M E M O R A N D U M

TO: Richard Franzetti
Town of Carmel
60 McAlpin Avenue
Mahopac, NY 10541
rjf@ci.carmel.ny.us
djenkins@m-strat.com

FROM: Shelly Clark

DATE: July 15, 2020

RE: *EOH_Carmel_Lake Casse*
NEI Job Code: 0100-329
Project Code: 2020-014

Attached is a copy of the agreement for the above-referenced project. If you concur, please print the document, sign it, and either (1) scan and send it back as an email attachment (preferred) or (2) mail to NEIWPCC at 650 Suffolk St., Suite 410, Lowell, MA 01854. We will then email one fully executed copy to you for your files **once we have received all required documentation from you** (*see below*). Please review our **NEIWPCC Guide for Contractors (attached)** for details on our electronic process and policies.

In addition, please submit the following materials, which can be accessed on our Contractor Guidance webpage at (http://www.neiwpcc.org/contractors/guidance.asp):

- **W-9 Form -** Please fill out and return to NEIWPCC ASAP. (No invoices will be processed by NEIWPCC until we have a completed form on file.)
- **DBE Questionnaire**

Information on other forms and materials you may need (i.e., sample invoice and quarterly report), can be found on our Contractor Guidance webpage.

NEIWPCC also requires you to provide **insurance certificates** and Resolution (if required) as referenced in the contract. Your agreement will not be fully executed, and work cannot begin until we have received all required documentation.

All other correspondence, invoices, deliverables, quarterly reports, etc. should be sent to Drew Youngs. Thank you.

cc: Drew Youngs

NEI 07.07.20

CRO-597
East of Hudson Comm Wastewater Planning
NEIWPCC Job Code: 0100-329
Project Code: 2020-014

PROGRAM PARTICIPATION AGREEMENT
between
NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION (NEIWPCC)
and
TOWN OF CARMEL

This Agreement is made and entered into by and between the New England Interstate Water Pollution Control Commission ("NEIWPCC"), represented by NEIWPCC's Executive Director as the Contracting Officer, and having its usual place of business at Wannalancit Mills, 650 Suffolk Street, Suite 410, Lowell, MA 01854 (Tel: 978-323-7929; Fax: 978-323-7919), and the Town of Carmel, (the "Program Participant"), Putnam, New York, and political subdivision of the State of New York, having its principal office at 60 McAlpin Avenue, Mahopac, NY 10541; (Tel: 845-628-1500 ext 181; Email: rjf@ci.carmel.ny.us); Contact: Richard Franzetti (NEIWPCC and the Program Participant collectively, the "Parties").

WHEREAS, NEIWPCC provides various services relating to water management, protection, and compliance issues to the State of New York, and

WHEREAS, the City of New York ("City"), acting by and through the Commissioner of the Department of Environmental Protection ("DEP") is charged with the duty of protecting the high quality of waters from which the City's water supply is drawn and preserving it from degradation for the purpose of protecting the health and general welfare of the consumers of this supply; and

WHEREAS, pursuant to Section 4.9 of the 2017 Filtration Avoidance Determination ("2017 FAD"), issued by the New York State Department of Health, the City entered into an agreement with NEIWPCC, dated November 1, 2019 ("NEIWPCC-City Contract"), whereby the City agreed to fund, and NEIWPCC agreed to develop and administer a program that provides grants to identified municipalities of certain "Eligible Study Areas" (as defined in the NEIWPCC-City Contract) in the East of Hudson portion of the New York City water supply watershed, to be used to fund engineering reports that evaluate viable wastewater solutions in their areas (the "Program"); and

WHEREAS, the Program Participant is an "Eligible Municipality";

WHEREAS, the Program Participant has submitted an application for funding of an engineering study ("Project") of an area located wholly in Croton Falls Reservoir Basin, Lake Casse, Town of Carmel, New York ("Project Area"), and NEIWPCC has approved such application in accordance with the terms of the NEIWPCC-City Contract.

NOW THEREFORE, in consideration of the promises and respective representations and agreements hereinafter contained, the parties hereto agree as follows:

ARTICLE I. DESCRIPTION OF THE WORK

A. The Program Participant is responsible for performing all the "Work" (as defined below) in accordance with the terms and conditions set forth herein. The "Work" consists of procuring all of the engineering, surveying, scientific and other professional services and tasks that are necessary for the completion of an engineering study of the Project Area in form attached hereto as Appendix A ("Engineering Report"). The purpose of the Engineering Report is for use by the Program Participant in subsequently seeking from a funding source other than the City, such as a State or federal funding source, the necessary financing of the design and construction of the recommended wastewater treatment solution identified in the Engineering Report. In no event shall the Work include the design or construction of a wastewater treatment solution for the Project Area.

B. The following tasks ("Tasks") and deliverables ("Deliverables") shall be completed or caused to be completed by the Program Participant as part of the Work on or before the milestone deadlines set forth below. Failure to meet the milestones will give NEIWPCC the option to declare an event of default under this Agreement.

Tasks:

(i) By September 30, 2020, distribute approved request for qualifications/request for proposals ("RFP") for proposal of engineering services in accordance with the form attached hereto as Appendix B.

(ii) By December 1, 2020, if required, submit selected engineer for DEP approval of business integrity in accordance with the procedures sets forth below.

(iii) By December 30, 2020, upon applicable approval of business integrity, enter into contract with approved engineer.

(iv) By January 15, 2021, submit QAPP per the requirements outlined in Appendix C, or as otherwise approved by NEIWPCC's Oversight Project Manager. The draft QAPP will have been reviewed as to the appropriate form by NEIWPCC's Oversight Project Manager prior to submission. NEIWPCC's Quality Assurance Program Manager or his designee shall review and provide required changes or approval to the draft QAPP by February 5, 2021.

(v) Submission of Quarterly Reports by the 10th of January, April, July, and October for the preceding quarter throughout the term of this Agreement.

(vi) Submit draft Engineering Report by August 15, 2021.

(vii) Submit final Engineering Report by December 1, 2021.

Deliverables:

(i) QAPP: The Program Participant shall prepare and submit a "Quality Assurance Project Plan" ("QAPP"), per the requirements outlined in Appendix C, or otherwise in form approved by NEIWPCC's Oversight Project Officer (defined below). The QAPP must support the quality

of the data for environmental data operations in accordance with NEIWPCC's standards. The term "environmental data operations" refers to activities involving the collection, generation, compilations, analysis, evaluation, and use of environmental data. Approval of the QAPP by NEIWPCC is required prior to any environmental data operations.

(ii) Quarterly Reports: Brief (1-2 page) quarterly written or electronic reports which shall describe work progress to date; completed outputs; problems encountered and anticipated, including but not limited to the means of responding to those problems; a statement of activity anticipated during the next reporting period; and a comparison of the percentage of the Work completed to the milestone schedule. Electronic submission is encouraged.

(iii) Draft Engineering Report: The Draft Engineering Report shall be submitted to NEIWPCC no later than August 15, 2021. It shall specify, at a minimum, all applicable information outlined in the template, attached as Appendix A. The draft Engineering Report shall meet and comply with all standards for grants that fund construction of wastewater treatment infrastructure in the Project Area heretofore or hereafter promulgated by the NYS DEC or such other State or federal agency or agencies, as shall have jurisdiction over the Project Area. The Program Participant assumes full responsibility for having familiarized himself or herself with such standards, and with the requirements of this Program Participation Agreement, local conditions, and all other applicable rules and regulations, including SEQRA and local permitting and approval requirements necessary for completion of the Work in accordance with the terms of this Agreement. NEIWPCC will review the draft Engineering Report in consultation with DEP, and will submit to the Program Participant any comments that must be incorporated into the final Engineering Report in a timely manner.

(iv) The Final Engineering Report shall be submitted to NEIWPCC no later than December 1, 2021. The final Engineering Report must resolve all comments and concerns that were transmitted to the Program Participant by NEIWPCC subsequent to submittal of the draft Engineering Report. The final Engineering Report must be delivered to NEIWPCC in Adobe PDF format and in bound hard copy format. A minimum of six (6) bound hard copies must be provided. Any data files assembled as part of the Work must be delivered in a standard digital database format. Acceptable formats include formats readable by Microsoft Excel and/or Microsoft Access and/or ESRI ArcView.

C. Any GIS data produced under this contract shall be in accordance with the following specifications unless approved in writing by NEIWPCC: The data format of any vector data will be in ArcGIS version 10 or higher File Geodatabase Polygon, Point, or Line "Feature Class". Any raster/grid data will be in ArcGIS version 10 or higher File Geodatabase "Raster Dataset" Page 4 of 7 format. All GIS data must use the UTM Zone 18 North NAD83 meters projection. Detailed metadata accompanying each "Feature Class" or "Raster Dataset" must be developed describing the dataset's purpose, source information, methodology of development, identity of developer, accuracy, scale or spatial resolution, list of attributes and their meaning, any caveats to the data or limitations in its use/interpretation, and date of creation.

D. The Program Participant shall submit all Invoices and Deliverables to NEIWPCC's Oversight Project Officer ("Oversight Project Officer") for review and approval. Electronic submission is encouraged, in accordance with the terms and procedures set forth herein, at the following:

Drew Youngs
NEIWPCC
650 Suffolk Street, Suite 410
Lowell, MA 01854
978-349-2512
978-323-7919
dyoungs@neiwpcc.org

E. NEIWPCC's or DEP's review and/or approval of Work shall not in any way relieve the Program Participant of responsibility for the technical adequacy of his/her Work. Neither NEIWPCC's nor DEP's review, approval, acceptance, or payment for any of the Work shall be construed as a waiver of any rights under this Agreement.

ARTICLE II. DURATION OF THIS AGREEMENT

A. The Program Participant will start the Work on the date on which this Agreement is executed and delivered and insurance has been submitted in accordance with the terms hereof. No Work shall be eligible for reimbursement with Program Funds (as defined below) prior to the date on which the Work is to start.

B. The period of this Agreement shall commence to run on the date when the Work is to start as provided in Paragraph A of this Article.

C. The term of this Agreement shall expire the earlier of the date all Work and services to be completed hereunder have been performed; or July 1, 2022, unless sooner terminated by NEIWPCC in accordance with the terms hereof.

ARTICLE III. ELIGIBLE COSTS AND PAYMENT PROCEDURES

A. NEIWPCC agrees to reimburse the Program Participant with Program funds ("Program Funds") for the actual, reasonable and necessary costs incurred by the Program Participant in performing the Work, up to an aggregate total amount not to exceed **Three Hundred Thousand Dollars ($300,000)** (the "Contract Price"). Payment is contingent upon NEIWPCC's receipt of Program Funds from the City, and the Program Participant's compliance with the terms, conditions and provisions of this Agreement.

B. Requests for Payments for the Work performed may be submitted no more than monthly and shall require approved original invoices in form provided in this paragraph and documenting the specific task performed, back up materials, and other documents requested by NEIWPCC, including invoices from subcontractors and a cover letter from the Program Participant verifying that all costs are reasonable and fair and were authorized in good faith and in accordance with all applicable laws, pending receipt of one W-9 Form and all insurance certificates required hereunder. Invoices must include (1) the name and address of the Program Participant, (ii) the invoice date, (iii) the contract identification number, if any, (iv) the time period of work invoiced,

(v) a description of the Work performed, (vi) the address where payment is to be sent, (vii) the person to be notified in the event of a disputed invoice, and shall (1) provide itemized documentation of costs related to work performed, (2) be accompanied by a brief narrative of work completed, and (3) be supported by such supplemental information as NEIWPCC may reasonably require.

C. Any costs for the Work incurred by the Program Participant in excess of the Contract Price shall be the responsibility of the Program Participant.

D. NEIWPCC will pay invoices by check in the proper amount made payable to the Program Participant, within thirty (30) days of receipt of a request for payment by the Oversight Project Officer as required hereunder.

E. The Program Participant shall ensure that all funds advanced or released to it shall be used exclusively for eligible costs incurred in connection with Work as set forth herein.

F. All receipts and disbursements of funds pursuant to this Agreement are subject to audit by the City or the State, and the Program Participant agrees to cooperate with any such audit of this Agreement. NEIWPCC or the City may dispute the whole or any part of any payment that is determined by pre or post-audit to be ineligible costs in accordance with the provisions set forth in subsection J below.

G. Upon satisfactory completion of the Work performed in accordance with the terms and provisions of this Agreement, including the approved QAPP, and NEIWPCC's approval of the final Engineering Report, the Program Participant shall label the final payment request as "final invoice," and, acceptance of such payment, shall operate as a release from all claims of and liability against NEIWPCC, the City and the Water Board of the City of New York, and their officials and employees for anything heretofore done or furnished by the Program Participant relating to or arising out of any work done pursuant to this Agreement, and for any prior act, neglect or default on the part of NEIWPCC and the City or any of its officials, agents or employees, excepting only a claim against NEIWPCC or the City, its officials and employees, for the amounts deducted or retained in accordance with the terms and provisions of this Agreement or law. Final payment under this Agreement shall not constitute a waiver of NEIWPCC's or the City's claims against the Program Participant under this Agreement.

H. Any billings incurred for Work must be received by the Oversight Project Officer in NEIWPCC's office in Lowell, MA, as per Article II, no later than February 1, 2022. Any billing invoices received after February 1, 2022 will not be processed and payment due will be lost. NEIWPCC may extend these deadlines at the request of the Town upon written agreement by the Parties.

I. NEIWPCC's payment of the final invoice is contingent on NEIWPCC's receipt of the final Engineering Report in accordance with the terms and conditions of this Agreement.

J. Rejecting Ineligible Costs. NEIWPCC may disapprove or reject an invoice for proposed Work that does not conform to the requirements of this Agreement. Prompt notice of all disputes shall be given to the Program Participant. Any disputes that may arise regarding payments under this Agreement shall be governed by and construed in accordance with the laws of the State of New York. There is no alternate dispute resolution of payment or other disputes provided for by this

Agreement. Thus, unless otherwise specifically agreed to in writing by the parties hereto, any dispute that cannot be resolved amicably between the parties must be resolved by litigation filed in the Supreme Court of the State of New York, with venue in appropriate jurisdiction, in the federal District Court, with venue in the Northern District of New York.

