1* ADMINISTRATIVE SUMMARY

RESPONSE FORM
319 NONPOINT SOURCE POLLUTION GRANT PROGRAM
4/01/15
RFR #BWR 2015-03
Administrative Summary

RESPONDENT - Town of Hopedale, MA

Address – Park Department, PO Box 7
78 Hopedale Street
Hopedale, MA 01747

Telephone - (508) 254-0460 (cell) Facsimile - (508) 634-2200 Email Address - Daniel.Iacovelli@fmr.com

PROJECT TITLE – Hopedale Pond Stormwater Management at Town Park

WATERSHED(S)/SUBWATERSHED(S) SERVED BY THIS PROJECT -
Hopedale Pond Subwatershed in the Blackstone River Basin

PROJECT TYPE(s) - see Section 3. A response may encompass more than one project type.

- ☒ **A. Implementation** ☐ TMDL ☐ Category 4a or 5 ☒ other
  - ☐ **Priority basin:**
  - ☒ **Continues the work commenced under publicly funded program(s)**
- ☐ **B. Healthy Watersheds**
- ☐ **C. Outreach and Education**
- ☐ **D. Stormwater Utility Development**
- ☐ **E. NPS Program Goal**

POLLUTANT(S) OF CONCERN:
This project addresses pathogen issues at the Town Beach (currently closed) on Hopedale Pond.

AMOUNT OF FUNDING REQUESTED AND AMOUNT AND PERCENT OF MATCH FUNDING PROPOSED -

Federal Funds via MassDEP	$ 342,000	
Non-Federal Match	$ 228,000	% of Total Budget 40
Total Project Budget	$ 570,000	

PROJECT SUMMARY/OBJECTIVES -
Hopedale Beach has been out of active use for several years and does not currently support swimming due high levels of pathogens. The primary source of bacteria to Hopedale Pond was identified as part of the Diagnostic and Feasibility Study for Hopedale Pond (ESS, 2009) as the Dutcher Street Outfall, which was found to contribute up to 200,000 cfu/100 ml and phosphorus in the range of 0.2 – 0.3 mg/L, in part from wet weather. These levels of pollutants were confirmed in a 2014 sampling study. The Parks Commission is spearheading an effort to improve water quality and reestablish primary-contact recreation using green infrastructure retrofits, pet waste management, and waterfowl management. Town's project strategy is to finalize design work and install infiltration in Hopedale Town Park, bioretention in the Town-owned area across from the park on the other side of Dutcher Street, and replant vegetation on the Town Beach for the purpose of waterfowl deterrence. The Town will also conduct public education and outreach to deter feeding of birds and to encourage proper pet waste management.

PRINCIPAL CONTACT (Project Manager)

Daniel Iacovelli, Parks Commission Chair
Name and Title

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Telephone

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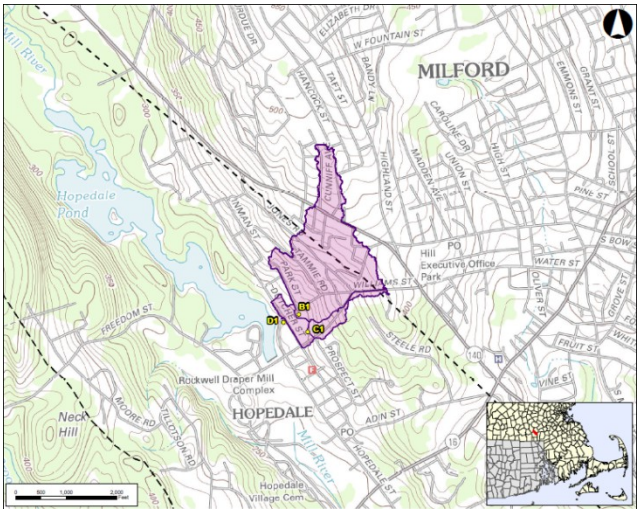
2* PROJECT NARRATIVE

CONCISE STATEMENT OF THE PROBLEM



The Hopedale Beach has been out of active use for several years and does not currently support swimming due high levels of pathogens. The primary source of bacteria to Hopedale Pond was identified as part of the Diagnostic and Feasibility Study for Hopedale Pond (ESS, 2009) as the Dutcher Street Outfall, which was found to contribute up to 200,000 cfu/100 ml and phosphorus in the range of 0.2 – 0.3 mg/L, in part from wet weather. These levels of pollutants were confirmed in a 2014 sampling study. The Parks Commission is spearheading an effort to improve water quality and reestablish primary-contact recreation using green infrastructure retrofits as well as illicit discharge elimination. The Town's project strategy is to finalize design work and install infiltration in Hopedale Town Park, bioretention in the Town-owned area across from the park on the other side of Dutcher Street, and replant vegetation on the Town Beach for the purpose of waterfowl deterrence. The Town will also conduct public education and outreach to deter feeding of birds and to encourage proper pet waste management.

