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Drought Information and the U.S. Geological Survey

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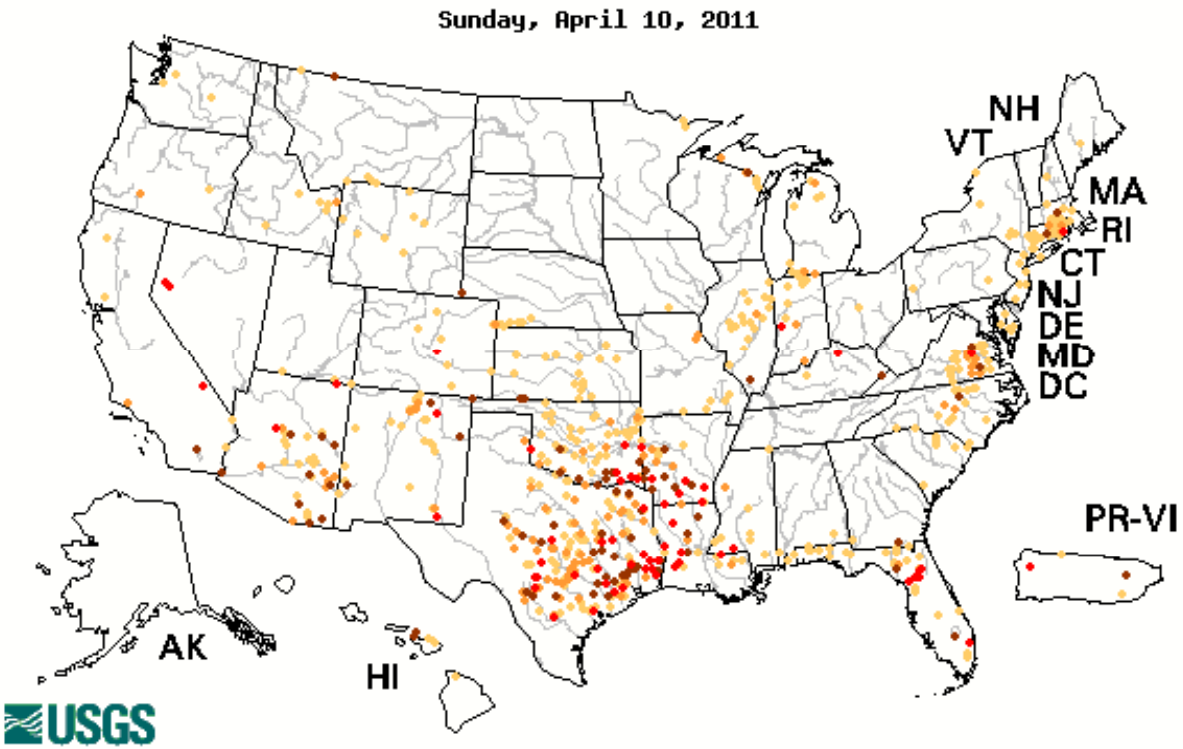
U.S. Department of the Interior
U.S. Geological Survey

