



Managing Drought Risk on the Ranch

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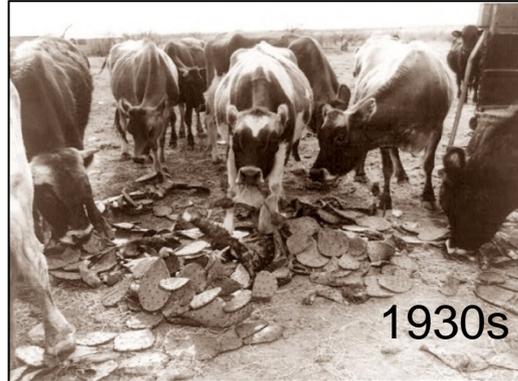


What we've heard so far

- Drought as a risk to be managed
- Importance of soil health during drought
- Range management practices that may help during drought
- Financial risk management practices to take before and during drought

Why Plan?

- We can't control whether or not it rains
- We can control what we do before drought, during drought, and in drought recovery



Farms wither

Wells dry, herds cut

JUN 23 1958
By Robert C. Bjorklund
Farm news

Lack of pasture, a shortage of hay, the increasing need to sell cattle and drying of wells is putting Wisconsin farm families to the test as they become more desperate with worsening drought conditions, the Governor's Drought Task Force reported Tuesday.

Peter Senn, state executive director of the Wisconsin Agricultural Stabilization and Conservation Committee, said farmers may not have any crops to harvest if these conditions persist.

"Farmers are cutting everything green but the trees," he said. "They are harvesting canary grass and marsh hay on marshland they haven't been able to put a tractor on in 30 years."

In Wood County in central Wisconsin, wells on five dairy farms have gone dry, and up to 5,000 gallons of water are being hauled to each farm for livestock.

John Kolpman, state humane officer, said the shipment of cattle to bring numbers in line with expected feed supplies had led to panic conditions among farmers in parts of Richland and Trempealeau counties.

Normally, feed supplies would be at their seasonal peak in late June, but this year county Agricultural Stabilization and Conservation Service offices reported that farmers in four counties would be out of feed in July.

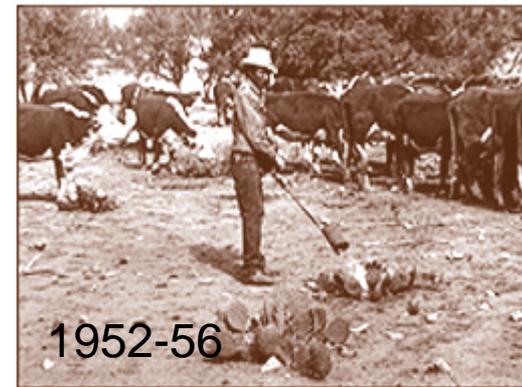
An ASCS survey showed feed supplies would be depleted in August in 11 counties, in September in 29 counties, in October in four counties and in November in 16 counties. Only two counties had enough feed to last farmers through February.

The task force met to prepare a set of drought assistance recommendations that Gov. Tommy Thompson will take to Chicago for Thursday's meeting of the National Governors Association Agriculture Committee. The committee will meet with U.S. Secretary of Agriculture Earl Butts.

One of the recommendations is a 30-day authority to allow the state to divert water from rivers, streams or lakes, has resulted in 412 permits being granted, Robert Boden, of the state Department of Natural Resources, reported.

- There are possible drought winners/3A
- Heat won't let rainfall soak in/3A
- Hay harvests are approved/3A
- Area fireworks are jeopardized/1B
- How some people beat the heat/1B