PROJECT GOAL

The goal of this project is to reopen the Town Beach at Hopedale Pond by abating source of pathogens in the watershed from the storm drain system, waterfowl, and domestic animals. The Town intends to use a management approach involving stormwater best management practices (BMPs), waterfowl deterrence, and public education/outreach.

TARGETED POLLUTANTS AND WATERBODY

This project targets pathogens from wet weather at the Town Beach of Hopedale Pond in the Blackstone River Basin.

ESTIMATED QUANTITY OF POLLUTANTS TO BE REMOVED

The project proposed will remove…

PROJECT STRATEGY

The Town's project strategy is to finalize design work and install infiltration in Hopedale Town Park, bioretention in the Town-owned area across from the park on the other side of Dutcher Street leaching catch basins, and replant vegetation on the Town Beach for the purpose of waterfowl deterrence. The Town will also conduct public education and outreach to deter feeding of birds and to encourage proper pet waste management.

Key elements of the approach for the project proposed in this grant application are listed below.

Tasks	Participants	Deliverables	Approximate Month of Completion
1. Procurement and contracting	Town of Hopedale	Contract with engineering consultant	1
2. Project initiation meeting	Town of Hopedale Engineering Consultant	Meeting summary	2

3.	Public meeting 1	Town of Hopedale Engineering Consultant	Public meeting 1 materials	3
4.	Land survey and base map update	Town of Hopedale Engineering Consultant	Updated base map	4
5.	Budget level design	Town of Hopedale Engineering Consultant	Budget-level design	6
6.	Waterfowl management planning	Town of Hopedale Engineering Consultant	Waterfowl management plan	6
7.	Public meeting 2	Town of Hopedale Engineering Consultant	Public meeting 2 materials	6
8.	Permitting	Town of Hopedale Engineering Consultant	Permits	10
9.	Final design (with operation and maintenance (O&M) plan) and bidding	Town of Hopedale Engineering Consultant	Final design, O&M plan, bid documents, and summary of selection	11
10.	Construction and construction administration	Town of Hopedale Engineering Consultant Contractor	Confirmation of substantial completion	17
11.	Model water quality results	Town of Hopedale Engineering Consultant	Results of modeling	18
12.	Reporting	Town of Hopedale Engineering Consultant	Administrative reports (quarterly and final)	18

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM STATUS

Hopedale is entirely within the MS4 jurisdiction. Our project strategy is to finalize design work and construct BMPs for mitigation of pathogens in Hopedale Pond. This project also involves development of a plan for waterfowl control at the Town Beach. This project work is not required by a final or draft NPDES permit.

3* PROJECT MILESTONE SCHEDULE

TASK	MONTH																				
	1	2	3	4	5	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Task #1 (Procurement)	X																				
Task #2 (Project initiation meeting)	X	X																			
Task #3 (Public meeting 1)			X																		
Task #4 (Land survey)				X																	
Task #5 (Budget-level design)				X	X	X															
Task #6 (Waterfowl management planning)				X	X	X															
Task #7 (Public meeting 2)						X															
Task #8 (Permitting)																					
Task #9 (Final design and bidding)							X	X													
Task #10 (Construction and construction administration)								X	X	X	X	X	X	X							
Task #11 (Modeling)															X						
Task #12 (Reporting)															X						

4* PROJECT BUDGET

Expense Items	319 Amount	Nonfederal Match and Source	Total Amount
Respondent's Salaries	$0	$0	$0
Subcontractual Services Cash match	$342,000	$228,000	$570,000
Equipment	$0	$0	$0
Supplies (including printing, mailing)	$0	$0	$0
Travel (for mileage only @ 0.40 cents/mile)	$0	$0	$0
Other	$0	$0	$0
Total Amounts:	**$342,000**	**$228,000**	**$570,000**

OVERHEAD RATE (%) 0 %
TOTAL REQUEST FOR GRANT: $342,000 (319 Funds)
TOTAL COST SHARE: $228,000 (40%)
TOTAL BUDGET AMOUNT: $570,000

(The Town intends to assign approximately $24,624 of contractual services under Task 4 and Task 10 to meet Fair Share requirements.)

TASK/OBJECTIVE # 1 : Procurement

DELIVERABLES: Contract with engineering consultant

ESTIMATED COST: $0 s.319 SHARE: $0 NON-FEDERAL MATCH SHARE: $0

TASK/OBJECTIVE #2 : Project initiation meeting

The engineer will conduct a project initiation meeting that includes review of the problem, objectives, project scope, schedule, and reporting.

