A landscape photograph showing a wide, dry riverbed in the foreground, filled with light-colored sand and gravel. The riverbed curves from the bottom left towards the center. In the middle ground, there is a field of bright yellow wildflowers. The background features rolling hills and mountains under a blue sky with scattered white clouds. The overall scene suggests a dry, semi-arid environment.

Setting the Stage:

Drought Tools Overview

Woodland, California

February 26, 2009

Mark Svoboda, Climatologist
Monitoring Program Area Leader

National Drought Mitigation Center
School of Natural Resources
University of Nebraska-Lincoln

Photo: San Luis Obispo County, CA (March 2008)
Craig Dremann, Redwood City, CA

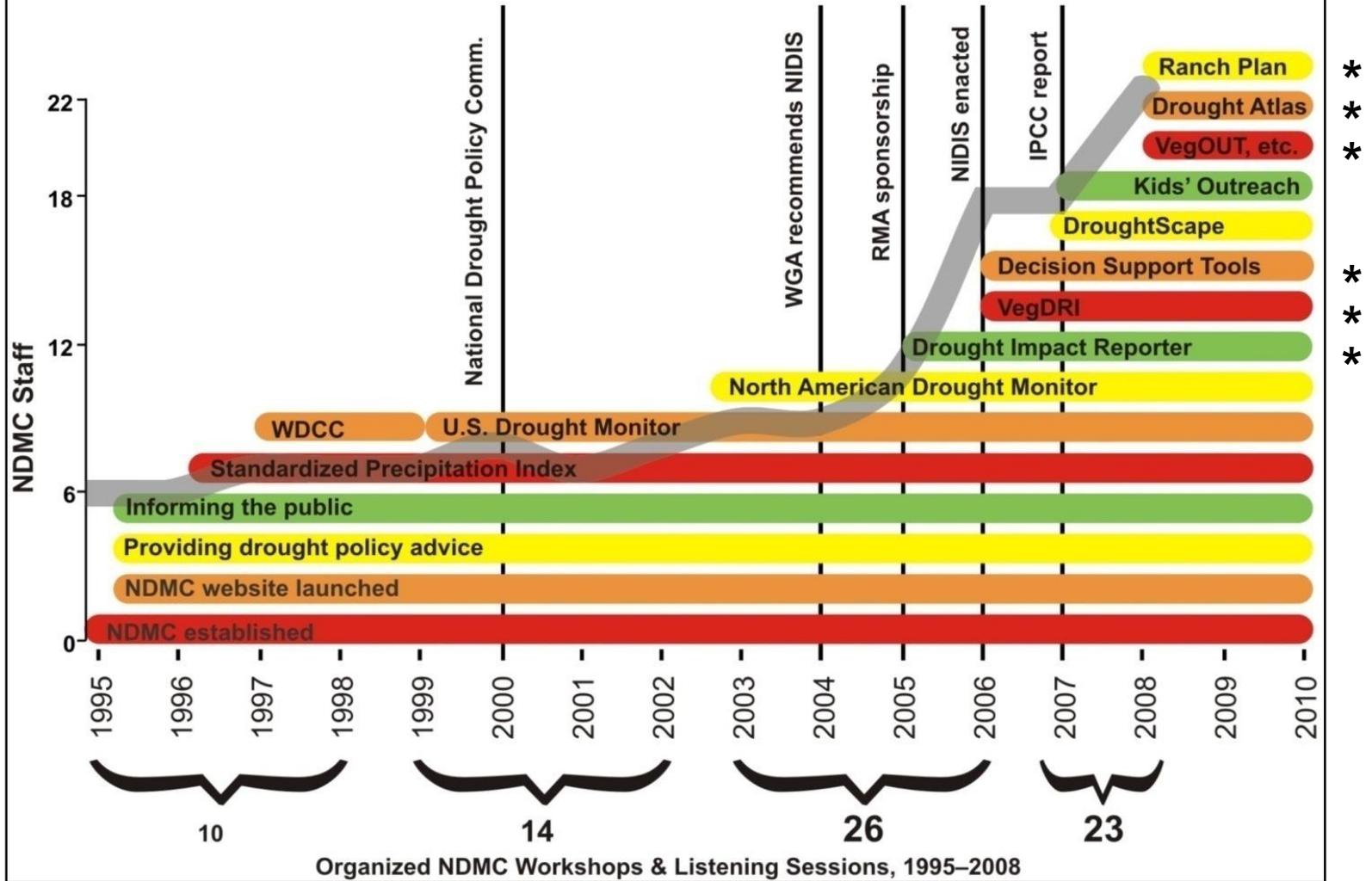
National Drought Mitigation Center



Founded: 1995 at the University of Nebraska-Lincoln

