**#20190012 Mare Brook Watershed-based Plan Development**

Grantee: Town of Brunswick

**I. Project Title and Applicant’s Organization**

|  |  |
| --- | --- |
| Project Start Date | October 2019 |
| Project Completion Date | December 2021 |

1. **Waterbody and Watershed Information**

**a. Background**

|  |  |
| --- | --- |
| Waterbody Name | Mare Brook |
| Waterbody Size (e.g., lake acres, stream miles) | 1.4 stream miles |
| Watershed Area (acres or square miles) | 5.8 Square miles or 3,648 acres |
| Watershed Location (town(s), county(s)) | Brunswick, Cumberland County |
| Is water quality listed as impaired? | Yes |
| If impaired, what is the listed cause(s) and/or impaired use? | Benthic-Macroinvertebrate Bioassessments (Streams) and Habitat Assessment (Streams) |
| Name and date of any DEP TMDL report(s) for the waterbody. | Maine’s Statewide Impervious Cover (IC) Total Maximum Daily Load, 2012 |

**b. Waterbody and Watershed Physical Characteristics**

Mare Brook is located within the Town of Brunswick, on the mid-coast of the State of Maine in the northeastern corner of Cumberland County, the State’s most populous county. The Town of Brunswick is comprised of approximately 22,000 residents and encompasses 49.7 square miles of land ranging from suburban to rural in character. The location of the brook and the limits of the watershed are shown on the Mare Brook Watershed Map included in Section IV.

Mare Brook begins in an area of dense residential development in the northwest corner of the approximately 5.8- square mile Mare Brook watershed above Baribeau Drive in Brunswick. It flows east through these developments toward Bowdoin College’s athletic fields on Harpswell Road before reaching Coffin Pond and Coffin Pond Dam upstream of Harpswell Road. The stream continues through land owned by the Midcoast Regional Redevelopment Authority (MRRA) (Brunswick Executive Airport) flowing through a ¾ mile long culvert underneath the airport runway. It then flows an additional 0.7 miles to its confluence with Merriconeag Stream which flows in from the north. Mare Brook is a freshwater stream to head of tide near the Liberty Road crossing, becoming more saline within the Harpswell Cove estuary. This section of the stream passes through land owned and operated by the U.S. Navy and the Kate Furbish Preserve (owned by the Town of Brunswick) and eventually into Harpswell Cove in the southeast corner of the watershed.

Unlike typical urban streams, Mare Brook has large areas of highly buffered shoreline and the watershed contains 38.7% forest and wetland complexes2. However, the remaining 61% of land is urban and has led to alteration of the stream and degradation to habitat and water quality. Land-use estimates are from the 2012 Maine DEP TMDL land use file and reflect the methods used in this publication (Maine DEP 2012). It should be noted that land use estimates are not exact but do offer a general understanding of development distribution within the watershed.

Merriconeag Stream is an important part of the Mare Brook watershed. This stream begins at Beaver Road in the northeast corner of the watershed, flowing south until it reaches Picnic Pond, upstream of the Purinton Road crossing. After crossing the Picnic Pond Dam, Merriconeag Stream continues winding its way south towards its confluence with Mare Brook. Because of its location on the former Brunswick Naval Air Station (BNAS) property, Merriconeag Stream contributes elevated levels of legacy pollutants into Mare Brook[[1]](#footnote-2).

**c. Description of Waterbody Uses and Value**

Mare Brook is an Urban Impaired Stream, which is under stress from mixed urban uses including transportation, commercial use, single family residences, urban open space, forested and wetlands. Despite the stresses, the stream provides habitat for brook trout. It flows through the heart of Brunswick’s residential districts, Brunswick Landing (former Naval Air Station), and public conservation lands including the Town Commons and Kate Furbish Preserve. Historically, the brook supported native brook trout populations given its cool groundwater discharge and clean sandy substrate. Sea run brook trout are seasonally fished by locals up to the downstream end of the impoundment at Picnic Pond. In a 2015 survey report, MDIFW indicated that Mare Brook has a healthy population of brook trout, and other fish in many of its non-tidal reaches.

Public recreation opportunities such as fishing and ice skating also exist at Coffin Pond easily accessible by the public by vehicle. Water quality and geomorphic improvements to the brook in these upper residential reaches will increase public use and should have a measured positive effect on wildlife movement and habitat.

