

Victoria's Pilot Water Sector Climate Change Adaptation Action Plan

The plan outlines 20 actions to put Victoria's water sector on track to a resilient future

Victoria's water sector must adapt if it is to continue to provide reliable services under an increasingly challenging climate.

Victoria is already experiencing the impacts of climate change. Since 1950, average temperatures have increased by around 1°C while average annual rainfall has reduced. Heatwaves are on average hotter than between 1950-80, and stream flows in some rivers have reduced drastically since the 1990s.

Future climate projections and models suggest annual stream flow reductions of around 50% could occur in some Victorian catchments by 2065, meaning less water would be available for our storages. Combined with a series of additional climate change impacts projected for Victoria (Figure 1), this decrease in rainfall and reduction in water availability has serious consequences for everyone - households, industry, agriculture, recreation, cultural values, and liveability - and for waterway health and our environment.



Figure 1: Projected climate change impacts for Victoria

Victoria's Pilot Water Sector Climate Change Adaptation Action Plan: building resilience to climate change in the water sector

The Government committed to developing a Pilot Water Sector Climate Change Adaptation Action Plan in *Victoria's Climate Change Adaptation Action Plan 2017-2020*. The plan commits to delivering more resilient services for water sector customers. The actions will be cost effective in leveraging existing investments, research, and expertise, and have a minimal impact on greenhouse gas emissions. It contains three short-term objectives:

1. Build knowledge of how climate change will impact Victoria's water sector;
2. Develop the framework, policy and tools to enable successful adaptation in the water sector; and
3. Enhance the capacity and capability of water sector staff to apply climate change adaptation to business decisions.

The plan sets out 20 actions (Figure 2 overleaf) for delivery between 2017 and 2020 to inform Victoria's long-term strategy to tackle the effects of climate change. These actions will put the water sector in a strong position to prepare its inaugural Water Sector Climate Change Adaptation Action Plan by 2021 as required under the *Climate Change Act 2017*. Actions will be delivered by DELWP in partnership with Victoria's water corporations, catchment management authorities, local governments, and Traditional Owners.

Medium and long-term adaptation objectives for Victoria's water sector

The medium-term objective of the plan is to integrate climate change adaptation considerations into all relevant business decisions in the water sector. This objective will require a coordinated and systematic approach to climate change adaptation, supporting and linking with key business systems and processes.

The long-term objective is to enable the sector to provide reliable services that meet customer expectations under a changing climate, while balancing the associated impacts on customer bills, on water business finances, and on the environment.

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WSAAP Objective 1: Build knowledge

Action 1: Undertake a water grid stress test

Action 2: Understand implications of more intense rainfall in combination with overall drier conditions, for flooding

Action 3: Consider the changing sewerage, drainage and flood management risks under climate change in Integrated Water Management Forums

Action 4: Encourage the use of best practice methods to incorporate climate change into the estimation of future flood impacts

Action 5: Identify the impact of climate change on Traditional Owner values associated with water and how to adapt to them

Action 6: Collate and share knowledge about the impact of climate change on water supply between water sector stakeholders

Action 7: Collate and share knowledge about the impact of climate change on sewerage

Action 8: Improve information sources on adaptation for the water industry



WSAAP Objective 2: Develop frameworks, policy and tools

Action 9: Review the Guidelines for Assessing the Impact of Climate Change on Water Supplies in Victoria

Action 10: Develop a framework to inform consistent and systematic embedment of climate change considerations into water business decisions

Action 11: Develop a monitoring, evaluation, reporting and improvement plan

Action 12: Review the use of climate change scenarios in water sector planning

WSAAP Objective 3: Enhance the capability and capacity of water sector staff

Action 13: Review emergency management plans used in the water sector in the context of climate change

Action 14: Review and update workforce emergency management capability, capacity and training requirements

Action 15: Identify and manage key risks between water and other critical service sectors

Action 16: Identify key elements of successful adaptation business cases

Action 17: Develop and deliver guidance material for water industry boards and executives on climate change risks and duties of care

Action 18: Estimate the costs of climate change to water corporations

Action 19: Improve management of the potential impacts of climate change on water quality relating to algae

Action 20: Prepare guidelines for assessing the impact of climate change on sewerage systems

Figure 2: The policy objectives of the Act informed the WSAAP's objectives and adaptation actions.

More information

[Click here](#) to access the Pilot Water Sector Climate Change Adaptation Action Plan. Alternatively visit DELWP's website at

<https://www.water.vic.gov.au/climate-change> to learn more about the water sector climate change initiatives underway in Victoria.

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