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

NDMC Products & Activities



* RMA supported projects developing drought tools for agricultural producers.

What are we doing here?

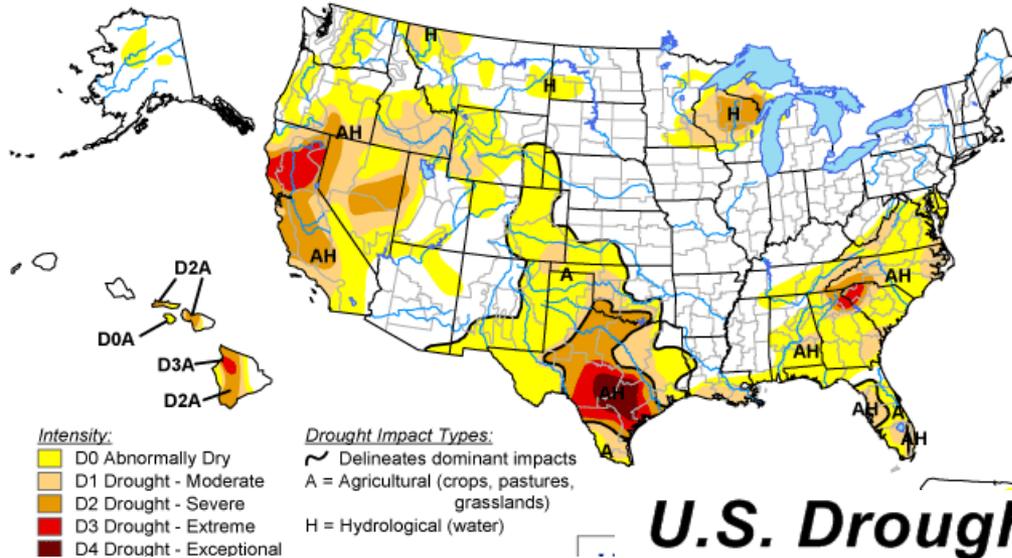


- Funding from **USDA-Risk Management Agency**
- NDMC **partnership** w/ UNL's Computer Science and Engineering Department
- How can we get **feedback** on our tool development to help better them and our nation's assessment capacity
- **NOT** a substitute for telling locals what you already know!
 - Relevant ties to policy at various levels
 - Uses by decision makers that may have a local impact
 - Uses for assessing drought in other market regions

U.S. Drought Monitor

February 17, 2009

Valid 8 a.m. EST

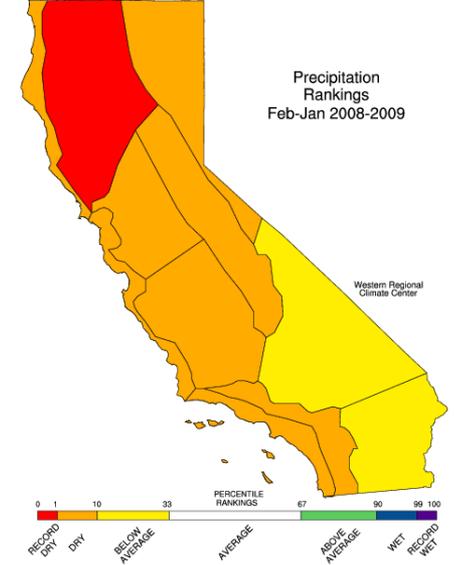


Intensity:

