UPDATED DECEMBER 2024

DROUGHT

RESOURCE GUIDE

FARMER RESOURCE NETWORK





Deepening drought conditions have not only impacted farms and ranches' bottom lines but have introduced a new level of uncertainty for farmers. Drought conditions vary year to year and region by region, but as of this writing, the percentage of the US population experiencing drought is the highest on record. Climate change is exacerbating and increasing the frequency of drought conditions (Cassidy, 2024), and one region in particular is facing extreme, long-term drought. The U.S. West is currently in the middle of a record 22year drought, referred to as a mega-drought (James, 2024). As drier conditions persist, this guide is intended to supply you with steps to insulate your operation from the worst effects of drought and to access assistance when needed.

While we can't control how much water we receive, we can take steps to control how much water we keep. Conservation practices, particularly soil management practices, are widely recognized as the best way to retain this precious resource at the root level for as long as possible. A Kansas State University study demonstrated that for every 1% increase in soil organic matter, up to 25,000 more gallons of water are retained per acre (Kansas State Agronomy, 2012). The following information will help you decide which practices make sense for your operation:

- <u>ATTRA Drought Resources</u> include soil and water management practices, state-specific irrigation guides, moisture monitoring tools and more. Their <u>Manage Soil for Water</u> article highlights key tenets and practices to improve soil organic matter.
- The <u>National Drought Mitigation Center</u>, operated by the University of Nebraska, hosts a database highlighting drought mitigation and response strategies implemented across the United States.
- Community Alliance with Family Farmers' (CAFF) <u>Ecological Farming</u> <u>Resources</u> provides in-depth knowledge for a wide array of ecologically sound practices.
- Utah State University Extension published <u>Defense Against Drought</u> to equip farmers and ranchers with six tools to mitigate the effects of drought.
- <u>UC Insights: Water and Drought Online Seminar Series</u> covers a multitude of irrigation and water management approaches. The <u>Agricultural Water</u> <u>Management</u> is a good overview if you're just starting to explore.
- Your <u>state's University Extension</u> is always a good place to explore programs and speak with staff that can support your efforts.
- If you'd like to explore deeper, <u>The Drought Resilient Farm</u> by Dale Strickler is a great place to start.

Ranchers and livestock farmers face unique demands. These articles contain information that can help mitigate damage and cultivate resilience over time:

- The Noble Research Institute's <u>Prepare for Drought With Regenerative Ag</u> <u>Mindset</u> outlines proactive strategies specific to pasture management.
- The University of Nebraska's <u>Managing Drought Risk on the Ranch: A</u> <u>Planning Guide for Great Plains Ranchers</u> will help you make decisions that are appropriate for your operation.
- Colorado State University Extension's <u>Alternative Feeding Strategies for Cows</u> <u>and Calves Due to Drought Related Forage Shortages</u> is self-explanatory.

• <u>Grasscast</u>, from The National Drought Mitigation Center at the University of Nebraska<u>f</u>orecasts forage productivity for the upcoming growing season relative to your area's 40-year history.

Regardless of your operation, these websites contribute valuable data to inform your management decisions:

- <u>Crop Condition and Soil Moisture Analytics</u> (Crop-CASMA) uses highresolution data to map soil moisture and crop vegetation conditions across the United States. The tool is designed to plan crop planting, forecast yields, monitor droughts or floods and more. The user's guide is <u>here</u>.
- The National Integrated Drought Information System's (NIDIS) <u>Drought.gov</u> <u>Agriculture page</u> provides data to assess both current conditions and forecasts for precipitation, evaporative demand, soil moisture and surface/groundwater quantity and quality in your area.
- The National Drought Mitigation Center's <u>Ag In Drought</u> website also features updates for row crops, livestock and forage and specialty crops.

