across various organisations and service providers.

It is therefore critical to understand how people, organisations and sectors are connected at local and regional scales, and how climate risks may disrupt those connections.

To make sense of these connections, we have been working alongside different government agencies, authorities, and peak bodies to understand the interdependencies across sectors and to identify those climate risks which have the potential for maximum systems disruption.

Case study: Highlighting interdependent (shared) climate risks

The Port of Portland is a major trade facility for south west Victoria, trading around 6 million tonnes of trade per year including grain, woodchips, logs, mineral sands, livestock and aluminium ingots. Given climate change may affect the profitability of these industries, the port will, in turn, be affected.

Likewise, inability of ports in general to manage the effects of climate change on their infrastructure may have economic effects on the productivity of agricultural sectors. For example, if access routes to ports are impacted (flood inundation, bushfires, or heat damaged roads or rail), this may disrupt schedules, delay departures or customers may seek alternative facilities. All of these scenarios will lead to reduced revenue.



Preparing for climate change: opportunities to work together

Collaboration – working together to adapt

Preparing for climate change is a shared responsibility. Governments at all levels, businesses and households each have complementary roles to play to support our communities to adapt.

The Barwon South West region is coordinating our approach to prepare for climate change. Regional agencies are working together to identify opportunities to collaborate on climate change initiatives. We are identifying ways to better share knowledge and resources to be more efficient at delivering climate adaptation results for communities.



Climate equity – provide extra assistance to those who need it most

The impacts of climate change have the potential to grow and entrench the inequalities that already exist in communities. The impacts of climate change may disproportionately affect population groups such as people over 65 years, young children, pregnant women, people with a chronic disease, low-income households, people who are experiencing homelessness, and Aboriginal and Torres Strait Islander people.

'Climate equity' puts the people who are most vulnerable at the forefront of decision-making. These population groups may need extra assistance to prepare, respond and recover from climate impacts.

Why is climate equity so important for the region?



We are an aging population.



We have high levels of chronic disease.

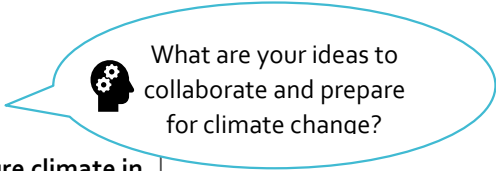


We have communities living with high levels of entrenched social disadvantage.



We are a highly dispersed population.

Preparing for climate change Focus areas to expand collaboration



Maintain functioning natural systems with our future climate in mind – Trial targeted interventions to support climate vulnerable species, ecosystems and ecological processes.

Strengthen emergency preparedness – build the capacity of primary healthcare, community service, tourism and agricultural organisations to contribute to emergency management planning.

Expand regenerative agriculture – Build upon and expand regenerative agriculture opportunities, to build diversity into agricultural systems and value add to produce.

Communities and agencies working together on coastal planning and response – place community and across agencies partnerships at the centre of coastal planning and response.

Invest in community health and wellbeing – invest in community health and wellbeing as a preventative measure.

Upgrade urban environments to ensure liveability under climate change - Upgrade our cities and towns to cope with heatwave, flash flooding, and transition to a circular economy.

COLLABORATION



Advocacy: focus areas out of the regions control

Diversify water supply – build understanding about the region’s aquifers and drought preparedness.

Ongoing skill and capacity building for climate change planning and response – tailor capacity building support to needs. Targeted support for low capacity groups to contribute to regional climate change planning and response.

Mainstream climate change across government agencies – mainstream climate change planning and risk management across all areas of government agencies and authorities.

Empower local communities in climate change initiatives – expand funding avenues by targeting local, place-based climate change initiatives, including extreme event recovery initiatives.

Identify and monitor trade-offs which could drive maladaptation – Identify potential counterproductive actions which could undermine future capacity to prepare and respond to climate change e.g. monitor competing demands between agriculture, urban development, natural systems and water.

Target emissions reduction support – target support to our highest emitting sectors to transition to renewable energy and carbon neutrality standards.

These focus areas have emerged from a 7-part workshop series with 38 different agencies in the Barwon South West region.

STRENGTHEN & EXPAND COLLABORATION WITH:

Traditional Owners	Young people	Researchers	Not for Profits	NGOs	Community groups	Communities	Small business	Industry	Across government	Across sectors	Across borders
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GUIDING PRINCIPLES FOR HOW WE COLLABORATE ON CLIMATE CHANGE

<p>Equity: Environmental, social & intergenerational Putting the people and places that are most vulnerable at the forefront of decision-making.</p>	<p>Inclusive Actively seeking and valuing diverse views and perspectives – include the people who will be affected by decisions in the decision-making process.</p>	<p>Deliberative learning Using deliberative learning and reflection to drive action projects – connecting lessons with implementation.</p>
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This is what preparing for climate change looks like

Keeping Carbon on the Farm

Project lead: Heytesbury District Landcare Network and partner organisations.

A pilot project to support dairy farmers and primary producers improve soil and animal health while also reducing their greenhouse gas emissions. The project established a demonstration farm site to showcase a series of activities that farmers can use to prepare for climate change. The demonstrations included re-vegetation activities, carbon-sequestering, soil amelioration and energy reduction strategies. The outcomes of the project saw an increase in carbon sequestration in soil profiles, a reduction in energy usage, and better understanding of how climate change will impact dairy farmers. It is also expected that soil health, animal health and general productivity will improve on the project farm.

This project was funded through the Victorian Climate Change Innovation Grant program.

Heytesbury District Landcare Network are expanding their work through a follow up project, *Increasing Soil Carbon*. This major new project will show how increasing soil carbon on 20 Heytesbury district farms can lead to food production and climate change benefits.

This project is funded by the Lord Mayor's Charitable Foundation.



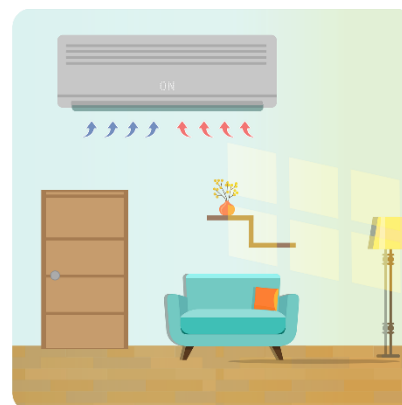
Climate Safe Rooms

Project lead: Geelong Sustainability Group.

A 'climate safe room' is a room in a home that has been retrofitted to ensure residents are safe during extreme temperatures (heat and cold). The project involved household energy and thermal comfort upgrades to 16 eligible households across the Geelong area. The project upgraded a room to be more energy efficient (e.g. draught proofing) and then installed a highly efficient reverse cycle air-conditioner (for heating and cooling), along with a small solar system to generate the electricity needed to operate the air-conditioner and offset its running costs.

The participants are now enjoying reduced power bills and a safer home during extreme temperatures.

This project was funded through the Victorian Climate Change Innovation Grant program.



Ways to be involved

We are seeking your ideas about how to prepare for climate change that will make a difference to you and your community.

To guide your contribution, we have prepared a short survey. The purpose of the survey is to:

- sense check our emerging focus areas
- an opportunity for you to pitch your ideas about ways to prepare for climate change.

The survey should take longer more than 15 minutes to complete.



To contribute to the Barwon South West Climate Adaptation Strategy, please complete to our survey: <https://engage.vic.gov.au/regional-climate-adaptation-strategy-barwon-south-west/survey-preparing-climate-change-barwon-south-west>

Thank you for your contribution!

