

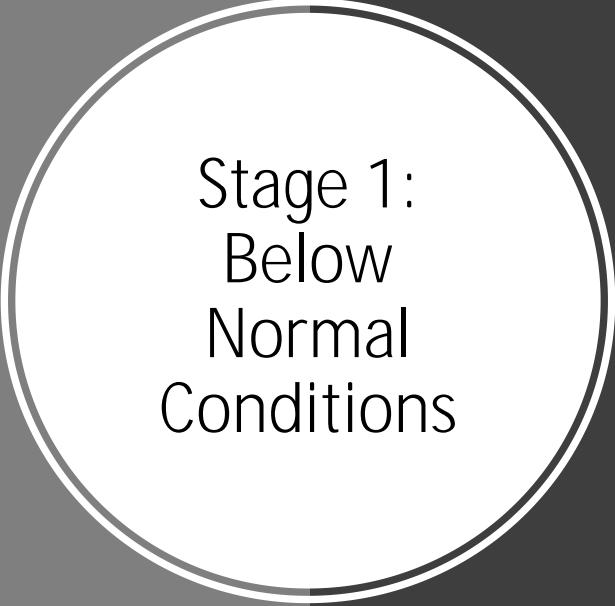
Connecticut Drought Preparedness and Response Plan

Overview for Small Water Utilities

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Primary Functions of the State Drought Plan

- Defines criteria and guidelines to assess the severity of drought conditions.
- Identifies the state, regional, local, federal, and private sector entities that are primarily responsible for managing drought response.
- Recommends drought mitigation functions according to drought severity, responsible entity, and function type.
- Defines communication strategies to integrate and connect the functions and responsibilities of government entities and the public.
- Identifies a progression of water use restrictions that may be implemented at the state or local level.



Stage 1:
Below
Normal
Conditions

- Preliminary preparedness stage.
- Intended to advise state, regional, and local officials and public water suppliers of potentially developing drought conditions and to re-establish lines of communication.

Stage 1: Below Normal Conditions

Defining Criteria:

Stage 1 is a preliminary preparedness stage that serves to alert the parties who should be prepared to respond to potentially worsening drought conditions. The primary target audience includes state, regional, and local officials and public water suppliers. Typically, this stage is activated upon the first signals of impacts from abnormally dry conditions. There is no expectation for a broad public notice of a Stage 1 declaration.

Specific criteria thresholds are not defined for Stage 1 as the decision to begin focusing on a possible developing drought is based on the IDW's professional judgment.



Stage 2:
Incipient
Drought

- Emerging drought event.
- Impacts typically limited and isolated in nature; likely felt first in the most water-constrained settings.
- Possible depletion of sensitive shallow/dug wells; declining fire pond levels; declining reservoir levels in limited supply/high demand settings.
- Some public water systems may enter first stage of their drought plans.

Stage 2: Incipient Drought

Defining Criteria:

A decision to issue a Stage 2 declaration regarding incipient drought is guided by the following drought criteria thresholds, as well as any other ancillary data:

Precipitation	Two-month total below 65% of average
Groundwater	Two out of three months below the 25 th percentile
Streamflow	Two out of three months below the 25 th percentile
Reservoirs	Average levels less than 80% of normal
Palmer Drought Severity Index	-2.0 to -2.99
Crop Moisture Index	-1.0 to -1.99, abnormally dry
VegDRI (seasonal)	Pre-drought conditions
Fire Danger	Moderate
U.S. Drought Monitor	Intensity level D1-D2

This stage was formerly called: Drought Advisory



Stage 3:
Moderate
Drought

- Well-established drought across a significant area.
- Impacts increasing in extent and intensity; isolated severe impacts.
- Tone of public messaging conveys the more serious nature of conditions.
- Preparations are made for the possibility of widespread emergency response, should conditions continue to worsen.

