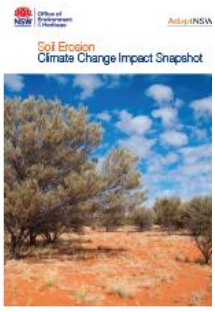
NSW Climate Adaptation Newsletter

The latest in climate change adaptation research, news and events

In the final installment for this year we cover:

- NSW climate impact research now available
- Adaptation in Action featuring CSIRO Community Adaptation
- Come work for the AdaptNSW team at OEH
- Plus upcoming conferences in 2016.

Know someone with an interest in adaptation? Share this newsletter with others



The latest research on climate change impacts in NSW has now been released.

Find out how heatwaves, land use change, bushfires, rainfall, East

Do you want to get involved in adaptation in your community? Now you can!

A new online tool helps every member of the community get involved in climate change adaptation by documenting and mapping how people are responding to changes in climate and weather.

This type of "citizen science" brings research and the community together. See more at

Do you live in Dubbo or Coffs Harbour? Do you currently work or want to work in climate change adaptation?

The Impacts and Adaptation team at the Office of Environment and Heritage are looking for two dynamic senior project

Coast Lows, hydrology and soils are likely to change across NSW in the future.

For all the detail, including maps, reports and videos visit AdaptNSW website.

https://csiro.ourcommunitymap.com/adapt.

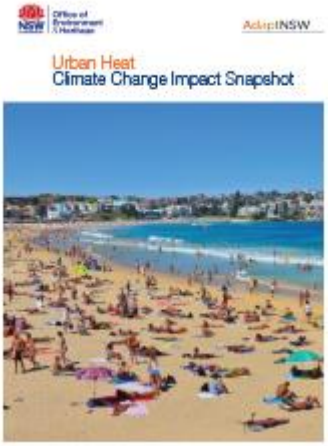
officers to join the team and help deliver this successful program in these regions.

For information and to apply visit the Jobs NSW website.

Applications close 11.59pm 30 November 2015.

Climate Change Impacts in NSW

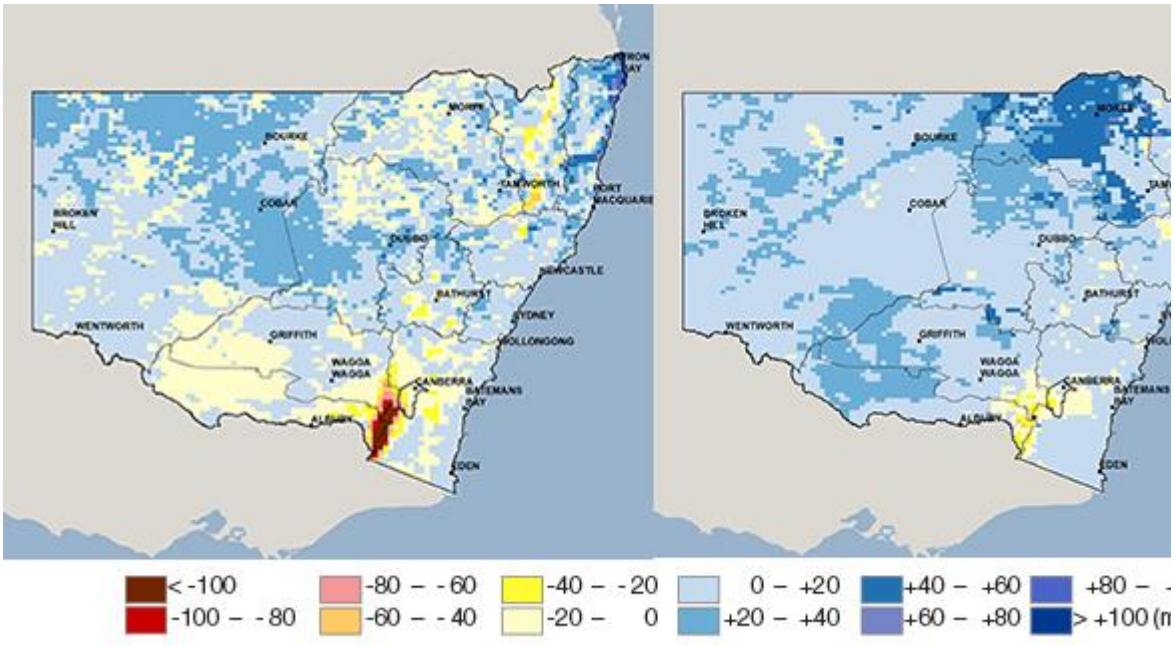
The NSW Office of Environment and Heritage (OEH) has released a suite of climate impact research for NSW. This new research details how climate change may impact: heatwaves; urban heat in Sydney; bushfire risk; east coast low storms; hydrology (groundwater recharge, surface runoff); soils and extreme rainfall across NSW.



