CT Interagency Drought Workgroup

January 7, 2021 2:00 p.m. EST, conducted remotely via Zoom:

Join Zoom Meeting https://uso2web.zoom.us/j/89358561487?pwd=cU1Rd2x2THBXWXEwYk5DUTRBcWlJUT09

Meeting ID: 893 5856 1487 Passcode: 308034 One tap mobile +19292056099,,89358561487# US (New York)

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Agenda

- 1. Call to order
- 2. Introductions (if needed)
- **3.** Approval of minutes: 12/10/2020
- **4.** 2021 meeting schedule
- **5.** Discuss current conditions and areas of improvement/degradation for each drought region (county)
 - a. Review conditions report compiled by OPM and any questions on agency updates
 - b. Discussion of other information
- 6. Recommend a course of action in accordance with <u>State Drought Plan</u>:
 - a. Maintain or modify current drought stage for each county
 - b. If modifications are made, review actions to take place in accordance with State Drought Plan
- 7. Business
 - a. Drought Plan modification recommendations
 - b. Assignments for Drought Action Team
 - c. Items for next meeting
- 8. Adjourn

Drought Conditions Report

January 7, 2021

Connecticut Water Planning Council Interagency Drought Workgroup

Stage 2 Drought Trigger Summary by Region January 7, 2021										
	Stage 2 Trigger	Fairfield	Hartford	Litchfield	Middlesex	New Haven	New London	Tolland	Windham	Data of Record
Precipitation (1)	Two-month total below 65% of normal	120% of normal	136% of normal	134% of normal	145% of normal	147% of normal	138% of normal	136% of normal	160% of normal	12/31/2020
<u>Ground Water (2)</u>	Two out of three months below the 25th percentile	25% stations meet trigger	50% stations meet trigger	40% stations meet trigger	71% stations meet trigger	23% stations meet trigger	80% stations meet trigger	58% stations meet trigger	83% stations meet trigger	12/31/2020
Streamflow (3)	Two out of three months below the 25th percentile	0% stations meet trigger	9% stations meet trigger	10% stations meet trigger	25% stations meet trigger	0% stations meet trigger	0% stations meet trigger	0% stations meet trigger	10% stations meet trigger	12/31/2020
<u>Reservoirs (4)</u>	Average levels less than 80% of normal	91% of normal	108% of normal	104% of normal	106% of normal	102% of normal	101% of normal	100% of normal	100% of normal	1/4/2021
Palmer Drought Severity Index (5)	-2.0 to -2.99	1.68	1.94	2.11	1.68	1.68	1.68	1.94	1.94	1/6/2021
<u>Crop Moisture</u> Index (6)	-1.0 to -1.99	2.12	2.23	2.25	2.12	2.12	2.12	2.23	2.23	1/6/2021
VegDRI (seasonal) (7)	Pre-drought stress	N/A - out of season	N/A - out of season	N/A - out of season	N/A - out of season					
Fire Danger (8)	Moderate	N/A - out of season	N/A - out of season	N/A - out of season	N/A - out of season					
<u>U.S. Drought</u> Monitor (9)	Intensity level D1-D2	None	None	None	None	None	None	None	None	1/7/2021

Key:	Drought trigger met	Region partially meets drought	Drought trigger not met across the
	across the majority of	trigger or is near trigger threshold	majority of region (conditions can
	region	(judgement call needed)	be worse in specific localities)

Methodology:

(1) Based on monthly precipitation averaged by region, calculated by National Weather Service (NWS).

(2) Based on monthly assessment of groundwater stations by region, calculated by United States Geological Survey (USGS). Region is identified as meeting trigger when ≥65% of stations in the region meet the threshold. Region is identified as partially meeting trigger when greater than 25% and less than 65% of stations in the region meet the threshold. Region meet the threshold.