1988-89

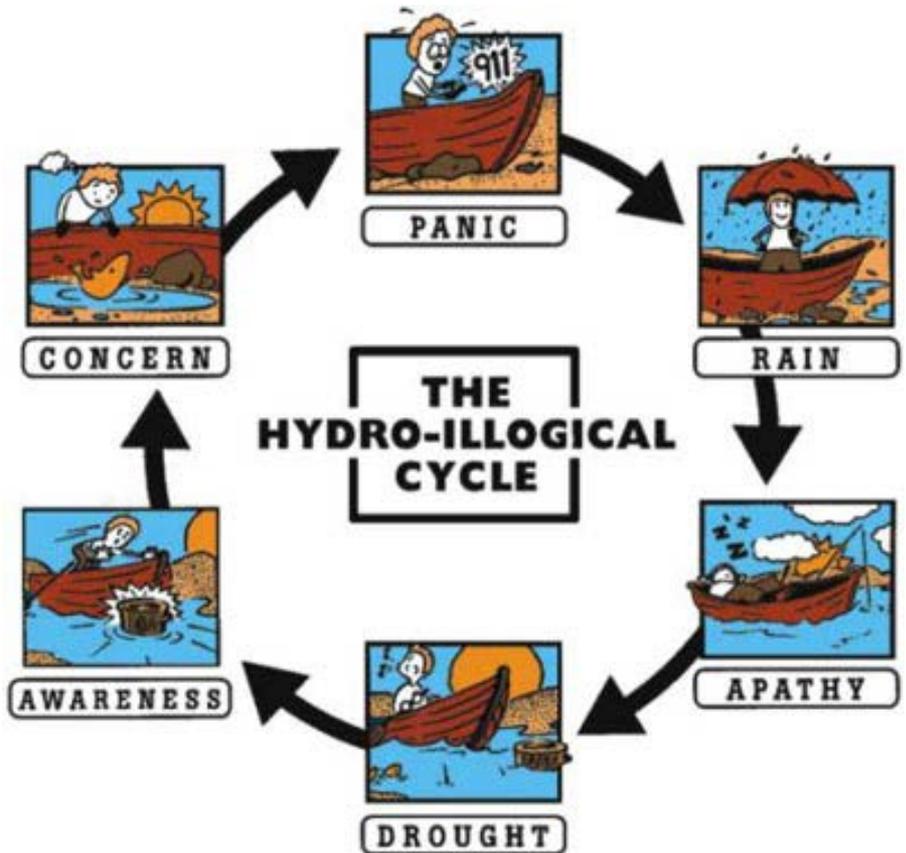


Baylor University, Texas Collection

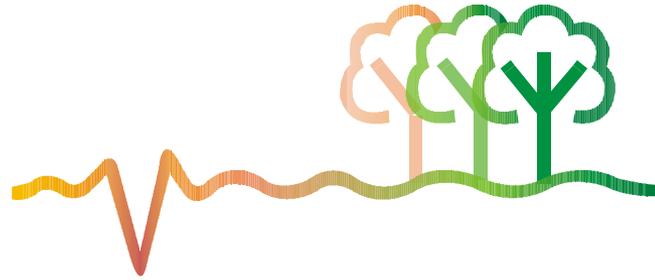


Why Plan?

- When it's raining, it's hard to remember what it's like when it's dry
- When it's dry, a sense of panic might keep us from making the best decisions



National Drought Mitigation Center



Mission: To lessen societal vulnerability to drought by promoting planning and the adoption of appropriate risk management techniques.

www.drought.unl.edu

Wednesday, October 28, 2015

National Drought Mitigation Center

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- [Current info via the Drought Impact Reporter RSS feed](#)
- [Drought Headlines](#)
- [Recently updated state drought pages](#)
- [Comprehensive list of resources, by state, via a drill-down map](#)

NDMC News

Sept. 2015 Drought & Impact Summary: Southeast improves, South dries out and West stays dry

Oct 13, 2015

September brought improvements to the Southeast, but the South got drier. The long-term drought in the West continued unabated, but with a glimmer of hope based on the forecast for a mega-El Nino this winter. Western wildfires were particularly destructive and intense in September. Californians exceeded state-set conservation targets in September and the state unveiled a new system for tracking dry domestic wells. [Read the full report.](#)

