



Each person uses 80-100 gallons of water per day. During periods of drought, it is important minimize water use to ensure enough is available for everyone. Here are some tips to help your household during periods of drought.

## Before a Drought

- **General water conservation measures.**
  - Check your faucets, pipes and toilets for leaks; even a small faucet leak can waste as much as 20 gallons of water.
  - Do not pour water down the drain when there may be another use for it (e.g., watering plants or a garden).
  - When purchasing a new appliance, choose one that is more energy and water efficient.
- **Conserve water in the bathroom**
  - Turn off the water while you brush your teeth, wash your face, or shave, instead of leaving the faucet running.
  - Install aerators with flow restrictors on all household faucets.
  - Replace your shower heads with low-flow heads, which use less water.
  - Install a low-flow toilet to replace your existing model; this can cut your home water consumption by 20 percent.
  - Install a toilet displacement device.
    - Place a 1 gallon jug of water to displace toilet flow.
    - Do not use a brick, it may dissolve and loose pieces may cause damage to internal parts.
- **Conserve water in the kitchen.**
  - Run your dishwasher only when it is full; select the water-saving cycle, if you have that feature.
  - Store drinking water in your refrigerator to avoid the need to run water in the sink to get it cold.
  - Clean fruits and vegetables in a pan filled with water rather than running water from the tap; reuse the water in the pan for other purposes (e.g., watering plants).
  - Hand wash dishes by filling two containers – one with soapy water, the other with rinse water containing a small amount of chlorine bleach.
  - Avoid rinsing dishes prior to putting them in a dishwasher to conserve water.
  - Kitchen sink disposals require lots of water to operate properly; start a compost pile as an alternate method of disposing food waste.
- **Conserve water while doing laundry.**
  - Operate automatic clothes washers only when they are fully loaded.
  - Set the water level for the appropriate size of your load to avoid wasting water.

- **Conserve water outdoors.**
  - Do not overwater your lawn. Lawns only need to be watered every five to seven days in the summer.
  - Water lawns during the early morning hours when temperatures and wind speed are the lowest; this reduces evaporation and waste.
  - Plant native and/or drought-tolerant grasses, ground covers, shrubs and trees that can survive dry periods without watering.
  - Use mulch to retain moisture in the soil.

## During a Drought

- **Stay informed.**
  - Monitor potential drought conditions in your area at the U.S. Drought Monitor website.  
<http://drought.unl.edu/dm/monitor.html>
  - Listen to the radio or television for situation developments and instruction for water conservation or restrictions for your area.
- **Increase your water conservation measures.**
  - Limit how much water each person may use.
  - Do not flush toilets if it is not necessary.
  - Wash things only when it is necessary to do so. Only wash a full load.
  - Do not take baths; take short showers instead. Turn on the water to get wet and rinse; lather with the water off.
  - Use bottled water when possible, such as for brushing your teeth, washing your face or hands.

## After a Drought

- **Once the situation is over, it is still important to continue to conserve water for future droughts.**
  - Continue to be aware of how much water is used on a daily basis.
  - Make changes to your home to conserve water.

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The impact of drought on livestock can be devastating. Limited water supplies occur during a time when the water needs are increased. Feed availability can also become limited. Plants can also concentrate toxins making them lethal to livestock. Planning ahead can help protect the health and well-being of your livestock.

## Before a Drought

- **Keep up-to-date forage inventories.**
  - Accurate records of available feedstuffs can help you determine available feed supplies during drought situations.
- **Develop an emergency plan for water and feed resources.**
  - Obtain emergency supplies of forage and grain.
    - Alternative feed sources
    - Additional grazing areas
  - Identify emergency resources for water.
  - Plant alternative forage crops.
- **Good land management before a drought provides greater flexibility when droughts occur.**
  - Maintain healthy soils.
  - Balance stocking rates and land resources.
    - Adjust the stocking rate to the point where only 75% of the available forage is utilized.

## During a Drought

- **Provide quality water sources.**
  - Ensure animals have a supply of cool, clean water.
  - Truck water in for livestock.
  - Monitor the water temperature and keep it cool.
  - Monitor water sources, such as watering hole, streams and ponds, which can dry out during drought conditions.
  - Check water delivery systems periodically for proper function.
  - Dry conditions can lead to undrinkable or toxic water sources. Have water quality testing performed.
    - Concentration of naturally occurring salts and minerals can be harmful to animal health.
    - Increased nutrients in water can lead to increased growth of blue-green algae, which can be toxic.

