

Department of Environmental Protection

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FY 2022 Water Management Act Program Grant Summary

The Water Management Act Grant Program is designed to assist eligible public water suppliers and municipalities that hold Water Management Act permits and registrations by providing funds for planning assistance, demand management, and withdrawal impact mitigation projects in local communities. The focus of these grants is: 1) planning projects for specific watersheds or sub-watersheds to identify implementation projects to improve ecological conditions; 2) demand management projects aimed to improve the efficiency of water use within a municipality or a watershed; and 3) mitigation projects in the following categories: improve or increase instream flow, wastewater projects that keep water local including reductions in inflow and infiltration, stormwater management projects that improve recharge, reduce impervious cover and/or improve water quality, water supply operational improvements, habitat improvement, and other projects that could mitigate the impacts of water withdrawals.

Eligible grant applicants are Massachusetts public water suppliers or municipalities with a valid Water Management Act Permit or Registration. A 20 percent funding match is required. Cooperative proposals are encouraged. Particular consideration is given to proposed projects in highly impacted basins or sub-basins and those undergoing permit renewals. The funds allocated for grants are distributed under a competitive procurement process. Approximately \$1.0 million was available to distribute. This year, up to 5 extra points were given to projects in Environmental Justice (EJ) communities.

MassDEP received eleven proposals for this grant year totaling just under \$1,421,000 (\$1,808,084 when match is included). A summary of the review and ranking process for the proposals is provided below. The proposal review committee recommended funding 6 proposals this year. The total grant dollar amount of the recommended projects is \$420,577 which will also leverage an additional \$130,079 in project work (required 20% match), for a total of \$550,656. Non-selected proposals had significant weaknesses.

The proposals recommended for funding by the review committee are outlined below. Brief summaries for these projects are attached.

				Grant	
			Project	Money	
Project	Title	Applicant	Total	from State	Match
	Rate Study and SCADA				
	Integration for Implementation of				
	Proposed Worcester	Auburn Water			
2	Interconnection*	District	\$88,320.00	\$70,676.00	\$17,644.00
	Meter Reading Hardware and				
3	Software	Avon	\$55,250.00	\$44,200.00	\$11,050.00
	Alternative Source Study for				
6	Rehabilitation of Mt. Warner Wells	Hadley	\$87,590.00	\$69,950.00	\$17,640.00
	Regional Evaluation to Improve				
	Water Supply Resiliency within the				
7	Lower Ipswich River Watershed	Hamilton	\$155,110.00	\$107,615.00	\$47,495.00
	Planning and Preparation for				
	Leominster-Clinton-Sterling-	Leominster			
	Lancaster Regional Water	Water			
9	Interconnection	Department	\$101,312.00	\$80,832.00	\$20,480.00
	Continuation of the Stony Brook	Westford and			
11	Flow Restoration Project*	Littleton	\$63,074.00	\$47,304.00	\$15,770.00

 Table 1: 2022 WMA Recommended Grant Proposals

* Contingent on changes being made to the scope of work in the application.

FY 2022 WMA GRANT PROGRAM FUNDING RECOMMENDATIONS

		PROJECT	
NUMBER	TITLE	TOTAL	MATCH
	APPLICANT		

02 **Rate Study and SCADA Integration for Proposed Worcester Interconnection Auburn Water District** \$88.320

This proposed project would continue the implementation of the proposed interconnection(s) between the Auburn Water District (District) and the City of Worcester, which supports the District's ongoing efforts to improve the system's supply resiliency (accounting for existing stressed and vulnerable water supplies) while minimizing environmental impacts through regional cooperation. The purchase of water from the City of Worcester has been identified as a potential alternative to the District's local groundwater withdrawal sources. In prior WMA grant projects, three potential interconnection locations were evaluated, preliminary designs were constructed, and biddable contract documents and permits were developed. This year's proposal continues this work by: 1) Performing a Rate Study. The goal of the rate study would be to provide recommendations for revising the current rates, charges, and methods of billing to ensure fiscal sustainability while promoting water conservation. 2) Performing Construction Quality Assurance (CQA). The purpose of this task would be to hire a registered professional engineer to perform CQA. 3. Installing Instrumentation and Perform SCADA Programming. The purpose of this task would be to hire a qualified vendor to install instrumentation and program the SCADA system for the interconnection's proposed metering facility.

