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## Spruce Creek Watershed Improvement Project Phase II Project # 2010RT07

### Final Report

Grantee: Town of Kittery

Grantee Contact: Mary Ann Conroy

Date Project Started: December 15, 2009

Date FPR Submitted: September 30, 2012

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**TABLE OF CONTENTS**

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1. Project Overview .....	1
1.1 Project Purpose .....	1
1.2 Project Highlights and Difficulties .....	1
1.3 Key Personnel .....	2
2. Task Summary .....	2
2.1 Task 1: Project Management .....	2
2.2 Task 2: Steering Committee .....	2
2.3 Task 3: LID Team: LID and Stormwater Best Management Practices .....	2
2.4 Task 4: Septic Team: IDDE Evaluation Follow-up and Technical Assistance .....	3
2.5 Task 5: Residential Team: Residential Socials and Residential Conservation Practices .....	4
2.6 Task 6: Public Outreach .....	4
2.7 Task 7: Pollutant Load Reduction Estimates .....	6
3. Deliverables Summary .....	7
Task 1: Project Management .....	7
Task 3 (LID and Stormwater Best Management Practices) and 5 (Residential Conservation Practices) ..	7
Task 4: Septic Team .....	7
Task 5: Residential Conservation Practices .....	7
Task 6: Public Outreach .....	7
Task 7: Pollutant Load Reduction Estimates .....	7
4. Project Outcomes .....	8
5. Summary of Total Expenditures .....	10
6. Non-Federal Match Documentation and Certification .....	11
7. Appendices .....	19

## 1. PROJECT OVERVIEW

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### 1.1 Project Purpose

The primary purpose of the Spruce Creek Watershed Improvement Project (SCWIP) Phase II was to address the cumulative impacts of increasing development and polluted runoff to surface waters in the Spruce Creek watershed (see Appendix A for watershed description). In particular, this project focused on reducing bacteria loading and the export of sediment and nutrients into Spruce Creek to improve water quality and help re-open shellfish harvest areas. This was accomplished through the installation of structural Best Management Practices (BMPs) at residential, commercial, and town properties. The project also aimed to raise awareness about watershed problems and foster long-term watershed stewardship. Some of the major project outcomes include:

- The installation of 25 BMPs to control polluted runoff (21 residential and 4 commercial).
- Direct education of over 300 watershed citizens and visitors through outreach.
- Over 1,526 volunteer hours logged.
- The maintenance of the Save Kittery Waters website.
- The continuation of the Save Kittery Waters Pledge program which has received pledges from 54 local citizens to implement a total of 648 watershed-friendly practices on their properties.
- Presentations at over 8 events.

### 1.2 Project Highlights and Difficulties

Overall, Phase II of the SCWIP was a success. Major highlights of the project include the completion of many of the tasks outlined in the grant agreement as well as tasks originally beyond the scope of the plan. These “extras,” such as hosting exhibit booths at local events engaged many more local citizens than was originally anticipated. At the end of this project, more than 300 watershed citizens and visitors were exposed to the work being completed through this grant.

Despite the successes of this project, there were some difficulties that complicated and delayed the completion of some of the original tasks. For instance, many of the BMPs installed during this project were on commercial property. The “go-ahead” for work to be completed on these properties often had to go through many levels of approval. The long-time frame associated with this type of work was not anticipated and prevented the installation of some of the BMPs originally planned on commercial properties. Another major difficulty of this project was the transition to a new town manager in 2011.

Other notable project difficulties include the need for a project extension and several changes to the project scope of work. The original end-date for this project was June 30, 2012. In order to complete all project tasks, an extension was requested changing the end-date to September 30, 2012. Throughout the project, it was also necessary to make slight changes to the initial scope of work. The major change was made to Task 4: Septic Team. Initially, it was proposed to conduct a sanitary survey throughout the

watershed. The Maine Department of Marine Resources conducted this survey during the project period which freed up funds for other tasks including conducting an illicit discharge detection investigation in Admiralty Village. In a separate project, an area of this neighborhood was found to have a series of private catch basins in multiple backyards. FBE conducted an in-depth investigation of these catch basins to document illicit discharges to the storm drain system. Other changes to the scope for Task 4 included assistance with writing a septic system ordinance for the town and producing educational materials about the ordinance.

### ***1.3 Key Personnel***

To simplify task management, the number of key personnel involved in the management and organization of SCWIP Phase II was reduced from the previous grant. The key personnel involved in this project served on the Steering Committee and met multiple times throughout the project to ensure the requirements for each task were met. Members of the Steering Committee included:

1. Mary Ann Conroy – Commissioner of Public Works, Kittery, ME
2. Jonathan Carter – Kittery Town Manager (previous)
3. Robert Markel – Kittery Town Manager (current)
4. Sue Cobler – SCWIP Grant Business Manager
5. David Ramsey – SCWIP Grant Manager
6. Phyllis Ford – Spruce Creek Association
7. Amber Harrison – Kittery Shoreland Resource Officer
8. Wendy Garland – Maine Department of Environmental Protection
9. Forrest Bell – FB Environmental Associates
10. Emily DiFranco – FB Environmental Associates

## **2. TASK SUMMARY**

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### ***2.1 Task 1: Project Management***

The Town of Kittery and MEDEP finalized the contract for this project in December 2009. The Town of Kittery tracked project progress, expenses, and local match. Four semi-annual progress reports were completed. David Ramsey was hired as the Project Manager and Sue Cobler was hired as the business manager for SCWIP Phase II in January 2010.

