Lessons Learned?
Recent Drought Risk Management Experiences in the U.S.

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Photo: Lake Travis in Texas
Jay Janner, Austin American-Statesman, April 24, 2009
The Cycle of Drought Risk Management

- Planning
- Monitoring and Prediction
- Mitigation
- Protection
- Recovery
- Impact Assessment
- Reconstruction
- Response

risk management

crisis management
Lessons Learned?

1. Drought is a normal part of climate across the United States
   Recent droughts provide opportunities to learn lessons and become better aware of risks
Percent Area of the United States in Severe and Extreme Drought

January 1895–February 2010

Based on data from the National Climatic Data Center/NOAA
Early Warning
Lessons Learned?

2. The U.S. Drought Monitor has been a catalyst for progress in drought monitoring.

U.S. Drought Monitor

March 16, 2010
Valid 7 a.m. EST

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, March 18, 2010
Author: Matthew Rosencrans, NOAA/NWS/NCEP/CPC
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, November 1, 2007
Author: Douglas Le Comte, CPC/NOAA
IN LAYMEN'S TERMS,
THERE ARE 23 FLUSHES
LEFT...
Planning

I’m sure glad the hole isn’t in our end . . .
3. Breaking the Hydro-Ilogical Cycle is hard.
THE HYDRO-ILLOGICAL CYCLE

CONCERN  →  PANIC  →  RAIN  →  APATHY  →  DROUGHT  →  AWARENESS  →  CONCERN
Characteristics of Crisis Management

- reactive, post-impact
- poorly coordinated
- untimely
- poorly targeted
- ineffective
- decreases self-reliance → greater vulnerability

The Hydro-Ilogical Cycle

- Concern
- Panic
- Rain
- Apathy
- Drought

Greater vulnerability
Mitigation
Lessons Learned?

4. Planning and mitigation reduces vulnerability, impacts, and the need for governmental intervention

A good investment
Increasing need for timely, reliable information such as climate/water supply assessments
Increasing need for higher resolution analysis for policy/decision support
and along comes . . .

**NIDIS**
California
Columbia River
Southeast
Montana
Colorado River Basin
Missouri
Oklahoma
Chesapeake Bay
The NIDIS U.S. Drought Portal

http://drought.gov
Lessons Learned?

5. Drought needs to be placed into the broader context of the issues surrounding water, sustainability, all natural hazards, and climate change.
If it is so easy, why is it so hard?
Annual Runoff for 2080-2099

IPCC 2007