

NCSL: Budget Working Group Meeting

Impact of Disasters & Reserves on State Ratings

June 1, 2023 -- Providence, Rhode Island



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S&P Global
Ratings

Agenda

- Overview of Ratings
- Methodology of State Ratings
- Reserve & Liquidity Discussion
- Disaster/Catastrophic Event Discussion

PLEASE ASK QUESTIONS THROUGHOUT

Understanding S&P Global's Ratings

- An issuer's *ability* and *willingness* to pay debt in a *timely* manner
- Credit ratings are *forward looking*
- S&P Global ratings are *opinions*, not guarantees of credit quality or exact measures of the probability that a particular issuer or particular debt issue will default
- The Ratings scale *is relative* and based on the creditworthiness of an issuer or credit quality of an individual debt issue, from strongest to weakest, within a universe of credit risk
- Criteria provide the analytic framework to derive the rating opinion

[Understanding Credit Ratings | S&P Global Ratings \(spglobal.com\)](https://www.spglobal.com)

S&P Global Ratings | Ratings Scale

Investment-Grade

AAA	→	Strongest
AA+	}	Very Strong
AA		
AA-		
A+	}	Strong
A		
A-		
BBB+	}	Adequate
BBB		
BBB-		

Speculative-Grade

BB+	}	Least Speculative
BB		
BB-		
B+	}	Speculative
B		
B-		
CCC	}	Highly Speculative
CC		
C		
D	→	In Default

S&P Global Ratings | Outlook and CreditWatch

• Outlooks

- Potential rating change within 1 to 2 years
- At least 1-in-3 likelihood of rating action
- Outlooks can be:
 - Stable
 - Positive
 - Negative
 - Developing

• CreditWatch

- Potential rating change within 60 to 90 days
- At least 1-in-2 likelihood of rating action
- CreditWatch can be:
 - Positive
 - Negative
 - Developing

S&P Global Ratings | State Ratings (as of May 26, 2023)

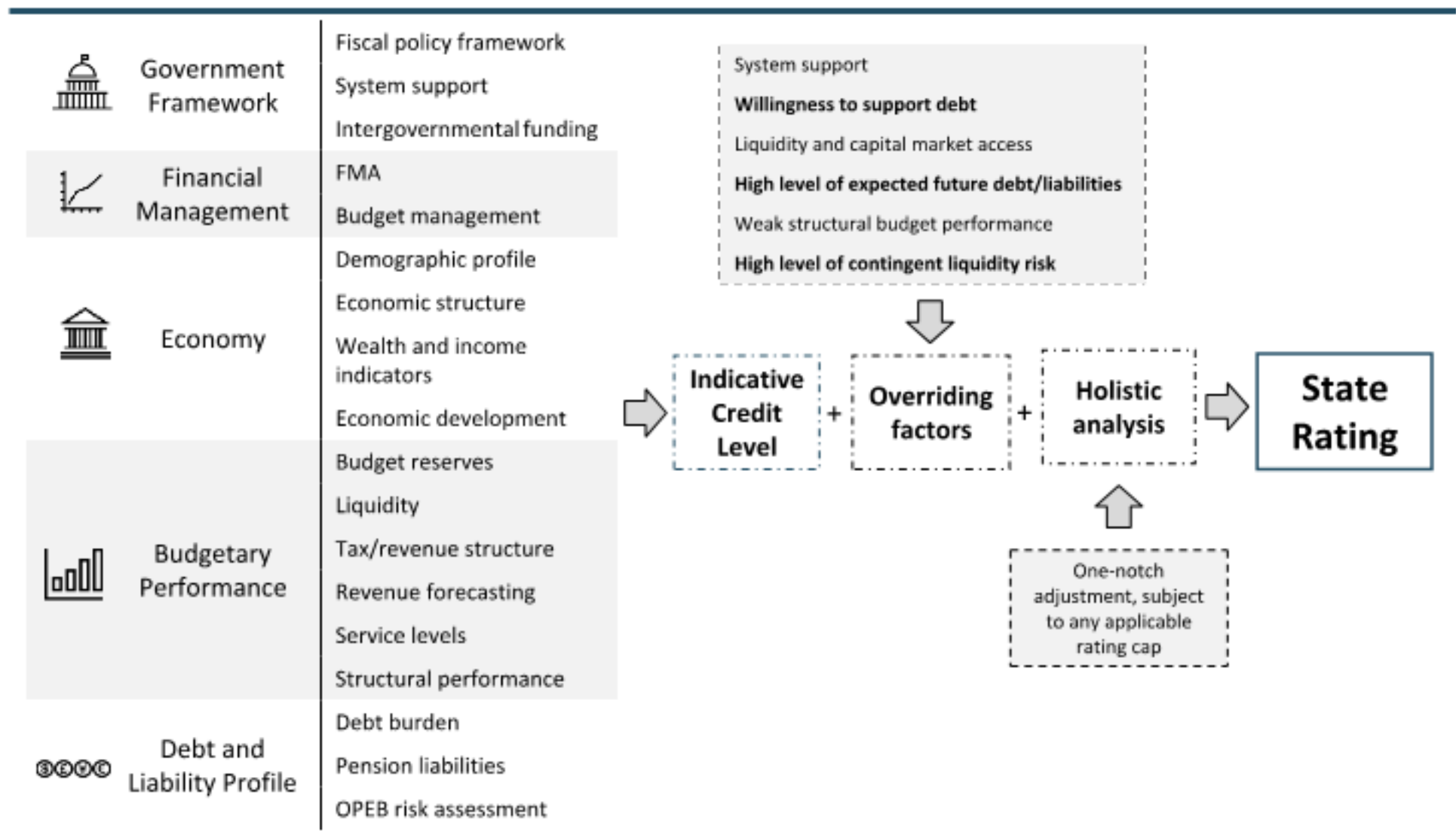
State	Rating	Outlook/Watch
– Alabama	AA	Stable
– Alaska	AA-	Positive
– Arizona	AA	Stable
– Arkansas	AA	Stable
– California	AA-	Positive
– Colorado	AA	Stable
– Connecticut	AA-	Stable
– Delaware	AAA	Stable
– Florida	AAA	Stable
– Georgia	AAA	Stable
– Hawaii	AA+	Stable
– Idaho	AA+	Stable
– Illinois	A-	Stable
– Indiana	AAA	Stable
– Iowa	AAA	Stable
– Kansas	AA-	Positive
– Kentucky	A	Positive