(3) Based on monthly assessment of stream gauge stations by region, calculated by USGS. Region is identified as meeting trigger when ≥65% of stations in the region meet the threshold. Region is identified as not meeting trigger when ≤25% of stations in the region meet the threshold. Region is identified as partially meeting trigger when greater than 25% and less than 65% of stations in the region meet the threshold.

(4) Based on latest available reservoir status reports obtained from public water suppliers and compiled by CT Department of Public Health Drinking Water Section.

(5) Calculated by Climate Prediction Center (CPC) for each State Climate Division and extrapolated to county. Northwestern Climate Division reflective of Fairfield county, Central Climate Division reflective of Hartford, Tolland, Windham counties. Blend of Central Climate Division and Coastal Climate Division for Fairfield, New Haven, Middlesex, New London counties.

(6) Calculated by CPC for each State Climate Division and extrapolated to county. Northwestern Climate Division reflective of Fairfield county, Central Climate Division reflective of Hartford, Tolland, Windham counties. Blend of Central Climate Division and Coastal Climate Division for Fairfield, New Haven, Middlesex, New London counties.

(7) Based on visual assessment of geographic extent of each VegDri drought designation in each region, calculated by the National Drought Mitigation Center in collaboration with USGS.

(8) Based on daily forest fire danger report from CT DEEP Bureau of Natural Resources, Division of Forestry.

(9) Based on analysis of most recent edition of the U.S. Drought Monitor, produced by the National Drought Mitigation Center.

Connecticut Interagency Drought Workgroup Meeting January 7, 2021 NWS Boston/Albany Summary

Observed Precipitation:

December precipitation, inclusive of rain and melted snow, was above normal across the State. Precipitation totals ranged from 5 to 9 inches at most reporting stations. Windham County had the highest precipitation, ranging from 8 to 10 inches. Statewide precipitation generally ranged from 2 to 5 inches above normal, or 150% to 225% of normal precipitation for the month.

January month-to-date precipitation (Jan 1-5) ranged from 0.25 to 0.5 inch.

Forecast Precipitation:

Mainly dry conditions are forecast through next Tuesday. A storm system originating in the Gulf Coast States is expected to track off the Carolina coastline during Saturday, passing well south of New England. Thus at this time, measurable precipitation is not expected in CT with this system. Another low pressure may make a similar track early next week. A more northerly track with this second system could produce some light wintry precipitation, and warrants additional monitoring as we head into the weekend.

Observed Temperatures:

Temperatures during December as a whole averaged 1 to 3 degrees above normal. However, the last 10 days of the month were consistently warmer than normal. During the rain and snowmelt floods on December 25, the temperature at Hartford was 20 degrees above normal! This warmth, accompanied by a strong south wind, resulted in a melt out of the snowpack established on December 17th.

Forecast Temperatures:

Temperatures through next Tuesday are expected to range from normal to a few degrees above normal. Forecast highs range from the low 30s to low 40s. Forecast lows range mainly in the teens and 20s.

Long Range Outlook

The outlook from January 13-19 from the Climate Prediction Center indicates normal to above normal temperatures and near normal precipitation. The week 3 to 4 outlook, spanning January 16-29, indicates below normal precipitation and above average temperatures are probable.

NWS Conditions Update

Connecticut Interagency Drought Workgroup Meeting National Weather Service Boston MA and Albany NY January 7 2021



December 2020 Rainfall



National Weather Service - Boston/Norton MA

Rainfall Forecast Through 7 pm Wed Jan 13





Outlook for Jan 13-19, 2021





National Weather Service - Boston/Norton MA

Outlook for Jan 16-29



National Weather Service - Boston/Norton MA

Outlook for Feb/Mar/Apr



National Weather Service - Boston/Norton MA

Connecticut Precipitation National Weather Service Offices Boston/Norton MA, Albany NY, Upton NY Preliminary Precipitation Data (inches) by County Precipitation Data Through December 2020 Includes CoCoRaHS data

