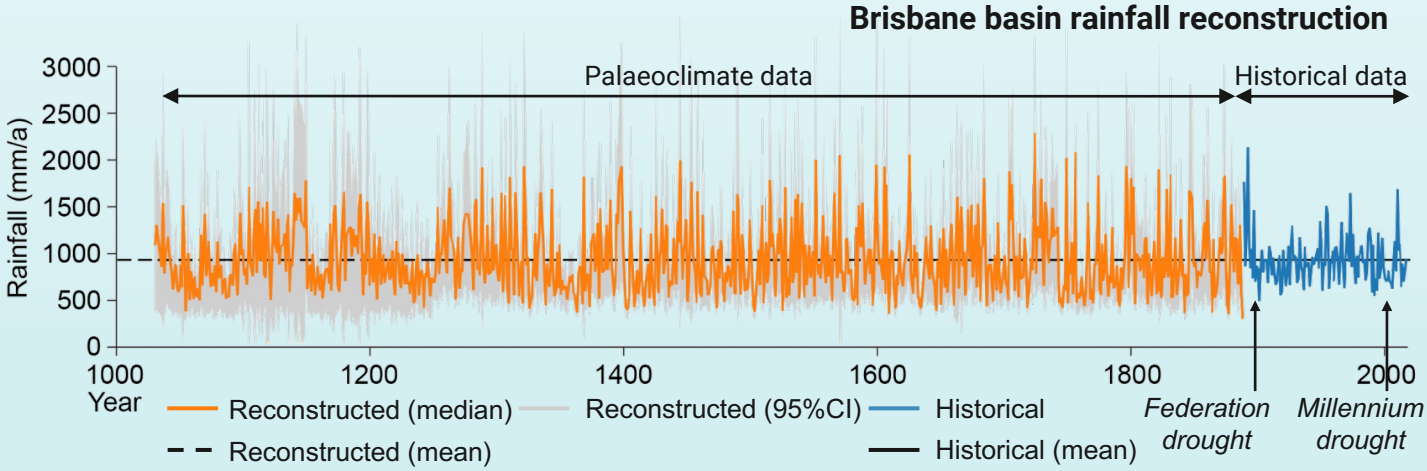
Is 130 years of climate data enough?

Major decisions related to climate rely on the last 130 years of climate data derived from direct measurements. This short time period does not capture the full range of climatic variability. High quality, longer climate records developed from palaeoclimate data are a valuable resource. New climate data for the past 1000 years has been developed for Queensland catchments, using the best available palaeoclimate sources. These longer time series of key climate variables can be used to answer critical questions for the future, such as:

- **Are dams big enough?**
- **Are droughts worse than the Millennium Drought possible?**
- **How do climate drivers such as El/La Nina & IPO vary over the long term?**

What does the new climate data look like?

Brisbane basin rainfall reconstruction



How does it help? New climate data reduces uncertainty around climate variability to improve risk management and decision making

- Long term trends analysis
- Extreme event analysis
- Infrastructure requirements
- Expanded input data for models

Did you know... *Climate is indirectly captured and stored across the landscape. Corals, tree rings, ice cores provide 'proxies' of past climate. Analysis of physical or chemical characteristics + chronological dating yields accurate climate records for the past 1000 years. The new climate data include rainfall reconstructions for Queensland catchments, which are developed from multiple proxies.*