SFY 2020 Corporate Business Tax (CBT) and 319(h) Funding for Grants to Prevent, Mitigate and/or Control Freshwater Harmful Algal Blooms (HABs) - AMENDED JANUARY 10, 2020 TO REVISE GRANT MATCH REQUIREMENTS AND TO EXTEND THE DEADLINE FOR THE SUBMITTAL OF PROPOSALS TO MONDAY JANUARY 27, 2020 AT 5PM EST

1. REQUEST FOR PROPOSALS

Cyanobacteria, also known as blue-green algae (although not true algae) are naturally present in lakes and streams in low numbers that can form dense blooms under suitable environmental conditions (optimal sunlight, elevated nutrients from stormwater runoff or other sources, warm temperatures and calm water). These Cyanobacterial Harmful Algal Blooms (HABs) can discolor the water and produce floating mats or "scums" on the surface. Under the right conditions these HABs can produce cyanotoxins, toxins that can be dangerous for humans, pets, livestock and wildlife.

In 2019, New Jersey experienced an unprecedented number of HABs in its freshwater waterbodies, resulting in advisories to limit direct contact and closure of a number of freshwater recreational bathing beaches to protect public health. Some of these advisories and recreational bathing beach closures had a negative impact on local economies and limited NJ residents and visitors' enjoyment of these natural resources. To protect public and animal health, the recreational and potable uses of our waters, and our local economies, the New Jersey Department of Environmental Protection (DEP) issues this Request for Proposals (RFP) to seek applications for grants of up to a total of $2,500,000 to eligible applicants to fund the implementation of innovative or proven methods to prevent, mitigate and/or control freshwater HABs within the State in accordance with and subject to the conditions set forth herein. The DEP may award individual grants of up to $500,000 per applicant. Grantees will be required to provide a 33% match to any DEP funding received through further investment in projects to prevent, mitigate and/or control freshwater HABs within the State, resulting in a $3,325,000 investment in projects that will help avoid or mitigate HABs in the future.

2. DESCRIPTION OF ELIGIBLE PROJECT TYPES

The DEP is making up to $2,500,000 available for innovative or proven methods to prevent, mitigate and/or control freshwater HABS within the State ("Eligible Projects"). Eligible Projects may be conducted within any freshwater waterbody, including lakes, reservoirs and other surface waterbody types, provided the applicant demonstrates the project will prevent, mitigate and/or control freshwater HABS within the State.

For the purposes of this RFP, the following descriptions shall apply:

a. **Prevention** shall include projects designed to avoid the occurrence of HABs or reduce their intensity and duration including best management practices that reduce nutrient input;

b. **Mitigation** shall include projects designed to minimizing HAB impacts on human and animal health, aquatic resources, and local economies when they do occur; and

c. **Control** shall include projects that directly reduce or contain a HAB

Eligible Projects designed for HAB prevention may focus on addressing the root causes of the blooms through nutrient management, including internal and external loadings, using a wide variety of approaches.

Eligible Projects designed to mitigate and control HAB impacts may include short-term bloom reduction techniques such as simple installation (barley straw), physical treatment structures like aeration systems, mechanical skimming, water column mixing, aeration, biological treatment, chemical algaecides, and/or chemical additions such as alum and other flocculation techniques.

Applicants shall address the need for the development of long-term operation and maintenance plans including funding of long-term maintenance where appropriate for any Eligible Project.

All Eligible Projects shall be capable of completion within three (3) years of the date of award.

Eligible Projects may include water quality monitoring only to the extent necessary to fill information/data gaps or for specific assessment of project success and, if included, shall follow DEP-approved sampling protocols. Eligible projects shall be scored and ranked in accordance with the Water Quality Restoration Grants Project Evaluation Criteria contained in Appendix B.

3. REQUIREMENTS FOR APPLICANT ELIGIBILITY

Applicants eligible to apply for funding under this RFP (Eligible Applicants) shall be limited to:

- State, regional and local government units or entities entirely within New Jersey, including municipal planning departments or boards, health departments; County planning departments or boards, health departments;
- Designated water quality management planning agencies;
- State government agencies, universities and colleges;
- Interstate agencies of which New Jersey is a member; and
- Watershed and water resource associations and other local nonprofit organizations recognized by the Internal Revenue Service under Section 501(c)(3) of the Internal Revenue Code.

Eligible Applicants shall, in their application, demonstrate they possess:

- Sufficient staffing and other resources with the capability, expertise, and environmental experience to perform the proposed project directly or thru contracting services;
- The ability to establish and maintain partnerships to ensure project implementation as well as long-term operation and maintenance/ management; and
- Authority to implement the proposed project(s) and property or other access rights to construct the project. The applicant shall provide documentation that the applicant possesses or will obtain the property or access rights necessary to conduct the project.

4. DEADLINE FOR SUBMISSION OF PROPOSALS

PROPOSAL MUST BE SUBMITTED BY: 5pm EST Monday, January 27, 2020

Applicants must email an electronic copy of the project proposal that includes all elements of the proposal, by 5pm EST on Monday, January 27, 2020, the application deadline to NPSgrants@dep.nj.gov in Microsoft Word,

PDF or compatible format. Other larger format documents, such as maps tables and photos, may be submitted and postmarked by the application deadline to:

New Jersey Department of Environmental Protection
Division of Water Monitoring and Standards
Bureau of Environmental Analysis, Restoration and Standards
401 East State Street
P.O. Box 420 / Mail Code 401-04I
Trenton, New Jersey, 08625-0420
Attention: Dian Smith

The Department held a public information session from 9:30am to Noon in the Public Hearing Room at DEP on Friday December 20, 2019. As a result of the questions and feedback received at that public information session, the DEP has chosen to amend this RFP to revise match requirements to allow the value of in-kind services directly related to the Eligible Project to count towards the applicants 33% match and to extend the proposal deadline to 5 pm EST Monday January 27, 2020.

5. PROJECT SELECTION PROCESS

To be considered for funding, a proposal must be complete and timely in accordance with specifications within this RFP.

The DEP will conduct a preliminary review of all applications and will reject any ineligible or incomplete proposals. Applications compliant with specifications within this RFP will be reviewed, grouped by project or proposal type, and ranked by an evaluation team comprised of DEP staff, in accordance with the Project Evaluation Criteria contained in Appendix B. In some cases, the DEP may ask applicants to make minor clarifications to a project proposal to improve its understanding of the project proposal or to correct an error in the submittal.

DEP may award grant funds to Eligible Applicants for Eligible Projects that it deems, in its sole discretion, to be most beneficial to the state per the criteria herein. The DEP reserves the right not to award a grant if, at its sole discretion, no acceptable proposal is received, funding is no longer available or for any other reason. All applicants will be notified in writing with the DEP's grant award decisions in approximately 30 days from the proposal deadline.

Once applicants have been notified of the DEP's intent to fund a specific project, they will be required to submit all contract development forms within 30 days from notification. Failure to adhere to this deadline may result in an immediate reallocation of funds to other suitable projects.

The following table contains information on the schedule for the proposal submission, funding, and completion of contracts.

Grant Processing Schedule

Action	Responsibility	Deadline
Full Proposal Submission – EXTENDED DEADLINE	Applicant	5pm, EST, Monday January 27, 2020
Funding Recommendations and Notifications	DEP	On or about Friday February 28, 2020
Completion of Contract Execution Forms	Applicant	On or about Wednesday April 15, 2020

6. PROJECT AWARD – FORM OF AGREEMENT

By acceptance of funding awarded under this RFP, any Grantee agrees to be bound by and execute the grant agreement, attached hereto as Exhibit F, without modification. Completion of the project and expenditure of grant funds shall be in accordance with the terms set forth therein, and the same are, as applicable, incorporated by reference into this RFP. The grant award date shall be start date on the executed contract. Any work performed in accordance with the submitted scope of work and budget shall be eligible for reimbursement upon the final execution of the contract. Any work performed outside of the tasks enumerated in the submitted scope of work and budget shall not be reimbursable.

7. CONTENTS OF COMPLETE PROPOSAL

The proposal shall not exceed 10 pages and shall be presented as a scope of work with a detailed description of the project implementation strategy, milestones, outputs and schedule, the environmental benefit that will be achieved by the project, and how effectiveness will be measured including a description of the expected measurable environmental results and all eligibility criteria set forth herein. The Scope of Work shall be complete and shall not require major changes or edits.

Any documents such as reports, reference photos, maps, and data should be added as supplemental information and are not to be included in the 10-page Scope of Work.

Supplemental information (*e.g.* site plans, maps, blueprints) may be submitted in a larger format if necessary and mailed in the matter set forth above.

The format of the proposal shall be as follows. For more information, see Appendix A.

Cover Page

The format for the required cover page for the proposal is provided in Appendix A.

Abstract

The proposal must include a brief abstract of the project that includes a summary of the key information in sufficient detail to address the requirements of an Eligible Project, including, but not limited to, the category applied for, the major elements of the project, the objectives to be achieved, and the spatial extent of the work are clear.

Project Summary

The proposal must include a brief project summary that includes background, location, and goal(s) of the project.

