| • | CPA PROJECT | APPLICATION | FORM | | | | |
|-----------|--|---|--|---|------------------------------|--|--|
| | [CPC Use Only: Date Received 1/14/21 By: SAMMIE KUL Assigned CPC #2022-03] | | | | | | |
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| li a | possible, use word propplicable. | ocessor to fill out form | n. Please answer all ques | stions, use "N/A" | if not | | |
| 1. | a.) Applicant Name an Organization(s) (if ap | d Organization: Last_ propriate)_Great Ponds Adviso | Woodle, Alex Fi | rst | | | |
| | b.) Regional Project: Y | ′es√? or No? If Y | es, Town/Organization: | Groton | | | |
| 2. | Submission Date: 1/14 | 4/21 | - | | | | |
| 3. | Applicant Address: St. | 20 Highland Road | tt | 150 | | | |
| | City | // State: Groton, MA | ZIP: | +00 nom | | | |
| 4. | Ph. # <u>970-732-3224</u> | Email: alexal | | | | | |
| 5. | CPA Purpose. Check Community Housir Recreation | all that apply: ng (Affordable H | ousing:) Historic Pres | servation*: Op | oen Space: ✔ | | |
| | * As per MA Genera listed on the state' Commission that ti | al Law Chapter 44B, p s registry of historic p he proposed project is | proposed historic projects laces require a determina s of historic significance. | that are not on t tion by the Groto | he structures on Historic | | |
| 6. | Town Committee or bo | pards participating: Gr | eat Ponds Advisory Commit | tee/Groton Lakes / | Assoc. | | |
| 7. | Project Location/Addre | ess: Lost Lake/Kno | ps Pond Watershed | | | | |
| 8. | Project Name: Non-Po | int Sources of Pollution | on in Lost Lake/Knops Po | ond Watershed | | | |
| 9. | Additional Responsible | e Parties (If applicable | e): | | | | |
| | Role (specify) | Name | Address | Ph. (w) (cell) | Email | | |
| | Property/Site Owner | | | | | | |
| | Project Manager | A. Woodle | 20 Highland Road | 9787323224 | alexander.wo | | |
| | Lead Architect | Order of Conditions from Conservation Commission | | | | | |
| | Project Contractor | | | | | | |
| | Project Consultants | | | | | | |
| | Other: | | | | | | |
| | Other | | | | | | |
| 10 | As appropriate, indica Option agreement <u>۱</u> | ate if proposal require Other-describe: | es P&S agreement <u>IN</u> D | eed <u>IN</u> | | | |
| 11 | . a.) Assessor info. (ma | ap/ block/ lot id.(s)): <u>^</u> | V/A b.) Tax | classification type | ∋: <u>N/A</u> | | |
| 12 | . Permits required: Zor | ning: <u>N/A</u> Historic P | reservation: <u>N/A_</u> Other <u>:</u> | Order of Conditions from Conservation C | ommission | | |
| 13 | . Historic Commission | Approval signoff (whe | en required): | Date: | | | |
| 14 | . Funding: a.)Project C | ost: \$49,00 <mark>⊕</mark> Estima | ite: \$ Profession | onal Quote: \$ | | | |
| b. | Requested from CPC | ; \$ \$ 43,000.00 | c.) Committed from c | other sources:\$ | \$ 6,000.00 | | |
| u. | Annual anticipated to | | e.) Annual anticipate | a total expense: company: Alex M | ֆ ತ49,000.00 Voodle | | |
| ı.) 15 | 6. CCP Objectives - use | e ເບວຣ). ຈ e codes from Section | 5 to indicate all that appl | y: | | | |
| 16 | . Project Timelines: Pr | oposed Start Date: 7/ | 1/21 Projected Cor | nplete Date: 6/30/ | 22 | | |
| 17 | Estimated Delivery D | ate of Completion Re | port to CPC: 9/1/21 | | | | |

11. CPA PROJECT APPLICATION FORM

Project Description

For the purposes of clarity for the reader, a couple of definitions from the outset may be useful: 1. **Point source** is pollution emanating from a single, identifiable source such as a drainage pipe from a factory or sewage plant; 2. A **non-point source** is pollution not coming from a single source; 3. **Stormwater** is from rain or melting snow that runs off land and/or roads picking up pollutants along the way and ending up into a watercourse; and 4. **Best management practices** (**BMPs**) are the most effective and practical means of preventing or reducing non-point source pollution.

As part of the continuation of the Lost Lake/Knops Pond Long-Term Lake Management Plan, the Great Pond Advisory Committee and the Groton Lakes Association are seeking funds to complete a major component of this plan namely the dataset identifying the non-point sources of pollution entering Lost Lake and the development of a mitigation plan to correct these problems.

Non-point sources of pollution include land runoff, drainage, seepage and precipitation. Erosion can wash the nutrients into the streams and carry them to the lake. The watershed contains forest, agriculture, commercial and institutional lands. The roads within these areas act as conduits for storm water run-off and contamination. In addition, there are non-point sources within the shoreline areas of the lake as well. These have been already documented by the Groton lakes Association (Attachment A). Previous studies (Attachments B, C, & D) in around the Knops Pond/Lost Lake Watershed have not identified the non-point sources nor have they formulated any mitigation plan.

The major nutrient loading comes from phosphorus and over the years, studies have confirmed that two-thirds of the phosphorus is entering Lost Lake through its two inlets. These two streams drain a watershed (Attachment E) that is fourteen times the size of the lake or approximately 2800 acres or almost 14% of Groton's land area.

The major goal is to lower the eutrophic level of phosphorus in Lost Lake's water column with the ultimate hope of reducing weeds and decreasing or eliminating the need to apply herbicides to treat them. Phosphorus is the main limiting factor for the health of the lake.

The federal government through the Environmental Protection Agency has recently been pushing for states to improve and update their plans for storm water management. Groton created an Enterprise Fund in 2020 and assessed each landowner an equal amount to capitalize this fund and implement best management practices for storm water management problems.

The completion of the non-point study would make Groton eligible to apply for federal funds under Section 319 of the Clean Water Act. The federal funds, not to exceed 60% of the total cost together with matching funds from the locale, would be used to implement best management practices.

The Open Space and recreation Plan (OSRP) recently adopted by the town of Groton, has as one of its goals "to protect and enhance the quality of Groton's surface and groundwater resources." Both the Groton Lakes Association and the Great Ponds Advisory Committee have committed \$6,000 to the successful completion of this program. This study if approved by the Community Preservation Committee, will help to achieve those goals.



PDF







Attachment A.pdf

Attachment B.pdf

Attachment C.pdf

Attachment D.pdf

Attachment E.jpg

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| | Storm water studies are currently a major focus for environmental consultants in 2020 | |
| 19. | easibility: | |
| 20 | ist of attachmonte. Attach A Erosion & Storm Water Run-off at Lost Lake/Knops Pond. 2014: Attach B A | Dia |
| 20. | nostic/Feasibility Study For the Management of Lost Lake/ Knonns Pond, Attach C Comprehensive Wastewa | ter |
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| 21. / | Management Plan; Attach D Lost Lake WAtershed Management Plan; | |
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