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

Drought Impact Types:

- Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)



Precipitation Rankings
Feb-Jan 2008-2009

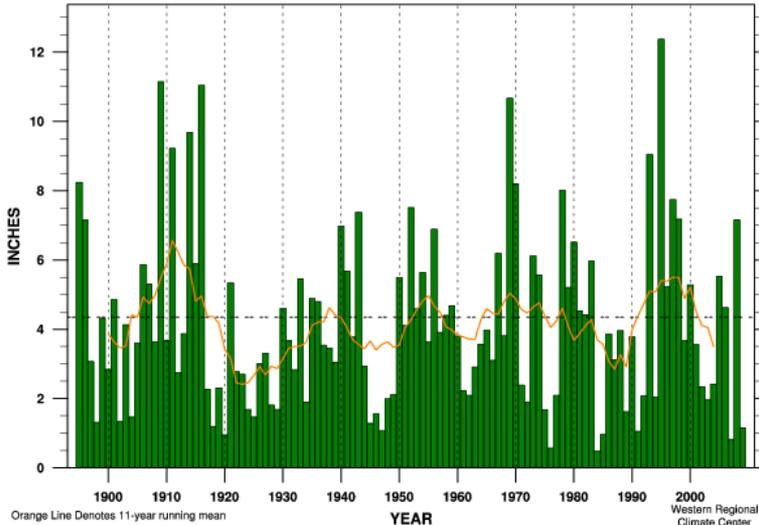
Western Regional
Climate Center

U.S. Drought Monitor

California

February 17, 2009
Valid 7 a.m. EST

California Statewide Precipitation January



Orange Line Denotes 11-year running mean

Western Regional
Climate Center

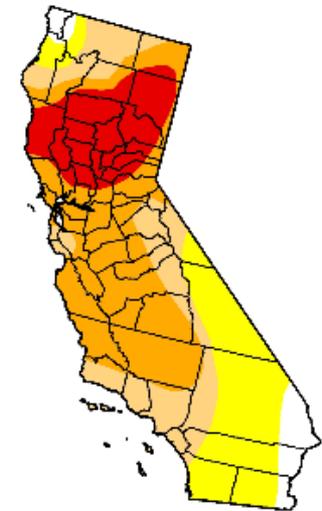
Linear Trend 1895-present	- 0.09 ± 1.39 in.	(- 2 ± 31%) per 100 yr
Linear Trend 1949-present	- 0.80 ± 3.64 in.	(- 18 ± 83%) per 100 yr
Linear Trend 1975-present	+ 1.58 ± 9.45 in.	(+ 36 ± 217%) per 100 yr
Wettest Year	12.37 in. (284%) in 1995	MEAN 4.35 in.
Driest Year	0.48 in. (11%) in 1984	STDEV 2.47 in.
January 2009	1.15 in. (26%)	RANK 8 of 115

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	5.2	94.8	70.7	50.1	16.7	0.0
Last Week (02/10/2009 map)	0.9	99.1	78.8	54.7	19.0	0.0
3 Months Ago (11/25/2008 map)	4.7	95.3	86.0	41.3	0.0	0.0
Start of Calendar Year (01/06/2009 map)	1.7	98.3	88.2	41.3	2.8	0.0
Start of Water Year (10/07/2008 map)	0.0	100.0	95.9	55.0	0.0	0.0
One Year Ago (02/19/2008 map)	18.3	81.7	37.5	14.1	0.0	0.0

Intensity:

- D0 Abnormally Dry
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- D4 Drought - Exceptional



