



# GENERAL GUIDELINES

SECTION 319(h) FY2015  
NONPOINT SOURCE IMPLEMENTATION GRANT

Revised June 2014

## FY2015 TABLE OF CONTENTS

<b>INTRODUCTION</b> .....	<b>4</b>
Eligible Applicants .....	4
Maximum Federal Reimbursement & Minimum Match .....	4
<b>WHAT'S NEW FOR FY2015</b>  .....	<b>5</b>
<b>MINIMUM REQUIREMENTS FOR FUNDING</b> .....	<b>5</b>
Competitive Criteria .....	5
Additional Funding Criteria .....	6
<b>SELECTION FACTORS</b> .....	<b>7</b>
Eligible Projects .....	8
Ineligible Projects .....	8
“Above & Beyond” NPDES Permit Requirements .....	9
<b>APPLICATION INSTRUCTIONS</b> .....	<b>10</b>
Check List of Inclusions .....	11
Project Cover Page .....	12
<b>PROJECT DESCRIPTION</b> .....	<b>14</b>
Project Title .....	14
Lead Organization .....	14
Project Goals .....	15
Project Background .....	14
Project Activities .....	16
Roles and Responsibilities of Participating Organizations .....	19
Project Location .....	20
NPS Pollution Impairments or Healthy Waters .....	22
Monitoring .....	23
Project Budget .....	24
Project Implementation and Drawdown Schedule .....	28
Project Attachments.....	29
<b>TABLES</b>	
1. Nonpoint Source Pollutants or Indicators .....	30
2. Major Categories and Subcategories of NPS Pollution .....	31
3. Nonpoint Source Pollution Management Activities .....	32
4. Best Management Practices .....	33
<b>APPENDICES</b>	
A. USEPA’s Nine Elements of Watershed Planning .....	34
B. Determining Measures of Success .....	35
C. Monitoring for 319(h) Projects .....	39
D. Match FAQs Sheet .....	44
E. Required Due Diligence for NPS Land Conservation Projects	47



## CONTACT US

GEORGIA ENVIRONMENTAL PROTECTION DIVISION  
WATERSHED PROTECTION BRANCH  
NONPOINT SOURCE PROGRAM

2 MARTIN LUTHER KING JR. DRIVE  
ATLANTA, GEORGIA 30334  
(404) 463-1511

**JEFF LINZER (UNIT MANAGER) – (404) 651-8532**  
[JEFFREY.LINZER@GAEPD.ORG](mailto:JEFFREY.LINZER@GAEPD.ORG)

**BARBARA STITT-ALLEN (PRIMARY CONTACT) – (404) 651-8538**  
[BARBARA.STITT@GAEPD.ORG](mailto:BARBARA.STITT@GAEPD.ORG)

**HARRIET BRYANT – (404) 651-8525**  
[HARRIET.BRYANT@GAEPD.ORG](mailto:HARRIET.BRYANT@GAEPD.ORG)

**MARY GAZAWAY – (404) 651-8522**  
[MARY.GAZAWAY@GAEPD.ORG](mailto:MARY.GAZAWAY@GAEPD.ORG)

**CONNIE GILLIAM – (404) 651-8530**  
[CONNIE.GILLIAM@GAEPD.ORG](mailto:CONNIE.GILLIAM@GAEPD.ORG)

**If you have any questions about these guidelines or the associated application materials, please contact a Grants Unit Staff Member listed on this page**

The preparation of these guidelines was financed through a grant from the U.S. Environmental Protection Agency under provisions of Section 319(h) of the Clean Water Act of 1987, as amended.

## INTRODUCTION

Under Section 319(h) of the Clean Water Act, the U.S. Environmental Protection Agency (USEPA) awards a Nonpoint Source Implementation Grant to the Georgia Environmental Protection Division (GAEPD) to fund eligible projects that support the goals of the Georgia Nonpoint Source Program (NPSP). **Section 319(h) Grant funds are awarded to projects that specifically identify the nonpoint sources of pollution to be addressed and the activities proposed to prevent, control and/or abate the identified nonpoint pollution sources.** Therefore, GAEPD employs a competitive process to ensure the most appropriate projects are selected for funding. This document is designed to assist applicants in understanding that process and completing the necessary application materials.

Federal funding for each Grant is dependent on allocations from Congress and adjustments by USEPA.

### Eligible Applicants

Public entities in Georgia such as:

- City and county governments, and State agencies;
- Local, regional, or State authorities operating jurisdictional services and/or delivery programs;
- Regional Commissions;
- Resource Conservation and Development Councils;
- Local and regional school systems, and State colleges and universities;

State law currently prohibits non-governmental organizations (such as private firms and nonprofit organizations) from receiving Section 319(h) Grant funds directly. However, these organizations are encouraged to foster partnerships with eligible applicants to develop and/or implement projects.

### Maximum Federal Reimbursement & Minimum Non-Federal Match

- Maximum federal reimbursement for a 319(h) Grant is capped at \$400,000 and limited to 60 percent of the total project cost.
- Award recipients must provide a minimum non-federal match of 40 percent of the total project cost.
- Applicants must specifically identify match commitment and sources within various sections of their project application.
- Applicants who document a match commitment of 50 percent or greater will receive priority consideration for funding.

#### **Sample Calculation for Determining Match Commitment**

Federal Funds Requested x (2/3) = Required Non-Federal Matching Funds

<i>Example:</i>	319(h) Funds Requested:	\$150,000 (60% of Total Project Cost)
	+ Matching Funds Required:	\$100,000 (40% of Total Project Cost)
	Total Project Cost:	\$250,000 (100% of Total Project Cost)

**MATCH IS EXPLAINED IN MORE DETAIL IN APPENDIX D**

## WHAT'S NEW FOR FY2015?

TRACK WHAT'S NEW FOR THE FY2015 SECTION 319(h) GRANT WITH THE  SYMBOL!

### MINIMUM REQUIREMENTS FOR FUNDING

To be considered for funding, all project applications **must** meet **both** of the following minimum requirements:

 Implement an **existing** watershed-based plan that meets USEPA's Nine Elements for Watershed Planning; **and**

- Commit to a minimum 40% non-federal Match that can be accomplished through local funds, in-kind services, or other non-federal sources.

 There will be no FY2015 competitive funds awarded for either revising existing or developing new watershed-based plans. However, GAEPD may consider funding minimal updates to plans to be implemented on a case-by-case basis provided the updates meet the following conditions:

- Purpose will be to bring one-to-three sections of the existing watershed-based plan current with major high-impact changes in land use, recent improvements or degradations in water quality, or additional stakeholder input or activities;
- Completion will be within the first four months of a project implementation schedule;
- Cost will be a maximum 10% of requested federal funds.

**Please note that local governments must have Qualified Local Government Status in compliance with the requirements of the Georgia Planning Act of 1989 and the Service Delivery Strategy Law of 1997 in order to be eligible to execute contracts with GAEPD, per State law.**

### Acceptable Alternatives to Watershed-Based Plans

The 11 Regional Water Plans are recognized as acceptable alternatives to watershed-based plans. In addition, proposals to implement multiple documents that have been combined to represent an alternative to a watershed-based plan are also acceptable for project funding through Section 319(h) grants. Both these options are acceptable as long as the application for grant funds describes each of the nine elements in list format (1-9) and summarizes content in the Regional Water Plans or the assembled texts (citing documents, headings and page numbers) that fulfills each element's requirements.

### Competitive Criteria

Projects will be scored competitively based on the following criteria established in compliance with GAEPD and USEPA rules and guidelines to allocate 319(h) funds. The more criteria addressed, the more competitive the project.

- Implement an existing watershed-based plan compliant with USEPA’s Nine Elements for Watershed Planning which targets Georgia’s 2014 DRAFT 2014 Section 305(b)/303(d) List of Waters in order to:
  - Improve water quality in impaired (not supporting) waters; or
  - Restore water quality in impaired (not supporting) waters to support their designated or beneficial uses; or
  - Protect water quality in Category 1 (supporting) waters, by incorporating USEPA’s *Healthy Watersheds Initiative*.
- Implement structural and/or nonstructural best management practices recommended in a watershed-based plan that lead to measurable (i.e., quantitative) improvements in water quality.
- Obtain signed letters of commitment that quantify match contribution, as appropriate, from cooperating partners and/or multi-governmental agencies in support of a watershed management approach, especially in conjunction with other nonpoint source management activities within the watershed as well as across jurisdictional boundaries.
- Focus in a project area equal in size to a single 10-digit Hydrologic Unit Code (HUC) or smaller watershed.
- Implement management practices identified within the appropriate Regional Water Plan.

For a list of the State of Georgia’s impaired waters on the 305(b)/303(d) list, please visit  
<http://epd.georgia.gov/georgia-305b303d-list-documents>  
 USEPA’s **Healthy Watersheds** website provides the tools and information that states, local governments and others need to identify and protect healthy watersheds  
[www.epa.gov/healthywatersheds](http://www.epa.gov/healthywatersheds)

### Additional Funding Criteria

This list is for guidance purposes only and can in no way be used as a prediction for funding approval. Proposals may be comprised of multiple criteria to achieve a more competitive application.

- Target specific impairments or water quality issues related to Pathogens, Dissolved Oxygen, Sediment, and/or Nutrients.
- Address waters with TMDLs finalized before October 31, 2013.
- Demonstrate that the project results in additional or ancillary environmental, economic and social benefits “other than” water quality improvement such as environmental justice, impact on recreation amenities or jobs, and air quality or energy conservation.
- Include administrative and/or managerial improvements that prevent and/or correct the adverse hydrologic impacts of increased impervious surfaces. In order to receive consideration for this criterion, applications must propose to develop and implement items such as local or regional ordinances, stream buffer protections wider than State minimums, or other mechanisms to ensure long-term success in minimizing the impacts of hydrological modifications.

- Commit to a match of 50 percent or higher.
- Qualify as a WaterFirst Community or locate the project in a WaterFirst Community that has committed to participate as a partner in the project.
- Locate the project area(s) in priority watershed(s) as determined by GAEPD and USEPA, and focus proposed activities on watershed-based implementation and/or restoration.
- Address and/or implement management measures, enforceable policies, and mechanisms that will result in *Georgia's Coastal Nonpoint Source Management Program* being fully approvable under Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA).

#### WHAT IS A TMDL?

A TMDL (Total Maximum Daily Load) is a calculation of the maximum amount of a pollutant that a river, stream, or lake can receive and still meet water quality standards.

For a list of the State of Georgia's TMDLs, please visit

<http://epd.georgia.gov/total-maximum-daily-loadings>

For more general information on TMDLs, see the USEPA website: <http://www.epa.gov/owow/tmdl/>

#### SELECTION FACTORS

Proposals must support the milestones and/or implementation activities described in the current Georgia Nonpoint Source Management Program as well as meet the following key factors for competitive selection:

- Follow all instructions and guidelines as described in GAEPD's *General Guidelines: Section 319(h) FY2015 Nonpoint Source Implementation Grant*. (Applications that fail to comply with FY2015 instructions and guidelines may not be reviewed or recommended for funding.)
- Present goals, objectives and activities clearly and concisely.
- Specify the nonpoint sources of pollution to be addressed.
- Propose activities best-suited to prevent, control, and/or abate the pollution sources.
- Provide expected measurable results / improvements in water quality.
- Demonstrate cost effectiveness.
- Include components that evaluate project progress and success.

**Applicants who have NOT demonstrated successful administration of previous Section 319(h), Section 106, and/or Section 604(b) grant-funded projects, where applicable, may receive a reduction in points during project review.**

**Please note that first-time applicants will NOT be penalized during the review process.**

Applicants are encouraged to describe any staff or other changes since the completion of a previous project that would improve their ability to manage a 319(h) Grant project efficiently and effectively. Successful administration includes, but is not limited to the following:

- Completing all project activities during the contract period;
- Meeting all required deadlines;
- Completing the project on time and on budget;
- Expending most or all grant funds requested on project activities; and
- Providing adequate documentation as requested by GAEPD.

### Eligible Projects

**Eligible activities must address nonpoint sources of pollution to improve water quality through implementation of an existing watershed-based plan.** The following categories and examples are not exhaustive and should be considered in context with the competitive selection requirements, priorities, and factors listed on Pages 5-7.

<b>Examples of Projects Eligible for Funding as Implementations of Watershed-Based Plans</b>	
Implement TMDL or Restore Watershed	<ul style="list-style-type: none"> <li>• Commit to operate/maintain BMPs 5-10 years</li> <li>• Estimate BMP effectiveness to reduce loads (nitrogen, phosphorus &amp; sediment) or to restore &amp; protect streambank (feet) or wetland (acres)</li> </ul>
Build Local Capacity to Implement Project	<ul style="list-style-type: none"> <li>• Recruit partners to practice pollution controls</li> </ul>
Urban NPS pollution controls (non-NPDES)	<ul style="list-style-type: none"> <li>• Develop stormwater utility</li> </ul>
Implement Agricultural BMPs	<ul style="list-style-type: none"> <li>• Fence out livestock; provide alternate watering sources; install heavy use protection areas</li> </ul>
Water Quality Monitoring (evaluate BMPs)	<ul style="list-style-type: none"> <li>• Develop GAEPD QA/QC Plan or SQAP or USEPA QAP</li> </ul>
Specific Demonstration Projects	<ul style="list-style-type: none"> <li>• Introduce &amp; evaluate new technology or policy</li> </ul>
Certain Groundwater Activities	<ul style="list-style-type: none"> <li>• Target BMPs to recharge &amp; wetland areas</li> </ul>
Approved Lake Protection Projects (NPS)	<ul style="list-style-type: none"> <li>• Establish &amp; maintain buffers</li> </ul>
Technical & Financial Assistance	<ul style="list-style-type: none"> <li>• Adopt ordinances; secure funding &amp; partners</li> </ul>

See **TABLE 3 - NONPOINT SOURCE POLLUTION PREVENTION, CONTROL AND/OR ABATEMENT ACTIVITIES** for a list of acceptable practices within the context of implementing a Nine-Element watershed-based plan. If you have any questions regarding the eligibility of your project proposal, please feel free to contact a Grants Unit Staff Member listed on page 3.

### Ineligible Projects

Certain projects are not eligible for 319(h) funding due to various Federal and State laws, rules, and policies, and cannot be supported by either federal or local matching funds.