Additionally, Mare Brook has economic significance to the Town. It drains to one of the most important shellfish growing areas in Harpswell Cove, where 2,500 bushels of softshell clams are harvested annually. NPS pollution has historically caused sections of the cove to be restricted for harvesting.

1. **NPS Pollution Problem / Need:**

**Water Quality Overview**

Mare Brook was included in Maine's Statewide Impervious Cover (IC) Total Maximum Daily load (TMDL) report (Maine DEP 2012) based on data collected in 2001-2003 by the Maine DEP indicating that Mare Brook does not meet water quality standards for aquatic life use. The watershed’s 18% impervious cover is the primary cause of this non-attainment.

1. **Watershed Nonpoint Pollution Sources and NPS Mitigation Activities**

**Summary of Past Watershed Assessments and Most Important Nonpoint Sources**

A significant number of studies and projects have occurred in the Mare Brook Watershed. See Task 3 for a list of studies since 2015. In 2015, the Town of Brunswick applied for, and was awarded, a Coastal Communities Grant to fund a preliminary assessment of Mare Brook[[2]](#footnote-3). By completing an updated baseline assessment of the physical and ecological characteristics of Mare Brook, the Town of Brunswick had the necessary data to engage the public in a facilitated and locally-guided planning process. The project determined: most of the riparian corridor of Mare Brook contains intact floodplains and buffers; a variety of fish live in Mare Brook and Merriconeag Stream including: Brook Trout, 9 Spine Stickleback, American Eel, and Lake Chub; poor aquatic insect populations in areas of the stream is suspected to be a result of an influx of sand (source unknown) and mass movement of sandy substrate; fish passage is limited by existing culverts and dams, and; legacy pollution remains in areas around the former Brunswick Naval Air Station. This preliminary assessment work provided recommendations for restoring stream health. The report identified water quality knowledge gaps and made recommendations for filling in these gaps through additional monitoring, assessment, and/or restoration.

Finally, recent Mare Brook watershed specific management plan development guidance from the MDEP[[3]](#footnote-4) identified the need for further stressor analysis of the brook. The analysis needs to include identification of proximate stressors and casual pathways done by identifying discrete habitat issues for specific stream reaches. Assessment work will extend to areas upstream of Baribeau Avenue. Geomorphic work also needs to be conducted to determine required in-stream work and road crossing affects and potential field fixes.

**Description of Watershed Activities to Address NPS Sources**

The Town of Brunswick is still in the data collecting phase and the baseline report recommends that additional monitoring data be collected. The baseline report also identified that Habitat Restoration, Education and Outreach, Watershed Surveys and an Action Plan, are important next steps to addressing NPS Sources. The Town has identified that they need to complete a WMP that includes the key baseline recommendations and meets the EPA nine element plan requirements as the next step to beginning to address NPS sources in the future.

1. **Purpose:**

The purpose of this project is to develop a locally sponsored, watershed-based management plan for Mare Brook with specific action items to address the multiple water quality problems previously identified within the watershed and with the waterbody.

The project will collect information related to watershed non-point source problems and supplement previous study data to develop a WMP that includes EPA’s nine minimum elements. Together with watershed residents and landowners, the Town will develop a WMP that will guide future watershed restoration and protection efforts.

1. **Partner Coordination, Roles and Responsibility**

* **Maine Department of Environmental Protection** will administer project funding, serve as the project advisor and provide project and technical support.
* The **US Environmental Protection Agency** will provide project funding and work plan guidance.
* The **Town of Brunswick Maine** will serve as the grant manager and local partner, providing cash and in-kind match, technical assistance, and significant input into project.
* The **Cumberland County Soil & Water Conservation District** will serve as the Sub-Grantee of the project and provide significant technical and administrative support.
* A **Geomorphologist** and an **Environmental Chemist** will be hired (following procurement procedures in the DEP’s NPS Grant Administrative Guidelines) to provide essential technical and planning services.

1. **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 604(b) 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 Grant Agreement, Rider A. Section III. F. Acknowledgement.

