

Project Title	#20210006 Abrams Pond Watershed Protection Project, Phase II
Organization	Town of Eastbrook
Start Date	January 1, 2021
Completion Date	December 31, 2022

## I. Waterbody and Watershed Information

### a. Background

Waterbody Name	Abrams Pond (Midas # 4444)
Waterbody Size (e.g., lake acres, stream miles)	435 acres
Watershed Area (acres or square miles)	1.42 square miles <sup>1</sup>
Watershed Location (town(s), county(s))	Eastbrook and Franklin, Hancock County
Title and Date of Existing or Past Watershed-based Management Plan	Abrams Pond Watershed-Based Protection Plan, April 2016
Public Access to Waterbody	Via Town Lot Road (no formal boat launch)

### b. Waterbody and Watershed Physical Characteristics

Abrams Pond is a shallow lake situated at 167 feet above sea level. With a maximum depth of 8 meters (27 feet), an average depth of 5 meters (16 feet), and a low flushing rate (0.42 flushes/yr.), the pond is sensitive to changes in pollutant loading from the watershed because nutrients have a chance to settle to the bottom and be recycled within the water column, especially under anoxic conditions.

Abrams Pond is the headwater that feeds into Scammon Pond, Webb Pond, Webb Brook, Graham Lake, and the Union River. The Union River is part of the Designated Critical Habitat for the Atlantic Salmon (*Salmo salar*), Gulf of Maine Distinct Population Segment under the Endangered Species Act. Most of Abrams Pond lies in the Town of Eastbrook, but a small area of the lake, and about a fifth of the lake's 60 developed shoreline camps are located in the Town of Franklin (see Location Map in File #3). All the roads in the watershed that provide access to the developed shoreline are private, gravel roads (with no functioning formal road associations). Dickens Farm Road is the longest road in the watershed spanning from the northeast corner, around the north end of the lake, and skirting the shoreline around the east side of the lake. Large expanses of actively farmed blueberry barrens are a significant feature of the watershed, reaching to within 150 feet of the north and northeastern shores. Maine DEP estimates that approximately 11% of the land within 500 m (1,640 ft) of the lake is in agricultural production.<sup>2</sup> The watershed contains several small intermittent drainages and several wetlands on the southwest side of the lake, and the southeast corner of the watershed has been actively logged in the recent past.

<sup>1</sup> The drainage area of 1.42 sq. mi. was calculated in GIS using the Maine Drainage Divides layer from MEGIS. Drainage area does not include the surface area of the lake (0.68 sq. mi). Lakesofmaine.org lists the drainage area as 1.7 sq. mi.

<sup>2</sup> Lake Stewards of Maine-Lakes of Maine. Abrams Pond. Accessed online May 6, 2020 at: <https://www.lakesofmaine.org/lake-overview.html?m=4444>

### c. Description of Waterbody Uses and Value

Abrams Pond is used for recreation, including boating, fishing, and swimming. There are two avenues for public access. Public access exists via Town Lot Road, which leads to an undeveloped shorefront lot owned by the Town of Eastbrook, although the town has so far refrained from creating a boat launch there. Frenchman Bay Conservancy has created the new 135-acre Abraham’s Woods Preserve and is negotiating for public access through either the Lyle Frost Wildlife Management Area (WMA) or an adjacent private lot. Fishermen commonly access the pond through privately owned sites for both open water and ice fishing. The private camp roads are available and utilized for hiking and ATV use and marked snowmobile routes provide access to and around much of the lake in winter. The creation of the Abraham’s Woods Preserve was the result, in mid-2017, of an important conservation transaction. A total of 135 acres, including the entire undeveloped eastern lakeshore and timberland to the east, was purchased by a private party, who then donated a conservation easement to Frenchman Bay Conservancy (FBC), and in early 2018 the remaining fee interest. These actions lay the foundation for increased public access. FBC engaged a professional trail designer, who mapped out a public hiking trail several miles in length. This conservation initiative was especially important because it includes a 35-acre tract of lakeshore that had already been subdivided for development of 12 new camps, which would have constituted a sharp increase in stress on the lake.