Examples of ineligible projects include, but are not limited to:

- Implementation of National Pollutant Discharge Elimination System (NPDES) permit requirements (including Concentrated Animal Feeding Operations, Phase I & II Stormwater Permits, Wastewater Permits, etc.) or of elements included in a permit (i. e., mandated Watershed Assessments and/or Protection Plans).
- Dam construction and/or removal
- Lake dredging or aquatic macrophyte harvesting  
Note: Exceptions may be made if ALL contributing sediment sources have been corrected.
- Surface paving (impervious).
- Fulfillment of consent orders and/or decrees.
- Construction of wastewater infrastructure (including sewer connections).
- Water quantity/supply projects (such as reservoirs, wells, infrastructure, etc.).
- Installation of incinerators  
Note: Composting is the preferred practice for 319(h) funding as a means of dead livestock disposal. Policy documents are available upon request.

### “Above and Beyond” NPDES Permit Requirements

Some activities recommended in a watershed-based plan may be considered eligible for funding or as match in a 319(h) grant project if they represent efforts, approaches or applications “above and beyond” any elements associated with a NPDES permit. Congruently, grant-funded activities entered in any NPDES permit report **MAY NOT** be counted as compliance.



**Applicants must include a signed letter on official letterhead** verifying that activities proposed for the project represent practices that are “above and beyond” NPDES permit requirements and will never be counted as meeting compliance in any NPDES permit reports.

Watershed monitoring under a NPDES permit will not qualify for 319(h) Grant funding. However, the grant applicant can state that ongoing NPDES water quality data will be delivered with the project Quarterly Progress Reports in order to contribute to BMP and water quality assessments in support of the 319(h) project.

### Examples of Activities “Above & Beyond” NPDES Permits

**Add to Specified Number of Activities or Tasks Quoted in the NPDES Permit.**

**Example:**

- The permit itemizes installation of nine septic system replacements.
- The 319(h) grant application would request funds to replace septic systems number 10 and up, and explain that these qualify as “above and beyond” the permit requirement.
- The applicant would replace the additional septic systems (10 and up), and would never count the additional installations as compliance with any NPDES permit requirements.

**Fulfill Numerical Quota for Activities with No Specified Number in the NPDES Permit.**

**Example:**

- The permit describes installing unspecified numbers of signs, disposal bags / stations, and receptacles to address pet waste in areas of high pet traffic, parks or picnic sites.
- The 319(h) grant application would request funds to install a specific numerical quota (3 signs, 300 bags, 3 bag stations, 3 receptacles), and explain that this quota would be "above and beyond" any permit requirement.  
In this case, the applicant would receive grant reimbursement until the numerical quota had been reached; but would never count those installations as compliance with any NPDES permit requirements.

**Propose Completely New Activities or Approaches Not Included in the NPDES Permit.**

**Example:**

- The permit proposes particular feasible structural controls to reduce urban run-off pollution; but, does not include bio-swales as an effective management practice.
- The 319(h) grant application would request funds to install bio-swales or to reimburse other activities not specified in the permit, and explain these practices as "above and beyond" the permit requirements.
- The applicant would never count the grant-funded installations or activities as compliance with any NPDES permit requirements.

**APPLICATION INSTRUCTIONS**

**APPLICATION MATERIALS THAT DO NOT ADHERE TO THE CURRENT FORMATS AND GUIDELINES ON THE GAEPD WEBSITE MAY NOT BE CONSIDERED FOR FUNDING.**

**APPLICATION DEADLINE**

**Section 319(h) FY2015 Grant applications must be postmarked by OCTOBER 31, 2014.**  
Any application postmarked (or hand-delivered) after this date will not be considered for funding.

**Completion of the Application**

Please follow ALL instructions and complete ALL sections of the application. If a section of the application does not pertain to the project, then put a "Not Applicable (N/A)" response. **DO NOT LEAVE ANY SECTIONS BLANK.** Incomplete applications may not be considered for funding.

**Required Format**

**SUBMIT APPLICATION PACKETS AS DIGITAL FILES SAVED TO A CD.  
INCLUDE ALL SUPPORTING MATERIALS.  
LABEL FILES PROPERLY TO CORRESPOND WITH REFERENCES IN THE APPLICATION.**

Do not print out paper copies of the application or supporting documents. **The only paper copies to submit with the CD are the Check List of Inclusions and the Project Cover Page.** The Project Cover Page should also be the first page of the digital application file.

**Applications must be in MicroSoft WORD (NOT Adobe or .pdf )** and typed single-spaced in 11-point normal font. Please number all pages and include the project and applicant names on each page. Reference all supporting documents as attachments in Section 12 at the end of the application. Assign appropriate designations (Appendix, Attachment, Exhibit, Figure, Table, or Map), titles, and sequential numbers (1, 2, and 3) or alphabetical letters (A, B, C) to the documents. Submit electronic files of the application and all supporting documents in their FINAL version. Make sure that file labels correspond with the titles and numbers/letters referenced in Section 12.

Prepare a digital Project Implementation and Drawdown Schedule (Section 11 of the application) **formatted in color and sized 11 x 17 inches**, and save the electronic file to the CD. Access and download an interactive template of the Project Implementation and Drawdown Schedule in a separate electronic file (not the same file as the application) at: <http://epd.georgia.gov/section-319h-georgias-nonpoint-source-implementation-grant>. Label the schedule file appropriately so that it can be easily paired with the application file. **The Project Implementation and Drawdown Schedule MUST be completed according to the template provided, and detailed instructions plus an Example are included in the file.**

#### **Deadlines for Pre-Application Meeting or Conference Call and Draft Application Reviews**

All applicants are required to meet (or conference call) with GAEPD Grants Unit Staff to discuss the project proposal before an application is submitted. Project partners, consultants, or other affiliated parties are welcome to attend, but the primary applicant **MUST** be in attendance. **All pre-application meetings MUST be completed by October 15, 2014.** Grants Unit Staff are available to review and comment upon draft applications if the documents are received (email is acceptable) by September 30, 2014.

**SUBMIT DIGITAL APPLICATION PACKETS ON CD BY MAIL OR DELIVER BY HAND.  
FAXES OR EMAILS WILL NOT BE ACCEPTED.**

**Applicants must address their 319(h) FY14 Grant application packets as follows:**

Section 319(h) FY2015 Grant Application  
ATTN: Connie Gilliam  
Georgia EPD Watershed Protection Branch  
Nonpoint Source Program  
2 Martin Luther King Jr. Drive, Suite 1462  
Atlanta, GA 30334

### **CHECK LIST OF INCLUSIONS**

Check or X each item included in the digital Application Packet saved on a CD. Required items **must** be included in the packet or the application may not be considered for funding. Provide the file label to identify where the document can be found in the Application Packet.

**Required in Digital Application Packet to be Considered for Funding**

- \_\_\_\_\_ Project Application (included in one file)
- \_\_\_\_\_ Check List of Inclusions (supply one paper copy)
- \_\_\_\_\_ Project Cover Page (supply one paper copy)
- \_\_\_\_\_ Signature on Budget Disclaimer: Non-Federal Source & No Overlap of Match Funds
- \_\_\_\_\_ Project Implementation and Drawdown Schedule (in color)
- Document File Label:** \_\_\_\_\_

**Include in Digital Application Packet to be Competitive for Funding**

- \_\_\_\_\_ Letters of Commitment that Quantify Match Values (on letterhead)
- Document File Label:** \_\_\_\_\_
- \_\_\_\_\_ DRAFT QA/QC Water Quality Monitoring Plan (for GAEPD review)
- Document File Label:** \_\_\_\_\_
- \_\_\_\_\_ Letter of Assurance: Project Is Above & Beyond NPDES Permits (on letterhead)
- Document File Label:** \_\_\_\_\_
- \_\_\_\_\_ Watershed-Based Plan to be Implemented
- Document File Label:** \_\_\_\_\_
- Add File Labels to the following as needed*
- \_\_\_\_\_ Attachments, Appendices, Exhibits (research studies, TMDLs, TMDLIPs)
- Document File Label:** \_\_\_\_\_
- \_\_\_\_\_ Photographs, Figures, Tables (field surveys, water quality data)
- Document File Label:** \_\_\_\_\_
- \_\_\_\_\_ Maps (project area, watersheds, streams, counties, cities, roads)
- Document File Label:** \_\_\_\_\_

**PROJECT COVER PAGE**

**Project Title:** \_\_\_\_\_  
*The project title should clearly identify and describe the project in no more than **two lines** of text. The title should state the type of project (e.g. implementation of watershed-based plan or TMDL implementation plan, streambank restoration, etc.) and applicable watershed(s) name(s).*

**Applicant:** \_\_\_\_\_  
*The Applicant is the lead organization responsible for managing the proposed project.*

**Primary Contact:** \_\_\_\_\_  
*This contact will be the individual within the lead organization who will be responsible for all project administration and communication with GAEPD.*

**Date of Pre-Application Meeting with GAEPD Staff:** \_\_\_\_\_

1. Is the project proposal implementing an existing watershed-based plan that addresses USEPA's Nine Elements of Watershed Planning?

YES \_\_\_ NO \_\_\_

If YES, identify the title of the plan and provide a copy as an Attachment to the application:

TITLE: \_\_\_\_\_

2. Was the watershed-based plan developed using Section 106, 604(b) or 319(h) Grant funds?  
YES \_\_\_ NO \_\_\_

*If you are unsure whether your plan was developed through one of these Grants, please contact a Grants Unit Staff Member listed on Page 3 for clarification.*

-  3. List the page numbers and section headings/subheadings where each of the Nine Elements of Watershed Planning can be found in the attached watershed-based plan.

*Add Pages and Sections as needed.*

*Keep each Summary to a maximum of 5 sentences.*

***Include a digital copy of the full plan in an electronic file as an attachment.***

- I. Identification of sources contributing to nonpoint source (NPS) pollution to be controlled:  
Pages\_\_\_\_\_ Section\_\_\_\_\_ Pages\_\_\_\_\_ Section\_\_\_\_\_  
Summary:
- II. Estimated load reductions expected from recommended NPS management measures:  
Pages\_\_\_\_\_ Section\_\_\_\_\_ Pages\_\_\_\_\_ Section\_\_\_\_\_  
Summary:
- III. NPS management measures necessary to achieve established TMDLs or improvement:  
Pages\_\_\_\_\_ Section\_\_\_\_\_ Pages\_\_\_\_\_ Section\_\_\_\_\_  
Summary:
- IV. Funding sources needed and authorities relied upon to implement the plan:  
Pages\_\_\_\_\_ Section\_\_\_\_\_ Pages\_\_\_\_\_ Section\_\_\_\_\_  
Summary:
- V. Education & outreach strategies to engage public participation in implementing the plan:  
Pages\_\_\_\_\_ Section\_\_\_\_\_ Pages\_\_\_\_\_ Section\_\_\_\_\_  
Summary:
- VI. Schedule or timeline for implementing the recommended NPS management measures:  
Pages\_\_\_\_\_ Section\_\_\_\_\_ Pages\_\_\_\_\_ Section\_\_\_\_\_  
Summary:
- VII. Interim, measurable milestones to determine progress of implementation:  
Pages\_\_\_\_\_ Section\_\_\_\_\_ Pages\_\_\_\_\_ Section\_\_\_\_\_  
Summary:
- VIII. Criteria to determine success in water quality improvement or need to revise plan  
Pages\_\_\_\_\_ Section\_\_\_\_\_ Pages\_\_\_\_\_ Section\_\_\_\_\_  
Summary:

IX. Evaluation of effectiveness of implementation efforts measured against above criteria:  
Pages \_\_\_\_\_ Section \_\_\_\_\_ Pages \_\_\_\_\_ Section \_\_\_\_\_  
Summary:

See **Appendix A** for more information on USEPA's Nine Elements of Watershed Planning.

## PROJECT DESCRIPTION

Describe the specific project goals and related activities that will take place to achieve them. By capturing the details of what will occur from the time the project begins until completion, the applicant is able to visualize the implementation of the project. Additionally, the **project description must specifically identify the nonpoint sources of pollution to be addressed and clearly articulate the activities designed to prevent, control and/or abate those sources.** Include information that demonstrates the lead organization's specific knowledge about the proposed project and its competency to produce an acceptable product.

### 1. Project Title:

### 2. Lead Organization and Primary Contact:

Please provide the name, address, telephone number, fax number and email of the lead organization and primary contact. It is acceptable to include a secondary point of contact (for instance, when an applicant would like to include contact information for a major project partner). However, primary contact information must be provided for the applying organization to facilitate invoicing, documentation, and reporting.

### 3. Project Goals

**Clearly state the overall goal(s) of the proposed project in a concise manner.** Treat this section as a "sound byte" that provides an accurate account of what the project will accomplish in the grant period. The information provided must be factual, and project goals must be realistic and attainable. **Each objective should tie into the Project Activities & Tasks and Budget.**

- Specify the names and listing status, as appropriate, of water bodies to be addressed.
- Directly target the water quality problems identified.
- Estimate load reductions or other quantifiable measures of success.
- Focus on the implementation of management measures to achieve and/or maintain state water quality standards.

#### EXAMPLE

The goal of this project is to implement five urban stormwater BMPs consistent with the Watershed-Based Plan in order to reduce elevated sediment loads by 25% in a segment of Mud Creek listed for Biota F. This project will also conduct three hands-on workshops to educate the local citizenry about the impact of erosion on water quality.

#### 4. Project Background

Explain in a clear and concise manner the **what**, **how**, **why**, and **who** that justifies funding the particular proposed project. Include all relevant supporting background information in a summary format. The following list is not all inclusive; but, provides some examples:

- State **what** are the existing and documented water quality impairments and concerns.
  - Clarify all existing nonpoint source pollution impairments (or water quality concerns, if the project will be protecting a healthy watershed with preventive management practices).
  - Identify the sources of impairment and reference the basis for that information (watershed-based plan, TMDLs, water quality data collected under permits, etc.).
  - Discuss the watershed-based plan to be implemented, including sections that support the project (i.e. sources of impairment, recommended management measures, etc.), sections that are deficient, and how those deficiencies will be corrected.
- Articulate **how** the proposed project will alleviate those issues. **Each practice should tie into the Project Activities & Tasks (Section 5.) and Budget (Section 10.).**
  - Describe past work performed within the watershed to address existing impairments (specify a certain time period) and how the proposed project will build upon that work.
  - Introduce all proposed activities related to the current project and summarize how they are linked to the watershed-based plan. The summary will also tie into details developed in Section 5. Project Activities.
- Include relevant information about **why** the proposed project activities are appropriate for the watershed, including any pertinent land-use information. Reference supporting documents or materials that demonstrate the need for the proposed project as an attachment in Section 12. at the end of the application:
- Specify the organizations, agencies or individuals **who** will function as staff, partners, contractors (if known), and/or in-kind match volunteers, and summarize **how** they will contribute to achieving the project goals.

