

#### Climate risk and opportunity for Snowy Valleys Snowy Valleys Council Climate Change Forum 29 April 2019



Mel Hillery, Regional Preparedness, Climate Resilience & Net Zero Emissions

Pallet & Bin

Annual Crop Estimate Impacted by Weather, Apple and Pear Australia, March 6<sup>th</sup> 2019



# Climate Risks & Opportunities for Snowy Valleys



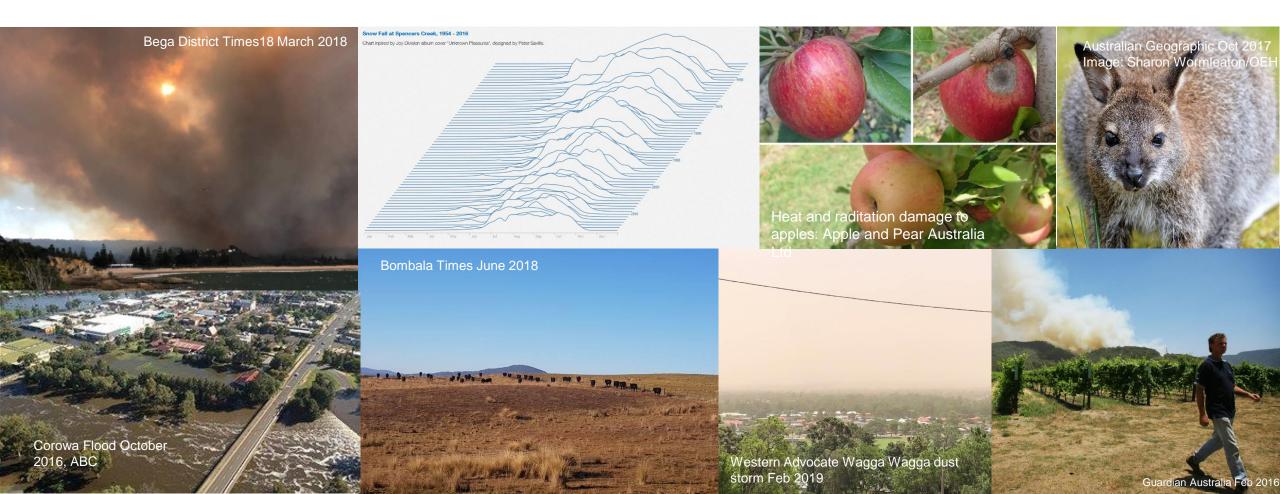


- 1. The case for action
- 2. KNOW: Climate observations and projections
- 3. ASSESS: NSW government
- 4. ASSESS: Risks and opportunities for Snowy Valleys
- 5. RESPOND: NSW Government support



**AdaptNSW** 

#### What's with the weather: SE and eastern Riverina of NSW?



Climate change poses both risks and opportunities to council, local businesses and the wider community

Risks and opportunities can be partitioned into two areas:

- Physical risks from changes in the local climate, and
- Transition risks and opportunities associated with the shift to lower emissions.

Our failure to adequately address them can lead to legal and liability risks

# The case for action





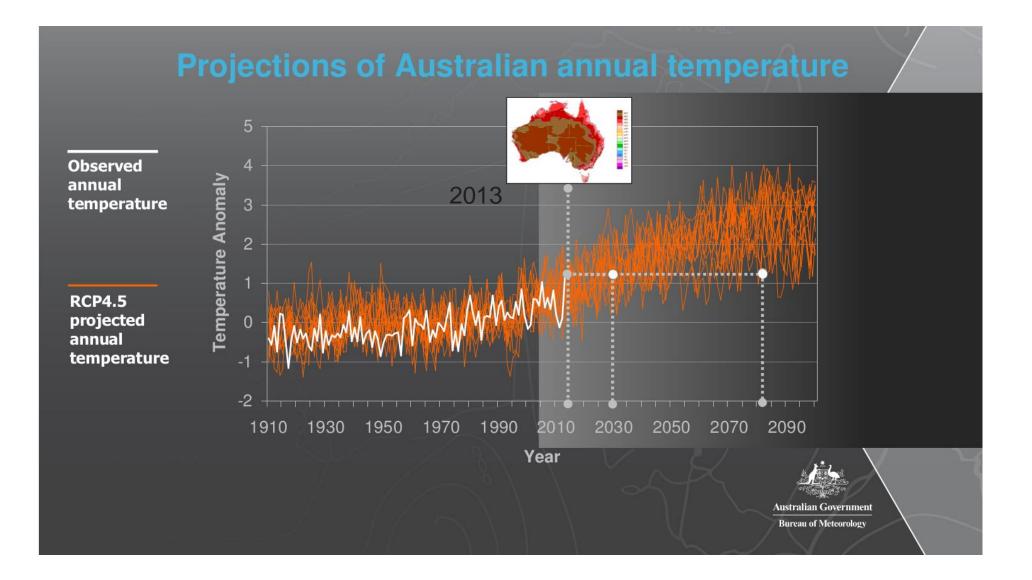
#### Climate Risks & Opportunities for Snowy Valleys