– Louisiana	AA-	Positive
– Maine	AA	Stable
– Maryland	AAA	Stable
– Massachusetts	AA+	Stable
– Michigan	AA	Stable
– Minnesota	AAA	Stable
– Mississippi	AA	Stable
– Missouri	AAA	Stable
– Montana	AA	Stable
– Nebraska	AAA	Stable
– Nevada	AA+	Stable
– New Hampshire	AA	Positive
– New Jersey	A	Stable
– New Mexico	AA	Stable
– New York	AA+	Stable
– North Carolina	AAA	Stable
– North Dakota	AA+	Stable
– Ohio	AA+	Stable
– Oklahoma		AA

Stable

– Oregon	AA+	Stable
– Pennsylvania	A+	Stable
– Rhode Island	AA	Stable
– South Carolina	AA+	Stable
– South Dakota	AAA	Stable
– Tennessee	AAA	Stable
– Texas	AAA	Stable
– Utah	AAA	Stable
– Vermont	AA+	Stable
– Virginia	AAA	Stable
– Washington	AA+	Stable
– West Virginia	AA-	Stable
– Wisconsin	AA+	Stable
– Wyoming	AA	Stable

U.S. States | U.S. State Ratings Methodology (GO)



Source: S&P Global Ratings U.S. States Ratings Methodology, October 17, 2016

U.S. States | Criteria Table for Budget-Based Reserves

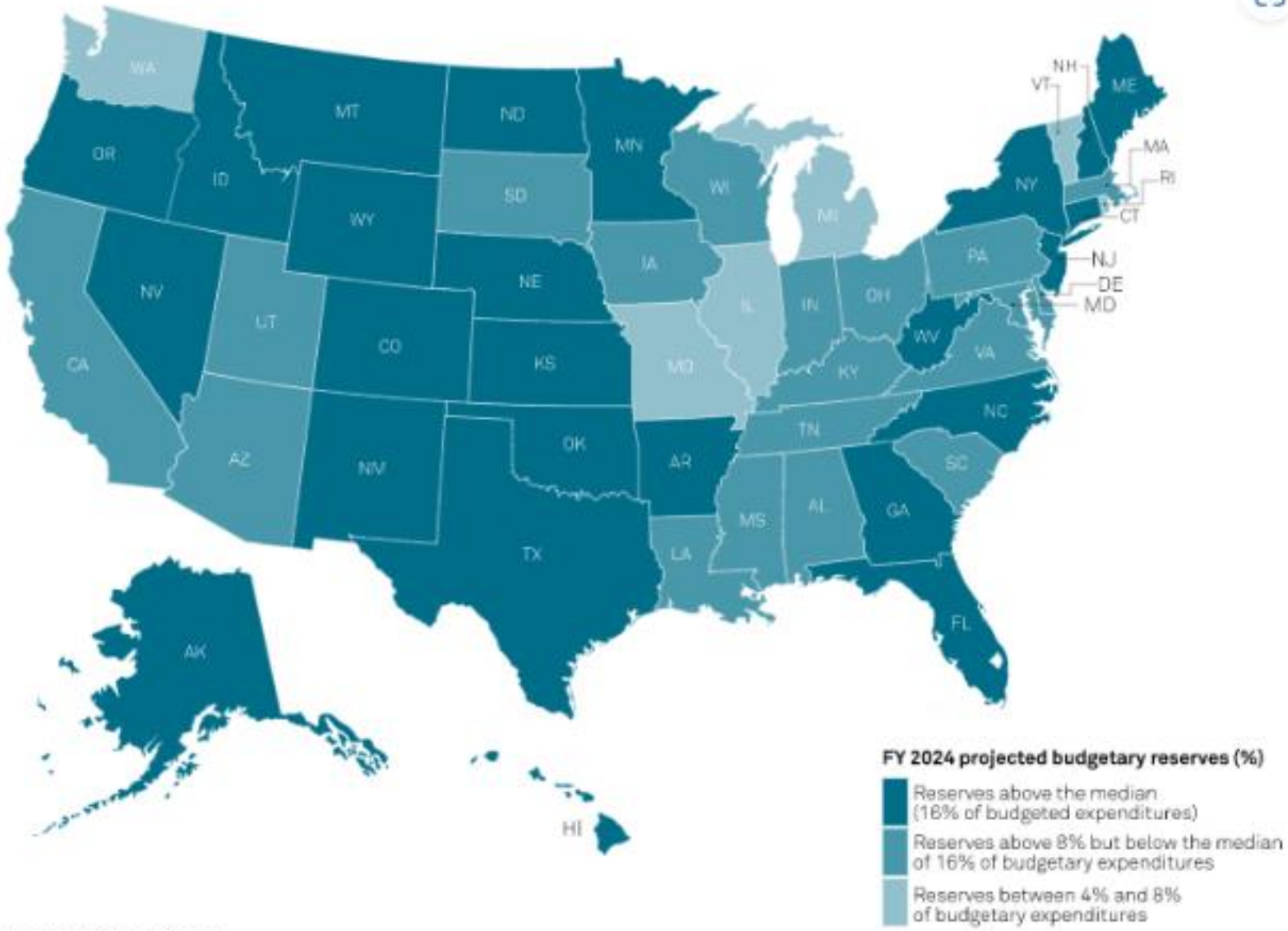
Budget-Based Reserves Relative To Revenue And Spending

Score

1	There is a formal budget-based reserve relative to revenue or spending that is above 8%. In addition, there is a formal process or a demonstrated track record of restoring the reserve following depletion.
2	There is a formal budget-based reserve relative to revenue or spending that is between 4% and 8%. In addition, there is a formal process or a demonstrated track record of restoring the reserve following depletion.