03 Meter Reading Hardware and Software

Town of Avon

This proposal would fund and implement a new meter reading system for the town in an attempt to reduce Unaccounted for Water UAW) and increase billing frequency. This project is a result of the findings from two M36 audits previously done for which Avon received grant funding. In addition, a rate study would be performed to validate work done in 2018 to fully cover direct costs by FY2024.

06 Alternative Source Study for Rehabilitation of Mt. Warner Wells **Town of Hadley**

This grant would evaluate the possibility of rehabilitating and treating the Mount Warner Wells to be used as safe and redundant regional backup water supply for the Towns of Hadley and Amherst. Project objectives are to gain an understanding of how much water the Mt. Warner wells can provide to Amherst and Hadley, what it will cost to treat it, how to deliver it to Amherst via interconnection, and to provide recommendations for next steps. Tasks include: 1) Develop a Pilot Testing Protocol for MassDEP approval. 2) Perform Pilot Testing. Configure the required equipment for piloting of iron and manganese treatment. 3) Evaluate Potential Hydraulic Needs. Run simulations using Hadley's existing distribution system model to determine how much water can potentially be provided by the Mt. Warner Wells to Hadley and Amherst and what would be the hydraulic requirements of the interconnection.

07 **Regional Evaluation to Improve Water Supply Resiliency within the Lower Ipswich River** Watershed \$47.495 \$155.110

Town of Hamilton

The scope of this project builds on the findings of the 2018 WMA report with the primary goal of exploring the feasibility of various alternatives specific to Hamilton and its immediately surrounding communities to increase water supply resiliency and to reduce their

\$55,250 \$11.050

\$17,640

\$87,590

\$17,644

FY 2022 WMA GRANT PROGRAM **FUNDING RECOMMENDATIONS (continued)**

		INCLUI	
NUMBER	TITLE	TOTAL	MATCH
	APPLICANT		

dependency on the Ipswich River, particularly in the summer. Major tasks include: 1) Exploring the feasibility of obtaining alternative water supplies from the Salem-Beverly Water Supply Board to supplement the water needs of Hamilton and the participating communities on a regional/seasonal basis. 2) Examining the required infrastructure, interconnections, system hydraulics and water quality/blending issues from augmenting Hamilton and the participating communities with supply from the Salem-Beverly Water Supply Board including possible regionalization of the community water systems. 3) Examining the feasibility of obtaining alternative water supplies for Hamilton and other interested communities to meet 100-percent of their water supply needs, thereby eliminating the need to utilize their wells and treatment facilities at all. 4) Exploring partial regionalization between the Towns of Manchester and Hamilton, and the other interested communities. 5) Exploring the feasibility of and issues associated with sharing and wheeling current and future sources of water to/through Hamilton and its immediately surrounding communities on a Mutual Aid and potentially routine basis. 6) Identifying regulatory and cost considerations for the water supply alternatives evaluated.

Planning and Preparation for Leominster-Clinton-Sterling-Lancaster Regional Water Interconnection Leominster

\$101.312 \$20,480

DDATECT

The purpose of this grant is to plan for the regional shared use of Leominster's Wachusett Reservoir water pipeline and pump station for improved water supply resilience and redundancy for the communities of Clinton, Sterling, Lancaster, and Leominster. In the 1960's Leominster constructed an emergency use pump station on the Wachusett Reservoir, located in Clinton. A 30-inch diameter water pipeline connects this pump station to Leominster and has existing connections to Leominster, Sterling, and Lancaster's distribution systems. However, the pipeline has not been used in decades. The pipeline could potentially be used to supply finished water from Leominster to the other communities or to supplement its overall water supply by pumping water from Wachusett Reservoir.

Continuation of Stony Brook Flow Restoration Project - 2022 Towns of Westford and Littleton

09

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The primary goal of this project is to improve streamflow in Stony Brook through operation of the existing impoundments in a coordinated manner based on actual streamflow data and model results to inform operational decisions. The study area is controlled by a series of six control structures located in Littleton and Westford including the Spectacle Pond Outlet, the Mill Pond Dam, the Forge Pond Dam (or Abbot Mill Dam), and the Stony Brook Dam. This project will expand on previous grants issued in past years by finalizing the Spectacle Pond valve automation and calibrating the hydrologic model to better predict future scenarios.

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\$63,074 \$15,770