

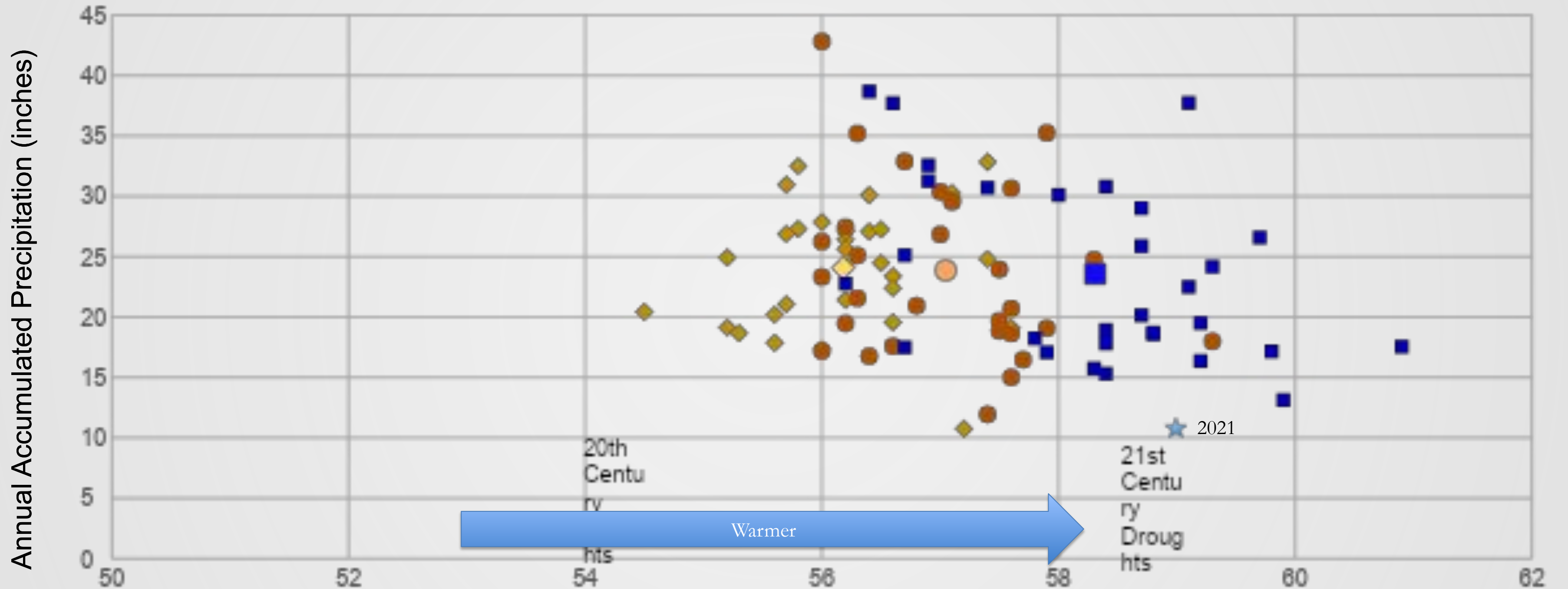
Perspectives on FIRO-MAR FIRO Workshop



August 4, 2022

Michael L. Anderson,
State Climatologist

CA Temperature and Precipitation



Annual Average Temperature (Degrees Fahrenheit)

• 1896-1925 • first30yr • 1961-1990 • 61-90Avg ■ 1991-2020 ■ 91-20Avg



California by NCEI Climate Divisions

Precipitation Percentile Rankings for 2020-2021 Water Year (October - September)



Why are warmer droughts worse?

