



The Australian Energy and Water Exchange Initiative



Jason Evans (presenting), Albert van Dijk & Seth Westra (co-Chairs)
GEWEX GHP meeting
24-26 October, Santiago Chile

What?

Overarching science question:

understand and predict Australia's fresh water resources and water security into the future given Australia's many climate zones, relatively large climate variability and future climate change.

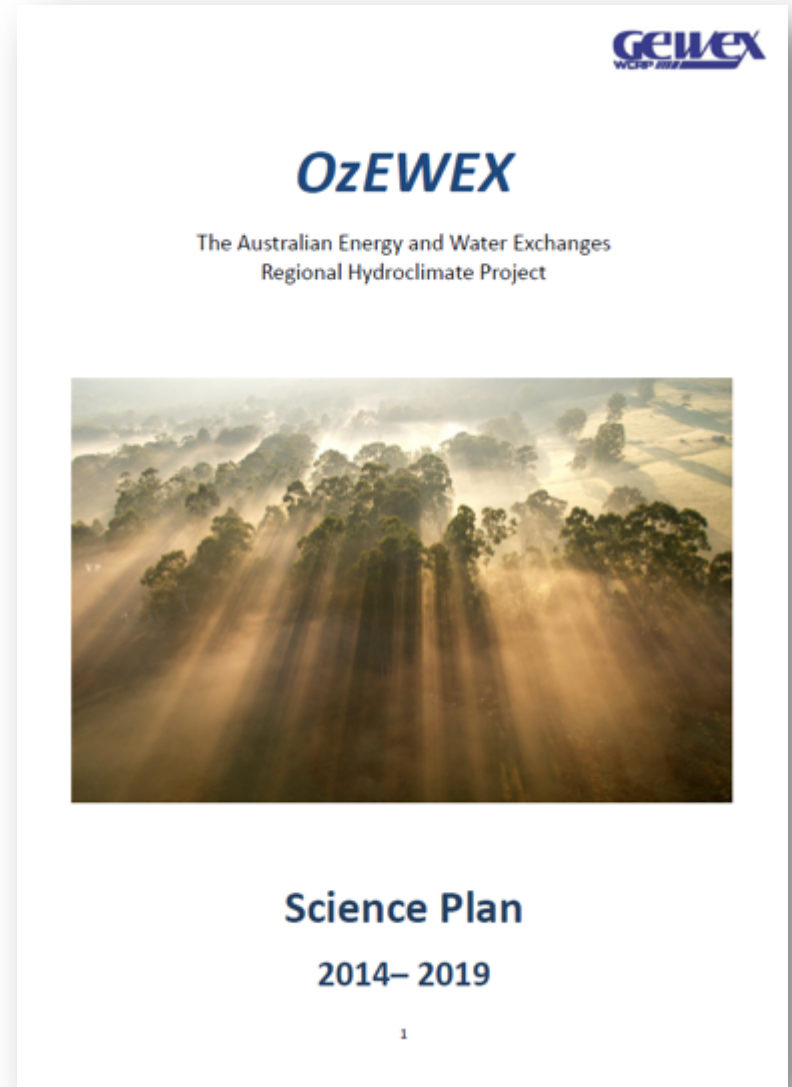
- promoting and facilitating data sharing
- collaboration and engagement between researchers, data providers, research users, resource managers and research managers.

Working groups around science priority areas:

1. Observational Data
2. Model Evaluation and Benchmarking
3. Data Assimilation
4. Trends and Extremes
5. Vegetation Processes
6. Hydrological Prediction

Working group activities:

- organising workshops
- data collection, collation and hosting
- collaborative experiments and development.



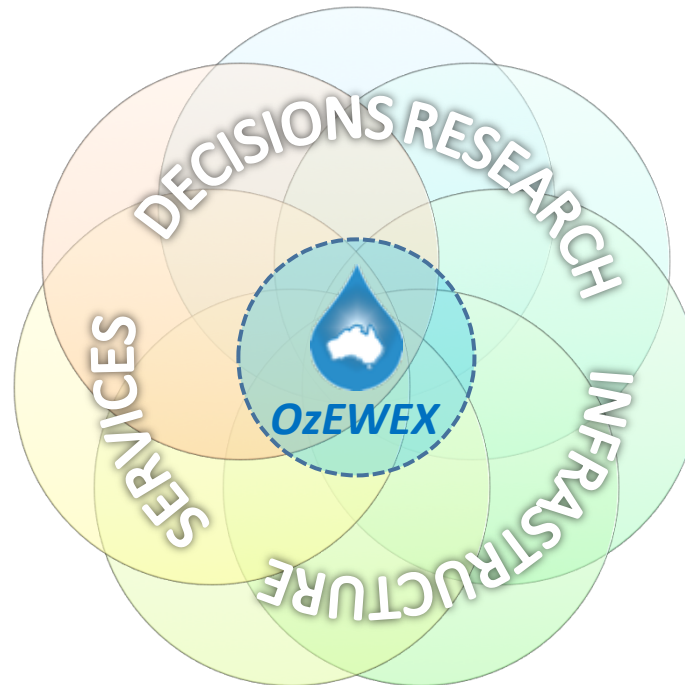
Who?