Applicant Description

A description of the applicant and how it meets the eligibility requirements set forth herein. Indicate whether this applicant or any partners have received previous CWA section 319(h) and/or corporate business tax (CBT) funded grants. If so, include all grant contract date(s), project title(s), expiration date(s), and grant identification number(s) as an appendix.

Project Description and Implementation Schedule

Describe how the project is eligible under this RFP, why the applicant believes the proposed project is needed, the scope of the problem, and/or current condition of the targeted water body. Identify the source used to determine the condition. Define the desired result that this project will seek to achieve. Provide documentation that the applicant possesses the property or will obtain the property or access rights necessary to conduct the project.

Identify, to the extent known, pollution stressors/sources that cause or contribute to the HAB condition that will be addressed. Explain how and to what degree implementing this project will address the root cause stressors/sources of the problem and any direct or indirect environmental benefits that will be achieved.

The proposed project shall be described in terms of the goals, objectives, and tasks of the project.

> **Goals** should be clearly presented for each type of implementation project. The goal statement(s) must identify the desired outcome(s) related to the identified problem or need and be stated in terms of results to be accomplished.

Objectives describe the outcomes in a measurable way, specify the results to be achieved or criteria by which results will be measured (*e.g.*, 25% reduction in phosphorous loading to the Muddy River), and the time frame for achieving the objective.

Tasks are concise statements of activities that need to take place to achieve the stated objectives. Tasks should:

- Describe the specific action that will be taken to achieve the project goals and objectives;
- Have a designated responsible party; and
- Have a specified timeframe to accomplish the action.

Proposals shall contain a task schedule that lists outputs or deliverables associated with each task, the party responsible for the tasks, and the time duration associated with completing each task for the total length of the project. Project schedules from start to finish should be no more than three (3) years. The DEP may consider requests to extend the project schedule another two (2) years, up to a total of five (5) years with good cause. Please note that funding of projects and/or extension of projects beyond five years will only be made in extenuating circumstances related to factors beyond the control of the applicant. The inability of the applicant to complete the project in a timely manner is not an extenuating circumstance. The schedule should include sufficient time for: administrative start-up, monitoring [including QAPP development and approval, if monitoring is found to be appropriate, considering seasonal or flow conditions that may be important to the sampling design], all required paperwork and legal review, permit acquisition if needed, project completion and evaluation of the outcome, and preparation and submission of the final report. The format for the schedule should adhere to the following:

Project Objective: **Completion Month #**					
Task	**Responsible Party**	**Timeframe**	***Anticipated Start Month**	**Project Deliverable**	***Anticipated Completion Month**
Task 1	*e.g.*, Lead Agency	Months	M1, M2, etc.	*e.g.*, A, B, and C design documents	M4, M5, etc.
Task 2	*e.g.*, Partner's Name	Months	M1, M2, etc.	*e.g.*, D, E, and F BMP installation	M4, M5, etc.

*Start and Completion Months should be described in terms of months from initial month in which work begins, with M1 designating that month.

Supporting Documentation

The following supporting documentation is required to be submitted in attachments to the Scope of Work:

- Dated USGS topographic map with project area delineated;

- Dated Lot and Block tax map with project area delineated (including property ownership);
- Sketch/site plan or dated large-scale map showing project area in detail, as well as any regulated features such as flood hazard areas, riparian buffers, wetlands, etc., that would be impacted by any proposed construction;
- Photos of the site; and
- List of required local and state permits expected to be needed for project implementation.

Budget

The applicant shall submit for the project proposal both a detailed budget describing how costs per work task will be broken down and a more generalized budget adhering to the following categories. The Budget shall also address applicants 33% funding match. The required 33% match may be in cash for costs that would not have otherwise been incurred by the applicant, if not for the Eligible Project (e.g. paying directly in full or for a portion of a capital expenditure, approved monitoring or the application of chemical or biological treatment such as alum) or through direct in-kind services, such as salaries for workers installing the Eligible Project (with appropriate documentation and certification) or approved monitoring to ascertain the effectiveness of the Eligible Project. Costs associated with operation and maintenance of the Eligible Project during the term of the grant agreement may be funded by the grant or included in the match however long term operation and maintenance (after the completion of the grant agreement) will not be considered as part of the match requirement. Ambient monitoring or the continuation of existing practices will also not be considered as part of the match. Additionally, the match cannot be from other State or Federal grants, including the Highlands Commission. Applicants must be able to demonstrate their ability to provide the required match via a letter of resource commitment or a CFO Certification of Funds. The match may be spread out over the length of the project and does not need to be provided at the time of award or at the execution of the contract.

General Budget Categories

- Personnel Costs (Salaries and Benefits) Note: if students will be performing work, tuition is not eligible for funding;
- Consultants and Subcontractors;
- Travel, at the state allotted 0.35 cents per mile;
- Administration (workshops, printing, postage, etc.) Note: may not exceed 10% of the amount requested;
- Construction (for example, to implement a BMP, http://www.njstormwater.org/bmp_manual2.htm);
- Equipment (list must be provided). Equipment acquired with grant funds must be surrendered to the DEP at the completion of the project, prior to or with the submission of the Final Report, as described in Appendix E.
- Match and additional funding provided by other sources;
- Audit; and

- Indirect Costs.

Monitoring and Evaluation Information

All proposals must include a description of how attainment of project objectives will be measured or demonstrated. The means to demonstrate attainment must be appropriate to the project type and environmental outcome expected. Describe the evaluation techniques and targets and why those approaches are an appropriate measure of success. Examples include improving trends in a related biological indicator/index, improving trends in water quality, a delisting of the affected waterbody/assessment unit, or a calculated evidence of pollutant load reductions using predictive models such as the USEPA Spreadsheet Tool for Estimating Pollutant Load (STEPL) or the Unit Area Load method (UAL) established in Chapters 3 and 4 of the DEP's Best Management Practices (BMP) Manual http://www.njstormwater.org/bmp_manual2.htm.

If monitoring for biological, chemical, habitat, and/or physical monitoring the applicant should include information on sampling procedure, monitoring parameters, locations of sampling sites, frequency of collection, data usage, data format, and costs. The DEP maintains a comprehensive ambient monitoring program that is used to make determinations regarding water quality impairments. Improving trends in water quality and/or indicators are most appropriately determined using the DEP's network, and not through a separate ambient monitoring design. Water quality monitoring will be funded only to fill information/data gaps or for specific assessment of project success and follow DEP approved sampling protocols.

Projects that include a BMP that includes a discrete inlet and outlet may warrant a specific monitoring plan to determine effectiveness at reducing NPS pollution by the BMP. If water quality monitoring is proposed as the means to demonstrate effectiveness, the DEP must approve this proposal. For such projects, a quality assurance project plan (QAPP) will be required to be developed and approved by the DEP prior to project initiation. Refer to Appendix C and EPA's website: http://www.epa.gov/quality/ for QAPP requirements.

As a condition of 319(h) grant awards, all applicants must fulfill the USEPA Grant Reporting and Tracking System (GRTS) requirements and conform to the USEPA STEPL or NJDEP's BMP Manual requirements to determine load reductions (Appendix E). The STEPL model and documentation may be found at http://it.tetratech-ffx.com/steplweb/. Time for performing this required element must be factored into the schedule and budget.

Other Elements of a Proposal

Completion of a Project

In accordance with USEPA Guidance for 319(h) grants (https://www.epa.gov/nps/319-grant-current-guidance) the total project period of new grants awarded after for continuing State environmental programs, including any no-cost extensions or supplemental amendments, may not exceed 5 years. The DEP's preference is for project schedules, from start to finish, to be no more than three (3) years. The DEP

may consider requests to extend the project schedule another two (2) years, up to a total of five (5) years with good cause. Please note that funding of projects and/or extension of projects beyond five years will only be made in extenuating circumstances related to factors beyond the control of the applicant. The inability of the applicant to complete the project in a timely manner is not an extenuating circumstance. Projects must be completed within the grant period. Expenditures by the grantee outside the grant period may not be eligible for reimbursement. If the project cannot be implemented or the project was completed for less than the grant award, resulting in a balance of unexpended funds, then the DEP may make the unexpended 319(h) funds available in future RFPs, see http://www.epa.gov/sites/production/files/2015-09/documents/319streamlining.pdf.

Letter(s) of Resource Commitment

Any party committing resources to the project must submit a letter of resource commitment and is then considered a project partner. The letter, submitted with the project proposal, must describe the partner's commitment to the project (*e.g.* time, money, and/or effort) or it will not be considered as a letter of resource commitment. Letters of resource commitment must be included with the original proposal to ensure consideration of the proposal.

Letters of resource commitment from county and local governmental agencies must be signed by person(s) with the financial authority to commit time, money, and/or effort to the project.

A letter of resource commitment must be provided from the landowner of the site of an implementation project if the landowner is a party other than the applicant. A formal resolution or written consent from the landowner agreeing to execution of the project on their property will be required before any contract is executed with the State.

Ownership/Proprietary Rights; Data and Geographical Information System (GIS) Requirements

All information generated during each Water Quality Restoration project, or materials purchased through Water Quality Restoration funds, must be provided to the DEP in an electronically pre-determined standardized format at the conclusion of the project, please refer to Appendix E. This includes all data collection related to sites and results, maps generated, photos, and all equipment (such as computers and GPS units) purchased with these grant funds.

