

Interagency Drought Workgroup (IDW)
Meeting Minutes

September 8, 2016, 10:00 AM
Office of Policy & Management
Room 2A, 450 Capitol Ave.
Hartford, CT 06106

CT Agency representatives:

Steve Anderson, DoAg; Rob Baran, DPH; Cheryl Chase, DEEP; William Foreman, DEEP; Doug Glowacki, DESPP; Dave LeVasseur, OPM; Eric Lindquist, OPM; Lori Mathieu, DPH (by phone); 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 10:04 AM.

2. Assessment of Existing Conditions

• **Review & evaluation of data**

Precipitation:

Doug Glowacki reviewed statewide precipitation trends since the August 5th IDW meeting. He said the state saw some decent rains in August that helped the rainfall deficit but that drier than normal conditions are expected to continue. New England is still trapped in a pattern of northwesterly winds that are keeping moisture from running up the east coast as it otherwise would. The most recent example of this is the lack of precipitation from Post Tropical Cyclone Hermine, which dissipated and was pushed out to sea. Doug circulated a print-out graphic of the nationwide quantitative precipitation forecast through September 15 issued by the National Weather Service's Weather Prediction Center. The graphic demonstrated that Connecticut is forecast to receive approximately 0.25 inches of precipitation in the next 7 days, keeping with the below normal precipitation trend. Although precipitation is still below normal long-term, the total rainfall for the month of August raised the 2-month totals enough to lift out of the Drought Advisory trigger (below 65% of normal) for every county except New London.

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, and four months. He said it is clear that groundwater meets the Drought Advisory criteria of three consecutive months below

normal, but it is a tough call as to whether the Drought Watch trigger of four consecutive months below normal is triggered. Bruce Wittchen said his interpretation of the groundwater trigger for a Drought Advisory has always been the appearance of a “significant” number of individual wells meeting the trigger, without counting to see if there is a clear majority or certain percentage. The IDW will need to use its judgement in determining what is considered a “significant” number.” John displayed historical water level measurements compared to normal for wells within the USGS groundwater monitoring network to demonstrate the range in variability among wells. He said the worst problems tend to be in hilltop areas.

Streamflow:

John Mullaney displayed the USGS monthly map archive of monthly-average streamflow for month of the year by hydrologic unit code (HUC). He demonstrated that April is the last month that most streamflow in the state was considered normal, and monthly streamflow was below normal periodically prior to that. John then displayed a map of individual stream gauge sites that have been below normal for one, two, three, or four months, similar to the previous groundwater map. In order to show the variation among stream gauge sites, he displayed a series of long-term hydrographs for individual stream gauges as compared to normal and record lows and highs.

Reservoirs:

Rob Baran said that statewide average reservoir levels were approximately 86-87% for the month of July, above the Drought Advisory threshold of 80%. Rob displayed a list of water suppliers that have requested voluntary or mandatory conservation as of September 8th. The list is continually updated and available on the Department of Public Health website. If precipitation trends continue as predicted, Rob cautioned that statewide average levels could drop below 80% for the month of August, thus meeting the Drought Advisory criteria.

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

Steve Anderson said that both the Palmer Index and Crop Moisture Index continue to meet Drought Advisory triggers. Steve noted that the Palmer Indices have a wide range, but all actual values are near -3.0. The coastal Connecticut climate division is seeing worse Palmer Index ratings (-3.0 to -3.9) while the interior Connecticut climate divisions are seeing ratings of -2.0 to -2.9. The Crop Moisture Index is -1.0 to -1.9 (abnormally dry) statewide.

Nationwide maps of the Palmer Index and Crop Moisture Index were displayed on the screen for IDW members to view. Doug Glowacki referred to the relative dryness of the entire country (most climate divisions in the United States were below normal on both indices) as evidence that prevailing westerly winds truly are having an impact on dryness across the country, not just in Connecticut. He remarked that the two areas of the country that were wetter than normal (Florida and the Carolinas) were because of Tropical Storm Hermine.

Fire Danger:

Bruce Wittchen reported that Fire Danger is currently reported by DEEP to be “Moderate.” Fire danger is calculated on a daily basis, making it difficult to use as an indicator for purposes of declaring a stage of drought. Doug Glowacki asked a question regarding drought-stressed trees. He said he has seen stressed pine trees

surrounded by green grass. There was discussion about whether the grass was outcompeting the trees for available moisture, and whether any rainfall that occurs has been able to soak deeper into the ground before being absorbed by grass roots.

- **Discussion**

Dave LeVasseur said that based on recent precipitation received during August the state as a whole has not deteriorated significantly and remains within the Drought Advisory threshold. Dave proceeded to update the IDW on what happened to the press release that was supposed to be issued after the August 5th IDW meeting. Dave said that there was a delay in transmitting the release to the Governor's Office, and that the timing of the release did not correspond well with the period of wet weather that had been forecast for the second week of August. Therefore, the press release was not issued. He said now that the IDW has met again, the time is right to issue a new press release calling for voluntary conservation.

Eric Lindquist circulated copies of a draft press release for IDW members to consider. Bruce Wittchen said this is the first time the IDW would request voluntary conservation. Dave said that such a request for conservation is what should have been done in the June announcement of a Drought Advisory.

Lori Mathieu asked when comments on the draft press release are needed by. Dave said that comments should be submitted to him by the end of the day. Lori said that a press release should ideally include examples of how to achieve the requested 10% conservation so that the public will know what to do. Lori said this would be especially important if individual counties are singled out for more stringent conservation in the future.

There was some discussion regarding the Farmington River and the situation there, considering that DEEP needed to close portions of the river to fishing for the first time in history. John Mullaney displayed a hydrograph for the Farmington River and highlighted the current discharge rate in cubic feet per second compared to normal. Bill Foreman said water temperature was extremely high due to the hot days and warm nights, causing the fish to become extremely stressed and seek refuge near the mouths of cooler tributaries.

Nicole Belk said Hartford had its 2nd warmest August on record and third warmest meteorological summer (June-August). John Mullaney said that Connecticut's USGS office received a boost in funding for two new real-time wells to add to the groundwater monitoring network. He said the new wells will fill gaps in the existing real-time network. The new wells are located in Clinton and Salisbury.

3. Course of action

The Drought Advisory will remain in effect statewide, as five of seven indicators have been met (all except precipitation and reservoir levels). A new press release will be issued calling for 10% voluntary reduction in water demand from all residents and businesses. OPM will coordinate with the Governor's Office to issue the release.

4. Date for next meeting

The IDW will schedule its next meeting in October to reevaluate data, unless conditions warrant a sooner meeting.

5. Adjournment

Dave LeVasseur adjourned the meeting at 11:05 AM.

Minutes prepared by Eric Lindquist, OPM

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