ARTICLE IV. SUBCONTRACTING AND SELECTION OF ENGINEER

A. The Program Participant shall, in soliciting or procuring subcontracts for any of the Work ("Project Subcontract"), comply with all public procurement requirements that are applicable to the Program Participant by State or local law, or that would be applicable to the Program Participant under State or local law or any regulations thereunder if the Program Participant were funding such Work itself. The Program Participant shall use the "RFP" in form attached hereto as Appendix B, or in form otherwise approved by NEIWPCC and DEP, as the sole basis for its solicitation of an engineer proposal from at least 3, unless otherwise waived in writing by NEIWPCC for good cause shown, qualified professional engineers licensed to practice in the State of New York preliminarily selected by the Program Participant in connection with the Work.

B. Business Integrity for Certain Subcontracts**.** The Program Participant agrees and covenants to hire only responsible consultants and contractors ("Project Consultant") with respect to any Work to be performed under this Agreement. A responsible person or firm is one who or which, in DEP's opinion, has the capability in all respects to fully perform the contract requirements, including appropriate licenses where applicable, sufficient financial capabilities, equipment and personnel, and the business integrity to justify the award of public tax dollars. A Project Consultant shall be deemed to lack the requisite business integrity if any of the following criteria set forth in Subsection B(i)-(vii) are met within or during the period commencing ten (10) years prior to and continuing through the date of DEP's determination made in accordance with the procedures in Section C below.

(i) Criminal conduct in connection with government contracts or the conduct of business activities involving: a) the infliction, attempted infliction, or threat of death, intentional personal injury, or intentional property damage, in connection with involvement in a pattern of racketeering, labor racketeering, extortion, obstruction of justice, or other comparable crimes; b) bribery, fraud, bid rigging, embezzlement, theft, perjury, forgery, or other comparable crimes; c) serious moral turpitude, fundamental lack of integrity, or a pattern or practice of a knowing disregard for the law so as to call into question the integrity of the proposed Project Consultant; or (d) conspiracy to do any of the above acts. Evidence of such conduct shall consist of (A) (1) a judgment of conviction, (2) a pending criminal indictment, or (3) a formal grant of immunity in connection with a criminal prosecution, in each case of a proposed Project Consultant, any director or officer, any principal, and any employee primarily responsible for contracting procedures, or any holder of five (5) percent or more of the shares or equity of the proposed Project Consultant, or any affiliate or subsidiary of the proposed Project Consultant; or (B) any ongoing criminal investigation by a law enforcement agency in which the proposed Project Consultant, any director or officer, any principal, employee primarily responsible for contracting procedures, or any holder of five (5) percent or more of the shares or equity of the proposed Project Consultant, or any affiliate of the proposed Project Consultant is a target.

(ii) An actual determination by a person or entity which has jurisdiction of a willful noncompliance with the prevailing wage requirements of Section 220 of the Labor Law by the proposed Project Consultant or any affiliate thereof.

(iii) An actual determination by a person or entity which has jurisdiction of a significant willful violation of the Workers' Compensation Law including, but not limited to, the failure to maintain required workers' compensation or disability coverage.

(iv) An actual determination by a person or entity which has jurisdiction of a submission by the proposed Project Consultant to a government agency of a false or misleading statement on a uniform questionnaire or other form in connection with a bid or proposal for, or award of, a contract or request for approval of a subcontractor.

(v) A conviction or judgment of civil liability against the proposed Project Consultant for fraud in connection with a bid or proposal for, or award of, a contract or request for approval of a subcontract.

(vi) Debarment or current suspension of the proposed Project Consultant (i) for reasons of business integrity, or (ii) from consideration for the award of contracts with a government, governmental entity or public authority pursuant to any procedure enacted by statute or adopted by regulation providing for notice and hearing.

(vii) Arrears for more than one year on income, sales or payroll taxes.

C. Before any Project Subcontract is awarded to a Project Consultant for work, materials, equipment or services paid for in whole or in part with Program Funds, Program Participant shall require the proposed Project Consultant to complete and email the form attached as Appendix D to:

Vincent Giorgio, Project Manager
New York City Department of Environmental Protection
vgiorgio@dep.nyc.gov

Within ten (10) business days of receiving a written request for a determination, the City may provide NEIWPCC and the Program Participant with a report indicating whether any of the criteria of Subsection (B)(i)-(vii) above are met, including an explanation of the non-confidential evidence that such criteria are met. If the report states in fact that such criteria are met, the Project Consultant will be deemed to be not responsible.

Even if the Project Consultant does not meet the criteria set forth in Subsection (B)(i)-(vii), the City may provide NEIWPCC and the Program Participant with information within the ten (10) business day period following the submission of Appendix D which may be relevant to the question of whether a proposed Project Consultant has a satisfactory record of business integrity. Before awarding the Project Subcontract, Program Participant shall receive and consider such information provided by the City. If no report and no information, each as referred to in Subsection (B) above is received from the City within the ten (10) business day period following the submission of Appendix D, the DEP determination shall be deemed to be that the proposed consultant or contractor is a responsible Project Consultant for purposes of this Section.

D. Required Subcontractor Provisions**.** A subcontract to perform work to be paid with Program Funds provided by NEIWPCC pursuant to this Agreement shall include the following provisions:

(i) A requirement that the Project Consultant perform all work in accordance with the terms of this Agreement.

(ii) A requirement that prior to commencement of work on the Project, the Project Consultant maintain liability insurance in full force and effect during the entire period of performance of the Project in sufficient amount and scope to protect the interests of NEIWPCC and the City as provided in Appendix E.

(iii) The Project Consultant shall name NEIWPCC and the City of New York, their officials and employees, as additional insured with respect to the General Liability policy**.**

(iv) The Project Consultant shall require all subconsultants to performing any work on the Project to procure and maintain insurance in the types and amounts set forth in Appendix E during the entire period of the performance of the Project.

(v) The Program Participant shall require the Project Consultant and all contractors and subcontractors to submit to NEIWPCC all Certificates of Insurance for the coverage required in this Agreement upon request.

(vi) A statement and requirement that nothing contained in the Project Contract shall create any contractual relationship between the subcontractor, and NEIWPCC or the City.

(vii) A statement and a requirement that the Project Consultant agrees to indemnify NEIWPCC, the Water Board of the City of New York, and the City and their officials and employees, and assume liability for injuries where such injury, sickness or disease including death, or damage is the result of the Program Participant Subcontractor's or its subcontractors' negligence or willful tort arising from any activities related to this Agreement.

(viii) A statement that nothing contained in the Project Subcontract shall impair the rights of the City.

(ix) A requirement that NEIWPCC and the City be granted a license to use all written or electronic materials developed by Project Consultant or its subcontractors in connection with the Project, for any purpose.

(x) A requirement that all requests for payments for eligible costs be made by itemized voucher. Such vouchers shall include documentation demonstrating that the services for which payment is sought have actually been performed, and that the vouchers cover an eligible cost as defined in this Agreement. Where appropriate, the documentation supporting the voucher may include items such as purchase orders, canceled checks, certified payroll records and machinery use records.

(xi) All press releases, QAPPs, and draft/final engineering reports developed by the Project Consultant under this agreement must include the NEIWPCC logo and contain the following statement "This project has been funded wholly or in part by the City of New York under a contract administered by NEIWPCC."

ARTICLE V. INDEMNIFICATION

The Program Participant shall indemnify and hold harmless NEIWPCC, the City of New York, and the Water Board of the City of New York, and each of its members, officials, and employees, from and against all claims, damages, demands, payments, suits, actions, recoveries, judgments, losses, and expenses, including reasonable attorneys' fees, arising out of this Agreement, provided that any such claim, damage, loss, or expense is the result of the intentional tortious act or negligence of the Program Participant, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. This indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Program Participant or any subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts. The obligations set forth herein shall survive the expiration or termination of this Agreement.

ARTICLE VI. INSURANCE

The Program Participant shall comply with the liability insurance requirements in sufficient amount and scope to protect the interests of the City and NEIWPCC, its officials and employees, as set forth in Appendix E attached hereto for the entire time this Agreement remains effective.

ARTICLE VII. ACCESS TO INFORMATION AND PRESS RELEASES

A. The Program Participant grants to NEIWPCC and the City a royalty-free, non-exclusive, perpetual and irrevocable license to use any data, information, and/or products generated or gathered or prepared pursuant to this Agreement for any purpose deemed appropriate and to reproduce, publish, distribute, copy or otherwise use, and to authorize others to use, any data, information, and/or products gathered or prepared pursuant to this Agreement for any purpose it deems appropriate.

B. The Program Participant agrees to notify the NEIWPCC five (5) days in advance of any press events, public kick-off meetings, ribbon cuttings, tours, or debut events associated with this Project. Notification should be provided to the Oversight Project Officer by email. NEIWPCC and the City shall review and approve in writing, any written press releases in advance.

ARTICLE VIII. REMEDIES FOR DEFAULT AND TERMINATION OF AGREEMENT

A. NEIWPCC may terminate this Agreement by giving written notice to the Program Participant specifying the effective date, such date to be at least fourteen (14) calendar days from the date of notice, if the Program Participant has failed to meet, or in NEIWPCC's opinion, the Program Participant is likely to fail to meet one of the milestones or budget set forth in this Agreement; or NEIWPCC determines that there has been a material default under any provision hereof and the Program Participant has not cured such default within ten (10) business days after receipt of the notice from NEIWPCC specifying the failure.

B. Upon receipt of a termination notice, the Program Participant shall (1) promptly discontinue all Work (unless the notice directs otherwise) and (2) deliver or otherwise make available to NEIWPCC all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by the Program Participant in performing this Agreement, whether completed or in process.

C. In the event of termination due to the Program Participant's default, payment of Program Funds shall be adjusted because of the Program Participant's default.

D. Force Majeure. The performance of this Agreement is subject to acts of god, war, government regulations, disaster (including, but not limited to, fire, flood, severe weather, or earthquake), strikes, civil disorder, acts of terrorism, epidemic, curtailment of transportation facilities or any other emergency beyond the Program Participant or NEIWPCC's reasonable control making it commercially impracticable, illegal or impossible for the Party to perform their obligations under this Agreement in which case this Agreement may be terminated by the affected Party for any one of the above reasons, without liability, upon written notification to the other Party and the City.

E. The rights and remedies afforded to either Party pursuant to any part or provision of this Agreement are in addition to any other rights and remedies afforded by law or otherwise.

ARTICLE IX. NOTICE

Unless otherwise expressly provided in this Agreement, any notice from one Party to the other required or permitted to be given hereunder shall be in writing and delivered by hand to the following addresses:

If to NEIWPCC:
Wannalancit Mills
650 Suffolk Street, Suite 410
Lowell, MA 01854
Tel: 978-323-7929
Fax: 978-323-7919
Attention: NEIWPCC's Executive Director

If to Program Participant:
Town of Carmel
60 McAlpin Avenue
Mahopac, NY 10541
Tel: 845-628-1500 ext 181
Email: rjf@ci.carmel.ny.us

ARTICLE X. WARRANTIES

A. Status and Authority of the Program Participant. The Program Participant warrants and represents that it has all requisite power and authority to execute, deliver and perform this Agreement.

(i) This Agreement shall be accompanied by a resolution passed by the appropriate governing body authorizing the Program Participant Supervisor or other authorized representative to enter into contract. If a separate agency is entering into contract on behalf of a municipality, such contract application shall be accompanied by a resolution passed by the appropriate governing body authorizing the agency to act on behalf of the municipality.

(ii) This Agreement has been duly authorized by all necessary action on the part of the Program Participant and has been duly executed and delivered by the Program Participant and, assuming due execution and delivery by NEIWPCC, constitutes a legal, valid and enforceable obligation of the Program Participant.

(iii) The execution and delivery of this Agreement by the Program Participant and compliance with the provisions hereof, do not and will not conflict with or constitute a violation of or default under any provision of applicable law, ordinance or regulation or, to the extent of the Program Participant's knowledge, or any material agreement, judgment, injunction, order, decree or other instrument binding upon the Program Participant. In the case of joint applications, this Agreement shall be accompanied by a resolution passed by the appropriate governing bodies of all participating Eligible Municipalities designating one of the involved Eligible Municipalities as a project lead and authorizing the Town Supervisor of lead Eligible Municipality or other authorized representative to enter into a contract on behalf of that Eligible Municipality.

B. Conflict of Interest**.** The Program Participant and NEIWPCC represent and warrant that neither the Program Participant, nor NEIWPCC, nor any of their officers or employees have any interest, nor shall they acquire any interest, directly or indirectly, in any contracts or subcontracts, which would or may conflict in any manner or degree with the performance or rendering of the services herein provided. The Program Participant and NEIWPCC further represent and warrant that in the performance of this Agreement, no person having such interest or possible interest in any contracts or subcontracts which would or may conflict in any manner or degree with the performance or rendering of the services herein provided shall be employed by them or receive any of the funds to be paid by NEIWPCC or the Town.

C. No Employment. The Program Participant acknowledges and agrees that he/she and its consultants and subconsultants, is not an employee of NEIWPCC or the City of New York and is an independent contractor. Accordingly, none of the Program Participant or any of its consultants or employees or agents performing Work in connection with this Agreement will hold themselves out as, or claim to be, officers or employees of NEIWPCC or the City of New York or any department, agency or unit of the City, by reason of this Agreement, or make any claim, demand or application for any right or benefit applicable to an officer or employee of the City, including, but not limited to, Workers' Compensation coverage, disability benefits coverage, unemployment insurance benefits, Social Security coverage or employee retirement membership or credit.

D. Equal Employment Opportunity. In connection with the performance of the Work, the Program Participant shall abide by all applicable Federal, State and local laws regarding equal employment.

E. Access to and Retention of Records for Audit Purposes. The Program Participant shall prepare and maintain books and records and supporting documentation and justification in support of expenditures under the Agreement (including but not limited to cancelled checks, paid bills, payrolls, time and attendance records), in accordance with generally accepted accounting principles and practices consistently applied and shall allow access and make such documentation available to NEIWPCC and the City. All vouchers or invoices presented for payment to be made hereunder, and the books, records and accounts upon which said vouchers or invoices are based are subject to audit by the State, including the State Comptroller, and the City, including the City Comptroller, pursuant to the powers and responsibilities as conferred by State and/or City law, including Section 93 of the Charter of the City of New York. The Program Participant agrees to cooperate with any audit undertaken in connection with this Agreement. Retention of all such items is required for the longer of five years after the date Program Participant submits the final Engineering Report to NEIWPCC; or seven years after generation of the record.

ARTICLE XI. MISCELLANEOUS

A. Changes to this Agreement. No amendment or modification of this Agreement shall be binding upon either Party unless it is set forth in a written instrument signed by authorized representatives of the Parties.

