

Drought-Ready Communities

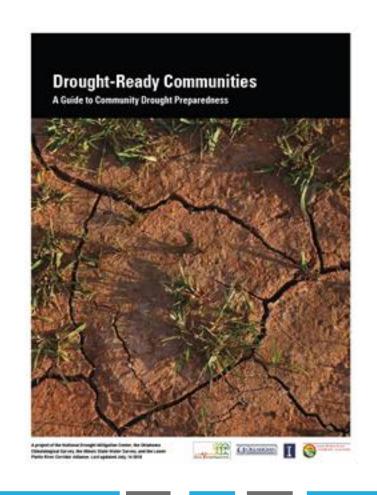
James R. Angel

Illinois State Water Survey,
Prairie Research Institute
University of Illinois, Urbana-Champaign



The Pilot project

- 2 years (June 2008-June 2010)
- Funded by NOAA's
 Climate Program
 Office, Sectoral
 Applications
 Research Program
 (SARP)





Research Team

- Mark Svoboda, National Drought Mitigation Center
- Melissa Widhalm, National Drought Mitigation Center,
- Kelly Helm Smith, National Drought Mitigation Center,
- Donna Woudenberg, National Drought Mitigation Center
- Cody Knutson, National Drought Mitigation Center
- Meghan Sittler, Lower Platte River Corridor Alliance
- Jim Angel, Illinois State Water Survey
- Mike Spinar, Midwestern Regional Climate Center
- Mark Shafer, Oklahoma Climatological Survey
- Renee McPherson, Oklahoma Climatological Survey
- Heather Lazrus, University of Oklahoma



Goals

 Develop a community-driven process for reducing vulnerability to drought

 Develop a "drought resources kit" of educational, public awareness, climatological, hydrological, planning and mitigation resources



The pilot Communities

- Nebraska City, Nebraska, pop. ~ 7,000
 - Wells draw from Missouri River
- Decatur, Illinois, pop. ~ 82,500
 - Surface water
- Norman, Oklahoma ~ 100,000 +
 - Surface and ground water





Drought Risk

Community Stakeholders 1. Getting Started Gathering 2.1110 4. Awareness and Education 5. Action Plan

Unique features

- Worksheets
 - Benefits of DroughtPlanning
 - Contact List
 - Perceptions of Drought
 - Available Water supplies
 - Top Water Users
 - Cost-Benefit Comparison
 - Linking Thresholds to Actions



Section 1: Getting Started

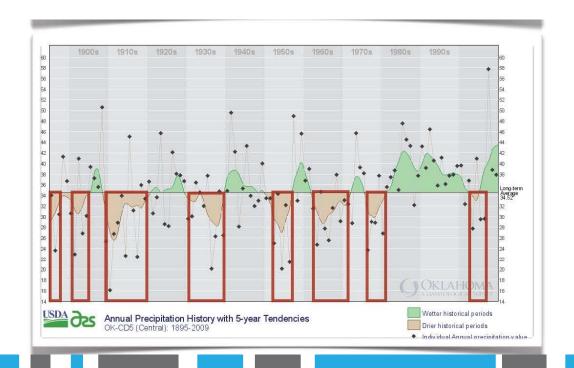
- Form a leadership team
- Identify stakeholders
- Start drought contact list
- Gather community drought perceptions





Section 2: Information gathering

- Identify water sources and uses
- Learn about past drought in community
- Gather data on water and climate





Section 2: Information gathering

- Worksheet 4: Available Water Supplies
 - Source
 - Pumping rates
 - Cost
 - Last year, 5 years ago, 10 years ago
 - Minimum usable level
 - Does drought affect water quality?



Section 3: Establish monitoring

- A list of drought indicators the community should regularly monitor including:
 - One large-scale climate indicator and
 - One locally generated indicator directly relevant to your community's water supply
- A list of drought impact indicators and who will report them



Section 4: Public Awareness & education

- A strategy and schedule for a public awareness and education campaign (longterm)
- Any presentations, pamphlets, templates for press releases, or other materials you have developed to publicize drought and response actions in your community (during drought)



Section 5: Drought response planning

- Determine possible strategies to take before and in response to drought.
- Linking thresholds to actions (examples from Decatur case study)
 - Impact: available water for industry and community
 - Indicator(s): lake level











Summary

- Proof of concept
- Community-driven
- Drought planning toolkit
- Need to work out details on the actual certification of a Drought Ready Community







Guide: Drought Ready Communities

http://drought.unl.edu/plan/DRC.htm