Where applicable, the DEP may require entry of the data into a web-based system or spreadsheet. All projects involving activities using a GIS data or mapping component must follow the DEP's 2013 *Mapping and Digital Data Standards*
http://www.nj.gov/dep/gis/assets/NJDEP_GIS_Spatial_Data_Standards_2013.pdf.

Coordination of Project Permitting

For implementation projects funded through this RFP, all grantees must coordinate all permit pre-application meetings, applications, and application meetings with the DEP's Division of Water Monitoring and Standards. The Division of Water Monitoring and Standards should be listed as a co-applicant for any DEP permit sought.

Maintenance Agreement

In order to ensure the success of any implementation project funded by a NPS grant, a Maintenance Agreement must be submitted to the DEP prior to in-the-ground installation of any Best Management Practices. The agreement must identify the applicant or applicants responsible for maintenance, describe timetables by which these functions will be carried out, and detail tasks performed to ensure the continuing functionality of the implementation project. See Appendix F for more information.

8. REPORTING REQUIREMENTS FOR PROJECTS SELECTED FOR FUNDING

Quarterly Performance and Financial Reports

Performance and financial reports are required to be submitted to the DEP on a quarterly basis to provide an update and explanation of the project status. These reports are vital to the success of the project and must be submitted complete and on time in order for payments to be made under the grant agreement. Failure to submit timely and complete reports may result in non-payment. The reports must follow the format found in Appendix D.

Quarterly Performance Reports are required to be submitted in both digital and hard copy formats. All interim work products, deliverables, as well as the Quarterly Financial Reports with documentation (receipts, vouchers, etc.) are required to be submitted with the appropriate Quarterly Performance Report.

Grants Reporting and Tracking System (GRTS); 319(h) grants only

As a condition of the 319(h) grant award, all grantees must fulfill the USEPA Grant Reporting and Tracking System (GRTS) requirements; the grantee's timely and accurate reporting on a quarterly basis is essential. GRTS provides USEPA management with an electronic means of accessing information on the use of Section 319(h) funds by state agencies. States input data into GRTS in an on-going manner. The information extracted from GRTS is used to respond to congressional and other inquiries; support the EPA's non-point source budget request; and provide a feedback loop on states' compliance with USEPA guidance and policy. GRTS also provides USEPA and other stakeholders greater and more efficient access to data, information, and program accomplishments than would otherwise be available. States are responsible for the validity of the data. States are required to submit reports on grant funded activities on either a semi-annual or annual basis, depending upon the particular region.

Spreadsheet Tool for Estimating Pollutant Loads

As a condition of the 319(h) grant award, all grantees must fulfill the USEPA pollutant load reduction estimates utilizing the USEPA Spreadsheet Tool for Estimating Pollutant Loads (STEPL) or other non-proprietary load reduction estimation model, such as the Unit Area Load method established in Chapters 3 and 4 of the DEPs Best Management Practices Manual http://www.njstormwater.org/bmp_manual2.htm, and include these load reductions in a "USEPA success story" style summary. This information must be provided within 90 calendar days of completion for each implementation measure. Use of models other than STEPL must be approved by the Water Quality Restoration Program. All Final Reports must include a detailed summary of load reductions achieved by individual implementation measures supported through a grant contract.

Water Quality Data

All monitoring measurements, or data generation must have a quality assurance project plan (QAPP) approved by the DEP before any monitoring, measurements, or data generation is initiated. If the grantee generates data without a DEP-approved QAPP, the costs for producing that data will not be eligible for funding.

All data collected through the course of the project must be submitted in the format requested by the DEP. All data must be entered into the DEP's Water Quality Data Exchange online database or other database as approved by the DEP. Information regarding the use of the DEP's Water Quality Data Exchange online database is located at: http://www.state.nj.us/dep/wms/data_submittal_wqde.html.

Final Reports

One hard copy and one electronic copy of the final report must be submitted to the project manager upon the completion of the project. If the Final Report is a completed DEP-approved Watershed Restoration and Protection Plan, then three (3) hard copies and one (1) electronic copy of the Plan must be submitted. The DEP must deem the report acceptable prior to the release of final payment of grant funds to the applicant. The required format for the final report can be found in Appendix E.

9. OTHER REQUIREMENTS FOR PROJECTS SELECTED FOR FUNDING

Quality Assurance Project Plan (QAPP)

If the DEP approves water quality monitoring as the means to demonstrate effectiveness of the project, a QAPP will be required. If required, the QAPP must be approved by the DEP before any monitoring, measurements, or data generation is initiated. A QAPP includes the purpose, the design to achieve the purpose, collection and analysis procedures, certified lab to be used, and other quality assurance measures. A template for a QAPP is provided in Appendix C.

Note: QA/QC certifications for field collection, field parameters, and/or lab analyses are required for an approvable QAPP. Water Quality Restoration funds cannot be used to pay for these certifications.

Reimbursement for Services

Water Quality Restoration funds are provided in reimbursement for services rendered. Exceptions to this policy will be made only in extenuating circumstances and only with prior DEP approval.

Native Species

All implementation projects that involve the selection and planting of vegetation are required to use only species of plants native to that particular region of New Jersey, whenever possible. In some circumstances, non-invasive, non-native plant species could be considered if the need is demonstrated. Successful applicants are advised that the DEP must approve the final species list indicating quantities and a planting plan with location and procedures prior to purchase and installation of any plant material.

Federal Funding Accountability and Transparency Act (FFATA); 319(h) funds only

The Federal Funding Accountability and Transparency Act (FFATA) requires information on federal awards be made available to the public via a single, searchable website, which is www.USASpending.gov. The intent of the FFATA is to increase government accountability. To comply with this legislation, the FFATA Sub-Award Reporting System (FSRS) is the reporting tool Federal prime awardees (*i.e.* grant recipients) must use to capture and report sub-award (*i.e.* subcontractor) and executive compensation data regarding their first-tier sub-awards (*i.e.* subcontracts) to meet the FFATA reporting requirements.

In accordance with 2 CFR Chapter 1, Part 170 REPORTING SUB-AWARD AND EXECUTIVE COMPENSATION INFORMATION, Prime Awardees (grant recipients) awarded a federal grant are required to file a FFATA sub-award (subcontractor) report by the end of the month following the month in which the prime awardee (grant recipient) awards any sub-grant (subcontract) equal to or greater than $25,000. User guides, FAQs, and an on-line demonstration are currently available at the FSRS website at https://www.fsrs.gov/. Although it is the Prime Awardee (grant recipient) that must file the report, the DEP can assist the Prime Awardee (grant recipient) with this reporting as needed.

All grants receiving 319(h) funds shall comply with all applicable requirements of 2 CFR 200 governing administrative requirements, cost principles and audit requirements for federal awards.

Federal Funded Agreement Provisions of Grant Contract; 319(h) funds only

Federal 319(h) grant contracts are required to contain certain specific provisions regarding debarment and suspension, restrictions on lobbying, compliance with the Civil Rights Act of 1964 among other things. A copy of the Additional Federal Funded Agreement Provisions is available at http://www.state.nj.us/dep/wms/bears/docs/nps_grant_contract_att1.pdf.

Division of Water Monitoring and Standards

Bureau of Environmental Analysis, Restoration and Standards

Water Quality Restoration Grants

Cover Sheet and Format for Project Proposals

Appendix A

The following three (3) pages are to be included as the Cover Sheet for each complete grant application package. A basic explanation of terms used is provided at the end of this Appendix.

Organization Information

1) Applicant Organization Name: _____

2) Organization Address: (street name and #): _____

(City, state, zip code) _____

3) Organization Numbers: Phone #: _____-_____-_____ Fax #: _____-_____-_____

4) Vendor ID #: _____

5) Federal DUN #: _____

6) Contact Person: _____, _____

(Name) (Title)

7) Contact's Phone: _____-_____-_____ Secondary Phone: _____-_____-_____

8) Contact's Email: _____

9) Financial Officer: _____, _____

(Name) (Title)

10) Financial Officer's Phone: _____-_____-_____ Secondary Phone: _____-_____-_____

11) Financial Officer's Email: _____

Consultant Information

12) Contact Person: _____, _____

13) Address: _____

14) Contact's Phone: _____-_____-_____ Secondary Phone: _____-_____-_____

15) Contact's Email: _____

Project Information

16) Project Name: _____

17) RFP Category: _____

18) Project Duration in Months: _____

19) Grant Amount Requested: $_____

20) Local Match (+) $_____

21) Project Total (=) $_____

22) Legislative District Number(s): _____

Watershed Information

23) WMA (# and name): _____

24) HUC(s) (# and name as per the most recent New Jersey Integrated List):

_____

_____

25) List of All Waterbodies Affected by Project and Their Impairment Status:

A) _____

Status: _____

_____

_____

B) _____

Status: _____

_____

_____

C) _____

Status: _____

_____

_____

D) _____

Status: _____

_____

_____

(Add additional Waterbodies with status as appropriate.)

Implementation Proposals

26) Name of Watershed Plan Project is Implementing: _____

_____

27) Primary Waterbody Affected: _____

_____

28) Type of NPS Implementation Project: _____

_____

29) Primary Pollutant(s) Targeted: _____

_____

30) Additional Pollutant(s) Addressed: _____

_____

****Please do not include the following pages (4- 7) of Appendix A with submitted proposal.****

Description of Elements found on Cover Sheets

Applicant Organization **(Lines 1-3)** - is the eligible entity applying for Water Quality Restoration grant funding. Fill in the organization's name, address, fax, and phone number.