The pond supports a thriving population of warmwater fish including bass, perch and pickerel and is designated a “trophy bass” pond. All bass caught must be released alive. In 2017 two loon pairs nested on the pond and each produced a surviving chick. Bald eagles, ospreys, kingfishers, blue herons, merganser ducks, black ducks and innumerable songbirds frequent the pond. In recent years otters have taken up residence. Abraham’s Woods Preserve links Abrams Pond and the Frost WMA. Scammon Pond, a high-value Inland Waterfowl/Wading Bird Habitat and a central feature of the WMA, is fed by the outlet brook from Abrams Pond.

## II. Water Quality Problem or Threat

### a. Water Quality Listing Status

Is water quality listed as impaired?	<i>No. Abrams Pond is a “Threatened Lake” on the MDEP NPS Priority Watershed List</i>
If impaired, what is the listed cause(s) and/or impaired use?	<i>n/a</i>
Name and date of any DEP TMDL report(s) for the waterbody.	<i>n/a</i>

### b. Water Quality Listing Status

Abrams Pond is listed on Maine DEP’s Nonpoint Source Priority Watersheds list as “Watch List” due to a history of algal blooms in the pond. Water quality data has been collected at Abrams Pond since 1980. Over this historical sampling period, Secchi disk transparency has ranged from a minimum of 1.5 m (2012) to a maximum of 8.1 m (2013) with an average of 4.7 m. Epilimnetic phosphorus has ranged from 10 ppb (July 2012) to 29 ppb (September 2012), with an average of

15 ppb. Dissolved oxygen and temperature profiles indicate that the lake is well-mixed throughout the year but exhibits low levels of dissolved oxygen (anoxia) in the bottom 3m of the lake in mid-summer.<sup>3</sup> Phosphorus concentrations near the bottom of Abrams Pond are routinely high, which suggests that the sediments are releasing phosphorus (a process known as "internal recycling") during periods of very low dissolved oxygen. Ratios of elements within the sediments (iron, aluminum, and phosphorus) can be used to predict whether internal recycling is likely to happen. Sediment testing indicates that Abrams Pond is near the threshold that predicts a high risk of internal phosphorus loading.

The potential for nuisance algal blooms at Abrams Pond is moderate to high, with documented blooms or localized blooms occurring in 1999, 2002, 2012 and 2018. In 1999, with warm summer temperatures, Abrams Pond was under near-bloom conditions with a 2 m Secchi disk reading on September 7. Bloom conditions occurred in September 2002, with a reading at 1.9 meters. A blue-green algae bloom occurred from June to mid-August 2012 (*Anabaena sp.*) after an 11-inch rain event. The state began continuous pond water testing the rest of that season and the 2013 season. On June 13, 2018, the pond experienced another blue-green bloom with a 1.8 m Secchi disk reading that lasted a few days. Abrams Pond has a low flushing rate and excess nutrients in the lake and sediments can take a long time to flush out. Unless nutrient inputs to Abrams Pond are reduced they will continue to have a negative impact on water quality, cause ongoing algal blooms, and result in a cycle of algal decomposition, oxygen consumption, and release of phosphorus into the water column.

### **III. Watershed Nonpoint Pollution Sources and NPS Mitigation Activities**

#### **a. Summary of Watershed Assessments and Priority Nonpoint Pollution Sources**

Water Quality Monitoring (1992-Present)- The APA has been monitoring Abrams Pond since 1992 under the direction of Lake Stewards of Maine/VLMP. In addition, watershed volunteers have been active in monitoring for invasive aquatic plants since 2008.

Abrams Pond LakeSmart Program (2011-Present)- In 2011, APA began participating in LakeSmart—a program started by Maine DEP and now run by the Maine Lakes Society to educate, assist, and recognize property owners who maintain their camp or home sites in ways that manage storm water on site and prevent runoff and groundwater flows of excessive nutrients to lakes. To date, 25 of 60 properties have participated with 11 full LakeSmart awards, and three commendations, and two properties that won early awards have been re-evaluated.

