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
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)

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 alternatives 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

LEGEND

AWWA M36 Audit Recipient

WMA Grant Recipient

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

MassDEP
Department of Environmental Protection
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.
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.
- Sign up for alerts on COMMBUYS.
- RFRs were released in late summer. Application deadline for both is September 18th.
For more information...

- Water Management Act Regulations:  

- Technical Resources: (map and permitting tool)  

- Water Management Act Permit Guidance:  

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