

Kentucky Drought Mitigation and Response Plan



Prepared by the Energy and Environment Cabinet in partnership
with the Kentucky Drought Mitigation
and Response Advisory Council

In fulfillment of the directive of Senate Joint Resolution 109

December 31, 2008



Pursuant to Senate Joint Resolution 109

Developed by the Energy
and Environment Cabinet
and the “Kentucky Drought
Mitigation and Response
Advisory Council”

“Coordination and synergy
between state agencies has not
been absent, but generally
implemented on an ad hoc
basis in later stages of drought
with a “crisis management
motive”.



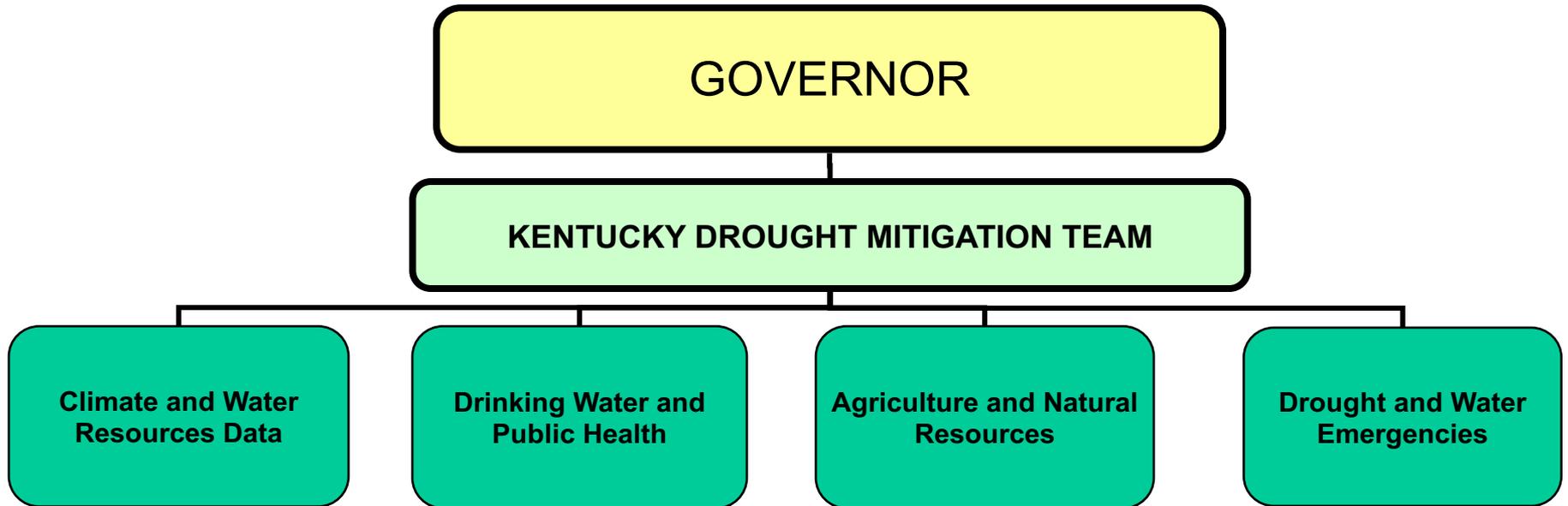
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“The plan describes a simple collaborative approach to accelerate the decision-making processes of state and federal agencies that are necessary to assist local government efforts in **drought response**. It establishes a mechanism for these agencies to work together during non-drought years with various agencies and individuals outside of state government to **identify mitigation actions** that can be taken to reduce the impacts of future droughts.

State Drought Plan

Drought Management Organizational Structure



Monitor and evaluate climate, weather and water data; identify drought potential and drought development.

Monitor and evaluate water supplies, water utility operations and public health impacts of drought.