The research is published in a number of different formats to meet the variety of stakeholder needs, including:

1. Scientific Technical Reports
2. Climate Change Impact Snapshots: synthesis of the technical reports for non-technical audience
3. Maps and data for download
4. Video of OEH and UNSW impact researchers summarising their research.

You can explore all of the climate change impact information at http://www.climatechange.environment.nsw.gov.au/Impacts-of-climate-change



Far future annual average change in recharge (left) and runoff (right)

Rainfall

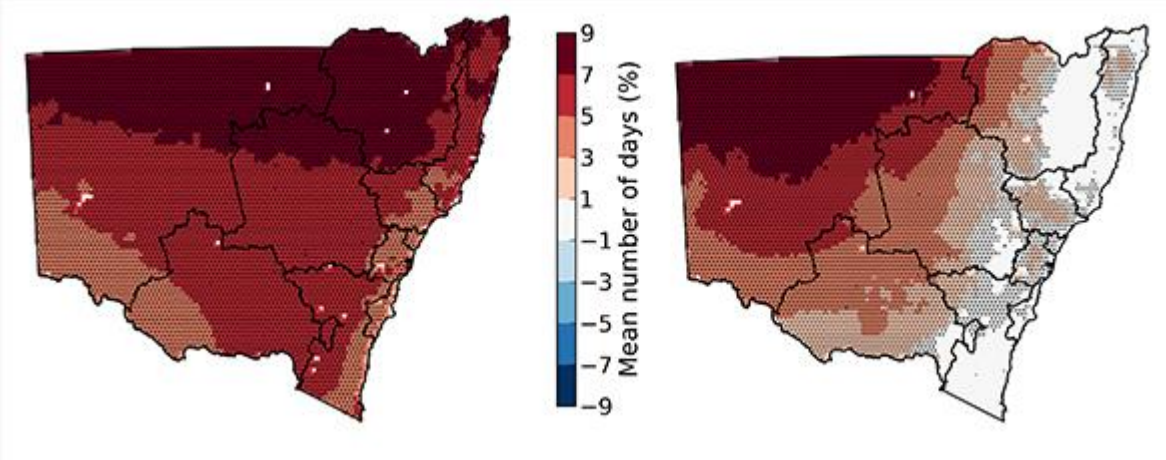
Rainfall extremes are projected to increase in the near and far future. However these changes are largely within the current natural variability. There may be an increase in the number of consecutive dry days, indicating longer periods between rainfall events.

Hydrology Technical Report
PDF - *4.1 MB*

Soil Properties Technical Report
PDF - *4.8 MB*

Heatwaves and Urban Heat

By 2030 heatwaves will occur more often and last longer, becoming even more frequent, lasting longer and getting hotter by 2070. There will also be more days above 40°C across most of NSW in the future. Land-use changes to house a growing Sydney have the potential to lead to further increases in urban temperatures.



Projected changes in mean number of heatwave days each year and number of days above 40°C across NSW by 2070.

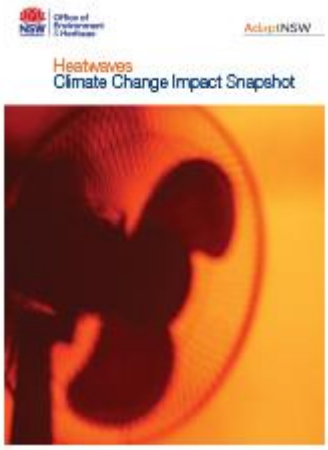
Soils

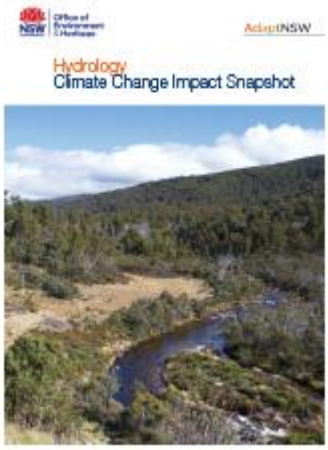
Soil erosion is projected to increase in both the near and far future. The areas most affected are those already in high erosion risk areas such as along the Great Dividing Range. Some areas may see significant increases in erosion risk, highlighting the importance of groundcover maintenance and soil management in these areas. Changes in erosion can have significant implications for natural assets, agricultural lands and water quality.

NSW is projected to undergo a change in important soil properties including pH, soil carbon and the availability of macro nutrients for plants. Soil organic carbon (SOC) stocks are projected to decrease over most of the state, although a slight increase is projected over the western regions. Most of eastern NSW may see an increase in pH (i.e. become more alkaline), while western NSW can expect considerable decreases in pH, i.e. becoming more acidic.