B. Waiver and Severability. The failure or delay of either party to insist on performance of any provision of this Agreement, or to exercise any right or remedy available under this Agreement, shall not be construed as a waiver of that provision, right, or remedy in any later instance. Further, if any provision of this Agreement becomes void or unenforceable by operation of law the remaining provisions be valid and enforceable.

C. Choice of Law. This Agreement shall be governed by the laws of the State of New York.

D. Integration and Merger. This Agreement constitutes the entire agreement between the Parties and supersedes all prior representations, agreements, understandings, and communications related to the subject matter of this Agreement.

E. Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same agreement. The parties hereto agree that the use of scanned or facsimile signatures for the execution of this Agreement shall be legal and binding and shall have the same full force and effect as if originally signed.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of date last written below.

NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION	TOWN OF CARMEL
_____	_____
Susan J. Sullivan Executive Director Date _____	Kenneth Schmitt Town Supervisor Date _____

APPENDIX

Appendices A-E are attached as a separate PDF

APPENDIX A

Form of Engineering Report

(Form begins on next page)

Draft and Final Engineering Report Requirements

Both the Draft and Final Engineering Report submitted to NEIWPCC must include associated supporting documentation and shall summarize and evaluate the viable wastewater solutions identified. The Engineering Report is to be used by the Program Participant to appropriately plan and evaluate costs of a variety of wastewater solutions and shall be of sufficient detail and in appropriate form to allow the Program Participant to seek financing through State and/or federal funding sources, including but not limited to funding under the New York State Clean Water Infrastructure Act or its successors.

Engineering Reports developed under the Program will specify, at a minimum, the following information for Eligible Areas. Each final Engineering Report shall be prepared, stamped, and dated by a New York State registered Professional Engineer and shall be developed in accordance with all applicable federal, state, and local standards as they related to wastewater treatment in the Eligible Area.

1. Title Page

2. Executive Summary – Provide a brief description of the purpose of the report, need for the project, evaluations conducted, recommended alternative, and the proposed course of action.

3. Environmental Settings
    - Project location and description of study area including municipal boundaries, and scaled maps
    - Land use and zoning
    - Number of properties and population served
    - Existing utilities and water service
    - Environmental resources including Federal, State, and locally mapped wetlands and watercourses, regulated adjacent areas, general overview of land cover, potentially impacted waterbodies or aquifers, etc.)

4. Environmental Conditions
    - General description and history of existing wastewater infrastructure including:
        - Number and type of existing units
        - Age and condition
        - Flow estimates
    - Suitability for septic systems
        - Size of each parcel in proposed district
        - Area of each parcel that is suitable for septic disposal (i.e., not constrained by slope, soil, groundwater, or setback from watercourse)
        - Soil types in district
        - Slopes
        - Depth to groundwater
        - Depth to ledge rock
        - Floodplains
        - Date of last inspection and pump-out
    - Septic inspection and failure data from municipality and County records (date of last

inspection)
- Date of most recent pump-out/inspection for each parcel
- Summary of water quality management actions to date, if any
- Water quality measurement criteria
    - Eutrophic indicators in waterbody
    - Lake perception
    - Biological condition
- Phosphorus load contributions by source (i.e. wastewater, stormwater, etc.)
- Water budget for lake (if applicable)

5. Evaluation of Treatment Options
    - Delineate the area to be served
    - Describe existing wastewater infrastructure in the vicinity of the study area, including but not limited to, existing sewer districts in and around the study area, existing WWTPs, gravity or force mains, etc.
    - Evaluation of management actions shall include, but is not necessarily limited to, the following:
        - Septic maintenance district
        - Community septic system
        - Connection to existing WWTP
        - New WWTP

6. Recommended Treatment Practice
    - Identify and describe the preferred treatment alternative, including but not limited to:
        - Proposed Sewer District Boundaries
        - Discharge location
        - Estimated wastewater flows, solids and nutrient loads
        - Proposed collection system layout

7. Potential Water Quality Impacts of the Recommended Treatment Practice
    - Projected nutrient load reductions and impact on TMDL
    - Impacts on downstream waterbodies and wetlands

8. Project considerations
    - Permits/ Approvals
        - MS4 permit, found on the NYSDEC website (link)
        - SPDES permit, found on NYSDEC website (link), if applicable
        - DEP Watershed Rules and Regulations (link), with potential requirements for additional permits, variances, or plans
        - County-Level Permits
            - Westchester County Wastewater Disposal System application (link)
            - Putnam County Forms, Requests, and Applications (link)
        - Town-Level Permits, depending on the proposed project type
    - Feasibility
        - Environmental constraints (ledge rock, wetlands, etc.)
        - Required improvements to existing facilities or decommissioning, as applicable
        - Land requirements and need for land acquisition, if any

    - Seasonal limitations, challenges, and requirements, if any
    - Public support or other community considerations or non-monetary considerations (e.g. aesthetics, improved habitat, etc.)
- Financial Status
    - Briefly provide information regarding potential sources of income, current and/or future rate schedules, and other capital improvement programs

9. Estimated Cost of Recommended Treatment Practice
    - General
    - Design Costs
    - Construction Costs
    - Operation and Maintenance Costs
    - Estimated annual costs per connection
    - Potential Federal/State Funding sources (e.g. CW State Revolving Fund)

APPENDIX B

Form of RFP

(Form begins on next page)

East of Hudson Community Wastewater Planning Assistance Grant Program

REQUEST FOR PROPOSALS – Updated June 2020

[TITLE OF RFP]

[MONTH/YEAR OF RFP RELEASE]

[TOWN] is inviting proposals for an engineer or engineering firm to develop a report that will assist the Town in evaluating potential wastewater solutions to mitigate identified water quality impacts. The report will enable **[TOWN]** to appropriately plan and determine costs for the identified wastewater project so that they have the information necessary to seek financing of the implementation of a recommended solution through State or Federal funding sources.

This request for proposals (RFP) includes information on:

I. Overview

II. Project Goal

III. Scope of Work

IV. General Guidelines for Proposed Engineers

V. Proposal Requirements

VI. Submission Process

VII. Proposal Evaluation Process

VIII. Notification of Awards

IX. Contacts

Appendix A: Quality Assurance & Quality Control Requirements
Appendix B. Draft & Final Engineering Report Requirements
Appendix C. Title Page Format
Appendix D. Budget Table Format
Appendix E. Business Integrity Review Form

I. Overview

The New York City Department of Environmental Protection (DEP) has established the East of Hudson (EOH) Community Wastewater Planning Assistance Grant Program ("Program") for select areas in the EOH watershed where poorly functioning individual septic systems have the potential to impact the water quality of DEP's

unfiltered water supply. The program is to award grant funding to eligible areas for completion of engineering studies that evaluate viable wastewater solutions in their areas.

NEIWPCC is serving as the Program Administrator for this grant program. NEIWPCC is a regional commission that helps the states of the Northeast preserve and advance water quality. It engages and convenes water quality professionals and other interested parties from New England and New York to collaborate on water, wastewater, and environmental science challenges across shared regions, ecosystems, and areas of expertise. Its mission is to advance clean water in the Northeast through collaboration with, and in service to, its member states. NEIWPCC's vision is for clean and sustainable water throughout the Northeast. It bases its work on the core values of leadership, collaboration, education, service, and science.

II. Project Goal

The scope of this project is to complete an engineering report (the "Project") that can be used to assist **[TOWN]** in evaluating potential wastewater solutions to mitigate identified water quality impacts. The final engineering report would be of sufficient scope and detail to allow **[TOWN]** to seek separate financing for the design and implementation of an identified wastewater solution through a different source, such as State or Federal programs, including but not limited to, funding provided under the New York State Clean Water Infrastructure Act, or its successors.

III. Scope of Work

This RFP is for services to develop an engineering report for **[TOWN]**.

Project Tasks

Task 1	Develop Approved Quality Assurance Project Plan (QAPP)
Task 2	Submit Draft Engineering Report
Task 3	Submit Final Engineering Report
Task 4	Quarterly Progress Reports

Anticipated Project Meetings (Only include this section if you anticipate project meetings)

[MEETING TYPE]	**[PURPOSE]**	**[POTENTIAL PARTICIPANTS]**
[MEETING TYPE]	**[PURPOSE]**	**[POTENTIAL PARTICIPANTS]**
[MEETING TYPE]	**[PURPOSE]**	**[POTENTIAL PARTICIPANTS]**

IV. General Guidelines for Proposed Engineers

Eligibility

Proposed engineering firms must be qualified New York State licensed engineers and engineering firms.

Schedule
The Project is anticipated to require 10-12 months, with all final reports and paperwork due to NEIWPCC by December 1, 2021. The timeline for the project includes the following deadlines:

December 30, 2020 – **[TOWN]** awards contract for consulting services.
January 15, 2021 – Draft QAPP submitted to **[TOWN].**
[August 15, 2021] – Draft engineering report submitted to **[TOWN]**.
[December 1, 2021] – Final engineering report submitted to **[TOWN]**.

[*PLEASE NOTE THAT DRAFT REPORTS ARE DUE TO NEIWPCC AND DEP ON AUGUST 15, 2021 AND FINAL REPORTS ARE DUE TO NEIWPCC AND DEP ON DECEMBER 1, 2021. PLEASE PLAN AND ADJUST DATES AS NEEDED IF THE TOWN REQUIRES ADDITIONAL REVIEW TIME.***]**

The schedule for this RFP is as follows:

Proposals Due to **[TOWN]**	**[INSERT DUE DATE]**
Proposed Engineering Firms Notified of Funding Decisions	**[INSERT DATE]**
Detailed Project Work Plans Due	**[INSERT DUE DATE]**
Project Start Date	**[INSERT DATE]**

Funding
The payment of the Engineering Services is solely for the actual, reasonable, and necessary costs incurred by the engineer or firm in performing the work required to complete a final Engineering Report up to the maximum amount allowed under available program funding. It is anticipated that one engineering firm will be chosen. Final proposal budgets cannot exceed pre-proposal budgets. Awarded funds may only be used for expenses specifically related to the proposed Project.

Deliverables
The deliverables required for this project will be the following:

1. Draft Quality Assurance Project Plan due no later than January 15, 2021
2. Draft Engineering Report due no later than August 15, 2021
3. Final Engineering Report due no later than December 1, 2021
4. Quarterly Progress Reports

All deliverables are required to be submitted in draft form in Microsoft Word format for review by the Town and approval by NEIWPCC project manager (See Contact Information in Section IX). All final reports are to be delivered in bound hard copy (6 copies) *and* Adobe .pdf format upon approval by the project manager.

Specific Quality Assurance and Quality Control requirements for the Engineering Report are to be developed in a Quality Assurance Project Plan. An approved form can be found in Appendix A. Requirements for the Draft and Final Engineering Reports can be found in Appendix B. Quarterly progress reports will be due for each quarter for the duration of the work. Quarterly reports will be due on April 10 for the January to March quarter, on July 10 for the April to June quarter, on October 10 for the July to September quarter, and on January 10 for the October to December quarter.

Geographic Information System (GIS) Data Requirements
Any GIS data produced under this contract shall be in accordance with the following specifications. The data format of any vector data will be in ArcGIS version 10 or higher File Geodatabase Polygon, Point, or Line

"Feature Class". Any raster/grid data will be in ArcGIS version 10 or higher File Geodatabase "Raster Dataset" format. All GIS data must use the UTM Zone 18 North NAD83 meters projection. Detailed metadata accompanying each "Feature Class" or "Raster Dataset" must be developed describing the dataset's purpose, source information, methodology of development, identity of developer, accuracy, scale or spatial resolution, list of attributes and their meaning, any caveats to the data or limitations in its use/interpretation, and date of creation.

Insurance Requirements

The selected engineering firm must maintain and submit evidence of Workers Compensation, Employee and Disability Benefits Liability, General Liability insurance, and Professional Liability insurance throughout the term of the Project. More details will be provided to the proposed engineer selected for this Project. Note this applies for all contractors, including sole proprietors. If you cannot provide proof of insurance, please do not apply for this Project.

V. Proposal Requirements

Proposals must include a (1) cover letter, (2) title page with abstract, (3) narrative with citations, (4) timeline, (5) budget and budget justification, (6) description of qualifications, (7) letters of commitment or support, and (8) business integrity form. Page limits for each of these components are provided in the individual descriptions below. Proposals that do not contain all of the information requested and/or do not meet the format requirements will be eliminated from consideration. Pages that exceed the maximum number specified for each section will not be reviewed.

All full proposals submitted to **[TOWN]** must be consistent with the corresponding pre-proposal submission, including funding amount requested.

Cover Letter

Please include a one-page cover letter, printed on official letterhead and signed by an authorized representative of the lead agency, firm, or institution, with each proposal. The cover letter must state that:

- You are applying to provide engineering services to develop an Engineering Report as required under this program.
- You acknowledge that funding is provided on a reimbursement basis based upon actual and reasonable costs incurred.

Title Page with Abstract

The title page must adhere to the format provided in Appendix C and include all of the following information, using a maximum of one single-spaced, one-sided, typed 8.5" x 11" page with 11-point font and 1-inch margins:

- Project Name: Use the exact project name as it appears throughout the proposal.
- Organization: Name of Licensed Engineer or Engineering Firm
- Primary Investigator Name and Contact Information: Provide the name, title, and affiliation of the primary investigator, as well as mailing address, phone number, and email address.
- Financial Contact Name and Contact Information (if applicable): Provide the name, title, and affiliation of the individual responsible for financial/contractual negotiations (if different from primary investigator), as well as mailing address, phone number, and email address.
- Project Partners (if any): Provide the names, titles, affiliations, for each of the additional investigators or support staff who will significantly contribute to the project (if any).
- Funds Requested: Provide the amount of money you are requesting from NEIWPCC for the project.
- Federal Tax Identification Number (FID)

- DUNS Number: A DUNS number is a unique, non-indicative 9-digit identifier that verifies the existence of a business entity globally. Contractors must provide NEIWPCC with a DUNS number to comply with an administrative condition of NEIWPCC (individuals are exempt). If you do not have a DUNS number, one can be obtained at the following web address: https://fedgov.dnb.com/webform
- Project Location Description (City, State): Provide the state and city where of the primary location where work will be completed.
- Abstract: The abstract must accurately describe the project being proposed and include: (1) the objectives of the project, (2) the methodology to be used, and (3) the expected outputs and outcomes of the project and how it addresses this RFP, including environmental benefits to **[ENTER LAKE HERE]**. **The abstract must fit within the title page.**

Proposal Narrative with Citations

The proposal narrative must not exceed **[ENTER PAGE LIMIT]** consecutively numbered, single-spaced, typed 8.5" x 11" pages with 11-point font and 1-inch margins. The **[ENTER PAGE LIMIT]** page narrative must include all of the following information:

- **Problem Description:** Briefly describe the project and its relevance to **[TOWN]** and **[LAKE]**. This section can also include brief background or introductory information.
- **Objectives**: Outline how the project will achieve the goal of this RFP.
- **Methodology**: Outline the project's design and describe the methods and techniques that will be used to meet the project's goal and tasks.
- **Expected outputs and outcomes**: Describe the project's expected outputs and outcomes, and list and describe each of the specific deliverables and end-products.
- Briefly discuss the **process to be used to evaluate the effectiveness and success** of the project.
- **Roles and Responsibilities**: Define the roles and responsibilities of all project participants.