Abrams Pond Watershed Survey (2015)- In May of 2015, the APA, in partnership with HCSWCD and MDEP, conducted a watershed survey which identified nonpoint source (NPS) pollution as the primary threat to water quality. The survey identified 34 NPS sites—20 residential and driveway sites (59%) and 14 private road sites (41%). Of these 34 sites, 12 were identified as high impact and 14 as medium-impact sites. Sixteen of the high- and medium-impact sites were roads or driveways. The survey estimated 151 tons of sediment and 129 pounds of phosphorus could be prevented from entering the lake if the highest priority sites were addressed. Due to the high

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<sup>3</sup>Lakes of Maine. Abrams Pond, Midas #4444, Accessed May 4, 2020 at: [https://www.lakesofmaine.org/data/2018\\_Lake\\_Reports/4444\\_1.html](https://www.lakesofmaine.org/data/2018_Lake_Reports/4444_1.html)

cost of these sites, outside funding and expertise is needed to address these NPS issues. Additional assessment is needed to determine impacts from septic systems and runoff from commercial blueberry barrens.

Abrams Pond Watershed-Based Protection Plan (2017)- In 2017, a Watershed-Based Protection Plan (WBPP) was developed for the Abrams Pond watershed by the HCSWCD. The plan laid out a strategy and schedule for NPS mitigation and water-quality protection efforts over the ten years (2016-2026).

#### **b. Description of Watershed Activities to Address NPS Pollution**

Abrams Pond Protection Project Phase I, #20190003 (2019-2020)- HCSWCD addressed NPS issues at five high priority private road and residential sites identified in the 2015 watershed survey and carried out public outreach and technical assistance. The project was funded in part by the United States Environmental Protection Agency (EPA) under Section 319 of the Clean Water Act.

It is anticipated that one additional phase will be needed to address any remaining NPS sites not addressed by this project. This will likely include low and medium impact residential sites along the shoreline and any new sites identified over the next 2-3 years. Identification of impacts from blueberry field runoff and septic systems may result in a need for future funding to address these problems. Any remaining residential sites beyond a third phase will be addressed by APA through their ongoing LakeSmart program or through self-funded landowner projects.

#### **IV. Purpose**

The purpose of the project is to significantly reduce phosphorus inputs from the Abrams Pond watershed by addressing five high- or medium-impact camp road sites, four driveway sites, and five high- and medium-impact residential sites. The project will provide outreach to increase awareness about NPS pollution, gravel road maintenance and sediment and erosion control BMPs. Technical assistance will be provided to encourage BMP installation and promote and sustain behavior change. Targeted outreach strategies such as a residential buffer workshop, distribution of an educational brochure through the Town's tax-bill mailing, a workshop for blueberry farmers, press releases, and newsletter articles in the APA annual newsletter will be completed as part of the project.

#### **V. Environmental Outcome**

The project will help to improve water quality to meet Class GPA standards and reduce the probability of ongoing nuisance algal blooms. Preliminary estimates indicate this project will reduce pollutant loading to the lake by approximately 27 pounds of phosphorus and 31 tons of sediment per year.

#### **VI. Partner Coordination, Roles and Responsibility**

**The Town of Eastbrook** will serve as the sponsoring grantee for the project. It will conduct project administration, serve on the steering committee, and assist with community education and outreach through the tax-bill mailing. The town is contributing \$1,000 in cash match, and \$2,255 in-kind to the project.

**The Abrams Pond Association (APA)** will participate on the steering committee, assist with

targeted education and outreach activities including serving as a liaison between the town and private landowners to line up cost-share projects, providing project updates at two annual meetings, distributing press releases, conducting LakeSmart evaluations, reviewing and providing feedback on relevant outreach materials including outreach to blueberry farmers, advertising project activities in their newsletter, and assisting with outreach for the buffer workshop. APA anticipates providing \$4,751 in-kind match to the project.

**Landowners-** APA received verbal commitments in spring 2020 from the owners of all five proposed residential projects and from two owners of four proposed driveway projects. In addition, positive intentions have been expressed during the course of Phase I from owners of the other two proposed driveway projects, and from owners of eight properties along private road projects.

A **managing environmental consultant** will be hired (following procurement procedures in the DEP's NPS Grant Administrative Guidelines) to manage the overall project, facilitate steering committee meetings, prepare TA plans, cost-share agreements, NPS site reports and PCR reports, and prepare educational materials including the final project report.

**Maine Department of Environmental Protection (Maine DEP)** will administer project funding, serve as the project advisor, and provide project and technical support.

