

ACT CLIMATE CHANGE ADAPTATION STRATEGY

LIVING WITH A WARMING CLIMATE

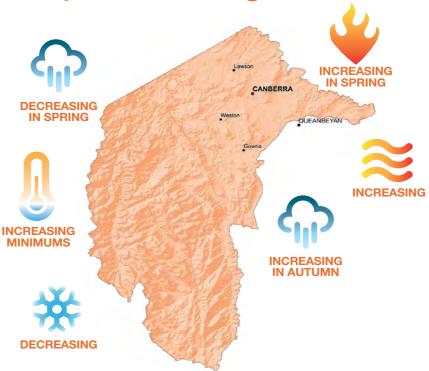
A changing climate affects us all. Adapting to climate change and preparing for more extreme weather events is everyone's business. The ACT Climate Change Adaptation Strategy provides a range of actions to reduce our vulnerability to existing and future impacts of climate change in ACT communities and the Capital Region.



WHY WE NEED AN ADAPTATION STRATEGY

Our climate is already changing, impacting health, property, infrastructure and businesses across Australia. In Canberra and its region, climate change is inducing longer, drier summers and more frequent storms. This increases the threat of bushfires, heatwaves and flash flooding to lives, property, economic activity and the environment. The Climate Change Adaptation Strategy: Living With a Warming Climate will help our city and region prepare.

Projected changes for ACT





Projected temperature change

Maximum temperatures are projected to increase in the near future by 0.6 – 0.9°C

Maximum temperatures are projected to increase in the far future by 1.4 – 2.3°C



Minimum temperatures are projected to increase in the near future by $0.4 - 0.7^{\circ}$ C

Minimum temperatures are projected to increase in the far future by 1.4 – 2.3°C



The number of hot days will increase

The number of cold nights will decrease



Projected rainfall change

Rainfall is projected to decrease in spring

Rainfall is projected to increase in summer and autumn



Projected Forest Fire Danger Index (FFDI) changes

Average fire weather is projected to increase in spring, summer and winter

The number of severe fire weather days is projected to increase in summer and spring

DISASTER AND EMERGENCY MANAGEMENT

ACTIONS BY END 2017

1. BUSHFIRE PRONE AREAS

The Government will consider whether the current regulatory settings of bushfire prone areas continues to adequately reflect bushfire risk

2. REDUCING IMPACTS FROM THE WARMING CLIMATE

Increase awareness of climate risks and what we all can do in our daily lives by:

- a. expanding Emergency Services Agency outreach to households in the Bushfire Prone Area
- b. expanding Actsmart programs to households in the bushfire prone area to incorporate bushfire education elements
- c. developing a web based tool for selfassessment of household climate adaptation and resilience.

3. CLIMATE RISK ASSESSMENTS

Undertake or update assessments of climate risk and resilience with upgrade proposals for:

- a. ACT Government owned and leased buildings
- b. ACT owned utility and services infrastructure and essential services delivery.

4. FRAMEWORK FOR FLOOD MANAGEMENT

Complete a revision of the framework and ensure implementation.

5. STRATEGIC BUSHFIRE CAPABILITY FRAMEWORK

Complete the capability framework under the Strategic Bushfire Management Plan.



COMMUNITY HEALTH AND WELLBEING

ACTIONS BY END 2017

6. INCREASING HEALTHY LIVING

Support healthy living through:

- a. progressive implementation of the Active Travel Strategy through expansion of pathways with appropriate support infrastructure such as shade planting, drinking fountains, parking, seating and shower facilities
- b. assess opportunities for investment in community gardens in new estates and urban renewal areas.

7. IDENTIFY HEAT REFUGES

Review opportunities for ACT Government and other publicly accessible buildings to be used as heat refuges, and publish information on potential heat refuges around the ACT to enable at-risk individuals to seek out areas where they can go to for relief during extended periods of hot weather.

8. WORKPLACE SAFETY

Review ACT Government workplace health and safety policies and guidelines to ensure that potential climate impacts on workers are identified and addressed.

ACTIONS BY END 2020

9. REGIONAL COLLABORATION

Work with the region to improve awareness of climate change impacts to build resilience and adaptive capacity.



SETTLEMENTS AND INFRASTRUCTURE

ACTIONS BY END 2017

10. CLIMATE IMPACTS AND PLANNING

Introduce mandatory requirements to planning for new estates in Territory Plan and Sub-division guidelines and design standards that reflect leading practice with regard to future climate change scenarios.

11. CITY RESILIENCE

Increase built environment resilience and amenity by:

- a. reviewing design standards for public infrastructure to ensure climate change adaptation is considered
- b. introducing requirements to reduce heat absorption of building surfaces and pedestrian pavements.