**TASK #1: Project Management**

The Town of Brunswick will administer the project according to the grant agreement with DEP. The Grantee, and CCSWCD, as Sub-Grantee, sign contracts outlining project roles, responsibilities and funding arrangements. The Town working with CCSWCD will select through competitive bid all needed project sub-consultants (e.g. Geomorphology, Environmental Chemistry, etc.). The Town will complete Letters of Agreement to define all project roles to be carried out to complete the work plan. CCSWCD will track project progress, expenses and local match, perform invoicing, submit semi-annual progress reports, and deliver a Final Project Report. A preliminary schedule for the project is included as an attachment.

**DELIVERABLES:** Sub-Agreements, Semi-Annual Progress Reports, and Final Project Report.

|  |  |  |
| --- | --- | --- |
| Start and Completion Dates | October 2019 – September 2021 | |
| Grant Cost: $4,419.56 | Match Cost: $2,520 | **Total Cost: $6,939.56** |
| Breakdown of Grant Cost by Cost Category: $4,419.56 Subgrant | | |
| Breakdown of Match by Cost Category: $2,520.00 Salary & Fringe | | |

**TASK #2: Steering Committee Meeting Coordination & Landowner Participation**

The Town of Brunswick and CCSWCD will convene a Steering Committee that will facilitate throughout the Watershed Management Plan development process and will consist of representatives from the following key stakeholder groups:

* Town of Brunswick
* Maine Department of Environmental Protection
* Maine Department of Marine Resources
* Midcoast Regional Redevelopment Authority
* Bowdoin College
* Department of the Navy
* Casco Bay Estuary Partnership
* Friends of Mare Brook and Coffin Pond
* Brunswick Area Citizens for a Safe Environment (BACSE)
* Municipal staff, citizen volunteers and CCSWCD will all have roles in this task. CCSWCD will be responsible for meeting coordination, facilitation and recording while municipal staff and citizen volunteers will be responsible for meeting participation and contribution into the Watershed Management Plan’s development.

Six Steering Committee meetings will be held throughout the course of the two-year project. The first will serve as an initial kickoff meeting to present the project scope/timeline and establish roles and responsibilities for various committee members. The intermediary meetings will include preliminary planning and preparation for the stakeholder kickoff meeting; work on management plan prioritization; and, check-ins to ensure that the various tasks are being completed on time and within the budget. As such, they will provide an important opportunity for the committee to recommend any adjustments needed to remain within the project scope. The sixth and final meeting will occur near the end of the project timeline so the committee can ensure that all tasks have been completed in accordance with the project scope. It will also involve planning and preparation for the presentation of the draft WMP to the Brunswick Town Council.

**DELIVERABLES:** Meeting Summaries and Participant Lists

|  |  |  |
| --- | --- | --- |
| Start and Completion Dates | October 2019 – September 2021 | |
| Grant Cost: $2,232.05 | Match Cost: $6,650.54 | **Total Cost: $8,882.59** |
| Breakdown of Grant Cost by Cost Category: $1,994.93 Subgrant, $237.12 Travel | | |
| Breakdown of Match by Cost Category: $6,650.54 Salary & Fringe | | |

**TASK #3: Identify and Summarize Existing Data**

The Town, CCSWCD and Subcontractors will identify, summarize and assess the importance of all relevant data for the watershed characterization process based on an inventory of existing documents, GIS and data. This will include the completion of limited field evaluations to confirm data and potentially fill any data gaps. Municipal staff will provide these documents and GIS data to assist with this task.

Significant information is available from past studies that includes data related to geomorphology, fish passage, riparian and stream corridor condition, and water chemistry. Before using pre-existing data, project staff will evaluate the data to determine if the data is acceptable to use for this project. Staff will prepare a brief “Secondary Data Quality Assurance Guidance” describing how the data will be evaluated. Project staff will document evaluations in a table: data type; data source (originating organization, report title, date); how data will be used for the project; and limitations on data use, if any. Documents and data that will be reviewed include, but are not limited to, those identified in the following Data Analysis Table.