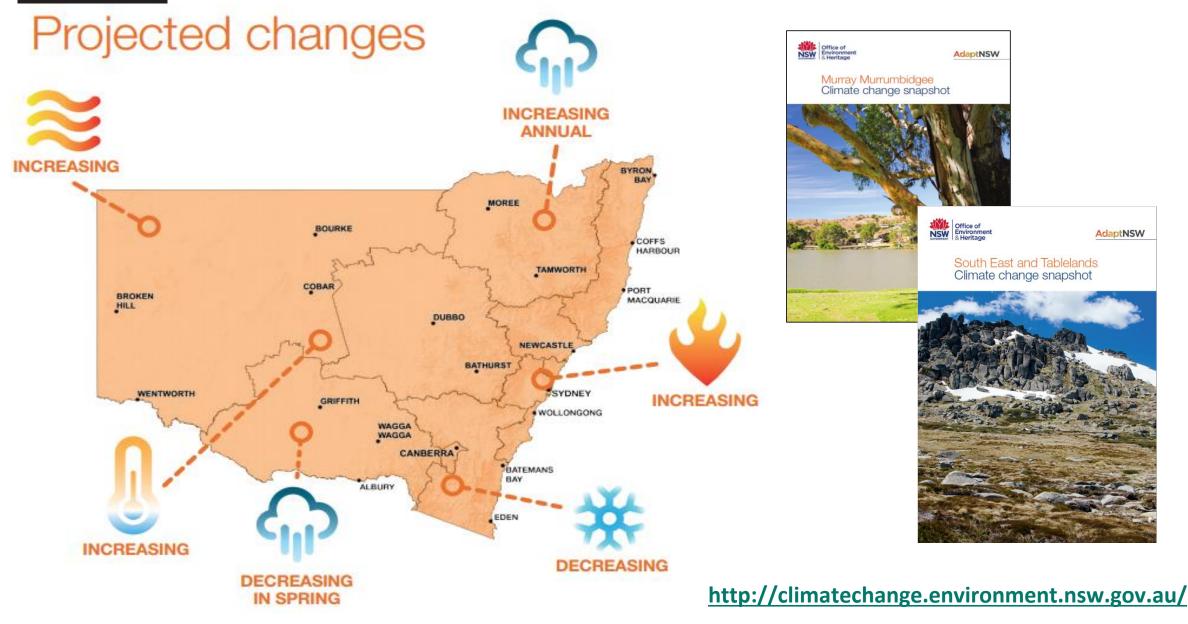


- 1. The case for action
- 2. KNOW: Climate observations and projections
- 3. ASSESS: NSW government
- 4. ASSESS: Risks and opportunities for Snowy Valleys
- 5. RESPOND: NSW Government support







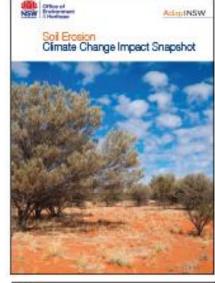




## **NSW Impacts Research**

## AdaptNSW

- Water resources
- East coast lows
- Extreme rainfall
- Heatwaves
- Soil properties
- Soil erosion and Rainfall erosivity
- Urban heat