Real-Time Reporting of Daily Streamflow



Choose a data retrieval option and select a location on the map

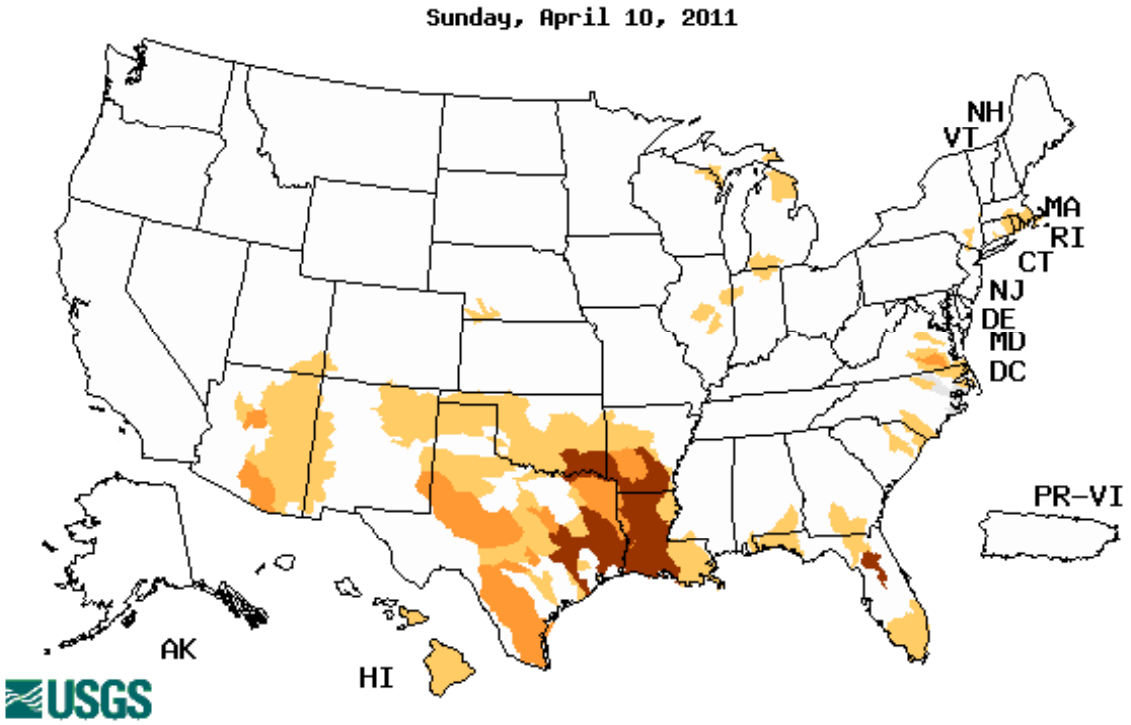
○ List of all stations in state, ◉ State map, or ○ Nearest stations

Explanation - Percentile classes			
●	●	●	●
Low	<=5	6-9	10-24
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal

Daily conditions across network of 7,770 streamgages.

Comparison of current conditions to historic conditions for day of the year.