DATA ANALYSIS TABLE

* Coastal Communities Planning Grant, Town 7/1/2015
* Gap Analysis/Data Catalogue, FB 11/16/2015
* Mare Brook Technical Advisory Committee meeting notes (3), 2015 - 2016
* Stressor Analysis Methodology, FB 4/2016
* 2016 Monitoring Plan – Revised, FFB 7/13/2016
* Mare Brook 2016 Macroinvertebrate Chamber Monitoring, MDEP 8/2016
* Bacteria Sampling of Upper Steam Hotspot, MDEP 9/2016
* Mare Brook Fish Passage Assessment, Stantec 10/25/2016
* Mare Brook Geomorphic Assessment, Stantec 10/25/2016
* Mare Brook Riparian Habitat Assessment, Stantec 10/27/2016
* Mare Brook 2016 Water Quality Monitoring, MDEP 11/2016
* Mare Brook Baseline and Best Management Practices Report, FB 12/2016
* Mare Brook Streambank Erosion Rate Predictions, CCSWCD 2017
* Mare Brook Water Quality sampling, BHS student Erin Coughlin 2018/2019
* Brunswick and MDEP GIS Stormwater Outfall and Infrastructure data
* Relevant sections of Town of Brunswick ordinances and Comprehensive Plan

Items may be added to this list throughout the course of the project depending on their timeliness and relevance.

**DELIVERABLES:** Synopsis of Data and Gaps, including Secondary Data Quality Assurance Guide.

|  |  |  |
| --- | --- | --- |
| Start and Completion Dates | October 2019 – March 2020 | |
| Grant Cost: $1,880.54 | Match Cost: $2,759.50 | **Total Cost: $4,640.04** |
| Breakdown of Grant Cost by Cost Category: $1,880.54 Subgrant | | |
| Breakdown of Match by Cost Category: $630.00 Salary & Fringe, $2,129.50 Contractual | | |

**TASK #4: Collect Additional Data / Stream Assessment**

CCSWCD will manage Subcontractor field survey activities to build on the surveys conducted between 2002 and 2017 to provide valuable baseline information on the basic physical and ecological characteristics of Mare Brook. The Town will conduct a competitive bid process to hire as needed subcontractor assistance. Additional data/analyses will be limited to only those that provide further understanding of the proximate stressors and pathways; physical components of the stream channel and riparian corridor (geomorphic survey/culvert and outfall survey); and ground-based stormwater infrastructure components. Assessment work will be extended into mostly unstudied areas upstream of Baribeau Drive.

**Subtask 4a. Stressor Analysis:** A Stressor Analysis will be conducted for the mainstem of the brook using the ‘MDEP Guide to identifying NPS Stream Stressors’ 2019 (if available). The analysis will include identification of proximate stressors and causal pathways (i.e. the environmental condition causing the impairment). To date, the proximate stressor for a majority of the mainstem appears to be altered physical stream habitat. Once identified, upland drainage characteristics within specific brook segment subcatchments will be compared to distinct habitat impairment issues associated within the respective reach.

**DELIVERABLES:** Stressor Analysis and Data Compilation Summary

|  |  |  |
| --- | --- | --- |
| Start and Completion Dates | April 2020 – December 2020 | |
| Grant Cost: $1,871.92 | Match Cost: $1,439.60 | **Total Cost: $3,311.52** |
| Breakdown of Grant Cost by Cost Category: $1,871.92 Subgrant | | |
| Breakdown of Match by Cost Category: $1,439.60 Contractual | | |

**Subtask 4b. Geomorphic Assessment:** A geomorphic study of Mare Brook will be conducted to build on previous studies, quantify changes to the stream channel and provide insight into the effects of existing stormwater management practices on the stream's habitat. The work will be extended into previously unstudied areas upstream of Baribeau Drive. The applied geomorphic work will be used to determine which road crossings, culverts and in-stream areas are most important to address and how to address them. The applied assessment will include: a background review and historic assessment, a review of previous geomorphic studies, reach delineation, rapid geomorphic assessment, detailed geomorphic assessment following standard protocols approved by Maine DEP, data integration and analysis, geomorphic condition base-line monitoring, and establishing the structure for a long-term monitoring program. The results of the geomorphic assessment will be used to identify priority sites for stream crossing upgrades and in-stream habitat restoration of which three sites will be chosen for the development of conceptual restoration designs that will showcase techniques that might also be applied to other priority reaches. Detailed geomorphic assessment of these three sites will be done and designs will be completed as part of this project and provided as a project deliverable. A Quality Assurance Project Plan (QAPP) will be developed by CCSWCD, or its qualified consultant, for the geomorphological assessment and provided to Maine DEP for its review and approval prior to conducting the assessment. The QAPP will be developed in accordance with the Maine DEP Quality Management Plan. A summary report will be provided as a project deliverable and will include documentation of all field activities as well as specific recommendations for addressing issues that were identified in the survey.

