

**Drinking Water Advisory Council - Source Water Protection Sub-committee  
Meeting Agenda  
October 3, 2018, 10am-12pm  
300 Sower Boulevard, Room 314  
Frankfort, Kentucky**

- Introduction
- Announcements
- Review Agenda
- March 1, 2018 Meeting Minutes-comments or corrections
- Dr. Stuart Foster (Ky. State Climatologist) will be presenting an update on development of the Kentucky Drought Early Warning System (DEWS) project.
- General Issues- on going

Source Water Protection Plans, PWS all?

Agriculture & Utilities, critical need to foster working relationships.

Source water monitoring

- Existing data from DOW, USCOE, USGS, EPA, ORSANCO, KGS
- Identify priority monitoring areas/reaches to benefit multiple systems
- Funding and resources to conduct monitoring

Secondary sources, interconnects and the testing, evaluating and authorizing emergency sources.

## **SWP Sub-Committee**

**Wednesday October 3<sup>rd</sup>, 2018**

**10:00 am**

- Introductions
- Water shortage response plan & relevance in SWP planning
- Need for more utility involvement in work group
- Dr. Stuart Foster – KY State Climatologist presents on KY Drought Early Warning System (DEWS)
  - National Integrated Drought Information System (NIDIS) funded this project
  - What is a Drought Early Warning System (DEWS)?
  - NIDIS has 9 Regional Drought Early Warning Systems across US
  - Progression of drought
    - Impact on public water suppliers and agriculture industry
    - What do utilities do in a drought situation?
      - What customers get cut first? Based on need for supply. Golf courses, car washed, etc.
      - Does ag get cut off if connected to city water supply?
        - Need to prepare ahead of time in these circumstances.
        - Need back up source
  - Dimensions of drought in space and time
    - How to detect a drought
    - Difficult hazard to predict, identify, and monitor
  - Historic Drought
    - Not as bad of drought in KY in a long lime
  - Correlation between heat wave and drought
    - Case study: WKY
  - KY is currently in a “wet period” since 2012
  - Building the DEWS – 4 components
    - Data Collection
    - Information Extraction
    - Messaging component
    - Building stronger communication
  - Keys to Success: Finding Balance
    - What information from all levels can be useful for the public?
    - A work in progress and feedback is encouraged as this program develops
- Water suppliers should know of these resources that are available to them
  - Example – Mesonet site and data
    - Are mesonet locations in close proximity to WTPs?
    - 70 stations in 68 counties
  - Need for information sharing/webinars with water suppliers, extension agencies, and ag groups that could utilize this information and resources
- What are the requirements to be involved in the mesonet program?
  - Match program between WKU and partnering group(s) (county, water supplier, etc) to set up a station
- Data and information sharing capabilities for already existing systems in a county (rain gage vs mesonet)

- QA/QC concerns
- Data generated by individual utilities can be used on a broad statewide scale
  - How do we get this useful information out to others in the state?
- How can local government and PWS utilize mesonet data?
- Encourage local governments to organize water resource/environmental/source water protection workgroups
  - Already existing groups – get them all to the table to discuss and create partnerships
    - Utilities, farmers, extension agents, fiscal courts
- DOW is currently working with DCA to develop a training program for operators on how to complete a CCR and SWPPs
  - Could incorporate how utilities can better educate the public
  - Good outreach possibilities/how to make it relevant to average customer
  - Increase education level and increase public interest in SWP
- Collaboration in Source water protection planning and ag community
- Closing statements
  - Next meeting in 6 months – early march
  - Goal to meet twice a year
  - Include more utility folks in upcoming meetings
  - Next meeting – tie down major swp issues and prioritize/rank

## Kentucky Drought Early Warning System

# Project Overview

Water is a valuable and normally abundant resource in Kentucky. However, extended periods of dry weather, often accompanied by summer heat waves, lead to periodic droughts that create adverse economic, environmental, and public health impacts. Kentucky's most recently experienced severe drought conditions in 2012, but significant droughts have occurred in nearly every decade. Improved monitoring, analysis, and communication can provide early indication of developing drought conditions, enabling managers in water-sensitive sectors to be pro-active as the threat of a water shortage grows. With support of NOAA's National Integrated Drought Information System (NIDIS), the Kentucky Climate Center at Western Kentucky University is leading an effort to develop the Kentucky Drought Early Warning System (DEWS). This project involves four components:

- **Soil Monitoring** – Soil moisture and temperature probes will be installed at an additional 10 Kentucky Mesonet stations.
- **Data Visualization and Analysis** – An interactive data visualization and analysis dashboard will be developed that integrates data from the Kentucky Mesonet and US Geological Survey, along with a drought impact reporter being developed by the Kentucky Division of Water, to enable users to explore and analyze drought indicator and impact data.
- **Targeted Engagement with Managers and Responders** – A webinar series will be launched to provide regular updates on hydrologic conditions and impacts, highlighting both drought and extreme precipitation, and to facilitate ongoing communication with managers in water-sensitive sectors.
- **Public Messaging via Information Graphics** – Static and interactive information graphics will be developed to highlight drought status and summarize drought episodes.

The Kentucky Climate Center, in partnership with NIDIS, the National Drought Mitigation Center, and the Kentucky Division of Water, will hold a kickoff meeting on Thursday, September 6<sup>th</sup>, in Frankfort, Kentucky. The purpose of the meeting is to build a professional support network and engage participants from a broad range of water-sensitive industries and agencies to help define the functional requirements for the Kentucky DEWS. Registration information for the meeting is forthcoming.

For more information, contact Stuart Foster (Email: [stuart.foster@wku.edu](mailto:stuart.foster@wku.edu) | Office: 270.745.5983)



**Source Water Protection Sub-Committee meeting**  
**Frankfort, Kentucky**  
**Registration Sheet**

Meeting Location EEC Building room 314.

Date and Time October 3, 2018 10:00 AM

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