DELIVERABLES:

ESTIMATED COST: $2,370 s.319 SHARE: $0 NON-FEDERAL MATCH SHARE: $2,370

TASK/OBJECTIVE # 3: Public meeting 1

The engineer and the Town will conduct a public meeting to review the project. This will include a description of expected bes practices and associated water quality benefits.

DELIVERABLES: Public meeting 1 materials

ESTIMATED COST: $3,130 s.319 SHARE: $0 NON-FEDERAL MATCH SHARE: $3,130

TASK/OBJECTIVE # 4 : Land survey and base map update
The engineer will conduct cadastral survey of the project area and existing utilities.

DELIVERABLES: Base mapping updated with cadastral survey

ESTIMATED COST: $15,230 s.319 SHARE: $0 NON-FEDERAL MATCH SHARE: $15,230

TASK/OBJECTIVE # 5 : Budget level design
The engineer will prepare budget-level designs in anticipation of public meeting 2.

DELIVERABLES: Budget level designs with updated costs

ESTIMATED COST: $0 s.319 SHARE: $0 NON-FEDERAL MATCH SHARE: $30,090

TASK/OBJECTIVE # 6 : Waterfowl Management Plan
The engineer will prepare a waterfowl management plan for Town Beach in anticipation of public meeting 2. This will focus on discourage geese from using the beach area for forage. Signage to discourage feeding geese will also be included.

DELIVERABLES: Waterfowl management plan

ESTIMATED COST: $7,150 s.319 SHARE: $0 NON-FEDERAL MATCH SHARE: $7,150

TASK/OBJECTIVE # 7 : Public meeting 2

The engineer and the Town will conduct a public meeting to review the project design plan. This will include renderings of the management practices to demonstrate the 3-dimensional appearance of the project.

DELIVERABLES: Public meeting 2 materials

ESTIMATED COST: $3,130 s.319 SHARE: $0 NON-FEDERAL MATCH SHARE: $3,130

TASK/OBJECTIVE # 8 : Permitting
The engineer will prepare permits for the proposed project including construction permitting and Conservation Commission p

DELIVERABLES: Permit applications and design plans

ESTIMATED COST: $12,050 s.319 SHARE: $0 NON-FEDERAL MATCH SHARE: $12,050

TASK/OBJECTIVE # 9 : Final design (with operation and maintenance (O&M) plan) and bidding

The engineer will prepare final designs including an O&M plan. The engineer will prepare bidding documents and a project ma
Town to bid construction of the project. The engineer will prepare a recommendation for a selected contractor.

DELIVERABLES: Final design, bidding documents, and recommendation for a selected contractor

ESTIMATED COST: $31,430 s.319 SHARE: $0 NON-FEDERAL MATCH SHARE: $31,430

TASK/OBJECTIVE # 10 : Construction and construction administration
The engineer will provide on-site oversight and bid administration services through substantial completion.

DELIVERABLES: Report of substantial completion

ESTIMATED COST: $459,130 s.319 SHARE: $342,000 NON-FEDERAL MATCH SHARE: $117,130

TASK/OBJECTIVE # 11 : Model water quality results

The engineer will provide water quality modeling of the BMP improvements for the pollutants of concern based on the anticip
water quality event (i.e., 1.2 inch, 24-hour storm).

DELIVERABLES: Modeling results

ESTIMATED COST: $2,610 s.319 SHARE: $0 NON-FEDERAL MATCH SHARE: $2,610

TASK/OBJECTIVE # 12 : Reporting
The engineer will prepare quarterly and final project report, which the Town will submit to DEP.

DELIVERABLES: Grant reports

ESTIMATED COST: $3,690 s.319 SHARE: $0 NON-FEDERAL MATCH SHARE: $3,690

Project Evaluation—Environmental Indicators

Water quality benefits will be modeled for nutrient and pathogen load reduction using the Simple Method as defined in the *2010 Rhode Island Stormwater Design and Installation Standards Manual* (RI Stormwater Manual) with pollution reduction percentages presented in the Massachusetts Stormwater Handbook. (We propose to complete design work in accordance with the Massachusetts Stormwater Handbook. Development of a quality assurance project plan (QAPP) using this approach is currently being completed for a closely related project under a federal grant from the Narragansett Bay Estuary Program.

Outreach—Technology Transfer

The Town anticipates sharing information on the project with the public through the permitting process. Plans and related deliverables will be posted on the Town's website. The Town will conduct a workshop with community residents to assist in planning and design of waterfowl abatement BMPs at the Town Beach. The Town will use this opportunity to educate the public not to feed waterfowl and to properly manage pet waste.