Vendor ID # **(Line 4)** – can obtain a Vendor ID # through the Department of the Treasury's NJSTART eProcurement System (https://www.njstart.gov/bso/).

Federal DUNS # **(Line 5)** – is required only for Federally-funded awards.

Applicant Contact Person **(Lines 6-8)** - is the person in that eligible entity that can be contacted for additional information. The contact person may not be an independent contractor. On the lines provided, include the contact's name, title, address, phone number(s), and email address.

Financial Officer **(Lines 9-11)** – is the person in that eligible entity that can be contacted for financial information. On the lines provided, include the officer's name, title, address, phone number(s), and email address.

Consultant Contact Person **(Lines 12-15)** – is the independent contractor providing professional services regarding the grant application. This information should be provided if the applicant prefers that the DEP work directly with the consultant regarding the grant application. On the lines provided, include the contact's name, title, address, phone number(s), and email address.

Project Name **(Line 16)** - is the name that refers to the proposed project.

RFP Category **(Line 17)** – is the grant opportunity sought from the RFP.

Project Duration in Months **(Line 18)** - is an estimate of the time needed to complete the project, in months. Estimations should factor in administrative start up time and anticipated delays. There is no penalty for completion of a project ahead of schedule, while "no cost time extensions" will only be granted in extenuating circumstances.

Grant Amount Requested **(Line 19)** - is the amount of funding sought from the Water Quality Restoration Grant Program.

Local Match **(Line 20)** - is the amount of local funding dedicated to the project.

Project Total **(Line 21)** - should equal the total amount necessary to complete the proposed project.

Legislative District Number(s) **(Line 22)** - is a list of state legislative districts found within the proposed planning or implementation area.

WMA **(Line 23) -** is the Watershed Management Area (WMA) that contains the proposed implementation project or planning watershed. Both the WMA number and name should be included.

HUC **(Line 24) -** is the 14-digit hydrologic unit code(s) of the subwatershed(s) contained in the proposed project area. Both the HUC14 number and name should be included.

List of All Named Waterbodies in Project Area **(Line 25)** - is a complete list of all named waterbodies in the proposed project area. This section must be supplemented with an appendix that includes the complete report on the condition of each waterbody listed in the most recent *New Jersey Integrated Water Quality Monitoring and Assessment Report.*

Watershed Plan Project is Implementing **(Line 26)** - is the name and approval date of the New Jersey Department of Environmental Protection approved watershed-based plan that specifically describes the need for the proposed project.

Primary Waterbody Affected **(Line 27)** - is the waterbody that is the target of the nonpoint source implementation project. Water quality improvement will be achieved in this waterbody through the implementation of the proposed project, if applicable.

Type of NPS Implementation Project **(Line 28)** - is a general category by which the proposed implementation project(s) can be described (*e.g.* stormwater BMP, streambank restoration etc.).

Primary Pollutant(s) Targeted **(Line 29)** - is the reason the nonpoint source implementation project is being proposed. List the primary pollutant(s) targeted. The abatement of this pollutant(s) is the main focus of the project.

Additional Pollutants Addressed **(Line 30)** – list any pollutants that will be addressed by the nonpoint source implementation project that are secondary to the primary targeted pollutant(s).

Standard Format for Project Proposals

All project proposals must include the following components and be organized accordingly:

1. **Application cover sheet** – Pages 1 -3 above;

2. **Brief project background summary information**;

3. **Brief summary of the overall project goals and objectives** - The proposal must include a brief abstract of the project that includes a summary of the key information contained in the Scope of Work, in sufficient detail so that the category applied for, the major elements of the project, the objectives to be achieved, and the spatial extent of the work are clear.

4. **Applicant description** – must demonstrate experience and expertise with completing and/or project management oversight for the type of project(s) proposed, including a description, estimated amount and type of in-kind contributions proposed by applicant. This section must also include a list of project partners, including estimated amount and type of in-kind contributions proposed by the project partners. In-kind contributions are not required, however projects with in-kind contributions and partner support could receive a higher priority;

5. **Project Goals, objectives, tasks** (under each objective), **and corresponding task deliverables** (required for each task);

6. **Implementation schedule by objective -** required table format:

Project Objective: **Completion Month #**					
Task	**Responsible Party**	**Timeframe**	***Anticipated Start Month**	**Project Deliverable**	***Anticipated Completion Month**
Task 1	*e.g.*, Lead Agency	Months	M1, M2, etc.	*e.g.*, A, B, and C design documents	M4, M5, etc.
Task 2	*e.g.*, Partner's Name	Months	M1, M2, etc.	*e.g.*, D, E, and F BMP installation	M4, M5, etc.

*Start and Completion Months should be described in terms of months from initial month in which work begins, with M1

7. **Monitoring and Evaluation Information** - All proposals must include a description of how attinment of project objectives will be measured or demonstrated.

8. **Budget tables –** two (2) required in the following format:

Task Breakdown of Contractual Services			
Objective/Task	Task Description	Responsible Party	Budget
Obj. 1 Task 1			
Obj. 1 Task 2, etc.			
Total Contractual Budget			

Project Title	
General Project Budget	
(Examples of categories)	
Salaries	$
Fringe	$
Travel	$
Training	$
Supplies	$
Implementation Projects Costs	$
Contractual	$
Sampling	$
Subtotal	$
Administration/Indirect 10%	$
Requested Grant Total	**$**
	$
	$

9. **Budget Justification** – a brief summary and explanation of each of the general project budget items as listed in the above table.

10. **Supplemental Information -** Letters of Resource Commitment, site plans, maps, blueprints, etc. This will be attachments to the proposal.

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Project Evaluation Criteria

Appendix B

The primary criteria for evaluation of proposals which are deemed eligible and complete are:

1. Project Applicability (up to 25 points)
   - The degree to which the proposal addresses one or more of the watershed areas or project types identified in the Request for Proposal;
   - The magnitude of the HAB issue the proposal would potentially reduce;
   - The degree to which proposal would prevent, mitigate or control HABs;
   - The degree to which the project would result in meeting Clean Water Act designated uses (Protection and propagation of fish, shellfish and wildlife; Recreation; Public drinking water supply; and Agricultural, industrial, navigational and other purposes)
   - The degree to which the project would leverage other positive environmental outcomes such as open space, recreational benefits, access to water, living shoreline creation and habitat enhancement.;
   - Integration of project with federal, state and local programs, plans and policies including Executive Order No. 23 (https://nj.gov/infobank/eo/056murphy/pdf/EO-23.pdf); and
   - Magnitude of water quality, public health, and environmental benefits associated with the proposal.

2. Project Readiness (up to 25 points)
   - Project feasibility;
   - Proposed design completion date (not to exceed 36 months);
   - The degree to which the project is readily implementable (shovel ready);
   - Consistency with existing local, state and federal requirements and ability to attain permits needed to implement the project; and
   - The degree of public engagement and/or support for the proposed concept.

3. Likelihood of Success (up to 30 points)
   - Technical merit (water quality improvement, reduction of pollutants);
   - Past performance of the applicant and/or applicant's partners (as identified in the project proposal), if applicable;
   - Ability of the applicant to complete the project or contract, or work with another entity to complete the project;
   - Qualifications of the proposed personnel (in-house and contracted) to ensure grant agreement compliance as well as completing project design and construction;

- Letter of resource commitment;
- Ability of the grantee to garner approval of property owners and secure long-term maintenance agreements; and
- Ability to deliver measurable outcomes and long term sustainable benefits.

4. Cost Share/Matching Funds/Leveraging of other Funding Sources (up to 10 points)
   - Level of matching funds (minimum 33% match is required directly from the applicant);
   - Leverage funding by combining with other funding sources (e.g. Farm Bill, Hazardous Discharge Remediation Fund);
   - Budget detail (funding source allocation per project component); and
   - Cost effectiveness.

5. Monitoring and Evaluation Information (up to 10 points)
   - How attainment of project objectives will be measured or demonstrated

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Quality Assurance Project Plan (QAPP) Guidance

Appendix C

A QAPP is a written document that describes the quality assurance procedures, quality control specifications, and other technical activities that must be implemented to ensure that the results of the project or task to be performed will meet project specifications. If the application is chosen for funding, and if a QAPP is required to achieve the tasks outlined in the scope of work, a QAPP must be submitted by the Grantee and approved by the DEP prior to any water quality sampling through a NPS grant.

No water quality monitoring shall begin until the QAPP has been approved by the DEP. Any sampling done prior to securing an approved QAPP will not be considered within the project's scope of work and the Grantee will not receive financial reimbursement for such sampling. Once the Grantee has received comments from the DEP, the Grantee shall revise the QAPP to address said comments and submit the final QAPP to the Project Manager. The response to comments should be bolded in the body of the document and numbered to correlate with the comment number.

For Grantees unfamiliar with QAPP procedures and protocol, a meeting with DEP QAPP staff will be coordinated in order to facilitate this process. Please contact your Project Manager to make those arrangements.