Soil Properties Climate Change Impact Snapshot

AdaptNSV



Impacts of climate change on Hydrology in NSW



AdaptNSW



AdaptNSW

Heatwaves Climate Change Impact Snapshot





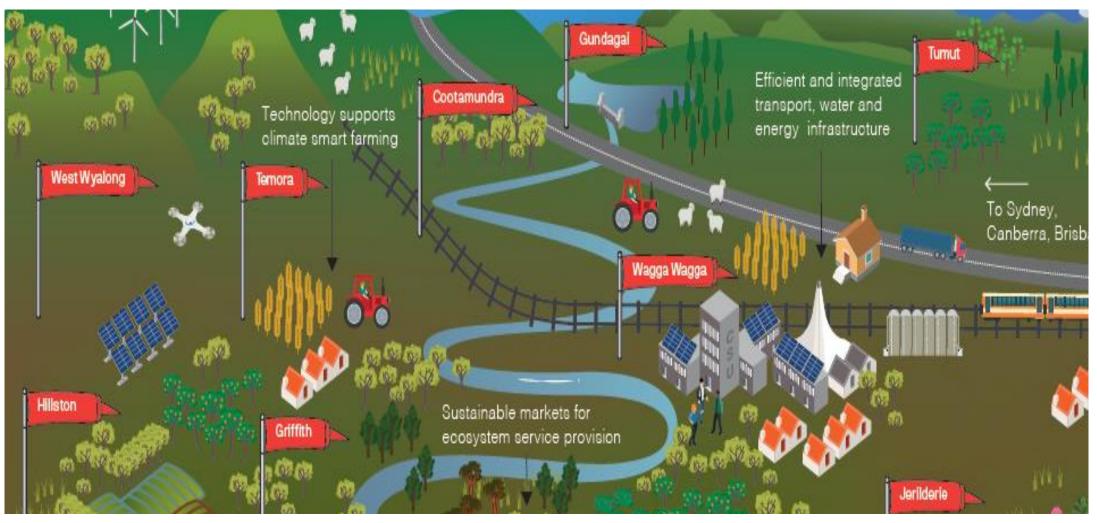
#### AdaptNSW Climate Risks & Opportunities for Snowy Valleys





- 1. The case for action
- 2. KNOW: Climate observations and projections
- 3. ASSESS: NSW government
- 4. ASSESS: Risks and opportunities for Snowy Valleys

# AdaptNSW Priority systems and adaptation pathways



- Riverine ecosystems
- Land management

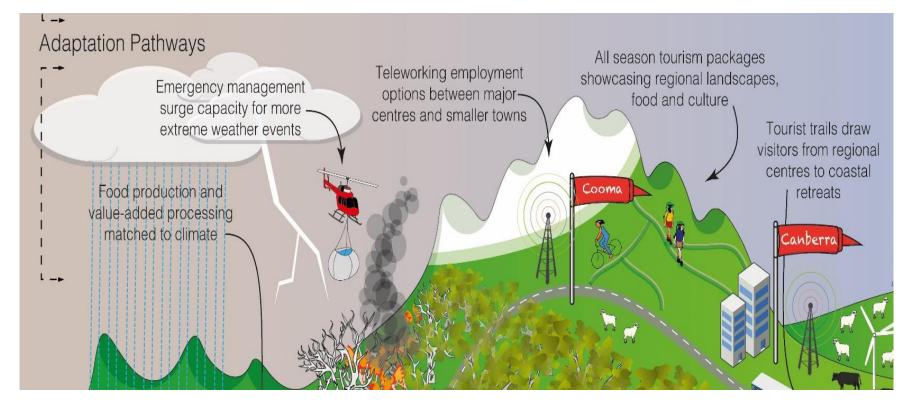
Office of Environment & Heritage

- Mixed farming
- Irrigated agriculture
- Energy

- Small communities
- River Tourism



## Priority systems and adaptation pathwaysaptNSW



- large regional towns
- agricultural service centres
- coastal development
- potable water supply

- emergency management
- alpine tourism
- beach tourism
- public land management

- coastal ecosystem management
- off-reserve conservation
- extensive grazing
- dairy farming



# Climate Risks & Opportunities for Snowy Valleys





- 1. The case for action
- 2. KNOW: Climate observations and projections
- 3. ASSESS: NSW government
- 4. ASSESS: Risks and opportunities for Snowy Valleys
- 5. RESPOND: NSW Government support

#### Local Government Climate Change Action

Councils and their communities are leading the way on climate action

•

- 20 years of action reducing corporate emissions included energy audits of large facilities, installing solar PV and upgrading lighting in council facilities
- Some councils signing the Global Covenant of Mayors for Climate & Energy
- Councils increasingly adopting corporate emissions reduction targets for e.g. Coffs Harbour City Council 100% renewable energy by 2030
- 19 out of 20 councils in the Riverina Murray region have a completed climate change risk assessment (CCRA)

Cycle classic in Tumut Jan 2017, Tumut and Adelong





### **Climate Change Risk Assessment**

- Councils who have completed a CCRA, mostly focused on climate change risks to council assets, operations and services and not addressing the risks of climate change to local communities
- Increasing Resilience to Climate Change (IRCC) program requires a CCRA to completed in the last 5 years putting most CCRAs out of date, e.g. completed before 2014
- Councils are starting to revise their CCRAs