South Korea delegation learns about drought

Oct 5, 2015

Play Slideshow

Drought Risk Atlas

Home | Map Viewer | Data | Methodology | About | Help

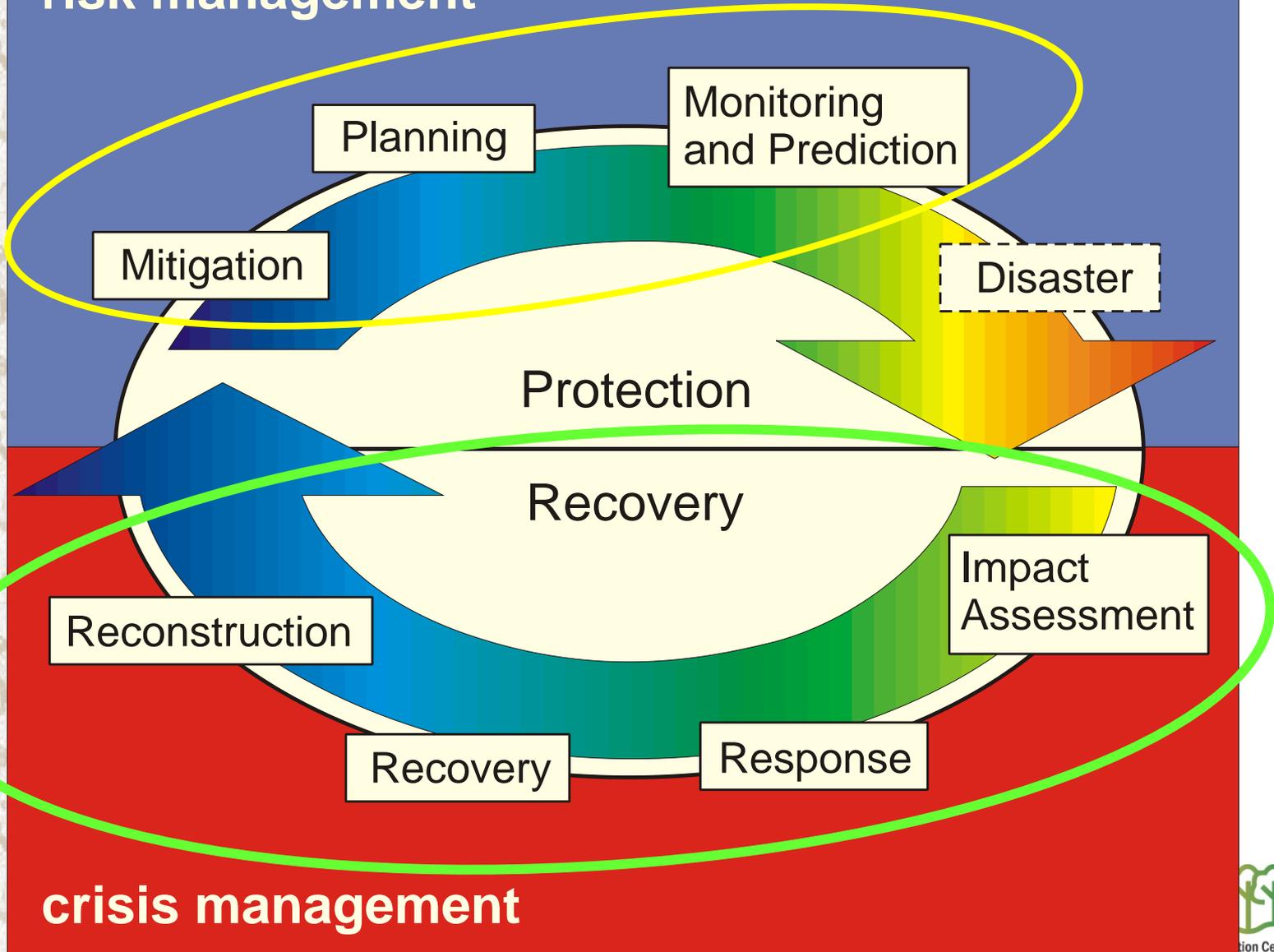
Map Viewer

Drought Risk Atlas

The Drought Risk Atlas provides drought data and visualizations for more than 3,000 climate stations across the U.S. through 2012 for at least 40 and in some cases more than 100 years.

The Cycle of Disaster Management

risk management



crisis management

How do Ranchers Plan for Drought?



- Daybreak Ranch
- Reed-Hamilton Ranch
- Tippets-Myers Ranch
- Shamrock Ranch
- Adams Ranch
- Alexander Ranch
- Welch Ranch
- Johnson Ranch



2012

Managing Drought Risk on the Ranch

A Planning Guide for Great Plains Ranchers



University of Nebraska - Lincoln
National Drought Mitigation
Center



Available Online at:
www.drought.unl.edu/ranchplan



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This guide to help rangeland managers better prepare for and manage drought is a project of the National Drought Mitigation Center (NDMC) at the University of Nebraska-Lincoln (UNL) and other collaborators at UNL, South Dakota State University, and Texas A&M Kingsville. This project was made possible through funding from the U.S. Department of Agriculture Risk Management Agency.

Much of the content of this handbook and the companion website was developed with information provided by Dr. Pat Reece, Professor Emeritus at UNL and now owner/consultant with Prairie Montarie Enterprises, LLC.

The handbook and website were developed by, and will be maintained by, the National Drought Mitigation Center. Comments and questions about the handbook and website can be directed to the NDMC at ranch_ndmc@unl.edu or 402-472-6781.

<http://drought.unl.edu/ranchplan>

WORKSHEET 4: CRITICAL DATES AND TARGET CONDITIONS

Date _____ Form Completed by _____

Critical dates are timely monitoring points in annual management cycles. Current and predicted forage resources are the primary focus of critical dates.

Each critical date should have an action plan that clearly states target points for initiating the plan.

Target points may be based on carrying capacity of current forage or a percentage of average precipitation, i.e., 75%.

See "Identify Critical Dates and Targets" at <http://www.drought.unl.edu/ranchplan> for suggested critical dates by region.