3	There is a formal budget-based reserve relative to revenue or spending that is between 1% and 4%. In addition, there is a formal process or a demonstrated track record of restoring the reserve following depletion.
4	There is no formal budget reserve fund, or reserves are funded at less than 1% over time, or there is no process for accumulating reserves. No additional reserve funds are identified or available.

Note: Refers to reserve policy levels and not actual funding level as we observe that reserves are often depleted through economic cycles.

U.S. States | State Budget Reserves For Fiscal 2024



U.S. States | Extreme Weather Events

What have we seen?

- Hurricanes
- Droughts
- Wildfires
- Floods
- Mudslides
- Earthquakes
- Tornados/Derechos

Preparedness considerations?

- Liquidity & reserves
- Federal and state emergency assistance
- Advance planning

U.S. States | What We're Watching



Inflationary pressures

Will wages, as well as construction and insurance costs, continue to rise?



Revenue stability

Will sales and income taxes continue to hold strong as consumer confidence softens?



Monthly revenues

Monthly revenue declines are often a bellwether of recessions



Expected recession

Reserve levels, liquidity positions, and management options will allow states to weather a shallow recession



Proactive management

In a recession, management may need to cut expenses, raise revenues, or draw from reserves



New Congress

The past 3 years have seen record levels of federal aid flow to the states. That period has ended