#### NONPOINT SOURCE POLLUTION AND SOURCES OF IMPAIRMENT

See **TABLE 1 - NPS POLLUTANTS OR INDICATORS** for examples of NPS pollutants or indicators. See **TABLE 2 - MAJOR CATEGORIES AND SUBCATEGORIES OF NPS POLLUTION** for sources of pollutant loadings or impairment. Please note these tables are provided for guidance purposes only.

#### Supporting Multi-Phase or Other On-going Projects

If the proposed project is part of a continuing or multi-phase strategy, briefly describe those efforts and their results in this section. Be clear if previous phases of a proposed project were funded by 319(h) grants.

Additionally, include information about other ongoing nonpoint source management activities in the watershed, whether they represent an effort by the applicant or another party. Describe how the proposed project will support and/or coordinate with other programs in order to leverage efforts across the watershed. Examples include stormwater management programs, NPS education and outreach programs, watershed-based plan implementation projects, other Section 319(h) projects and other NPS activities.

**Please note all management practices implemented with Section 319(h) federal or non-federal matching funds must be properly operated and maintained for at least five and up to 10 years.**

**Addressing Hydrologic Impacts of Impervious Surfaces**

If the proposed project will address hydrologic impacts of increased impervious surface in a watershed, include information on what local managerial mechanisms are in place that will ensure the long-term success of the project as far as minimizing the potential impacts of future hydrologic modifications. Examples of mechanisms may include any stream buffer requirements wider than state minimums; natural resource conservation and/or open space plans; low-impact development or quality growth ordinances; impervious surface limits; stormwater or other nonpoint source utilities; etc.

**Environmental, Economic and Social Benefits in Addition to Water Quality Improvement**

Describe any ancillary benefits the proposed project may acquire in addition to improvements in water quality. The applicant must clearly explain how project activities aimed at restoring or improving water quality would also result in secondary benefits or additional outcomes. Examples include, but are not limited to, the following:

Environmental	Economic	Social
<ul style="list-style-type: none"> <li>• Water conservation</li> <li>• Air quality protection</li> <li>• Wildlife habitat recovery</li> <li>• Endangered species welfare</li> <li>• Climate change mitigation</li> <li>• Carbon footprint reduction</li> </ul>	<ul style="list-style-type: none"> <li>• Energy efficiency/savings</li> <li>• Increased property values</li> <li>• Local job creation</li> <li>• Infrastructure savings</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental justice/equity</li> <li>• Recreation opportunities</li> <li>• Aesthetics enhancement</li> <li>• Public health</li> </ul>

**Implementing Management Practices Identified in an Appropriate Regional Water Plan**

If the proposed project will implement management practices identified in a Regional Water Plan (RWP) that includes the project watershed, specify the coded sections (WW, WQ, etc.) of the RWP that reference the practices, and outline how the Water Planning Council will make the materials and methods developed through the project available to communities in the region for water quality protection and improvement.

**5. Project Activities**

**PLEASE SEE EXAMPLE PROJECT ACTIVITIES TEMPLATE ON PAGE 18**

The Project Activities should summarize tactics, detail tasks, and describe outcomes and deliverables that will achieve the project goals. In addition, measures of success will be established to assess the effectiveness of each task.

**Project Activity:** *Identify each main tactic necessary for accomplishing the project. See Tables 3 and 4 for lists of examples of activities and best management practices. Please note these tables are provided for guidance purposes only.*

**Tasks:** *Describe in detail the specific tasks necessary to complete each activity using available resources, and provide quantifiable information where appropriate. **Correlate all Tasks directly to the Project Budget and Implementation & Drawdown Schedule.***

Load reductions models <b>must</b> be included as a task for all applicable BMP projects.
---

**Deliverables:** *Identify all items that will be delivered as a result of each task. Provide quantifiable information where appropriate. Examples of deliverables include, but are not limited to: subcontracts, permits, design specs, water quality monitoring data, maps, reports, pictures, manuals, educational materials (brochures, videos, etc.), and signage.*

**Measures of Success:** *Describe what evaluation criteria will be applied to each task to assess the appropriateness and effectiveness in accomplishing the associated activity. Criteria should target both quantifiable and qualitative results.*

Include Federal/State Quarterly Progress Reporting Requirements as a Project Activity with “Submit Quarterly Reports and Invoices” and “Submit Close-Out Report and Final Invoice” as two separate tasks with deliverables and measures of success.

Both these reports as well as the invoices will be completed using template formats supplied by GAEPD once the grant funds are awarded and the project implementation contract is executed.

Quarterly Reports and Invoices will be required for the length of the project to ensure adherence to the Implementation and Drawdown Schedule and to proactively address any concerns in a timely manner. Grant recipients will also verify and confirm in-kind services and resources contributed by project partners in Quarterly Reports.

**For more information on Measures of Success, see Appendix B.**

## EXAMPLE OF PROJECT ACTIVITIES TEMPLATE

**Project Activity:** Install agricultural BMPs based on contracts with a minimum of ten (10) property-owners within the watershed in accordance with the Watershed-Based Plan.

- **Task 1:** Identify and recruit participants
  - **Deliverables:** Outreach letters; meeting agendas and notes
  - **Measures of Success:** Make contact with 75% of agricultural producers within watershed
- **Task 2:** Contract with 10 property-owners (representing 50% of contacted producers)
  - **Deliverables:** Ten (10) Contract BMP Implementation Schedules; ten (10) Conservation or Comprehensive Nutrient Management Plans
  - **Measures of Success:** 100% completion of necessary schedules & plans
- **Task 3:** Install ten (10) BMP systems in accordance with NRCS specifications
  - **Deliverables:** Pictures of implemented BMPs; field days
  - **Measures of Success:** Certificates of Completion/Payment Requests on a minimum of ten (10) BMP systems in accordance with NRCS specifications

**Project Activity:** Install a minimum of three (3) urban stormwater BMPs within the watershed in accordance with the Watershed-Based Plan

- **Task 5:** Install three (3) stormwater BMPs on public property taking into account BMP effectiveness, proximity to stream and public access and estimate load reductions
  - **Deliverables:** Maps, BMP design plans, pre- and post-implementation pictures
  - **Measures of Success:** Completion of a minimum of three (3) urban stormwater BMPs in accordance with Blue Book Specifications

**Project Activity:** Conduct Educational Outreach

- **Task 6:** Conduct two (2) Urban Stormwater Workshops at BMP sites in order to better educate local homeowners on water quality projects they can do at home
  - **Deliverables:** Workshop materials, pictures
  - **Measures of Success:** Attendance of 20 participants per workshop; 35% improvement in pre- and post- workshop knowledge assessments; Installation of two (2) stormwater BMPs on private properties 6 months after workshop

**Project Activity:** Conduct Post-BMP Monitoring

- **Task 7:** Identify monitoring sites
  - **Deliverables:** Map of monitoring sites
  - **Measures of Success:** Successful identification of a minimum of five (5) monitoring sites that are representative of the watershed and the BMP locations
- **Task 8:** Conduct post-BMP monitoring in accordance with QA/QC Plan or SQAP
  - **Deliverables:** Monitoring data and report
  - **Measures of Success:** Successful collection of four (4) samples per monitoring site; 5% reduction in fecal counts after BMP installation

**Project Activity:** Estimate load reductions using Region V & STEPL Models

- **Task 9:** Load reduction reports for each BMP (submitted with Payment Requests)
  - **Deliverables:** Load reduction reports for agricultural (10 producers) and urban stormwater (3) BMPs (submitted with Payment Request)
  - **Measures of Success:** Minimum 10% sediment load reduction; 10% phosphorus load reduction; 20% nitrogen load reduction per site

## 6. Roles and Responsibilities of Participating Organizations

Participating Organizations, subcontractors and stakeholders can fulfill a variety of functions. Assigned roles can include project coordinator, technical expert, member of steering / advisory committee, and/or general stakeholder who attends infrequent outreach or educational events to learn about and comment upon the project. **Make sure that the organization or individual is qualified and capable of performing the duties and responsibilities associated with the role assigned to them.**

Describe the roles and responsibilities for all Participating Organizations, subcontractors and stakeholders, clearly delineating the duties and accountabilities assigned to each. In particular, identify whether they will serve as general stakeholders or in a more committed capacity. **Spell out all time, services or resources that each will contribute as match (cash or in-kind) to the project** and provide detailed descriptions of the different expectations of each. **Make sure that all contributions from Participating Organizations are appropriate to the Project Activities, Budget, and Implementation & Drawdown Schedule.**

### REQUIRED LETTERS OF COMMITMENT

All Participating Organizations **must provide a letter of commitment** clearly stating their understanding of their expected roles, contributions, and responsibilities. If a Participating Organization plans to provide match, either as cash or in-kind services, these letters must also describe the amount or value of the match to be supplied.

**NOTE: Private companies that will be reimbursed as paid sub-contractors on the project are not considered to be Participating Organizations.**

Applicants must include all relevant information and utilize the Participating Organizations table provided in the application template, as shown in the Example below:

EXAMPLE	
Organization Name	Specific Responsibilities
<i>(Lead Organization)</i>	<ul style="list-style-type: none"> <li>• Execute grant contract with GAEPD</li> <li>• Account for/contribute to 40% <i>(state if greater)</i> of total project costs in matching expenses or in-kind services</li> <li>• Pay funds to appropriate contractor(s) and vendor(s)</li> <li>• Request reimbursements from GAEPD on a quarterly basis</li> <li>• Track the progress of project activities completed, grant funds expended, and match values provided in accordance with the implementation &amp; drawdown schedule</li> <li>• Complete and submit quarterly progress reports and invoices to GAEPD by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup> of each project year</li> <li>• Complete &amp; submit close-out report at conclusion of project</li> <li>• <i>(Form Project Advisory/Steering Committee)</i></li> <li>• <i>(Hire a full-time project manager )</i></li> <li>• <i>(Update maps and other documentation as required)</i></li> <li>• <i>(Conduct monitoring training &amp; education events)</i></li> <li>• <b>(ADD OTHERS AS APPROPRIATE)</b></li> </ul>

<b>GAEPD</b>	<ul style="list-style-type: none"> <li>• Provide 60% of total project costs</li> <li>• Review and approve project deliverables</li> <li>• Participate in meetings, as appropriate</li> <li>• Review and assist as needed with 319(h) Grant protocols</li> <li>• Provide project oversight and contract management</li> <li>• Provide monitoring guidance and training</li> </ul>
<i>(Participating Organization)</i>	<ul style="list-style-type: none"> <li>• Serve on Project Advisory/Steering Committee</li> <li>• Contribute in-kind services to match as described in attached Letter of Commitment</li> <li>• <i>(Identify project implementation partners)</i></li> <li>• <i>(Provide technical assistance, including maps and land use surveys in the watershed)</i></li> <li>• <i>(Conduct post-BMP water quality testing)</i></li> <li>• <i>(Assist in preparation of load reduction models)</i></li> <li>• <b>(ADD OTHERS AS APPROPRIATE)</b></li> </ul>
<i>(Participating Organization)</i>	<ul style="list-style-type: none"> <li>• General Stakeholder</li> <li>• Letter of Commitment describing functions</li> <li>• <i>(Assist with outreach activities to agricultural producers)</i></li> <li>• <i>(Assist with BMP Schedules and Management Plans)</i></li> <li>• <i>(Assist with field days, workshops and other activities)</i></li> <li>• <b>(ADD OTHERS AS APPROPRIATE)</b></li> </ul>
<i>(Local Governments)</i>	<ul style="list-style-type: none"> <li>• Serve on Project Advisory/Steering Committee</li> <li>• Render in-kind services to match as described in attached Letter of Commitment</li> <li>• <i>(Provide technical assistance with stormwater BMPs)</i></li> <li>• <i>(Assist with preparation of load reduction models)</i></li> <li>• <b>(ADD OTHERS AS APPROPRIATE)</b></li> </ul>
<i>(Regional Water Council)</i>	<ul style="list-style-type: none"> <li>• Serve on Project Advisory/Steering Committee</li> <li>• <i>(Provide opportunities for leveraging efforts from other funding sources)</i></li> <li>• <i>(Provide technical support for BMP's)</i></li> <li>• <b>(ADD OTHERS AS APPROPRIATE)</b></li> </ul>

## 7. Project Location

**a) Project Area Description and Map:** *Identify the approximate size and location of the proposed project area on a map (embedded in application or as separate electronic file). Be sure to include the ENTIRE project area on one map, even if the project will take place in two or more subwatersheds.*

**b) Watershed(s) or Project Area Size (Acres):**

**c) County or Counties:**

**d) List the Following for the Watershed(s) or Project Area:**

Stream Miles: \_\_\_\_\_ Lake Acreage: \_\_\_\_\_ Wetland Acreage: \_\_\_\_\_

e) **Land Uses within the Watershed(s) or Project Area (Percentages):** *Applicants MUST provide the source and date of land use categories data to verify the distribution below. Such information can generally be found within applicable Watershed Improvement, TMDL Implementation or County Comprehensive Land Use Plans.*

Agricultural	_____
Commercial Forestry	_____
Urban/Residential	_____
Mining/Extraction	_____
Forest/Natural Areas	_____
Water/Wetlands	_____
<b>TOTAL</b>	<u>100%</u>

**Data Source & Date:** \_\_\_\_\_

**Hydrologic Unit Codes (HUCs)** are watershed units that define watershed boundaries. Additional information about watersheds (e.g. 8-digit HUC boundaries, rivers and streams in a watershed, land characteristics, river corridor and wetlands restoration efforts, index of watershed indicators, etc.) may be accessed through the USEPA webpage:  
<http://cfpub.epa.gov/surf/locate/index.cfm>.