Timeline

Provide a detailed timeline for meeting identified tasks and completing deliverables, with a completion date no later than December 1, 2021. All timelines should be stated in terms of Month #1, #2, #3, etc. rather than specific dates, e.g. "March 5, 2021." Although the project start date is anticipated to be on or about December 30, 2020, this date may change based on the time the actual agreement is established. The timeline must be no more than one 8.5" x 11" page with 1" margins and 11-point font.

Budget and Budget Justification (use this section as a guide, TOWN may have different expectations for proposed engineers' budget submission)

The project budget must be provided in two formats:

First, provide a complete, detailed budget using the format provided in Appendix D. The budget must be no more than one 8.5" x 11" page with 1" margins and 11-point font. Along with this budget, provide a brief justification (one page maximum) for the proposed costs in terms of meeting project objectives. Include an explanation of how indirect costs are calculated. Justify subcontracts, if any. Entities must provide documentation of their rates and costs for direct labor, overhead and profit and estimates of reimbursable costs to perform the work as set forth in the scope of engineering services as applicable. The cost proposal shall also clearly state the maximum total of all costs, expenses and fees payable to perform the tasks outlined in the scope of engineering services set forth in this RFP. This documentation does not count toward the page limit.

Final proposal budgets cannot exceed pre-proposal budgets.

Description of Qualifications
The engineering firm awarded the contract for this project should possess the academic and professional expertise and certifications in the relevant subject areas, have adequate resources for performance of all services described, and have a strong track record in delivering projects of this nature and facilitating successful working relationships with municipal and state government. Applications must include identification of a New York State Licensed Engineer as the project leader. Proposed engineers must be able to demonstrate extensive experience in developing engineering reports for wastewater projects similar in size and scope to this project. Attention to detail in documenting qualifications that meet the scoring requirements is strongly advised. The qualifications section, including resumes, CVs, descriptions of past projects, etc. must not exceed **[INSERT PAGE LIMIT]** pages.

Letters of Commitment or Support
The applicant may submit letters of support as they see fit that would be relevant to the work to be completed under this RFP. Any letter of support should be no more than two pages in length and should be signed by the designated head of the submitting entity.

Business Integrity Review Form
Each engineer or firm, other than a government entity, must submit a certificate attesting to the aggregated value of all contracts funded with funds provided by New York City awarded to the engineering firm and its affiliates in the previous 12-month period, and a completed business integrity review form found in Appendix E. These will be used in a business integrity review to justify the award of public funds to the engineer or firm.

VI. Submission Process

Proposals must be submitted by no later than **[INSERT DUE DATE/TIME HERE]**. No late submissions will be considered. To submit your proposal, **[INSERT TOWN METHOD HERE].**

Pre-Application Conference Call (Only include this section if you intend to hold a conference call)
A conference call with **[INSERT REQUIRED PARTICIPANTS HERE]** will be held on **[INSERT DATE/TIME HERE]** to answer clarifying questions submitted by proposed engineering firms. If you want to participate in the conference call, please send a request to participate to **[INSERT CONTACT INFO HERE]** by **[INSERT DATE/TIME HERE]**. Your request should include: your name, affiliation, email, and phone number, and any questions you would like answered. Only questions submitted by email prior to the call will be answered and no additional questions will be answered after the conference call. It is not necessary to submit a question to participate in the call. All interested proposed engineers will be contacted by email with details for joining the call.

VII. Proposal Evaluation Process

[TOWN] will screen all proposals to ensure that they meet all requirements of this RFP, and if required by DEP, the selected engineering firm will be approved by DEP to ensure that a firm has a sufficient record of business integrity. If a proposal is found to be incomplete, or if an insufficient record of business integrity is identified, the proposal will be deemed ineligible and **[TOWN]** will notify the proposed firm. To be considered complete, proposals must include all of components described in Section V. Proposal Requirements. Pages in excess of the limits specified for each component will not be reviewed. Complete and eligible proposals will be reviewed by a panel composed of **[TOWN]**, **and** NEIWPCC. Proposals may also be submitted for external peer reviews. The review team will evaluate the proposals based upon the following criteria:

1. Contract price,
2. Qualification of key project staff,
3. Extent of previous experience with wastewater management projects and studies,
4. Previous experience providing engineering services to local governments,
5. Familiarity with state, local, and regional water and wastewater regulations in the study area, and
6. Sufficient record of business integrity.
7. **[INSERT ADDITIONAL PROGRAM/PROJECT SPECIFIC CRITERIA HERE AS DESIRED]**

VIII. Notification of Awards

Award notification to proposed engineers is expected by December 30, 2020. Award recipients may be asked to submit a revised work plan, timeline, and budget at this time. Projects cannot start until the contract is signed by both parties and all mandatory documentation is received by **[TOWN]**. If your project includes environmental data operations, this work may not begin until the QAPP is approved. **[TOWN]** will not pay for expenses incurred prior to the contract start date. Payment for costs incurred will be **[INSERT TOWN METHOD HERE]**.

IX. Contacts

[Town] will accept questions about this RFP by email or phone through **[DATE]** and **[TIME]**.

For information regarding the application process or RFP topic, contact:

[NAME]
[TOWN]
[ADDRESS]
[PHONE]
[EMAIL]

RFP - Appendix A

Quality Assurance & Quality Control Requirements

The NEIWPCC Quality Management Plan requires that Quality Assurance Project Plans (QAPPs) are developed and approved for all projects involving environmental data operations (i.e., collection, analysis, and/or manipulation of environmental data). The engineer will be responsible for developing the project QAPP and submitting it to NEIWPCC staff for review and approval by the NEIWPCC Project Manager and the NEIWPCC Quality Assurance Program Manager prior to any data collection or analysis. If your proposed project will include environmental data operations, development of the QAPP can be completed as a task under this project and should be included in the proposal narrative, timeline, and budget. While preparing your proposal, please account for the additional time and resources necessary for QAPP development. Allow a minimum of 30 days for the development of your QAPP and 10 days for the review and approval of your QAPP by NEIWPCC. It is appropriate for a proposed engineer to utilize or build upon an existing, relevant, approved QAPP if one exists.

By January 15, 2021, the draft QAPP must be submitted to **[TOWN]**. The draft QAPP will have been reviewed as to the appropriate form by NEIWPCC's Oversight Project Manager prior to submission. NEIWPCC's Quality Assurance Program Manager or his designee shall review and provide required changes or approval to the draft QAPP by February 5, 2021.

There are two separate checklists that detail what is required in a QAPP depending on the type of data involved with the project. The first checklist ("EPA R-5…") is an example of what could be used to write a QAPP, especially one involving field sampling and laboratory analyses (i.e., primary data). To download this checklist, see: http://neiwpcc.org/wp-content/uploads/2019/09/R5-fillable-checklist-updated-for-FY20.docx

The second checklist ("Modified EPA R-5…") is an example of what could be used to write a QAPP, especially one that calls solely for the collection and use of secondary data. To download this checklist, see: http://neiwpcc.org/wp-content/uploads/2019/09/Secondary-Data-Checklist-updated-for-FY20.docx

For more information about QAPPs, see: http://neiwpcc.org/our-programs/assessment-and-research/quality-management/. Questions regarding the QAPP process or the necessity of a QAPP for a proposed project should be directed to **[ENTER TOWN CONTACT NAME]** (see contact information in Section IX) by **[ENTER DATE]**.

RFP - Appendix B

Draft and Final Engineering Report Requirements

Both the Draft and Final Engineering Report submitted to NEIWPCC must include associated supporting documentation and shall summarize and evaluate the viable wastewater solutions identified. The Engineering Report is to be used by the Program Participant to appropriately plan and evaluate costs of a variety of wastewater solutions and shall be of sufficient detail and in appropriate form to allow the Program Participant to seek financing through State and/or federal funding sources, including but not limited to funding under the New York State Clean Water Infrastructure Act or its successors.

Engineering Reports developed under the Program will specify, at a minimum, the following information for Eligible Areas. Each final Engineering Report shall be prepared, stamped, and dated by a New York State registered Professional Engineer and shall be developed in accordance with all applicable federal, state, and local standards as they related to wastewater treatment in the Eligible Area.

1. Title Page

2. Executive Summary – Provide a brief description of the purpose of the report, need for the project, evaluations conducted, recommended alternative, and the proposed course of action.

3. Environmental Settings
    - Project location and description of study area including municipal boundaries, and scaled maps
    - Land use and zoning
    - Number of properties and population served
    - Existing utilities and water service
    - Environmental resources including Federal, State, and locally mapped wetlands and watercourses, regulated adjacent areas, general overview of land cover, potentially impacted waterbodies or aquifers, etc.)

4. Environmental Conditions
    - General description and history of existing wastewater infrastructure including:
        - Number and type of existing units
        - Age and condition
        - Flow estimates
    - Suitability for septic systems
        - Size of each parcel in proposed district
        - Area of each parcel that is suitable for septic disposal (i.e., not constrained by slope, soil, groundwater, or setback from watercourse)
        - Soil types in district
        - Slopes
        - Depth to groundwater
        - Depth to ledge rock
        - Floodplains
        - Date of last inspection and pump-out
    - Septic inspection and failure data from municipality and County records (date of last

inspection)
- Date of most recent pump-out/inspection for each parcel
- Summary of water quality management actions to date, if any
- Water quality measurement criteria
    - Eutrophic indicators in waterbody
    - Lake perception
    - Biological condition
- Phosphorus load contributions by source (i.e. wastewater, stormwater, etc.)
- Water budget for lake (if applicable)

5. Evaluation of Treatment Options
    - Delineate the area to be served
    - Describe existing wastewater infrastructure in the vicinity of the study area, including but not limited to, existing sewer districts in and around the study area, existing WWTPs, gravity or force mains, etc.
    - Evaluation of management actions shall include, but is not necessarily limited to, the following:
        - Septic maintenance district
        - Community septic system
        - Connection to existing WWTP
        - New WWTP

6. Recommended Treatment Practice
    - Identify and describe the preferred treatment alternative, including but not limited to:
        - Proposed Sewer District Boundaries
        - Discharge location
        - Estimated wastewater flows, solids and nutrient loads
        - Proposed collection system layout

7. Potential Water Quality Impacts of the Recommended Treatment Practice
    - Projected nutrient load reductions and impact on TMDL
    - Impacts on downstream waterbodies and wetlands

8. Project considerations
    - Permits/ Approvals
        - MS4 permit, found on the NYSDEC website (link)
        - SPDES permit, found on NYSDEC website (link), if applicable
        - DEP Watershed Rules and Regulations (link), with potential requirements for additional permits, variances, or plans
        - County-Level Permits
            - Westchester County Wastewater Disposal System application (link)
            - Putnam County Forms, Requests, and Applications (link)
        - Town-Level Permits, depending on the proposed project type
    - Feasibility
        - Environmental constraints (ledge rock, wetlands, etc.)
        - Required improvements to existing facilities or decommissioning, as applicable
        - Land requirements and need for land acquisition, if any

    - Seasonal limitations, challenges, and requirements, if any
    - Public support or other community considerations or non-monetary considerations (e.g. aesthetics, improved habitat, etc.)
- Financial Status
    - Briefly provide information regarding potential sources of income, current and/or future rate schedules, and other capital improvement programs

9. Estimated Cost of Recommended Treatment Practice
    - General
    - Design Costs
    - Construction Costs
    - Operation and Maintenance Costs
    - Estimated annual costs per connection
    - Potential Federal/State Funding sources (e.g. CW State Revolving Fund)

RFP - Appendix C

Title Page Format

Project Name:

Organization:

Primary Investigator Name and Contact Information:

Financial Contact Name and Contact Information (if applicable):

Project Partners (if any):

Funds Requested: $

Federal Tax Identification Number:

DUNS Number:

Project Location Description (City, State):

Abstract:

RFP - Appendix D

Budget Table

PROJECT BUDGET		
BUDGET CATEGORY *(Add/remove itemizing lines below major categories as necessary, but do NOT delete major categories)*	***MATCH***	***GRANT REQUEST***
A. PERSONNEL (list individual names and titles below)	**$**	**$**
	$	$
	$	$
	$	$
B. FRINGE BENEFITS_____% of_____(e.g., 10% of total personnel costs) **TOTAL:**	**$**	**$**
C. TRAVEL (estimate number/purpose of trips below)	**$**	**$**
	$	$
	$	$
D. EQUIPMENT (itemize below) **TOTAL:**	**$**	**$**
	$	$
	$	$
E. SUPPLIES (itemize below) **TOTAL:**	**$**	**$**
	$	$
	$	$
F. CONTRACTS (identify & itemize below) **TOTAL:**	**$**	**$**
	$	$
	$	$
G. OTHER (identify & itemize below) **TOTAL:**	**$**	**$**
	$	$
	$	$
H. TOTAL DIRECT COSTS (SUM OF A-G)	**$**	**$**
I. INDIRECT COSTS_____% of_____(e.g., 10% of total direct costs) **TOTAL:**	$	$
J. TOTAL PROJECT COST (SUM OF H+I)	**$**	**$**

APPENDIX C

Quality Assurance & Quality Control Requirements

(Form on next page)

Quality Assurance & Quality Control Requirements

The NEIWPCC Quality Management Plan requires that Quality Assurance Project Plans (QAPPs) are developed and approved for all projects involving environmental data operations (i.e., collection, analysis, and/or manipulation of environmental data). The engineer will be responsible for developing the project QAPP and submitting it to NEIWPCC staff for review and approval by the NEIWPCC Project Manager and the NEIWPCC Quality Assurance Program Manager prior to any data collection or analysis. If your proposed project will include environmental data operations, development of the QAPP can be completed as a task under this project and should be included in the proposal narrative, timeline, and budget. While preparing your proposal, please account for the additional time and resources necessary for QAPP development. Allow a minimum of 30 days for the development of your QAPP and 10 days for the review and approval of your QAPP by NEIWPCC. It is appropriate for a proposed engineer to utilize or build upon an existing, relevant, approved QAPP if one exists.