Real-Time Reporting of Daily Streamflow



Choose a data retrieval option and select a state on the map

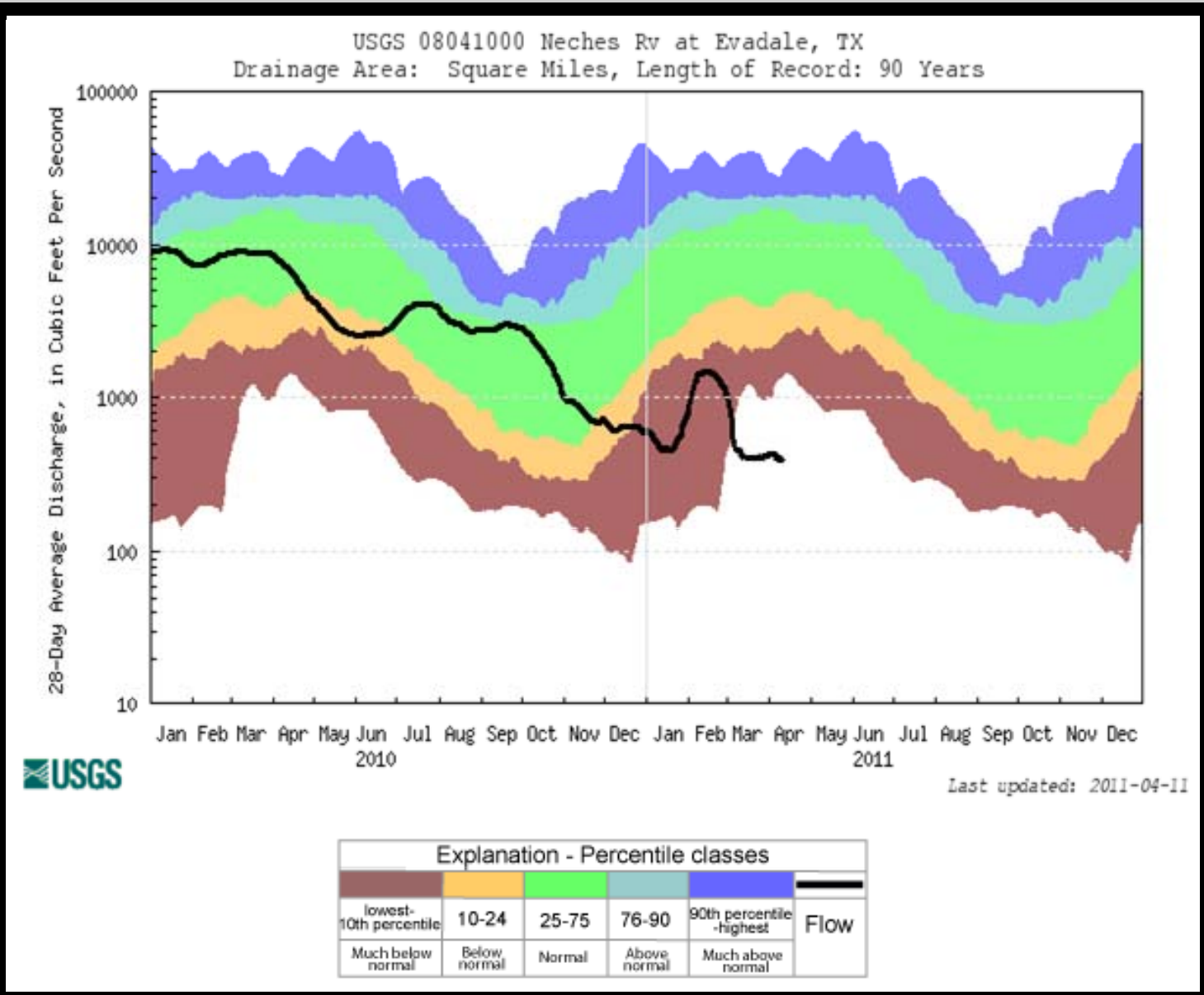
○ State DroughtWatch, ◉ State map

Explanation - Percentile classes				
Low	<=5	6-9	10-24	Insufficient data for a hydrologic region
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	

Daily conditions across network of 7,770 streamgages, reported by hydrologic unit.

Comparison of current conditions to historic conditions for day of the year.