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

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

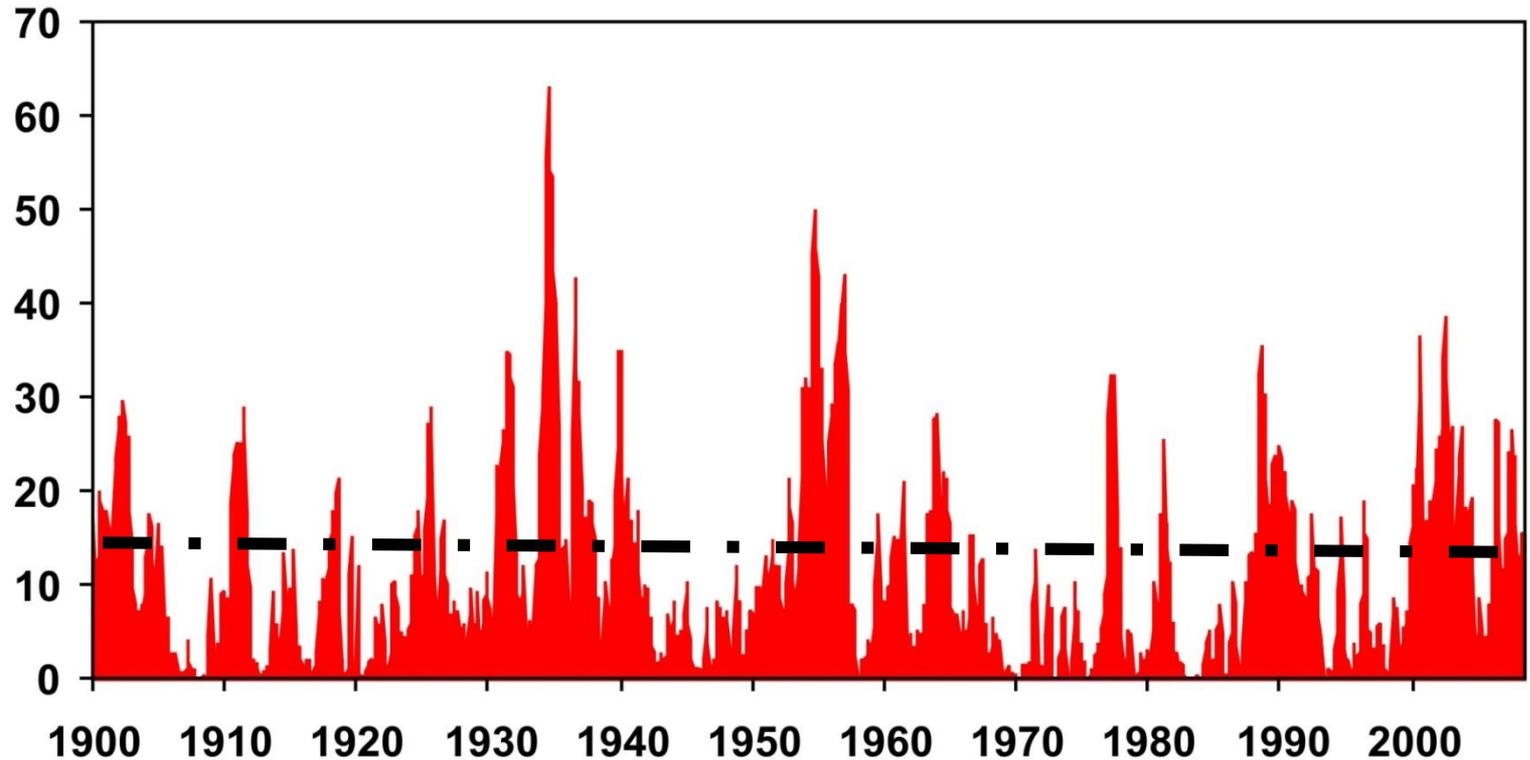


Released Thursday, February 19, 2009