By January 15, 2021, the draft QAPP must be submitted to NEIWPCC's Oversight Project Manager. The draft QAPP will have been reviewed as to the appropriate form by NEIWPCC's Oversight Project Manager prior to submission. NEIWPCC's Quality Assurance Program Manager or his designee shall review and provide required changes or approval to the draft QAPP by February 5, 2021.

There are two separate checklists that detail what is required in a QAPP depending on the type of data involved with the project. The first checklist ("EPA R-5…") is an example of what could be used to write a QAPP, especially one involving field sampling and laboratory analyses (i.e., primary data). To download this checklist, see: http://neiwpcc.org/wp-content/uploads/2019/09/R5-fillable-checklist-updated-for-FY20.docx

The second checklist ("Modified EPA R-5…") is an example of what could be used to write a QAPP, especially one that calls solely for the collection and use of secondary data. To download this checklist, see: http://neiwpcc.org/wp-content/uploads/2019/09/Secondary-Data-Checklist-updated-for-FY20.docx

An example of a NEIWPCC-approved QAPP is included in the following pages. This QAPP is intended to serve as an example and does not change the requirements outlined in this section. For more information about QAPPs, see: http://neiwpcc.org/our-programs/assessment-and-research/quality-management/. Questions regarding the QAPP process or the necessity of a QAPP for a proposed project should be directed to NEIWPCC's Oversight Project Manager.

1. Project Management

1.1. Title and Approval

BEAVER RIVER WATERSHED ASSESSMENT

Prepared by:
Town of Richmond, RI
Horsley Witten Group, Inc.

4/13/2020
Version 1.0
NEIWPCC QAPP ID: Q20-017
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1.3. QAPP Distribution List

QAPP distribution list

Signed copies of this Quality Assurance Project Plan (QAPP) and all subsequent revisions will be sent to the following individuals by electronic mail:

Courtney Schmidt, Staff Scientist, NBEP, courtney.schmidt@nbep.org
Richard Friesner, Director of Water Quality Programs, NEIWPCC, rfriesner@neiwpcc.org
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John Torgan, Executive Director, The Nature Conservancy, Rhode Island, jtorgan@tnc.org
Shaun Lacey, Town Planner, Town of Richmond, Rhode Island, townplanner@richmondri.com
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Michelle West, Project Manager, Horsley Witten Group, Inc., mwest@horsleywitten.com
Maria Pozimski, GIS Analyst, Horsley Witten Group, Inc., mpozimski@horsleywitten.com
Amy Ball, Senior Ecologist, Horsley Witten Group, Inc., aball@horsleywitten.com

1.4. Project Organization and Responsibilities

The Town of Richmond's consultant for this project is the Horsley Witten Group, Inc. (HW). HW's Project Manager, Principal in Charge, GIS Analyst, and Senior Ecologist are responsible for carrying out nearly every aspect of this project, including data gathering and analyses, quality assurance, identifying restoration and land management activities, writing most of the report, reviewing and editing sections that may be provided by contributors, and soliciting guidance on prioritization and to ensure the accuracy of the final report. More details are provided in the following list of project participants and their responsibilities:

EPA Project Officer: Caitlyn Whittle

- Responsible for reviewing the draft report and approving final report

EPA Quality Assurance Reviewer: Nora Conlon

- Provides technical assistance for QAPP development and supports the Quality Assurance managers to ensure that all elements of the project are completed in accordance with QA procedures in the QAPP.

NEIWPCC Project Manager: Richard Friesner

- Responsible for overseeing implementation of the project work plan, reviewing the draft report, approving final report, managing the project budget with the Town

NEIWPCC QA Program Manager: Peter Zaykoski

- Responsible for maintaining NEIWPCC Quality Management Plan; reviews the project QAPP and subsequent revisions in terms of quality assurance and project goals or designates authorized staff to do the same

NBEP Program Director: Mike Gerel

- Responsible for managing NBEP staff, reviewing the draft report, approving final report

NBEP Staff Scientist: Courtney Schmidt

- Responsible for being the contact person between NEIWPCC, EPA, the Science Advisory Committee, the Town and the contractor, providing guidance on the QAPP, reviewing the draft report, approving final report

Town Planner: Shaun Lacey

- Responsible for providing general guidance and advice on all issues regarding the Town, coordinating communication and contract between the Town and the contractor, processing invoices, coordinating with NEIWPCC, submitting quarterly project progress reports, reviewing the draft report, approving final report

Conservation Commission Chairperson: James Turek

- Responsible to serve as the liaison between the Advisory Committee and the consultant, provide general and technical guidance and advice on all issues involving the project and the Conservation Commission, review the draft report, and approve final report

Advisory Committee comprised of the Rhode Island Department of Environmental Management, Trout Unlimited, The Nature Conservancy, Wood Pawcatuck Watershed Association, Protect Rhode Island Brook Trout, and Beaver River Valley Association, along with the Town.

- Responsible for providing data, general guidance and advice on all scientific and technical aspects of the report, input on metrics and ranking methodology for proposed actions, and reviewing the draft report

HW Project Manager: Michelle West, P.E.

- Responsible to serve as the contact person between the client and the HW Team, for overseeing implementation of the project work plan, including developing and prioritizing restoration and land management activities, writing the draft report with support from the HW Team, the Town, and Advisory Committee. Manages the project budget and submits invoices and progress reports to the Town on a monthly basis.

HW QA Manager: Geraldine Camilli

- Responsible to review the project QAPP and subsequent revisions in terms of quality assurance and project goals or designates authorized staff to do the same. Maintains and distributes the approved QAPP and any subsequent revisions.

Principle In Charge, Senior Hydrogeologist: Neal Price

- Responsible to review the draft report, approving final report. Responsible in helping to identify the priority sites for habitat restoration and protection, and decisions and strategies on implementing projects benefiting water resources in the watershed.

GIS Analyst: Maria Pozimski

- Responsible to take the lead on the existing data collection and existing/projected conditions analyses, including collecting and compiling data in Excel spread sheets and file geodatabases, assuring secondary data quality according to the approved QAPP, performing data analyses where necessary and appropriate, creating charts, and providing data as well as all coordination with the Town's GIS consultant and other data sources as necessary.

Senior Ecologist: Amy Ball

- Responsible for providing guidance on vegetation communities and ecological benefits of habitat restoration and protection based on the priorities previously identified and on the habitat requirements of the most vulnerable species that have been identified in the watershed.

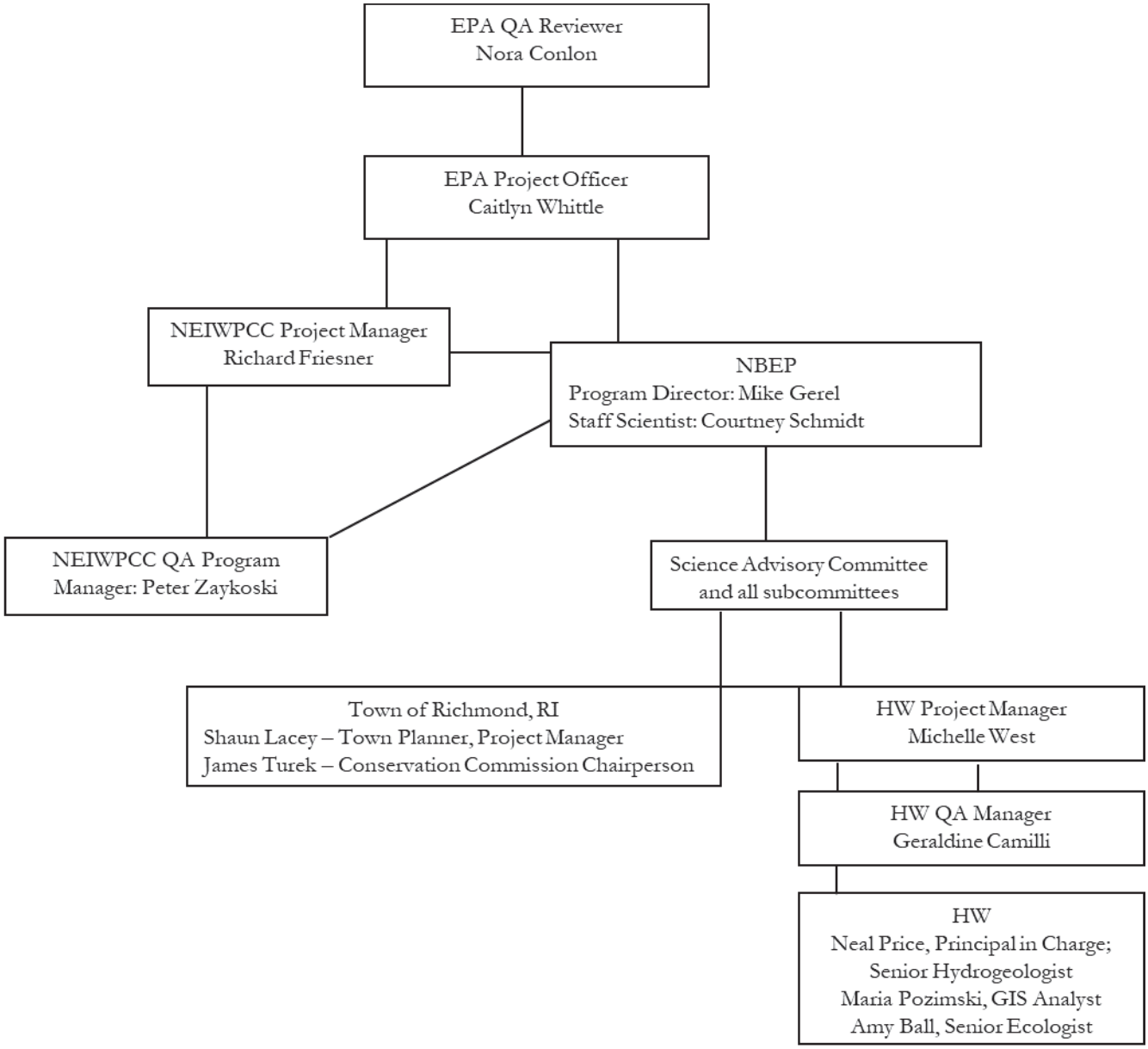

Figure 1. Organizational Chart.

1.5. Problem Definition/Background

The Town seeks to undertake a planning assessment focused on the Beaver River watershed to identify important natural resources and prioritize sites and projects that will enhance, restore and/or protect both the quality and quantity of the Beaver River. This planning-level project will rely solely on previously collected, secondary data. No original field data will be collected as part of this project. While more broad plans have been completed or are now being developed for the federally-designated Wild and Scenic Wood-Pawcatuck River watershed, this desktop, spatial data analysis focuses specifically on a portion of Richmond, and the outcome will be to use the habitat restoration and protection prioritizations for decisions and strategies on implementing projects benefiting water resources in the watershed. Ultimately, an outcome of this assessment will be a deliverable to serve as a model for implementing restoration and conservation actions and conserving lands in other portions of Richmond situated in the Wood-Pawcatuck River watershed in the future. The objectives of the analysis using secondary data include:

- Identify existing and potential future land uses in the watershed
- Identify potential restoration projects and actions and land protection measures to address watershed water quality and quantity
- Develop criteria for scoring, evaluating and prioritizing potential restoration and land protection projects
- Provide recommendations for implementing projects with future funding opportunities
- Instill and enhance community stewardship values and citizen scientist roles to increase support for watershed restoration, land protection, and sustainable, high quality water resources

The Town expects this watershed study will address the Narragansett Bay Program's Comprehensive Conservation and Management Plan (CCMP) priority actions including:

(1) Section 1, protect and restore clean water – Action 4.2: utilize watershed-based plans to coordinate prioritized actions to protect, restore and manage land and water resources in watersheds; and
(2) Section 3, protect and restore fish, wildlife and habitats – Action 1.1: focus resources and enhance land protection efforts on less-developed areas, particularly areas threatened by development.

Secondary data in the form of existing, spatial datasets will be collected and analyzed to complete an assessment of land use conditions and changes, as well as a prioritization of potential projects that could be conducted to benefit water resource management and restoration. This analysis will be focused on the following restoration and management activities:

Restoration Activities

- Dam Removals
- Culvert Replacements
- Stream Restoration
- Buffer Restoration
- Stormwater Retrofits
- Wetland Restoration
- Invasive Species Management

Watershed Non-structural Management Activities

- Enhanced Regulations (e.g., Enhanced Buffer Protection, Land Use Restrictions, Water Withdrawal Restrictions, Dark Sky Ordinance, Tree protections)
- Preservation of Land (e.g., Land Purchases, Conservation Restrictions)

- Improved Agricultural Practices

The following table lists concerns for the health of the watershed as well as the potential restoration or land management activities that might be able to address each watershed concern. The last column lists all data layers that will be used in the analysis to find/prioritize the potential restoration or land management activities. The dataset categories correspond to the Table 3, which lists the data sources for each category.

