

Interagency Drought Workgroup (IDW)
Meeting Minutes

October 14, 2016, 2:00 PM
CT Office of Policy & Management
Room 2A, 450 Capitol Ave.
Hartford, CT 06106

CT Agency representatives:

Pete Aarrestad, DEEP; Steve Anderson, DoAg; Rob Baran, DPH; Sylvia Dake, DESPP; Jacob Ducharme, DPH; Doug Hoskins, DEEP; Dave LeVasseur, OPM; Eric Lindquist, OPM; Lori Mathieu, DPH; Ryan Tetreault, DPH; Bruce Wittchen, OPM;

Other attendees:

Nicole Belk, NWS Taunton; John Mullaney, USGS East Hartford; Andy Waite, USGS East Hartford

1. Call to order

Dave LeVasseur called the meeting to order at 2:05 PM.

2. Assessment of Existing Conditions

• **Review & evaluation of data**

Precipitation:

Nicole Belk reviewed average precipitation totals by county for the month of September. Precipitation tended to be just under half of normal except for Middlesex and New London counties, where totals were near $\frac{3}{4}$ of normal. Hartford county was the worst at 1.52 inches for the month ending September 30 (36% of normal). Hartford County is the only county under 65% of normal for the 6-month period ending September 30. In terms of month-to-date precipitation for October, eastern portions of the state have received 2 or more inches, while western portions have been largely dry.

Groundwater:

John Mullaney displayed a map of groundwater monitoring wells in the USGS groundwater monitoring network that were measured below normal (below the 25th percentile) for the past one, two, three, four, and five months. He said we are at a point where the vast majority of monitoring wells have been below normal for four to five consecutive months. A couple real-time wells responded to the most recent rains in eastern Connecticut, so we are getting to that time of year where more precipitation is infiltrating deep into the ground instead of being intercepted and used up by stressed vegetation. USGS has a new drought page that John attempted to demonstrate, but he could not display it due to a poor internet connection. John

said that, looking at the groundwater data, a case could be made that much of the state is 6 or 7 months below normal.

Streamflow:

John Mullaney displayed hydrographs for numerous streams throughout the state. Most streams continue to be at or near record lows, having been below normal for at least 4 of the past 5 months, with some below normal for as much as 6 or 7 months.

Reservoirs:

Rob Baran and Lori Mathieu discussed reservoir trends. Reservoir levels have been dropping quickly. Around 3/4 of monitored reservoirs are reporting below normal levels, with several at record lows. Pete Aarrestad said he spoke with MDC recently and learned that MDC's water storage is approaching 75% of normal, which is concerning considering the size of MDC's storage capacity. Lori displayed the latest reservoir status report, which she said is regularly updated. Lori also displayed a list of water systems with voluntary or mandatory water use restrictions and noted that several systems have recently joined the list, such as the Norwalk systems. Both items are available at DPH's website:

http://www.ct.gov/dph/cwp/view.asp?a=3139&Q=387348&dphNav_GID=1824.

Bruce Wittchen mentioned that several systems have voluntary restrictions but are at record lows. He said that perhaps water suppliers need new thresholds for conservation requests. Rob said that DPH is going to be collecting additional data from water systems going forward and that a new reporting form has been created. Bruce asked whether water consumption information will be requested. Rob replied that yes, DPH will ask for consumption data as well as precipitation data for each treatment plant.

Lori said DPH has just issued an emergency order for Aquarion's water system in southern Fairfield County. Aquarion will be installing 8,000 feet of new on-land piping to connect to Norwalk. Aquarion has reported that it will probably need a Phase III order. Waterbury previously requested an order but then retracted. Danbury has asked for an order to move more water to its water storage reservoir. Bruce asked if reporting will be done town by town. He said it would be helpful to see how an individual town's water use changes. Lori said Stamford, Darien, and New Canaan are proposing municipal ordinances for water use restrictions. She said that enforcement will be different in each case, and they must deal with the effects on landscaping businesses that use water. Lori said that all of this information is available on DPH's web page.

Palmer Drought Severity Index (Palmer Index) and Crop Moisture Index:

Nicole provided an overview of the Palmer Index, which shows the State in Severe to Extreme Drought, and the Crop Moisture Index, which shows the state as abnormally to excessively dry.

Fire Danger:

Bruce Wittchen reported that fire danger has remained at "Low" even without any precipitation over the past four days. He said this is an indicator of entering a cool-season climate where fire danger conditions tend to remain low. He said that the group can probably ignore the fire danger indicator through the winter until spring.