The QAPP guidance was developed based upon USEPA's document entitled "EPA Requirements for Quality Assurance Project Plans, EPA QA/R-5" (EPA/240/B-01/003). This document, as well as additional information regarding QAPPs, can be found at http://www.epa.gov/quality/.

Upon completion and acceptance of collected monitoring data, the grantee is required to submit the data in electronic form either through WQDE or WQX web per guidance provided by the Project Manager.

The guidance on the following pages outlines the required elements of a QAPP Document.

QAPP DOCUMENT TABLE OF CONTENTS

Section 1: Title and Approval Sheet

QUALITY ASSURANCE PROJECT PLAN (QAPP)

Name of Water Quality Restoration Grant

Contract WM #: WMXX-XXX

Prepared by: _____ Date: _____

QAPP Preparer

Affiliation

Reviewed by: _____ Date: _____

Preparer's Organization QA/QC Officer (if there is one)

Affiliation

Reviewed by: _____ Date: _____

NPS Grantee

Reviewed by: _____ Date: _____

DEP Staff, Project Manager

Division of Water Monitoring and Standards, BEARS

Reviewed by: _____ Date: _____

Bureau QAPP Reviewer

Division of Water Monitoring and Standards, BEARS

Reviewed by: _____ Date: _____

Section Supervisor

Division of Water Monitoring and Standards, BEARS

Approved by: _____ Date: _____

DEP Quality Assurance Officer

Office of Quality Assurance

Names of other organizations involved in project (such as field operations manager, laboratory managers, State, and Federal agency officials, etc.) should be included on this cover sheet as well as the Distribution List.

Section 2: Distribution List

The Distribution List includes individuals and their organizations that need copies of the approved QAPP and any subsequent revisions. See Table below.

Table: Distribution List for QAPP and QAPP Revisions

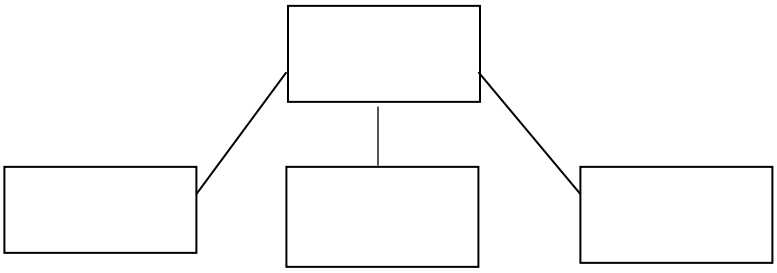
Name	Organization	Address	email
Project Manager			
QA Officer			
Laboratory			
Grantee			
Project Manager	DEP – Division of Water Monitoring and Standards, BEARS	401 E. State Street P.O. Box 420 Mail Code 401-04I Trenton, NJ 08625-0420	Fname.Lname@dep.nj.gov
Bureau QAPP Reviewer	DEP – Division of Water Monitoring and Standards, BEARS	401 E. State Street P.O. Box 420 Mail Code 401-04I, Trenton, NJ 08625-0420	
Section Supervisor	DEP – Division of Water Monitoring and Standards, BEARS	401 E. State Street P.O. Box 420 Mail Code 401-04I, Trenton, NJ 08625-0420	
QAPP Approval Officer	DEP – Office of Quality Assurance	401 E. State Street P.O. Box 420 Mail Code 401-02D, Trenton, NJ,08625-0420	Fname.Lname@dep.nj.gov

Section 3: Project/Task Organization

Identify individuals or organizations involved in the project and discuss their specific roles and responsibilities. Include the principal data users, the decision makers, the project QA manager, and all persons responsible for implementation. Provide a concise organization chart showing the relationships and the lines of communication among all project participants.

Figure: Organization Chart

Insert organization chart per Section 3 above.



Section 4: Problem Identification/ Background

State the specific problem to be solved, decision to be made, and/or outcome to be achieved. Include the sources and causes of impairments [from 303(d) List], known problems, Total Maximum Daily Loads (TMDLs), other threats to water quality (from experience or other studies), conflicts and known efforts to address these issues (from experience or other studies). Describe land use, Category 1 designation, and identify any previous efforts and/or studies and conclusions.

In Appendix A of the QAPP Document, include the project Scope of Work, which is Attachment D in the executed Contract.

Section 5: Project / Task Description

Describe all work to be performed, products to be produced and the schedule for implementation needed to resolve the problem described in Section 4. ***Maps and tables that show and state the geographic locations of field tasks must be provided.***

Sample Locations and Rationale: Justification for each location. Mark sample locations in the field with stakes and surveying tape for possible field visit.

Table: Sample Locations and Rationale

Location I.D.	*Name*	*Justification*

Temporal and Spatial Aspects:

Frequency: for example, bacteria samples should be collected five times per location within a 30-day period between Memorial Day and Labor Day. Other parameters may be collected eight times per location within a two-year period on a quarterly basis. This represents the optimum sampling regime but may be modified based on project goals with DEP approval.

Conditions: include baseline, baseflow, wet weather and first flush. Define the condition and explain the rationale.

Parameters:

Describe the selected parameters and rationale for the specific parameter at each location. For example: In-situ water quality parameters (temperature, pH, DO, conductivity, flow, discharge, diurnal DO, etc.), chemical water quality parameters (nitrate, nitrite, TKN, TP, TSS, TDS, etc.), bacterial parameters, physical parameters (flow, bathymetric data, etc.), benthic macroinvertebrates.

Table: Summary of Monitoring Design

Type	*Baseline*	*Wet Weather*	*Dry Weather*	*Bacteria*	*Biological*
Frequency					
Parameters					
Sample Location					
SW-1					
SW-2					
SW-3					

Schedule:

Insert and populate a table below (Table 5.3) with the proposed schedule of sampling for collecting data to be analyzed.

Table: Field Sampling Schedule for Data Collection

Section 6: Sampling Procedures

All samples should be collected in conformance with the DEP Field Sampling Procedures Manual and applicable USEPA guidance. All instrumentation for the collection of field data will be properly calibrated in conformance with the manufacturer's instructions and the DEP Field Sampling Procedures Manual.

Section 7: Training Requirements and Certification

Identify and describe any specialized training/certifications needed by personnel in order to successfully complete the project. Discuss the training that will be provided and how the necessary skills will be assured and documented. Include any required certification information, such as the laboratory certification or the DEP field sampling certification numbers.

Section 8: Sample Handling and Custody Procedures

Describe how samples should be handled, transported, and then received in the laboratory or office. Include how handling and custody is documented (through field notebooks or forms, etc.) and identify responsible personnel. For parameters measured in this project, provide information on container, volume, initial preservation, and holding times in the table below. Identify chain of custody procedure. Separate form may be attached.

Table: Sample Handling and Custody

Parameter	Container	Volume	Initial Preservation	Holding Time

Section 9: Sampling Method Requirements

Table: Sampling Locations and Sampling Methods

Sampling Location	Location ID Number	atrix	Depth units)	Analytical Parameter	Samples (include ield duplicates)	npling SOP #	Sample Volume	ntainer #, size, type	reservation (chemical, temperature, light protected)	laximum Holding Time: Preparation/ analysis

Section 10: Analytical Methods Requirements

Provide reference to the analytical procedures, including field measurements and laboratory that will be used in the study.

Table: Field and Laboratory Analytical Methods

Analyte	Laboratory / Organization	Project Action Limit (units, wet or dry weight)	Project Quantitation Limit (units, wet or dry weight)	Analytical Method		Achievable Laboratory Limits	
				Analytical Method/ SOP	Modified for Method yes/no	MDLs	Method
e.g. pH	Field: monitoring by field staff	6 - 9 pH units	NA	Standard Methods (*) 4500H+B FDCC Field SOP 1	None		
e.g. Total coliform and E. coli	Lab: In-house laboratory	< 20 MPN/100mL for E. coliforms	2 MPN/100mL	Standard Methods 9223B Enzyme substrate method	None	Not applicable	2 MPN/100 mL

(*) Standard Methods for the Examination of Water and Wastewater, 20th edition.

Section 11: Calibration Procedures and Preventative Maintenance

Table: Instrument Calibration Table

Equipment / Instrument	SOP reference	Calibration Description and Criteria	Frequency of Calibration	Responsible Person

List equipment and provide testing, inspection and maintenance information in narrative form or in the Table below. Information such as availability/location of spare parts or corrective action should be identified only if these items are not addressed in the SOP.

Table: Testing, inspection, maintenance of sampling equipment and analytical instruments

Equipment / Instrument	Maintenance Activity, Testing Activity or Inspection Activity	Responsible Person	Frequency	SOP Reference

Section 12: Quality Assurance and Quality Control

N.J.A.C. 7:18 and 40 CFR Part 136 should be followed for all quality assurance and quality control (QA/QC) practices including detection limits, quantitation limits, precision and accuracy and documentation attached as Appendix C.

Section 13: Documentation and Records

Submit a CD with the approved QAPP, all monitoring data in Excel, including explanations of anomalies and Summary Report. Describe the process and responsibilities for ensuring the appropriate project personnel have the most current approved version of the QAPP, including version control, updates, distribution and disposition.

