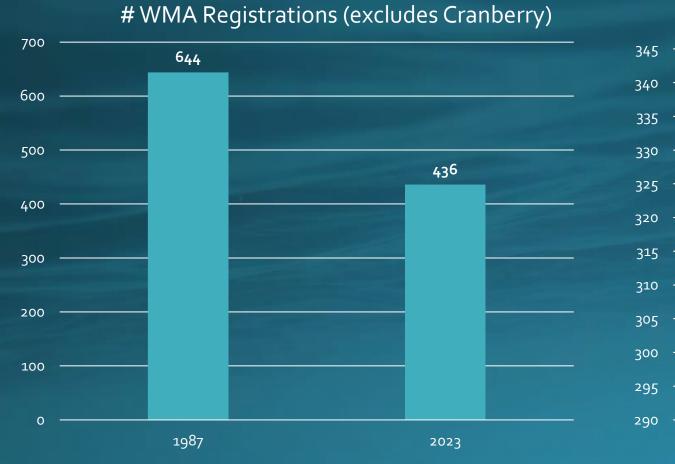


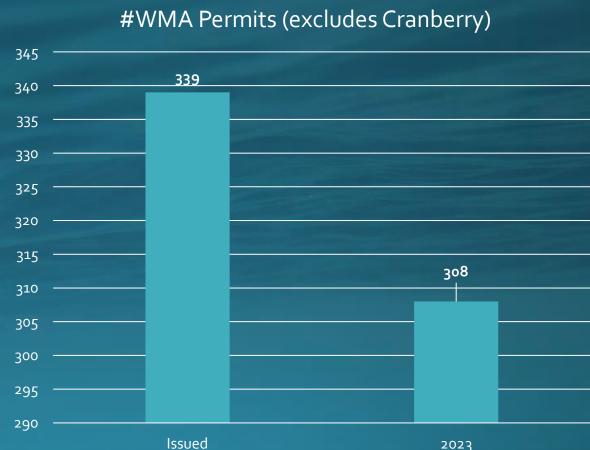
Water Management Act (WMA) Water Authorizations Status and Reported Water Use in MA

WMA Advisory Committee
December 11, 2023
2-4 pm via Zoom

Shi Chen, Water Management Program
Project Team: Duane LeVangie, Linjun Yao, Shi Chen

Total WMA Registrations and Permits Numbers





Decreased: 208

Decreased: 31 (24.3 MGD)

Top 5 Surrendered WMA Registrations

| Name | Basin | Use Type | Annualized Registered Volume (MGD) | Closure Date |
|-------------------------------------|------------------|------------|--|--------------|
| Mt Tom Generating Company LLC | Connecticut | Industrial | 113.6 | 12/31/2017 |
| Ogden Martin System of Haverhill | Merrimack | Industrial | 10.25 | 4/6/2006 |
| American Optical Corporation | Quinebaug | Industrial | 7.95 | 1/1/2008 |
| Lenox Development LLC | Housatonic | Industrial | 4.6 | 4/8/2023 |
| Armstrong World Industries Inc | Boston Harbor | Industrial | 3.34 | 6/30/1997 |

Statewide Total Volumes by Water Use Type

(All volumes in million gallons per day (MGD) (December 2023)

| Water Use Type | Annualized Registered Volume | Annualized Permitted Volume | Total | % of Statewide Total |
|--|------------------------------|-----------------------------|---------|----------------------|
| PWSs (262 Reg. & 203 Permits) | 797.83 | 136.26 | 934.09 | 92.1% |
| Golf (96 Reg. & 63 Permits) | 6.12 | 4.98 | 11.1 | 1.1% |
| Industrial (51 Reg. &, 25 Permits) | 33.43 | 18.71 | 52.14 | 5.1% |
| Agricultural excluding Cranberry (25 Reg. & 4 Permits) | 1.86 | 0.96 | 2.82 | 0.3% |
| *Others (10 Reg. & 13 Permits) | 10.99 | 3.45 | 14.44 | 1.4% |
| Total excluding cranberry (436 Reg. & 308 Permit) | 850.23 | 164.36 | 1014.59 | |