Weather Forecast:

Nicole Belk provided the current precipitation outlook for the coming 7 days. She said some showers are possible Monday, and again on Thursday, in total about ½ inch of rain. Sylvia Dake said a storm was entering the northwestern United States and will cross the continent but that it won't bring much moisture with it. Sylvia asked Eric Lindquist to display the National Weather Service GFS model quantifiable precipitation forecast (QPF) for the coming 2-week period, and discussion followed.

- **Discussion**

Dave LeVasseur asked group members to propose actions to take, given current and forecasted conditions. Lori Mathieu said that the next stage — a Drought Watch — is called for. She said that the message needs to be to reduce all non-essential water use. It was noted that it would be a stretch to advance to the next stage of the plan based on the criteria needed for a Drought Watch. Current data indicate that the state is solidly within a Drought Advisory, and at the cusp of a Drought Watch but not there yet. Eric Lindquist circulated print-outs of the drought criteria for each county and gave an overview of how the data were interpreted. Some drought indicators have hit the Drought Watch criteria in some counties, while different indicators have hit the Drought Watch criteria in other counties. Eric said that, using month-end data for September, no county has the required 4 out of 7 (majority) of indicators triggered for the Drought Watch level. Most counties have 3 out of 7 indicators triggered.

Dave said we cannot blindly follow the plan; we are close enough to justify going to the next stage. Dave looked to the group members in the room for concurrence. Lori said the press is going to ask if we are following the plan. She said one negative impact is on the landscaping industry; DPH has received calls about cancelled orders. Lori said that the group needs to think about the impact when we make a declaration on a statewide level. Bruce Wittchen said Greenwich's consumption was reduced from 32 million to 5 million gallons per day after mandatory bans went into effect, making it clear how much water is used for irrigation. Ryan Tetreault asked if the mandatory water restrictions apply to users of private wells in addition to customers of public water suppliers. Lori said the ordinances will apply to everyone. The fine in Greenwich is \$91 per day.

Dave said that OPM would draft a press release announcing the upgrade to a Drought Watch and circulate it to the full group via email. Steve Anderson said there are a number of action items required by the plan for a Drought Watch and asked if everyone is aware. Steve listed a couple of examples. Bruce Wittchen said a number of items are already being undertaken by state agencies.

Nicole Belk said there was a regional drought coordination meeting in Boston on Tuesday and spoke briefly about the outcome of that meeting. Lori Mathieu said she recently received two press inquiries on the Drought Plan, one asking whether it is being followed. She said the Interagency Drought Workgroup needs to take its actions seriously or it risks being scrutinized. There is a lot more to do under the Drought Watch stage — a lot more monitoring items.

Dave LeVasseur briefly mentioned his experience at the regional drought conference in Boston that he attended. He mentioned that New Hampshire currently relies on the United States Drought Monitor to dictate state response, and perhaps Connecticut should consider adopting a similar model.

Rob Baran said he is hoping to get weekly reservoir data submitted every two weeks. Eric Lindquist asked Nicole Belk to include 5-month totals in her county-by-county precipitation reports going forward.

3. Course of action

The statewide Drought Advisory is to be elevated to a Drought Watch under the Connecticut Drought Preparedness and Response Plan. OPM will draft a press release and circulate a list of action items to be completed by IDW agencies under the Drought Watch stage.

4. Discussion of revised drought plan

Eric Lindquist was asked by Dave LeVasseur to give an overview of the revised draft of the Drought Plan recently submitted to the Water Planning Council by the Water Planning Council Advisory Group. Eric proceeded to give an overview of where the revision process stands, describing the revised plan as not perfect. He asked for input from Interagency Drought Workgroup members specifically relating to the revamped drought stages, indicators, and criteria for each stage. Bruce Wittchen said Eric's depiction of the revised drought plan as not perfect was being generous, and went as far as to say that the revised plan is inadequate. The Drought Plan needs to be able to react to a long-term, low-intensity drought, as well as a short-term, high-intensity drought. A new concern is that the Interagency Drought Workgroup does not have control over press releases; people outside of the workgroup have the final say in what should be included in a press release. Lori Mathieu said she shares that concern.

5. Date for next meeting

Lori Mathieu suggested meeting every two weeks going forward, now that reservoir data is being collected on a weekly basis. Dave LeVasseur concurred and said that a next meeting would be scheduled via email.

6. Adjournment

Dave LeVasseur adjourned the meeting at 3:12 PM.