Bushfires

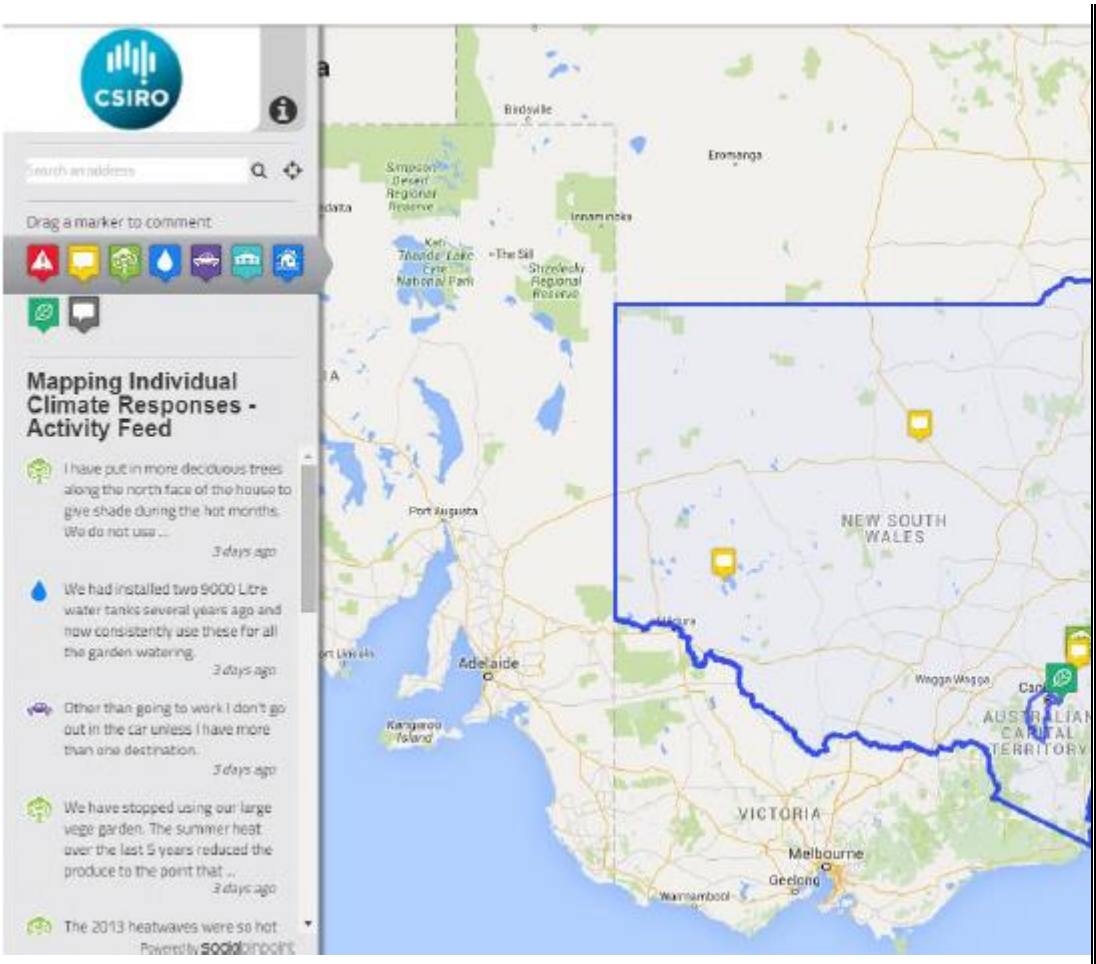
Increasing temperatures and changes in seasonal rainfall may impact bushfire risk. NSW is projected to experience an increase in average and severe fire weather in the future. These increases are projected to occur mainly in summer and spring. The greatest increases in severe fire weather in NSW will occur west of the Great Dividing Range.





How can I get involved in adaptation research?

Are you doing something differently because of changes in climate and weather? Help us understand how you are adapting. Visit our map and share changes that you have made in your life and see what other people are doing in your area.



What –CSIRO and the Institute for Sustainable Futures, University of Technology Sydney (under the Adaptive Communities Node), are launching a new platform to explore climate adaptation by people in the community.

Why – The aim of this project is to gather information on how people respond to changes in weather and climate. Other similar research has been conducted at the industry/government level but we know very little about what happens in communities like yours.

How – You can access an interactive map and comment on your experiences of adapting to changing weather and climate. Tell us about anything related to changes in water use, gardening practices, building modifications, preparation for natural hazards or other adaptations you have made to the way you live, work and play.

You can access the map using this internet address:
https://csiro.ourcommunitymap.com/adapt

Thanks – we look forward to seeing how you adapt!

THANK YOU

A sincere thanks to everyone who attended and made the AdaptNSW 2015 event a huge success. All the speakers were thought provoking and inspiring, and the chance to network among such a great group of colleagues was a pleasure. We look forward to continuing our collaborations into next year and beyond.

See you in 2016!

Conferences

Abstracts and registration are now open for the National Climate Change Adaptation Research Facility (NCCARF) conference.
Climate Adaptation 2016 will run from 5-7 July 2016 in Adelaide, South Australia.

Symposium on Climate Change Adaptation in the Pacific Region will be held in Lautoka, Fiji from 26-28 July 2016. Abstracts are open now and will close 30 January 2016.

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