Site-Specific Flow Duration Charts



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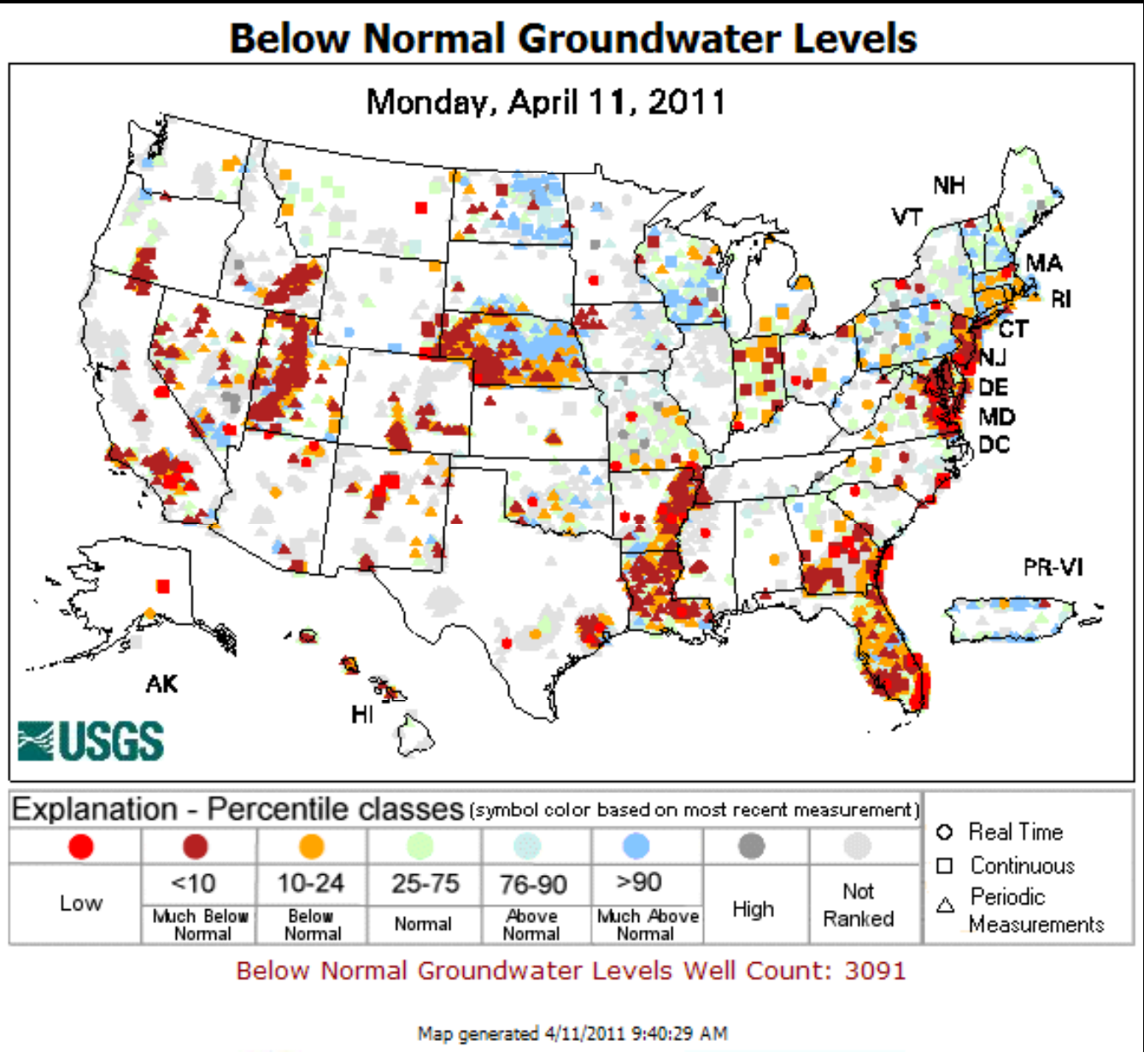
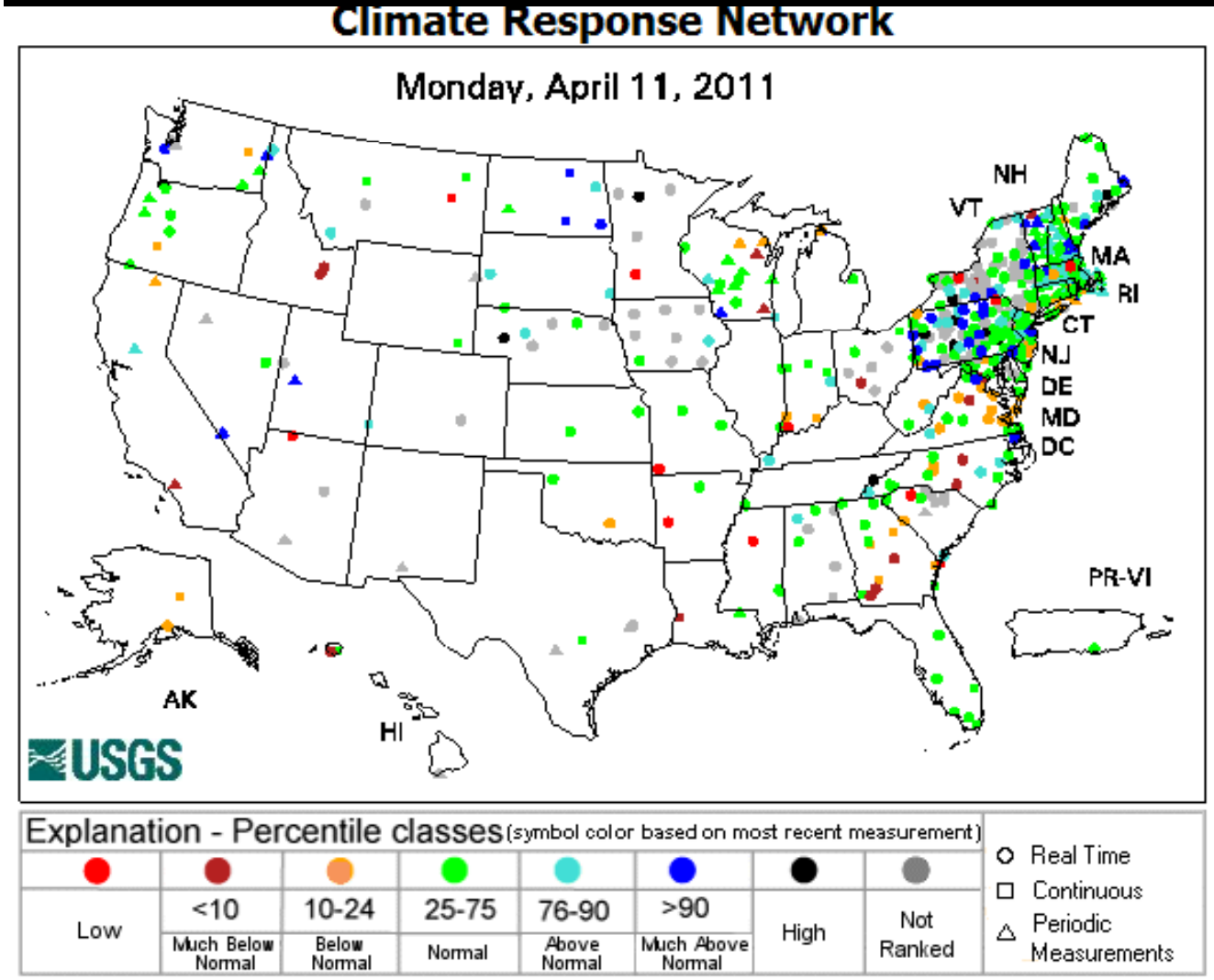
Groundwater Conditions



Comparison of current conditions to historic conditions for day of the year. Includes both stressed and unaffected sites.