### ***2.2 Task 2: Steering Committee***

The Steering Committee met six times throughout the course of this project. Committee members included Mary Ann Conroy, Jonathan Carter, Robert Markel, Sue Cobler, David Ramsey, Phyllis Ford, Amber Harrison, Wendy Garland, Forrest Bell, and Emily DiFranco. The Steering Committee managed this project based on project tasks and met to discuss progress and next steps.

### ***2.3 Task 3: LID Team: LID and Stormwater Best Management Practices***

In SCWIP Phase I, the LID Team inventoried the Spruce Creek watershed during wet and dry weather to identify potential commercial and industrial sites for the implementation of stormwater BMPs. From this inventory, approximately ten sites were selected as good candidates for remediation. In Phase I, a total of 11 stormwater BMPs were installed at three of these sites. In Phase II, four additional sites were addressed. The work completed at each site is thoroughly documented in the NPS reports in Appendix B. A brief summary of the work completed in Task 3 includes the following:

- **LID Site 1: Shapleigh School:** Improvements to this site include the installation of permeable pavers in the school parking lot;
- **LID Site 2: Bob's Clam Hut:** Improvements to this site include the installation of a rain barrel;
- **LID Site 3: Robert's Maine Grill:** Improvements to this site include the installation of a rain barrel;
- **LID Site 4: GAP Outlet:** Improvements to this site include the installation of a vegetated underdrain.

#### ***2.4 Task 4: Septic Team: IDDE Evaluation Follow-up and Technical Assistance***

For Task 4, SCWIP Phase II focused on identifying human sources of bacteria in Kittery and worked to promote the recently drafted septic pump-out ordinance and tracking system. As stated in the Project Summary section of this report, it was necessary to make slight changes to the initial scope of work for this task. Initially, it was proposed to conduct a sanitary survey throughout the watershed. The Maine Department of Marine Resources conducted this survey during the project period which freed up funds for the other tasks described below.

##### **Replacement of One Residential Septic System**

One overboard discharge was discovered and corrected during the course of this project. The SCWIP Phase II assisted with the dispersal of septic system dye which identified the overboard discharge that was located approximately 30 feet from Spruce Creek. Since its discovery, the system has been replaced with a modern septic system and leach field that is located the appropriate distance from the Creek. Though the initial task required the replacement of two residential septic systems, no other candidate sites were identified through this project.

##### **Illicit Discharge Detection**

SCWIP Phase II focused efforts on areas identified as “hotspots” of bacteria in outfall and tributary sampling in 2009 and 2011. Admiralty Village, a residential neighborhood along Spruce Creek that includes Navy housing, was identified as one area that consistently had high bacteria counts even in dry weather. A follow-up camera inspection of one section of the storm drain system led to the discovery of a system of catch basins in the backyards of private homes in the area. As part of this project, FBE mapped this storm drain system and began the outreach process to educate residents about proper maintenance and use of these catch basins. A report including the map of the private storm drain system can be found in Appendix D.



### Septic Pump-out Ordinance

The Town of Kittery is currently working to pass a septic pump-out ordinance that would require regular pump-outs and inspections of privately owned septic systems. Members of the SCWIP Phase II team worked to support this ordinance by attending two public information sessions and producing and dispersing multiple septic system brochures and informational packets. All outreach materials, including press releases and a copy of the ordinance can be found in Appendix C.

#### ***2.5 Task 5: Residential Team: Residential Socials and Residential Conservation Practices***

In the initial Scope of Work, it was proposed to identify residents interested in installing BMPs on their properties through residential socials. However, other outreach efforts (described in Section 2.6) and the “word of mouth” generated from Phase I provided the Residential Team with more than enough interested residents that it was not necessary to hold residential socials. In SCWIP Phase II, Technical Assistance reports were generated for seven residences (Appendix C). From these reports, 21 BMPs were installed on five residential properties with the help of volunteers donating over 1,526 hours of their time. From the Technical Assistance Reports, approximately five other BMPs were completed by the residents.

The work completed at each site is thoroughly documented in the NPS reports in Appendix D. A brief summary of the work completed by the Residential Team includes the following:

- **Residential Site 1: 381 Haley Road:** Improvements to this site include the installation of a rain garden, an infiltration trench and a plunge pool. This site is a non-shoreline property.
- **Residential Site 2: 8 Moore Street:** Improvements to this site include the installation of two vegetated buffers, two rain gardens, and a gravel walkway.
- **Residential Site 3: 19 Bond Road:** Improvements to this site include the installation of three rain gardens, infiltration steps, a vegetated buffer, a no-mow zone, and two infiltration trenches.
- **Residential Site 4: 21 Bond Road:** Improvements to this site include the installation of an infiltration trench.
- **Residential Site 5: Bond Road Shared Driveway:** Improvements to this site include the repaving of a private driveway to ensure the pitch of the driveway pushes water into constructed BMPs. The driveway is shared by five homes.