The USGS 10-digit HUC map for Georgia may be ordered from the USGS Science Information Center (ESIC) at 1-888-275-8747 or at <http://www.usgs.gov>.

f) **Hydrologic Unit Code(s), Watershed Name(s), and Priority Watershed(s):** *Indicate the HUC 10 or 12 size(s) most appropriate for the project scope. Provide watershed name and check or put an X after "Priority" if the project area is located in a priority watershed (see list below). Repeat the format as needed.*

HUC #: \_\_\_\_\_ Name: \_\_\_\_\_ Priority: \_\_\_\_\_  
 HUC #: \_\_\_\_\_ Name: \_\_\_\_\_ Priority: \_\_\_\_\_

**PROJECTS THAT OCCUR WITHIN THE FOLLOWING HUC-8 WATERSHEDS  
 MAY RECEIVE PRIORITY CONSIDERATION FOR FUNDING**

03130001 – Upper Chattahoochee	03150104 – Etowah (Coosa)
03150108 – Tallapoosa	03130003 – Lower/Middle Chattahoochee
03060106 – Middle Savannah	03060107 – Brier (Savannah)
03060203 – Canoochee (Ogeechee)	03070107 – Ohoopsee (Altamaha)
03070106 – Altamaha	03070202 – Little Satilla
03070201 – Satilla	03070101 – Upper Oconee
03120002 – Upper Ochlockonee	03110203 – Withlacoochee (Suwannee)
03070104 – Lower Ocmulgee	03070105 – Little Ocmulgee
03130006 – Middle Flint	03130007 – Kinchafoonee – Muckalee (Flint)
06020002 – Hiwassee (Tennessee)	06020003 – Ocoee (Tennessee)

## 8. Nonpoint Source Pollution Impairments or Healthy Waters

Funding criteria applied to all 319(h) grant proposals include addressing either impaired or healthy Category 1 waterbodies on Georgia's DRAFT 2014 Section 305(b)/303(d) List of Waters. Proposals directed at a healthy Category 1 waterbody must identify the water quality concern and meet criteria specified in the USEPA *Healthy Watersheds Initiative*. Please find more information on the USEPA's *Healthy Watersheds Initiative* at [www.epa.gov/healthywatersheds/](http://www.epa.gov/healthywatersheds/)

- a) **Section 305(b)/303(d) List of Waters:** *Use the chart below to identify the stream segments in the project area that are listed on Georgia's DRAFT 2014 Section 305(b)/303(d) List of Waters. Fill in all columns with information targeted by the project activities. Add rows as necessary.*

*Please include ONLY those listed segments within the project area that will be directly targeted by project activities. These segments should also be referenced in the project goals and background. The DRAFT 2014 Section 305(b)/303(d) List of Waters can be found online at: <http://epd.georgia.gov/georgia-305b303d-list-documents>*

Water Body Segment Name (Segment Length (Miles) or Embayment Acreage)	County Location(s)	Criterion Violated or Water Quality Concern	Listing Status Category 4a, 5 or 1	Plan Exists to Implement TMDL or Address Water Quality Concern YES / NO

- b) **Secondary Pollutants(s):** *Include other nonpoint source pollutants or impairments related to water quality in the project area which may be positively impacted by project activities, but are not directly targeted.*

**EXAMPLE**

**Fecal coliform** may be the **Criterion Violated** or impairment to be addressed by an agricultural BMP implementation project. **Secondary** pollutants or impairments to consider include: **sediment, nutrients and/or dissolved oxygen.**

See **TABLE 1 - NPS POLLUTANTS OR INDICATORS** for more information.

- c) **Other Documented Nonpoint Source Impacts (Only if Applicable):** *This section applies only if a stream has a known pollutant or water quality threat that is documented by the applicant, but is NOT included on Georgia's DRAFT 2014 Section 305(b)/303(d) List of Waters. Use the template below to identify the impacted segment (including length or embayment acreage), the water quality threat, and any supporting documentation that verifies the threat and describes the extent of concern.*

- **Segment Impacted:**
- **Pollutant(s) or Water Quality Threat(s):**

- **Source(s) of Documentation:** *Acceptable forms of supporting documentation include pictures, local or regional watershed-based plans (not necessarily associated with a TMDL), water quality data, environmental impact research or studies, etc. If necessary due to length, this information can be attached as an appendices to the application.*

Please note that the inclusion of additional segments in this section will in no way impact its listing status on the 305(b)/(303(d) List of Impaired Waters. This section serves only to provide applicants an opportunity to address segments that are not currently listed as impaired.

## 9. Monitoring

**There is no required water quality monitoring under Section 319(h) Grants administered by GAEPD.** Applicants can include water quality monitoring in 319(h) grant projects for the following purposes:

- Identifying or confirming pollutant sources to update a watershed-based plan, particularly when there is insufficient or old data at the time of the application.
- Evaluating BMP effectiveness (pre- and/or post-installation).
- Tracking trends in water quality improvement or degradation during the life of the project (protecting healthy waters).
- Collecting and qualifying samples for 305(b)/303(d) List of Waters assessments (data would show that the stream is meeting State water quality standards for the criterion violated, and can be restored to supporting its designated use).

For monitoring expenses to be eligible for reimbursement or as in-kind match, **the application must include a DRAFT Quality Assurance/Quality Control (QA/QC) Monitoring Plan** for GAEPD to review and approve. The plan can be either a Targeted/BMP Monitoring Plan or a Sampling Quality Assurance Plan (SQAP).

**APPENDIX C**  
**of this application provides guidance on monitoring activities**  
**using 319(h) funds or to be applied as match.**

**For instructions on how to develop a QA/QC Monitoring Plan and perform water**  
**quality monitoring, request GAEPD guidelines**  
**“How to Plan for and Proceed with 319(h) Grant-Funded Monitoring”**  
**from the Grants Unit staff (see page 3).**

The QA/QC Monitoring Plan must identify the pollutant(s) or water quality concern(s) to be monitored, such as bacteria, dissolved oxygen, pH, conductivity, habitat, or sediment. In addition, the monitoring design/methodology described in the plan must include the stream name, the time line and frequency schedule for sample collection, the number and locations of targeted pollution sources/pre-BMP sites/post-BMP sites (upstream, downstream, and latitude/longitude coordinates), and the number of samples to be collected.

In situations where up-to-date water quality monitoring data is available, please provide all relevant data summaries as an appendix to the application.

## 10. Project Budget

 **INDIRECT CHARGES ARE NO LONGER ELIGIBLE AS PROJECT COSTS FOR FEDERAL REIMBURSEMENT.** However, 100% of the indirect costs associated with the project may be applied toward the match requirement if applications can document the federally-approved indirect cost rate for the lead organization.

 Make sure that expenditures (i.e. salary, fringe, materials and supplies), for both federal and match, are prorated as a percentage of what will be applied specifically to the project.

### Confirm Sources and Values of Non-Federal Match

**Identify the sources of non-federal match in the Item Class Categories of the Project Budget**, making sure the sources correlate with in-kind or cash commitments from specific Participating Organizations.

 **In addition, applicants must sign and date a one-sentence Disclaimer** found at the bottom of the Project Budget line items chart assuring that match contributions are from non-federal sources and do not overlap current or future projects funded by either 319(h) or other federal grants.

### Delineate and Justify Project Costs Based on Actual Project Activities and Tasks

Delineate proposed federal and non-federal matching expenditures by Item Class Categories (A-G) in sufficient detail to justify all project costs.

**Project Activities and Tasks must correspond directly to the break-down of budget expenditures in the Item Class Categories.** For example, if a turbidity meter is listed in the Equipment or Supplies item class categories, there must be a Project Task that requires the purchase of a turbidity meter – i.e. TSS monitoring.

 **Under the Contractual item class category, any single expenditure equal to or over \$30,000 must be broken-down into amounts that add up to the total.** Attach a copy of the bid request, job announcement, or contractual agreement, as available, to the application.

- |   |
|---|
| <ul style="list-style-type: none"><li>• Applicants <b>MUST</b> use the budget format included in the application template.</li><li>• All project proposals are limited to \$400,000 in requested federal funding.</li></ul> |
|---|

 Applicants must also supply a **narrative related to actual Project Activities and Tasks that justifies the expenses covered by federal dollars and match values in appropriate Item Class Categories.** The Narrative Justification template will be found in the application at the end of Section 10. Project Budget.

## Narrative Justification for Item Class Categories:

- **Personnel (A) Budget Description:** *Personnel budget items must include the position title, salary rate, percentage of full-time equivalent (FTE), resulting dollar amount and number of years to be reimbursed for each position cited, regardless of funding source.*  
**Narrative Justification (A):** *Summarize responsibilities and duties as related to Project Activities and Tasks for each position cited, regardless of funding source.*
- **Fringe Benefits (B) Budget Description:** *Fringe benefit budget items must include the position title, percentage of FTE, resulting dollar amount, fringe rate (as a percentage of salary), and number of years to be reimbursed for each position cited, regardless of funding source.*
- **Travel (C) Budget Description:** *Travel budget items should be clearly linked to the individual traveling by position title, and the type and purpose of travel. Calculate the mileage by multiplying the number of expected travel miles by the current federal mileage rate.*  
**Narrative Justification (C):** *Correlate travel budget items with a specific project activity and task. **NOTE: Out-of-state travel must be pre-approved by GAEPD and is dependent upon reason for travel and cost.***

For current information on the **Federal Mileage Rate**, please visit the following website:  
<http://www.irs.gov/2014-Standard-Mileage-Rates-for-Business,-Medical-and-Moving-Announced>

- **Equipment (D):** *All equipment budget items and costs **MUST** be itemized separately, and associated with a specific activity and task.*  
**Narrative Justification (D):** *Include brief descriptions, specifications or actual quotes to justify the proposed costs. **The term “Equipment” applies only to items with a useful life of more than one (1) year and an acquisition cost equal to or greater than \$5,000. Any single equipment item purchased at a cost over \$5,000, regardless of funding source, must be tracked until its value depreciates below \$5,000.***
- **Supplies (E):** *Summarize items by category (monitoring, administrative, printing, etc.) when each category totals less than \$2,000.*  
**Narrative Justification (E):** ***MUST** break down categories of Supplies into individual items if collective total is more than \$2,000. Explain how Supply items or categories support actual project activities and tasks. **Items estimated to cost under \$5,000 and/or with less than one (1) year of useful/shelf life should be budgeted as Supplies.***
- **Contractual (F):** *Contractual budget items represent formal financial relationships between the lead organization and subcontractors, and must identify the type of subcontractor and the applicable project activities.*  
**Narrative Justification (F):** ***Insert a detailed budget breakdown for each Contractual item equal to or greater than \$30,000.** Include a description of job specifications and contractor qualifications required to accomplish the related project activities and tasks. Attach a copy of the bid request, job announcement, or contractual agreement, as available, to the application.*

### ALLOWABLE COSTS

When procuring equipment and services, the lead organization MUST follow the policies and procedures as delineated in 40 CFR Par 31.36 online at [http://www.whitehouse.gov/sites/default/files/omb/assets/omb/fedreg/2005/083105\\_a87.pdf](http://www.whitehouse.gov/sites/default/files/omb/assets/omb/fedreg/2005/083105_a87.pdf).

Allowable costs will be determined in accordance with the cost principles in "OMB Circular A-87" online at <http://www.gpo.gov/fdsys/pkg/CFR-2013-title40-vol1/pdf/CFR-2013-title40-vol1-part31.pdf>.

Copies are also available upon request.

- **Construction (G):** *GAEPD Section 319(h) Grant funds CANNOT be applied to this category, which refers to infrastructure and related building costs.*
- **Other (H):** *Other budget items and costs must be itemized separately.*  
**Narrative Justification (H):** *Specify expenses (either dollar amount or percentage of totals) allocated to proposed project that are eligible for federal reimbursement (rent, utilities, telecommunications, financial services, audits, etc.).*



**Indirect Charges (J):** *GAEPD Section 319(h) Grant federal funds CANNOT be applied to this category. However, 100% of a **federally-approved indirect cost rate** associated with the project may be applied to match.*

**Narrative Justification (J):** *Identify what specific indirect costs **will be associated with the proposed project**. Attach documentation supporting the federally-approved indirect cost rate for the lead organization to be able to apply 100% of the approved rate **associated with project** towards the match requirement.*

### EXAMPLE PROJECT BUDGET

Item	Item Class Category	319(h) Grant Funds (60% Maximum)	Non-Federal Matching Funds (40% Minimum)	Total
A	Personnel: One (1) Project Manager - 0.50 FTE (\$35,000/year) x 3 years Description of Duties: Communication and collaboration with project partners and project oversight	\$52,500	\$0	\$52,500
	One (1) Technician - 0.20 FTE (\$25,000/year) x 3 years Description of Duties: Conduct pre- /post- BMP monitoring	\$0	\$15,000	\$15,000
	<b>Sub Total:</b>	<b>\$52,500</b>	<b>\$15,000</b>	<b>\$67,500</b>
B	Fringe Benefits: One (1) Project Manager – 0.50 FTE at 30% x 3 years	\$15,750	\$0	\$15,750
	One (1) Staff Position - 0.20 FTE at 30% x 3 years	\$0	\$4,500	\$4,500
	<b>Sub Total:</b>	<b>\$15,750</b>	<b>\$4,500</b>	<b>\$20,250</b>
C	Travel: Staff Position: Project Manager 2,000 miles x \$.56/mile Purpose of Travel: Meetings, Field Days, Site Visits	\$1,120	\$0	\$1,120
	<b>Sub Total:</b>	<b>\$1,120</b>	<b>\$0</b>	<b>\$1,120</b>
D	Equipment: Equipment: Fluorometer & accessories Purpose/Use: Optical brightener testing	\$6,600	\$0	\$6,600
	Equipment: Projector Purpose/Use: Education, outreach, meetings and field days	\$0	\$250	\$250
	<b>Sub Total:</b>	<b>\$6,600</b>	<b>\$250</b>	<b>\$6,850</b>
E	Supplies: Supplies: Laboratory Supplies Purpose/Use: Pre- and post- BMP sampling	\$0	\$4,410	\$4,410

Item	Item Class Category	319(h) Grant Funds (60% Maximum)	Non-Federal Matching Funds (40% Minimum)	Total
	Supplies: Office Supplies Purpose/Use: Meetings, educational outreach, project oversight	\$0	\$500	\$500
	<b>Sub Total:</b>	<b>\$0</b>	<b>\$4,910</b>	<b>\$4,910</b>
F	Contractual: Contractor Name: ABC, Stream Restoration, Inc. Description of Duties: Stream Bank Stabilization (600 linear feet)	\$62,500	\$62,500	\$125,000
	Rain Garden Systems (2 Systems @ \$10,000)	\$12,000	\$8,000	\$20,000
	Contractor Name: Agricultural Producers TBD Description of Duties: Install BMP contracts @ \$7,500 on 10 Ag properties	\$45,000	\$30,000	75,000
	<b>Sub Total</b>	<b>\$119,500</b>	<b>\$100,500</b>	<b>\$220,000</b>
G	Construction: Does not apply to GAEPD Section 319(h) Grants	N/A	N/A	N/A
H	Other: Audit	\$0	\$400	\$400
	<b>Sub Total</b>	<b>\$0</b>	<b>\$400</b>	<b>\$400</b>
I	<b>Total Direct Charges: (Sum of A-H)</b>	<b>\$187,970</b>	<b>\$125,560</b>	<b>\$313,530</b>
J	Indirect Charges: Indirect Charge Rate (0% Eligible for Reimbursement with Federal Dollars)	N/A	\$0	\$0
K	<b>Total: (Sum of I and J)</b>	<b>\$187,970</b>	<b>\$125,560</b>	<b>\$313,530</b>

**Disclaimer:** Match contributions are from non-federal sources, and do not overlap current or future projects funded by either 319(h) or other federal grants.