So much about the weather is beyond our control, which can leave us feeling powerless. A well-designed drought plan is one way that you can regain some control and transform your knowledge into tangible steps that protect your farm from some of the worst impacts of drought. These materials from Colorado State Extension's Drought Advisors program offer everything you need to create an effective drought plan:

- Start with this brief <u>Elements of a Drought Plan</u> webinar.
- The <u>Drought Planning Handbook</u> takes you step by step through the process.
- <u>Drought plans from producers across the Great Plains provide a wide range of examples to draw from.</u>

If funding for your plan is limited, here are some alternatives:

- Farm Progress' article highlights <u>Natural Resource Conservation Service</u> (<u>NRCS</u>) programs that provide cost share benefits as well as technical support for conservation projects including irrigation, soil management, livestock and more. You can find a <u>comprehensive list of NRCS climate smart mitigation</u> <u>activities and projects here</u> and your local NRCS office <u>here</u>.
- The USDA's <u>Funding to Support Climate Smart Agriculture and Forestry</u> features partnerships and programs to fund your conservation efforts.
- Conservation Districts often offer grants to help fund projects. Find opportunities near you <u>here</u> (some links are broken; you'll at least have the name of your local district as a starting point).
- You'll find further grant, cost share and loan alternatives in our <u>Farm Aid Farm</u> <u>Financing Resource Guide</u>.



WHEN DROUGHT OCCURS

When drought hits, it's critical to remain abreast of your county's status. Drought declarations by either your state or the federal government make resources available to help you persevere and recover.

- State declarations are typically posted on your state's <u>Department of</u> <u>Agriculture website.</u>
- Federal drought designations are automatic for any county when D2 (severe drought) conditions exist for eight weeks in a row. Any county that has any area experiencing D3 (extreme drought) conditions or worse at any time during the growing season also would be designated as a disaster area. If conditions cause a single crop or group of crops to suffer a loss of 30% or more, this can also trigger a federal drought designation. There are several ways you can check your county's status:
- > Use the <u>USDA Disaster Assistance Discovery Tool</u>
- > Go to <u>drought.gov</u> and enter your ZIP code at the top of the page, "How is drought affecting your neighborhood?" The message "<u>This county is designated</u> <u>in drought by the USDA. Learn more.</u>" will appear if your county has been declared. You can sign up for alerts in the upper right corner if you'd like to be notified when status changes occur.

If your county has been declared to be in drought, you may be eligible for a variety of disaster relief programs administered by the FSA. Their <u>A Producer's Guide to Drought: USDA</u> <u>Drought Assistance Programs and Reporting Guidelines</u> highlights the programs and timeline requirements for application submittals. Contact your <u>FSA county office</u> and be sure to document every interaction with the FSA. This can be as simple as logging the date, the mode of conversation (phone, email, text, etc.), who you spoke with, the topic and the outcome. Be sure to get a <u>receipt for services</u> for each benefit or service sought; as of 2014, the <u>FSA is</u> <u>required to provide one (but you often must ask</u>). Documenting details will work in your favor if any disputes or misunderstandings arise later. For a more detailed overview, see <u>Farm Aid's</u> <u>Disaster Assistance Resource Guide</u>. For local and state-based drought relief programs and information, see our <u>Resources for Farmers and Ranchers Facing Drought</u> blog and spreadsheet. Although it was originally created in 2022, we diligently strive to keep the resources current.

Finally, with so much focus on crops and livestock, it's easy to forget drought's potential impact on our physical and mental health. If you feel overwhelmed, our <u>Farm Aid Farm Stress</u> <u>Resource Guide</u> provides tangible steps and resources to address your concerns.

CONNECT WITH FARM AID

Not finding what you need? Request one-on-one assistance from our Farmer Services Team by filling out our <u>Online Request for Assistance form</u> or by calling **1-800-FARM-AID (1-800-327-6243)**. Farm Aid staff are happy to listen and help you in all the ways we can.

FARMER RESOURCE GUIDES

Check out our Farmer Resource Guides for straightforward information created by our Farmer Services Team to help with topics that come up frequently on our 1-800-FARM-AID hotline.

REFERENCES

Cassidy, E. (2024, October 29). *Drought expands across the U.S.* Earth Observatory. <u>https://earthobservatory.nasa.gov/images/153526/drought-expands-across-the-us</u>.

James, I. (2024, July 30). *The American West's last quarter-century ranks as the driest in 1,200 years, research shows.* Los Angeles Times. <u>https://www.latimes.com/environment/story/2024-07-30/megadrought-ucla-research.</u>

Kansas State Agronomy. (2012, July 6). *Kansas State Extension Agronomy e-updates*, Number 357.