CRITICAL DATE	TARGET CONDITION

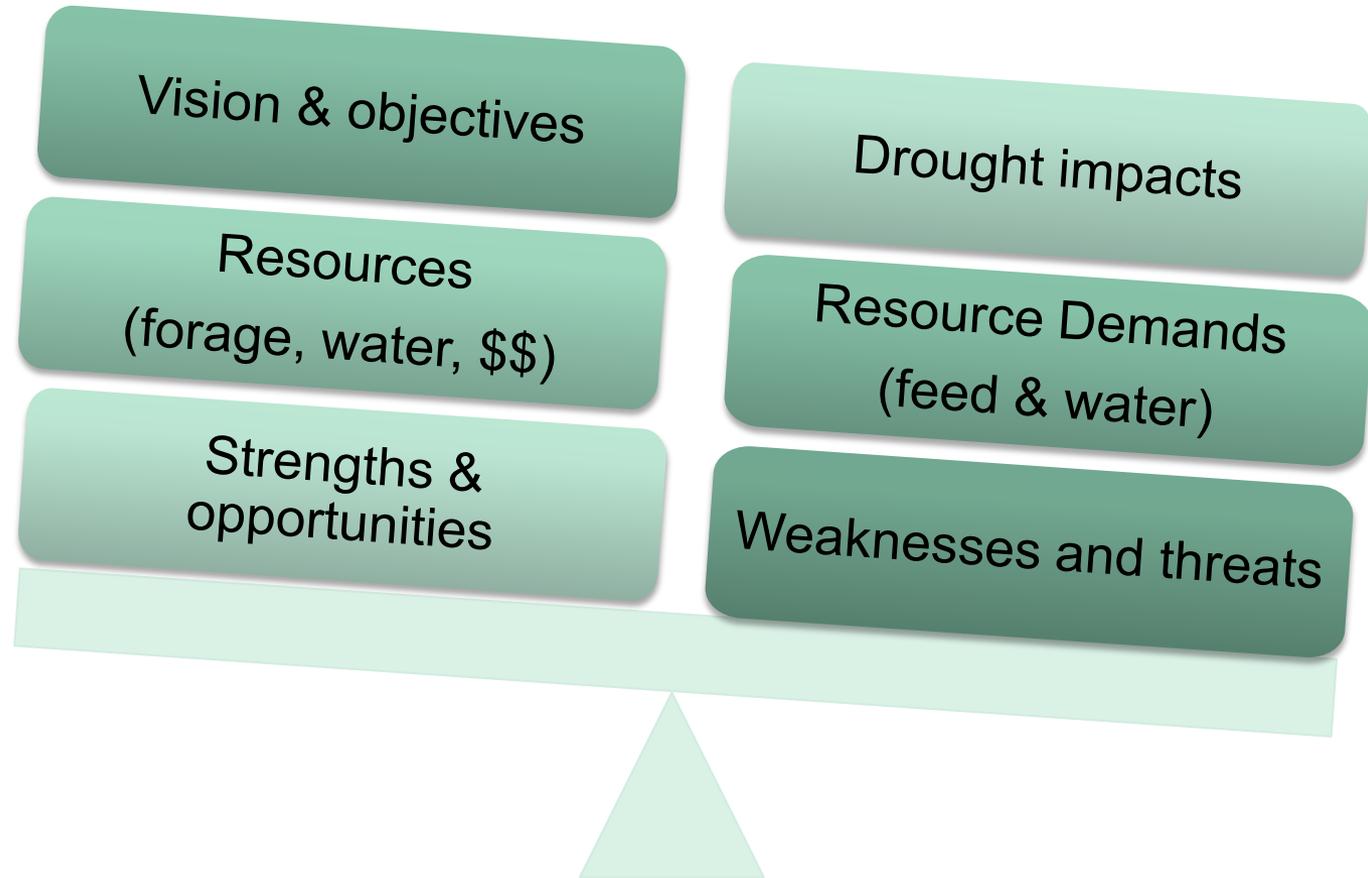
WORKSHEET 7: EVALUATE MANAGEMENT STRATEGIES DURING DROUGHT

Date _____ Form Completed by _____

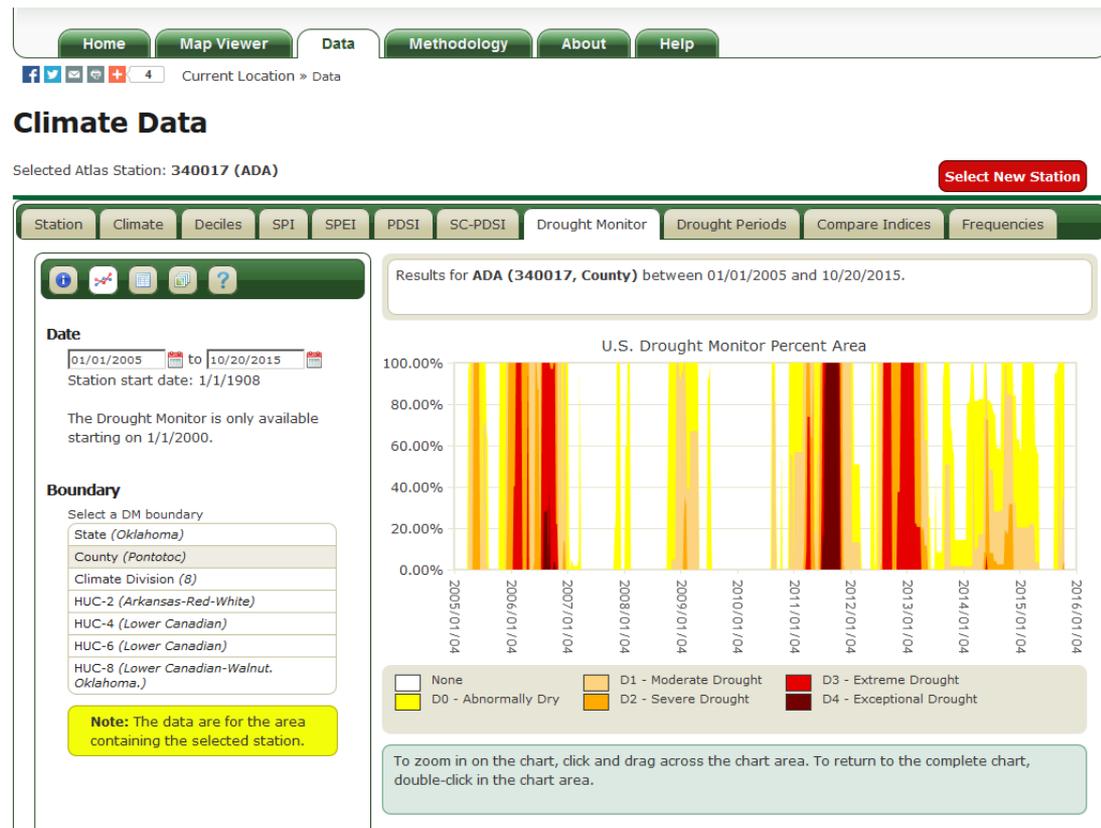
DROUGHT STRATEGIES	IS IT FEASIBLE?	WILL IT HAVE AN IMPACT?	WILL BENEFITS OUTWEIGH COSTS?	TO CONSIDER?
FORAGE SAVING STRATEGIES				
FINDING ALTERNATIVE FEEDS & FORAGES				
FINANCIAL STRATEGIES				
FAMILY & PEOPLE STRATEGIES				
OTHER				