The **US Environmental Protection Agency (US EPA)** will provide project funding and work plan guidance.

## **VII. Tasks, Schedules and Estimated Costs**

All press releases, outreach materials, project signs, and plans will acknowledge that the project is funded in part by the United States Environmental Protection Agency under Section 319 of the Clean Water Act. Project staff will consult with DEP on EPA's public awareness terms and conditions for Section 319 grants before the project commences. In addition, project staff will consult with DEP and EPA before project signs are designed. Refer to the Service Contract, Rider A. Section III. D. Acknowledgement.

The project will not use project funds to undertake, complete or maintain work required by existing permits, consent decrees or other orders. Project staff will exercise best professional judgment in the selection, design and installation of BMPs for NPS sites and will design and install BMPs at NPS sites according to design guidance described in Maine BMP guidance manuals or use other BMPs acceptable to the DEP. Project staff will ensure that permits required for construction are secured prior to construction and BMPs are constructed in an acceptable manner, before reimbursing landowners according to applicable Cost Sharing Agreements.

### **Task 1 – Project Administration**

The Town of Eastbrook will administer the project according to the service contract with DEP and prepare an RFQ for consulting services. This task includes tracking project progress, expenses, and matching funds, and submitting reports (semi-annual progress report, annual pollutants-controlled report, and final project report) and other deliverables. The selected consultant will update and maintain an NPS Site Tracker spreadsheet tool in collaboration with APA to efficiently

accumulate and record information about NPS sites observed during this project to enable continued activity in future years to maintain existing BMPs and address new NPS sites.

Start and Completion Dates	January 2021 – December 2022	
Grant Cost: \$8,111	Match Cost: \$1,676	<b>Total Cost: \$9,787</b>
Breakdown of Grant by Cost Category: Contractual: \$8,111		
Breakdown of Match by Cost Category: Salary & Fringe: \$1,260; Donated Services: \$416		

### Task 2 – Steering Committee

A steering committee will guide project activities and meet at least four times during the grant period. This committee will include representatives from the Town of Eastbrook, APA, MDEP, and interested watershed residents. It is anticipated that most of these meetings will be held online to cut down on cost.

Start and Completion Dates	January 2021 – December 2022	
Grant Cost: \$2,880	Match Cost: \$835	<b>Total Cost: \$3,715</b>
Breakdown of Grant by Cost Category: Contractual: \$2,880		
Breakdown of Match by Cost Category: Salary & Fringe: \$280; Donated Services: \$555		

### Task 3 – BMP Installation at NPS Sites: Roads and Driveways

Private gravel roads in the Abrams Pond watershed accounted for 41% of the NPS sites identified in the 2015 watershed survey. This project will provide landowners on primary camp roads with technical assistance, matching grants, and cost-sharing to address high priority NPS sites at 5 private road sites. In addition, there will be 4 driveway sites. For these 9 sites, cost-share recipients overall will provide a 58% match through cash, material or labor contributions and agree to maintain the project as directed. The projects will range in cost from \$3,000 - \$20,000 (see candidate site list in Section XII). The grantee and the cost-share recipient will complete a cost-share agreement prior to construction. The DEP NPS Site Report form, including before and after photographs, will be prepared for each completed site. NPS Abatement sites were selected based on the following criteria: high priority NPS sites identified during the 2015 watershed survey and through Phase I follow-up work, and landowner cooperation.

MDEP guidelines “Using Project Funds for Construction of BMPs at Road-related Sites” will be used to evaluate road-related NPS sites and determine if NPS project funds can be used to help a landowner pay for construction of road-related BMPs.