Event risks

Cyber attacks and extreme weather events will continue to challenge management

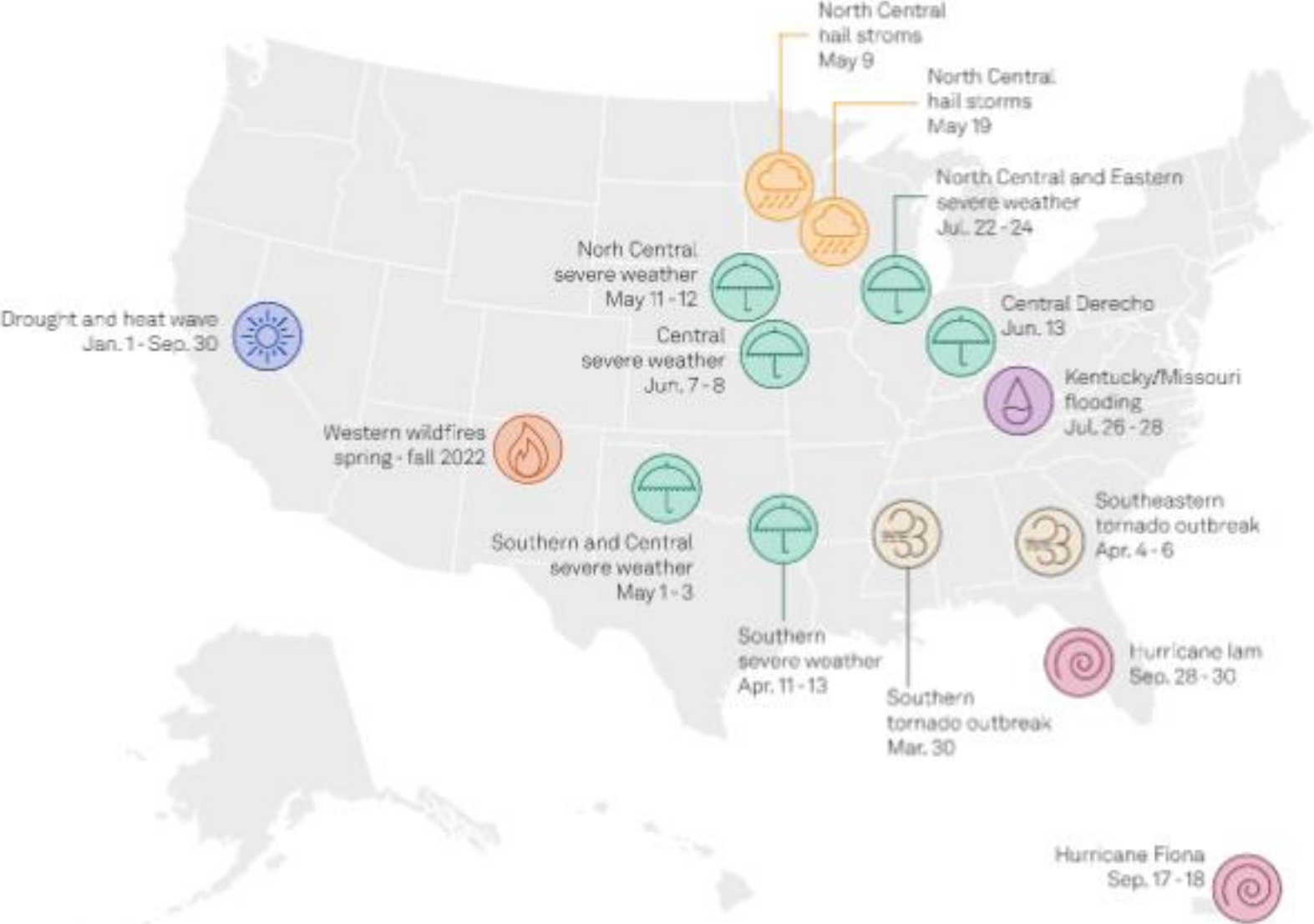


Demographics

Will international migration return and will hiring challenges slow economic growth?