Author: David Miskus, JAWF/GPC/NOAA

Percent Area of the United States in Severe and Extreme Drought

January 1895–July 2008



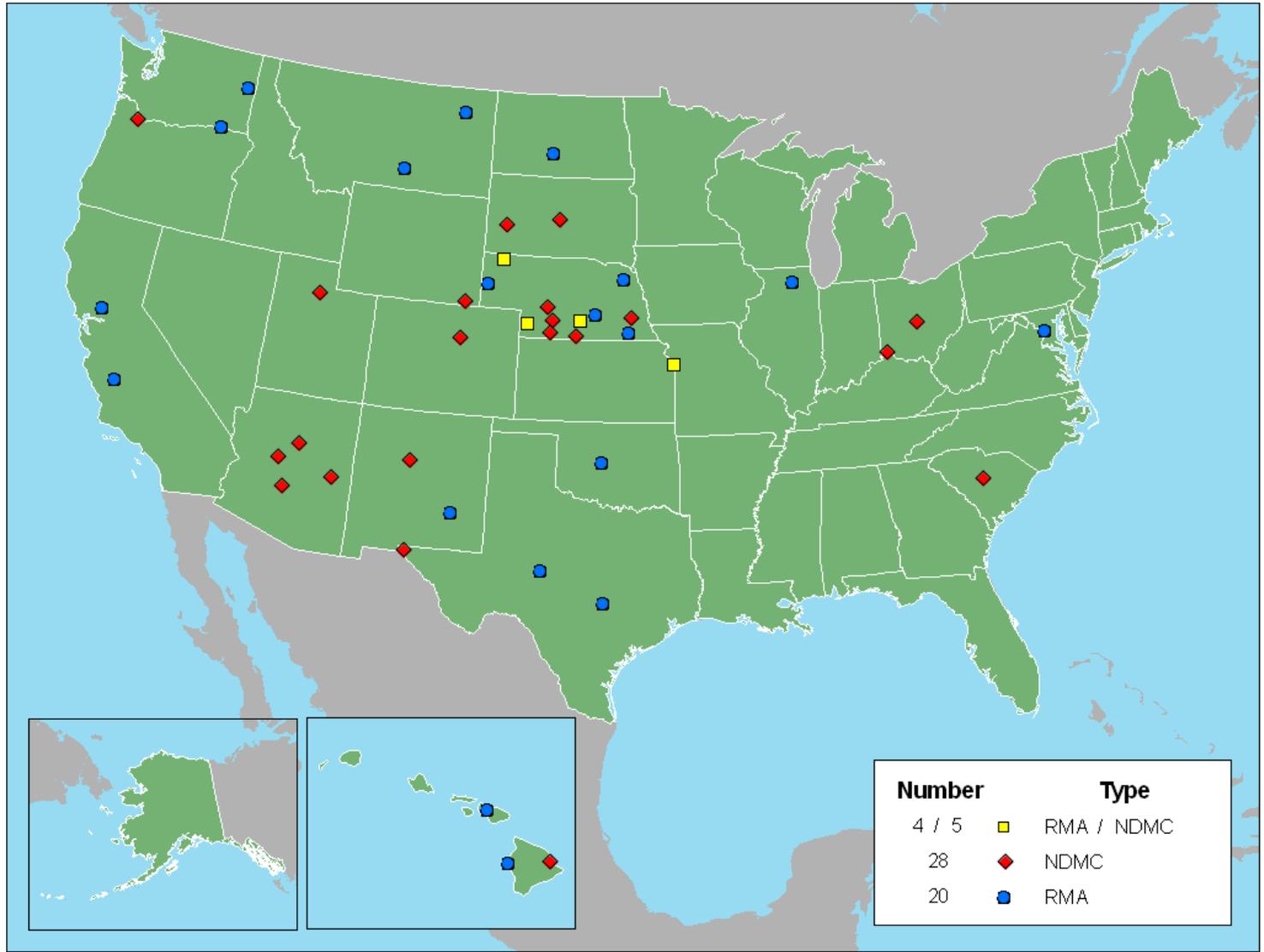
Based on data from the National Climatic Data Center/NOAA