CT 1 Month December 2020	Rainfall	Departure	Percent	Normal
Litchfield	7.18	3.19	180	3.99
Hartford	7.89	3.95	200	3.94
Tolland	7.90	3.73	190	4.17
Windham	9.49	5.25	224	4.25
Fairfield	6.06	1.98	149	4.08
New Haven	7.64	3.74	196	3.90
Middlesex	8.29	3.97	192	4.32
New London	7.42	3.13	173	4.29

CT 2 month Nov-Dec 20	Rainfall	Departure	Percent	Normal
Litchfield	11.04	2.79	134	8.25
Hartford	11.45	3.05	136	8.40
Tolland	11.79	3.12	136	8.67
Windham	13.91	5.23	160	8.69
Fairfield	10.05	1.67	120	8.38
New Haven	11.81	3.75	147	8.06
Middlesex	12.58	3.92	145	8.66
New London	12.15	3.36	138	8.79

CT 3 month Oct-Dec 20	Rainfall	Departure	Percent	Normal
Litchfield	16.27	3.19	124	13.08
Hartford	17.86	4.55	134	13.31
Tolland	17.79	4.37	133	13.43
Windham	18.69	5.49	142	13.20
Fairfield	15.38	2.46	119	12.92
New Haven	17.30	4.60	136	12.70
Middlesex	17.58	3.55	125	14.03
New London	17.34	4.26	133	13.08

CT 4 month Sep-Dec 20	Rainfall	Departure	Percent	Normal
Litchfield	19.49	1.99	111	17.50
Hartford	20.10	2.52	114	17.58
Tolland	19.60	2.25	113	17.36
Windham	19.97	2.66	115	17.32
Fairfield	18.61	1.42	108	17.20
New Haven	19.93	3.29	120	16.64
Middlesex	19.59	1.87	111	17.72
New London	18.65	1.34	108	17.31

CT 5 month Aug-Dec 20	Rainfall	Departure	Percent	Normal
Litchfield	23.33	1.44	107	21.89
Hartford	22.64	0.72	103	21.92
Tolland	22.24	0.91	104	21.33
Windham	22.43	0.95	104	21.48
Fairfield	21.88	0.24	101	21.64
New Haven	23.02	2.43	112	20.59
Middlesex	22.90	1.16	105	21.74
New London	20.86	-0.93	96	21.79

CT 6 month Jul-Dec 20	Rainfall	Departure	Percent	Normal
Litchfield	26.64	0.17	101	26.47
Hartford	24.60	-1.89	93	26.49
Tolland	25.00	-0.26	99	25.26
Windham	24.93	-0.81	97	25.74
Fairfield	27.77	1.86	107	25.91
New Haven	26.61	1.99	108	24.62
Middlesex	26.40	0.28	101	26.12
New London	23.06	-2.44	90	25.50

CT 7 month Jun-Dec 20	Rainfall	Departure	Percent	Normal
Litchfield	28.82	-2.25	93	31.07
Hartford	26.28	-4.83	84	31.11
Tolland	27.43	-2.41	92	29.84
Windham	27.90	-2.18	93	30.08
Fairfield	29.66	-0.68	98	30.35
New Haven	29.11	0.09	100	29.02
Middlesex	27.92	-3.16	90	31.08
New London	25.78	-3.80	87	29.58

CT 12 month Jan-Dec 20	Rainfall	Departure	Percent	Normal
Litchfield	46.09	-4.63	91	50.72
Hartford	43.97	-6.87	86	50.84
Tolland	45.58	-4.49	91	50.06
Windham	46.63	-3.54	93	50.17
Fairfield	46.80	-3.41	93	50.21
New Haven	47.84	-0.85	98	48.69
Middlesex	47.42	-3.75	93	51.16
New London	44.14	-5.75	88	49.89

