

# WMA: Grant Programs

Water Management Act Grants

M36 Water Audit Grants

2016-2017

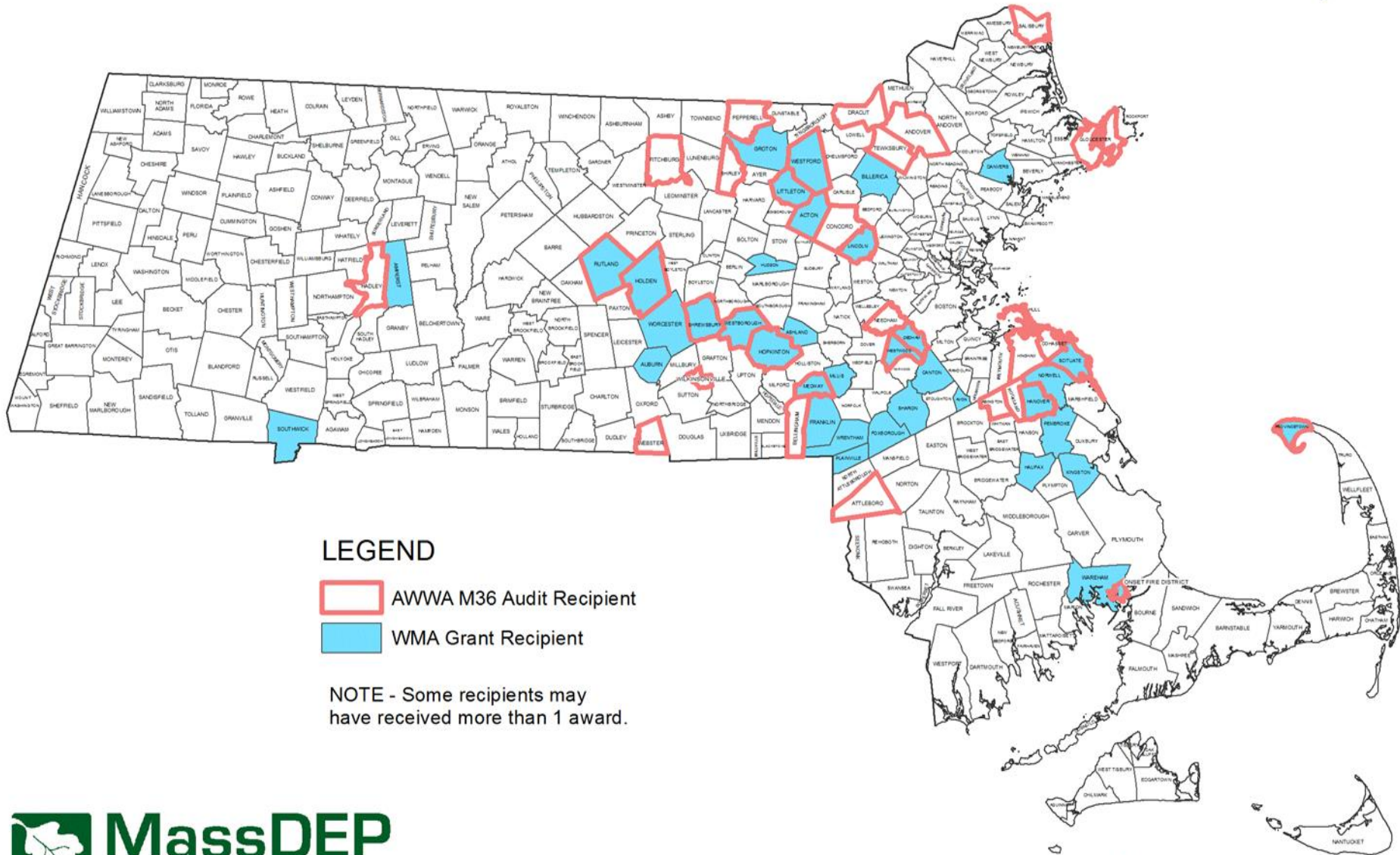
Water Resources Commission  
September 14, 2017

# Water Management Acts Grants & M36 Water Audit Grants Background

- State capital fund provides money for both grants
- Approximately \$1 million/year combined
- Funding for 2018-2022 is in the new capital budget
- WMA Grant (2013-2018)
  - Assist WMA permittees with minimization & Mitigation requirements
- AWWA M36 Grant (2016-2018)
  - Assist registrants & permit holders reduce their non-revenue water

# WMA GRANT RECIPIENTS, 2013-2017

## AWWA M36 AUDIT RECIPIENTS, 2016-2017



### LEGEND

- AWWA M36 Audit Recipient
- WMA Grant Recipient

NOTE - Some recipients may have received more than 1 award.