Table 1. Watershed Concerns and Potential Activities to Address Them

Watershed Concerns		**Potential Restoration or Land Management Activity**	**Necessary Datasets**
Forest and Buffer Protection		Preservation of Land (Land Purchases, Conservation Restrictions)	Forest/Shrub Cover
			Streams
			Wetlands
			Parcels
		Buffer Restoration	Parcels
			Streams
			LU class
Wetlands Restoration		Wetland Restoration	Wetlands
			Soil type
			LU class
Groundwater Recharge		Preservation of Land (Land Purchases, Conservation Restrictions)	Soil type
			Topography
			Parcels
		Enhanced Regulations (e.g., Enhanced Buffer Protection, Land Use Restrictions, Water Withdrawal Restrictions, Dark Sky Ordinance, Tree protections)	Soil type
			Streams
			Wetlands
		Preservation of Land (Land Purchases, Conservation Restrictions)	Parcels
Habitat Assessment	Rare Species Habitat	Dam Removals	Species Habitat
			Dams
		Culvert Replacements	Species Habitat
			Culverts and Bridges
		Stream Restoration	Species Habitat
			Streams
			Assessment Sites
		Buffer Restoration	Species Habitat
			Streams
			Restoration Sites
		Wetland Restoration	Species Habitat
			Wetlands
		Invasive Species Management	Species Habitat
			Invasive Species

Watershed Concerns		Potential Restoration or Land Management Activity	Necessary Datasets
		Enhanced Regulations (e.g., Enhanced Buffer Protection, Land Use Restrictions, Water Withdrawal Restrictions, Dark Sky Ordinance, Tree protections)	Species Habitat
		Preservation of Land (Land Purchases, Conservation Restrictions)	Species Habitat
			Parcels
		Improved Agricultural Practices	Species Habitat
			LU class
			Groundwater Quality
			Nutrient Loading
	Cold Water Habitat	Dam Removals	Water Temperature Data
			Waterbodies
			Dams
		Culvert Replacements	Water Temperature Data
			Culverts and Bridges
		Buffer Restoration	Water Temperature Data
			Streams
		Stormwater Retrofits	Water Temperature Data
			Impervious Surface
			Groundwater Quality
			Nutrient Loading
		Wetland Restoration	Water Temperature Data
			Wetlands
		Enhanced Regulations (e.g., Enhanced Buffer Protection, Land Use Restrictions, Water Withdrawal Restrictions, Dark Sky Ordinance, Tree protections)	Water Temperature Data
		Preservation of Land (Land Purchases, Conservation Restrictions)	Water Temperature Data
			Parcels
		Improved Agricultural Practices	LU class
			Groundwater Quality
			Nutrient Loading
Agricultural Impacts		Buffer Restoration	LU class
			Streams
			Soil type
			Topography
		Wetland Restoration	LU class
			Wetlands
			Soil type
			Topography
		Improved Agricultural Practices	LU class
			Soil type
			Topography

Watershed Concerns	Potential Restoration or Land Management Activity	Necessary Datasets
		Groundwater Quality
		Nutrient Loading
Hydrologic/ Hydraulic Connections	Culvert Replacements	Streams
		Culverts and Bridges
		Watershed Size
	Dam Removals	Dams
		Topography
		Watershed Size
		Assessment Sites

1.6. Project Description

Deliverable

The primary deliverable of this project is a final report with prioritizations for potential restoration and land management activities in the Beaver River watershed, with scaled maps and tables supplementing the report document. The report will include a description of the study, project objectives, summary of project activities, maps and photographs, action plan for next steps and expected outcomes, and GIS data that can be incorporated into the NBEP's watershed restoration database.

Description

Project work is organized into a series of tasks culminating in the final report with ranked and prioritized restoration and protection projects.

Task 3 – Existing and Projected Conditions
Task 3.1 – Data Collection
Existing secondary data will be collected and assessed for quality suitability (as described in this QAPP) from sources such as RIGIS, Town of Richmond GIS, Town of Exeter GIS, USGS, RIDEM, StreamStats, Ecosheds.org and the Wood-Pawcatuck Watershed Flood Resiliency Management Plan (Fuss & O'Neill 2017). Additional species-specific habitat requirements will be confirmed using reliable website data from U.S. Fish and Wildlife Service (USFWS) or NatureServe, with additional data borrowed from Massachusetts Division of Fisheries & Wildlife.

Task 3.2 – Existing and Projected Conditions Assessment and Mapping
The secondary data, which has been assessed for quality, will be used to perform the change analyses to determine existing conditions (baseline) of land uses and build-out status and projected developmental pressures, which will likely impact the Beaver River watershed. To this end, HW will consider RIGIS Land Use/Land Cover projections for 2025, the Town of Richmond's Buildout Analysis as well as Zoning Data from the Town of Exeter. Existing and projected conditions will be mapped and areas which will likely experience higher development pressure will be highlighted.

Task 4 - Prioritization of Recommended Actions
Based on the secondary data reviewed in Task 3, HW will identify a set of potential restoration projects, as well as land conservation, regulatory reform, or other non-structural watershed planning opportunities that would benefit Beaver River habitat and ecology, especially considering the previously identified

developmental pressures. Those potential projects will be evaluated and ranked against a set of performance metrics to be developed by HW in consultation with the Town and Advisory Committee. Field visits to the potential priority sites will be conducted for "ground-truthing," to ensure that all assumptions made in the desktop analysis were correct. The culmination of this task will be a final list of prioritized projects.

Schedule

The tentative schedule for the project is provided in the following table.

Table 2. Tentative Schedule for the Project

	Task	Anticipated Start Date	Anticipated End Date
QAPP	Preparation	1-Feb-20	19-Mar-20
	Acceptance	19-Mar-20	15-May-20
Task 3	Data Collection	1-Feb-20	15-Mar-20
	Data Analysis and Mapping	16-May-20	31-Jun-20
Task 4	Restoration/Protection Actions	1-Jul-20	31-Jul-20
	Metrics Development/Ranking Methods	1-Aug-20	30-Sep-20
	Prioritization	1-Oct-20	31-Oct-20
Task 5	Produce Draft Report	1-Nov-20	31-Dec-20
Task 6	Public Meeting	1-Jan-20	31-Jan-20
	Final report	1-Feb-21	30-Feb-21
QAPP End Date/End of Contract	End of all activities	30-May-21	30-May-21

Geographical Locations

The Beaver River watershed, an approximately 12-square mile area situated almost entirely within the limits of Richmond, a suburban-rural community in Washington County ("South County"), Rhode Island. Approximately 15 % of the watershed area is located in the Town of Exeter, RI and 85% is located in the Town of Richmond, RI (Figure 2). The 11-mile long Beaver River is one of 8 tributaries of the Wood-Pawcatuck River watershed that was recently designated as part of the Wild and Scenic River system.

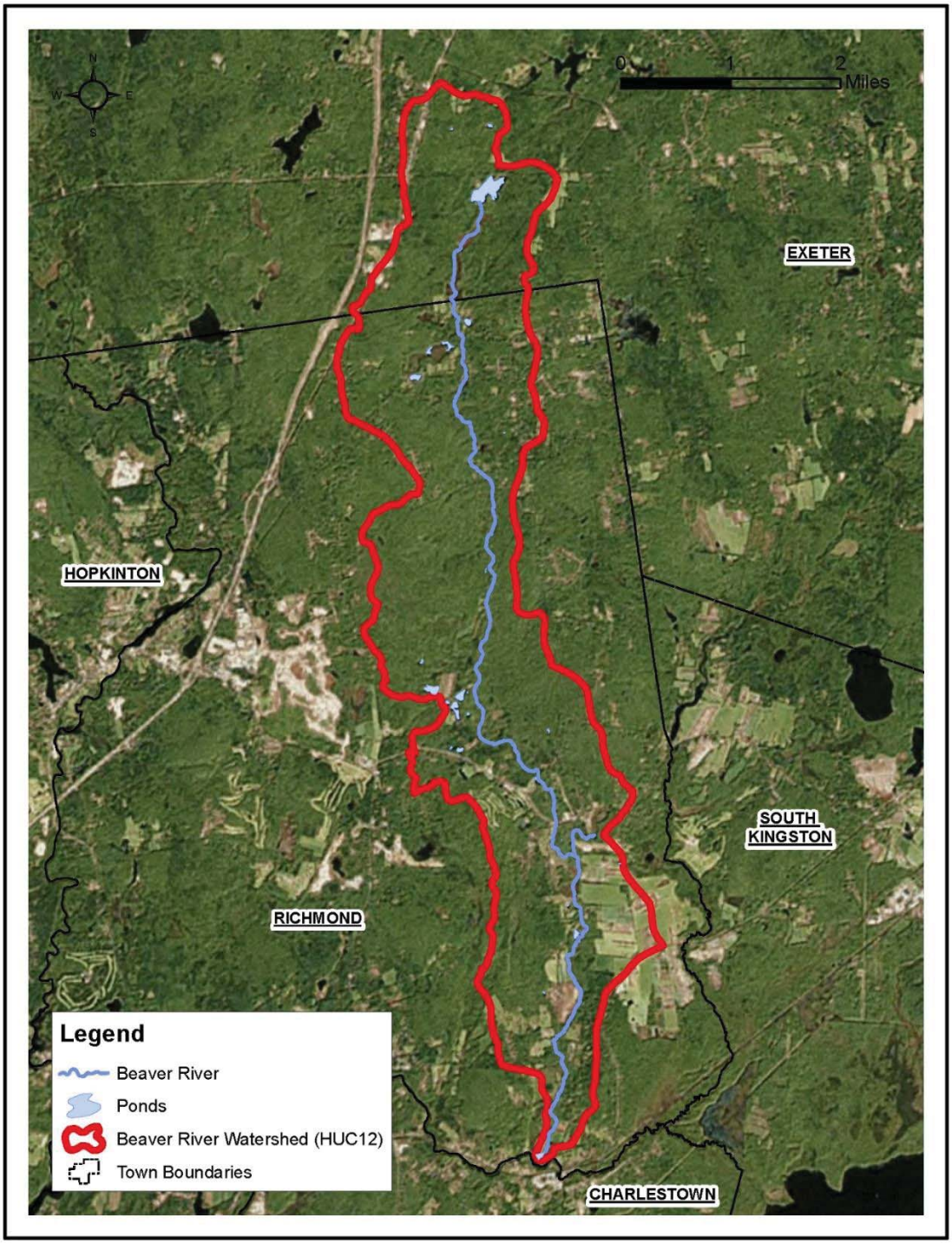

Figure 2. Map of the Beaver River Watershed Assessment Study Area.

Resources and Time Constraints

The Town and its consultant Horsley Witten Group, Inc. (HW) anticipate the completion of the desk-top analysis project within an approximate 12-month time period, using the project grant's finite funds and in-kind services.

As part of the Town's own efforts of continuous assessment of the natural resource that the Beaver River represents, the Town seeks to utilize volunteer engagement and citizen science to install in-stream temperature loggers in multiple locations throughout the watershed, following a field protocol previously developed by the Rhode Island Department of Environmental Management (RIDEM) and using the Quality Assurance Handbook and Guidance Documents for Citizen Science Projects to ensure the usability of the data to this project. Temperature loggers will ideally be installed no later than mid-May to identify potential elevated temperature thresholds adverse to aquatic resources (e.g., brook trout). This data collection project including volunteer engagement, training and logger installation is separate from the Beaver River Watershed Assessment and is not funded by NEIWPCC or EPA. However, it would be vastly helpful to determine the most appropriate logger installation sites before the loggers are employed. To this end, it will be beneficial for the Town if an initial analysis of spatial cover data could be performed by the consultant before the data loggers will be employed. Thus, it will be important for the initial analysis of secondary data to be completed by late April 2020, to the extent possible.

1.7. Quality Objectives and Criteria

In general, the quality of the data set will be assessed on the basis of:

- Source (federal, state and regional agencies preferred);
- Age (the most recent data revision of a given dataset will be used);
- Type (geospatial data will be preferred over data sources that will need to be digitized);
- Extent (only data which covers the Beaver River Watershed will be selected); and
- Metadata (data with sufficient metadata and/or background information will be preferred)

The following decision tree will be used to assess the quality of secondary data:

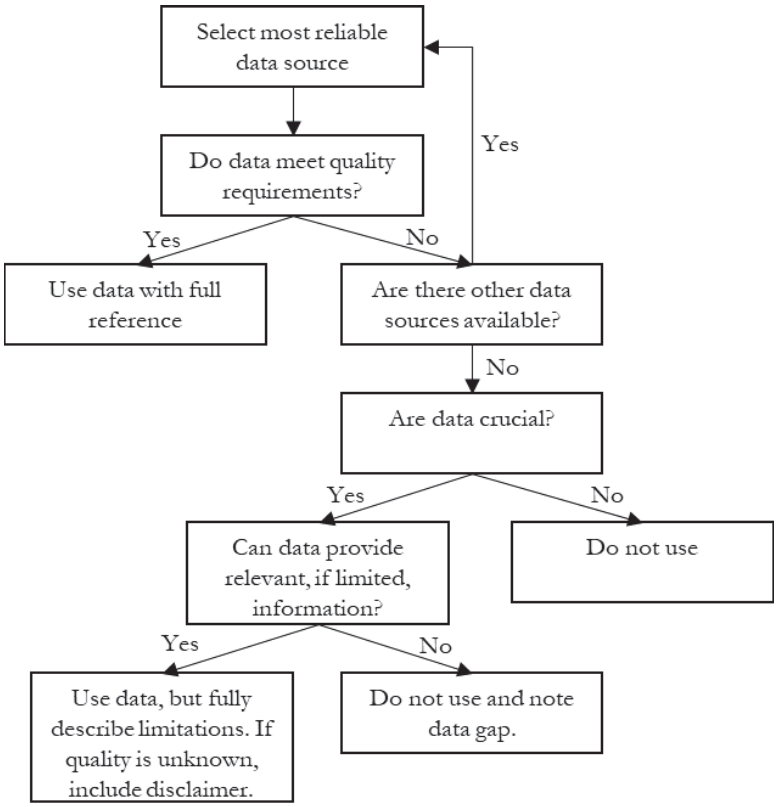

Figure 3. Data Decision Tree

1.8. Special Training/Certification

HW staff participating in this project have the background and experience to evaluate the acceptability of the data and perform the work. The key technical individuals who work on this assignment have an expert working knowledge of the procedures discussed in this QAPP.

Michelle West, P.E., is the project manager. She has eighteen years of professional experience in civil and environmental engineering. Her specific expertise is in stormwater management, watershed planning, hydraulic/hydrologic modeling, ecological restoration, and low impact development (LID)/green infrastructure planning, assessment, design, and implementation. She also has extensive experience with geographic information system (GIS) mapping, analysis, and modeling.

Geraldine Camilli, P.E., is the HW QA Manager for this project. She is a project manager and professional environmental engineer with almost 20 years of professional experience, including over a decade working on EPA projects. Her areas of expertise and experience include water and wastewater management, Geographic Information System (GIS) mapping, modeling, training, and data development; mathematical and numerical modeling; and sediment transport and coastal processes. Geraldine has managed a broad range of water and wastewater management studies and developed a number of models to evaluate water quality and quantity issues.

Maria Pozimski is the GIS Modeler for this project. During her seven years of experience in various GIS applications and hydrological modeling she has worked with private, public and governmental agencies as well as academic institutions on the creation and maintenance of databases and online data platforms, information gathering, data modeling, analysis and visualization. Maria's skills include: Coding in HTML, Java, Python and SQL, database management, analytical and hydrological modeling. Maria is proficient in the use of ArcGIS and the ArcGIS Online Platform, ENVI, Google Earth Engine, and ERDAS Imagine.

Neal Price is the Principal in Charge and Senior Hydrogeologist for this project. He has over 27 years of professional experience in the fields of hydrology and hydrogeology. Neal is a Senior Hydrologist and Associate Principal at HW and has conducted fieldwork, data analysis and interpretation, report preparation, and client contact for HW's varied hydrologic and hydrogeologic investigations over the past 23 years. The nature and extent of the work he has conducted includes wetlands, stream, and pond restorations; dam removals; culvert replacements; estuarine hydrology studies; nutrient management; wastewater disposal feasibility studies, design, and permitting; groundwater and surface water modeling; watershed and drinking water protection studies; and water supply investigations, design, and permitting.