Event Risks | Extreme Weather

U.S. 2022 Billion-Dollar Weather And Climate Disasters
January-September 2022

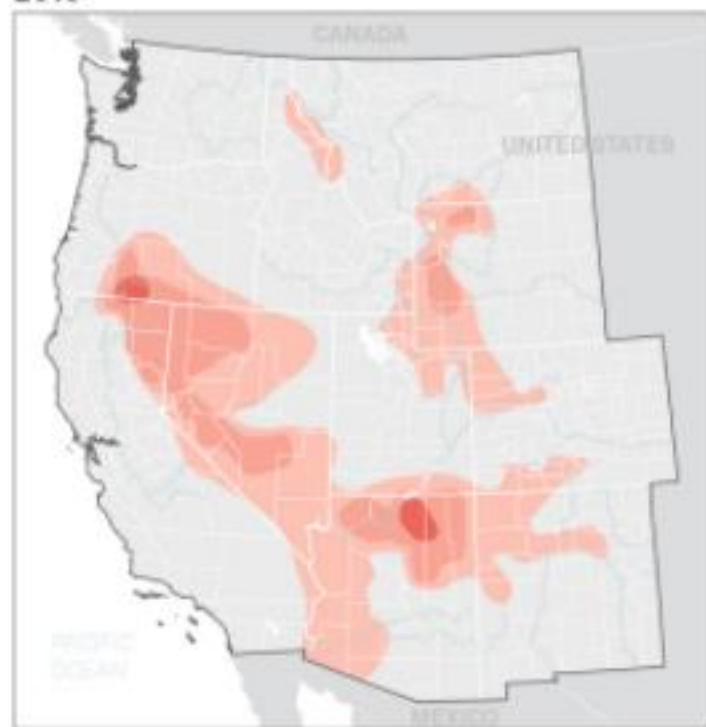


Source: NOAA

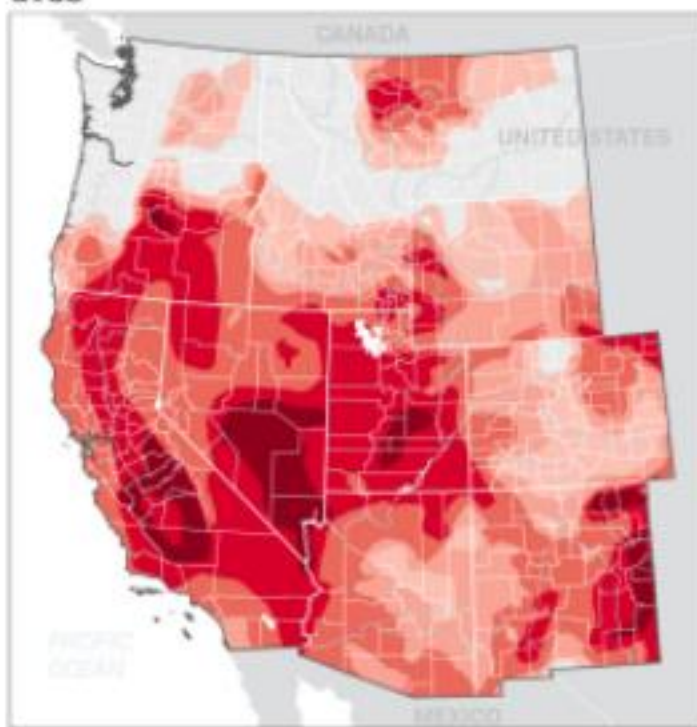
Event Risks | Droughts

Western Region Is Experiencing Droughts Of Increasing Frequency, Length, And Intensity

2010



2022



- No drought
- D0 - abnormally dry
- D1 - moderate drought
- D2 - severe drought
- D3 - extreme drought
- D4 - exceptional drought

As of Aug. 2, 2022. Source: US Drought Monitor.

Extreme Weather Events | Select Commentaries

- “Western U.S. Wildfires Challenge Local Governments, But Experience In The Past Year Points To Resilience,” Aug 22, 2018
- “California Wildfires Could Hurt Local Government Credit This Time,” Nov 13, 2018
- “Western U.S. Drought: Declining Supply, Rising Challenges,” Aug. 16, 2022
- “Hurricane Ian: Most Municipal Utility Ratings, Bolstered By Significant Liquidity, Are Expected To Be Unaffected,” Sep 30, 2022
- “Hurricane Ian: What Comes Next For Government And Related Credits In The Storm’s Broad Path?,” Oct 03, 2022
- “California’s Atmospheric River Brings Widespread Damage But Has Limited Credit Impact To Date,” Jan 26, 2023
- “The Importance Of Contingent Liabilities: Low Probabilities But High Impacts,” Mar 23, 2023

ESG In Credit Ratings | Cyber Risk Management



Prepare

- ✓ Identify areas of risk
- ✓ Protect assets and data



Respond

- ✓ Detect and respond to an attack



Recover

- ✓ Recover data
- ✓ Maintain sufficient liquidity
- ✓ Disclose attacks

Source: S&P Global Ratings.

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S&P Global | Sample Cybersecurity Questions

1. What steps have you (the Issuer) taken to *identify* and *protect* your assets and data from cyberattacks?

- Device registration and access controls
- Firewalls, staff training, virus, and malware scans
- Two-signature requirements on wire transfers and payments

2. What policies and practices have you implemented to enable you to *detect*, *respond* to, and *recover* from a cyberattack?

- Data recovery plans including offsite backups
- Cyber insurance
- System scans to detect malware/attacks
- Ability to isolate attack from affecting entire network

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