# WMA Grant

- WMA Grant (2013 – 2018)
  - WMA permittees with minimization & mitigation requirements
  - Site or town specific projects
  - Particular consideration is given to projects in “highly impacted basins or subbasins”, or areas with coldwater fish resources.
  - Project usually in the \$100-150k dollar amount
  - Average of 13 projects a year
  - Current Requirements:
    - Applicants must have a valid WMA permit
    - 20% financial match for all projects

# WMA Grant- Review Process

- Review Committee consisted of:
  - 6 MassDEP staff, 1 DCR staff; 1 DFG staff; and 1 EEA staff
- Competitive scoring:
  - All proposals were reviewed and competitively scored using the following criteria:
    - Problem definition; Strategy/approach; Project viability; Applicant strength; timeline; and Proposal quality and responsiveness
- Recommendations made:
  - Based on total score.
  - Reviewed by MassDEP Commissioner, EEA Secretary, and the Governor's Office

# Summary of Prior WMA Grant

- 2013
  - 27 proposals requesting \$2.62 million
  - 10 projects funded (\$858,250)
    - Amherst, Medway, Hopkinton, Franklin, Worcester, Dedham-Westwood Water District, Scituate, Halifax, Kingston, Pembroke
- 2014
  - 26 proposals requesting \$2.3 million
  - 17 projects funded (\$1.08 million)
    - Acton, Ashland, Auburn, Canton, Foxboro, Franklin, Groton, Hanover, Holden, Hudson, Kingston (2), Littleton, Medway, Scituate, Sharon, and Worcester.
- 2015
  - 20 proposals requesting just under \$2.0 million
  - 12 projects funded (\$754,700)
    - Auburn, Franklin, Halifax, Kingston, Lincoln, Littleton, Medway, Norwell, Shrewsbury, Westborough, Westford, Wrentham

# WMA Grant Summary Results cont.

- 2016
  - 16 proposals requesting \$1.14 million
  - 12 projects funded (\$812,000)
    - Amherst, Auburn Water District, Avon, Billerica, Canton, Groton, Norwell, Rutland, Shrewsbury, Southwick, Wareham Fire District, and Wrentham.
- 2017
  - 16 proposals requesting \$1.08 million.
  - 9 projects funded (\$648,000)
    - Auburn Water District, Danvers, DWWD, Millis, Plainville, Provincetown, Scituate, Shrewsbury, and Wrentham.

# 2017 Projects

- Interconnections with Worcester and Drought Impacts – Auburn
- Data Collection and Planning for Ipswich Suppliers – Danvers
- Dropcountr and Stormwater – DWWD
- Stormwater Utility Feasibility Analysis – Millis
- Water Rate Study – Plainville
- Leak Detection and AC Pipe Condition Assessment – Provincetown
- First Herring Brook: Reservoir Dam Modifications – Scituate
- Water Accounting – Shrewsbury
- Bioretention System - Wrentham



# Scituate- First Herring Brook

- 2013 - Assessed improving herring passage at First Herring Brook. Selected option proposes lowering fish exit channel and raising pond elevation with flashboards. Estimated cost is \$1,335,000.
- 2014 - Phase One of restoring fish passage at Reservoir Dam, included: Fishway Modifications Preliminary Engineering, Design, and Public Outreach.
- 2017 – Completion of 60% design and initiated the permit process for spillway and fishway structure modifications.

# DWWD– Dropcountr

- Partnership between DWWD, CRWA, and NepRWA. Piloting a digital water conservation tracking system to all DWWD customers at no cost.
- An online data portal for DWWD and their customers to communicate and analyze historic and real-time water use.
- Initial target of 5% customer sign-on surpassed, with nearly 650 customers enrolled to date. Customers will be able to continue to access the tracking system until March 2018.