Start and Completion Dates	June 2021 – October 2022	
Grant Cost: \$42,623	Match Cost: \$35,556	<b>Total Cost: \$78,179</b>
Breakdown of Grant Cost by Cost Category: Contractual: \$17,623; Construction: \$25,000		
Breakdown of Match by Cost Category: Salary & Fringe: \$140; Contractual: \$1,000; Donated Services: \$416; Construction: \$34,000		

**Task 4 – BMP Installations at NPS Sites: Residential**

Residential properties (including driveways, which are accounted for in Task 3) accounted for 59% of the documented 2015 NPS survey sites. A total of 5 cost-share grants will be awarded for up to \$500 each toward the purchase of native plants and/or materials for conservation practices such as runoff diverters, infiltration steps and trenches, drywells, and buffers. A brief report of the residential projects will be submitted as a deliverable. The report will summarize site conditions, recommendations, and design as well as before and after photos. Each grant recipient will sign a cost-share agreement prior to construction outlining the match requirement (capped at \$500, or 50% of the total project cost), and verification of proper installation will occur to complete the agreement. One report will list descriptive information for all sites receiving the Conservation Practice Matching Grants.

Start and Completion Dates	June 2021 – October 2022	
Grant Cost: \$9,516	Match Cost: \$4,300	<b>Total Cost: \$13,816</b>
Breakdown of Grant Cost by Cost Category: Contractual: \$7,216; Construction: \$2,300		
Breakdown of Match by Cost Category: Salary & Fringe: \$175; Donated Services: \$925; Construction: \$3,200		

**Task 5 – Education and Outreach**

**Publicity:** Two press releases will be developed and sent to the local newspapers. Project information will be posted on the Town website. APA will work with property owners to conduct at least two new LakeSmart evaluations each year (total of 4) with a goal of landowners receiving a LakeSmart Award Certification. APA will send a targeted mailing to landowners that have not yet participated in the program.

**Workshops/Meetings/Other:** A buffer workshop will bring together residents and lake association volunteers to learn about conservation practices that protect water quality including a buffer planting at a residential property to highlight the use of native plant materials. Two presentations will be given at the APA annual meeting (2021 and 2022). The presentations will emphasize the available cost-sharing opportunities and the benefits of erosion prevention. A letter will be sent to blueberry farmers to invite them to a workshop focused on management tools for maximizing blueberry harvests while protecting water quality. Targeted septic system outreach will be conducted following completion of a Septic Vulnerability Analysis by Maine DEP.

**Publications:** A "Watershed Living" insert will be developed and inserted in approximately 730 tax bill mailings and will include information about septic systems and water quality. Project updates will be highlighted in APA newsletters which are distributed annually to over 100 watershed residents, property owners and other interested parties.

Start and Completion Dates	March 2021- December 2022	
Grant Cost: \$4,009	Match Cost: \$3,258	<b>Total Cost: \$7,268</b>
Breakdown of Grant Cost by Cost Category: Contractual: \$4,009		
Breakdown of Match by Cost Category: Salary & Fringe: \$280; Donated Services: \$2,358; Other: \$620		

**Task 6 – Pollutant Load Reduction Estimates**

Project staff will estimate NPS pollutant load reductions and resources protected under this project. During design or installation of conservation practices at NPS sites, appropriate field measurements will be recorded to prepare estimates of pollutant load reductions. Estimates will be prepared for all NPS sites unless there is not an applicable estimation method. Methods to be used are the EPA Region 5 Road Estimation Model <http://it.tetrattech-ffx.com/steplweb/> and/or the U. S. Forest Service WEPP Road Model at <http://forest.moscowfsl.wsu.edu/fswapp/>. Results will be provided using DEP’s “Pollutants Controlled Report” (PCR), which will be submitted to the MDEP, by December 31<sup>st</sup> of each project year.

Start and Completion Dates	June 2021 – December 2022	
Grant Cost: \$1,210	Match Cost: \$0	<b>Total Cost: \$1,210</b>
Breakdown of Grant Cost by Cost Category: Contractual: \$1,210		
Breakdown of Match by Cost Category: \$0		

**VIII. Deliverables**

An electronic copy of each deliverable will be provided to the DEP Contract Administrator. Each deliverable will be labeled according to procedures described in DEP document *Nonpoint Source Grant Administrative Guidelines*, <http://www.maine.gov/dep/water/grants/319-documents/2016GrantAdminGuidelinesFinal2.docx>.

1. Sub agreements, semi-annual progress reports, final project report and NPS site tracker summary (Task 1).
2. NPS site reports for each NPS abatement site (Task 3).
3. Summary table listing residential projects: NPS site, landowner name, brief description of problem, BMPs recommended, and BMPs implemented (Task 4).
4. Copies of key education/outreach materials - Press releases, newsletter articles, tax bill insert, letter to blueberry farmers, list of LakeSmart properties evaluated (Task 5).
5. Pollutants Controlled Report (PCR) for each year until project completion (Task 6).

