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Drought Continues... Water use planning for pork producers

The drought that began in 2011 has had significant impacts on livestock producers. Short crops have resulted in high input prices and the potential for isolated cases of actual feed shortages this coming summer. Continued drought conditions also have had an impact on water availability. Some producers have already experienced problems with well or rural water production. Continued drought conditions could lead to further water shortages. Producers need to have alternative plans in place in the event of a critical loss of water.

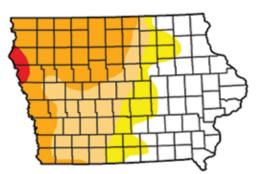




U.S. Drought Monitor

Iowa

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	34.68	65.32	52.84	31.75	1.54	0.00
Last Week (04/09/2013 map)	16.83	83.17	69.84	44.49	20.65	0.00
3 Months Ago (01/15/2013 map)	0.00	100.00	100.00	58.33	32.26	1.23
Start of Calendar Year (01/01/2013 map)	0.00	100.00	100.00	58.42	32.07	1.23
Start of Water Year (09/25/2012 map)	0.00	100.00	100.00	100.00	65.77	2.52
One Year Ago (04/10/2012 map)	48.30	51.70	30.75	21.73	0.00	0.00



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

D4 Drought - Exceptions





http://droughtmonitor.unl.edu

DO Abnormally Dry D1 Drought - Moder

> Released Thursday, April 18, 2013 David Miskus, NOAA/NWS/NCEP/Climate Prediction Center

Scope of the issue

As drought conditions continue to persist in lowa and west of the Mississippi River, it is critical that farmers and livestock producers consider emergency options and potential on-farm water conservation measures.

Recent rains have improved the drought scenario slightly. While soil conditions can respond more quickly, recharge of hydrologic systems takes significantly longer, meaning water availability challenges could last 18 months or more.

Water is an essential ingredient for pigs. Unlike feed, the lack of water can result in potential life threatening conditions within 24 hours. This short time frame leaves producers with little time to react in the face of failure of the water supply.

Current challenges are largest in the western portion of the state, although all producers should begin establishing emergency action and conservation plans in the event of more widespread water availability challenges.

Do not assume water allocation or voluntary conservation measures alone will offer a longterm solution, as livestock consumption is a primary water use in many rural water districts.



Potential Water Shortage Issues

- Private well, or wells, fail.
- Above-ground sources of water go dry.
- Rural water district(s) experiences a reduction in their capability to provide a normal level of water pressure to some, or all, of their customers.
- Rural water district(s) is unable to supply some, or all, its customers with an adequate supply of water.

Emergency Action Planning

- Communicate with your water service provider regarding specific concerns for your area.
- Consider installing 24-hour, or more, on-site water storage.
 - This will reduce load on the system and allow for more adequate recharge, reducing potential or low-pressure issues. More storage may be necessary in the case of more catastrophic water supply issues.
- Consider digging a private well. Act ASAP as there will likely be a waiting period if demand is high.
- Check status of old, backup, wells and pumps
 where applicable and service as necessary. Do not
 assume a well that has been out of service will work
 appropriately when restarting.
- Consider options for animal movement to water in the event water is unavailable at their present location.
- Implement voluntary water conservation measures on your farm(s).
- Provide information concerning potential sustenance problems to the Iowa Department of Agriculture and Land Stewardship (IDALS) and the Iowa Pork Producers Association as soon as possible. IDALS – (515) 281-5305 IDALS after-hours emergencies – (515) 242-0247 IPPA - (800) 372-7675

Some producers have established relationships with crop farmers to lease bulk water storage transport to alleviate short term failures. In the event of wide spread water shortages, transport of water will not be feasible.

DO NOT transfer water back into individual wells as this can create additional health and environmental challenges.



Conservation Tips

- Avoid heavy water use, when possible, during peak use periods of 4 p.m. to 9 p.m.
 This could include delaying the following:
 - Washing & cleaning
 - Filling of sprayer tanks
 - Use of misters & cool cells
- Follow voluntary guidelines
 As recommend by your water service provider.
- Use cooling systems only when needed Generally when outside temperatures exceed 85°F. Pre-soak timers also may be an option to reduce water use when cooling.
- Measure/meter water consumption
 Measuring water consumption will allow for
 prompt leak detection. Reduced consumption also
 can be an early indicator of herd health challenges.
- Visually check for system leaks or drips
 One drip per second equals nearly 2,200 gallons per year.
- Use dry clean-up practices when possible
 Using shovels or scrapers for hard-packed
 manure in barns and removal of trailer bedding
 can greatly reduce water needs during washout.
- Presoak intermittently when washing
 Can cut water use during barn cleanup in half.
 Also consider using pre-soak timers.
- Consider options other than conventional nipple drinkers
 Drinker type selection can account for as much as a 34 percent reduction in water use. The National Pork Board suggests the following water savings over conventional nipple drinkers:
 - Wet/dry feeders 10-34%
 - Cup or bowl drinkers 9-31%
 - Bite style or Arato style nipple drinkers 8-22%
 - Swinging nipple drinkers 11%
 - Proper management of nipple height and flow rate – 16-26%

Water conservation should be practiced and promoted even in times of plentiful supply as it can have significant economic and manure nutrient value impacts. Keep in mind, it costs as much as five times more to dispose of wasted water, at manure application time, than the initial cost of the water itself.

While we recognize many of these options may be undesirable, if drought conditions persist, livestock producers may be faced with increasingly difficult choices.



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Pork producers need to be aware of the importance of water and should have a plan in place that can be rapidly adopted in the event of a catastrophic failure of water supply. Producers should consider additional investments of infrastructure like wells or storage facilities. They should also be ready to put conservation plans in place to reduce average daily consumption. For more information, contact the lowa Pork Producers Association or check out the additional resources below.

Additional resources:

- National Pork Board www.pork.org/Resources
- Iowa State University Extension and Outreach www.extension.iastate.edu
- Iowa Department of Agriculture and Land Stewardship www.iowaagriculture.gov
- Iowa Governor's Office governor.iowa.gov/drought
- National Drought Mitigation Center drought.unl.edu
- Iowa Rural Water Association www.iowaruralwater.org