# DWWD and Stoughton – Stormwater

- 2016 - GIS analyses and site assessments to identify potential stormwater retrofits for groundwater recharge. Identified 79 retrofit sites. Site selection criteria included: soils, separation to groundwater, proximity to resource areas, capture of impervious area, slopes, and costs.
- 2017 - Selected five priority sites - 2 in Stoughton & Dedham and 1 in Westwood. Topographic surveys and test pits were conducted to identify grades, existing infrastructure, trees and utilities and to evaluate soil conditions. Existing conditions plans and 30% concept designs were developed.

# Auburn - Interconnections with Worcester

- 2015 - An alternative water supply study was completed evaluating the feasibility to permit and develop alternative water supply sources. Recommendation of study was to pursue an interconnection with Worcester.
- 2016 - Further evaluated the purchase of water from Worcester, including the development of a hydraulic model and simulated potential interconnections. Evaluation included: hydraulic & infrastructure needs; water quality impacts; and regulatory considerations.
- 2017 - Evaluated the effectiveness of 3 interconnections during stressed conditions; the practicality of constructing interconnection facilities; the transfer of water from District's Low to High Zone; Worcester's ability to provide water during droughts; and the effect on water rates.

# Wrentham- Bioretention Systems

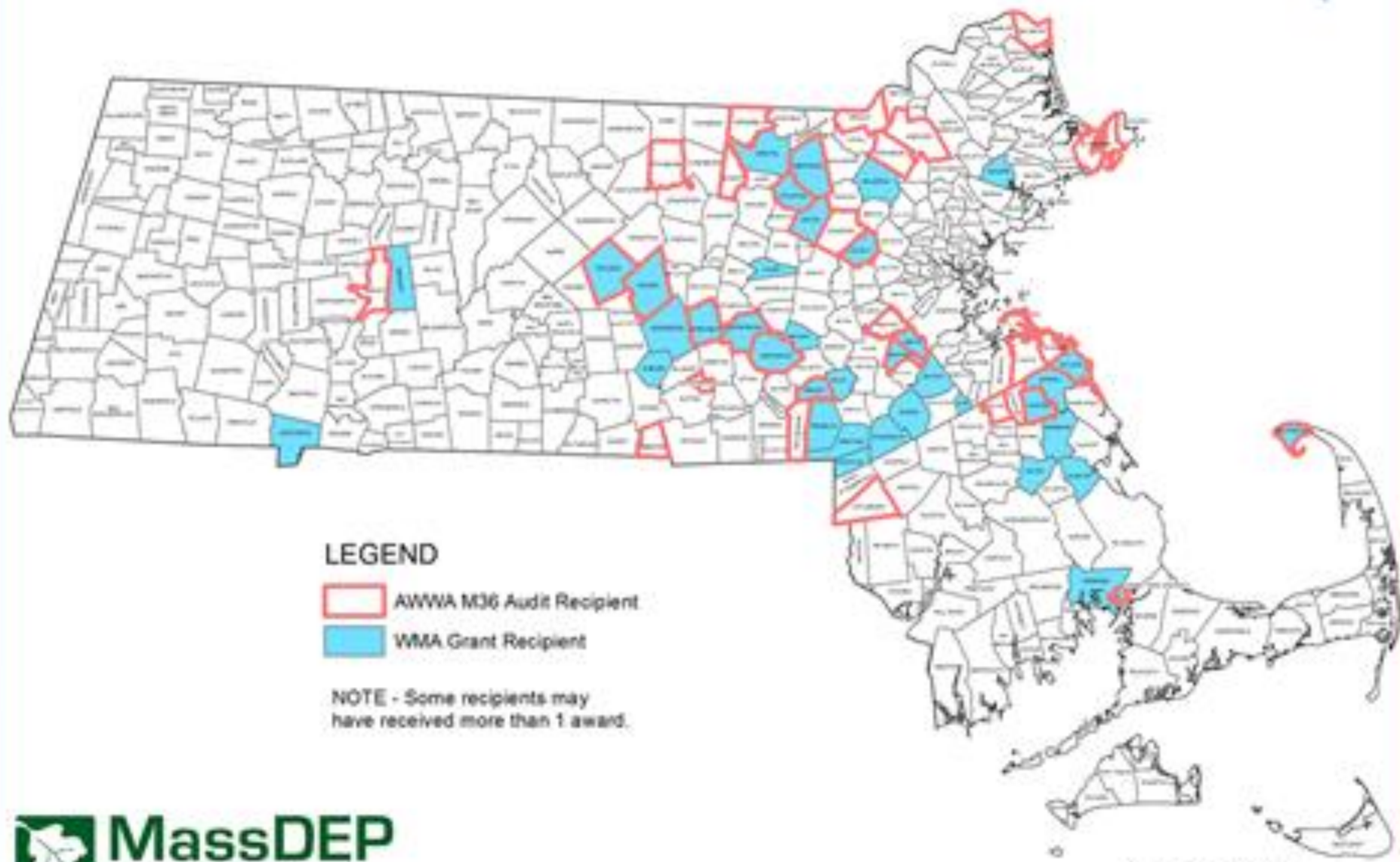
- 2015 – Minimization and mitigation options explored in detail.
- 2016 – Stormwater assessment that identified 10 priority recharge sites. Top site = Sweatt Beach, and a 30% infiltrating bioretention system was designed.
- 2017 – Design expanded to 100%, NOI filed with Stormwater Management Plan and a Operation and Maintenance Plan. Site constructed. The bioretention area is expected to recharge 7.2 mg each year.