This task also included the continuation of the Watershed Pledge program established during SCWIP Phase I. The pledge is a public outreach tool that encourages local residents to discuss what they can do to improve water quality in the Spruce Creek watershed with their families, and commit to implementing these actions. Residents can pledge to improve buffers around their homes, care for their lawns and gardens in a more watershed-friendly way, prevent erosion and reduce runoff from their property, or simply spread the word to other residents. For their pledge, homeowners received a yard sign indicating their participation (Appendix D). During Phase II, 54 people pledged to complete a total of 648 watershed-friendly practices on their properties.

#### ***2.6 Task 6: Public Outreach***

A major goal of SCWIP Phase II was to raise community awareness about water quality in the Spruce Creek watershed through public outreach. Upon the completion of this project, four public presentations were held, two educational exhibits were organized at local events, two workshops on non-point source pollution management were hosted, and one end-of-project intercept survey was conducted.

### Public Presentations

Four public presentations were given by FB Environmental and Maine NEMO (See Appendix D for more detailed descriptions):

- La Marr Clannon from NEMO presented about non-point source pollution at the Phase II kickoff meeting in March 2011 held at the Kittery Trading Post.
- FB Environmental held a brief presentation on the SCWIP and the effect of stormwater on local waterbodies during the tour of residential and commercial projects completed during Phases I and II, on October 5, 2011.
- FB Environmental presented about non-point source pollution and the results of the 2011 stormwater outfall sampling at a Kittery Town Council Meeting in November 2011.
- FB Environmental presented at a residential BMP installation event (8 Moore Street), in which the health of the Spruce Creek watershed was discussed as well as best management practices to apply to residential neighborhoods.

### Workshops on NPS Management

Two workshops on NPS Management were organized by the Outreach Team as part of Phase II (See Appendix D for more detailed descriptions):

- La Marr Clannon from NEMO hosted a workshop for the Kittery Planning Board on October 2, 2011.
- Landscaping at the Water's Edge Workshop, a 2-day workshop for professional landscapers and homeowners, was held in collaboration with the UNH Cooperative Extension at the Kittery Trading Post on March 30 and 31, 2011.

### Educational Exhibits

In addition to the public presentations, three educational exhibits were organized and staffed by the Spruce Creek Association and the Town of Kittery.

- In a separate project, the Town of Kittery, working with FB Environmental, brought the dogs from Environmental Canine Services to conduct an investigation of storm drains and tributaries throughout Kittery to identify human sources of bacteria to Spruce Creek. These dogs are trained to detect, through scent, human-specific sources of bacteria. As part of this investigation, an education and outreach event was held in the parking lot of the Kittery Trading Post, in which members of the press and local citizens were invited and the Spruce Creek Association and the Town of Kittery hosted an educational booth.

- The Spruce Creek Association and the Town of Kittery organized a booth at the Kittery Block Party on June 16, 2012 in which exhibits showcased information about the SCWIP Phase II, a rain barrel program, and gave information about Kittery's revisions to the septic ordinance.
- The Spruce Creek Association organized a booth at Kittery's Zero Waste Event held on September 23, 2012 at Fort Foster in Kittery Maine, which showcased information about protecting Spruce Creek and collecting pledges.

### Intercept Survey

In 2008 and 2010, intercept surveys were conducted in the Spruce Creek watershed to gauge the type of public outreach and education needed. An end-of-project intercept survey conducted in September of 2012, given to a sample of part-time and full-time Kittery and Eliot residents was used to gather responses and information regarding the success of those outreach and educational efforts put forth during Phase II of this project. Copies of the surveys and results can be found in Appendix D.

### Technological Outreach

As part of Phase II, one blog was created and one website was updated to spread information about Spruce Creek and best management practices (See Appendix D).

- **Protect Kittery Waters Website** ([www.savekitterywaters.org](http://www.savekitterywaters.org)): Created in 2009, this website provides a central location for information about the SCWIP, an overview of steps each resident or business owner can take to improve water quality in the watershed, a calendar of events for SCWIP projects, as well as links to other resources.
- A blog was created by a homeowner whose property was the site of a residential BMP project documenting the process of building a rain garden and posted it online as a guide to other interested homeowners.

### Additional Outreach Efforts

- **Press Releases:** Four press releases were published during Phase II and many news articles covered the events (Appendix D).
- **Tour of SCWIP Phase I and II Sites:** One tour of the Spruce Creek watershed residential and commercial projects that have been installed in SCWIP Phases I and II was held on October 5, 2011. This tour was organized in collaboration with the Wells Reserve National Estuarine Research Center (See Appendix D).
- **Flyers/Brochures:** A new BMP flyer/brochure was designed for the tour of SCWIP Phase I and II sites held on October 5, 2011 (See Appendix D).