Itemize the information and records which must be included in the data report package and specify the reporting format for hard copy and any electronic forms. Records can include raw data, data from other

sources such as databases or literature, field logs, sample preparation and analysis logs, instrument printouts, model input and output files, and results of calibration and QC checks.

Identify any other records and documents applicable to the project that will be produced, such as audit reports, interim progress reports, and final reports. Specify the level of detail of the field sampling, laboratory analysis, literature or database collection, or modeling documents or records needed to provide a complete description of any difficulties encountered.

Specify or reference all applicable requirements for the final disposition of records and documents, including location and length of retention period.

List of Figures

List of Tables

List of References

List of Appendices:

Appendix A – Scope of Work from executed Contract (Attachment D)

Appendix B – Map(s) with monitoring locations identified in Section 5

Appendix C – Quality Assurance/Quality Control (QA/QC)

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Quarterly Reporting Requirements

Appendix D

Grantee must submit an original, signed hard copy of expenditure reports to contract administrator on a quarterly basis. Grantee must submit hard copy and electronic copy of progress and expenditure reports (pdf file) to project manager on a quarterly basis.

Title Page or Cover

Title of Project

Grant Project WM Number

Contact person or project manager/address/telephone number/email address of grantee

Report Period and Quarter Number

Summary of Progress to Date: Must include major project activities implemented, number of sites addressed, progress in attainment of the project objective, timelines, percentage of tasks complete, etc. If a work product has been developed, this should be included in the Quarterly Report, for example an educational brochure.

Slippage Report: Must describe any slippage in project timeline or budget along with an explanation and revised timetable, budget, and new completion schedule. Please note that project no-cost time extensions must be applied for through the project manager and will only be granted when the grantee has demonstrated unforeseeable project setbacks. No project will be granted more than one no-cost time extension unless an exception is given from the Director of the Division.

Problems/Issues: Must describe any problems encountered in project implementation, such as unanticipated events and their consequences, along with a description of the solutions applied (should cross-reference the slippage report if applicable).

Additional Information:

1**)** Summary of Activities Planned in Next Project Period;

2) Attachments (as appropriate);

3) Surveys;

4) Monitoring data and/or results; and

5) Attendance sheets (meetings, outreach events, etc.…)

All Quarterly Reports Must Include an Expenditure Report

An expenditure report, including an original, signed Attachment C in the executed grant agreement, and any supporting documentation, is required to be submitted with every quarterly report. If there are no expenditures for the work period, the expenditure report must still be submitted indicating $0 in the total. Fiscal Information should include: time sheets, phone logs, mileage logs, bills, and receipts for expenditures related to the project.

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Final Report Requirements

Appendix E

The final report must include the following information:

1) Front Cover /Title Page

- ☑ Project Title
- ☑ Project Identification Number
- ☑ Identify the number(s) and name(s) of the HUC 14 watershed(s) in which the project is located
- ☑ Grantee's name, address, and phone number
- ☑ Name/address/telephone number of organization completing the project
- ☑ Project Partners names and addresses
- ☑ Date of the Report
- ☑ Date of Project Completion

2) Executive Summary

A brief abstract of the project that can also serve as a stand-alone document and includes the following information:

- ☑ Description of project area
- ☑ Summary of the existing conditions addressed
- ☑ A brief summary of the overall project (e.g., its goals, methodology, affected locations, and time frame)
- ☑ Highlight major results or outcomes of the project
- ☑ Project implications and recommendations

3) Evaluation Approach and Methodology

Presents a brief background on the method for evaluating project success, possible applications of results, and includes the following:

- ☑ List of major questions answered by the evaluation
- ☑ Description of the overall evaluation design and schedule of data collection
- ☑ Description of the evaluation techniques and targets and why those approaches are an appropriate measure of success.

4) Results of Project and Evaluation

The project evaluation shall include, at a minimum, the following information:

- ☑ A summary of results
- ☑ A detailed evaluation of findings, including relevant tables, graphs, charts
- ☑ A breakdown of findings by relevant variables
- ☑ An integration of results from multiple qualitative and quantitative data sources
- ☑ A statement of implications of the project
- ☑ Specific recommendations for future action
- ☑ Suggested means for disseminating project results, including technology transfer
- ☑ A description of strategies for assuring utilization of project results

- ☑ Submission of as-built plans for implementation projects

5) Appendices

The following items, at a minimum, shall be included in the final report

- ☑ One hard copy – complete
- ☑ One electronic copy, or similar as appropriate, with the final report and any appendices, in a pdf format if possible, but all maps and tables should be included in one report. A separate Word document on this electronic copy, or similar as appropriate, will also be necessary to allow for editing prior to posting on websites or other acknowledgments.
- ☑ One electronic copy, or similar as appropriate, with all GIS projects including all associated files used to create the projects and the metadata. This should not be a pdf. The map should be saved as "store relative path names". Please include with this all associated files necessary to open and view the map. This electronic copy, or similar as appropriate, should also include a narrative explaining what the individual maps are showing. Metadata is required with the mapping.
- ☑ A list of all equipment purchased (with associated specification) under the grant and the date in which they were returned to the DEP.
- ☑ One electronic copy, or similar as appropriate, with all digital pictures related to the grant with some key to decipher each picture both spatially and temporally. You should include the photographer's name and WM# so that credit may be given. This electronic copy, or similar as appropriate, is required even though pictures have been submitted in Quarterly Reports, as it provides one digital library of the project. All pictures should be saved with names that are indicative of the picture and purpose (i.e. WM15-XXX post-imp stormwater)
- ☑ Any and all material developed as part of the grant. For example, if an educational brochure was created or a sampling manual or maintenance manual was developed these should be submitted with all other like materials on a separate electronic copy, or similar as appropriate, titled Deliverables.
- ☑ On a separate electronic copy, or similar as appropriate, titled Implementation (if appropriate), please provide all installation information, including: site plans; plants; pictures; monitoring data; pollutant removal estimates based on both theoretical and monitoring data; and any issues that were encountered (for example the road does not have sufficient space with the infrastructure already in the road), the decisions that were made, problems encountered, solutions and how these solutions changed the project, permit issues, and the water quality improvement achieved based on both modeling (such as STEPL or UAL) and monitoring data. Specific projects will have varying information to include. Please include any other information that would be important to understand from beginning to end what occurred during the implementation of the project.
- ☑ A separate electronic copy, or similar as appropriate, with all raw data in usage format. A copy of the approved Quality Assurance Project Plan (QAPP) should be included on this electronic copy, or similar as appropriate. Any comments or considerations should also be included on this electronic copy, or similar as appropriate, (data point for site b on 8/2/2015 was considered an outlier because …) and a brief summary of data (this will probably be contained in your final report and should just be copied/pasted here also).
- ☑ Success Story in approved EPA format (Section 6 of this appendix). This should be submitted digitally on the Final Report electronic copy, or similar as appropriate, along with the hard copy.
- ☑ Load reduction calculations should be submitted as a spreadsheet for all implementation projects on the electronic copy, or similar as appropriate. Any decisions should be clarified within the spreadsheet. STEPL is a relatively low technology model endorsed by USEPA for the

determination of loads and potential load reductions within a watershed. Information regarding this model may be found at http://it.tetratech-ffx.com/steplweb/. Detailed information will be provided upon award of a grant contract.

6) EPA Success Stories:

Format and Content for Section 319 Success Stories

Each story should run 1-2 pages in length, addressing all of the information identified in each category below to the extent possible (aim for a maximum of 950 words). The story should provide a clear, succinct summary in plain language so that the general public will be able to understand. Use a non-technical, plain language description or definition (or photo) that demonstrates the meaning. Please note that all examples below are excerpted from published Success Stories.

I. TITLE

Create a brief title that uses a verb.

Example:

Stream Restoration Efforts Reduce Impacts of Acid Mine Drainage

II. WATERBODY IMPROVED *(one paragraph)*

1. What was the water quality problem?
2. What was done to address the problem?
3. Did the waterbody improve or was it removed from the state's 303(d) list?

Example:

The North Fork of the South Branch of the Potomac River is a scenic trout stream in the headwaters of the Potomac River in northeastern West Virginia. Water in the North Fork had high levels of fecal coliform bacteria, primarily from agricultural runoff from beef and poultry farms. Over 85 percent of farmers in the watershed worked together to construct animal waste storage facilities, establish riparian buffers, and implement a range of other best management practices (BMPs) at the farms. As a result, the stream now meets its designated use and is no longer impaired by fecal coliform bacteria.

III. PROBLEM *(generally two paragraphs)*

1. Specify the location of the waterbody, and, if relevant, geographic connection with other streams/rivers.
2. (a) What year was the waterbody put on the 303(d) list? (b) What beneficial use was not met? (c) Which parameter was the cause of the listing, if known? (d) If not identified in the listing, what pollutant(s) is believed to have been responsible for the impairment?
3. What specific segment (and/or length) of the waterbody was listed?
4. Describe the source(s) of the problem and specify category and subcategory (e.g., agriculture, cattle with access to streams).
5. If desired, list any major study that may have documented the problem. If data is available, include monitoring results that showed the water quality problem.

6. Was a TMDL done? If so, please provide information (e.g., the waterbody was listed for [*insert parameter here*], and the TMDL said it was necessary to meet a target of [*insert concentration or loading*] to achieve water quality standards).
7. What is the water quality goal or water quality standard that needed to be achieved to address the problem (e.g. rolling 7-day maximum average of 64°F)?

