

# STATE FELLOW BYRON RIGGINS

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Collaborative Science & Peer Review Unit



**Delta Science Program**

DELTA STEWARDSHIP COUNCIL

- **Byron Riggins**

- CSPR Unit
- Native Philadelphian, converted Californian
- Avid hiker
- SFSU Estuary & Ocean Science Center (EOS)

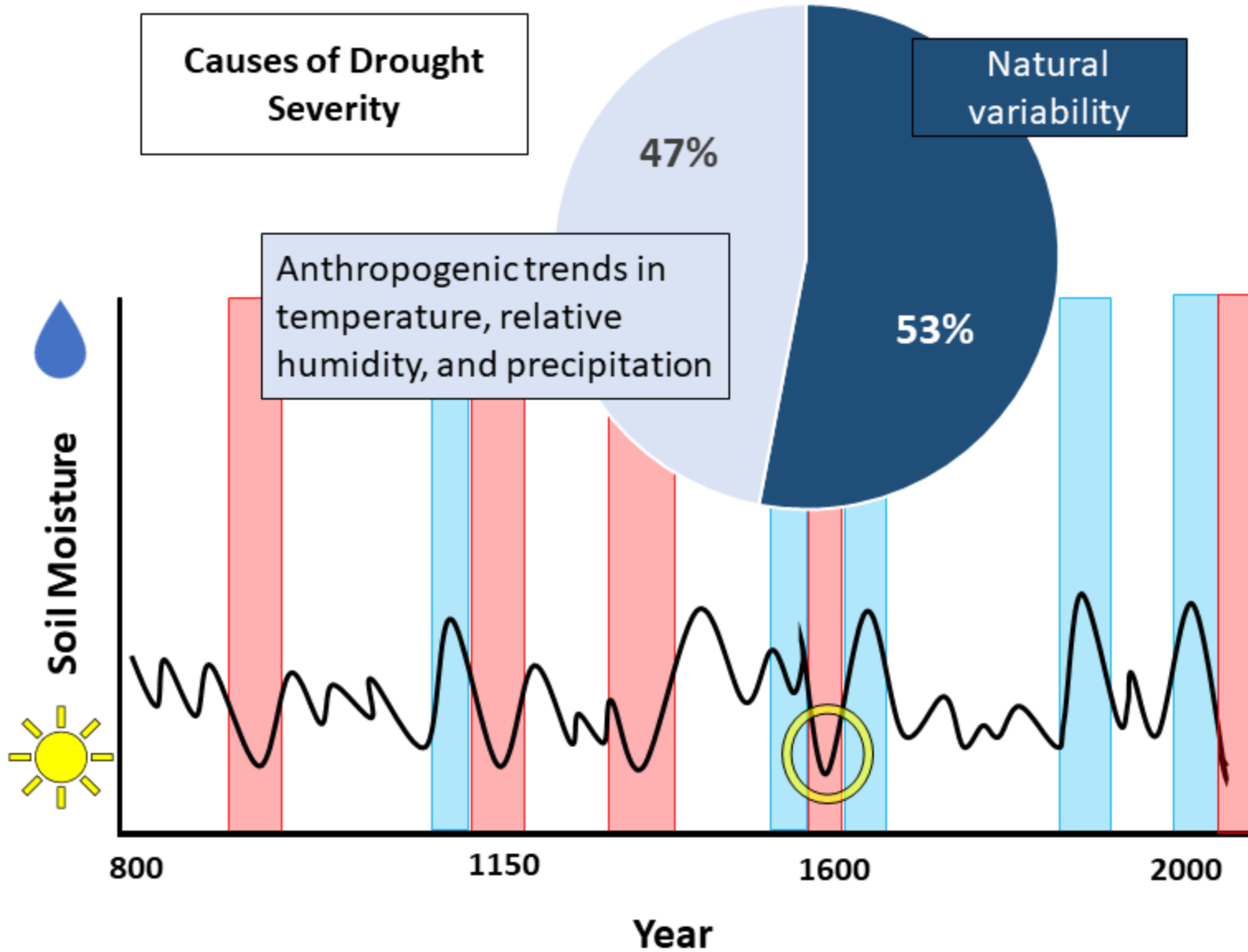
- **Lead Scientist Report (LSR)**

- Production of LSR
- Provides update on critical Delta water resources and groundbreaking science
- Hone skills of science synthesis and increase fundamental understanding of Delta system





# Anthropogenic warming largely contributes to an emerging North American megadrought



## So what?

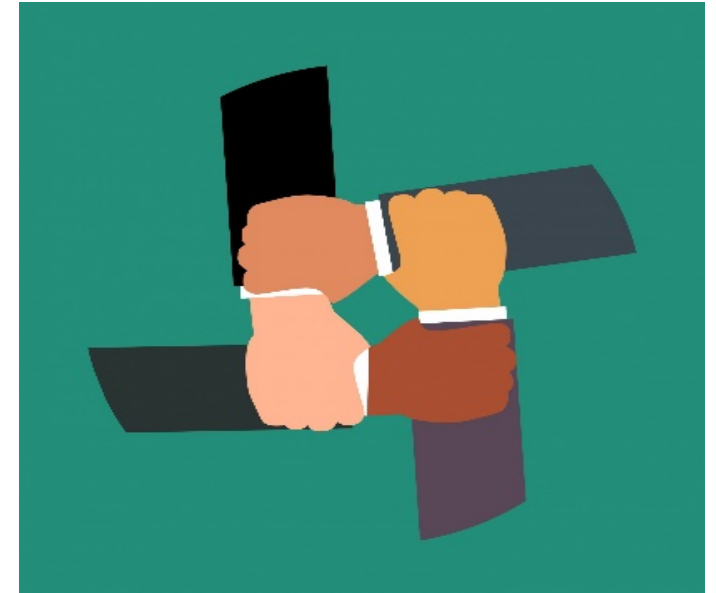
Researchers characterized summer soil-moisture patterns in Southwest North America from 800 CE - present. 2000-2018 is the second driest 19 -year period observed, exceeded only by a late 1500s megadrought. Anthropogenic activities are largely to blame for current drought conditions and have pushed its trajectory from moderate to severe. Future conditions depend on global GHG emissions and sustainable resource use.

- Wet Periods (Blue square)
- Dry Periods (Red square)
- Driest Period Observed (Yellow circle)

Large contribution from anthropogenic warming to an emerging North American megadrought. Williams, A.P., et al. Science. 2020.

- **Delta Diversity Team (DDT)**

- Chartered the Delta Diversity Team
- Increase internal cultural sensitivity
- Increase diversity for the independent scientific review panel



- **National Estuaries Week Video**

- With help of Lynn Takata, produced video showcasing M.S. thesis research
- One Estuary, One Science
- Science communication, increase exposure of C SPR Unit and DSP