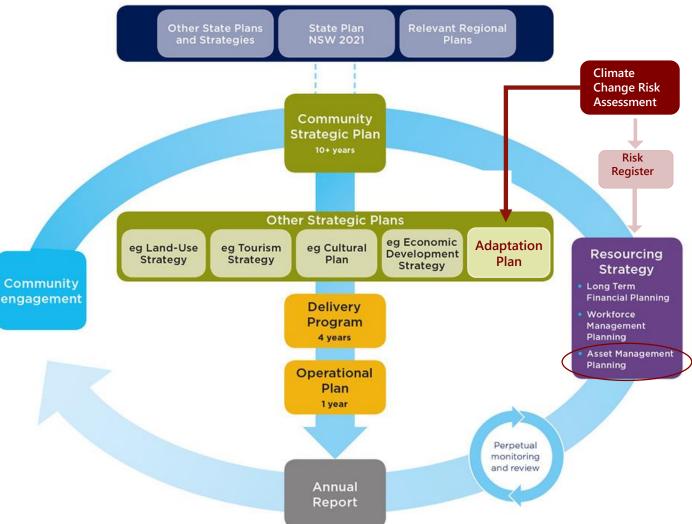
Does your council have a Climate Change Risk Assessment (CCRA)?

2015 70% of respondents indicated they had a CCRA 2018 44% of respondents indicated they had a CCRA



### How to integrate CCRA into AdaptNSW Integrated Planning & Reporting framework

- Integrating climate risk into the IP&R framework
  - Community Strategic Plancommunity engagement
  - Delivery program and operational plan via adaptation plan
  - Asset management planning via risk register
- The IRCC grants encourage integration of Climate Change Adaptation activities into the IP&R framework





#### Local Strategic Planning Statements (LSPS)

- EP&A Act
- Regional NSW councils must have their LSPS in place by 1 July 2020
- The LSPS is a 20 year vision for the land use of an LGA underpinned by the Regional Plan which takes into account the context of local dynamics e.g. housing, industry, employment, heritage issues, etc.
- The LSPS will inform changes to the planning controls in council's Local Environmental Plan (LEP) and Development Control Plans (DCP) to achieve the priorities
- The LSPS must cover the local context and identify planning priorities, actions and implementation
- For more information refer to the Department of Planning and Environment website: <u>https://www.planning.nsw.gov.au</u>



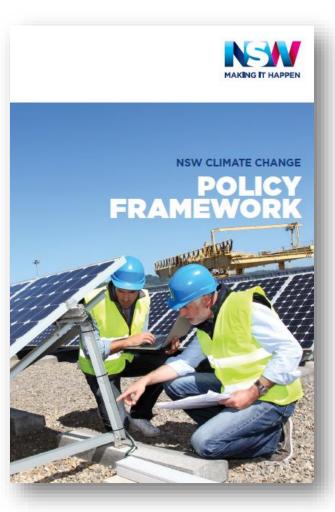
- 1. The case for action
- 2. KNOW: Climate observations and projections
- 3. ASSESS: NSW government
- 4. ASSESS: Risks and opportunities for Snowy Valleys
- 5. **RESPOND: NSW Government support**



## **AdaptNSW**

## **NSW Government Response**

- In 2016 the NSW Government released the Climate Change Policy Framework that set two aspirational objectives:
  - Achieve net zero emissions by 2050
  - •NSW is more resilient to a changing climate





#### Planning for Climate Resilience and Net Zero

- OEH has put together a team to assist local councils in planning for net zero emissions
- Support for understanding community emissions profiles
- Action planning support
- Guidance notes and case studies
- Targeted support



## SUPPORT TO ASSIST WITH RISK MANAGEMENT

- Updating Council's Climate Change Risk Assessments (CCRA)
- Funding support IRCC grants to address climate risks
- Sustainable Advantage CCRA consultant fee
- Statewide Mutual offer to review existing CCRA





office of environment & heritage Increasing Resilience to Climate Change (IRCC) grants

AdaptNSW



AdaptNSW

Murray Murrumbidgee Climate change snapshot







#### Key messages

Climate impacts are being felt today and are increasing in frequency and severity

A first step is for Councils to update Climate Change Risk Assessments

Regional assistance is available from OEH

We are looking forward to working with Councils and their communities under round 2 of IRCC grants program

#### Thank You.



#### Melinda Hillery

Senior Project Officer - South East and Tablelands / Riverina Murray - Queanbeyan

Melinda.Hillery@environment.nsw.gov.au