## **2.7 Task 7: Pollutant Load Reduction Estimates**

Pollution reduction estimates were calculated for all sites where applicable. The EPA Region 5 Model was used to estimate load reduction. As the "Urban Runoff" tab was used, total sediment controlled was not calculated. It is estimated that a total of 458 pounds/year of Total Suspended Solids and 2pounds/year



of Total Nitrogen were reduced through the implementation of BMPs. Pollutant reductions calculated with the Region 5 Model are reported in a Pollutant Load Report for the Maine DEP (Appendix E).

As of September 2012, water quality in the Spruce Creek watershed is still considered impaired based on recent water quality data. Shellfish harvesting areas still remain closed.

### **3. DELIVERABLES SUMMARY**

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#### ***Task 1: Project Management***

- Contract between the Town of Kittery and MDEP was signed in December 2009.
- Semi-annual progress reports were submitted four times throughout the project.
- This final report was submitted on September 28, 2012.

#### ***Task 3 (LID and Stormwater Best Management Practices) and 5 (Residential Conservation Practices)***

- All non-point source (NPS) site reports for each NPS site can be found in Appendix B.
- A list of technical assistance documents produced and an example technical assistance document can be found in Appendix C.

#### ***Task 4: Septic Team***

For this task, the deliverables required in the initial scope of work included the sanitary survey report and any technical documents regarding septic system replacement. As Maine DMR is currently completing the sanitary survey report, it is not included in this report. Further, no technical documents are provided for the septic system replacement though this work is described in Section 2 of this report. Deliverables provided for this task include:

- Draft septic system ordinance work (Appendix D); and
- Illicit discharge report for Admiralty Village (Appendix D).

#### ***Task 5: Residential Conservation Practices***

- Results of residential conservation practice pledges (Appendix D); and
- Proposed residential pledge sign for review (Appendix D).

#### ***Task 6: Public Outreach***

- Copies of newspaper articles, brochures, presentations, outreach materials, and citizen surveys (Appendix D); and
- Summary of results of the intercept survey (Appendix D).

#### ***Task 7: Pollutant Load Reduction Estimates***

Pollutants Controlled Reports were submitted throughout the grant period. A summary of the 2012 pollutant load estimates can be found in Appendix E. One difficulty with the current method used to

calculate pollutant load reductions is that this method does not appear to provide an accurate representation of the value of the BMPs that were installed. In fact, this model does not address bacteria (the pollutant of concern in Spruce Creek) and is not a useful tool for the town to convince homeowners that these efforts are working to reduce pollution to the Creek.

#### **4. PROJECT OUTCOMES**

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The major project outcomes of the SCWIP Phase II include (by task):

***Task 2: Steering Committee***

- Six steering committee meetings.

***Task 3: LID***

- Four commercial BMPs to control polluted runoff;
- Three press releases to highlight this work; and
- One tour of LID projects from SCWIP Phase I and Phase II.

***Task 4: Septic Systems***

- Assistance with the writing of a draft septic system ordinance and associated outreach materials;
- An illicit discharge investigation in Admiralty Village; and
- Replacement of one overboard discharge.

***Task 5: Residential***

- Twenty-one residential BMPs to control polluted runoff;
- Pledges from 54 local citizens to implement a total of 648 watershed-friendly practices on their properties; and
- One tour of residential BMP projects from SCWIP Phase I and Phase II.

***Task 6: Outreach***

- Direct education of over 300 watershed citizens and visitors through outreach.
- Over 1,526 volunteer hours logged.
- Maintenance of the Save Kittery Waters website;
- One flyer on BMPs for homeowners;
- Four public presentations;
- Two NPS management workshops; and
- One end-of-project intercept survey.

***Task 5: Pollutant Controlled Reports***

- Two PCRs completed.

For the most part, this grant proceeded smoothly and had tremendous environmental benefits. There were, however, many “lessons learned” from SCWIP Phase II which will be used in the execution of SCWIP Phase III to streamline the process to ensure maximum environmental benefit. These major lessons are summarized below:

- The new project management structure included a grant manager and a financial manager in addition to the existing town staff, volunteers, and consultants. This structure proved to be “too many cooks in the kitchen” and acted as a roadblock to accomplish many tasks. This structure did not provide an accurate idea of who was working on what task which made it difficult to move forward.
- More outreach should be completed at the beginning of the grant period to ensure residential and commercial BMPs can be completed in a timely manner throughout the grant period. In this phase, many of the sites for Tasks 3 and 5 were not identified until the second year of the grant making it difficult to complete the required number of sites in time. Further, early identification would allow grant managers to choose the best sites and not just the available sites.

It should also be noted that local citizens and volunteers were extremely engaged in SCWIP Phase II and were willing to donate time and money to ensure its successful completion. This is not only a reflection of the environmental consciousness of citizens in Kittery, but also on the successful outreach efforts conducted by the grant.

