

**MassDEP Bureau of Water Resources**  
**Safe Yield and Its Components by Major Basin**  
**March 29, 2016**

<b>Basin Name</b>	<b>Drainage Area (sq mi)</b>	<b>Annualized Basin Yield (Q90 Streamflow and/or Drought Aquifer Recharge) (MGD)</b>	<b>Reservoir Storage Credit (MGD)</b>	<b>SAFE YIELD: 55% of Q90 Streamflow and/or 100% of Drought Aquifer Recharge, + Storage (MGD)<sup>1</sup></b>	<b>Total Annualized Authorized Withdrawals<sup>2</sup> (MGD)</b>	<b>Total Annualized Registered Withdrawals (MGD)<sup>2</sup></b>
Blackstone	431.2	162.0	0	89.1	35.53	24.92
Boston Harbor	289.0	98.6	0.6	54.9	39.14	31.62
Buzzards Bay	374.6	178.1 <sup>3</sup>	0	148.4	84.02	73.26
Cape Cod	401.8	266.0	0	266.0	51.87	32.68
Charles	312.9	117.6	0.5	65.2	46.62	34.11
Chicopee	721.6	252.9	214.0	353.1	204.96	201.56
Concord	400.3	159.2	0	87.5	36.79	28.62
Connecticut (NET)	7368.8	3,393.6	0	1,866.5	149.67	143.19
Deerfield	663.5	236.4	0	130.0	3.93	3.77
Farmington	151.9	46.3	0	25.5	0.0	0
French	94.7	35.8	0	19.7	3.54	3.42
Housatonic	549.9	175.2	0	96.4	35.61	30.75
Hudson	231.3	69.4	0	38.2	13.35	10.69
Ipswich	155.2	53.4	0	29.4	32.81	29.59
Islands	157.8	104.4	0	104.4	7.38	5.2
Merrimack (NET)	3901.4	1,637.1	0	900.4	80.22	54.68
Millers	389.1	120.1	0	66.0	10.87	8.73
Narr-Mt. Hope Bay	116.7	46.2	12.6	38.0	13.16	12.41
Nashua	507.8	212.3	138.8	255.5	180.87	167.46
North Coastal	171.5	46.4	0	25.5	21.93	20.8
Parker	82.8	27.2	0	15.0	2.52	1.61
Quinebaug	164.0	61.0	0.40	33.9	5.63	2.7
Shawsheen	78.2	26.4	0	14.5	5.01	5.01
South Coastal	240.7	92.4 <sup>3</sup>	0	70.1	47.4	36.39
Taunton	530.1	244.4	0	134.4	92.45	66.36
Tenmile	53.1	21.1	0	11.6	12.94	9.99
Westfield	516.9	152.6	14.9	98.8	55.21	51.1

sq mi = square miles; MGD = million gallons per day

1. The annualized basin yields of the Cape Cod, Islands, and portions of the South Coastal and Buzzards Bay basins were not adjusted by 55% of streamflow because they are based on drought year aquifer recharge, rather than on simulated drought streamflow.

2. As of January 2016

3. Basin Yield values are a combination of streamflow-based (Q90) in one portion of major basin and aquifer-recharge based in another portion.

Connecticut (NET) = Connecticut River at USGS gage in Thompsonville, CT minus Westfield, Chicopee, Millers, and Deerfield River basins

Merrimack (NET) = Merrimack River at USGS gage in Lowell, MA minus Nashua, Concord, and Shawsheen River basins, plus drainage area below Lowell gage.