**Signed:** \_\_\_\_\_ **Title:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Organization:** \_\_\_\_\_

**Narrative Justification for Item Class Categories:**

- **Personnel (A):**  
Narrative Justification (A):
- **Fringe Benefits (B):**
- **Travel (C):**  
Narrative Justification (C):
- **Equipment (D):**  
Narrative Justification (D):
- **Supplies (E):**  
Narrative Justification (E):
- **Contractual (F):**  
Narrative Justification (F):
- **Construction (G):** *GAEPD Section 319(h) Grant federal funds CANNOT be applied to this category, which refers to infrastructure and related building costs*

- **Other (H):**  
Narrative Justification (H):
- **Indirect Charges (J):** *GAEPD Section 319(h) Grant federal funds CANNOT be applied to this category. However, 100% of a federally-approved indirect cost rate **associated with the project** may be applied to match.*  
Narrative Justification (J):

## 11. Project Implementation and Drawdown Schedule



Please note that the template is coded with formulas to automatically calculate the quarterly percentages for both federal dollars spent (Row 4) and match accrued (Row 7).

All project proposals must include a Project Implementation and Drawdown Schedule that details expected execution of tasks, state and federal reporting requirements, expenditure of funds and accumulation of match. **Note that 319(h) projects CANNOT exceed three (3) years in duration** and that the three years are divided into quarters that progress consecutively from Quarter #1 to Quarter #12. The Project Implementation and Drawdown Schedule includes the following items:

- **Project Timeline in Quarters (Row 2):** *Based on the 3-year limit, the Schedule template assumes awarded projects will be contracted in October 2015 and completed by September 2018. For the purposes of the application, all applicants **MUST base their timeline on an October 2015 start date**. If a proposed project is expected to be completed prior to September 2018, the remaining columns should be left blank. **Once grant funds are awarded, the Schedule can be reconfigured based on actual start and end dates.***



- **Federal Drawdown (Rows 3 & 4):** *Applicants **MUST** estimate the amount of 319(h) Grant funds they will spend each quarter. The “Initial” column indicates that no grant funds can be expended prior to the contract execution date, and the “Final” column indicates that by the end of 12 quarters all grants funds are expected to be spent. **Once each dollar amount is entered manually into Row 3, the template will calculate the percentage of federal dollars spent in Row 4 for you.***



- **Match Expenditures (Rows 6 & 7):** *Applicants must also estimate the rate at which they expect to accrue match dollars. The “Initial” column indicates that no match funds can be accrued prior to the contract execution date, and the “Final” column indicates that by the end of 12 quarters, 100 percent of the match commitment will be met. **Once each dollar amount is entered manually into Row 6, the template will calculate the percentage of match accrued in Row 7 for you.***

- **Milestones/Tasks (Rows 11-111):** *This section details the timeframe in which each task identified in Section 5 is expected to be completed.*
  - **Contract Execution:** *This section has already been completed in the Template, and should remain as is.*
  - **Tasks:** *Applicants should include all tasks and task numbers from Section 5. It may be appropriate to shorten the task description to fit within the allotted space in the template, but the intent of the task should remain clear. Applicants should*

*“fill-in” the appropriate number of cells, creating a line that depicts the expected length of each task in months (tasks that will require less than one month should be represented by the filling in of an entire month cell). Applicants are encouraged to color code their tasks by suitable categories. For instance, in the “Example Schedule”, meetings are color-coded in purple and tasks that will result in deliverables to GAEPD are color-coded in orange. A key should be provided.*

- **Federal/State Quarterly Progress Reporting Requirements:** *319(h) Grant award recipients will be required to submit Quarterly Reports and Invoices for the length of the project to ensure adherence to the Implementation and Drawdown Schedule and to proactively address any concerns in a timely manner. These reporting requirements have already been completed in the template (color coded in pink) and should remain as they are.*
- **Contract Close-Out:** *This section has already been completed in the template, and should remain as is. The contract close-out date can be adjusted as necessary once grant funds are awarded.*

## **12. Project Attachments**

Reference all digital supporting documents as attachments in this section. Assign appropriate designations (Appendix, Attachment, Exhibit, Figure, Table, or Map), titles, and sequential numbers (1, 2, and 3) or alphabetical letters (A, B, C) to the documents. Label all files appropriately so that they can be easily associated with the Application Packet. **Electronic files of the application and all supporting documents must be in their FINAL version, and file labels must correspond with the titles and numbers/letters referenced in this section.**

**TABLE 1**  
NONPOINT SOURCE POLLUTANTS OR INDICATORS

Algal Growth/Chlorophyll	
Alteration	Organics
Flow	Pathogens
Habitat – Other than Flow	Fecal Coliform
	Enterococci Coliform
Ammonia	E. Coli
	Other
Chlorine	
Cyanide	PCBs
Dioxins/Furans	Pesticides
	DDT
Dissolved Oxygen (Low)	Chlordane
	Dieldrin
Ethylene Glycol	Dianzinon
	Other
Exotic Species	pH
Herbicides	Phosphorus
Atrazine	
Alachlor	Plants (Noxious Aquatic)
Other	
Inorganics (Other)	Propylene Glycol
Metals	Radiation
Aluminum	Salinity/TDS/Chlorides
Arsenic	
Cadmium	Sedimentation/Siltation (Habitat and/or
Copper	Morphological)
Chromium	
Iron	Sulfates
Lead	
Mercury	Suspended Solids
Selenium	
Zinc	Taste and Odor
Other	
Methyl Tertiary-Butyl Ether	Temperature
Nitrate	Toxics (Total)
Nitrogen	Trash, Debris, Floatables
Total Kjeldahl Nitrogen	Tributyltin
Oil and Grease	Turbidity

**TABLE 2**  
**MAJOR CATEGORIES AND SUBCATEGORIES OF NONPOINT SOURCE POLLUTION**

**Agriculture**

- Non-irrigated Crop Production
- Irrigated Crop Production
- Specialty Crop Production
- Grazing-Related Sources
- Pasture Grazing
- Range Grazing
- Animal Feeding Operations (NPS)
- Aquaculture

**Silviculture**

- Harvesting/Residue Management
- Reforestation
- Forest Management
- Road Construction/Maintenance

**Construction**

- Highways/Roads/Bridges
- Land Development or Redevelopment

**Urban Runoff/Stormwater**

- Municipal
- Commercial
- Residential
- Illicit Connects/Illegal Hook-ups
- Dry Weather Flow
- Highway/Road/Bridge Runoff
- Post-Development Erosion and Sedimentation
- Salt Storage Sites

**Resource Extraction**

- Surface Mining
- Subsurface Mining
- Open Pit Mining
- Placer Mining
- Dredge Mining
- Petroleum Activities
- Mill Tailings
- Mine Tailings
- Abandoned Mine Drainage
- Sand/Gravel Mining

**Land Disposal/Storage/Treatment**

- Wastewater
- Landfills
- Inappropriate Waste Disposal
- Industrial Land Management
- On-site/Decentralized Wastewater Treatment

- Hazardous Waste
- Septage Disposal
- Waste Storage/Storage Tank Leaks (above ground)
- Leaking Underground Storage Tanks

**Hydromodification**

- Channelization
- Channel Erosion/Incision
- Dredging
- Dam Construction
- Upstream Impoundment
- Flow Regulations/Modification
- Other Habitat Modification
- Removal of Riparian Vegetation
- Streambank Modification/Destabilization
- Drainage/Filling of Wetlands
- Groundwater Withdrawal

**Marinas and Recreational Boating**

- Pumpouts
- Sanitary On-Vessel Discharges
- Other On-Vessel Discharges
- Boat Construction
- Boat Maintenance
- Shoreline Erosion
- Fueling
- Dredging

**Turf Management**

- Golf Courses
- Yard Maintenance
- Other Turf Management

**Historical Pollutants**

- Contaminated Sediments
- Clean Sediments
- Other Historical Pollutants

**Other NPS Pollution**

- Erosion from Derelict Land
- Atmospheric Deposition
- Spills
- Natural Sources
- Recreation/Tourism Activities (non-boat)
- Groundwater Loadings
- Wildlife

**Source Unknown**

**TABLE 3**

**NONPOINT SOURCE POLLUTION PREVENTION, CONTROL AND/OR ABATEMENT ACTIVITIES  
(Must Occur within the Context of Implementing a Nine-Element Watershed Management Plan)**

**BMP Demonstration Projects**

Unique, Innovative or New Technology  
Design & Implementation  
Performance Evaluation/Assessment

**Restoration/Protection/Prevention**

BMP Design/Implementation Activities in  
HUC-10 and smaller  
Animal Manure/Litter Management Projects  
Livestock Control Projects  
Vegetation Management/Revegetation  
Stream Bank Stabilization  
Grade Stabilization  
Sediment Control  
Stormwater Discharge Design/Control  
Erosion Control Projects  
Acquisition of Wetland Resources  
Wetland Restoration/Protection  
Acquisition of Riparian Resources  
Riparian Projects  
Fisheries Projects  
Other Restoration/Protection/Prevention  
Activities

**Education/Information Activities**

Statewide Education/Information Programs  
Local (Specific target) Education/Information  
Programs

**Technical Assistance**

Technical Assistance to State/Local  
Government  
Nonpoint Source Program Overall  
Coordination/Management  
Nonpoint Source Project Staffing  
Technology Transfer to State/Local  
Government  
Other Technical Assistance Activity

**Regulatory / Enforcement Activities**

Certification Activities  
Program Development Activities  
Inspection Activities  
Ordinance Development  
Enforcement Activities

**Planning Activities**

Nutrient Management Planning  
Watershed Modeling Planning  
Stormwater Management Planning  
Watershed Planning  
Geographic Information Systems  
Develop/Revise Basin Plans  
TMDLs  
Nonstructural Planning (for new  
development)  
Livestock Grazing System Planning  
Other Planning Activities

**Water Quality Assessment/Monitoring**

Instream Flow Assessments  
Assessments for Compliance with Water  
Quality Standards  
Wetland Assessment/Monitoring  
Riparian Assessment/Monitoring  
TMDL Assessments  
Water Quality Trend Assessment  
Water Quality Problem Identification  
Other Water Quality Assessment/Monitoring  
BMP Effectiveness Monitoring  
Biological Monitoring  
Watershed Assessments  
319(h) National Monitoring Project

**Other Activities**

Groundwater (all groundwater activities)  
Antidegradation Activities and Analyses  
Soil Analyses

**TABLE 4**  
**BEST MANAGEMENT PRACTICES**

0310	Bedding	0436	Irrigation Storage Reservoir	0572	Spoil Spreading
0312	Waste Management System	0441	Irrigation Trickle	0574	Spring Development
0313	Waste Storage Structure	0442	Irrigation Sprinkler	0575	Stock Trails/Walkways
0314	Brush Management	0443	Irrigation Surface and Below	0580	Stream/Shoreline Protect
0317	Compost Facility	0447	Irrigation Tailwater Recover	0582	Open Channel
0320	Irrigation Canal/Lateral	0449	Irrigation Water Management	0584	Stream Channel Stability
0322	Channel Vegetation	0451	Land Fire Control	0585	Stripcropping-Contour
0324	Chiseling and Subsoiling	0452	Land Shaft and Adit Closing	0586	Stripcropping-Field
0326	Clearing and Snagging	0453	Land Landslide Treatment	0587	Structure for Water Control
0327	Conservation Cover	0454	Land Subsidence Treatment	0589	Stripcropping-Wind
0328	Conservation Cropping Sequence	0455	Land Toxic Discharge Control	0590	Nutrient Management
0329	Conservation Tillage	0456	Land Highwall Treatment	0595	Pest Management
0330	Contour Farming	0460	Land Clearing	0600	Terrace
0331	Contour Orchard/Other Fruit	0462	Precision Land Forming	0606	Subsurface Drain
0335	Controlled Drainage	0464	Irrigation Land Leveling	0607	Surface Drain Field Ditch
0338	Prescribed Burning	0466	Land Smoothing	0608	Surface Drain Maintenance
0340	Cover/Green Manure Crop	0468	Lined Waterway or Outlet	0609	Surface Roughening
0342	Critical Area Planting	0472	Livestock Exclusion	0610	Toxic Salt Reduction
0344	Crop Residue Use	0482	Mole Drain	0612	Tree Planting
0348	Dam-Diversion	0484	Mulching	0614	Trough or Tank
0349	Dam-Multiple Purpose	0490	Woodland Site Preparation	0620	Underground Outlet
0350	Sediment Basin	0500	Obstruction Removal	0630	Vertical Drain
0352	Deferred Grazing	0510	Pasture and Hayland Management	0633	Waste Utilization
0354	Delayed Seedbed Preparation	0512	Pasture/Hayland Planting	0636	Water Harvest Catchment
0356	Dike	0516	Pipeline	0638	Water/Sediment Control Basin
0359	Waste Treatment Lagoon	0521	Pond Sealing or Lining	0640	Waterspreading
0362	Diversion	0528	Proper Grazing Use	0641	Water Table Control
0378	Pond	0530	Proper Woodland Grazing	0642	Well
0380	Farm and Feedlock	0532	Pumped Well Drain	0644	Wildlife Wetland Management
	Windbreak	0533	Pumping Plant-Water Control	0645	Wildlife Upland Area Management
0382	Fencing			0648	Wildlife Watering
0386	Field Border	0543	Land Reconstruction	0650	Windbreak Renovation
0388	Irrigation Field Ditch		Abandoned Mine	0652	Woodland Direct Seeding
0392	Field Windbreak	0544	Land Reconstruction Current Mine	0654	Woodland Improved Harvest
0393	Filter Strip			0657	Wetland Restoration
0394	Firebreak	0548	Grazing Land Mechanical Treatment	0660	Woodland Pruning
0395	Fish Stream Improvement			0666	Woodland Improvement
0397	Commercial Fishponds	0550	Range Seeding	0901	Urban Catch Basin
0398	Fish Raceway or Tank	0552	Irrigation Pit/Reservoir	0902	Urban Catch Basin – Oil
0399	Fishpond Management	0554	Regulate Water-Drain System	0903	Urban Catch Basin – Sand
0400	Floodwater Diversion			0904	Urban Concrete Grid
0402	Dam-Floodwater Retarding	0555	Rock Barrier	0905	Urban Extension Detention Pond
0404	Floodway	0556	Planned Grazing Systems		
0408	Forest and Erosion Control	0557	Row Arrangement	0906	Urban Filtration Basin
0409	Forest Land Management	0558	Roof Runoff Management	0907	Urban Grassed Swale
0410	Grade Stabilization Structure	0560	Access Road	0908	Urban Infiltration Basin
0411	Grasses/Legumes Rotation	0561	Heavy Use Area Protection	0908	Urban Infiltration Trench
0412	Grassed Waterway	0562	Recreation Area Improvement	0910	Urban Porous Pavement
0422	Hedgerow Planting			0911	Urban Stormwater Wetland
0423	Hillside Ditch	0566	Recreation Land Grading	0912	Urban Vegetated Filter
0425	Waste Storage Pond	0568	Recreation Trail/Walkway	0913	Urban Wet Pond
0428	Irrigation Ditch/Canal	0570	Runoff Management System		
0430	Irrigation Pipeline	0571	Soil Salinity Management		

