

Interagency Drought Workgroup Minutes

June 27, 2016, 10:00 AM
Office of Policy & Management
Room 3A, 450 Capitol Ave.
Hartford, CT 06106

CT Agency representatives:

Pete Aarrestad, DEEP; Steve Anderson, DoAg; Rob Baran, DPH; Melissa Czarnowski, DEEP; William Foreman, DEEP; Doug Glowacki, DESPP; Robert Hust, DEEP; Dave LeVasseur, OPM; Eric Lindquist, OPM; Bruce Wittchen, OPM

Other attendees:

Alex Bauer, UConn; John Mullaney, USGS East Hartford; Britt Westerguard, NWS Albany

1. Call to order

Dave LeVasseur called the meeting to order at 10:05 AM.

2. Discussion of Existing Conditions

- **Review & evaluation of data**

Precipitation:

Doug Glowacki reviewed statewide precipitation trends. He explained that measurable rainfall over the past two months is approximately 60% of average for most parts of the state, with New London County fairing slightly better. Doug explained that Connecticut has a long term precipitation deficit that will likely require a large tropical weather event to alleviate, since traditional convective summer rains tend to be scattered and not much help. According to Doug, the [GFS](#) model suite has been consistently overestimating rainfall forecasts since March. The current 10-day forecast calls for about 1/4 - 1/2 inches statewide, but some parts of the state may see nothing. Looking beyond the 10-day forecast, it appears the dry weather pattern will continue. Doug noted that the relatively cool temperatures Connecticut has experienced so far this spring and summer has helped prevent conditions from deteriorating more rapidly.

Groundwater:

John Mullaney provided an update on groundwater conditions. He explained that the pattern of decline we are currently seeing can be traced back to the lack of groundwater recharge during the Spring. Most USGS groundwater monitoring wells in the statewide monitoring network are at or below normal at this time, with a handful reaching the “much below normal” threshold (below the 10th percentile). John mentioned that wells at normal levels are likely proximal to a stream or in a location that received above-average recharge in the spring. Groundwater levels are expected to decline further if the weather pattern does not change.

Streamflow:

John Mulaney reviewed USGS streamflow data and noted that most areas of the state are experiencing moderate or severe hydrologic drought. The vast majority of stream gauges have reported monthly average streamflows below normal for the past two months. Slightly better conditions can be found in the Thames Valley, but streams are quite dry statewide.

Reservoirs:

Rob Baran provided an update on reservoir levels as reported by water utility companies at the end of May. Levels for the May reporting cycle appeared to be close to average, with no water use restrictions in effect. Rob said that DPH will have more current information on Friday, and cautioned that we could see a significant drop in water levels. Rob mentioned that DPH has not heard from suppliers on small wells, but those would likely be the first suppliers to experience trouble meeting demand.

Palmer Drought Severity Index (Palmer Index):

Steve Anderson gave a brief overview of the Palmer Index and said that the state currently ranges from -2.0 (moderate drought) to -3.9 (severe drought). Steve the Vegetation Drought Response Index (Vegi-Dri), a relatively new indicator, but said he is not sure of its accuracy since it does not seem to line up with the Palmer Index. Bruce Wittchen said that he believes the Vegi-Dri data are more reflective of conditions.

Crop Moisture Index:

Bruce Wittchen reported that the Crop Moisture Index is “normal” for all three CT climate divisions and therefore the criteria for a Drought Advisory has not been met. There was some further discussion regarding soil moisture. It was surmised that the lack of hot weather may be reducing evapotranspiration rates enough to keep soils from drying up quickly in between rains.

Fire Danger:

Bruce Wittchen reported that the criterion for Fire Danger has been met, as of the most recent report issued by DEEP.

- **Discussion**

Dave LeVasseur said that based on the review of indicators, it appears that 5 of 7 criteria have been triggered for declaring a “Drought Advisory” under the [Connecticut Drought Preparedness and Response Plan](#) (Drought Plan). Dave said that OPM would prepare a draft press release, but the Governor’s Office has asked that any announcement be handled by DPH. Dave said that he will include language in the draft press release reminding the public to follow the recommendations of their water suppliers. There was some further discussion of the draft press release with Rob Baran.

Rob Hust asked whether there is an official protocol for making a declaration, or whether the group still has the option to recommend a declaration even if not all of the required criteria are met. There was some discussion as to how the Drought Plan is implemented. Rob Hust also asked why DPH is making the announcement instead of OPM. Dave said that he did not have any other information beyond what the Governor’s Office told him.

Dave mentioned that DPH will need to act quickly in order to make the announcement before the Independence Day holiday, when it could easily get lost in the holiday excitement.

There was some discussion among the group regarding voluntary compliance for water conservation.

Steve Anderson asked if the press release would include agricultural information. Dave said that OPM would typically leave the issuance of agriculture-specific recommendations to the Department of Agriculture.

Pete Aarrestad said it is important to distinguish between people on public water from those on private wells when drafting the press release and there was further discussion.

3. Course of action

The group agreed to proceed with issuing a Drought Advisory and agreed to meet again to re-assess conditions. Bruce said that he would send an update to the group by e-mail once the new reservoir level data are available. Doug Glowacki asked if it would be helpful to have weekly updates from the Army Corps of Engineers and Dave LeVasseur said that it would.

4. Date for next meeting

The group decided to schedule the next meeting via e-mail and provide e-mail updates in the interim.

5. Adjournment

Dave LeVasseur adjourned the meeting at 10:55 AM.

Attachment 1: Drought Advisory Criteria, as of 06/27/2016

Precipitation: Two months cumulative below 65% of normal,

7 of 8 counties were below 65% for the 2-month period May-June. The only exception is New London County, which was at 70%.

Ground Water: Three consecutive months below normal,

The vast majority of USGS monitoring wells statewide were below normal for the reporting cycles of April, May, and June.

Streamflow: Two out of three months below normal,

All major basins had a majority of stream gauges below normal (compared to monthly average) for the past two months.

Reservoirs: Average levels less than 80% of normal.

As of the end of May, reservoirs were at 96.0% of capacity state-wide, which is 99.0% of normal.

Palmer Drought Severity Index: -2.0 to -2.99

As of the latest update, the Coastal division is in the -3.0 to -3.9 range and the remaining two CT divisions are in the -2.0 to -2.9 range.

Crop Moisture Index: -1.0 to -1.99 abnormally dry,

As of the latest update, all three CT divisions are normal (-0.9 to +0.9)

Fire Danger: Moderate.

As of the latest update, the fire danger is high.