**DELIVERABLES:** QAPP, Geomorphic Assessment Report, 3 Conceptual Restoration Designs

|  |  |  |
| --- | --- | --- |
| Start and Completion Dates | April 2020 – December 2020 | |
| Grant Cost: $609.59 | Match Cost: $8,800.00 | **Total Cost: $9,409.59** |
| Breakdown of Grant Cost by Cost Category: $609.59 Subgrant | | |
| Breakdown of Match by Cost Category: $8,800.00 Contractual | | |

**Subtask 4c. Culvert & Outfall Ground-Truthing Studies:** In combination with the geomorphic assessment, the Town/CCSWCD will conduct a watershed wide culvert and stormwater outfall inventory, documenting the location and condition of culverts and stormwater outfalls within the stream corridor. While the geomorphic assessment may include review of some culverts and stormwater outfalls, this task will focus on the condition and maintenance needs of all culverts. The culvert survey will evaluate the impact of culverts or other stream crossing structures, identify barriers to fish and other wildlife, and set priorities for restoration. CCSWCD will ask Maine Department of Inland Fisheries and Wildlife to conduct a pit tag survey at the ¾-mile long culvert under the airport runway to identify if trout are able to navigate from one end to the other. The outfall reconnaissance inventory will identify the location and condition of stormwater outfalls in the stream, identify potential illicit discharges, and prioritize outfalls for follow-up monitoring or replacement. A Survey Implementation Plan (SIP), under the *Maine Lake & Stream Watershed Survey Generic QAPP*, will be developed and provided to Maine DEP for review and approval prior to conducting the survey.

**DELIVERABLES:** SIP, Culvert and Outfall Summary Report

|  |  |  |
| --- | --- | --- |
| Start and Completion Dates | April 2020 – September 2020 | |
| Grant Cost: $6,822.13 | Match Cost: $2,129.40 | **Total Cost: $8,951.53** |
| Breakdown of Grant Cost by Cost Category: $6,822.13 Subgrant | | |
| Breakdown of Match by Cost Category: $630.00 Salary & Fringe, 1,499.40 Contractual | | |

**Subtask 4d. Compilation and Prioritization of Potential Stormwater Retrofits** The first step of the watershed retrofit reconnaissance will be to locate and map the existing upland hydrology and stormwater management infrastructure. The reconnaissance will include an assessment of land uses and existing stormwater practices and potential retrofit sites within the watershed. The land use assessment and retrofit possibilities could provide stormwater treatment in locations where practices previously did not exist or were ineffective; or, include modifications to existing stormwater practices or construction of new practices. Specific in-stream needs, such as culvert retrofits and riparian recovery sites (from previously executed Subtasks) will be included in the prioritization process. The impact, cost, and feasibility of the identified BMPs, structural, non-structural, and habitat retrofits will be assessed. Using this information and input from the Steering Committee, the potential retrofits and BMPs will be prioritized. The final document will include a complete listing of retrofit BMP opportunities and cost estimates for addressing these concerns, GIS maps of the hot spots, and the retrofit prioritization.

**DELIVERABLES:** Potential Stormwater Retrofits and Retrofit BMP Prioritization Report

|  |  |  |
| --- | --- | --- |
| Start and Completion Dates | January 2021 – August 2021 | |
| Grant Cost: $5,820.19 | Match Cost: $1,730.00 | **Total Cost: $7,550.19** |
| Breakdown of Grant Cost by Cost Category: $5,741.15 Subgrant, $79.04 Travel | | |
| Breakdown of Match by Cost Category: $630.00 Salary & Fringe, $1,100.00 Contractual | | |

**TASK #5: Pollutant Load Modeling**

CCSWCD will analyze and compile the relevant data sources into a concise and cohesive summary that identifies and describes the most likely pollutant sources and establishes estimates for the relative pollutant contributions of each.