# APPENDIX A

## USEPA'S NINE ELEMENTS OF WATERSHED PLANNING

### Nine Elements of Watershed Plans

*a. Identification of causes of impairment and pollutant sources or groups of similar sources that need to be controlled to achieve needed load reductions, and any other goals identified in the watershed plan. Sources that need to be controlled should be identified at the significant subcategory level along with estimates of the extent to which they are present in the watershed (e.g., X number of dairy cattle feedlots needing upgrading, including a rough estimate of the number of cattle per facility; Y acres of row crops needing improved nutrient management or sediment control; or Z linear miles of eroded streambank needing remediation).*  
 ( Chapters 5, 6, and 7.)

#### **What does this mean?**

Your watershed plan should include a map of the watershed that locates the major causes and sources of impairment. To address these impairments, you will set goals that will include (at a minimum) meeting the appropriate water quality standards for pollutants that threaten or impair the physical, chemical, or biological integrity of the watershed covered in the plan.

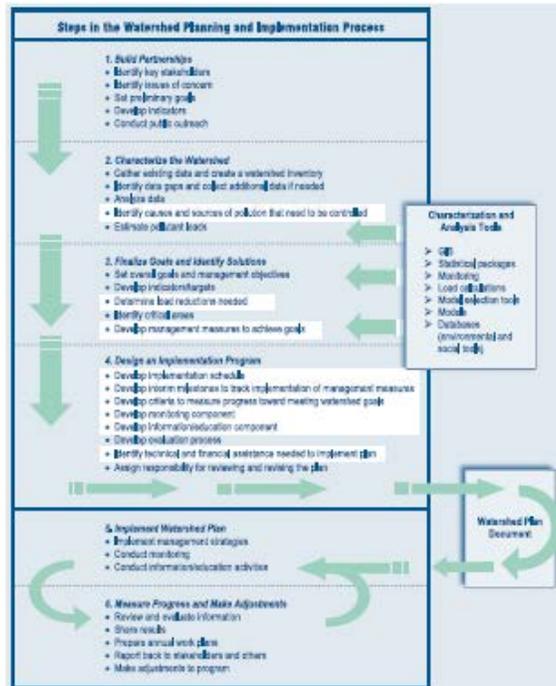
This element will usually include an accounting of the significant point and nonpoint sources in addition to the natural background levels that make up the pollutant loads causing problems in the watershed. If a TMDL exists, this element may be adequately addressed. If not, you will need to conduct a similar analysis to do this. The analytical methods may include mapping, modeling, monitoring, and field assessments to make the link between the sources of pollution and the extent to which they cause the water to exceed relevant water quality standards.

*b. An estimate of the load reductions expected from management measures.*

#### **What does this mean?**

On the basis of the existing source loads estimated for element *a*, you will similarly determine the reductions needed to meet the water quality standards. You will then identify various management measures (see element *c* below) that will help to reduce the pollutant loads and estimate the load reductions expected as a result of these management measures to be implemented, recognizing the difficulty in precisely predicting the performance of management measures over time.

Estimates should be provided at the same level as that required in the scale and scope component in paragraph *a* (e.g., the total load reduction expected for dairy cattle feedlots, row crops, or eroded streambanks). For waters for which EPA has approved or established



**Figure 2-3.** Incorporating the Nine Minimum Elements into Your Watershed Plan

TMDLs, the plan should identify and incorporate the TMDLs. Applicable loads for downstream waters should be included so that water delivered to a downstream or adjacent segment does not exceed the water quality standards for the pollutant of concern at the water segment boundary. The estimate should account for reductions in pollutant loads from point and nonpoint sources identified in the TMDL as necessary to attain the applicable water quality standards. (↪ Chapters 8 and 9.)

*c. A description of the nonpoint source management measures that will need to be implemented to achieve load reductions in paragraph 2, and a description of the critical areas in which those measures will be needed to implement this plan.*

***What does this mean?***

The plan should describe the management measures that need to be implemented to achieve the load reductions estimated under element *b*, as well as to achieve any additional pollution prevention goals called out in the watershed plan (e.g., habitat conservation and protection). Pollutant loads will vary even within land use types, so the plan should also identify the critical areas in which those measures will be needed to implement the plan. This description should be detailed enough to guide implementation activities and can be greatly enhanced by identifying on a map priority areas and practices. (↪ Chapters 7, 8, 9, 10, and 11.)

*d. Estimate of the amounts of technical and financial assistance needed, associated costs, and/or the sources and authorities that will be relied upon to implement this plan.*

***What does this mean?***

You should estimate the financial and technical assistance needed to implement the entire plan. This includes implementation and long-term operation and maintenance of management measures, I/E activities, monitoring, and evaluation activities. You should also document which relevant authorities might play a role in implementing the plan. Plan sponsors should consider the use of federal, state, local, and private funds or resources that might be available to assist in implementing the plan. Shortfalls between needs and available resources should be identified and addressed in the plan. (↪ Chapter 12.)

*e. An information and education component used to enhance public understanding of the project and encourage their early and continued participation in selecting, designing, and implementing the nonpoint source management measures that will be implemented.*

***What does this mean?***

The plan should include an I/E component that identifies the education and outreach activities or actions that will be used to implement the plan. These I/E activities may support the adoption and long-term operation and maintenance of management practices and support stakeholder involvement efforts. (↪ Chapters 3 and 12.)

*f. Schedule for implementing the nonpoint source management measures identified in this plan that is reasonably expeditious.*

***What does this mean?***

You should include a schedule for implementing the management measures outlined in your watershed plan. The schedule should reflect the milestones you develop in *g*. (↪ Chapter 12.)

*g. A description of interim measurable milestones for determining whether nonpoint source management measures or other control actions are being implemented. (↪ Chapter 12.)*

***What does this mean?***

You'll develop interim, measurable milestones to measure progress in implementing the management measures for your watershed plan. These milestones will measure the implementation of the management measures, such as whether they are being implemented on schedule, whereas element *h* (see below) will measure the effectiveness of the management measures, for example, by documenting improvements in water quality.

*h. A set of criteria that can be used to determine whether loading reductions are being achieved over time and substantial progress is being made toward attaining water quality standards.*

***What does this mean?***

As projects are implemented in the watershed, you will need water quality benchmarks to track progress. The *criteria* in element *h* (not to be confused with *water quality criteria* in state regulations) are the benchmarks or waypoints to measure against through monitoring. These interim targets can be direct measurements (e.g., fecal coliform concentrations) or indirect indicators of load reduction (e.g., number of beach closings). You should also indicate how you'll determine whether the watershed plan needs to be revised if interim targets are not met. These revisions could involve changing management practices, updating the loading analyses, and reassessing the time it takes for pollution concentrations to respond to treatment. (↪ Chapters 12 and 13.)

*i. A monitoring component to evaluate the effectiveness of the implementation efforts over time, measured against the criteria established under item *h* immediately above.*

***What does this mean?***

The watershed plan should include a monitoring component to determine whether progress is being made toward attaining or maintaining the applicable water quality standards. The monitoring program should be fully integrated with the established schedule and interim milestone criteria identified above. The monitoring component should be designed to determine whether loading reductions are being achieved over time and substantial progress in meeting water quality standards is being made. Watershed-scale monitoring can be used to measure the effects of multiple programs, projects, and trends over time. Instream monitoring does not have to be conducted for individual BMPs unless that type of monitoring is particularly relevant to the project. (↪ Chapters 6, 12, and 13.)

*From the [Handbook for Developing Watershed Plans to Restore and Protect Our Waters](http://water.epa.gov/polwaste/nps/handbook_index.cfm). USEPA. March 2008.*

USEPA has released a new document called “**A Quick Guide to Developing Watershed Plans to Restore and Protect Our Waters**” along with a companion Web-based outline tool called “**An Introduction to Watershed Planning**.” The **Quick Guide** provides a streamlined summary of the 2008 *Handbook for Developing Watershed Plans to Restore and Protect Our Waters* (the Handbook) while the **Introduction** supplies techniques and training on how to organize and write more effective watershed plans to help restore and protect water resources.

Access “**A Quick Guide to Developing Watershed Plans to Restore and Protect Our Waters**” at [http://water.epa.gov/polwaste/nps/upload/watershed\\_mgmnt\\_quick\\_guide.pdf](http://water.epa.gov/polwaste/nps/upload/watershed_mgmnt_quick_guide.pdf), and the companion Web-based outline tool called “**An Introduction to Watershed Planning**” at [http://cfpub.epa.gov/watertrain/moduleFrame.cfm?module\\_id=70&parent\\_object\\_id=2867&object\\_id=2867](http://cfpub.epa.gov/watertrain/moduleFrame.cfm?module_id=70&parent_object_id=2867&object_id=2867)

## APPENDIX B

### DETERMINING MEASURES OF SUCCESS

The Measures of Success are critical components of a successful project proposal. They provide the criteria (what & how) by which a project will be assessed to determine if the Tasks are being accomplished in an effective manner in order to achieve the Project Activities. The Measures of Success also demonstrate that an applicant has a clear understanding of the expected efforts and results involved with each Project Task.

When developing the Project Activities, applicants should (1) identify what criteria will demonstrate that each specific Project Task will be accomplished successfully, and (2) determine how to track those criteria. These criteria should include both qualitative and/or quantitative measures as appropriate. For some Project Tasks, the Measures of Success will be easier to develop than for others. For certain BMP implementation tasks, the primary indicator of success will be expected load reductions from primary and secondary pollutants, and tracking that indicator will involve modeling those load reductions to get numeric values. For other projects, the Measures of Success will require more creativity and thought to be able to best capture the success of the tasks. Since applicants are highly encouraged to provide metrics that will demonstrate an improved understanding as an actual result of the Project Tasks, a generally accepted Measure of Success for educational outreach tasks would be improved understanding of nonpoint source pollution issues throughout the watershed. And, one way to track that change in behavior or knowledge might be to conduct an educational survey before and after information or instruction materials are disseminated or workshops are conducted.

As appropriate, the Measures of Success should include both what is the expected outcome of each Project Task as well as a short description of how each Measure will be tracked, studied or captured. For instance, if a Project Task is to install 3 rain gardens, the Measures of Success should include not only the completion of the rain gardens with any appropriate design specifications, but also the expected load reductions and how those load reductions will be determined (i.e. modeling or monitoring).

<b>EXAMPLE</b>	
<b>Be Specific and Avoid Generalizations!</b>	
Generalized Measure of Success:	“Improved water quality within Reedy Creek”
Preferred Specific Measure of Success:	“A 25% reduction in fecal coliform levels to be determined through water quality monitoring”

Please note that in some instances, the Measures of Success may seem redundant. For instance, if the Project Task is to develop 10 Comprehensive Nutrient or Conservation Management Plans, the only logical indicators of success may be the documented completion and delivery of said plans. These redundancies are inherent in some Project Tasks, and applicants will not be penalized in the event they occur within an application.

Examples of Measures of Success per Project Activity are included on Page 34. Please note that projects may include Tasks from many different Project Activities. The example list is not exhaustive and is for guidance purposes only. Applicants should include the Measures of Success they feel are most appropriate for their projects regardless of their location or inclusion on the list.