Workshops on Drought Management Tools

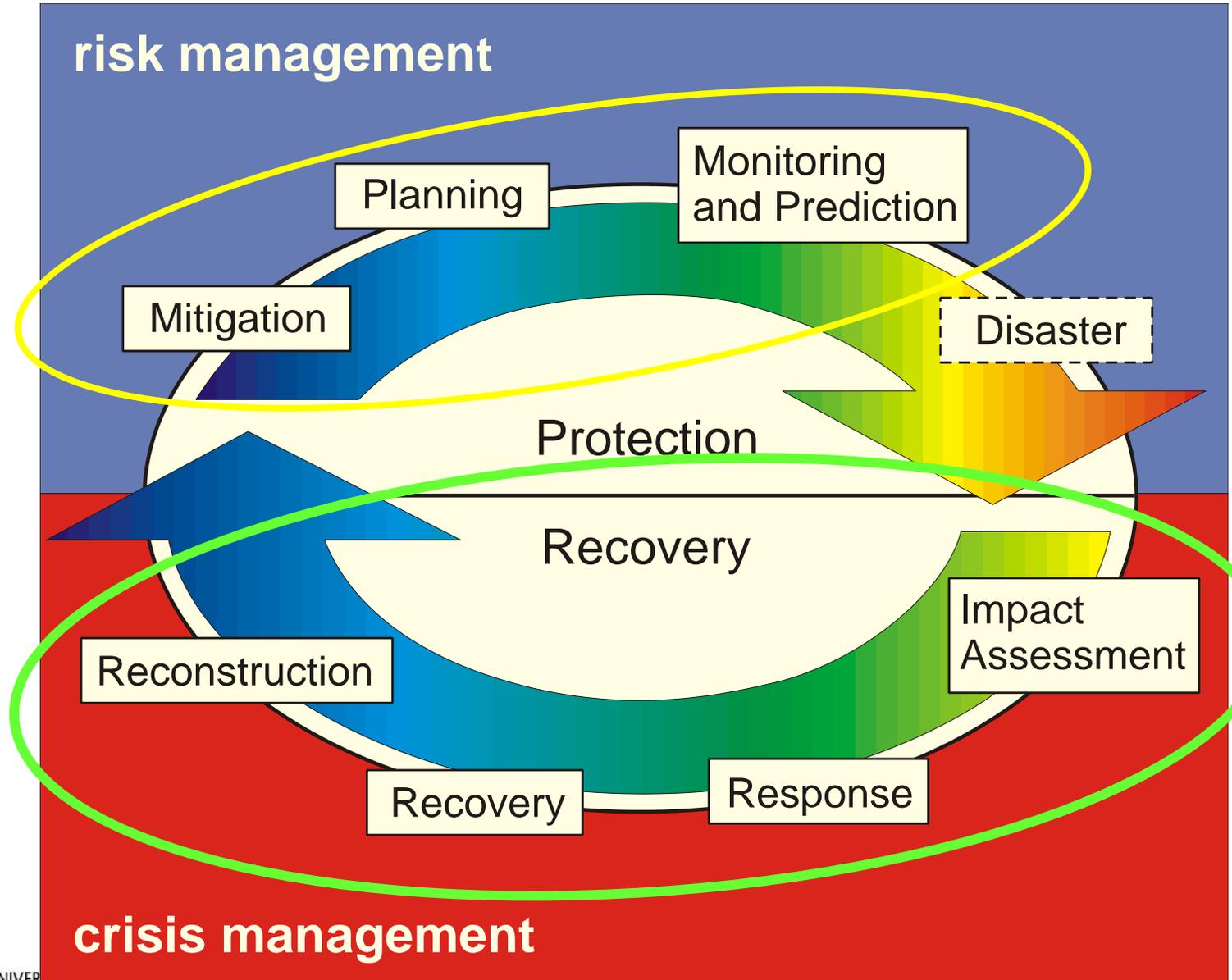


- Provide producers and advisors with easy-to-use tools and data to better understand the linkages between local climate and agricultural production
- Obtain feedback on what information or tools are needed to better understand these linkages
 - Multiple feedback approaches
- Effectively plan and prepare for drought