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Rainfall	Departure	Percent	Normal
00.04 -	-1.40	99	101.44
9.37 -	-2.32	98	101.69
04.55	4.43	104	100.13
04.29	3.95	104	100.35
04.28	3.86	104	100.42
05.83	8.45	109	97.38
05.46	3.14	103	102.32
05.82	6.04	106	99.79
	Name 00.04 0.37 04.55 04.29 04.28 05.83 05.82	Contraction Departure 00.04 -1.40 0.37 -2.32 04.55 4.43 04.29 3.95 04.28 3.86 05.83 8.45 05.46 3.14 05.82 6.04	Relation Departure Percent 00.04 -1.40 99 0.37 -2.32 98 04.55 4.43 104 04.29 3.95 104 04.28 3.86 104 05.83 8.45 109 05.46 3.14 103 05.82 6.04 106

CT 36 month Jan 18-Dec 20	Rainfall	Departure	Percent	Normal
Litchfield	166.42	14.26	109	152.16
Hartford	162.89	10.36	107	152.53
Tolland	167.23	17.04	111	150.19
Windham	171.28	20.76	114	150.52
Fairfield	170.84	20.21	113	150.63
New Haven	169.37	23.31	116	146.06
Middlesex	171.19	17.71	112	153.48
New London	168.25	18.57	112	149.68

County-based monthly precipitation totals are calculated using an average of all available full-month precipitation totals within that County from the following networks: Community Collaborative Rain, Hail and Snow network (CoCoRaHS), Cooperative Weather Observer Program (Coop), and Automated Surface Observing Systems (ASOS) data.

Coop and ASOS sites are part of National Weather Service networks. CoCoRaHS is a community-based network of volunteers that report precipitation.

County-based monthly normals were calculated using 30-year precipitation normals from NOAA/National Centers for Environmental Information (NCEI) for the period of 1981-2010. Monthly normals from 42 stations (consisting of Coop and ASOS stations) were grouped by County to calculate a single monthly normal for each County.



Generated 1/5/2021 at HPRCC using provisional data. NOAA Regional Climate Centers Map 2. Three month SPI ending December 2020, from the NOAA Regional Climate Centers.



Generated 1/5/2021 at HPRCC using provisional data. NOAA Regional Climate Centers. Map 3. Twelve month SPI ending December 2020, from the NOAA Regional Climate Centers.



Map 4. Palmer Drought Index from the Climate Prediction Center as of 1/2/21. CT Palmer Drought Index values: Northwest +2.11 (Unusual Moist Spell), Central +1.94 (Near Normal), Coastal +1.42 (Near Normal).



Map 5. U.S. Drought Monitor zoom-in on CT, effective 12/29/2020.



Map 6. U.S. Drought Monitor for Northeast US, effective 12/29/2020.

Provisional Data Subject to Review and Revision

USGS

U.S. Geological Survey

Status of streamflow and groundwater levels, as of December 31, 2020



Provisional Data Subject to Review and Revision

		Number of wells				
		Number of wells	below normal for 4		Percent	Sites
		below normal for 2	or more		stage 3	back to
	Number of	or more	consecutive	Percent	or	normal
County	wells	consecutive months	months	stage 2	greater	range*
Fairfield	8^	2	0	25	0	2
Hartford	10	5	1	50	10	4
Litchfield	5	2	1	40	20	1
Middlesex	7	5	0	71.4	0	3
New Haven	13	3	1	23.1	7.7	2
New London	5	4	2	80	20	2
Tolland	12	7	0	58.3	0	7
Windham	6	5	2	83.3	33.3	3

END OF DECEMBER 2020 GROUNDWATER SUMMARY BY

COUNTY *These are sites that changed from > = 2 consecutive months below normal last month to the normal range for December. Reset to 2/3 months below normal (stage 2) regardless of how many consecutive months they were below normal.



