Conditions in Tropical Pacific

- Weak El Nino conditions persisted well into the spring/early summer (much longer than usual)
- Sea surface temperatures (SST) quickly cooled in the summer yielding a neutral state
- SST’s have recently warmed again, but this appears to be a sub-seasonal spike which will cool back to normal in the next month
El Niño/La Niña

- ENSO neutral conditions are strongly favored through the winter and early spring.

- Forecast models are fairly consistent in depicting neutral conditions through spring 2020.

- There is almost no evidence of La Niña on the horizon and only a minority of forecast members suggesting El Niño re-emerging.
Elsewhere in the Pacific

Teleconnections with warmer Pacific Ocean water, tracking back as far as Australia may favor more frequent periods of dry, high pressure over Arizona.
Temperature Outlook: Jan/Feb/Mar 2020

Three-month averages
Better odds for above normal temperatures
Three-month averages
Slight tilt in odds towards lower than normal precipitation
Lack of rainfall and much warmer temperatures during the monsoon and early fall likely will result in drier soils, and concerned upcoming runoff will be impacted.
The outlook for winter 2019-20 indicates ENSO neutral conditions likely persisting through the spring.

By itself, ENSO neutral conditions offer no skillful prediction for seasonal weather in Arizona.

Odds are shifted towards a warmer than normal winter based on a combination of model output and trends over the past 10-15 years.

Water temperature anomalies elsewhere in the Pacific may be some influence this winter towards drier conditions.

Climate models and official forecast indicate a slight tilt in odds towards a drier than normal winter.

Concerns exist that antecedent dry soils may negatively impact runoff in the upcoming water year even if near average snowfall occurs.