^{*}Others include Fish, Ski and Commercial

New Permits Issued since 2014

| Basin | # of New Permits Issued since 2014 (increased volumes , new sources, new permits) | |
|--|--|--|
| Cape Cod | 3 | |
| South Coastal | 3 | |
| Islands, Buzzards Bay, Taunton, Boston Harbor, North Coastal | 1 permit in each basin | |
| Total | 11 | |
| | 3.13 MGD additional allocation | |
| Volumes allocated | 1.95 MGD actual increase in use from baseline period (Eastham, Abington-Rockland, Southport, National Cemetery) | |

Volumes Reduced since 2014

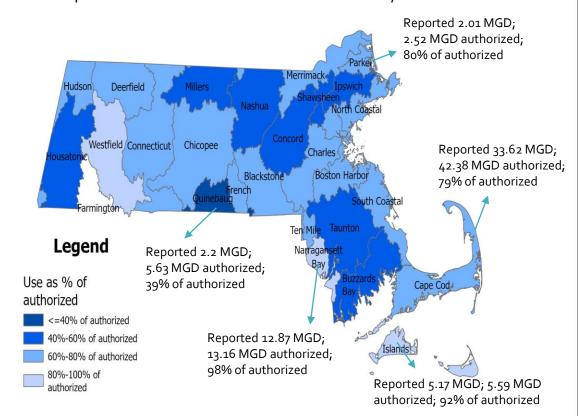
| Basin | # of Permits Reduced or Surrendered | |
|--------------------------------------|--|--|
| Taunton | 5 | |
| Concord | 4 | |
| Boston Harbor | 3 | |
| Ipswich | 2 | |
| Westfield, South Coastal, Charles | 1 permit in each basin | |
| Total | 17 | |
| Reduced Permit Vol. | 10.66 MGD | |
| Reduced Reg. Vol. | 7.87 MGD | |

Reasons:

- 4 Gave up permits
- 5 Held back volumes to avoid mitigation
- 6 Reduced volumes due to needs
- 2 Reduced for other reasons

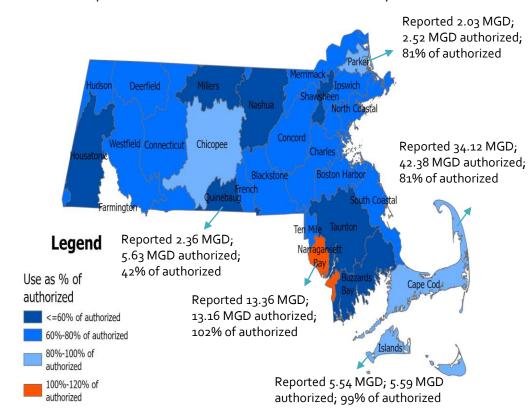
2021 and 2022 reported water use to total authorized volumes

2021 reported water use to total authorized volumes by basins



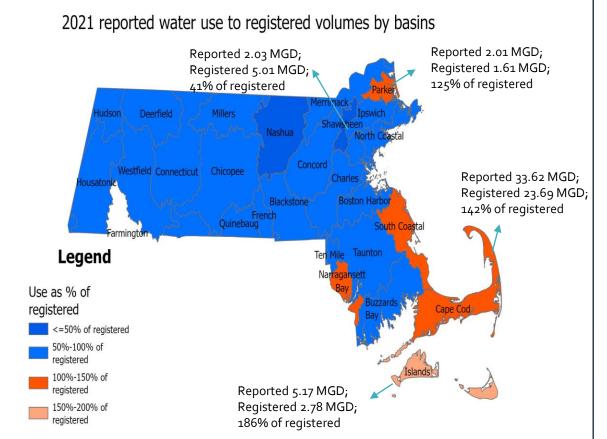
| | Reported (MGD) | Authorized (MGD) | % reported/Authorized |
|---------------|----------------|------------------|-----------------------|
| lpswich | 17.25 | 32-54 | 53% |
| Charles | 29.62 | 43.18 | 68.6% |
| Concord | 19.83 | 34-35 | 57.7% |
| South Coastal | 25.82 | 36.24 | 71.2% |