[^]Three wells not measured in Fairfield County due to access issues caused by the snowstorm



STATUS OF CONTINUOUS RECORD WELLS AS OF 1-4-2021 THERE WAS SIGNIFICANT PRECIPITATION AFTER MOST OF THE MANUAL DECEMBER MEASUREMENTS WERE MADE, AND

GROUNDWATER LEVELS HAVE CONTINUED TO RISE



Provisional Data Subject to Review and Revision

Provisional Data Subject to Review and Revision

	Number of	Number of gages below normal for 2 or more	Number of gages below normal for 4 or more out of 5	Percent	Percent	Sites back to
County	gages	consecutive months	consecutive months	stage 2	stage 3	normal*
Fairfield	14	0	0	0	0	0
Hartford	11	1	1	9.1	9.1	1
Litchfield	10	1	0	10	0	1
Middlesex	4	1	1	25	25	1
New Haven	7	0	0	0	0	0
New London	5	0	0	0	0	0
Tolland	3	0	0	0	0	0 ///
Windham	10	1	1	10	10	1

DECEMBER STREAMFLOW SUMMARY BY COUNTY



*These are sites that changed from > = 2 consecutive months below normal last month to the normal range for December. Not reflected in the percentages above because the standard for stage 2 or 3 is 2/3 months below normal or 4/5 months below normal, therefore for any of these sites, the status was set the same as in November.

