

Interagency Drought Workgroup (IDW)
Meeting Minutes

December 9, 2016, 10:00 AM
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; Bill Foreman, DEEP; Doug Glowacki, DESPP; Doug Hoskins, DEEP; Dave LeVasseur, OPM; Eric Lindquist, OPM; Lori Mathieu, DPH; Cindy Tangney, DESPP; Ryan Tetreault, DPH; Bruce Wittchen, OPM;

Other attendees:

Nicole Belk, NWS Taunton; David Knauf, Town of Darien; John Mullaney, USGS East Hartford

1. Call to order

Dave LeVasseur called the meeting to order at 10:06 AM.

2. Assessment of Existing Conditions

• **2a. Review & evaluation of data**

Precipitation:

Doug Glowacki reported that while we have continued to trend dry up to the present, above normal precipitation can be expected over the course of the next two weeks. The weather pattern is changing to a wetter coastal storm track as the jet stream sags south. As this happens the warm sector will be pushed to our south and east. If this pattern change delivers the expected results, we could see above normal precipitation for the month of December. Doug noted that when looking at historical precipitation data during the 1960's drought, there seems to be a trend of wetter winters.

Nicole Belk presented a PowerPoint briefing on precipitation trends up to the present, including percent of normal precipitation for the 1-month, 3-month, and 7-month periods ending November 30. Nicole also displayed a graph of year-to-date precipitation, and reported that as of December 9, Connecticut stands at approximately 15" below its annual normal precipitation of 45.85 inches. In order for the Bradley International Airport climate site to fall outside of the top 10 driest calendar years on record, it would need more than 4.05 inches of liquid equivalent precipitation before midnight on December 31st.

Pete Aarrestad commented that in light of the continued dry conditions, DEEP's Burlington Fish Hatchery is experiencing a water shortage and seeking to offload fish sooner than normal.

Groundwater:

John Mulaney reported that a large number of groundwater monitoring wells have been below normal for six of the past six months, and that nearly all wells have been below normal for at least three or four of the last six months. The most recent measurements were made right before the last rain event. Continuous monitoring wells responded to that rain event but are still well below normal.

Streamflow:

John Mullaney displayed a map of the average streamflow index for the past 45 days. The current index is just over 3, which equates to the 10-24 percentile (below normal). Streamflow is quick to bump up to normal range in response to rain events but quickly drops below normal after precipitation ends. It was asked how the current trend compares to the 1960's drought. John did not know off-hand but said he has a script that can superimpose the 1960's streamflow data to compare it to current conditions. John said that with the expected forecast, we could see improvement in groundwater levels. It will depend on precipitation type and whether the ground freezes.

Bill Foreman noted that the 1960's is when Colebrook River Lake was being filled, so there may be artificially lowered flows on the Farmington River during that time — something to keep in mind when performing any comparative analysis.

Reservoirs:

Rob Baran reported that statewide reservoir levels were at approximately 71.6% for the month of November. Rob shared a new version of the status reporting form being used by water suppliers. It collects more data in an improved format, and will be completed weekly. Lori Mathieu said UConn called to talk about downgrading its water supply status to Stage I. UConn noted that streamflow has been steadily improving.

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

Steve Anderson overviewed the monthly Palmer Index and Crop Moisture Index reports for Connecticut, which have been improving. It was noted that neither of these indicators are appropriate for assessing a wintertime drought. Steve reported that some dairy farmers have been needing to truck water to the farms in order to deal with shortages.

Fire Danger:

Bruce Wittchen reported that fire danger is "Low." During the winter months, this indicator is not updated regularly.

- **2b. Discussion**

Ryan Tetreau discussed a spreadsheet and chart of private well drilling/deepening/fracking permits. David LeVasseur asked what the typical

number of permits would be in a typical year. John Mullaney said by and large the wells being replaced are dug wells with shallow sources of supply.

Eric Lindquist circulated and explained charts showing the drought indicators currently triggered in each county for each stage of drought. Discussion about current conditions and the importance of each indicator followed. There was agreement that, contrary to the CT Drought Plan, it does not make sense to consider crop moisture or fire danger when assessing winter drought conditions. Dave LeVasseur said that he believes we should stay in a holding pattern with the current drought declarations.