Project Activity	Examples of Measures of Success
Watershed Management Planning	<ul style="list-style-type: none"> <li>• Creation of a stakeholder committee that is inclusive and representative of watershed interests</li> <li>• Number of monitoring sites established</li> <li>• Description of data results necessary to determine pollutant sources</li> <li>• Development of a Nine-Element Watershed Management Plan</li> <li>• Number of attendees at stakeholder and public meetings (percentage of target)</li> <li>• Scope of pertinent area (watershed, jurisdiction) covered</li> </ul>
BMP Implementation	<ul style="list-style-type: none"> <li>• Number of landowners contacted</li> <li>• Number of projects contracted (percentage of target)</li> <li>• Percentage of watershed affected by project</li> <li>• Percentage of pollutant sources addressed</li> <li>• Number of appropriate designs/plans</li> <li>• Number of completed BMPs in accordance with appropriate specifications</li> <li>• Estimate of load reductions for nitrogen, phosphorus and sediment</li> <li>• Estimate of water quality and other environmental benefits above and beyond load reductions (based on modeling and/or monitoring)</li> <li>• Effectiveness of BMP(s) in reducing primary and secondary pollutants (based on modeling and/or monitoring)</li> <li>• Number of field days/workshops/etc. and number of participants</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>• Number of monitoring sites</li> <li>• Percentage of watershed for which monitoring data will be collected</li> <li>• Completion of Monitoring Plan in accordance with GAEPD Guidelines</li> <li>• Collection of data in accordance with Monitoring Plan</li> <li>• Summarization of data results (load reductions)</li> </ul>
Education and Outreach	<ul style="list-style-type: none"> <li>• Number and description of educational materials produced and distributed</li> <li>• Percentage of watershed population affected by project</li> <li>• Attendance at workshops/meetings/classes by target audience (to be demonstrated through sign-in sheets, agendas, etc.)</li> <li>• Improvement in water quality knowledge (based on survey or test results)</li> <li>• Description of expected behavior change (based on survey results or other methods)</li> <li>• Number of Continuing Education credits earned</li> <li>• Creation of/Participation in Adopt-A-Stream or other volunteer groups</li> <li>• Number of field days/workshops/etc. and number of participants</li> </ul>
Technical Assistance	<ul style="list-style-type: none"> <li>• Number/Percentage of participating local governments and other relevant stakeholders</li> <li>• Extent of assistance performed (i.e. number of ordinances developed/implemented; workshops held and attendance; plans completed; monitoring results; etc.)</li> </ul>
BMP Demonstration	<ul style="list-style-type: none"> <li>• Participation of appropriate parties/property owners</li> <li>• Number of installed BMPs</li> <li>• Monitoring results</li> <li>• Achievement towards specific demonstration goals/purpose</li> <li>• Effectiveness of BMP(s) in reducing primary and secondary pollutants</li> <li>• Expected future use of results (i.e. future use of BMP within watershed, etc.)</li> <li>• Number of field days/workshops and number of participants</li> </ul>
Regulatory Programs	<ul style="list-style-type: none"> <li>• Establishment of self-funding mechanism within an appropriate timeframe</li> <li>• Number of inspections, reports, plan reviews, citations etc.</li> <li>• Number of ordinances developed/implemented/supported</li> </ul>

## APPENDIX C

### MONITORING GUIDANCE FOR 319(h) PROJECTS

#### **Monitoring Purpose**

Monitoring funded by 319(h) Grants will be conducted for the following purposes:

- Update the most likely sources of impairment within a watershed;
- Assess the effectiveness of Best Management Practices (BMPs) by sampling pre- and post-installation to determine reduction in pollutant loads;
- Track trends in water quality improvement or degradation during the life of the project to protect healthy waters; and/or
- Provide data to update assessments on the 305(b)/303(d) List of State Waters.

#### **Monitoring Types**

There are two distinct types of monitoring associated with a 319(h) Grant-funded project:

- Targeted/BMP Monitoring, and
- 305(b)/303(d) List Monitoring.

#### **Monitoring Pollutant(s) or Water Quality Concern(s)**

- Biological (i.e. Bacteria)
- Chemical/Physical (i.e. DO, pH, Conductivity, etc.)
- Habitat (i.e. Macroinvertebrates, Fish IBI, Habitat Assessments)
- Sediment (i.e. Turbidity, TSS, Macroinvertebrates, Fish IBI)

#### **Monitoring Plans**

Once the monitoring purpose and appropriate, corresponding monitoring type have been determined, **a quality assurance/quality control monitoring plan** will be required that describes the protocol for selecting sampling sites, establishing collection techniques, and conducting water quality analysis:

319(h) grant applications that request funds for monitoring must identify the monitoring purpose and type, and reference the preliminary content of a specific monitoring plan in the initial application proposal. A more-detailed plan will be required if the project is selected for funding.

The Targeted/BMP Monitoring Plan to evaluate pollution sources and BMP effectiveness or the Sampling Quality Assurance Plan (SQAP) for 305(b)/303(d) List assessment will both be expected to detail the following topics:

#### **Watershed Description:**

- Stream segment name(s) and location(s), including impaired reaches.
- Pollutant(s) or water quality concerns to be monitored, drainage area delineation, general conditions, jurisdictions, and reasons for monitoring.

#### **Description of Target Pollution Sources or Pre-BMP Sites to be Sampled:**

- Site names and locations (upstream/downstream), GPS latitude/longitude coordinates, and map.

#### **Description of Post-BMP Sites to be Sampled:**

- Site names and locations (upstream/downstream), GPS latitude/longitude coordinates, and map.

**Procedures:**

- Number of samples to be collected during the length of the time line.
- Description of methodology and materials used to collect and analyze samples.
- Names, affiliations and credentials of field and laboratory personnel.

**Time Line and Frequency Schedule:**

- Monitoring time period (month/year through month/year) and frequency of sample collection (weekly or monthly or quarterly)

**Quality Assurance:**

- Dates of monitoring training workshops, and names and affiliations of training instructors.
- Chain of Custody / rules for sample storage, transport, analysis, and disposal.

**Data Retention:**

- Names, locations and duration of data storage.
- Procedures for reporting and sharing data.

Guidance on 305(b)/303(d) List Monitoring and Targeted / BMP Monitoring is available upon request in GAEPD's *How to Plan for and Proceed with 319(h) Grant-Funded Monitoring*.

**305(b)/303(d) LIST MONITORING**

Water quality monitoring for listing assessments involves collecting data from impaired water bodies classified as “Not Supporting” or “Assessment Pending”. 305(b)/303(d) List monitoring is subject to the Quality Control / Quality Assurance requirements described in GAEPD's *Guidance On Submitting Water Quality Data For Use By The Georgia Environmental Protection Division In 305(b)/303(d) Listing Assessments* (October 2002)<sup>1</sup> with references to the GAEPD *Water Protection Branch Quality Assurance Manual* (June 1999, Jan 2005 revision) and Quality Assurance Project Plan. In addition, *Georgia Rules and Regulations for Water Quality Control*<sup>2</sup> Chapter 391-3-6-.03(13), page 17, describes conditions that need to be met in order for GAEPD to use water quality data collected by outside sources in 305(b)/303(d) listing decisions.

Samples are to be collected, when feasible, at the same site(s) that previously placed the water body on the 305(b)/303(d) List. GAEPD will need to approve an alternate location if sampling at the original site is not feasible. Qualified data that fits criteria outlined in *Georgia's 2014 305(b)/303(d) Listing Assessment Methodology*<sup>3</sup> will be reviewed by GAEPD to determine if a stream meets water quality standards and may be moved to a “Supporting” status.

Pollutant or Indicator	Summary of Water Quality Standards*	Required Number of Samples
Fecal Coliform	<p><b>Two seasonal in-stream water quality standards for geometric means:</b>            1,000 mpn per 100 ml (Nov-April)            200 mpn per 100 ml (May-Oct)</p>	<p>16 samples per site: 4 samples collected within a 30-day period during each of 4 calendar quarters or seasons to calculate 4 geometric means.  <b>NOTE:</b> The 30-day sampling period must not overlap the months of April/May or October/November due to seasonal changes in water quality standards.</p>

Dissolved Oxygen	5mg/l (daily average) 4 mg/l (minimum)	20 measurements within a 12 month period (1-2 measurements per month)
Temperature	90° F (maximum)	20 measurements within a 12 month period (1-2 measurements per month)
pH	6.0-8.5 std. Units	20 measurements within a 12 month period (1-2 measurements per month)

**NOTE:** GA EPD will consider requests to monitor additional pollutants or indicators on a case-by-case basis.

\*Specific water use classifications (Fishing, Recreation, Scenic River, etc.) have different water quality standards<sup>2</sup>.

<sup>1</sup> [http://epd.georgia.gov/sites/epd.georgia.gov/files/related\\_files/site\\_page/SQAP-qwf\\_1.pdf](http://epd.georgia.gov/sites/epd.georgia.gov/files/related_files/site_page/SQAP-qwf_1.pdf)

<sup>2</sup> <http://rules.sos.state.ga.us/docs/391/3/6/03.pdf>

<sup>3</sup> [https://epd.georgia.gov/sites/epd.georgia.gov/files/related\\_files/site\\_page/303d\\_Listing\\_Methodology\\_Y2014.pdf](https://epd.georgia.gov/sites/epd.georgia.gov/files/related_files/site_page/303d_Listing_Methodology_Y2014.pdf)

The U.S. Environmental Protection Agency (USEPA) requires Georgia to provide a biennial report for 305(b)/303(d) listing assessments on April 1st of every even-numbered year (2016, 2018, 2020, etc.). To be considered for a listing assessment, data must be submitted to the GAEPD no later than June 30th of each odd-numbered year (2015, 2017, 2019, etc.).

Steps to 305(b)/303(d) List Monitoring of Water Bodies Classified as Not Supporting or Assessment Pending
<ul style="list-style-type: none"> <li>• Design and submit a site-specific Sampling Quality Assurance Plan (SQAP) that follows procedures described in the <b>Guidance on Submitting Water Quality Data for Use by the Georgia EPD in 305(b)/303(d) Listing Assessments</b> (October 2002).</li> <li>• Schedule certified training by GAEPD's Monitoring Unit that will include instructions on proper site access, sample collection and handling, and in-situ testing and analysis (i.e. dissolved oxygen, pH, and temperature).</li> <li>• Collect and deliver samples under the chain-of-custody authorized by a certified laboratory analyst or accredited laboratory as referenced in the GA EPD's <b>Water Protection Branch Quality Assurance Manual</b> (June 1999, Jan 2005 revision).</li> <li>• Employ sample collection methods that conform to the guidelines in the <b>Water Protection Branch Quality Assurance Manual</b> (June 1999, Jan 2005 revision).</li> <li>• Report testing results based on analytical procedures approved by the U.S. EPA as outlined in the <b>Title 40, Code of Federal Regulations, Part 136</b>.</li> <li>• Assure analytic tests are performed by a certified laboratory analyst or by personnel from an accredited laboratory.</li> <li>• Report testing results (if collected) with each invoice<sup>1</sup> submitted; and, where appropriate, the data should be accompanied by load reduction information based on a load reduction model such as STEPL or Region 5.</li> <li>• Complete a Final Monitoring Report<sup>2</sup> for GA EPD review that compiles all data, notes, and information gathered on the conditions of the watershed. The Final Monitoring Report should be submitted in hardcopy format with the Final Project Closeout Report.</li> </ul> <p><sup>1</sup> Invoices that include reimbursement for monitoring costs may not be paid until water quality data is received.  <sup>2</sup> A completed watershed-based plan (of any type) will serve as the Final Monitoring Report.</p>

## TARGETED/BMP MONITORING

Targeted/BMP Monitoring aims at particular nonpoint sources of pollution or water quality concerns, or tracks BMP effectiveness, and is intended to provide a broader picture of water

quality conditions within a watershed. Samples or in-stream measurements are collected following GA Adopt-A-Stream Program or other GAEPD-approved quality assurance/quality control techniques. Monitoring is performed at multiple locations in the watershed including any already-established GAEPD/USEPA sampling site(s). Resulting data can direct resources toward areas that show the greatest need for BMPs, demonstrate the effectiveness of BMPs with pre- and post-installation comparisons, or track water quality trends in healthy waters.

If Targeted/BMP Monitoring data shows improvement in water quality, this can lead to monitoring for 305(b)/303(d) List purposes under an approved SQAP or by GAEPD.

Pollutant or Indicator	Recommended Water Quality Criteria*	Required Number of Samples
E. coli <sup>1</sup>	<b>Swimming Categories</b> Designated: <235 cfu/100 mL Moderate: <298 cfu/100 mL Light: <410 cfu/100 mL Infrequent: <576 cfu/100 mL	1 sample per site every month (12 samples per year)
Dissolved Oxygen <sup>2</sup>	5mg/l (daily average) 4 mg/l (minimum)	20 measurements within a 12-month period (1-2 measurements per month)
Temperature <sup>2</sup>	90° F (maximum)	20 measurements within a 12-month period (1-2 measurements per month)
pH <sup>2</sup>	6.0-8.5 standard units	20 measurements within a 12-month period (1-2 measurements per month)
Phosphorus <sup>3</sup>	Normal background levels: < 0.1 ppm	1 sample per site every month (12 samples per year)
Nitrogen <sup>3</sup>	Normal background levels: < 1 ppm	1 sample per site every month (12 samples per year)
Conductivity <sup>3</sup>	Georgia streams supporting mixed fisheries range from 50 to 500 mS/cm	1 measurement per site every month (12 measurements per year) Establish normal background levels Follow up any deviations
Habitat Assessment <sup>2</sup>	All waters shall be free from substances that interfere with legitimate water uses or are harmful to humans, animals or aquatic life.	Quarterly assessments at each site 4 pre-BMP and 4 post-BMP installation (8 measurements per year)
Turbidity <sup>2</sup>	All waters shall be free from turbidity that causes a substantial visual contrast in a water body.	3 pre- and post-BMP wet weather samples per season (May-October / November-April) (6 wet weather samples per year)
Total Suspended Solids (TSS) <sup>4</sup>	Reduce post-development total suspended solids loadings by 80%, as measured on an average annual basis.	3 pre- and post-BMP wet weather samples per season (May-October / November-April) (6 wet weather samples per year)
Settleable Solids (Imhoff Cone) <sup>3</sup>	Excessive solids block sunlight, clog fish gills, smother aquatic habitats, carry toxic substances, and erode stream banks.	3 pre- and post-BMP wet weather samples per season (May-October / November-April) (6 wet weather samples per year)

\*Specific water use classifications (Fishing, Recreation, Scenic River, etc.) have different water quality standards<sup>2</sup>.

<sup>1</sup> USEPA recommendations based on an acceptable risk level of 8 people out of 1000 getting sick

<sup>2</sup> GAEPD water quality standard: <http://rules.sos.state.ga.us/docs/391/3/6/03.pdf>

<sup>3</sup> GA Adopt-A-Stream data

<sup>4</sup> USEPA guidance adopted by GAEPD: <http://www.georgiastormwater.com>

The pollutants or water quality concerns that GAEPD considers priorities for 319(h) grant-funded monitoring are bacteria (fecal coliform, E. coli and Enterococci), dissolved oxygen, nutrients (phosphorus and nitrogen) and sediment. Monitoring for sediment consists of habitat assessments and measurements for turbidity, settleable solids and Total Suspended Solids. GAEPD may allow other monitoring (macroinvertebrates, pebble counts, metals, toxicity) under certain conditions.