**DELIVERABLES:** Pollutant Load Summary Report.

|  |  |  |
| --- | --- | --- |
| Start and Completion Dates | June 2021 – September 2021 | |
| Grant Cost: $1,744.87 | Match Cost: $157.50 | **Total Cost: $1,902.37** |
| Breakdown of Grant Cost by Cost Category: $1,744.87 Subgrant | | |
| Breakdown of Match by Cost Category: $157.50 Salary & Fringe | | |

**TASK #6: Public Input**

In addition to the Steering Committee meetings, three public meetings will be held serving as the primary method for involving the public and receiving feedback on the plan. These meetings will capture local and historical knowledge of the watershed, foster community support for the WMP, inspire stewardship of our natural resources (specifically Mare Brook), and establish relationships with watershed landowners to help guide future actions and activities on their properties.

* The first public meeting will present data collected to date under Task 3 and Task 4 (January 2021).
* The second public meeting will present a DRAFT WMP with action items and will provide an opportunity for public comment and input (June 2021).
* The third public meeting will present the completed WMP to the public and to Brunswick’s Town Council for final approval (September 2021).

Public outreach efforts will include:

* Notifications via press releases, e-blasts, Facebook pages, and websites promoting this project and its public meetings;
* Outreach to watershed neighborhoods and property owners encouraging them to participate in the public meetings; and
* Presentations / updates to Town boards (Planning, Conservation, Town Council, etc.) periodically throughout the project.

**DELIVERABLES:** Summaries of Public Meetings and Input Received, Final Presentation to The Town Council, Press Releases, and Outreach Materials

|  |  |  |
| --- | --- | --- |
| Start and Completion Dates | January 2021 - September 2021 | |
| Grant Cost: $2,433.23 | Match Cost: $945.00 | **Total Cost: $3,378.23** |
| Breakdown of Grant Cost by Cost Category: $2,275.15 Subgrant, $185.08 Travel | | |
| Breakdown of Match by Cost Category: $945.00 Salary & Fringe | | |

**TASK #7: Complete Watershed-Based Management Plan**

Based on the information amassed from all the previous tasks, CCSWCD will work with the Steering Committee to create and prioritize action items and prepare a draft WMP that incorporates the EPA’s nine elements for watershed-based plans. Prioritization of action items will include prioritizing all BMPs compiled from Tasks 3 and 4.

Additionally, the WMP’s recommendations will include provisions for adaptive management to provide the flexibility needed to ensure efficient and successful plan implementation.

Once the Draft WMP has been completed, it will be reviewed by the Steering Committee and other interested parties for refinement and revision. The draft WMP will be submitted to DEP and EPA for review at least three months prior to project completion date. DEP and EPA comments need to be addressed for the plan to be accepted. Additionally, the key findings and recommendations from the plan will be presented to the Town Council and other relevant committees (i.e., Conservation Commission, Open Space Committee, etc.) for consideration and feedback. CCSWCD will incorporate all relevant comments and suggestions to produce the final version of the WMP. Once the plan has been finalized, the Brunswick Town Council will be asked to formally lend their support to the restoration effort through the issuance of a joint resolution to this effect.

**DELIVERABLES:** Final Watershed Management Plan

|  |  |  |
| --- | --- | --- |
| Start and Completion Dates | July 2021 – September 2021 | |
| Grant Cost: $4,346.91 | Match Cost: $630.00 | **Total Cost: $4,976.91** |
| Breakdown of Grant Cost by Cost Category: $4,228.47 Subgrant, $118.44 Travel | | |
| Breakdown of Match by Cost Category: $630.00 Salary & Fringe | | |

**VIII. Deliverables**

An electronic copy of each deliverable will be provided to the Maine DEP Agreement Administrator (AA). Maine DEP will forward an electronic copy of all deliverables to EPA. Each deliverable will be labeled according to procedures described in Maine DEP document *Nonpoint Source Grant Administrative Guidelines*, [*http://www.maine.gov/dep/water/grants/319-documents/2016GrantAdminGuidelinesFinal2.docx*](http://www.maine.gov/dep/water/grants/319-documents/2016GrantAdminGuidelinesFinal2.docx)*.*