<http://drought.unl.edu/ranchplan>

Plan is built on understanding of ranch's...



Inventory and Monitor – Know what you're working with



U.S. Drought Monitor

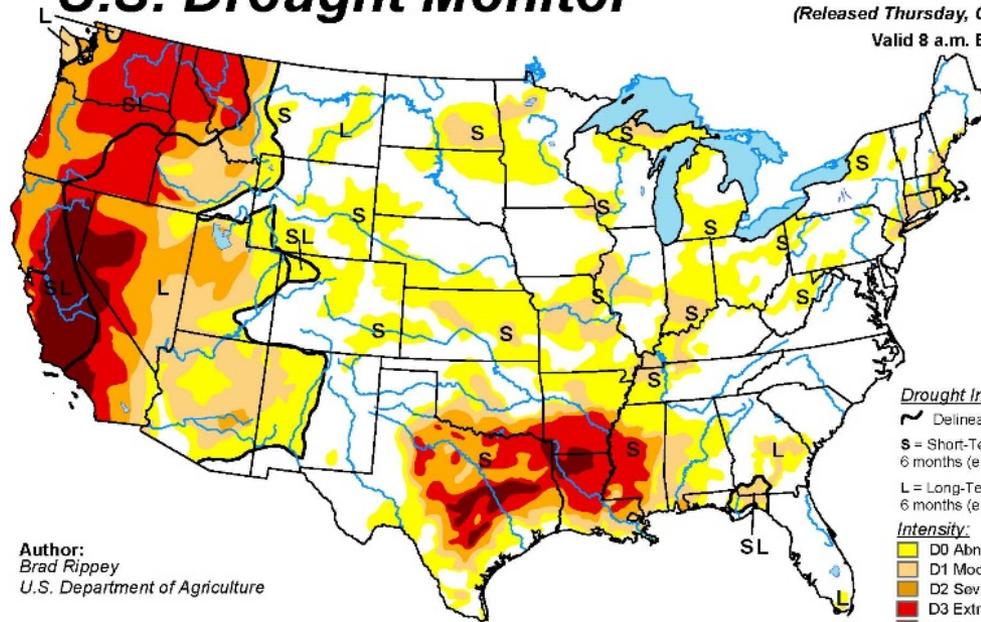
www.droughtmonitor.unl.edu

U.S. Drought Monitor

October 20, 2015

(Released Thursday, Oct. 22, 2015)

Valid 8 a.m. EDT



Author:
Brad Rippey
U.S. Department of Agriculture

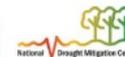
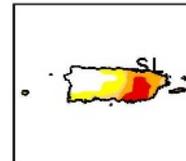
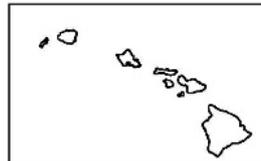
Drought Impact Types:

- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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



<http://droughtmonitor.unl.edu/>

Monitoring Tools

Vegetation Drought Response Index

Home Change Maps Time-Series Archive Experimental Products Outreach Evaluation FAQ Comments

Home > State VegDRI Login

Vegetation Drought Response Index for Oklahoma

Select map type:

Download: [PNG](#) [PDF](#) [JPG](#)

Vegetation Drought Response Index
Rangelands: Oklahoma
October 19, 2015

Vegetation Condition

- Extreme Drought
- Severe Drought
- Moderate Drought
- Pre-drought stress
- Near Normal
- Unusually Moist
- Very Moist
- Extreme Moist
- Out of Season
- Water
- Other Landcover

Reference Map
(Click a region to zoom in further.)