Amy Ball, PWS, is the Senior Ecologist for this project. She has more than 24 years of professional experience as a wetland scientist and ecologist. Her specific expertise is in wetland botany and ecology, wetland restoration and mitigation, rare species and wildlife habitat assessments, wetland assessment and monitoring, and invasive species management.

1.9. Documentation and Records

As discussed in the customized Quality Management Plan (QMP) (HW, 2016), attached as Appendix A, HW has established procedures for the process of developing, reviewing, approving, and disseminating final work products.

Report Format:
HW will prepare and submit a draft report in WORD format that will include a description of the study,

project objectives, summary of project activities, maps and photographs, restoration and protection prioritizations, recommendations for next steps and expected outcomes, and EXCEL file attachment with GIS data that can be incorporated into the NBEP's watershed restoration database. The final report will be submitted in PDF format.

Data Report Package Information:
Maps will be provided in .JPG and .PDF formats, and GIS data produced through this project will be delivered in the ESRI File Geodatabase format in the UTM Zone 19N and Horizontal Datum NAD83, units feet. Feature classes within Feature Datasets will be in this projection. GIS data produced on this project will adhere to the requirements of EPA's National Geospatial Data Policy.

Metadata or documentation for all produced data, shall include source information (scale and accuracy, date, coordinate system), specific information about digital data layers (i.e., method used, geographic extent of data layer, file format, date of creation, staff contact, description and definition of data fields and their contents, related files, if any) and description of data quality and quality assurance methods use).

Data Storage and Public Access:
Data will be downloaded and stored electronically when possible. Data meeting an identified need will be organized in a folder with the topic name. Documents that meet the review standards as described in this QAPP will be shared among HW staff on the HW server, or some other means of file sharing, when requested. When data are available electronically, HW will keep all project materials as digital files on a company server. Each resource will be named with a meaningful title and saved in the project folder. The resources will be stored in HW's office in Sandwich, Massachusetts for at least five years after project completion unless the NEIWPCC and EPA project managers request otherwise. HW will conduct daily backup of files stored electronically.

The Town intends to post a PDF copy of the report to the Town website for availability to the public. Information will also be provided on the Town website indicating the availability of land cover data sets to the public and indication that entities and organizations interested in securing land cover data sets can contact the Town Planner to request information.

QAPP Dissemination:
The HW QA Manager will disseminate a copy of the QAPP to everyone on the distribution list (see Section 1.3) and will provide HW staff with a copy of this QAPP, and an overview of the quality assurance process associated with this project.

2. Data Acquisition

2.1. Sources of Secondary Data

In January of 2020, the Town of Richmond invited stakeholders to discuss potential sources for previously identified secondary data categories (see section 1.5). For each category, data sources of known and documented quality available were preferred. However, stakeholders also provided a number of potential data sources with either documentation deficiencies or gaps. These data will not necessarily be excluded but, instead, will be evaluated for use in specific, appropriate circumstances. For example, incompletely documented data could still be valuable to augment or refine the main, documented data sources, illustrate the current state of knowledge and uncertainties about watershed conditions, and illustrate the need for either improved, or additional monitoring programs.

The following table lists main data sources (white background) as well as potential supplementary data sources (grey background) for each data category that was introduced in Table 1.

Table 3. List of Data Sources by Data Category

Data Category	Secondary Data Source Title	Originating Organization	Year	Link (if applicable)
Base Map Information	Watershed Boundary Dataset: HUC 12	RIGIS	2019	http://www.rigis.org/datasets/watershed-boundary-dataset-huc-12
Topography	Contour Lines - 2 Foot	RIGIS	2011	http://www.rigis.org/datasets/contour-lines-2-foot-1
LU Class	Land Use and Land Cover	RIGIS	2011	http://www.rigis.org/datasets/land-use-and-land-cover-2011
Future Land Use	Land Use (2025)	RIGIS	1995	http://www.rigis.org/datasets/land-use-2025
	Richmond Buildout Analysis	Town of Richmond	2019	Received internally.
	Scenario 360 Buildout Wizard*	Community Viz	2018	https://communityviz.city-explained.com/communityviz/scenario360.html
Zoning Data	Richmond Zoning Data	Town of Richmond	2018	Received internally.
	Exeter Zoning Data	Town of Exeter	2018	Received internally.
Parcels	Richmond Cadastral Data	Town of Richmond	2018	Received internally.
	Exeter Cadastral Data	Town of Exeter	2018	Received internally.
Forest/Shrub Cover	Forest Habitat	RIGIS	2010	http://www.rigis.org/datasets/forest-habitat-2010
	Ecological Communities Classification	RIGIS	2017	Received internally.
Streams	Freshwater Rivers and Streams (1:5,000)	RIGIS	2006	http://www.rigis.org/datasets/f06b84e8b5c74efb82e1c7bd5b075308_0
Waterbodies	Ponds and Lakes	RIGIS	2017	http://www.rigis.org/datasets/ponds-and-lakes
Wetlands	National Wetlands Inventory	USFW	2014	https://www.fws.gov/wetlands/Data/Mapper.html
Nutrient Loading	Pawcatuck River and Little Narragansett Bay Water Quality Data	RIDEM	2019	Received internally.
	Watershed Treatment Model**	Center for Watershed Protection	2013	https://owl.cwp.org/mdocs-posts/watershed-treatment-model-documentation-final/
Rainfall Data	Average Annual Rainfall Data	NOAA	2019	https://www.ncdc.noaa.gov/cdo-web/
Species Habitat	Natural Heritage Areas and Species	RIGIS & RIDEM	2019	http://www.rigis.org/datasets/natural-heritage-areas
	Beaver River Species Data	RIDEM	1998-	Received internally.

Data Category	Secondary Data Source Title	Originating Organization	Year	Link (if applicable)
			2019	
	Margaritafera Margaritafera Habitat	RIDEM	2019	Received internally.
	List of Species of Greatest Conservation Concern (SGCN) (Amphibians and reptiles)	RIDEM	2019	Received internally.
	Wood Turtle Habitat	RIDEM	2019	Received internally.
	Species-Specific Habitat Requirements	USFWS	2020	https://www.fws.gov/southeast/endangered-species-act/critical-habitat/
Invasive Species	RI Forest Health Works Project: Points All Invasives	RIGIS	2019	http://www.rigis.org/datasets/ri-forest-health-works-project-points-all-invasives
Impervious Area	Impervious Surfaces	RIGIS	2011	http://www.rigis.org/datasets/8c40daec43ce4ea2a90396c42e739df0
Watershed Size	StreamStats	USGS	2020	https://streamstats.usgs.gov/ss/
Ground Water Quality	Groundwater Quality Standard	RIGIS	2018	http://www.rigis.org/datasets/groundwater-quality-standard
Soil Type	Soils (HSG)	USGS	2018	https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx
	Hydric soils	USGS	2018	https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx
Water Temperature Data	Beaver River Temperature Data	RIGIS	2016-2019	Received internally.
	An Assessment of Brook Trout (Salvelinus fontinalis) Distribution and Water Temperature Fluctuations in the Beaver River, Rhode Island By Jon C. Vander Werff	URI	2018	Received internally.
	Citizen Science Data from Temperature Loggers employed by the Town (if	Town of Richmond	2020	To be collected.

Data Category	Secondary Data Source Title	Originating Organization	Year	Link (if applicable)
	available)			
	Landsat Oli-8 (TIR)	USGS	2019	https://earthexplorer.usgs.gov/
Flooding	Areas of Flooding	Fuss&O'Neill	2017	Received internally.
	FEMA Floodplain, to be in effect in April Town of Richmond	FEMA/Town of Richmond	2020	Received internally.
Culverts/Bridges	Culverts and Bridges Ratings	Fuss&O'Neill	2017	Received internally.
	Road – Stream Crossings	Town of Richmond	2019	Received internally.
Dams	Dam Management Recommendations	Fuss&O'Neill	2017	Received internally.
	Dams	RIGIS	2018	http://www.rigis.org/datasets/dams
	Northeast Aquatic Connectivity Assessment Project	TNC	2017	Received internally.
Assessment Sites	Geomorphic Assessment Sites	Fuss&O'Neill	2017	Received internally.
Restoration Sites	River Corridor Restoration Sites	Fuss&O'Neill	2017	Received internally.

* If needed, a watershed wide build-out analysis will be performed using the Scenario 360 Build-Out Wizard. This will allow an estimation of the amount and location of development for the entire watershed. Performing a build-out analysis identifies the holding capacity of the land. A build-out is a supply-side calculation applied to a clearly delineated area that is based on assumptions for density, and secondary data inputs for physical constraints to development (such as waterbodies, wetlands and flood zones), and land-use regulations. Traditionally, planners have performed build-out analyses by using spreadsheet tables to associate build-out assumptions with a hard copy map. The Scenario 360 Build-Out Wizard automates the entire build-out process. Data sources for the necessary data inputs are listed in this table.

**If needed, the Watershed Treatment Model (WTM) will be used to estimate annual pollutant loads for sediment, nutrients (total nitrogen and total phosphorus), and bacteria, as well as annual stormwater runoff volumes. The WTM is a public-domain, spreadsheet model which relies principally on the following secondary data inputs: annual rainfall; watershed size; land use and corresponding standard pollutant loading and runoff coefficients; and soil data, including type and depth to groundwater. Data sources for the necessary data inputs are listed in this table.

2.2. Quality of Secondary Data

Any problems with the quality of data published by RIGIS or federal agencies are considered unlikely. Other, supplementary datasets will only be incorporated if they meet the quality standards described in this section.

HW has a Secondary Data Assessment Checklist (Appendix B) that analysts use to verify that data will be matched for the work. A visual inspection of data will be done to check for anomalous values before inclusion in the final report (Section 4.2). If following a visual inspection, an analyst is satisfied that the main and supplementary data sources correspond with each other, then the data quality verification threshold is considered satisfied.
If while verifying data accuracy, or performing the work, an analyst detects data quality issues that will affect the results, HW will consult with the NEIWPCC and EPA project managers and document the resolution in the final reports. Flawed sources will be handled on a case-by-case basis. A data quality objective of this work is to have confidence in the results—so all decisions about data need to be sound.

Any limitations in data quality will be fully disclosed. If a decision is made to use data of unknown quality, then this limitation will be indicated in a disclaimer that will be added to any project deliverable. The disclaimer will read: "These data are of unknown quality and presented here for illustrative purposes only. No inferences regarding the environmental condition of the Beaver River Watershed should be made based on these data until their quality can be determined."

2.3. Data Management

Management & Storage
See Section 1.9

Data handling equipment:
All spatial data will be processed, compiled and analyzed using the ArcMap 10.7.1 software including the spatial analyst extension. Relevant metadata will be recorded using EPA Metadata Editor (EME) 5.0 in the EPA Geospatial Metadata Style (see Appendix C).

Spatial data will be stored in a file geodatabase format on the HW server, through which it can also be shared within HW. To transfer geospatial data, files will be sent in geodatabase format to retain relevant metadata. Other data types, such as spreadsheets, reports, etc. will be handled with the programs of the Microsoft Office 365 Business Suite.

Individual(s) responsible for data management
Each individual receiving/creating content within this project has the following responsibilities:

- Save a read-only, unedited, copy of the original file in a designated "Originals" folder immediately upon receipt/creation of the data.
- Record appropriate metadata.
- If a file becomes outdated, do not delete it, but move it to a designated "Archive" folder.
- In case of errors contact the person responsible for overall data management.

The GIS Analyst will be responsible for the overall oversight of the data management in this project. Their responsibilities include:

- Checking files regularly for correct naming, metadata and location of the file in the folder structure.
- Checking each file that will be part of the final product for correct naming, metadata.
- Respond to data management questions from the team.

3. Assessment and Oversight

3.1. Assessments and Response Actions

The technical staff will conduct assessments of the secondary data sources before incorporating them into the analysis and will fully describe metadata, limitations and potentially disclaimers.

The QA Manager will review data limitations and potential disclaimers of the secondary data sources. Furthermore, the QA manager will review the analysis outcomes and project deliverables before submittal (for schedule see Section 1.6). Any issues and potential solutions will be discussed with the EPA and NEIWPCC project managers.

NEIWPCC may implement, at their discretion, various audits or reviews of this project to assess conformance and compliance to the quality assurance project plan in accordance with the NEIWPCC Quality Management Plan.

NEIWPCC may issue a stop work order and require corrective action(s) if nonconformance or noncompliance to the Quality Assurance Project Plan is found.

3.2. Reports to Management

The Town of Richmond will file quarterly reports as a mechanism to keep NEIWPCC and EPA project managers apprised of progress and communicate any QA-related findings associated with the project's secondary data. The Town anticipates that Quarterly Reports will be submitted in April 2020, July 2020, October 2020, and January 2021.

4. Data Reduction, Reporting, and Validation

4.1. Data Reduction

In general, data reduction will be kept to a minimum. The data reduction types anticipated for this project include:

- Datasets with multiple categories may need to be combined (summed). (e.g., data on land cover types within the watershed may be reduced by grouping certain land covers (e.g., types of forest, types of residential) into a single category)
- Data units may need to be changed for report consistency and/or to allow comparisons across data sources.
- Certain datasets may be reduced and presented as percentages (e.g., percentage of fish species caught).

- Some data reduction may also be needed to display data in map form (maps will normally be intended to summarize some of the available information). Possible data reductions include:
    - Average values at a site (e.g., stream temperature)
    - Data may be reduced for comparison with a given benchmark. (e.g., concentrations of fecal coliform may be compared to the recommended standards and data displayed as above or below this benchmark)
    - GIS data may be reduced using geoprocessing techniques to combine, analyze, and/or select relevant data for the indicators. These data may be organized into one or several layers.