Example 1:

Cobbossee Lake (short for Cobbosseecontee), a large 5238-acre lake in central Maine, is valued by people for fishing, swimming, boating, and wildlife. One of Maine's premier bass fishing lakes, Cobbossee Lake is also a secondary source of drinking water for Maine's capital—Augusta.

In the 1960s water quality in Cobbossee Lake began to deteriorate. Elevated nutrient (i.e., phosphorus) levels spurred the growth of noxious blue-green algae, which reduced water clarity, formed green surface scums, and depleted oxygen in the bottom waters of the lake. The excess phosphorus in Cobbossee Lake's watershed was caused by soil erosion and runoff from agricultural, residential, and commercial lands, and the gradual conversion of forested land into developed land. The other significant source of phosphorus came from Annabessacook Lake, immediately upstream of Cobbossee. At one time, Annabessacook received sewage discharges from the town of Winthrop, and this nutrient-rich sewage caused algae blooms. Although sewage discharges to Annabessacook Lake were eliminated by 1977, the phosphorus in the lake's sediments continued to recycle and flow into Cobbossee Lake.

The Total Maximum Daily Load (TMDL) assessment developed for Cobbossee Lake in 1995 estimated that two-thirds of the external phosphorus load came from the lake's direct 32-square-mile watershed, and one-third came from the indirect upstream watershed. Agriculture accounted for about 60 percent of the phosphorus and developed lands accounted for about 40 percent of the phosphorus load. The TMDL showed that in-lake phosphorus needed to be reduced to 15 parts per billion (ppb), or 5,904 kg P/yr, for Cobbossee to attain Maine's water quality criterion for water clarity (more than 2 meters of Secchi Disc Transparency).

Example 2:

Furlong Creek flows through Mackinac County in Michigan's Upper Peninsula. Surveys conducted in 1989 found diverse fish and macroinvertebrate communities in the creek. By 1999, however, cattle grazing on private property had unrestricted access to the creek. The animals walked in the creek and trampled riparian vegetation, causing excessive instream habitat disturbance and sedimentation.

Subsequent creek monitoring revealed low fish and macroinvertebrate diversity. Pollution-sensitive insect families (e.g., caddisflies, stoneflies, and mayflies) and fish species (e.g., rainbow trout) were absent or very rare. These aquatic life support impairments led Michigan to place a 4-mile segment of Furlong Creek on its 303(d) list in 1996.

IV. PROJECT HIGHLIGHTS *(generally two paragraphs)*

1. What major BMPs /activities addressed causes of pollution and demonstrated in-stream improvements?
2. Who were major partners in the effort?
3. During what timeframe did the activities occur?
4. Was there a larger context of a watershed / comprehensive plan?
5. Are there ongoing plans to continue improvement?

Example 1:

In August 2001 EPA approved a TMDL for siltation that called for a 50 percent reduction in sediment delivery to the lake. To accomplish this goal, the Decatur County Conservation Board and the Decatur Soil and Water Conservation District proposed the construction of two large basins to slow sediment delivery originating from gully erosion. The Iowa Department of Natural Resources' (IDNR) Nonpoint Source Pollution Program provided further suggestions to address the problem using a watershed approach. As a result, the plan was expanded to include seven smaller sediment basins throughout the watershed. To further stabilize the shoreline of Slip Bluff Lake, the Iowa Department of Transportation and the Iowa Department of Agriculture and Land Stewardship, Division of Soil Conservation (IDALS-DSC), provided funds to riprap portions of the shoreline.

To ensure the continued success of this project, the Decatur County Conservation Board maintained the project by planting additional seedings in exposed soil on the constructed sediment basins.

Example 2:

An educational effort on reducing fertilizer and chemical usage targeted landowners and highlighted the benefits of potential cost savings. One-on-one meetings and public sessions were held to teach peanut and alfalfa growers integrated pest management techniques including proper weed and insect scouting, determining pest thresholds, interpreting soil test reports and proper fungicide use. Demonstration BMPs illustrated techniques to manage vegetation; exclude cattle from riparian zones; and reduce nutrient, pesticide, and sediment loading. BMPs implemented from 1995 to 2002 included reduced tillage planting in peanut fields, riparian fencing, alternative livestock water source construction, grade stabilization structures, diversion terraces, deferred grazing, rotational grazing

V. RESULTS

1. What water quality goals were achieved?
2. Was the waterbody delisted? If so, which year was it delisted, or when does the state expect to delist the waterbody?
   Note: *EPA may count this waterbody as being "partially or fully restored" for Strategic Plan purposes (Category 1 story) even if the waterbody has not officially been removed from the 303(d) list, as long as the story demonstrates that actual restoration has occurred and the state has nominated that the waterbody be delisted in the next 303(d) cycle. It is not sufficient to merely believe by the next 303(d) list cycle, that restoration will have occurred.*
3. Were there load reductions in other pollutants that indicate progress?
4. Were any new ordinances or laws put into place as a result of the actions?

Example 1:

By 2003 biological integrity and habitat at Blue Spring Creek had improved, as measured by the higher diversity and types of macroinvertebrates such as insects, crayfish, snails, and clams—indicators of good water quality. Almost twice as many EPT families (a category of insects used to measure water quality) were present in 2003 (11 EPT) than in 1999 (6 EPT), and 25 different taxa were collected in 2003 as compared to 15 different taxa found in 1999. Eight of these families are intolerant of pollution. These metric values represent the highest score possible (15) out of a family-level biological reconnaissance (biorecon) index that considers scores from 11 to 15 indicative of a non-impaired biological community. The habitat assessment score had improved from 114 in 1999, which is considered inadequate in the ecoregion, to a score of 136—well above the target habitat score of 123, which indicates a healthy

Example 2:

The Bass Lake restoration project achieved TMDL targets by reducing the average phosphorus concentrations from 490 μg/L to 10 μg/L, and the lake will be removed from the state's 303(d) list in the next listing cycle. Farmers' participation in nutrient management planning should reduce nutrient delivery from cropped areas in the watershed even further.

The alum treatment dramatically reduced total phosphorus in Bass Lake. Without the high concentration of phosphorus to feed on, heavy blue-green algae blooms no longer cover the lake and water clarity continues to improve. Secchi disk readings have improved from less than 10 feet before the project to up to 20 feet during July 2004 after the alum treatment. No fish kills have been noted since the project, and the fish population appears healthy.

Example 3:

Between March and October of both 2003 and 2005, ADEM collected dissolved oxygen data at three sites on the impaired segment of the Flint River. The agency also collected continuous dissolved oxygen data at two of the sites during July 2005.

As shown in the following table, only two monthly measurements (4.6 mg/L and 4.97 mg/L) fell below the state minimum criterion of 5.0 mg/L for the public water supply and fish and wildlife designated water use classifications. Furthermore, none of the continuous dissolved oxygen measurements were below the minimum criterion.

ADEM's assessment methodology stipulates that conventional water quality parameters, including dissolved oxygen, may not exceed water quality standards more than 10 percent of the time in waterbodies designated as public water supply and fish and wildlife resources. The data demonstrate that this 28-mile segment of the river now meets this requirement. As a result, ADEM has proposed that the segment be removed from the state's 2006 303(d) list of impaired waters. The next scheduled monitoring year for the segment is 2008.

Example 4:

The accompanying table compares key Whetstone Brook biomonitoring results with Class B water guidelines. Data highlighted in bold indicate the waterbody's failure to meet aquatic life support biocriteria for Vermont Class B waters. These data led to Whetstone Brook being added to Vermont's 303(d) list in 1998.

The monitoring team reassessed the segment in 2002 and found significant biological improvement. However, before 2004 (when Vermont revised its listing methodology for impaired waters), a waterbody could not be removed from the state's impaired list until 2 years of biological monitoring data showed compliance with water quality standards. Such compliance was confirmed in 2003. The EPT richness, BI values, and other biological indicators for both years remained well within the Class B guideline. In addition, the team found no evidence of oil sheens either year.

Because of these findings, VT DEC concluded that oil/grease no longer impaired Whetstone Brook's aesthetic and aquatic life uses. As a result, Vermont removed the waterbody from its 303(d) list in 2004. Whetstone Brook is scheduled to be monitored again in 2008.

VI. PARTNERS and FUNDING

1. List specific partners who contributed to the improvements in the waterbody.
2. List specific amounts of NPS dollars dedicated to the project (mention total amount over the lifetime of the project).
3. What did the NPS dollars support?
4. If NPS grant money was not used for the project, please describe the involvement in this project by any staff member who works in the states' nonpoint source program, if applicable.

Additionally, was the project patterned after any other projects that have been funded by NPS. The objective here is to try and link NPS grant elements to the success of the project.

5. Identify other matching sources of funding (e.g., state agricultural funds, USDA/EQIP, SRF, and local/private if such information is available).
6. Please provide GRTS numbers (9 digit grant number) if applicable. GRTS numbers are for internal tracking purposes only and will not be included in the story. If the Region or State is unable to provide this information, HQ will attempt to match up project with GRTS numbers. In this case, please provide project name.
7. BONUS question: What Congressional District does the waterbody reside in? This is for the purposes of tailored mailings to congressional members, which are frequently requested by Office of Water management or by the Office of Congressional and International Relations (OCIR). If the state cannot provide this information, Headquarters staff will attempt to determine the District number.