Return to the 48 State map State Statistics

The National Drought Mitigation Center | 3310 Holdrege Street | P.O. Box 830988
Lincoln, NE 68583-0988 | phone: (402) 472-6707 | fax: (402) 472-2946 | [Contact Us](#)

National Drought Mitigation Center USGS science for a changing world HIGH PLAINS WATER CLIMATE RMA

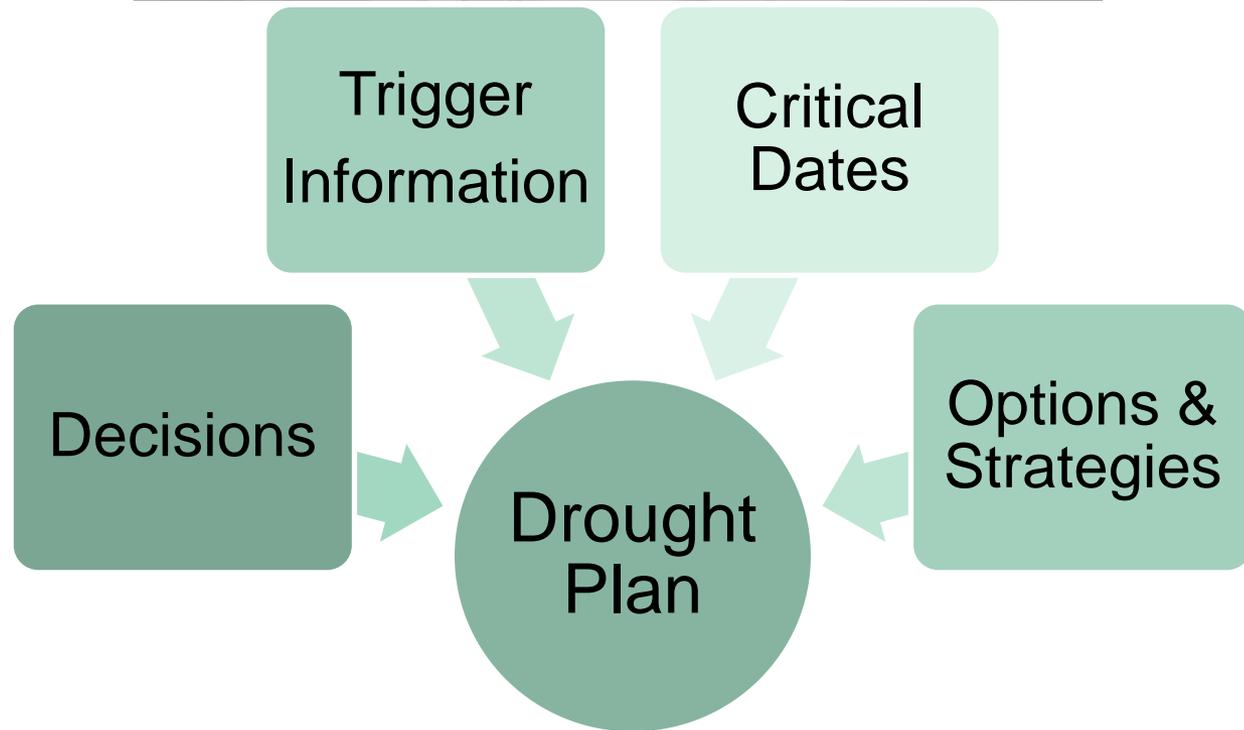
Building Resilience



- Maximize health of resources
- Build flexibility into operation
 - “We build enough in the good years that we can stand a two-year drought....In the good years we build lots of reserve. In the drought years we take off...”
- Ongoing monitoring



Developing a Drought Plan



Write it down!

“I think it’s real important to have that discipline, and writing it out is probably as good a way as any to get that discipline.”

CRITICAL DATES

AVERAGE ANNUAL RAINFALL- 21 inches/year.
CRITICAL DATES- April 1, June 15, August 15, & Nov 1

April 1

- End of the winter dormant season and the beginning of the growing season for warm season grasses
- < 4” of moisture during the winter dormant season (killing frost or Nov 1 till April 1) No prescribed burns should be conducted.
- Plan to increase the length of rest periods earlier than usual.

June 15

- About half of the forage is produced by June 15
- 75%(15.75”) of the annual average rainfall is received between Nov 1 & June 15
- If the rainfall is <80% (12.60”) of the 75% (15.75”) then the stocking rate should be decreased 30% by weight. (Finish culling herd C)
- If the rainfall is < 60%(6.30”) of the 75%(15.75”) then the stocking rate should be decreased 40-50% by weight (Cull herd B deep)
- The 3 weeks following June 15th is very critical. By July 15 the destocking should be completed.
- Rest periods should be as long as possible by June 1 if any indicator of a drought is present.
- Graze periods should be as long as possible to allow the other paddocks to rest for as long as possible.

