Droughts: Downstream Health Effects

Droughts are a fact of life in Montana’s dry climate. They make heat, dust, and flooding worse, hurt farms and ranches, and hurt your health. Still, for millennia, people have been making do here during dry times.

However, the state is getting hotter than in past decades, and our seasons are changing. Our snow pack is expected to drop by a third this century. Warmer springs also mean earlier snow melt and faster spring runoff, so less water is left by summertime, when it is needed for crops and rangeland.

Soil that’s been too dry for too long also absorbs less water, meaning that heavy rains don’t soak into the ground. Instead, it floods. You can see this effect for yourself if you try to water a houseplant that’s too parched: all the water runs out of the pot.

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Droughts make wildfires more likely and more intense, causing more smoke.

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Mental Health

It’s normal for drought to cause distress - nearly 3/4 of Montana’s farmers and ranchers report feeling this way.

- Visit regularly with family or friends - it’s proven to help protect your mental health.
- See a therapist if you’re anxious, losing sleep, or feeling hopeless.
- If you’re worried about your farm or ranch, MT Drought Management has collected financial and data resources for you at drought.mt.gov/resources.

Dust and Smoke

Dust and Smoke get worse during droughts. Studies show more deaths from lung problems, especially in older folks and children. Rural areas are hit hardest by health problems. If it’s dusty or smoky:

- Wear an N95 mask outside.
- Close windows in cars and your house.
- Get a HEPA air filter for your home.
- Check your local air quality on Airnow.gov.

What you can DEW*

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Water that’s usually flowing can shrink to a stagnant pool during drought. This is the perfect habitat for mosquitoes, who carry diseases, and blue-green algae, which can poison water. When it evaporates, pollutants also get more concentrated.

- Monitor your water quality.
- Cover up and use mosquito repellent.
- Never touch or drink water with blue-green algae (this goes for pets and livestock too).

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What stage drought are we in?

There are three stages of drought: D1 (moderate drought) through D4 (exceptional drought). The Missouri River Basin *Drought Early Warning (DEW) System keeps track of this at drought.gov/states/mta.

Check your county’s drought stage:

What are my risk factors?

Everyone can be affected by drought, but some people are more at risk. These people are:

- pregnant or nursing people
- babies, children, and teens
- people over 60
- people with lung diseases, heart problems, or diabetes.

Talk to your doctor about how to reduce your personal drought-related risks.

Am I prepared? Are we?

- Drought can make extreme heat, wildfires and flooding worse. Make sure you have a plan in case of a fire or flood, and know the signs of heat stroke.
- Keep track of air quality and filter your air.
- Avoid blue-green algae and protect yourself from mosquitoes.
- If you’re stressed because of the drought, reach out to friends and a therapist.
- Get involved! The state holds many Drought and Water Supply Advisory Committee meetings every year, and your town may have an integrated water resources plan (WRP). If it doesn’t, ask your city council to start one!