

## Interagency Drought Workgroup Minutes

August 5, 2016, 10:00 AM  
Office of Policy & Management  
Room 2A, 450 Capitol Ave.  
Hartford, CT 06106

### **CT Agency representatives:**

Pete Aarrestad, DEEP; Steve Anderson, DoAg; Rob Baran, DPH; William Foreman, DEEP; Doug Glowacki, DESPP; Dave LeVasseur, OPM; Eric Lindquist, OPM; Lori Mathieu, DPH; Maria Szul, DEEP; Ryan Tetreault, DPH; Bruce Wittchen, OPM

### **Other attendees:**

Alex Bauer, UConn; Nicole Belk, NWS Taunton; John Mullaney, USGS East Hartford

#### **1. Call to order**

Dave LeVasseur called the meeting to order at 10:13 AM.

#### **2. Discussion of Existing Conditions**

- **Review & evaluation of data**

##### *Precipitation:*

Doug Glowacki reviewed statewide precipitation trends. He circulated a print-out of monthly versus normal precipitation over the past 26 months which shows a long-term as well as a short-term precipitation deficit. Doug noted that the current forecast calls for roughly normal precipitation, and that last weekend the state received more precipitation than models had forecasted. Drought conditions are expected to persist for the 60 days through October 31, according to NOAA's Climate Prediction Center.

##### *Groundwater:*

John Mullaney circulated a map of groundwater monitoring wells that have been below normal (below the 25<sup>th</sup> percentile) for the past three months. He is not expecting any currently forecast rainfall to provide significant recharge to those wells. He explained that the wells in the USGS groundwater monitoring network have differences in terms of well depth, location, and geologic material, and that they also have variable periods of record.

Bruce Wittchen asked whether statistics are calculated based on the full period of record or by the most recent several decades, similar to what the National Weather Service does on a 30-year rotating cycle. John said that the statistics are based on the entire period of record. He said most wells have periods of record in the 20+ year range, with some of the newest wells being about 10 years. Bruce asked how many wells are from the 1970's and older. John was unsure, but said that many wells were installed in the 80's.

Lori Mathieu said it would be interesting to know which wells existed in the 1980-1981 drought and what the levels of those wells were at the time. John said he would gather that information for her. John said there have been more and more wells hitting record low values over the past few years. Lori asked about the history of the wells in the northwest corner and Mansfield area and there was further discussion.

*Streamflow:*

John Mulaney reviewed USGS streamflow data and stated that Connecticut has passed the 3 months below normal threshold in all basins, approaching 4-5 months below in all but a few areas. John passed out a handout of a 45-day streamflow graph, and there was further discussion.

The group looked at historical monthly average streamflow for the time of year on the USGS website. John said he likes to see average streamflow mapped by hydrologic unit (HUC) because they are consistent. Bruce cautioned the group about the HUC maps, explaining they have been known to hide areas of concern. There was further discussion on the most recent streamflow for July. Southwestern CT reported normal streamflow for the month as they likely received more precipitation from recent rains than other parts of the state.

*Reservoirs:*

Rob Baran acknowledged that Acquarion Water Company has called for voluntary conservation, an unusual course of action for them. The group viewed DPH's inventory of water suppliers currently asking for conservation. It was mentioned that Southington did not notify DPH and Lori said some suppliers just don't realize that they need to notify the State and DPH will work on better communication. Eric Lindquist pointed out that Bristol and Pawcatuck have also called for conservation.

Lori is concerned about some reservoirs getting so low and the resulting increased risk of cyanotoxins. Irrigation systems have been drawing down water tanks. Water suppliers are beginning to experience water quality issues with reservoir levels being so low. Lori said that in the next press release the focus needs to be on educating people of responsible use and ways to conserve.