PWSID	PWS Name	Most Recent Reading Date	Percent Full	Current Status	Trend	Historical Average	Percent of Normal	Previous Date	Previous Percent Full	County_Served
CT0570011	Aquarion Water Co of CT-Greenwich System	12/6/2020	47.80	Drought Warning	1	76.70	62	11/29/2020	38.40	FAIRFIELD
CT0150011	Aquarion Water Co of CT-Main System	12/6/2020	76.80	No Drought Stage	1	88.20	87	11/29/2020	69.20	FAIRFIELD
CT1350011	Aquarion Water Co of CT-Stamford	12/6/2020	64.90	No Drought Stage	$\uparrow \uparrow$	72.70	89	11/29/2020	54.40	FAIRFIELD
CT1030021	South Norwalk Electric & Water	1/4/2021	81.90	No Drought Stage	1	87.50	94	12/28/2020	78.20	FAIRFIELD
CT0340011	Danbury Water Department	1/3/2021	87.60	No Drought Stage	1	89.00	98	12/27/2020	79.50	FAIRFIELD
CT0090011	Bethel Water Dept	1/3/2021	100.00	No Drought Stage		97.90	102	12/27/2020	100.00	FAIRFIELD
CT1030011	Norwalk First Taxing District	1/3/2021	98.70	No Drought Stage	.↓	95.20	104	12/20/2020	100.00	FAIRFIELD
CT0770021	Manchester Water Department	1/3/2021	98.30	No Drought Stage	1	97.10	101	12/27/2020	97.40	HARTFORD
CT0170011	Bristol Water Department	1/3/2021	94.20	No Drought Stage	1	91.60	103	12/27/2020	89.70	HARTFORD
CT0640011	Metropolitan District Commission	12/14/2020	89.40	No Drought Stage	1	86.40	104	12/7/2020	88.60	HARTFORD
CT1310011	Southington Water Department	1/2/2021	100.00	No Drought Stage	$\uparrow \uparrow$	90.30	111	12/26/2020	71.90	HARTFORD
CT0890011	New Britain Water Department	12/31/2020	78.00	No Drought Stage	1	69.50	112	12/24/2020	70.90	HARTFORD
CT0473011	CTWC - Northern Reg-Western System	12/31/2020	100.00	No Drought Stage	$\uparrow\uparrow$	88.10	114	12/17/2020	89.20	HARTFORD
CT0980011	Aquarion Water Co of CT-Norfolk System	12/6/2020	93.40	No Drought Stage		99.60	94	11/29/2020	93.40	LITCHFIELD
CT1620011	Winsted Water Works	1/3/2021	100.00	No Drought Stage		99.30	101	12/27/2020	100.00	LITCHFIELD
CT1220011	Aquarion Water Co of CT-Salisbury Sys	12/6/2020	100.00	No Drought Stage		97.60	102	11/29/2020	100.00	LITCHFIELD
CT1250011	Sharon Water & Sewer Commission	1/2/2021	100.00	No Drought Stage		93.90	107	12/5/2020	100.00	LITCHFIELD
CT1430011	Torrington Water Company	1/1/2021	95.20	No Drought Stage	1	83.10	115	12/25/2020	90.50	LITCHFIELD
CT0830021	Connecticut Valley Hospital	12/28/2020	100.00	No Drought Stage		97.60	102	12/21/2020	100.00	MIDDLESEX
CT0261031	CTWC - Shoreline Region-Chester System	12/31/2020	100.00	No Drought Stage		97.40	103	12/17/2020	100.00	MIDDLESEX
CT0830011	Middletown Water Department	1/3/2021	100.00	No Drought Stage		88.90	112	12/27/2020	100.00	MIDDLESEX
CT1510011	Waterbury Water Department	12/27/2020	87.00	No Drought Stage	1	92.90	94	12/20/2020	84.10	NEW HAVEN
CT0930011	Regional Water Authority	1/3/2021	82.00	No Drought Stage	1	83.90	98	12/27/2020	80.30	NEW HAVEN
CT0608011	CTWC - Shoreline Region-Guilford System	12/31/2020	90.70	No Drought Stage	$\uparrow \uparrow$	87.80	103	12/17/2020	73.00	NEW HAVEN
CT1480011	Wallingford Water Department	1/1/2021	88.00	No Drought Stage	1	84.40	104	12/24/2020	84.50	NEW HAVEN
CT0800011	Meriden Water Division	12/28/2020	94.50	No Drought Stage	1	90.10	105	12/21/2020	85.50	NEW HAVEN
CT0880011	CTWC - Naugatuck Region-Central System	12/31/2020	100.00	No Drought Stage	1	92.80	108	12/17/2020	96.40	NEW HAVEN
CT0950011	New London Dept. of Public Utilities	1/3/2021	66.80	No Drought Stage	1	73.80	90	12/27/2020	60.50	NEW LONDON
CT0590011	Groton Utilities	12/28/2020	86.90	No Drought Stage	1	89.80	97	12/21/2020	80.50	NEW LONDON
CT1370011	Aquarion Water Co of CT-Mystic	12/6/2020	100.00	No Drought Stage	1	98.00	102	11/29/2020	91.70	NEW LONDON
CT1040011	Norwich Public Utilities	1/2/2021	100.00	No Drought Stage		94.80	106	12/26/2020	100.00	NEW LONDON
CT0580011	Jewett City Water Company	12/28/2020	100.00	No Drought Stage		92.00	109	12/21/2020	100.00	NEW LONDON
CT1340011	CTWC - Northern Reg-Stafford System	12/31/2020	100.00	No Drought Stage		99.80	100	12/17/2020	100.00	TOLLAND
CT1630011	Windham Water Works	1/3/2021	100.00	No Drought Stage		100.00	100	12/27/2020	100.00	WINDHAM
			91.24			90.23	101.12	Ave	a Percent of Normal by County	/
\uparrow	-Increase since last measurement (less than 10% increase)			Number of systems:					g	0.86 FAIRFIELD
$\uparrow\uparrow$	-Increase since last measurement (10% or greater increase)			Greater than or equal	l to 100%	of Normal	24	1	10	7.50 HARTFORD
\downarrow	-Decrease since last measurement (less than 10% decrease)			Between 90% and 999	% of Norm	nal	7	7	10	3.80 LITCHFIELD
$\downarrow \downarrow$	-Decrease since last measurement (10% or greater decrease)			Less than 90% of Nori	mal		3	3	10	5.67 MIDDLESEX
	- Same measurement as the previous measurement			At 100% Full			15	5	10	2.00 NEW HAVEN

