DROUGHT & IOWA'S DRINKING WATER

In 2024, lowa emerged from its longest drought since 1954-1959. The 2020-2023 drought reflects broader changes in climate. lowa's average annual temperature is increasing, and with decreased annual precipitation, many communities faced dwindling drinking water supplies during the drought period. This cycle is expected to worsen.





The National Oceanic and Atmospheric Administration (NOAA) predicts lowa will experience longer, more frequent droughts in the coming years.

In 2020, NOAA analyzed three categories to determine a drought vulnerability score for each of the 48 contiguous states: sensitivity, exposure, and ability to adapt.

Along with Montana and Oklahoma, lowa ranked among the top three states for very high drought vulnerability.



EXAMPLES OF PUBLIC WATER SYSTEMS IMPACTED BY THE 2020-2023 DROUGHT

- Belle Plaine Water Department: 2,380 customers served | Groundwater
- Osceola Water Works: 5,500 customers served | Surface water
- Des Moines Water Works: 600,000 customers served | Surface water

Residents of these communities were asked to restrict water usage and/or use bottled water. The communities are looking at solutions to increase water supplies in times of drought.





MITIGATION RECOMMENDATIONS

To mitigate the impacts of drought on the landscape and to lowa's economy, we must implement more nature-based solutions on the land that will help retain water and allow greater infiltration, increasing soil moisture and recharging groundwater. We must also manage our water resources for drought resiliency and in ways that protect water quality.

URBAN AREAS

- 1. Implement natural infrastructure practices to manage, store, and filter stormwater.
- 2. Plant drought-resistant native species.

AGRICULTURAL LANDS

- 1. Reduce agricultural subsurface drainage ("tile" drainage) and restore wetlands or native prairie plantings in unproductive, wet areas of fields.
- 2. Improve soil health to increase the water-holding capacity of the soil by implementing practices such as no till, cover crops, and diverse rotations.
- 3. Raise livestock on pasture instead of in concentrated animal feeding operations.



POLICY RECOMMENDATIONS

Policy change that supports drought mitigation and water resource management for drought is an important part of the solutions necessary to protect lowa from the impacts of drought.

- 1. Expand state water monitoring, including groundwater monitoring.
- 2. Improve state and local water use and hazard mitigation planning.
- 3. Institute restrictions on industrial water use and siting.