**5. SUMMARY OF TOTAL EXPENDITURES**

	<b>Federal NPS Grant</b>	<b>Non-Federal Match</b>	<b>Total</b>
Funds Originally Allocated	\$79,780.00	\$81,346.00	\$161,126.00
Funds Expensed	\$79,780.00	\$134,108.20	\$213,888.20
Funds Remaining	\$0	(\$52,762.20.00)	(\$52,108.20.00)

<b>SCWIP Phase II Grant Expense and Non-Federal Match Summary</b>							
<b>Watershed Project Activity or Workplan Element</b>	<b>Grant Funds Expended</b>	<b>Non-Federal Match</b>					<b>Grant + Match</b>
		<b>Volunteer Match</b>	<b>In - Kind Services</b>	<b>Kittery Match</b>	<b>Cost Share</b>	<b>Total Match</b>	
Task 1: Project Management	\$13,488.88	\$21,600	\$1,110	\$480	--	\$23,190	\$36,678.88
Task 2: Steering Committee	\$5,482.30	\$240	\$840	\$1,200	--	\$2,280	\$7,762.30
Task 3: LID Team	\$22,462.93	--	\$7,040	\$16,056	\$1,179	\$24,275	\$46,737.93
Task 4: Septic Team	\$6,163.91	--	\$2,000	\$800	\$44,000	\$46,800	\$52,963.91
Task 5: Residential Team	\$22,314.51	\$3,660.20	\$1,233	\$2,125	\$21,075	\$28,083.20	\$50,397.71
Task 6: Outreach Team	\$5,088.75	\$2,940	\$3,460	\$1,040	--	\$7,440	\$12,528.75
Task 7: Pollutant Reduction Estimates	\$4,778.72	--	\$2,040	--	--	\$2,040	\$6,818.72
<b>TOTAL</b>	<b>\$79,780</b>	<b>\$28,440.20</b>	<b>\$17,713</b>	<b>\$21,701</b>	<b>\$66,254</b>	<b>\$134,108.20</b>	<b>\$213,888.20</b>

## 6. NON-FEDERAL MATCH DOCUMENTATION AND CERTIFICATION

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### GRANTEE INFORMATION:

Name: Town of Kittery  
Address: 200 Rogers Road Extension  
Kittery, Maine 03904  
Telephone: (207) 439-0333  
Contact Person: Mary Ann Conroy

### PROJECT INFORMATION:

Project Title: Spruce Creek Watershed Improvement Project Phase II  
Project ID#: 2010RT07

Match Amount planned under the Grant Agreement	\$ 81,346.00
Match Amount Claimed	\$ 134,108.20

### CERTIFICATION STATEMENT:

I certify that the non-federal match detailed in the attached information were expended in the course of completing work described in the Grant Agreement for the Project referenced above, and that detailed documentation of the match information is on file and available for review at the Grantee address shown above.



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Date 9/30/2012    Signature of Grantee - Authorized Official

**Table 1: Total Non-Federal Match for all Tasks for the SCWIP Phase II**

Date	Source	Activity or Item	Task	Hours	Rate or Value	Total
8/4/2010	Town Manager	Attendance at Steering Committee Meeting	2	2	\$40/hour	\$80.00
8/4/2010	DPW Director	Attendance at Steering Committee Meeting	2	2	\$40/hour	\$ 80.00
8/4/2010	Shoreland Resource Officer	Attendance at Steering Committee Meeting	2	2	\$20/hour	\$40.00
8/4/2010	FB Environmental	Attendance at Steering Committee Meeting	2	7	\$20/hour	\$140.00
8/4/2010	Phyllis Ford	Attendance at Steering Committee Meeting	2	2	\$20/hour	\$40.00
3/5/2011	LaMarr Clannon	Presentation at Kickoff Meeting	6	4	\$40/hour	\$320.00
5/10/2011	FB Environmental	Kittery Block Party Booth	6	12	\$20/hour	\$240.00
5/10/2011	Shoreland Resource Officer	Kittery Block Party Booth	6	12	\$20/hour	\$240.00
5/10/2011	Phyllis Ford	Kittery Block Party Booth	6	12	\$15/hour	\$180.00
5/10/2011	Lorna Perry	Kittery Block Party Booth	6	10	\$15/hour	\$150.00
5/10/2011	Kate Johnston	Kittery Block Party Booth	6	8	\$15/hour	\$120.00
5/16/2011	FB Environmental	Site Design	5 - 381 Haley Road	4	\$20/hour	\$80.00
5/26/2011	FB Environmental	Site Design	5 - 21 Bond Road	2	\$20/hour	\$40.00
5/26/2011	FB Environmental	Site Design	5 - 19 Bond Road	6	\$20/hour	\$120.00
7/15/2011	CMA Engineers	Design	3 - GAP Outlet		\$3,000	\$3,000.00
7/29/2011	GAP Outlet Lawyers	Design approval	3 - GAP Outlet		\$4,000	\$4,000.00
8/8/2011	Kittery DPW	Dump Truck	3 - Shapleigh School	4	\$44/hour	\$176.00
8/8/2011	Kittery DPW	Backhoe	3 - Shapleigh School	4	\$44/hour	\$176.00
8/8/2011	Kittery DPW	Permeable Pavers	3 - Shapleigh School		\$9,200	\$9,200.00
8/8/2011	Kittery DPW	Stone	3 - Shapleigh School		\$198	\$198.00
8/8/2011	Kittery DPW	Laborers (3)	3 - Shapleigh School	150	\$24/hour	\$3,600.00