100.80 NEW LONDON 100.00 TOLLAND 100.00 WINDHAM

Department of Agriculture – Drought Status Report

	Reported Conditions						
Parameter		As of 12/10/2020	Current Conditions (1/6/2021)				
	Report Date	Status	Report Date	Status			
Palmer Drought Severity Index	12/5/2020	Still reporting normal for the entire state	1/2/2021	Most of the state (all except coastal portions)			
<u>(map)</u>				shows unusually moist			
Palmer drought severity index	12/5/2020	Northwest: 1.41	1/2/2021	Northwest: 2.11			
(data)		Central: 1.62		Central: 1.94			
		Coastal: 0.88		Coastal: 1.42			
Precipitation needed to end	12/5/2020	Not reported	1/2/2021	Not reported			
drought (in.)							
Crop Moisture (current map)	12/5/2020	Now showing entire state as excessively wet.	1/2/2021	Now showing entire state as wet.			
Topsoil moisture (current map)	12/6/2020	No data reported	1/3/2021	No data reported			
Topsoil moisture (current vs. 5	12/6/2020	No data reported	1/3/2021	No data reported			
<u>yr. mean)</u>							
Veg DRI (% of CT land area	12/6/2020	Out of season, no VegDRI data reported	1/3/2021	Out of season, no VegDRI data reported			
shown as pre-drought,		outside of growing season.		outside of growing season.			
moderate, severe or extreme)							
Drought Monitor Report for CT	12/8/2020	The drought monitor continues to show	1/5/2021	The drought monitor continues to show			
		improvement over the last month, with the %		improvement over the last month, with the %			
		of the state showing no drought conditions		of the state showing no drought conditions			
		now at 43.1% (this was 0% as of October 6 th).		now at 100%.			
NASS Crop Progress Report	11/29/2020	Last report from season, reported 78%	1/6/2021	No report, last report was 11/29/2020.			
(New England)		adequate for topsoil, 75% adequate for					
		subsoil.					

Summary: Data from all of these indicators shows improved conditions throughout the state over the last month.

Explanatory notes:

Palmer Drought Severity Index: The Palmer Drought Severity Index (PDSI) uses readily available temperature and precipitation data to estimate relative dryness. It is a standardized index that generally spans -10 (dry) to +10 (wet). Maps of operational agencies like NOAA typically show a range of -4 to +4, but more extreme values are possible.

Crop moisture index: The CMI gives the short-term or current status of purely agricultural drought or moisture surplus and can change rapidly from week to week. The CMI index indicates general conditions and not local variations caused by isolated rain. Input to the calculations include the weekly precipitation total and average temperature, division constants (water capacity of the soil, etc.) and previous history of the indices.

Topsoil moisture: Topsoil Moisture Monitoring maps are based on United States Department of Agriculture state reports of topsoil moisture conditions. Means are calculated from historical weekly data published by USDA/NASS using the closest date to the equivalent date for the year. Results are based on the short and very short percentages of topsoil moisture (upper 6 inches) reported by the USDA. Reports are based on subjective observations.

Vegetation Drought Response Index: VegDRI calculations integrate satellite-based observations of vegetation conditions, climate data, and other biophysical information such as land cover/land use type, soil characteristics, and ecological setting. The VegDRI maps that are produced deliver continuous geographic coverage over large areas, and have inherently finer spatial detail (1-km2 resolution) than other commonly available drought indicators such as the U.S. Drought Monitor. The state statistics table is located here: https://vegdri.unl.edu/Home/VegDRITables.aspx?CT.





U.S. Drought Monitor Connecticut

December 8, 2020 (Released Thursday, Dec. 10, 2020)

Valid 7 a.m. EST

Drought Conditions (Percent Area)



None D0-D4 D1-D4 D2-D4 D3-D4 56.86 0.00 0.00 0.00 Current 43.14 0.00 Last Week 12-01-2020 43.14 56.86 0.30 0.00 0.00 0.00 3 Month s Ago 09-08-2020 13.43 86.57 58.18 32.29 0.00 0.00 Start of Calendar Year 100.00 0.00 0.00 0.00 0.00 0.00 Start of Water Year 09-29-2020 0.00 100.00 70.03 57.60 24.09 0.00 One Year Ago 12-10-2019 100.00 0.00 0.00 0.00 0.00 0.00