Stage 3: Moderate Drought

Defining Criteria:

A decision to issue a Stage 3 declaration regarding moderate drought is guided by the following drought criteria thresholds, as well as any other ancillary data:

Precipitation	Three-month total below 65% of average
Groundwater	Four consecutive months below the 25 th percentile
Streamflow	Four out of five months below the 25 th percentile
Reservoirs	Average levels less than 70% of normal
Palmer Drought Severity Index	-3.0 to -3.99
Crop Moisture Index	-2.0 to -2.99, excessively dry
VegDRI (seasonal)	Moderate drought conditions
Fire Danger	High
U.S. Drought Monitor	Intensity level D2-D3

This stage was formerly called: Drought Watch



Stage 4:
Severe
Drought

- Widespread severe impacts to water supplies imminent or occurring.
- Complete loss of some crops likely
- Public officials and some public water systems likely to begin undertaking emergency measures and emergency water restrictions.
- Governor likely to convene Unified Command to coordinate the drought response.

Stage 4: Severe Drought

Defining Criteria:

A decision to issue a Stage 4 declaration regarding severe drought is guided by the following drought criteria thresholds, as well as any other ancillary data:

Precipitation	Five-month total below 65% of average
Groundwater	Six consecutive months below the 25th percentile
Streamflow	Six out of seven months below the 25th percentile
Reservoirs	Average levels less than 60% of normal
Palmer Drought Severity Index	-4 or less
Crop Moisture Index	-3 or less, severely dry
VegDRI (seasonal)	Severe drought conditions
Fire Danger	Very high
U.S. Drought Monitor	Intensity level D3-D4

This stage was formerly called: Drought Warning



Stage 5:
Severe
Drought

- Public water supplies and firefighting capacity depleted to a point threatening public health and safety.
- Emergency Operations Center is likely to be activated; available federal and state resources may be deployed to assist with emergency response.

Stage 5: Extreme Drought

Defining Criteria:

A decision to issue a Stage 5 declaration regarding extreme drought is guided by the following drought criteria thresholds, as well as any other ancillary data:

Precipitation	Seven-month total below 65% of average
Groundwater	Eight consecutive months below the 25th percentile
Streamflow	Seven consecutive months below the 25th percentile
Reservoirs	Average levels less than 50% of normal or less than 50 days of supply
Palmer Drought Severity Index	-4 or less
Crop Moisture Index	-3 or less, severely dry
VegDRI (seasonal)	Extreme drought conditions
Fire Danger	Extreme
U.S. Drought Monitor	Intensity level D4

This stage was formerly called: Drought Emergency

State Drought Plan v. PWS Emergency Response Plans

- State Drought Plan purposely uses different stage names and definitions to avoid public confusion.
- PWS drought stages are intended to apply to a single customer base, while the State drought stages are meant to convey the status of water resources in Connecticut as a whole.
- Each PWS is expected to encourage water conservation and inform its customers of State-issued voluntary/mandatory conservation requests, even if the PWS has not entered a drought trigger under its emergency response plan.

State Drought Declaration Process

- Interagency Drought Workgroup (IDW) meets at a regularly scheduled monthly meeting or schedules a special meeting if necessary.
- Month-end condition reports are compiled for each drought indicator and put into a matrix for visualization.
- Ancillary reports/data are considered.
- IDW members vote on whether to recommend declaration of a particular drought stage, by county.
- Recommendations forwarded to Governor's Office for review.

State Drought Declaration Process

- When a drought declaration is approved:
 - IDW/OPM notifies general public via a press release.
 - DPH notifies public water systems.
 - DEMHS notifies municipal drought liaisons via emergency communication channels.
 - State agencies meet to review and undertake mitigation actions as deemed necessary.
 - Public water systems review and undertake recommended mitigation actions listed in State Drought Plan, as deemed necessary.
 - Municipal officials/municipal drought liaison coordinate with state agencies and public water systems, as appropriate.

Municipal Drought Liaison (MDL)

- One MDL per municipality, updated on an annual basis.
- Monitors local conditions on the ground.
- Transmits/receives information to/from state agencies and public water systems.
- Monitors impacts to agriculture, rivers and streams, private domestic wells, fire suppression ponds, etc.
- May assist with community engagement, education, and implementation of water use restrictions.