Example 1:

The cooperation of 28 members of the LVWCC, representing local, state, and federal agencies, local environmental groups, businesses, and interested citizens, was essential in the creation of a comprehensive management plan for the Las Vegas Wash. Volunteers also played an important role in the project, providing the needed labor for wetland and riparian plantings and invasive vegetation removal. The overall cost to implement the CAMP is projected to be approximately $127 million through 2013.

As of 2006, $33 million has been spent on CAMP implementation. Approximately $600,000 of section 319 funds was used to support construction of erosion control structures, bank revegetation, and public outreach efforts. Participating agencies contributed $1.8 million during the 2005–2006 fiscal year.

Example 2:

Partners involved in the effort were North Carolina Division of Water Quality, Soil and Water Conservation Districts, North Carolina Division of Soil and Water Conservation, North Carolina Cooperative Extension, U.S. Department of Agriculture's Natural Resources Conservation Service, North Carolina Department of Agriculture, North Carolina Farm Bureau, North Carolina State University, and agricultural community and commodity groups. The North Carolina Environment Management Commission brought together stakeholder groups of affected parties and provided the participants with a chance to express differing viewpoints. Stakeholders involved in the process included environmental groups, municipalities, developers, businesses, and the public. The North Carolina Agriculture Cost Share Program, administered by the Division of Soil and Water Conservation (DSWC), contributed $12.5 million between 1992 and 2003. Another DSWC-administered program, the federal Conservation Reserve Enhancement Program, has obligated approximately $33.1 million in the Tar-Pamlico River Basin since 1998. Between 1995 and 2003, approximately $2.67 million in Clean Water Act section 319 expenditures supported a variety of nonpoint source projects in the Tar-Pamlico Basin, including BMP demonstration and implementation, technical assistance and education, GIS mapping, development and dissemination of accounting tools, and monitoring. As part of the Phase I Agreement, the area's Point Source Association both contributed funds and acquired a section 104(b)(3) grant for agricultural BMP implementation. The combined total of their contributions was

VII. Photos:

Provide 1-2 photos of BMPs that illustrate the project actions. Photos should be of a type that helps illustrate the problem and/or the solution. Please provide a brief caption that explains and provides the context of the illustration. Photos should be 300 dpi resolution when printed at 3" X 3". Occasionally, the contractor can utilize photos with less resolution, but if that is not possible, the story will have to be published without a photo

Example:

Weirs are low dams designed to reduce streambed erosion by flattening the slope of the channel and slowing flows. Many weirs are constructed of confined rock riprap, providing a somewhat natural look (top). Other structures are built with concrete, resulting in a more engineered look (bottom). Weirs, wetland restoration, and invasive vegetation removal helped reduce total suspended solids (TSS) concentrations in lower Las Vegas Wash and led to its removal from the Nevada 303(d) list in 2004.

VIII. Table/Graph/Chart:

If data is provided that documents improvements in water quality, please label axes, indicate water quality target/endpoints, and provide brief caption that explains the data. Please attach graphs as separate files, if possible.

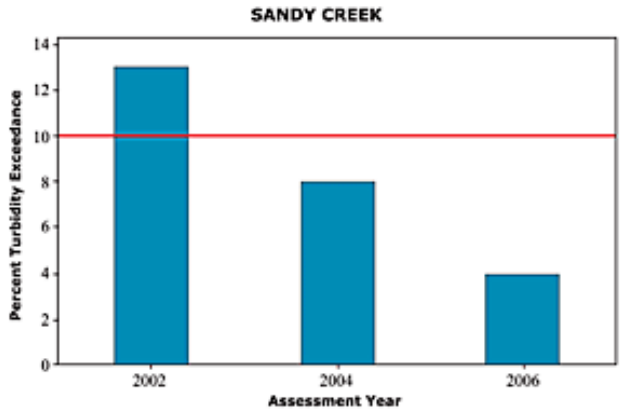
Example 1:

Chase Brook Biomonitoring Results

Sampling site	Date	Assessment rating	EPT	Density (individuals/m^2)	Individuals from *Oligochaeta* (%)
1.2	9/14/1993	Fair	15.0	357	10.6
1.2	9/20/1994	Fair	22.5	584	23.8
1.2	10/6/1998	Fair	19.0	493	11.7
1.2	9/18/2000	Very good	19.0	673	2.4
1.2	9/2/2002	Good	16.7	1253	1.4
Class B Guideline			> 16.0*	> 300	< 12.0

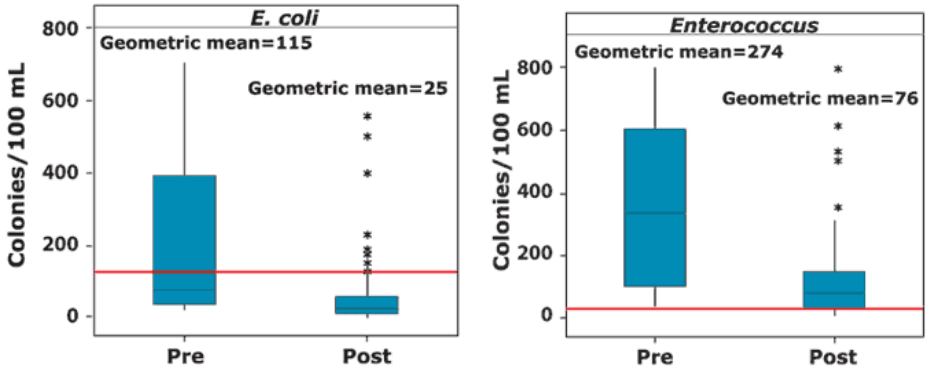
* Vermont Class B Guideline for EPT was 18.0 until the state changed it to 16.0 in 2002.

Example 2:



A stream is considered impaired due to turbidity if 10 percent or more of the seasonal base flow water samples exceed 50 NTUs (based on five years of data proceeding the assessment year). The FWP designation is now fully attained.

Example 3:



Boxplots indicate the interquartile range (25th-75th percentile) and median of the data in each of two periods: "Pre" contains data from August 1999 to January 2001; "Post" includes data from July 2001 to May 2005. The red line indicates the geometric mean above which the beneficial use is not achieved. There were significant reductions in mean levels of both *E. coli* and *Enterococcus* bacteria.

IX. Contact Information:

Provide a contact name, agency, phone, email address. Use your discretion on including a Regional, State, and/or local project contact(s).

Division of Water Monitoring and Standards
Bureau of Environmental Analysis, Restoration and Standards

2018 Water Quality Restoration Grants Maintenance Plan Guidance

Appendix F

MAINTENANCE PLAN CONTENTS

All maintenance plans for Water Quality Restoration projects must include the following:

1. The name, address, and telephone number of the person or persons responsible for the preventative and corrective maintenance of each BMP. If the plan identifies a party other than the owner as having responsibility for maintenance, that is, a public entity or homeowners' association, then the plan must include a copy of the other party's written agreement to assume this responsibility.

2. Specific preventative and corrective maintenance tasks such as removal of sediment, trash, and debris; mowing, pruning, and restoration of vegetation; restoration of eroded areas; elimination of mosquito breeding habitats; control of aquatic vegetation; and repair or replacement of damaged or deteriorated components.

3. A schedule of recommended regular inspections and tasks.

4. Cost estimates of maintenance tasks, including sediment, trash, and debris removal.

5. A written record of all preventative and corrective maintenance performed.

In addition, it would be useful if the following items were also included in the maintenance plan:

1. Maintenance equipment, tools, and supplies necessary to perform the various preventative and corrective maintenance tasks specified in the plan.

2. Maintenance, repair, and replacement instructions for specialized, proprietary, and nonstandard measure components, if any, including manufacturers' product instructions and user manuals.

3. Procedures and equipment required to protect the safety of inspection and maintenance personnel.

4. Approved disposal and recycling sites and procedures for sediment, trash, debris, and other material removed from the BMPs during maintenance operations.

MAINTENANCE PLAN CONSIDERATIONS

In addition to the plan contents described above, a maintenance plan should address the following aspects of BMP maintenance:

Access

All BMP components must be readily and safely accessible for inspection and maintenance.

Training of Maintenance Personnel

Include a basic description of the purpose and function of the BMP and its major components. Outline what tasks need to be done by what personnel, how and when (*i.e.* what time of year, etc.). Training should also be provided in the need for and use of all required safety equipment and procedures.

Aesthetics

The impacts of the aesthetics on the surrounding community should be included in maintenance considerations.

MAINTENANCE PLAN PRODECURES

Once the maintenance plan is approved by the Project Manager, the following procedures should be followed:

1. Copies of the maintenance plan must be provided to the owner of the BMP, who must commit to keeping the BMP in place, and keeping the land devoted to the BMP function. Copies must also be provided to the NJDEP Project Manager for the project file and any other entity deemed necessary by the NJDEP Project Manager and/or the Grantee (*e.g.* township, mosquito control commission, etc.).

2. Any change in the name, address, and telephone number of the person or persons responsible for maintenance must be updated in the maintenance plan and requisite copies distributed per Procedure #1 above.