Intensity:

None D2 Severe Drought D0 Abnormally Dry D3 Extreme Drought D1 Moderate Drought D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author: David Simeral



droughtmonitor.unl.edu

U.S. Drought Monitor Connecticut

January 5, 2021 (Released Thursday, Jan. 7, 2021) Valid 7 a.m. EST



	Dro	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	
Current	100.00	0.00	0.00	0.00	0.00	0.00	
Last Week 12-29-2020	100.00	0.00	0.00	0.00	0.00	0.00	
3 Month s Ago 10-06-2020	0.00	100.00	68.70	57.60	38.39	0.00	
Start of Calendar Year 12-29-2020	100.00	0.00	0.00	0.00	0.00	0.00	
Start of Water Year 09-29-2020	0.00	100.00	70.03	57.60	24.09	0.00	
One Year Ago	100.00	0.00	0.00	0.00	0.00	0.00	

Intensity: None D0 Abnormally Dry

D2 Severe Drought D0 Abnormally Dry D3 Extreme Drought D1 Moderate Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

Deborah Bathke National Drought Mitigation Center



droughtmonitor.unl.edu

Lindquist, Eric

From:	Fitting, Corinne
Sent:	Tuesday, January 5, 2021 9:57 AM
То:	Lindquist, Eric
Cc:	Hoskins, Douglas; Perry, Jennifer; Wittchen, Bruce
Subject:	Drought indicators update for 1/7/21 meeting

Hello Eric,

Below are updates to DEEP's indicators for the IDW.

Quantitative Indicators Fire Danger

• Fire Danger is not assessed nor reported out at this time. They will start up again sometime late winter as conditions warrant (usually around March 15).

Qualitative/Auxiliary Indicators Fisheries Issues

• Nothing to report

Water Diversions/Well-Field Pumping Issues

• Nothing to report

Doug will be attending the meeting on Thursday for DEEP.

As you may be aware, Phil Trowbridge has moved to a new position with New Hampshire DES. We will appoint a new designee for the IDW and let you know shortly.

Corinne Fitting Supervising Environmental Analyst Water Planning & Management Division Bureau of Water Protection & Land Reuse Connecticut Department of Energy and Environmental Protection 79 Elm Street, Hartford, CT 06106-5127 P: 860.967.3158 | F: 860.424.4055 | E: corinne.fitting@ct.gov



www.ct.gov/deep

Conserving, improving and protecting our natural resources and environment; Ensuring a clean, affordable, reliable, and sustainable energy supply.

Lindquist, Eric

From:	Glowacki, Douglas
Sent:	Wednesday, January 6, 2021 7:39 AM
То:	Lindquist, Eric
Subject:	Re: Interagency Drought Workgroup - 1/7 Meeting

Good Morning Eric,

The forecast for the next two weeks looks fairly active. There may be several coastal snow and mixed storms that threaten New England. At this time the storm tracks are just off shore (see precipitation map from the GFS model below) and our area is currently forecast to receive about 3/4" of precipitation (dark blue fill on map). However, any slight shift of the storm tracks closer to the coast would bring in significantly more precipitation. Perhaps as much as 2" - 3" inches. (light blue fill and magenta fill). We will not know the exact tracks until we get closer to each storm.



Sincerely, Douglas Glowacki Emergency Management Program Specialist Division of Emergency Management and Homeland Security 1111 Country Club Road, Middletown, CT 06457 Cell 860-250-2358

From: Lindquist, Eric <Eric.K.Lindquist@ct.gov>
Sent: Tuesday, January 5, 2021 8:40 AM
To: Aarrestad, Peter <Peter.Aarrestad@ct.gov>; Anderson, Stephen <Stephen.Anderson@ct.gov>; Baran, Robert
<Robert.Baran@ct.gov>; Belk, Nicole <nicole.belk@noaa.gov>; Bellucci, Christopher <Christopher.Bellucci@ct.gov>;