Date	Source	Activity or Item	Task	Hours	Rate or Value	Total
8/8/2011	Kittery DPW	DPW Foreman	3 - Shapleigh School	10	\$45/hour	\$ 450.00
8/8/2011	Kittery DPW	DPW Commissioner	3 - Shapleigh School	5	\$60/hour	\$ 300.00
8/8/2011	FB Environmental	Stormwater brochure	6	8	\$20/hour	\$160.00
8/30/2011	Kittery DPW	Pavement	3 - GAP Outlet		\$816	\$816.00
8/30/2011	Kittery DPW	DPW Foreman	3 - GAP Outlet	4	\$45/hour	\$180.00
8/30/2011	Kittery DPW	DPW Commissioner	3 - GAP Outlet	16	\$60/hour	\$960.00
9/9/2011	FB Environmental	Installation	5 - 381 Haley Road	8	\$20/hour	\$160.00
9/9/2011	Kittery DPW	Mulch and Stone	5 - 381 Haley Road		\$400	\$400.00
9/9/2011	Ann Grinnell	Volunteer for Installation	5 - 381 Haley Road	7	\$15/hour	\$105.00
9/9/2011	Judy Spiller	Volunteer for Installation	5 - 381 Haley Road	7	\$15/hour	\$105.00
9/9/2011	Phyllis Ford	Volunteer for Installation	5 - 381 Haley Road	7	\$15/hour	\$105.00
9/9/2011	Brett Fletcher	Volunteer for Installation	5 - 381 Haley Road	7	\$15/hour	\$105.00
9/9/2011	Joe Grinnell	Volunteer for Installation	5 - 381 Haley Road	7	\$15/hour	\$105.00
9/9/2011	Lorna Perry	Volunteer for Installation	5 - 381 Haley Road	7	\$15/hour	\$105.00
9/9/2011	Judy Spiller	Volunteer Mileage	5 - 381 Haley Road	12	\$0.55/mile	\$6.60
9/9/2011	Phyllis Ford	Volunteer Mileage	5 - 381 Haley Road	8	\$0.55/mile	\$4.40
9/9/2011	Brett Fletcher	Volunteer Mileage	5 - 381 Haley Road	17	\$0.55/mile	\$9.35
9/9/2011	Joe Grinnell	Volunteer Mileage	5 - 381 Haley Road	3	\$0.55/mile	\$1.65
9/9/2011	Lorna Perry	Volunteer Mileage	5 - 381 Haley Road	10	\$0.55/mile	\$5.50
9/9/2011	Lorna Perry	Plant Donation	5 - 381 Haley Road		\$73	\$73.00
9/15/2011	Town Manager	Attendance at Steering Committee Meeting	2	2	\$40/hour	\$80.00
9/15/2011	DPW Director	Attendance at Steering Committee Meeting	2	2	\$40/hour	\$80.00

Date	Source	Activity or Item	Task	Hours	Rate or Value	Total
9/15/2011	Shoreland Resource Officer	Attendance at Steering Committee Meeting	2	2	\$20/hour	\$40.00
9/15/2011	FB Environmental	Attendance at Steering Committee Meeting	2	7	\$20/hour	\$140.00
9/15/2011	Phyllis Ford	Attendance at Steering Committee Meeting	2	2	\$20/hour	\$40.00
10/2/2011	LaMarr Clannon	Presentation at Kittery Town Planning Board	6	4	\$40/hour	\$320.00
10/5/2011	FB Environmental	Presentation during Tour	6	4	\$20/hour	\$80.00
10/5/2011	Phyllis Ford	Tour	6	8	\$15/hour	\$120.00
11/3/2011	FB Environmental	Presentation at Kittery Town Council Meeting and Prep	6	12	\$20/hour	\$240.00
11/3/2011	Shoreland Resource Officer	Presentation at Kittery Town Council Meeting and Prep	6	10	\$20/hour	\$ 200.00
11/11/2011	FB Environmental	Site Design	5 - 8 Moore Street	8	\$20/hour	\$160.00
11/16/2011	Town Manager	Attendance at Steering Committee Meeting	2	2	\$40/hour	\$80.00
11/16/2011	DPW Director	Attendance at Steering Committee Meeting	2	2	\$40/hour	\$80.00
11/16/2011	Shoreland Resource Officer	Attendance at Steering Committee Meeting	2	2	\$20/hour	\$40.00
11/16/2011	FB Environmental	Attendance at Steering Committee Meeting	2	7	\$20/hour	\$140.00
11/16/2011	Phyllis Ford	Attendance at Steering Committee Meeting	2	2	\$20/hour	\$40.00
2/1/2012	Town Manager	Attendance at Steering Committee Meeting	2	2	\$40/hour	\$80.00
2/1/2012	DPW Director	Attendance at Steering Committee Meeting	2	2	\$40/hour	\$80.00
2/1/2012	Shoreland Resource Officer	Attendance at Steering Committee Meeting	2	2	\$20/hour	\$40.00
2/1/2012	FB Environmental	Attendance at Steering Committee Meeting	2	7	\$20/hour	\$140.00
2/1/2012	Phyllis Ford	Attendance at Steering Committee Meeting	2	2	\$20/hour	\$ 40.00