- **Feed management.**
  - Avoid overgrazing or overstocking of pasture and rangeland. Forages should never be grazed “to the roots” under any circumstance.
  - Drought situations can also result in increased grazing by livestock on toxic plants.
  - Move animals to additional pastures. This may involve moving them out of the drought affected area.
  - Providing supplemental feed (e.g., grains, hay) may be necessary.
    - Non-traditional feedstuffs may be an option.
    - Lease additional pastures.
  - Supplemental minerals, vitamins or energy sources may be needed.
- **If feed shortages occur,**
  - You may need to limit the number of animals to conserve water and reduce feed demand.
    - Sell unproductive animals. This option is best considered before the drought becomes too severe.
- **Monitor animals for illness.**
  - If your animals show signs of illness, contact your local veterinarian immediately!
  - **Signs of dehydration:** rapid, shallow breathing
    - reluctance to move
    - weight loss
    - drying of mucous membranes (e.g., eyes, nose, mouth)
    - decreased skin flexibility
  - **Signs of heat stress:** increased respiration rate or panting
    - excessive salivation
    - elevation of the head to make it easier to breathe
    - open mouth breathing

## After a Drought

- **If you plan to feed drought damaged crops (e.g., feed, forages) to livestock, be aware of these issues:**
  - Drought conditions can reduce the nutritional quality of forages and lower forage succulence (and protein content).
  - Dry forages are harder to digest.
  - Drought conditions increases plant toxicities (e.g., nitrates, mycotoxins).
  - Test harvested feed and forages for nutrient content and potential toxins prior to feeding.
- **See your county extension office about drought assistance programs and the enrollment process.**

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A prolonged drought can have a serious impact on crops. Decreased precipitation reduces crop and forage growth and can ultimately result in crop loss. Weakened plants are also more susceptible to disease and insects. Drought conditions can increase the level of wind erosion of top soil and the risk of fires. Planning ahead can help protect your crops during drought situations.

## Before a Drought

- **Crop management ideas.**
  - Plant crops that withstand dryness, hold water, and reduce the need for irrigation.
  - Rotate crops in ways that increase the amount of water that enters the soil.
  - Shift to cropping systems that are less water dependent than your current system.
- **Land management ideas.**
  - Good land management before a drought provides greater flexibility when droughts occur.
    - Maintain healthy soils.
    - Balance stocking rates on pasture areas; do not allow overgrazing.
  - Try to use minimum tillage techniques.
    - Leaving crop residue from the previous year on the surface can help to minimize evaporation of moisture from the soil.
  - Use conservation practices to reduce runoff, erosion, soil degradation and encourage infiltration of water into the soil.
    - Establish riparian buffers, filter strips, grassed waterways, and other types of conservation buffers near streams and other sources of water.
    - Use conservation practices such as crop rotation, contoured row crops, terracing, windbreaks, etc.
- **If irrigation systems are currently used,**
  - Select irrigation systems that will minimize loss of water by evaporation, percolation, and runoff.
  - Make your existing irrigation system more efficient and easier to maintain.
  - Build a water storage system that holds water for use during irrigation season.
  - Install measuring devices that keep track of water use.
  - Identify alternate water sources (e.g., springs, deep wells).
- **Weed management and control.**
  - Weeds, like other plants, consume large quantities of water. Competition for water can lead to reduced crop production.
  - Lack of water can lead to reduced herbicide effectiveness as the efficacy of most herbicides depends on water.
  - Mechanical weed control measures may be needed.

## • The Drought Management Calculator (DMC).

- Developed by the USDA Natural Resources Conservation Service (NRCS).
- Tool to help ranchers and farmers assess the impacts of drought on forage production, enabling them to make better informed decisions as to alternative drought strategies.  
[http://www.nd.nrcs.usda.gov/technical/Drought\\_Management\\_Calculator.html](http://www.nd.nrcs.usda.gov/technical/Drought_Management_Calculator.html)

## After a Drought

- **Have your soil tested.**
  - Herbicide and fertilizer carry over may occur, so soil testing is very important following a drought year.
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