Universities

Governments and
water managers

Bureau of
Meteorology

National
Computational
Infrastructure (NCI)



ARC Centre of
Excellence for
Climate System
Science (ARCCSS)

Commonwealth
Scientific and
Industrial Research
Organisation (CSIRO)

Terrestrial Ecosystem
Research Network
(TERN)

Activities over last year (highlights)

- National workshop in December 2017
- Protocol for the Analysis of Land Surface models (PALS) development continues
- OzEWEX newsletter publication frequency, original content and readership has increased
- 2nd Australian Climate and Water Summer Institute
- 2018 HEPEX workshop: Breaking the barriers. 6-8 February 2018, Melbourne
- National workshop “Water from Space”, March 2018, ANU, Canberra
- Are eucalypts different? (Martin De Kauwe and Belinda Medlyn; HIE/UNSW): invited workshop in February 2018

A National Environmental Observation and Prediction System for the year 2030

Wednesday, 6 December, 9 am-5 pm
CSIRO Hobart



Australian
National
University



~100 participants



OzEWEX

**AUSTRALIAN CLIMATE AND
WATER SUMMER INSTITUTE**

**2nd Australian Climate and
Water Summer Institute**

11 December 2017 – 2 February 2018



<http://ozewex.org/first-ozewex-summer-institute/>

Summer Institute 2017

The program involved a two-week 'boot camp' followed by four weeks of project planning and implementation. During the boot camp, the 14 participants visited various government agencies/organisations to attend talks and receive training in the most up-to-date data and tools used in Australian climate and water science.

Following two weeks of excursions and training, participants then self-organised into small groups to develop projects. All themes had an emphasis on the use of large, often grid-based data sets, modelling, high-performance computing and information technology. The themes were as follows:

- o Forecasts – using weather, climate and water forecasts to benefit economy, society or environment
- o Droughts – quantifying and predicting the economic and environmental impacts of drought
- o Floods – improving flood risk assessment and warning, increasing flood resilience and supporting emergency response
- o Water Sharing – quantifying available water resources, increasing the benefits of water use for people and environment
- o Data Integration – integrating observation networks, remote sensing and modelling through data discovery, data fusion and assimilation.

www.ozewex.org

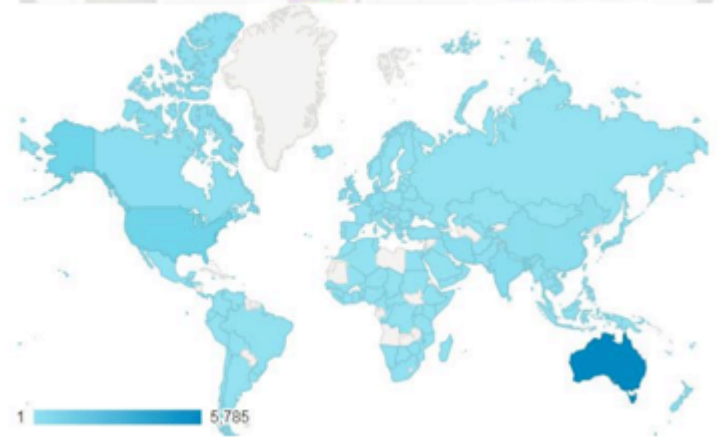
- bi-monthly newsletter to ~1000 people

Over past year:

- ~7,000 unique visitors
- ~17,700 page views

It is there for you.

We can help you publish:
editor@ozewex.org



Social media



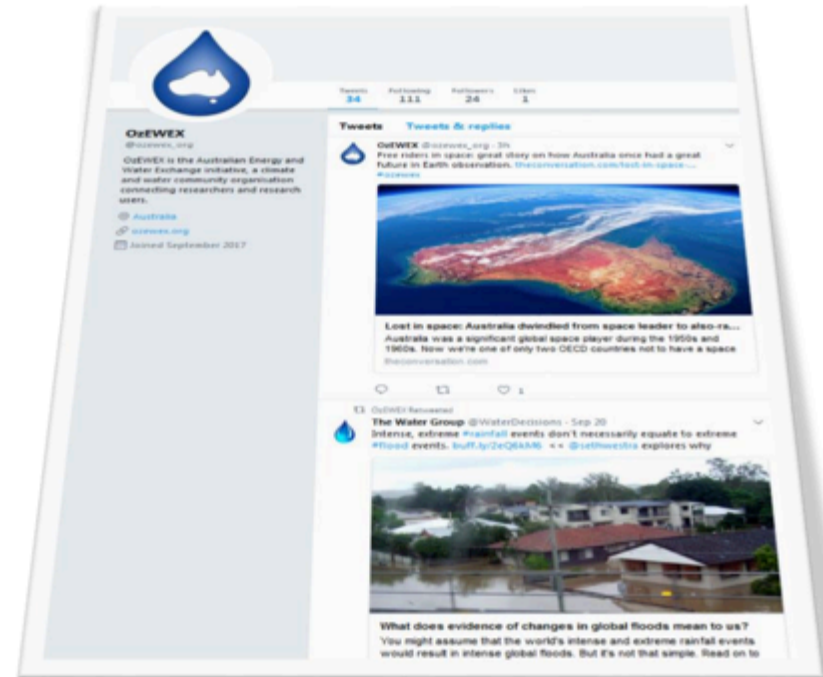
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- Australian climate and water news
- New publications
- Events



Issues / Foreseen Risks

- Funding for research projects remain a challenge
- With the upcoming expiry of the 2014-2019 Science Plan, seed funding has been sought from the University of Adelaide to support a national process for developing a decadal plan from 2020-2029. The outcome of this funding is still pending, but if successful would enable a national science planning process and focusing of the community to key outcomes to be delivered over the coming years. Part of this process will involve engaging with the GEWEX community to examine best practice overseas in relation to the science questions most relevant for the Australian community. Importantly, this planning process will focus on funding potential associated with different initiatives, to help enable OzEWEX's activities to be placed on a more sustainable footing in the longer term.



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Questions?