2022 reported water use to total authorized volumes by basins

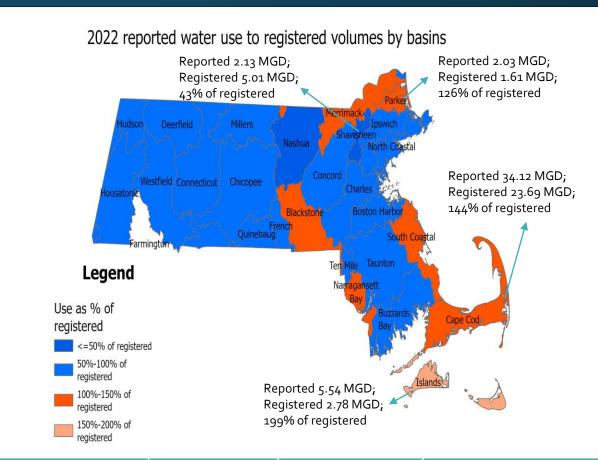


| | Reported (MGD) | Authorized (MGD) | % reported/Authorized |
|---------------|----------------|------------------|-----------------------|
| Ipswich | 19.71 | 32-54 | 60.6% |
| Charles | 30.29 | 43.18 | 70.1% |
| Concord | 22.11 | 34-35 | 64.4% |
| South Coastal | 26.96 | 36.24 | 74.4% |

2021 and 2022 reported water use to registered volumes

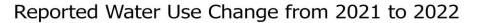


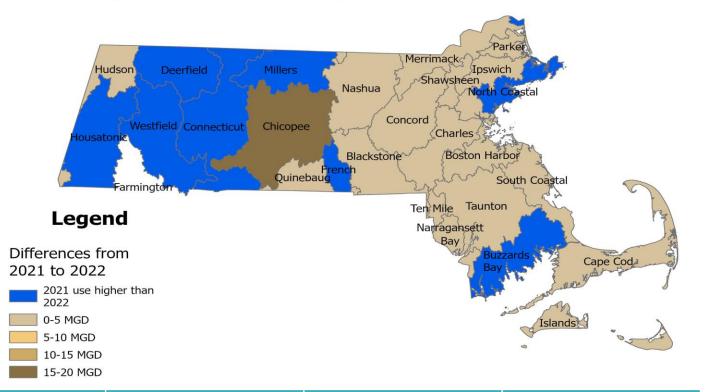
| | Reported (MGD) | Registered (MGD) | % reported/ Registered |
|---------------|----------------|------------------|------------------------|
| Ipswich | 17.25 | 29.58 | 58.32% |
| Charles | 29.62 | 34.08 | 86.9% |
| Concord | 19.83 | 28.19 | 70.34% |
| South Coastal | 25.82 | 24.42 | 105.7% |



| | Reported (MGD) | Registered (MGD) | % reported/ Registered |
|---------------|----------------|------------------|------------------------|
| Ipswich | 19.71 | 29.58 | 66.63% |
| Charles | 30.29 | 34.08 | 88.9% |
| Concord | 22.11 | 28.19 | 78.4% |
| South Coastal | 26.96 | 24.42 | 110.4% |

Reported Water Use Change from 2021 to 2022





| Basins | 2021 Reported Use | 2022 Reported Use | Differences |
|-------------|-------------------|-------------------|-------------|
| Chicopee | 153.5 MGD | 171.08 MGD | 17.58 MGD |
| Blackstone | 24.15 MGD | 26.6 MGD | 2.45 MGD |
| Merrimack | 54.07 MGD | 56.08 MGD | 2.01 MGD |
| Connecticut | 21.63 MGD | 20.67 MGD | -o.96 MGD |

| | Total Reported Use |
|------|-----------------------|
| 2021 | 663.5 MGD |
| 2022 | 696.7 MGD |

Questions?/Comments?

Shi Chen
MassDEP Water Management Program
shi.chen@mass.gov
857-360-0042