Consideration should be given to inclusion of groundwater levels in drought forecasts because of the major role groundwater plays in water supply and streamflow.

Groundwater Conditions



Climate Response Network uses data from wells unaffected by human activities.

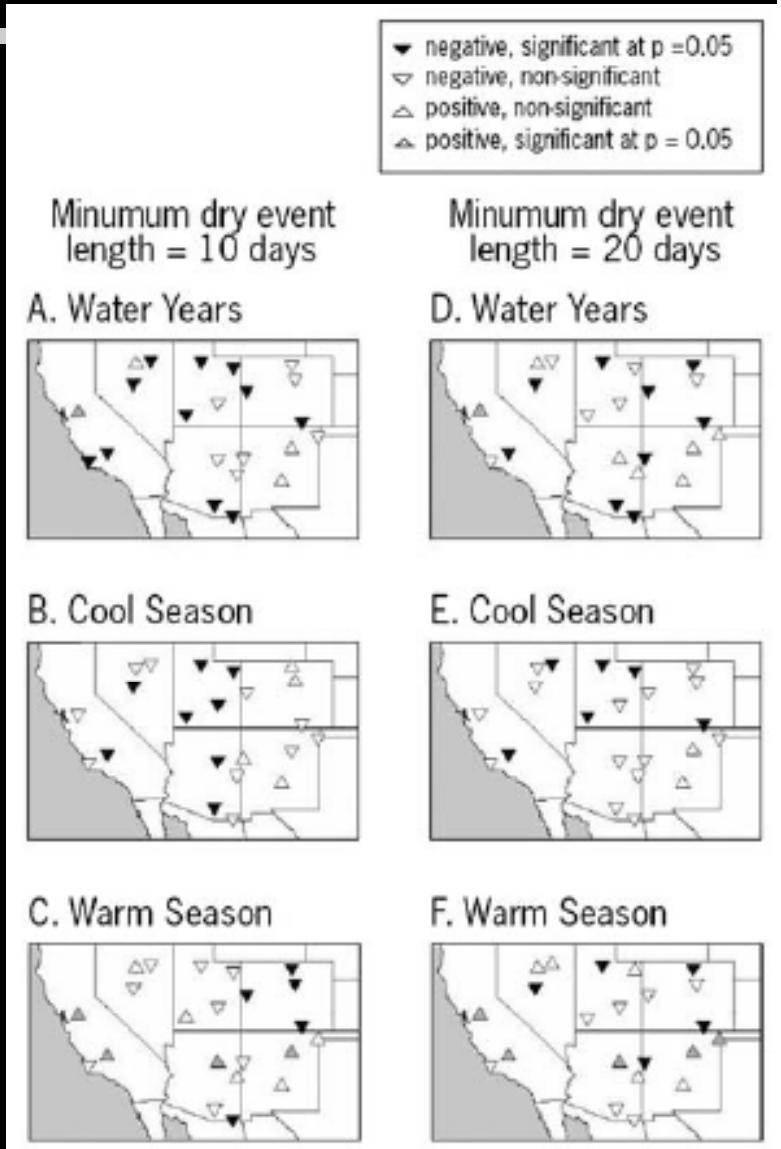
Groundwater levels are an important indicator of expected streamflow conditions.

More than 80 percent of streamflow in some locations is derived from groundwater discharge, and at least 50 percent in most streams.

Continuing Data Analysis is Important

Continued analysis of past observations is critical to understanding future drought.

In the case shown here, the duration of consecutive no-rainfall days (dry event length) is shown to have significantly decreased in many locations of the Southwest U.S. There were no statistically significant increases in the duration of consecutive no-rainfall days.



Trends in 5-year moving average of dry events (*McCabe et al., JGR v. 115, 2010)*

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Contact Information

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USGS Web resources:

USGS Water Programs: http://water.usgs.gov
Streamflow conditions: http://waterwatch.usgs.gov/
Groundwater conditions: http://groundwaterwatch.usgs.gov/
Water Data: http://water.usgs.gov/data/

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