12. CLIMATE-WISE BUILDINGS

Develop ACT region specific climate wise guides for buildings and estate planning.

ACTION BY END 2018

13. SUSTAINABLE PROCUREMENT

Introduce mandatory minimum sustainability requirements for ACT Government capital works and asset upgrade projects to ensure assets and services are climate wise.

14. TREE LINED PATHWAYS

Add to the Strategic Cycle Network Plan a program of shade tree planting for walking and cycling routes.

15. LIVING INFRASTRUCTURE

Develop and implement a strategy to enhance living infrastructure in the Territory, including targets for urban tree canopy cover.

ACTIONS BY END 2020

16. BUILDING CODES

The Government will consider whether current requirements in building codes adequately reflect projected climate change impacts on residential and commercial buildings.



WATER

ACTIONS BY 2017

17. WATER FOR LIFE

Evaluate stormwater infrastructure and initiatives for potential further expansion of:

- a. stormwater irrigation of priority public open spaces
- b. mitigation of nuisance flooding through increasing on-site retention and infiltration
- c. protection of aquatic habitats and prevention of waterway scouring.

18. INTEGRATED CATCHMENT MANAGEMENT STRATEGY

Ensure the plan for the catchments in our region is completed and being implemented.

ACTIONS BY END 2019

19. BASIN PRIORITY PROJECT

Complete the construction of approved water quality improvement projects, incorporating new approaches to catchment 'treatment trains', in six priority sub-catchments.

NATURAL RESOURCES AND ECOSYSTEMS

ACTIONS BY END 2017

20. BIODIVERSITY CONSERVATION

At a landscape scale, promote better collaboration to:

- a. enhance the resilience and adaptive capacity of our ecosystems including through improved habitat condition and connectivity
- b. identify, protect and manage potential climate refugia across the region.

21. SAFEGUARDING SPECIES

Undertake and facilitate targeted interventions to safeguard species under climate change.

22.CARING FOR LAND AND WATER

Improve:

- a. knowledge and understanding of land managers about climate impacts and adaptation actions
- b. coordination of pest animal and plant control to contribute towards increased landscape resilience under climate change
- c. monitoring of climate impacts on ecosystems in our bioregion.

INNOVATION AND INTEGRATION

ACTIONS BY END 2017

23. AWARENESS RAISING

Achieve more effective sharing of information across all stakeholders through sustained promotion and engagement efforts, including providing periodic updates on local climate impact assessments and emerging research outcomes.

24.SUSTAINABILITY ALLIANCE

Build on existing engagements with peak bodies and local knowledge brokers to create a cross-sector alliance that provides an efficient and effective vehicle to:

- a. share climate change and sustainability information across diverse groups to build understanding, support informed decision making and inspire action
- b. seek input on relevant ACT policy and program issues
- c. facilitate collaboration between sectors on challenges and opportunities of mutual interest.

25.CLIMATE ADAPTATION INNOVATION

In projects across the city for new or existing public infrastructure, initiate the creation and or provision of trials to innovate in:

- a. materials, surfaces, structures, products or methods
- b. maximising capture and re-use of stormwater
- c. making public realm landscape treatments more climate resilient.

26. CLIMATE ADAPTATION TRAINING AND EDUCATION

Collaborate with vocational and academic institutions and peak bodies on new or innovative delivery of:

- a. programs for education, training and up-skilling of builders and trades people
- b. continuing professional development for Canberra and region built environment professionals.

MONITORING AND EVALUATION

ACTIONS BY END 2017

27. MONITORING AND EVALUATION FRAMEWORK

Measure resilience as an outcome of successful adaptation, including:

- a. establishing a longitudinal community survey (commencing in 2016 and repeated in 2020)
- b. measurable and repeatable indicators to evaluate resilience across community sectors.

WHAT IS OUR APPROACH TO ADAPTATION?

The ACT Climate Change Adaptation Strategy was informed by a review of the potential impacts and risks of climate change in the ACT. It was developed in collaboration with experts and stakeholders.

The Climate Change Adaptation Strategy will:

- reduce our vulnerability to the impacts of extreme weather events by enabling
 households, businesses and government to assess climate risks and be prepared for
 extreme weather events
- **increase our resilience** by putting in place policies, programs and practices so we are able to overcome climate change impacts



FOR MORE INFORMATION ABOUT CLIMATE CHANGE

The Actsmart sustainability portal **www.actsmart.act.gov.au** is your one-stop-shop for information on climate change and sustainability in Canberra and our region.

The Environment and Planning Directorate website **www.environment.act.gov.au/cc** has further information about the ACT Government's climate change policy responses.