1. Sub-agreements, Semi-Annual Progress Reports and Final Project Report (Task 1)
2. Steering Committee Summaries and Participant Lists and Summaries of Public Meetings and Input Received (Task 2 & 6)
3. Synopsis of data and gaps, including Secondary Data Quality Assurance Guidance (Task 3)
4. Stressor Analysis and Data Compilation Summary, QAPP, SIP, Geomorphic Assessment Report, 3 Conceptual Restoration Designs, Culvert and Outfall Summary Report, and Potential Stormwater Retrofits Report (Task 4)
5. Pollutant Load Summary Report (Task 5)
6. Final Presentation to The Town Council, Press Releases and Outreach Materials (Task 6)
7. Final Watershed Management Plan (Task 7)

**IX. Project Coordinator**

|  |  |  |
| --- | --- | --- |
| Name | Jared Woolston | Heather Huntt |
| Organization | Town of Brunswick | Cumberland County Soil & Water Conservation District |
| Mailing Address | 85 Union Street, Brunswick, ME 04011 | 35 Main St., Windham, ME 04062 |
| Telephone Number | 207-725-6660, ext. 4022 | 207-892-4700 |
| DUNS Number | 077466274 |  |

**X. Project Budget**

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Position Name & Title** | **Hourly**  **Rate** | **Number of Hours** | **Salary & Fringe** | **Total Grantee**  **Personnel Expenses** |
| Jared Woolston | 78.75 | 96 | 7,560.00 | 7,560.00 |
| **Totals** |  |  |  |  |

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Cost Category** | **Federal Funds** | **Non-Federal Match** | **Total Cost** |
| Salary & Fringe (from Part 1) |  | 7,560.00 | 7,560.00 |
| Subgrant | 31,588.32 | 3,073.04 | 34,661.36 |
| Contractual |  | 14,968.50 | 14,968.50 |
| Donated Services – Labor |  | 2,160.00 | 2,160.00 |
| Travel (mileage total) | 592.68 |  | 592.68 |
| **Totals** | **32,181.00** | **27,761.54** | **59,942.54** |

|  |
| --- |
| **Part 2 Notes:** Include the following, as needed:  Subgrant – CCSWCD Support for All Tasks[[4]](#footnote-5): Chris Baldwin, District Engineer 218 hours @ 78.36 = 17,081.58, Damon Yakovleff, Environmental Planner 28 hours @ $69.21 = $1,937.79, Heather Huntt, Project Manager 190 hours @ $76.20 = $14,477.87 and Jenna Martyn-Fisher, Educator & Technical Specialist 8 @ $53.64 = $429.11, AudoCAD Services (CCSWCD Vendor) = $735.01  Contractual – Geomorphologist 102 hours @ $110.00 = $11,220 and Environmental Chemist 30 hours $124.95 = $3,748.50.  Donated Services-Labor – 6 Steering Committee Members totaling 108 hours @ $20.00 = $2,160.00  Travel – 1347 miles @ 0.44 = $592.68 |

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

|  |  |
| --- | --- |
| **Sources of Non-federal Match** | **Amount** |
| Town of Brunswick – In-kind | 7,560.00 |
| Steering Committee – In-Kind | 2,160.00 |
| Town of Brunswick – Cash – Geomorphologic contract | 11,220.00 |
| Town of Brunswick – Cash – Environmental Specialist contract | 3,748.50 |
| Town of Brunswick – Cash – CCSWCD | 3,073.04 |
| **Total** | **27,761.54** |

1. A summary of legacy toxics in the Merriconeag Stream sub-watershed and within the former Brunswick Naval Air Station can be found in [this](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwjUxo_9poPRAhWG7IMKHS1SBkMQFggdMAA&url=http%3A%2F%2Fwww.atsdr.cdc.gov%2FHAC%2Fpha%2FBrunswickNavalAirStation%2FNavalAirStationBrunswickPHA051605.pdf&usg=AFQjCNHlg_SSGxR2NM3WGA1ta0TxD1Pdqg&sig2=tdfXO-BU5jdQDVi-f2Y5mw&cad=rja) 2005 U.S. Department of Health and Human Services Public Health Service Report (U.S. Department of Health and Human Services 2005). [↑](#footnote-ref-2)
2. Mare Brook: Baseline & Best Management Practices Report, December 2016. Town of Brunswick & FB Environmental. [↑](#footnote-ref-3)
3. Mare Brook: Kristin Feindel, MDEP Telecon dated February 4, 2019. [↑](#footnote-ref-4)
4. See attached project budget for complete details by task. [↑](#footnote-ref-5)