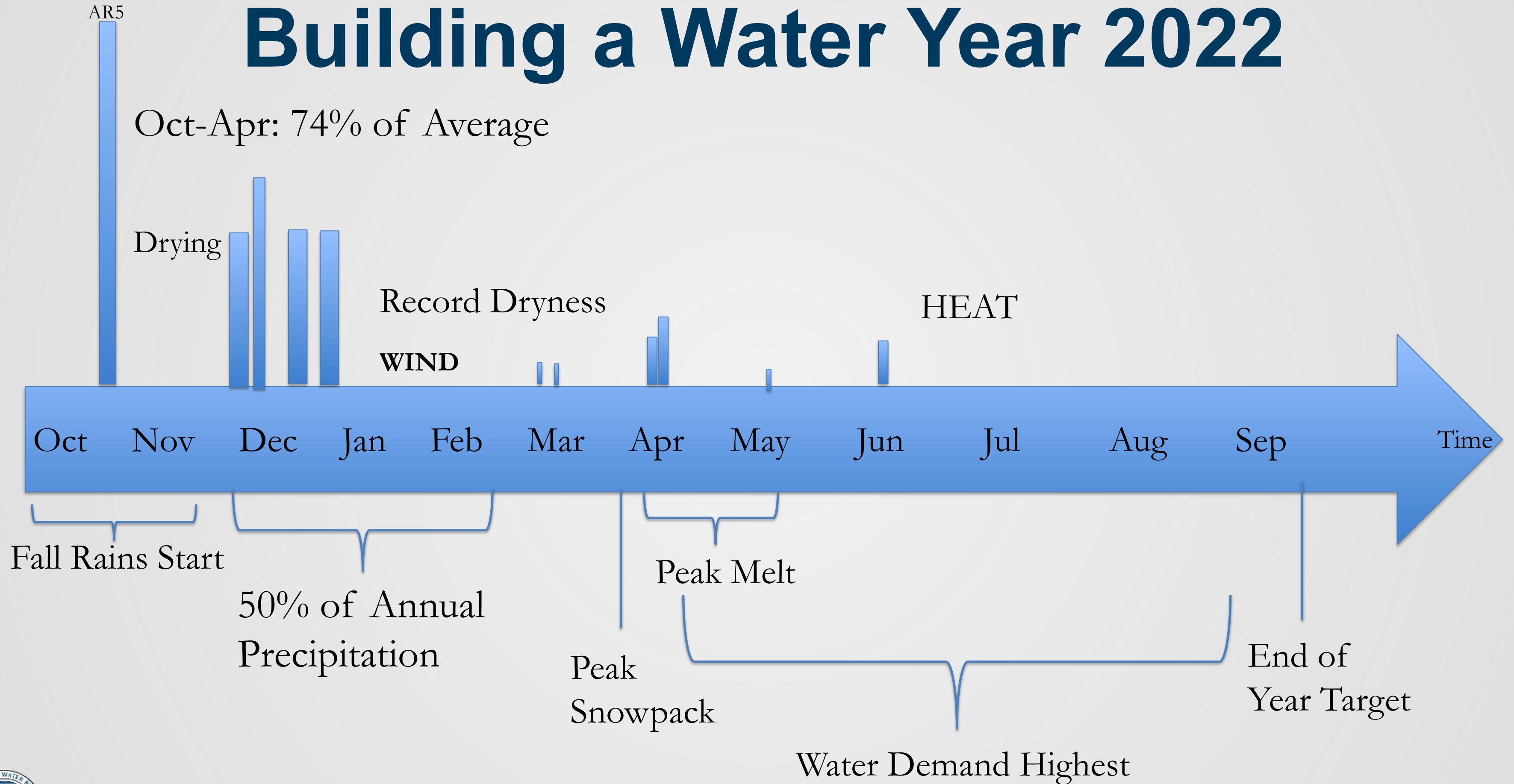
- Warmer, drier conditions dry out soils more increasing soil water deficit to be filled before runoff happens
- Warmer air can hold more water vapor increasing thirstiness of atmosphere to pull more water from landscape

Keys to Runoff Generation

- Timing – When in the water year an event happens
- Pace – How quickly or slowly events occur and time between events
- Scale – Size of each event
- Warming temperatures mean more drying between rain events which impacts quantity of runoff



Building a Water Year 2022



Real-Time Water Management – Maximize the Benefit and Minimize the Hazard

