

Understanding the impacts of big wet and big dry events on Country

Bringing Indigenous knowledge and Western science together to understand climate impacts on Country.

The NESP Climate Systems Hub Indigenous Partnerships Team is developing Indigenous-led research and resources to inform national and international climate decisions. The team is partnering with Indigenous communities to deliver on-Country case studies based on themes from the National First Peoples Gathering on Climate Change.

The impacts of big wet and big dry on Country and culture

Changes:

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Less rainfall and extended dry periods
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Changes in the timing and patterns of water across landscapes

Case study focus

- Build shared understanding of big wet and big dry by connecting Indigenous knowledge and Western science
- Identify on-Country indicators and changes over time
- Understand how changes in extreme wet and dry events affect Country and communities
- Support community decision-making to manage climate impacts
- Contribute Indigenous-led research to the Intergovernmental Panel on Climate Change (IPCC)

Case study locations

- Narran Lakes System, north-west New South Wales
- Moira Lakes System (Barmah & Moira Lakes) Victoria and New South Wales



Next steps

- Continue on-Country engagement and community-led research
- Investigate climate indicators and changes in wet and dry events
- Develop Indigenous-led publications and outputs
- Inform climate policy and IPCC reporting

Co-designed, Indigenous-led approach

Using an Indigenous-led, co-designed approach, the case study strengthens relationships and connects communities through on-Country learning:



Impacts:

Narran and Barmah lakes Country experience frequent swings between wet and dry extremes. The impacts of these swings on Country include:

- Damage to cultural sites, (middens, artifact scatter, scarred trees and birthing places)
- Riverbank erosion and sediment movement, causing biodiversity loss
- Traditional Owners once managed these natural swings without major issues, but with climate change and aging infrastructure, those same swings are now causing significant damage and disruption.
- Altered waterways and cultural heritage from water infrastructure and management
- Reconnection of water systems may occur after big wet events

Further information

Find out more about this and other case studies:

