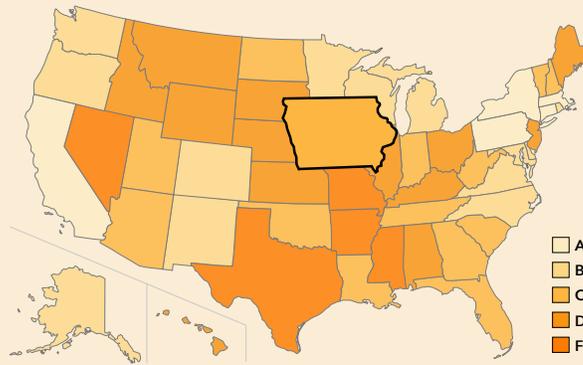


OVERALL GRADE:
C+



OVERALL: C+

EXTREME HEAT: C

DROUGHT: C+

WILDFIRE: -

INLAND FLOODING: C

COASTAL FLOODING: -

Iowa faces considerable and significantly increasing threat levels from extreme heat, drought, and inland flooding between now and 2050. Iowa scores an overall grade of C+ on the Report Card, with grades ranging from a C for extreme heat and inland flooding to a C+ for drought. The grades are relative to other states, and relative to the magnitude of the climate threats themselves. Like most states, Iowa has taken *strong action* to address its current risks. Additionally, Iowa has taken a *fair amount of action* to increase its awareness of future climate risks through the publication of the *Iowa Climate Change Adaptation and Resiliency Report*. However, Iowa has taken *no action* to conduct detailed climate change vulnerability assessments or adaptation planning.

ACTION TAKEN:

Extensive				
Strong	☀️ 🌵 💧			
Fair		☀️ 🌵 💧		
Limited				
None			☀️ 🌵 💧	☀️ 🌵 💧
	Addressing Current Risks	Conducting Vulnerability Assessments	Planning for Adaptation	Implementing Resilience Actions

Legend for action taken:

- ☀️ Extreme Heat
- 🌵 Drought
- 🔥 Wildfire
- 💧 Inland Flooding
- 🌊 Coastal Flooding

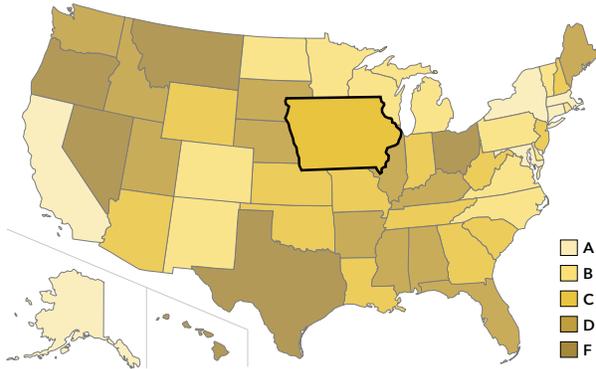
SOME ACTIONS ALREADY TAKEN

- Iowa's *Enhanced Hazard Mitigation Plan*, technical assistance programs, disaster response plans, and emergency communications materials are helping the state prepare for its current climate risks.
- The *Iowa Climate Change Adaptation and Resiliency Report* discusses potential future climate risks and impacts.
- Iowa's *Bridge and Highway Climate Change and Extreme Weather Vulnerability Assessment Pilot* is assessing flooding and precipitation vulnerability for the transportation sector.
- Iowa is tracking various climate related impacts, including collecting data on heat related deaths, and flood damages.

WEAKNESSES

- No evidence of climate change vulnerability assessments across the sectors examined (except for transportation).
- No evidence of state-led climate change adaptation planning efforts across the sectors examined.
- No evidence of funding, policies, or guidelines to improve resilience against climate change-related extreme heat, drought, or inland flooding resiliency.
- No evidence of action to incorporate climate change projections associated with extreme heat, drought, or inland flooding into state-level programs, investments, or activities.

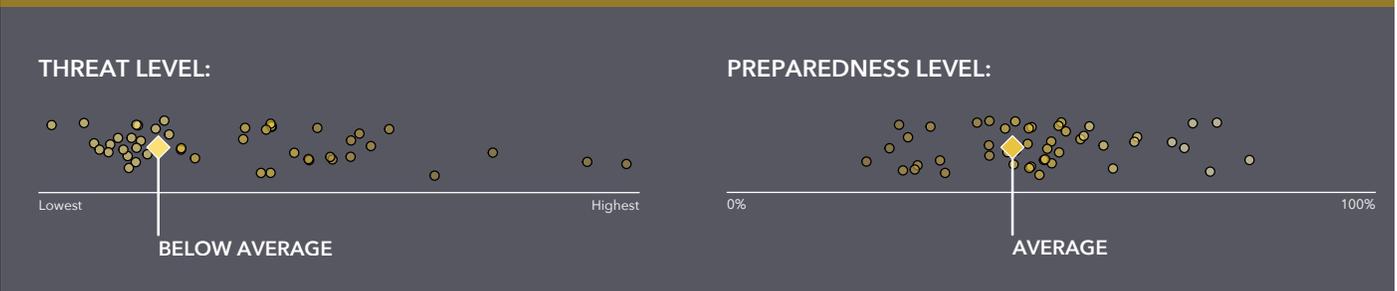
EXTREME HEAT: C



OVERALL:	C+
EXTREME HEAT:	C
DROUGHT:	C+
WILDFIRE:	—
INLAND FLOODING:	C
COASTAL FLOODING:	—

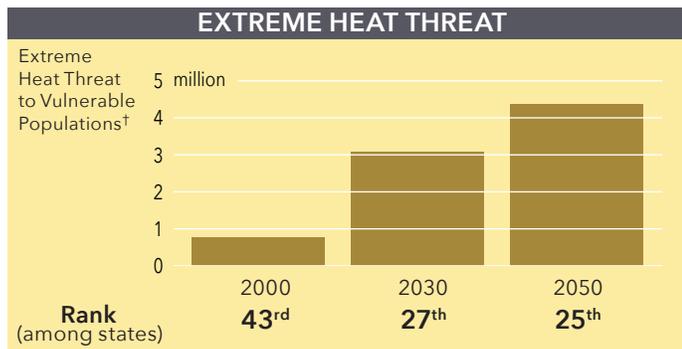
Iowa scores a C for its average level of preparedness in the face of a below average overall extreme heat threat. Currently, the state faces a below average extreme heat threat level among the lower 48 states and like many states, Iowa has taken strong action to address its current heat risks via its hazard mitigation planning process. Iowa has taken a fair amount of action to understand its future heat risks, as evidenced by the Iowa Climate Change Adaptation and Resiliency Report. However, like the majority of states, Iowa has taken no action related to planning or implementation of adaptation measures addressing its future heat risks.

IOWA COMPARED TO OTHER STATES:



The preparedness grade represents how well a state is preparing for its threat level, relative to all states evaluated for that threat. It compares a state's position in the distribution of threat levels to its position in the distribution of preparedness scores. Thus two states with the same absolute preparedness score might receive different grades, depending on their levels of threat—a state with a higher threat level would receive a lower grade. For details, see the methodology.

KEY FINDINGS:



† Average number of heat wave days per year times total vulnerable population. A score of 1 represents 1 vulnerable person exposed to 1 heat wave day.

► Average annual number of heat wave days: Average number of days each year on which the maximum temperature exceeds the 95th percentile of daily maximum temperature in the baseline period (1991-2010) for at least three consecutive days.

DID YOU KNOW?

- Currently, Iowa averages fewer than 5 days a year classified as dangerous or extremely dangerous, according to the NWS Heat Index. By 2050, Iowa is projected to see almost 40 such days annually.
- By 2050, the typical number of heat wave days is projected to increase from 10 to more than 60 days a year.
- Iowa has almost 70,000 people 65 and older, or under 5 years old, living below the poverty line, which is below average among the lower 48 states. These groups are considered to be especially vulnerable to extreme heat.

EXTREME HEAT: C

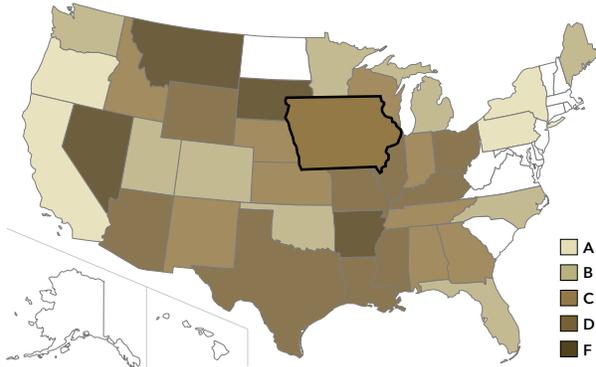
EXAMPLE CRITERIA

A subset of the criteria used to develop Iowa's extreme heat preparedness grade.

	Transportation	Energy	Water	Health	Communities
ADDRESSING CURRENT RISKS					
Does the State Hazard Mitigation Plan cover extreme heat?	n/a	✓	✓	✓	n/a
Does the state have an extreme heat emergency response plan that is updated routinely?	✓	✓	✓	✓	n/a
Does the state provide extreme heat emergency communication materials for citizens?	✓	✓	✓	✓	n/a
CONDUCTING VULNERABILITY ASSESSMENTS					
Has the state published information on how the frequency or severity of extreme heat events may change in the future?	✓	✓	✓	✓	n/a
Has the state conducted extreme heat vulnerability assessments for each sector?	NO	NO	NO	NO	n/a
Is the state tracking extreme heat impacts?	NO	n/a	NO	✓	n/a
PLANNING FOR ADAPTATION					
Is there a statewide climate change adaptation plan covering extreme heat?	NO	NO	NO	NO	n/a
Is there a statewide implementation plan for climate change adaptation?	NO	NO	NO	NO	n/a
Does the state have sector-specific extreme heat adaptation plans?	NO	NO	NO	NO	n/a
IMPLEMENTING RESILIENCE ACTIONS					
Are there optional state guidelines for resilient activities (e.g., construction)?	NO	NO	NO	NO	n/a
Are there state requirements for resilient activities (e.g., construction)?	NO	NO	NO	NO	n/a
Is there evidence that the state is implementing extreme heat adaptation policy/guidelines?	NO	NO	NO	NO	n/a

"n/a" indicates that the sector is either insensitive to the threat or the state does not have a significant role.

DROUGHT: C+



OVERALL:	C+
EXTREME HEAT:	C
DROUGHT:	C+
WILDFIRE:	—
INLAND FLOODING:	C
COASTAL FLOODING:	—

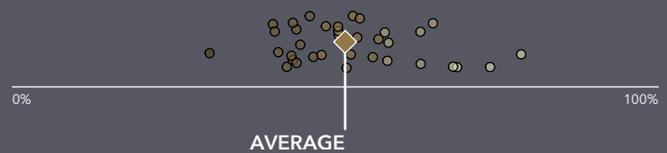
Iowa scores a C+ for its average level of preparedness in the face of a below average overall widespread summer drought threat. The state currently faces a below average threat level compared to the 36 states assessed for drought, and, like the majority of states, Iowa has taken strong action to address its current drought risks. By 2050, Iowa is projected to see a below average increase, and continue to face a below average drought threat. The state has taken a fair amount of action to increase its awareness of future risks, as evidenced by the Iowa Climate Change Adaptation and Resiliency Report. However, Iowa has taken no action to plan for its future drought risks or implement climate adaptation strategies.

IOWA COMPARED TO OTHER STATES:

THREAT LEVEL:



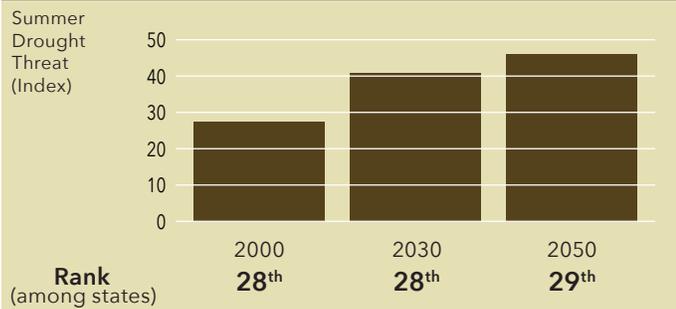
PREPAREDNESS LEVEL:



The preparedness grade represents how well a state is preparing for its threat level, relative to all states evaluated for that threat. It compares a state's position in the distribution of threat levels to its position in the distribution of preparedness scores. Thus two states with the same absolute preparedness score might receive different grades, depending on their levels of threat—a state with a higher threat level would receive a lower grade. For details, see the methodology.

KEY FINDINGS:

DROUGHT THREAT



DID YOU KNOW?

- Currently, Iowa's severity of widespread summer drought is below average and ranks in the bottom quarter of the 36 states assessed for drought threats.
- By 2050, the severity of widespread summer drought is projected to see a below average increase of 70 percent; Iowa is projected to continue to experience a below average threat compared to other states assessed.

► Severity of widespread summer drought: Sum of soil moisture deficit (standard score) in the summer months for model grid cells where the standard score is less than -1, when at least 30% of grid cells in a state meet this criterion.

DROUGHT: C+

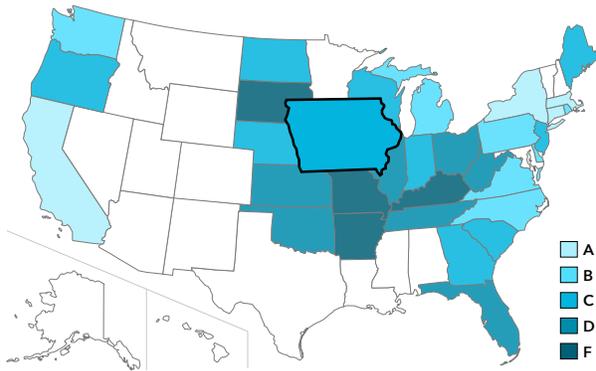
EXAMPLE CRITERIA

A subset of the criteria used to develop Iowa's drought preparedness grade.

	<i>Transportation</i>	<i>Energy</i>	<i>Water</i>	<i>Health</i>	<i>Communities</i>
ADDRESSING CURRENT RISKS					
Does the State Hazard Mitigation Plan cover drought?	n/a	✓	✓	✓	n/a
Does the state have a drought emergency response plan that is updated routinely?	n/a	✓	✓	✓	n/a
Does the state provide drought emergency communication materials for citizens?	n/a	✓	✓	✓	n/a
CONDUCTING VULNERABILITY ASSESSMENTS					
Has the state published information on how the frequency or severity of drought may change in the future?	n/a	✓	✓	✓	n/a
Has the state conducted drought vulnerability assessments for each sector?	n/a	NO	NO	NO	n/a
Is the state tracking drought impacts?	n/a	n/a	NO	NO	n/a
PLANNING FOR ADAPTATION					
Is there a statewide climate change adaptation plan covering drought?	n/a	NO	NO	NO	n/a
Is there a statewide implementation plan for climate change adaptation?	n/a	NO	NO	NO	n/a
Does the state have sector-specific drought adaptation plans?	n/a	NO	NO	NO	n/a
IMPLEMENTING RESILIENCE ACTIONS					
Are there optional state guidelines for resilient activities (e.g., construction)?	n/a	NO	NO	NO	n/a
Are there state requirements for resilient activities (e.g., construction)?	n/a	NO	NO	NO	n/a
Is there evidence that the state is implementing drought adaptation policy/guidelines?	n/a	NO	NO	NO	n/a

"n/a" indicates that the sector is either insensitive to the threat or the state does not have a significant role.

INLAND FLOODING: C

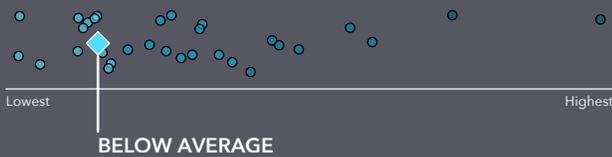


OVERALL:	C+
EXTREME HEAT:	C
DROUGHT:	C+
WILDFIRE:	—
INLAND FLOODING:	C
COASTAL FLOODING:	—

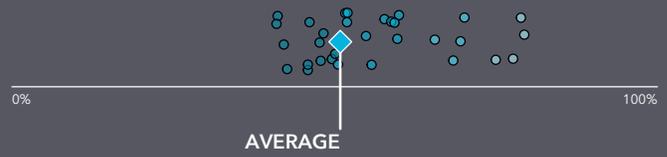
Iowa earns a C for its average level of preparedness in the face of a below average overall inland flooding threat. The state currently faces an average threat among the 32 states assessed for inland flooding, and like many states, it has taken strong action to address its current inland flooding risks with its hazard mitigation planning process and flood mitigation grants. By 2050, Iowa is projected to experience a below average increase in the severity of high runoff events, resulting in its threat level dropping to below average compared to the other states. The state has taken a fair amount of action to understand its future inland flooding risks, but Iowa has taken no action to plan for or implement adaptation actions to address its future inland flooding risks.

IOWA COMPARED TO OTHER STATES:

THREAT LEVEL:

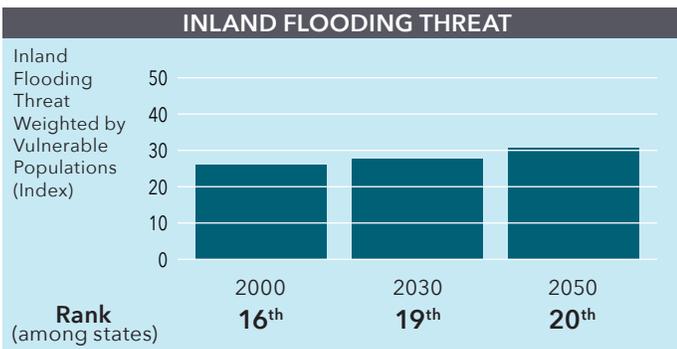


PREPAREDNESS LEVEL:



The preparedness grade represents how well a state is preparing for its threat level, relative to all states evaluated for that threat. It compares a state's position in the distribution of threat levels to its position in the distribution of preparedness scores. Thus two states with the same absolute preparedness score might receive different grades, depending on their levels of threat—a state with a higher threat level would receive a lower grade. For details, see the methodology.

KEY FINDINGS:



Average annual severity of high flow events weighted by total vulnerable population and vulnerable population as a percentage of state population.

- Average annual severity of high flow events: Sum of runoff volume per year that exceeds the 95th percentile of daily total runoff in the baseline (1991-2010) period.

DID YOU KNOW?

- More than 150,000 people in Iowa are living in flood prone areas (defined as the FEMA 100-year riverine floodplain).
- The severity of Iowa's high runoff events, weighted by its vulnerable population, is currently average among the 32 states assessed for inland flooding threats.
- By 2050, Iowa's inland flooding threat is projected to have a below average increase of less than 20 percent (assuming the size of the vulnerable population stays the same).

INLAND FLOODING: C

EXAMPLE CRITERIA

A subset of the criteria used to develop Iowa's inland flooding preparedness grade.

	Transportation	Energy	Water	Health	Communities
ADDRESSING CURRENT RISKS					
Does the State Hazard Mitigation Plan cover inland flooding?	✓	✓	n/a	✓	✓
Does the state have an inland flooding emergency response plan that is updated routinely?	✓	✓	n/a	✓	✓
Does the state provide inland flooding emergency communication materials for citizens?	✓	✓	n/a	✓	✓
CONDUCTING VULNERABILITY ASSESSMENTS					
Has the state published information on how the frequency or severity of inland flooding may change in the future?	✓	✓	n/a	✓	✓
Has the state conducted inland flooding vulnerability assessments for each sector?	✓	NO	n/a	NO	NO
Is the state tracking inland flooding impacts?	NO	n/a	n/a	✓	✓
PLANNING FOR ADAPTATION					
Is there a statewide climate change adaptation plan covering inland flooding?	NO	NO	n/a	NO	NO
Is there a statewide implementation plan for climate change adaptation?	NO	NO	n/a	NO	NO
Does the state have sector-specific inland flooding adaptation plans?	NO	NO	n/a	NO	NO
IMPLEMENTING RESILIENCE ACTIONS					
Are there optional state guidelines for resilient activities (e.g., construction)?	NO	NO	n/a	NO	NO
Are there state requirements for resilient activities (e.g., construction)?	NO	NO	n/a	NO	NO
Is there evidence that the state is implementing inland flooding adaptation policy/guidelines?	NO	NO	n/a	NO	NO

"n/a" indicates that the sector is either insensitive to the threat or the state does not have a significant role.