Date	Source	Activity or Item	Task	Hours	Rate or Value	Total
5/14/2012	Shoreland Resource Officer	Admiralty Village investigation	4	40	\$20/hour	\$800.00
5/14/2012	FB Environmental	Admiralty Village investigation	4	40	\$20/hour	\$800.00
6/1/2012	FB Environmental	Installation	5 - 8 Moore Street	8	\$20/hour	\$160.00
6/1/2012	Kittery DPW	Stone	5 - 8 Moore Street		\$310	\$310.00
6/1/2012	Kittery DPW	Backhoe	5 - 8 Moore Street	10	\$44/hour	\$440.00
6/1/2012	Melanie Burger	Volunteer for Installation	5 - 8 Moore Street	8	\$15/hour	\$120.00
6/1/2012	Barclay Jackson	Volunteer for Installation	5 - 8 Moore Street	8	\$15/hour	\$120.00
6/1/2012	Martha Peterson	Volunteer for Installation	5 - 8 Moore Street	8	\$15/hour	\$120.00
6/1/2012	Jill Harden	Volunteer for Installation	5 - 8 Moore Street	8	\$15/hour	\$120.00
6/1/2012	Liza Dube	Volunteer for Installation	5 - 8 Moore Street	8	\$15/hour	\$120.00
6/1/2012	Melanie Burger	Volunteer Mileage	5 - 8 Moore Street	10	\$0.55/mile	\$5.50
6/1/2012	Barclay Jackson	Volunteer Mileage	5 - 8 Moore Street	6	\$0.55/mile	\$3.30
6/1/2012	Martha Peterson	Volunteer Mileage	5 - 8 Moore Street	11	\$0.55/mile	\$6.05
6/1/2012	Jill Harden	Volunteer Mileage	5 - 8 Moore Street	3	\$0.55/mile	\$1.65
6/1/2012	FB Environmental	Presentation at 8 Moore Street Installation and Prep	6	10	\$20/hour	\$200.00
6/5/2012	FB Environmental	Re-design Meeting	3 - GAP Outlet	2	\$20/hour	\$40.00
6/7/2012	Town Manager	Attendance at Steering Committee Meeting	2	2	\$40/hour	\$ 80.00
6/7/2012	DPW Director	Attendance at Steering Committee Meeting	2	2	\$40/hour	\$ 80.00
6/7/2012	Shoreland Resource Officer	Attendance at Steering Committee Meeting	2	2	\$20/hour	\$40.00
6/7/2012	FB Environmental	Attendance at Steering Committee Meeting	2	7	\$20/hour	\$140.00
6/7/2012	Phyllis Ford	Attendance at Steering Committee Meeting	2	2	\$20/hour	\$ 40.00

Date	Source	Activity or Item	Task	Hours	Rate or Value	Total
6/8/2012	Liza Dube	Stormwater BMP Blog	6	48	\$15/hour	\$720.00
7/5/2012	FB Environmental	Admiralty Village report	4	60	\$20/hour	\$1,200.00
7/5/2012	Phyllis and Dan Ford	Installation of New Septic (upon discovery of OBD directly into Spruce Creek)	4		\$44,000	\$ 44,000.00
7/23/2012	George Frank	Cash	5 - 18 Bond Road Driveway		\$3,300	\$3,300.00
7/23/2012	Dan and Phyllis Ford	Cash	5 - 19 Bond Road Driveway		\$2,200	\$2,200.00
7/23/2012	Arthur Lutts	Cash	5 - 20 Bond Road Driveway		\$3,300	\$3,300.00
7/23/2012	Victor Messier	Cash	5 - 21 Bond Road Driveway		\$3,300	\$3,300.00
7/23/2012	Kate Johnston	Cash	5 - 23 Bond Road Driveway		\$3,300	\$3,300.00
8/9/2012	FB Environmental	Canine Detection Booth	6	10	\$20/hour	\$200.00
8/9/2012	Shoreland Resource Officer	Canine Detection Booth	6	10	\$20/hour	\$200.00
8/9/2012	Phyllis Ford	Canine Detection Booth	6	8	\$15/hour	\$120.00
8/16/2012	Michael Landgarten	Facilities Manager's Hours	3 - Bob's Clam Hut	5	\$45/hour	\$225.00
8/16/2012	Michael Landgarten	Cash	3 - Bob's Clam Hut		\$553	\$553.00
8/16/2012	Michael Landgarten	Facilities Manager's Hours	3 - Robert's Maine Grill	4	\$45/hour	\$180.00
8/16/2012	Michael Landgarten	Cash	3 - Robert's Maine Grill		\$221	\$221.00
8/16/2012	Kittery DPW	Stone	5 - 21 Bond Road		\$74	\$74.00
8/16/2012	Kittery DPW	Backhoe	5 - 21 Bond Road	4	\$44/hour	\$176.00
8/16/2012	Kittery DPW	Backhoe	5 - 19 Bond Road	8	\$44/hour	\$352.00
8/16/2012	Kittery DPW	Mulch and Stone	5 - 19 Bond Road		\$373	\$373.00
8/18/2012	FB Environmental	Installation	5 - 21 Bond Road	4	\$20/hour	\$ 80.00
8/18/2012	Dan Ford	Volunteer for	5 - 21 Bond	6	\$15/hour	\$90.00