In a transition back to precipitation discussion, Nicole Belk mentioned that Bradley Intl. Airport has a close to 20 inch deficit for a 2-year period. The short term drought situation with a backdrop of longer term dryness was a big topic of discussion at Rhode Island's recent drought task force meeting. Lori asked what Rhode Island decided to do and Nicole said all of RI's drought criteria are locked in the "Advisory" stage. The RI task force commented that residential demand is lower than what it used to be. Bruce said he has noticed a significant amount of lawn watering, and said that for a lot of systems it's not storage capacity but delivery capacity that has become an issue.

Lori said there has been some water trucking occurring for about 5 water suppliers. One has been doing so chronically, but the other four have been recent developments. John said there has been an explosion of blue-green algae on the Hockanum River near the East Hartford/Manchester line. William Foreman said that blue-green algae can maintain buoyancy well when lakes remain calm and are able to stratify.

*Palmer Drought Severity Index (Palmer Index) and Crop Moisture Index:*  
Steve Anderson said that the entire state is at the “Drought Watch” threshold (-3.0 to -3.9) for the Palmer Index except for the northwest corner. He said that the Crop Moisture Index is also at the Drought Watch threshold (-2.0 to -2.9) except for the northwest corner and coastal climate divisions. Dave LeVasseur asked about the peach crop and Steve indicated that it is virtually non-existent.

*Fire Danger:*

Bruce Wittchen reported that Fire Danger is Moderate due to the recent rainfall but that he had expected the level to increase back to High by today. Pete Aarrestad emailed a staff person in the DEEP Forestry Division and said the expectation is that Fire Danger will return to High tomorrow. There was discussion about gypsy moths and the increased risk of fire danger from tree defoliation.

- **Discussion**

Dave LeVasseur said that based on the review of indicators, the State as a whole has not quite made the jump from Drought Advisory to Drought Watch under the [Connecticut Drought Preparedness and Response Plan](#). Nonetheless, Dave suggested issuing a new press release telling the public that conditions have continued to decline and asking for voluntary conservation for the first time. A proposed draft press release was circulated to the group for discussion. Steve suggested amending the press release to mention the long-term precipitation deficit. Dave asked if Lori would coordinate with the Governor’s Office to put the press release in a long-term deficit context. There was further discussion regarding the effects of a long-term precipitation deficit. Bruce asked whether the long-term precipitation deficit means anything if all other drought indicators returned to “normal” over the winter. There was a question about whether groundwater had fully recharged and the group used the USGS website to confirm that groundwater wells and streamflow had been normal heading into the spring.

There was discussion over the term “Watch” and the perception that it is a lesser severity than “Advisory” even though it is the second stage of the Drought Plan. Doug suggested avoiding using the word in any press release and instead saying “drought conditions exist” since the term “watch” can be misleading. Other group members disagreed and said we are bound to the terms in the Drought Plan.

Dave said he wants the press release to include mention of the stress on wells. Ryan Tetreault said that there have been 27 permits issued for deepening, hydro-fracking, or replacement of private wells since May 1. Ryan said there could be a lot more of that type of work happening without permits. John said he frequently fields calls from the public about dry wells.

Lori asked what 10% conservation means to the average person. She said the press release should make specific recommendations and that there are some good guidance from EPA and others. Dave suggested adding a link to such guidance directly in the press release. Pete Aarrestad said that the media seemed to be late in picking up on the Drought Advisory when it was issued by DPH last month. Dave

said there seemed to be several weeks of lag time before media inquiries started coming in.

### **3. Course of action**

The group agreed to proceed with recommending the issuance of a new press release coordinated between OPM and DPH, requesting 10% voluntary conservation and highlighting that Connecticut is in a long-term precipitation deficit. The press release will indicate that Connecticut remains in a Drought Advisory under the CT Drought Plan. Lori and Eric will work together to propose a draft press release to the Governor's Office.

### **4. Date for next meeting**

The group decided to schedule the next meeting in early September.

### **5. Adjournment**

Dave LeVasseur adjourned the meeting at 11:25 AM.

*Minutes prepared by Eric Lindquist, OPM*