Ryan Tetreau asked if groundwater levels become “locked” in place once the ground freezes. John Mullaney said that groundwater recharge becomes limited when the ground freezes. Bruce states that he observed a sharp groundwater recharge last February when snow melted atop frozen ground. Nicole Belk said that the Connecticut River flooded extremely early (February) last year due to a sudden melt of the snowpack and rain event. John said that since the 1990’s, the average spring freshet has moved earlier by about a week.

Doug Glowacki stated that reservoir levels were almost at 100% last spring and quickly dropped, almost as if groundwater sucked the water down.

3. Course of action

David LeVasseur recommended to the group that the current drought declarations be left in place: Drought Advisory for New London and Windham Counties, and Drought Watch for all other counties. John Mullaney asked whether New London and Windham Counties should be upgraded to a Drought Watch. There was discussion and review of data for those counties, but the group could not justify expanding the Drought Watch.

The group agreed to leave the drought declarations as they are and continue monitoring conditions through December and January.

4. New Business

- **4a. Review of Drought Advisory and Drought Watch actions called for in the Connecticut Drought Preparedness and Response Plan**

Dave LeVasseur proposed the creation of a workgroup to review the state agency task assignments prescribed in the CT Drought Plan, and update them as needed. This group would pick up where the WPCAG Drought Plan Workgroup left off. There was further discussion.

- **4b. Review contact list of municipal drought coordinators; discuss and define roles of municipal drought coordinators**

Dave LeVasseur informed the group that OPM had recently asked municipalities to designate a municipal drought coordinator, as called for in the CT Drought Plan.

Approximately 18 of 169 towns have honored this request so far. Ryan Tetreau asked if it is known which towns have ordinances. Discussion followed. Bruce Wittchen said the model ordinance in the CT Drought Plan is flawed and needs to be fixed. The Pomperaug Watershed Coalition tried to test the model ordinance and it failed. Lori Mathieu said several towns do have ordinances, though the language varies. Bruce said they are not based on the state's model ordinance. Dave said each community is different. The state as a whole needs a coordinated response and that is why we need a drought coordinator in each community.

- **4c. Discuss creation of Drought Task Force**

Dave LeVasseur explained that the CT Drought Plan calls for the implementation of a Drought Task Force, but does not define what the Task Force is. Dave envisions that it would be a reincarnation of the Interagency Drought Workgroup with much broader representation, including the private sector, nonprofit organizations, water suppliers, and environmental groups. Bruce Wittchen asked if the Task Force would emulate the Drought Task Force that meets regularly in Rhode Island. There was further discussion. Dave said he attended a New England regional drought meeting in Massachusetts and learned that New Hampshire has decided to scrap the drought stages in its drought plan and adopt the United States Drought Monitor designations. New Hampshire sited communications problems in having two different sets of drought terminology.

Dave asked members to:

1. Review state agency actions in the CT Drought Plan
2. Think about the appropriate role of a municipal drought coordinators
3. Think about the Drought Task Force

Dave reminded members of the public comment period for the revised CT Drought Plan. Bruce said OPM will be submitting comment recommending the Water Planning Council delay the plan's adoption until after a post-event analysis has been completed for the current drought. Lori Mathieu said DPH will also be commenting because the communications piece has been a real issue.

Dave said there is willingness from other states to work toward a regional drought plan. The intriguing thing is that every state at the New England regional drought meeting was concerned about public communication.

Lori asked to talk about some of the communications tasks listed in the current Drought Plan and whether they make sense. For example, PSAs are becoming obsolete and state agencies should be making better use of Facebook and Twitter. Lori said we also need to educate meteorologists. Dave said the state should assemble all media and press folks to make sure everyone is on the same page and understand capacities. Bruce said the group needs to review its communications strategy during the Drought Advisory stage so that we are prepared in advance.

5. Date for next meeting

Dave LeVasseur proposed to have the next meeting in one month, to be scheduled via email.

6. Adjournment

Dave LeVasseur adjourned the meeting at 11:15 AM.

Minutes prepared by Eric Lindquist, OPM

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