4.2. Verification and Validation Methods

The accuracy of project data is validated by careful and clearly defined data reduction and performing visual inspection of data before including it in the deliverables. The following procedures will be observed for secondary data validation:

- A copy of every original dataset obtained from each data source will be saved as a read-only, protected file in the event the integrity of the working datasets is compromised.
- Working data will be stored in spreadsheet format and will include all relevant raw data, which will be locked for editing.
- Data manipulation will be minimized to decrease the chances of inadvertently introducing errors. If necessary, then it will be starting from the raw, protected dataset. All formulas, along with units and conversion factors, will be shown in the spreadsheet.
- Prior to inclusion in the project deliverables, raw and/or reduced data will be displayed in graphic form and inspected to detect any anomalous value. Most environmental indicators to be displayed have been measured in the past and values are expected to fluctuate between "generally accepted values." If apparently anomalous values are detected, then any data reduction will be verified. If the seeming anomaly is present in the original dataset, the data generator will be contacted for clarification and/or the issue will be discussed with appropriate parties. Any decision to eliminate "anomalous values" will be documented in the working data spreadsheets that will be kept as part of the project files and will be noted in the list of sources of secondary data (Section 2.1).
- In rare occasions, a dataset may only be available in hard copy format. In these cases, data will be manually entered into a spreadsheet. To ensure an error-free copy, summary statistics will be checked if possible. In addition, a few individual values will be cross-checked as well.
- Data downloaded, submitted by a secondary party, or created by HW through GIS geoprocessing methods, will be stored with original files for repository data management and also be re-projected to a common horizontal datum and coordinate system (NAD 1983 – UTM Zone 19N). This coordinate system is suitable for the region of the Beaver River Watershed. The re-projected data will be converted and stored into a Feature Dataset which will maintain this coordinate system within each Geodatabase.
- All data displayed and used in ArcGIS will have the projected coordinate system (NAD 1983 - UTM Zone 19N). This will be verified by checking the Data Frame properties within each ArcGIS map.
- When necessary, GIS data will be clipped for the Beaver River Watershed. The manipulation of datasets will be noted and new metadata will be created reflecting the purpose, sources, and geoprocessing of the outputs shown in the report.
- Any limitations on data usability or remaining data uncertainty will be communicated in the final report.

4.3. Reconciliation with User Requirements

As described in Section 1.9, the final report, which includes all data limitations, will be made available on the Town website. All data limitations are therefore available to the public and all potential users of the analysis results.

5. References

Caraco, D. 2013. Watershed Treatment Model (WTM) 2013 Documentation. Center for Watershed Protection, Ellicott City, MD. https://owl.cwp.org/mdocs-posts/watershed-treatment-model-documentation-final/

Community viz: Community Viz Scenario 360, 2018, Working with the Build-Out Wizard Scenario 360 v.5.2. https://communityviz.city-explained.com/PDFs/latest/WorkingWithTheBuild-OutWizard.pdf

Fuss & O'Neill. 2016. Quality Assurance Project Plan (QAPP) – Developing a Resiliency Management Plan for Pawcatuck River Watershed (CT, RI). 41 pp and 7 Appendices.

Fuss & O'Neill. 2017. Wood-Pawcatuck Watershed Flood Resiliency Management Plan. 109 pp and 13 Appendices.

Narragansett Bay Estuary Program (NBEP). 2012. Comprehensive Conservation and Management Plan. Update 2012. Envisioning an Ecological Future for the Narragansett Bay Region. 73 pp.

Rhode Island Department of Environmental Management (RIDEM). 2015. Wildlife Action Plan. Seven chapters + appendices.

Wood-Pawcatuck Wild and Scenic Study Committee (WPWSSC). 2018. Wood-Pawcatuck Wild and Scenic River Stewardship Plan for the Beaver, Chipuxet, Green Fall-Ashaway, Pawcatuck, Queen-Usquepaug, Shunnock, and Wood Rivers.

APPENDIX D

Subcontractor Business Integrity Approval

(Form on next page)

ELIGIBLE APPLICANT PROJECT
CONTRACTOR APPROVAL FORM

EOH COMMUNITY WASTEWATER GRANT PROGRAM
CONTRACTOR APPROVAL FORM

(DEP Contract Number: CRO-597; Registration No. CT 826 20201409228)

For Contractors of Eligible Applicants subject to Section 2.02(D) of the
EOH Community Wastewater Grant Program Agreement

Part I: CONTRACTOR INFORMATION:

Business Name of Program Project Contractor/ Prior Program Participant Contractor:

_____

Principal Place of Business Address: (Street, State, zip code)

_____

Business Contact Information:

Phone Number:_____

Email:_____

Fax: _____

Type of Business: (sole proprietorship, partnership, corporation, other)

_____

Business EIN/SSN: _____

I hereby affirm that the information supplied is true and correct.

Signature _____ Title_____

Print Name _____ Date: _____

Part II: AGENCY REVIEW

AGENCY RESPONSE

Business Integrity Approved ____ **Business Integrity Rejected _____**

APPENDIX E

Insurance Specifications

(a) Before commencing performance of any Work in connection with this Agreement, the Program Participant shall furnish to NEIWPCC a certificate or certificates of insurance in a form satisfactory to NEIWPCC, with AM Best's Ratings of A or higher in good standing and qualified to do business in each jurisdiction where the work is performed and showing compliance with this section. The certificate(s) shall provide that the policies shall not be changed or canceled or allowed to expire until the insurer or its agent has given at least thirty (30) days' prior written notice to NEIWPCC and DEP. The Program Participant shall not begin performance until the delivery of the certificate(s) to NEIWPCC.

(b) The Program Participant shall throughout the term of this Agreement, obtain and maintain in force, and shall require any subcontractor to obtain and maintain in force, both for the benefit of NEIWPCC the City of New York, and the Water Board of the City of New York, together with its officials and employees, the following kinds and amounts of insurance:

(i) Workers' Compensation Insurance. The policy shall cover the obligations of the contractor in accordance with the Workers' Compensations Law and Disability Benefits Law covering all operations under the Agreement, whether performed by it, or by any subcontractor. Prior to or upon execution of this Agreement, and as required by N.Y. Workers' Compensation Law §§57 and 220(8), the Program Participant shall submit proof of Program Participant's workers' compensation insurance and disability benefits insurance (or proof of a legal exemption) to NEIWPCC in the following acceptable form:

- C-105.2 Certificate of Workers' Compensation Insurance;
- U-26.3 -- State Insurance Fund Certificate of Workers' Compensation Insurance;
- Request for WC/DB Exemption (Form CE-200);
- Equivalent or successor forms used by the New York State Workers' Compensation Board; or
- Other proof of insurance in a form acceptable to DEP.

(ii) Commercial General Liability and Property Damage Insurance. Unless otherwise specified, each policy shall have limits not less than: $1,000,000 combined (Bodily Injury & Property Damage) $2,000,000 general aggregate, single limit per occurrence, $25,000 maximum deductible; $2,000,000 (Personal & Advertising Injury); $2,000,000 (Products/Completed Operations) aggregate; $1,000,000 each occurrence (Automotive Liability). Such limits may be provided through a combination of umbrella and primary policies, in form no less broad than a standard ISO CG 00 01. Such insurance shall include products-completed operations coverage with a limit of no less than $1,000,000 per occurrence.

(iii) For work including professional engineering services for design, engineering surveys and/or construction management: Professional Liability, $2,000,000 per claim,

$2,000,000 aggregate, Deductible or self-insured retention not to exceed $50,000 per claim. If coverage is written on a claims-made basis, any retroactive date shall be no later than the effective date of this Agreement; and continuous coverage shall be maintained or an extended discovery period will be exercised for a period of two years beginning from the time that services under this Agreement are include defense costs and shall apply to liability arising from contractor's, acts, errors, and/or omissions.

(c) Other Insurance Provisions

The identified insurance shall include the following provision on the Commercial General Liability and Umbrella insurance policies to name the following as additional party insureds (Additional Insureds), covering all the activities of the contractor with respect to the performance of this Agreement:

"**The City of New York, and the Water Board of the City of New York, including its officials and employees, and NEIWPCC, its officers, directors, employees and agents are hereby named as Additional Insured.**"

The insurance shall also:

a. Require NEIWPCC to be notified in writing at least thirty (30) days prior to cancellation of or any material change in the policy;
b. Be primary to insurance maintained by NEIWPCC or our affiliates (and insurance maintained by us and/or our affiliates shall be non-contributory to such insurance);
c. Endorsed to waive rights of recovery by subrogation in favor of NEIWPCC and our affiliates; and
d. In the case of policies or provisions relating to products, completed operations and professional liability, survive termination or expiration of this Agreement.

NEIWPCC Guide for Contractors

The Electronic Agreement Process

PLEASE READ THIS BEFORE SIGNING YOUR AGREEMENT

NEIWPCC sends all Contracts, Memoranda of Agreement (MOA), and Amendments to existing Agreements for signature through email as a .pdf attachment. This allows for faster turnaround time, increasing efficiency for all parties involved. A clause in our Contracts/MOAs/Amendments states that "the use of scanned or facsimile signatures for the execution of this Agreement shall be legal and binding and shall have the same full force and effect as if originally signed." To ensure receipt of important emails, NEIWPCC requests that Contractors please add contracts@neiwpcc.org to their address book or safe list.

I. Agreement Process Initiation

DUNS Number: All contractors must submit a DUNS number to NEIWPCC in order to obtain an Agreement. For more information on DUNS and how to obtain a DUNS number, please see our "Guide to DUNS" linked through our Contractor Guidance page: http://www.neiwpcc.org/contractors/guidance.asp

FID Number: All Contractors must have a Federal Identification Number ("FID"). A Contractor who does not have an FID number must obtain a Fiscal Sponsor before entering into an Agreement with NEIWPCC.

Scope of Work: Contractors will work with their technical contact at NEIWPCC or one of NEIWPCC's affiliate programs to finalize a Scope of Work. The final Scope of Work will generally be based on a Contractor's proposal, submitted in response to a competitive bid for contracts.

Task Based Payment Schedule: In addition to the Scope of Work, Contractors must submit a Task-Based Payment Schedule which is a breakdown of all project tasks and their associate costs. NEIWPCC pays Contractor invoices on a tasks completed basis – and not on a reimbursement basis. This is a sample Schedule:

$1,000	Task 1: Develop Quality Assurance Project Plan (QAPP)
$7,500	Task 2: Evaluate each pond system and outlet tributary
$ 700	Task 3: Measure and documents results
$ 300	Task 4: Quarterly Reports
$ 300	Task 5: Final Report Approved
$9,800	Total

Upon receipt of the final Scope of Work and Schedule, a Contract/MOA/Amendment will be drafted and sent to the Contractor for signature through email as a .pdf attachment. Contractor emails will be received from contracts@neiwpcc.org.

II. Contractor Receipt of Agreement

It is a Contractor's responsibility to review the language of the Contract/MOA/Amendment upon receipt. Contractors should understand that negotiation of Agreement language can prolong the agreement process and that project work cannot begin until a Contract/MOA is fully executed. The Contractor's authorized signatory signs the document, scans it, and sends it back as an email attachment to contracts@neiwpcc.org. **Please send back the entire document - NEIWPCC does not accept signature pages only.**

III. Agreement Execution

NEIWPCC's Executive Director will review all Contractor-signed Agreements, and upon approval will sign the Agreement. After NEIWPCC has received all required documentation mentioned below, the Contractor will receive a scanned copy of the fully executed Agreement as a .pdf attachment to an email from NEIWPCC.

Contractors are prohibited from beginning project work until they receive a fully executed agreement from NEIWPCC.

IV. Mandatory Forms Submitted with Agreement

In addition to the signed Agreement, Contractors are required to submit 3 forms before they can begin work or claim payment under an Agreement:

1. **W-9 Form:** All contractors must complete a W-9 form for Internal Revenue purposes. No invoices can be paid until NEIWPCC's accounting department receives a W-9 form. **Contractors must submit an updated W-9 form every 5 years**.

2. **Proof of Insurance:** Contractors must submit proof of adequate insurance coverage on an **annual basis** for the duration of the project. **Please make sure your insurance document lists the same coverage amounts as required by your Agreement.** Do not send copies of your entire policy. For most Contractors, an **Acord Certificate** is sufficient proof of insurance and may be obtain from your insurance broker. Make sure the broker enters NEIWPCC's name and address in the Certificate Holder section of the Acord form. For other Contractor, the following documentation is acceptable:

   - **Evidence of Insurance** or **Certificate of Coverage** – for municipalities, or
   - **Memorandum of Insurance** – for universities, or
   - **Letter of Self-Insurance** – for self-insured organizations

3. **Disadvantaged Business Enterprise (DBE) Form:** NEIWPCC must place a fair proportion of our acquisitions with disadvantaged business enterprises (DBEs), including small business enterprises, minority business enterprises (MBEs), women's business enterprises (WBEs), labor surplus area firms, and small businesses in rural area (SBRAs). DBEs should be given the opportunity to participate in contract and procurement for supplies, construction, equipment and services under any EPA grant or cooperative agreement. All NEIWPCC Contractors are required to submit this questionnaire even if they do not qualify for the program. If a repeat Contractor has completed this form previously, a new questionnaire is not required for each new agreement.

When Project Work May Begin

Contractors may begin work only after they have received a fully executed Agreement from NEIWPCC. As stated above, the Contractor must submit a W-9, DBE form and Insurance Certificate before final execution of the Agreement. In addition, if a QAPP is required, it must be approved by the NEIWPCC Project Officer and the Funding Agency before any "environmental data" work may begin. *Contractors will not be paid for work done prior to the finalization of the fully executed agreement and an approved QAPP*.

NEIWPCC Contractor Guidance Webpage

The following forms & resources can be found on NEIWPCC's webpage at http://neiwpcc.org/contractors/guidance.asp

- **W-9 & DBE forms**

- **Match Documentation Form:** If there is a matching funds provision in the Agreement, the Contractor must document the use of matching funds on this form.

- **Sample Invoice:** Contractors can use this sample invoice for guidance when submitting invoices for payment. Payments for work performed shall be made from approved original invoices. Invoices are to be submitted by the Contractor to the Oversight Project Officer(s) for approval prior to forwarding to the Commission for payment according to the Task Based Payment Schedule. Invoices must include (i) the name and address of the Contractor, (ii) the invoice date, (iii) the NEIWPCC Project Code, (iv) the contract identification number-if any, (v) the time period of work invoiced, (vi) a description of the Work performed, (vii) shipping and payment terms, (viii) the address where payment is to be sent, (xi) the person to be notified in the event of a defective invoice, and shall (1) provide itemized documentation of costs related to work performed, (2) be accompanied by a brief written progress report, and (3) be supported by such data as the NEIWPCC may reasonably require.

- **Guide to Quarterly Reports:** Contractors are responsible for preparing and submitting brief quarterly reports which are due by the 10th day after the end of each calendar quarter. Contractors must submit reports even if there is no activity during the quarter. Payment of invoices is contingent upon NEIWPCC's timely receipt and approval of reports.

Questions: We are happy to answer any questions related to this process. Please send any questions, comments, or concerns to contracts@neiwpcc.org.