Monitoring to prioritize sources or areas of pollutant loadings (“hot spots”) would be considered pre-BMP monitoring. Post-BMP monitoring takes place after BMP installations to evaluate whether BMPs are effective in improving water quality. In both pre- and post-BMP monitoring, sampling sites are usually located upstream and/or downstream of pollutant sources and BMP installations.

Steps to Targeted / BMP Monitoring
<ul style="list-style-type: none"><li>• Determine pollutants or water quality concerns to be monitored and develop an approved <b>Targeted/BMP Monitoring Plan</b> that follows the methods and procedures described in the most current GA Adopt-A-Stream Program (AAS) <b>Visual Stream Survey, Biological &amp; Chemical Stream Monitoring</b> and <b>Bacterial Monitoring</b> manuals*.</li><li>• Schedule certified training by GA EPD’s Monitoring Unit and/or Adopt-A-Stream Program staff that will include instructions on proper site access, sample collection and handling, and testing and analysis.</li><li>• Collect samples at multiple sites within the watershed to either 1) determine the most likely source(s) of impairment, or 2) better assess the effectiveness of BMPs in achieving their expected load reductions by sampling upstream and/or downstream of BMP installations, or 3) track water quality trends in healthy waters.</li><li>• Apply quality assurance/quality control protocols for the duration of the monitoring project such as using a blank, taking samples in duplicate, and equipment calibration.</li><li>• Report testing results with each invoice<sup>1</sup> submitted (if collected); and, where appropriate, the data should also be accompanied by load reduction information based on a load reduction model such as STEPL or Region 5.</li><li>• Complete a Final Monitoring Report<sup>2</sup> for GA EPD review that compiles all data, notes, and information gathered on the conditions of the watershed. The Final Monitoring Report should be submitted in hardcopy format with the Final Project Closeout Report.</li></ul> <p style="text-align: center;">* Access at <a href="http://georgiaadoptastream.com/db/manuals.asp">http://georgiaadoptastream.com/db/manuals.asp</a></p> <p><sup>1</sup> Invoices that include reimbursement for monitoring costs may not be paid until water quality data is received. <sup>2</sup> A completed watershed-based plan (of any type) will serve as the Final Monitoring Report.</p>

Targeted/BMP Monitoring offers the opportunity to evaluate other pollutants or water quality concerns in addition to the already-known impairments (listed or documented) addressed by specific BMPs. GAEPD should be consulted on a case-by-case basis to determine what additional monitoring would be appropriate for particular 319(h) BMP projects.

## APPENDIX D MATCH FAQs SHEET

### WHAT IS LOCAL MATCH?

Local match is a financial commitment related to the federal dollar amount requested and is required as part of a Section 319(h) Grant contract to implement the project. The applicant and project partners identify budget expenses that will be contributed as match in local dollars or in-kind services/resources when submitting the initial application. The check list in this FAQs Sheet is based on a similar document published by the Ohio Environmental Protection Agency, Division of Surface Water Nonpoint Source Program.

### HOW MUCH LOCAL MATCH IS REQUIRED?

A minimum 40% of the total project cost is the required local match for all Georgia Section 319(h) projects. Additional local match of 50% or above is encouraged; and may result in the project proposal receiving priority consideration for funding.

<b>Example Calculation for Determining Match Commitment: Federal Funds Requested x 2/3 = Required Minimum Non-Federal Matching Funds</b>	
<i>Federal Funds Requested:</i>	<i>\$150,000 x 2/3 (60% of Total Project Cost)</i>
<i>Minimum Local Match Required:</i>	<i>\$100,000 (40% of Total Project Cost)</i>
<i>Total Project Cost:</i>	<i>\$250,000</i>

### WHAT CAN BE USED AS LOCAL MATCH?

Local match **must be from non-federal sources** and may be in cash or in-kind services/resources applied to a specific project. Match items **MUST** be eligible for federal dollars. Any items that do not qualify for federal funds may not be counted as match.

**CASH MATCH:** Cash contributed specifically to cover the actual costs of the project.

**IN-KIND MATCH:** Contributions made directly in the form of services, resources or goods with dollar value specified to implement the project. These amounts must be:

1. Verifiable (see section below regarding tracking local match commitments);
2. Directly related to accomplishing project activities and tasks;
3. Not already counted as match for another project funded by federal grants;
4. Allowable as federal grant funds under the applicable cost principles (see CFR 40-Part 31 available online at <http://www.gpoaccess.gov/cfr/retrieve.html> and OMB Circular A-87 available on-line at [www.whitehouse.gov/omb/circulars](http://www.whitehouse.gov/omb/circulars)).

#### PUBLIC LAND CONSERVATION LOCAL MATCH

(1) Restricted to water quality protection purposes; (2) Compliant with **Conditions on Land Acquisition for State of Georgia (Appendix E)** and **Uniform Appraisal Standards for Federal Land Acquisitions**; (3) Permanently protected by Deed Restriction or Conservation Easement; and (4) Sustaining required due diligence.

### EXAMPLE IN-KIND MATCH SERVICES

✓ Personnel/Staff Salaries	✓ Structural Designs
✓ Professional Fees	✓ Outreach Products & Events
✓ Labor	✓ Media Buys & Production
✓ Supplies & Materials	✓ Surveys
✓ Equipment (Leases or Purchases)	✓ Publications
✓ Office / Meeting Space Rent	✓ Audits & Appraisals
✓ Office Utilities	✓ Indirect Charges
✓ Volunteer Hours	✓ Public Land Conservation
✓ Fringe benefits are also eligible as match for personnel time donations from the grant lead organization and other project partners.	

### EXAMPLE LIMITATIONS

- ⊗ Local match contributions must be from **non-federal** sources. This means that contributions **cannot** include:
  - × Cash from any federal funding sources;
  - × Cash or in-kind goods/services/efforts that will be reimbursed with federal dollars;
  - × Cash or in-kind goods/services/efforts used as cost-share for another federal grant; and/or
  - × In-kind goods/services/effort provided by federal employees or a federal organization.
- ⊗ Expenditures that are either required or anticipated to be required under an NPDES permit or enforcement order cannot be used as local match.
- ⊗ Match cannot be contributed until the start date of the fully-executed grant contract and as outlined in the Scope of Services Implementation & Drawdown Schedule.
- ⊗ The same cash or in-kind services/goods cannot be applied to more than one project.

## How Do I Track Local Match Contributions?

Local cash or in-kind match must be fully documented and consistent with the Implementation & Drawdown Schedule outlined in the grant contract. Specifically:

1. Local match contributions must be tracked on a quarterly basis along with invoicing for federal funds and progress reports;
2. Match contributions must be entered into the lead organization's accounting records and be auditable from those records (i.e. type, quantity, value of contribution, date of contribution, signature of contributor/partner organization);
3. When recording in-kind match, accounting records must show how the value placed on the match was derived (i.e. number of volunteer or personnel or meeting space hours and hourly rate for each, etc.);
4. Volunteer hours and services must be documented to the extent feasible.

## How Do I Calculate The Value Of In-Kind Match?

The in-kind match value must not exceed fair market cost or rental rates.

### DONATED SERVICES:

#### **Actual Salaries, Wages or Fees**

Actual salaries, wages or fees contributed for match only count if the individuals are performing the same work in support of the project for which they are employed or charge compensation. In this case, the value of fringe benefits and overhead costs associated with the donated time can also be applied to match. Otherwise, the value of donated time must be computed at the "volunteer" rate paid for the work performed. In other words, lawyers, engineers, planners must base donated time on "volunteer" rates if they are removing tires from a stream. However, if they donate their professional services to support the project, they can compute the match based on their normal fee structures.

#### **Volunteer Contributions**

Volunteer time/services donated to the project must be valued at rates consistent with standard fees or compensation ordinarily paid for similar work/services in the same labor market. Rates for volunteer services can be found on the following websites:

- <http://explorer.dol.state.ga.us/mis/wages2011/statewide.xls>
- [www.bls.gov/bls/blswage.htm](http://www.bls.gov/bls/blswage.htm)
- [www.independentsector.org/volunteer\\_time](http://www.independentsector.org/volunteer_time) (not a "hot" link – copy and paste)

### DONATED SUPPLIES:

The contribution must be priced at the market value of the supplies at the time of donation.

### DONATED EQUIPMENT OR SPACE IN A BUILDING:

The contribution must be appraised at the fair market rental rate of the equipment or space.

**APPENDIX E**  
**REQUIRED DUE DILIGENCE**  
**FOR NON-POINT SOURCE & LAND CONSERVATION PROJECTS IN GEORGIA**

The value of property that is permanently protected through a non-point source (NPS) project may be used as match in 319(h) grant applications if the following conditions are met and approved by the Georgia EPD.

**1. Connection to the Proposed NPS Project:**

In order for the proposed land conservation activity to be used as match, it must play an integral role in the protection of water quality through a larger NPS project. This role must be justified by the applicant in the application documents and approved by Georgia EPD. The use of land conservation as match may be denied if the proposed NPS project could be completed and sustained without permanent land protections.

**2. Permanent Protection:**

For projects in which the applicant will acquire a fee-title property interest, the following language must be incorporated into the property deed and recorded on the date of the project's real estate closing. The entity receiving the fee-title property interest must be eligible to accept 'Qualified Donations', as defined in O.C.G.A §48-7-29.12(a)(6). A copy of the so-amended deed must be recorded and delivered to the EPD.

*This property shall be and is perpetually restricted, as indicated herein, so as to maintain certain conservation values which may include waterways, wetlands, natural habitats, forests, wildlife, scenic and agricultural areas and other ecological values which qualify the property as scenic, natural or rural and that has not been subject to significant development and as a significant natural area that provides a "relatively natural habitat for fish, wildlife, plants, or similar ecosystems" as that phrase is used in Section 170(h)(4)(A)(ii) of the Internal Revenue Code. These restrictions are deemed to be covenants running in favor of or for the benefit of land and are being held for the use of the public. Therefore, pursuant to O.C.G.A. § 44-5-60 (c), these covenants shall run in perpetuity. The grantee shall seek to preserve any plants, animals, or plant communities of the property, including but not limited to species designated as protected by the Georgia Department of Natural Resources and the U.S. Fish and Wildlife Service.*

For projects in which the applicant will acquire a conservation easement on the property, EPD must review and approve the draft easement prior to its execution. A copy of the executed easement must then be delivered to EPD. The entity receiving the easement must be eligible to accept 'Qualified Donations', as defined by O.C.G.A §48-7-29.12(a)(6). The easement must also contain the language below.

*This conservation easement shall be perpetual and shall be a covenant running with the land. If circumstances arise under which an amendment to or modification of this Conservation Easement would be appropriate, Grantor and Grantee, or their successor or assigns, may subject to the approval process discussed below, amend this Conservation Easement; provided that no amendment shall be made that will adversely affect the qualification of this Conservation Easement or the status of Grantee under any applicable laws, including Sections 170(h) and 501(c) (3) of the Internal Revenue Code and the Georgia Uniform Conservation Easement Act, O.C.G.A. § 44-10-1 et seq. Any such amendment shall be consistent with the purposes of this Conservation Easement, shall not affect its perpetual duration, and shall result in equal or greater protection of the Conservation Values on the Protected Property. Nothing herein shall require Grantee to agree to any amendment, and Grantee shall obtain approval of the Georgia Environmental Protection Division or its successor State of Georgia entity, for any amendments, which approval shall not be granted if, in the sole discretion of the State of Georgia, the proposed amendment affects the Conservation Values of the Property. In the event no successor State of Georgia entity exists, the contact agency*

*will be the State Properties Commission or the State of Georgia entity then responsible for the accounting of state property.*

### 3. Appraised Value:

The values of permanently protected fee-title land or conservation easements being used to match 319(h) grant funds must be justified by appraisals that meet specific standards. The purpose of the appraisal is to develop an opinion of the market value of the fee-title or easement interest in the property being conveyed. Such interest is \$0 in inverse condemnations. All appraisals are subject to review and approval by the State.

Acceptable appraisals may only be developed by Certified General appraisers according to the Georgia Real Estate Appraisers Board. All appraisals must conform to the Uniform Standards of Professional Appraisal Practice (USPAP) and the Appraisal Institute's Code of Professional Ethics and Standards of Professional Appraisal Practice. Appraisals must also meet the requirements of Section 170 of Title 26 of the United States Code and contain the following items.

- Purpose, Scope and function of the appraisal.
- Highest and Best use of the property.
- Physical description of the property being appraised and at least a 5-year sales history of the property.
- All relevant approaches to valuation consistent with common professional appraisal practices.
- A description of comparable sales with photos and location maps of each comparable.
- A statement of the value of the real property to be acquired, including data analysis. For conservation easements, a statement of the property value *before and after* the easement is in place is required.
- Effective valuation date, appraisal date, appraiser signature and certification within one year of review.

### 4. Other Due Diligence Materials:

- Property Survey. For land or conservation easements acquired as part of the proposed NPS project, a current survey plat and/or legal description signed by a registered Georgia land surveyor is required. The surveyor shall provide a recordable plat and/or legal description of the tract(s); and provide a signed "Certificate of Surveyor" that complies with O.C.G.A. §15-6-67 – 69 as amended, and O.C.G.A. §44-4-20 – 31.
- A Phase I Environmental Site Assessment. A Phase I Environmental Assessment in accordance with the American Society for Testing and Materials (ASTM) Standard E 1527-00 or ASTM Standard E 2247-02 shall be conducted on all land being permanently protected as part of the NPS project.
- Title Insurance. All land conservation projects being used a match require a copy of a valid title insurance policy in favor of the intended real property or easement holder. A copy of a title commitment letter from a registered title insurance company must be delivered to EPD prior to project closing.
- Land Management Plan. The applicant shall submit a land management plan to EPD for review and approval at least 30 days prior to acquiring the land or easement. The land management plan shall outline how the permanently protected land will be managed to protect water quality and lessen the impacts of nonpoint source pollution in perpetuity.