Date	Source	Activity or Item	Task	Hours	Rate or Value	Total
		Installation	Road			
8/18/2012	Phyllis Ford	Volunteer for Installation	5 - 21 Bond Road	8	\$15/hour	\$120.00
8/18/2012	Nick Smith	Volunteer for Installation	5 - 21 Bond Road	2	\$15/hour	\$30.00
8/18/2012	Nick Smith	Volunteer Mileage	5 - 21 Bond Road	42	\$0.55/mile	\$23.10
8/18/2012	FB Environmental	Installation	5 - 19 Bond Road	17.5	\$20/hour	\$350.00
8/18/2012	Dan and Phyllis Ford	Cash	5 - 19 Bond Road		\$5,675	\$5,675.00
9/22/2012	Shoreland Resource Officer	Presentation at Kittery Town Council Meeting and Prep	6	8	\$20/hour	\$160.00
9/25/2012	Dan Ford	Intercept Survey	6	24	\$15/hour	\$360.00
10/1/2012	FB Environmental	Kittery Block Party Booth	6	12	\$20/hour	\$240.00
10/1/2012	Shoreland Resource Officer	Kittery Block Party Booth	6	12	\$20/hour	\$240.00
10/1/2012	Phyllis Ford	Kittery Block Party Booth	6	10	\$15/hour	\$150.00
10/1/2012	Lorna Perry	Kittery Block Party Booth	6	10	\$15/hour	\$150.00
10/1/2012	Kate Johnston	Kittery Block Party Booth	6	8	\$15/hour	\$120.00
11/15/2012	Town Manager	Attendance at Steering Committee Meeting	2	2	\$40/hour	\$80.00
11/15/2012	DPW Director	Attendance at Steering Committee Meeting	2	2	\$40/hour	\$80.00
11/15/2012	Shoreland Resource Officer	Attendance at Steering Committee Meeting	2	2	\$20/hour	\$40.00
11/15/2012	FB Environmental	Attendance at Steering Committee Meeting	2	7	\$20/hour	\$140.00
11/15/2012	Phyllis Ford	Attendance at Steering Committee Meeting	2	2	\$20/hour	\$40.00
8/18/2012 - 8/25/2012	Phyllis Ford	Volunteer for Installation	5 - 19 Bond Road	20	\$15/hour	\$300.00
8/18/2012 - 8/25/2012	Dan Ford	Volunteer for Installation	5 - 19 Bond Road	40	\$15/hour	\$600.00
8/18/2012 - 8/25/2012	John Smith	Volunteer for Installation	5 - 19 Bond Road	40	\$15/hour	\$600.00
8/18/2012 - 8/25/2012	Nick Smith	Volunteer for Installation	5 - 19 Bond Road	40	\$15/hour	\$600.00

Date	Source	Activity or Item	Task	Hours	Rate or Value	Total
8/18/2012 - 8/25/2012	John Smith	Volunteer Mileage	5 - 19 Bond Road	20	\$0.55/mile	\$11.00
8/18/2012 - 8/25/2012	Nick Smith	Volunteer Mileage	5 - 19 Bond Road	22	\$0.55/mile	\$12.10
9/24/2012-9/27/2012	Phyllis Ford	Intercept Survey	6	25	\$15/hour	\$375.00
9/24/2012-9/27/2012	Kate Johnston	Intercept Survey	6	25	\$15/hour	\$375.00
9/24/2012-9/27/2012	FB Environmental	Intercept Survey	6	18	\$20/hour	\$360.00
Throughout Project	Town Manager	Project Management	1	4	\$40/hour	\$160.00
Throughout Project	DPW Director	Project Management	1	8	\$40/hour	\$320.00
Throughout Project	Phyllis Ford	Project Management	1	1080	\$20/hour	\$21,600.00
Throughout Project	FB Environmental	Project Management	1	55.5	\$20/hour	\$1,110.00
Throughout Project	FB Environmental	Other Outreach Efforts	6	55	\$20/hour	\$1,100.00
Throughout Project	FB Environmental	Pollutants Controlled Report/Final Report	7	102	\$20/hour	\$2,040.00
<b>TOTAL</b>						<b>\$134,108.20</b>



## **7. APPENDICES**

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Appendix A: Watershed Description

Appendix B: NPS Site Reports

Appendix C: Technical Assistance Reports

Appendix D: IDDE and Public Outreach Deliverables

Appendix E: Pollutants Controlled Report Summary