**IX. Project Coordinator**

Name	Julie Curtis
Organization	Town of Eastbrook
Mailing Address	959 Eastbrook Road, Eastbrook, ME 04634
Telephone Number	(207) 565-3307
Email Address	<a href="mailto:jacurtis@myfairpoint.net">jacurtis@myfairpoint.net</a>
Federal DUNS #	058056081

**X. Project Budget**

<b>Federal Funds:</b>	<b>\$68,349</b>
<b>Non-Federal Match:</b>	<b>\$45,625</b>
<b>Proposed Total Cost:</b>	<b>\$ 113,974</b>

**Part 1. Estimated Personnel Expenses: (Applicant staff only)**

<b>Position Name &amp; Title</b>	<b>Hourly Rate</b>	<b>Number of Hours</b>	<b>Salary &amp; Fringe</b>	<b>Total Applicant Personnel Expenses</b>
Lisa Folmer, Treasurer	\$35.00	36	\$35.00	\$1,260
Julie Curtis, First Selectman	\$35.00	25	\$35.00	\$ 875
<b>Totals</b>		<b>61</b>		<b>\$2,135</b>

**Part 2. Budget Estimates by Cost Category**

<b>Cost Category</b>	<b>Federal Funds</b>	<b>Non-Federal Match</b>	<b>Total Cost</b>
Salary & Fringe (from Part 1)		\$2,135	\$2,135
Subgrant			
Contractual	\$41,049 <sup>1</sup>	\$1,000 <sup>2</sup>	\$42,049
Donated Services – Labor		\$4,670	\$4,670 <sup>3</sup>
Construction	\$27,300 <sup>4</sup>	\$37,200	\$64,500
Travel			
Supplies			
Other		\$620	\$620 <sup>5</sup>
Indirect Costs			
<b>Totals</b>	<b>\$68,349</b>	<b>\$45,625</b>	<b>\$113,974</b>

**Part 2 Notes:**

- Contractual- Project Manager 242 hrs. @ \$75/hr., Field Scientist 329 hrs. @ \$65/hr. Mileage=2,142 miles (15 trips to watershed) @ \$0.45/mile. Other= Printing/copies for Site Plans/CSA's, printing/postage for farmers letters, annual meeting handouts (\$125), buffer plants/soil amendments/handouts for buffer workshop (\$175) and tax-bill mailing (\$250= 730 copies @ \$0.34).
- Contractual- \$1,000 cash match from Town of Eastbrook for technical assistance.
- Donated Services- APA 150 hrs. @ \$23.12/hr. + Steering Committee 52 hrs. @ \$23.12.
- Construction- Cost-Share for driveway sites (\$6,000), private roads (\$19,000), and residential (\$2,300). Construction match for driveways (\$6,000), private roads (\$28,000), and residential (\$3,200).
- Other- Town of Eastbrook (\$400) for tax-bill mailing and APA (\$220) for newsletters.

**Part 3. Sources of Non-federal Match and Estimated Amounts**

<b>Sources of Non-federal Match</b>	<b>Amount</b>
Town of Eastbrook Labor (In-Kind)- 61 hrs. @ \$35/hr.	\$ 2,135
Town of Eastbrook (Cash)- \$1,000 to contractor for TA	\$ 1,000
Town of Eastbrook Tax Bill mailing (In-Kind)- Postage for ~ 730 letters @ \$0.55	\$ 400
Abrams Pond Association (In-Kind)- 150 hrs. @ \$23.12 (not including hours for Steering Committee)	\$ 3,468
Abrams Pond Association (In-Kind/Other)- Cost of printing & mailing two annual newsletters at \$110/newsletter (Total of 101 newsletters distributed including 47 US Mail & 54 via email)	\$ 220
Steering Committee (in-kind)- 52 hrs. @ \$23.12/hr.	\$ 1,202
Construction (Residential Match)- 5 sites	\$ 3,200
Construction (Private Road & Driveway Match)- 9 sites	\$34,000
<b>Total</b>	<b>\$45,625</b>