# M36 Grant

- AWWA M36 Grant 2016-2018
  - Assist permit holders & registrants reduce their non-revenue water
    - help determine how much water is being lost due to leakage, meter error, or other conditions; and
    - determine the cost of uncaptured revenue from non-revenue water
  - The M36 Audit has been successfully implemented throughout the country.
  - Permittees not meeting the 10% UAW Standard for 2 out of 3 years will be required to conduct a M36 Audit and implement the results to be considered Functionally Equivalent.

# WMA GRANT RECIPIENTS, 2013-2017

## AWWA M36 AUDIT RECIPIENTS, 2016-2017



# M36 Water Audits Funded

- In 2016, funded 15 M36 Audits.
  - Hanover, Attleboro, Andover, Provincetown, Dedham-Westwood Water District, Acton, Gloucester, Westborough, Onset Fire District, Tewksbury, Hadley, Concord, Dracut Water Supply District, Needham, and Wilkinsonville Water District.
- In 2017, funded 24 M36 Audits.
  - Scituate, Abington & Rockland Joint Water Works, Rutland, Attleboro, Fitchburg, Salisbury, Lincoln, Dedham-Westwood Water District, Hanover, Dracut, Littleton, Westborough, Shrewsbury, Acton, Medway, Hopkinton, Webster, Pepperell, Holden, Shirley Water District, Westford, Aquarion Water Company (Hingham, Hull, and Cohasset), and Bellingham.



# M36 Water Audit Program, cont.

- In 2017, funds were also provided for 4 free M36 Audit training sessions across the state.
- A detailed instruction manual for the M36 Audit methodology was also created.
  - Both are be on-line and in hard copy at:  
<http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html#7>

# AWWA M36 Audit Results - Overview

- 2016 and 2017 results have pointed to the following areas for PWSs to focus on:
  - Accuracy of master meters
  - Accuracy of customer meters
  - Billing inaccuracies
  - Systemic data handling errors
- PWSs that have done more than one round of M36 Audits (Acton, Attleboro, DWWD, Dracut, Hanover, Littleton, Lincoln, Rutland, and Westborough) have all improved their overall M36 data validity score.
  - All performed a more detailed audit process this year.
- Five of the 9 have improved their UAW values from 2015 to 2016.

# Get Informed

- Capital budget for 2018 includes funding for WMA grant program.
- All WMA Grants RFRs are posted on COMMBUYS, the state's online procurement site and on MassDEP's website.
  - <http://www.commbuys.com/>
  - <http://www.mass.gov/eea/agencies/massdep/water/grants/water-management-act-grant-program.html>
- Sign up for alerts on COMMBUYS.
- RFRs were released in late summer. Application deadline for both is September 18<sup>th</sup>.

# For more information...

- Water Management Act Regulations:  
<http://www.mass.gov/eea/agencies/massdep/water/regulations/310-cmr-36-00-the-water-management-act-regulations.html>
- Technical Resources: (map and permitting tool)  
<http://www.mass.gov/eea/agencies/massdep/water/watersheds/sustainable-water-management-initiative-swmi.html>
- Water Management Act Permit Guidance:  
<http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html#3>
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