August 15

- About 90% of the annual forage has been produced. Warm season grasses are preparing for next year growing season. Rest between now & frost will benefit next year’s grass production.
- Length of grazing season-Based on the rainfall in July & August
- If rainfall is <70% (1.50”) of the average 5” during July & August end herd C grazing by Sept 1(Cull Deep)

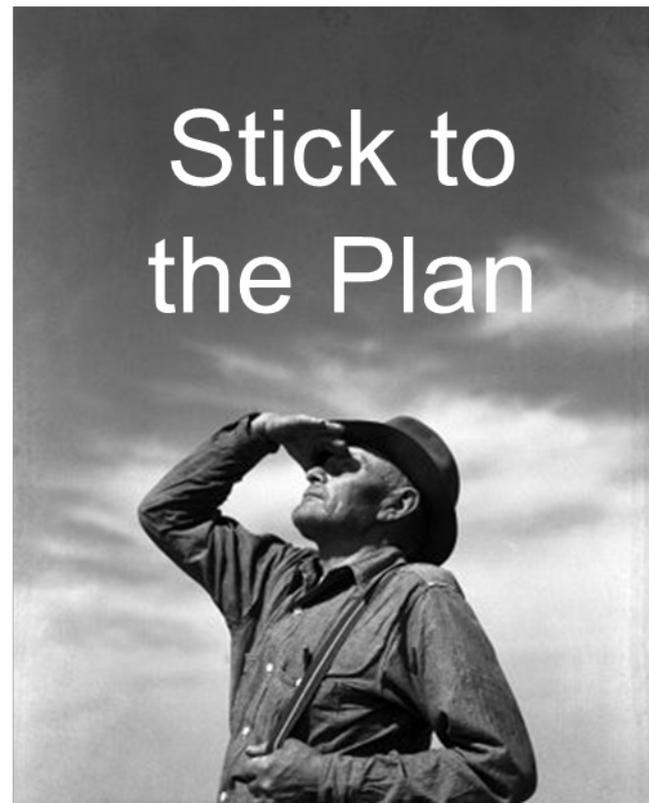
November 1

- End of the growing season and the beginning of the winter drought(drought season)
- < 80%(16.80”) of the 21” average annual precipitation would indicate the beginning of a drought for the next growing season unless the winter is exceptionally wet

“...your first loss is your least loss.
**You’ve got to make the
decision.”**

“I’ve never known I’m going into a drought...so what you’ve got to do is you’ve got to say, for my present, current conditions, how do I need to adjust my stocking rate. ...**And I think that’s a mindset that’s important, because like I say, every time you get a little shower during a drought, that gives you false hope if you’re not careful.”**

Stick to
the Plan





NDMC'S RANCH DROUGHT PLANNING RESOURCES



[Overview](#)

[Drought Basics](#)

[Inventory & Monitor](#)

[Before Drought](#)

[During Drought](#)

[After Drought](#)

[Write a Plan](#)



Managing Drought Risk on the Ranch

[Home](#) > [Overview](#)

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Managing Drought Risk on the Ranch

Drought is a normal part of climate...it will happen again. Fortunately, there are things you can do before, during, and after drought to reduce your risk. Ranchers are increasingly implementing new ways to better prepare for and respond to drought.

The information, strategies and resources on this site are designed to provide livestock producers in the [Great Plains region](#) with information on how to incorporate management strategies to reduce the threat drought poses to livestock and forage operations.

[Download "Managing Drought Risk on the Ranch" Handbook](#)

Managing Drought Risk on the Ranch: Great Plains Examples

South Dakota



[Daybreak Ranch](#)
(Central)

Nebraska



[Tippets-Myers Ranch](#)
(Western Sandhills)
[Reed Hamilton Ranch](#)
(Sandhills)
[Shamrock Ranch](#)
(Southwestern)

Kansas



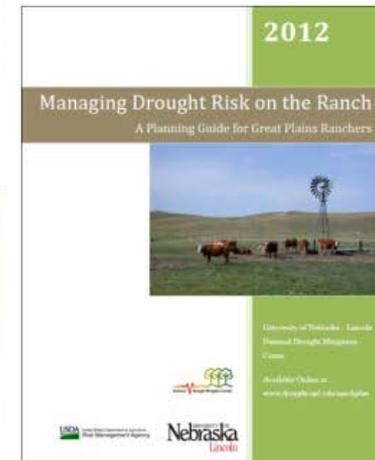
[Alexander Ranch](#)
(South Central)
[Adams Ranch](#)
(North Central)

Colorado

[Welch Ranch](#)
(Southern)

Texas

[Johnson Ranch](#)
(West Central)



[How to use this site](#)

Drought Conditions

[U.S. Drought Monitor](#)

[Water Year Precipitation \(Oct. 1st to present\)](#)



Managing Drought Risk on the Ranch

Write a Plan > Sample Drought Plans

Login

Sample Drought Plans

These sample drought plans have been contibuted by ranchers, consultants, and advisors throughout the Great Plains. They range from very simple to quite detailed. While they do not all follow the planning methods suggested here, they may help you decide what sort of plan is needed for your ranch operation.

A key point to remember with any planning process is the old saying, "garbage in - garbage out." The better job you do collecting information about your operation and evaluating your options before, during, and after drought, the better the results of your plan will be.