NDMC Stakeholder Workshops 1996-2009



The Cycle of Disaster Management



Lessons Learned



- Drought is not just a physical event
 - Vulnerability plays a major role
 - Vulnerability is dependent upon society
 - Vulnerability is dynamic

Lessons Learned



- Drought is not just a physical event
- “Wait and see” is a natural reaction
 - Can suppress timely responses
 - Need a plan in place...with triggers/thresholds

Lessons Learned



- Drought is not just a physical event
- “Wait and see” is a natural reaction
- Communication is critical
 - Overcome fears
 - Who’s accountable for doing what.....and when?
 - Essential for public support and buy-in

Lessons Learned



- Drought is not just a physical event
- “Wait and see” is a natural reaction
- Communication is critical
- Planning ahead is a good investment of resources

Acknowledgements

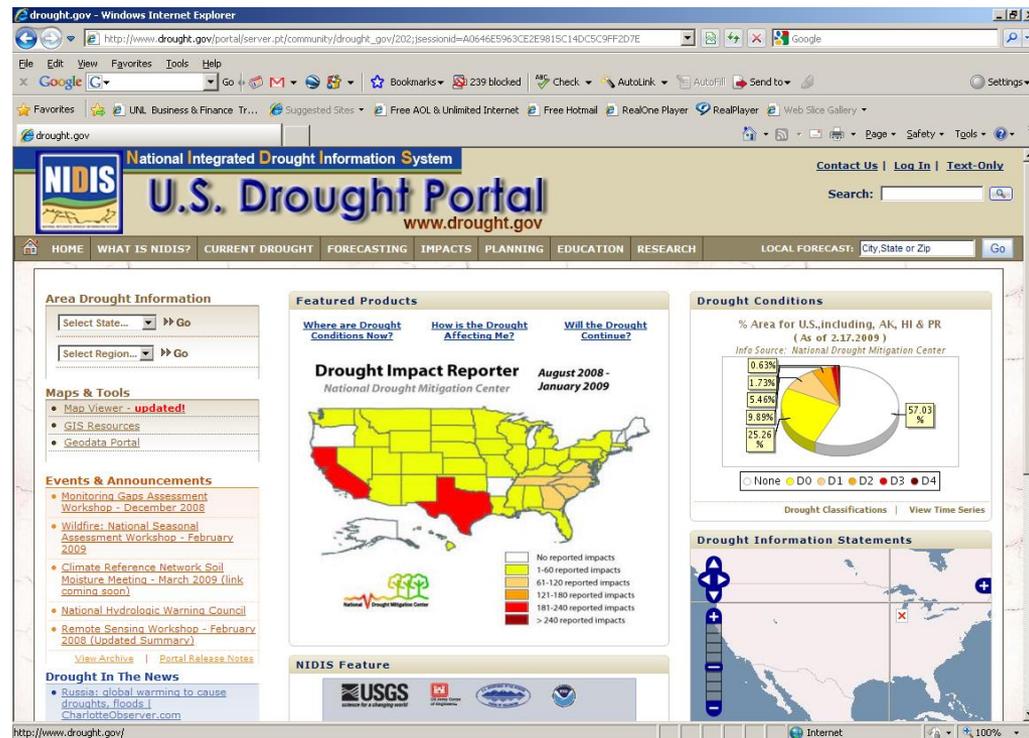


- UC-Davis (Melvin George)
- USDA-RMA Regional Office (Bob Smith)
- Brian Wardlow/Nicole Wall/Ann Fiedler (+ NDMC)
- Heidrick Ag Center staff and catering
- Most of all, you all for being here!!

Acknowledgements



- National Integrated Drought Information System (NIDIS) Program Office (Roger Pulwarty)
- Robin Webb/Kelly Redmond





Thank You

Any Questions ?

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