**XI. Candidate NPS Sites List**

NPS Site Name & Location	Describe the NPS Site & Conditions at the site Causing Polluted Runoff to Reach Surface Waters	BMPs Recommended	Construction Cost Estimates: Grant, Match, Total	Site Photo
3/A3- 63 Dickens Farm Rd.	Unstable clogged culvert, ditch erosion and road shoulder erosion (Driveway)	Stabilize culvert, remove clog, install culvert, reshape ditch	Grant: \$1,500 Match: \$1,500 Total: \$3,000	
4/A4- 63 Dickens Farm Rd (E. Map 6, Lot 15)	Lack of shoreline vegetation and unstable path to pond (Residential)	Stabilize footpath to pond, install infiltration steps and add to shoreline buffer	Grant: \$500, Match: \$500 Total: \$1,000	
6/A6- 101 Dickens Farm Road (E. Map 6, Lot 17)	Lack of shoreline vegetation (Residential)	Establish buffer along shoreline and add understory in wet woods	Grant: \$500 Match: \$1,000 Total: \$1,500	
9/A9- 123 Dickens Farm Rd. (E. Map 6, Lot 19)	Inadequate shoreline vegetation (Residential)	Establish buffer and stabilize shoreline with vegetation	Grant: \$500 Match: \$500 Total: \$1,000	
14/A14- 247 Dickens Farm Rd.	Surface erosion (Driveway)	Road rehab, install turnout and rubber razor, vegetated ditch, and buffer above bank, raise parking area	Grant: \$2,000 Match: \$2,000 Total: \$4,000	

NPS Site Name & Location	Describe the NPS Site & Conditions at the site Causing Polluted Runoff to Reach Surface Waters	BMPs Recommended	Construction Cost Estimates: Grant, Match, Total	Site Photo
17/B1-Sunnyside Rd. & culvert east of Cemetery Rd.	Road surface erosion, failing culvert (Private Road)	Replace culvert and resurface road	Grant: \$1,000 Match: \$5,000 Total: \$6,000	
20/B4a- Sunnyside Rd./Graves Rd.	Concave road, washing, water running down road (Private Road)	Raise/rehab road and install turnouts	Grant: \$2,000 Match: \$4,000 Total: \$6,000	
25/B9- Abrams Pond Rd.	Road surface and shoulder erosion (Private Road)	Install ditch turnouts and crown road	Grant: \$0 Match: \$3,000 Total: \$3,000	
26/C1- Dinsmore Rd. (E. Map5, Lot 20)	Surface erosion (Driveway)	Build up driveway surface, crown and/or install runoff diverters	Grant: \$1,000 Match: \$1,000 Total: \$2,000	
28/C3- Dinsmore Rd.	Surface erosion, undersized culverts, undersized ditch, ditching gully on steep grades (Private Road)	Phase II- 215 ft of riprap ditch w/rock check dams	Grant: \$6,000 Match: 6,000 Total: \$12,000	

NPS Site Name & Location	Describe the NPS Site & Conditions at the site Causing Polluted Runoff to Reach Surface Waters	BMPs Recommended	Construction Cost Estimates: Grant, Match, Total	Site Photo
32/C7- Bunker Lane/Sallie Rd. (E. Map 6 Lots 1 and 13-1)	Ditch erosion (Private Road)	Stabilize ditch by reshaping and armoring with stone and install check dams	Grant: \$10,000 Match: \$10,000 Total: \$20,000	
33/C8- Sallie Rd. (E. Map 6, Lots 11, 12)	Driveway erosion and unstable path to pond (Driveway)	Install waterbars	Grant: \$1,500 Match: \$1,500 Total: \$3,000	
35- 267 Dickens Farm Rd. (E. Map 6, Lot 26)	Inadequate shoreline vegetation; unstable shoreline (Residential)	Stabilize shoreline with a combination of rip rap and vegetation	Grant: \$500 Match: \$500 Total: \$1,000	NA
36- Dickens Farm Road (E. Map 6, Lot 23-1)	Steep slope above bank causing surface runoff to lake (Residential)	Add mixed vegetative planting to slow down water	Grant: \$300 Match: \$700 Total: \$1,000	NA