

## **Massachusetts Water Resources Authority**

# Drought Management Task Force Update

05.09.17

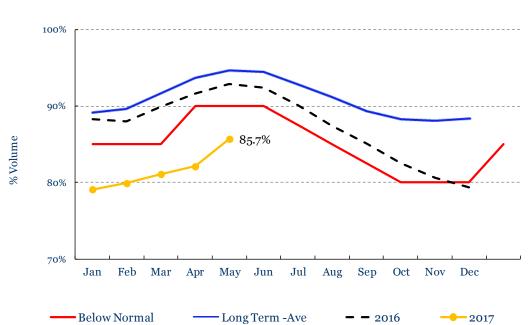
John Gregoire



# **Quabbin Status as of May 5, 2017**

- Current Elevation: 522.51 ft
- Current Volume: 355,425 MG (86.2%)
- At current capacity Quabbin can supply the system's current demand\* for 4.9 years

#### Quabbin Reservoir



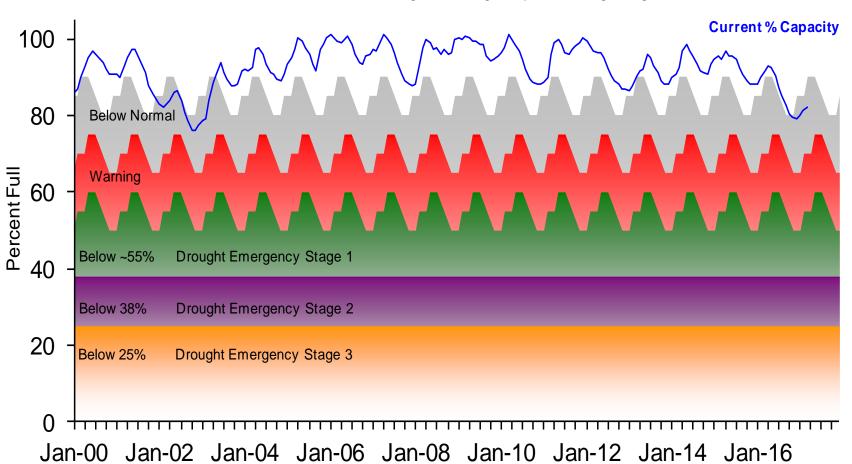
<sup>\*</sup> Calculated using an average daily demand of 200 MGD



#### **Quabbin Reservoir Levels relative to Drought Stages**

#### **Quabbin Reservoir Levels**

With Drought Emergency Planning Stages



3

#### **Quabbin Reservoir Projections – May 2017**

Quabbin Reservoir levels have been modeled for the next 12 months (May 2017 – April 2018) given varying yield conditions, and an annual demand of 220 mgd (includes a 10 mgd increase from current annual demand levels). It should be noted that April 2017 was the 58<sup>th</sup> driest April in the 68 year history of Quabbin yields. The monthly yield for April 2017 was 17,729.6 MG.

Table 1 below shows the ending drought status for the time period being simulated.

Table 1: Quabbin Reservoir Status with Varying Reservoir Yield Scenarios Looking Forward from May 1, 2017

	1-Month	3-Months	6-Months	12-Months
Median Yield				
	Below Normal	Normal	Normal	Normal
Dry				
(75th				
Percentile)	Below Normal	Normal*	Normal	Below Normal
Driest				
(of Record)	Below Normal	Below Normal	Below Normal	Drought Warning

<sup>\*</sup>Reservoir level is at 85.77% full at the end of the 3 month simulation which is Normal Condition but close to Below Normal (<85%)

Evaluating a 24-month scenario using the driest conditions, Quabbin Reservoir would end in the Drought Warning Stage Level.



## **Wachusett Reservoir Status – Normal operations**