Sample Plans

South Dakota

[Central South Dakota - Daybreak Ranch](#)

Nebraska

[Southwest Nebraska - Shamrock Ranch](#)

[Western Nebraska Sandhills - Tippets-Myers Ranch](#)

[Nebraska Sandhills - Reed Hamilton Ranch](#)

Kansas

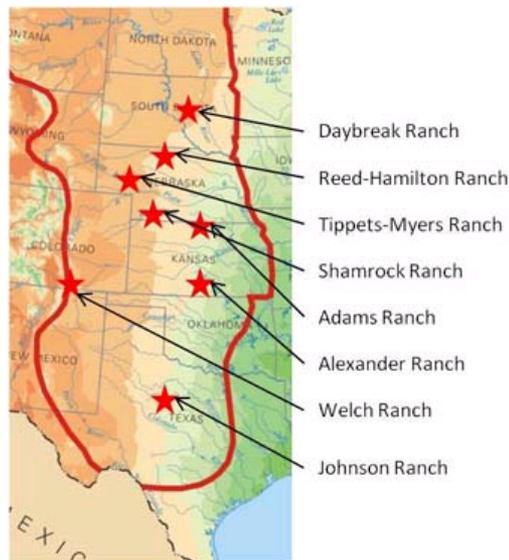
[South-Central Kansas - Alexander Ranch](#)

[North-Central Kansas - Adams Ranch](#)

Colorado

[Southern Colorado Case Study - Welch Ranch](#)

Texas



Content: Sample Plans

[Central South Dakota - Daybreak Ranch](#)

[Nebraska Sandhills - Reed Hamilton Ranch](#)

[Nebraska Sandhills - Tippets-Myers Ranch](#)

[Southwest Nebraska - Shamrock Ranch](#)

[North Central Kansas - Adams Ranch](#)

[South Central Kansas - Alexander Ranch](#)

[Southern Colorado - Welch Ranch](#)

[West Texas - Johnson Ranch](#)

Related Pages

Steps to Writing a Drought Plan:

1. [Form Planning Team](#)
2. [Set Goals/Strategic Objectives](#)
3. [Inventory](#)
4. [Identify Critical Dates and Targets](#)
5. [Develop Monitoring Plan](#)
6. [Develop Strategies](#)
7. [Implement and Monitor Plan](#)



Managing Drought Risk on the Ranch

Home > Write a Plan > Sample Drought Plans > South Central Kansas - Alexander Ranch

Login

Sample Drought Plan - South Central Kansas

Goals/Strategic Objectives

The declaration of purpose for the Alexander Ranch is to manage all integrated resources in order to maximize the production of protein, shape a harmonious existence with nature and maintain economic viability.

The strategic plan and goals for the Alexander Ranch include:

1. Regenerating the range while utilizing the optimum percent of forage grown.
2. Improve the quality and quantity of the water cycle, mineral cycle, and energy flow.
3. Maximize the forage utilization and flexibility.
4. "Ancora Imparo"(I am still learning) Continue the management education process.



Ted Alexander and son Brian

Operation

Seasonal custom grazing with cows and calves, no haying, no tractor

Inventory

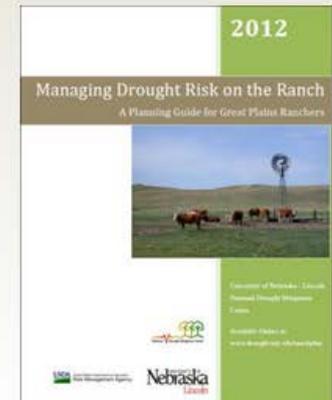
- Annual Rainfall - 18-22 inches per year
- Native mixed-grass prairie

Critical Dates

Write a Plan for Drought

Drought is a normal part of climate...it will happen again. Fortunately, there are things you can do before, during, and after drought to reduce your risk. [Learn more...](#)

Download "Managing Drought Risk on the Ranch" Handbook



NDMC YouTube Channel



National Drought Mitigation Center

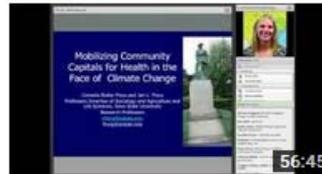
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learn more at <http://drought.gov> and <http://drought.unl.edu>



NIDIS Engaging Preparedness Webinar on Climate and Health Using the Community Capitals Framework

by National Drought Mitigation Center

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The National Integrated Drought Information System's Engaging Preparedness Communities Working Group hosted this drought...



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<http://drought.unl.edu/ranchplan>



Planning for a Drought - Ted Alexander

by National Drought Mitigation Center

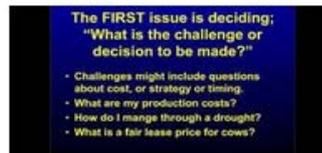
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Ted Alexander, owner of Alexander Ranch in south-central Kansas, describes his ranch operation and the ways that ...



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Economic Factors to Weigh in Making Decisions during Drought, Matt Stockton, UNL

by National Drought Mitigation Center

4 months ago • 3 views

Matt Stockton, Agricultural Economist at the West Central Research and Extension Center in North Platte, Nebraska

Thank you!

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