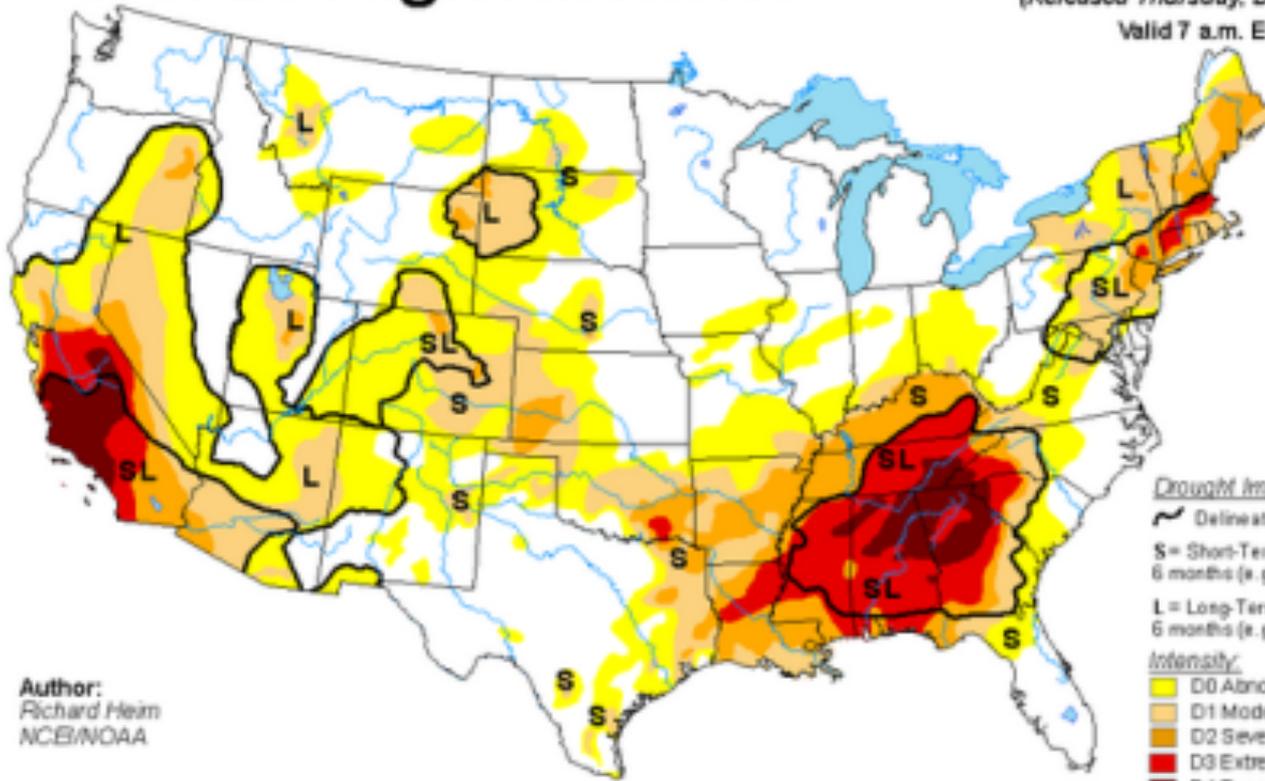
Identify water suppliers and communities that have an elevated risk of an emergency water shortage; oversee on the ground drought response in the event of an emergency.

Drought Indicators

U.S. Drought Monitor

November 29, 2016
(Released Thursday, Dec. 1, 2016)
Valid 7 a.m. EST

Cumulative Evaluation Period (days)
60
90
120
180



Drought Impact Types:

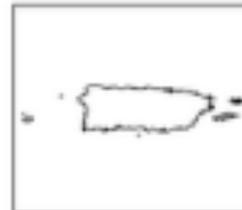
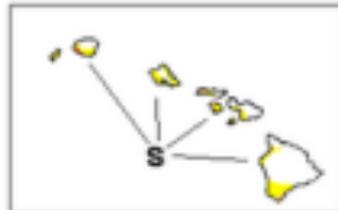
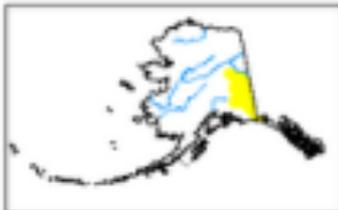
- ~ Delimits dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

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.

Author:
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NCBI/NOAA



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



S



Nov 29, 2016
7 a.m. EST
Drought Monitor
http://droughtmonitor.unl.edu

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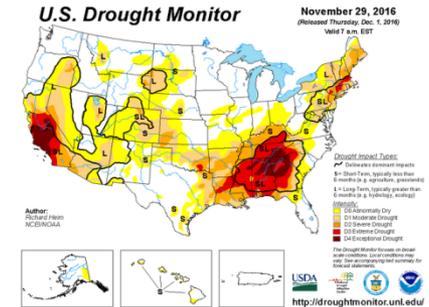
Map
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State Drought Declarations – Drought development milestones

Drought Level I

- “Official” recognition of drought
- Streamflows below a normal range: 11% to 25%
- Drought Monitor: moderate to severe
- Precipitation indicators: 60% to 75% of normal
- Drought impact(s) reported *****Agricultural impacts, fire**

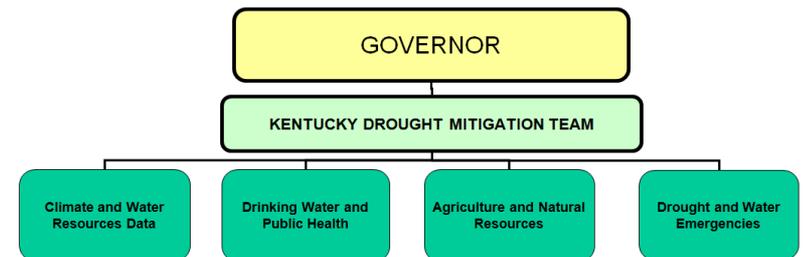


Drought Level II

- Streamflows well below normal: 6% to 10% duration
- Soil moisture deficit to 72 inches short
- Drought Monitor: severe to extreme
- **Observed drought impacts to some water supplies**
- **Local PWS water shortage advisories**

Drought Level III

- Streamflows less than a 5% duration
- Drought Monitor: severe to exceptional
- **Severe drought impacts: water shortages**



Challenges & Successes

Impact Assessment – the driver for Drought Declarations and Response

Messaging – timely and targeted

Individual and Local Preparedness – “hydro-illogical” optimism

Partnerships – our collaborative capabilities get better with each drought

- Division of labor – monitoring, messaging, problem-solving
- Confidence with consensus-based decision making
- Expansion of scope of drought response (and mitigation) beyond PWS
- Improved data collection and products – KY Mesonet, USGS gages

