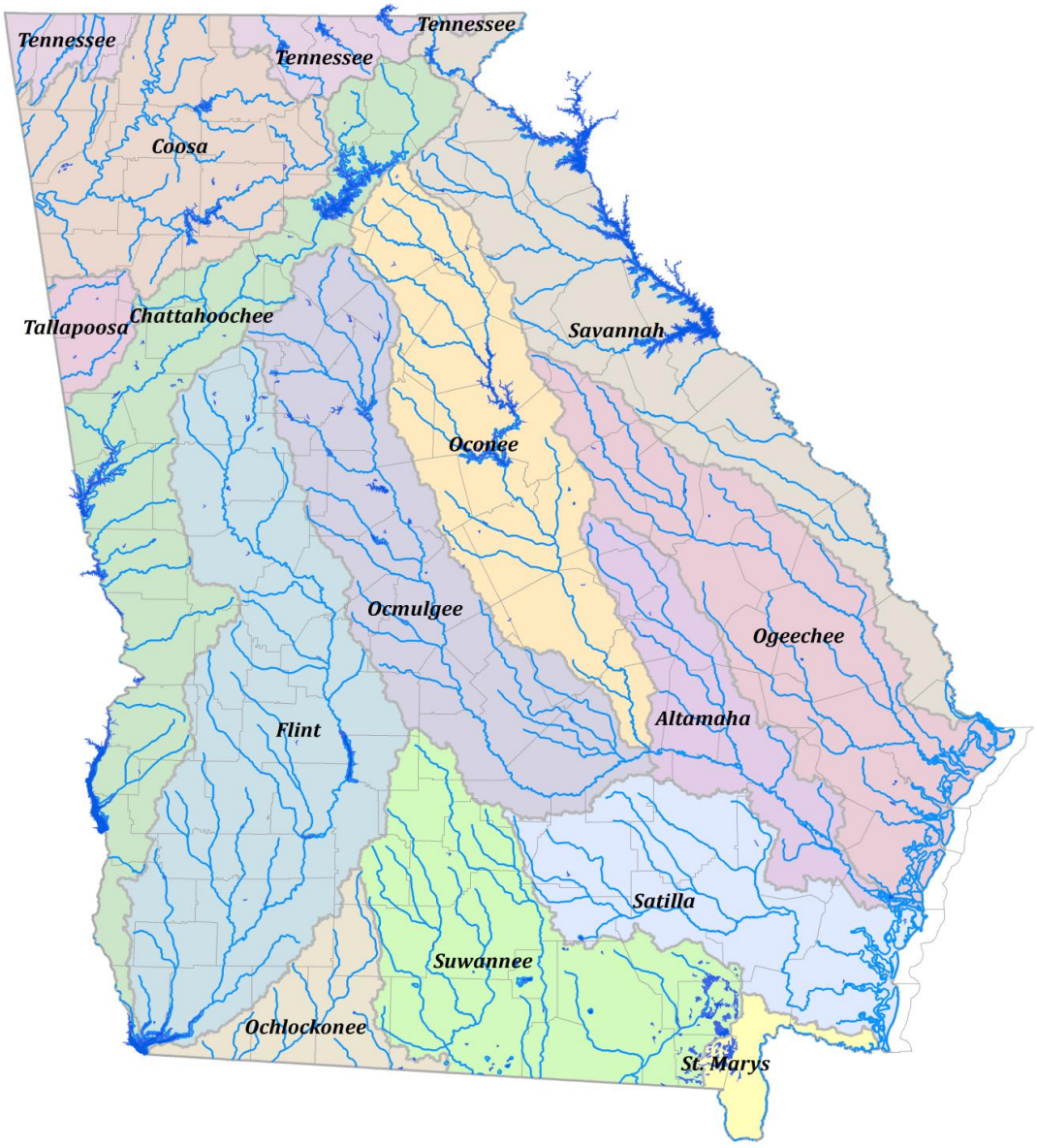
WATERSHED ASSESSMENT AND PROTECTION PLAN GUIDANCE: Watershed Protection Plan Annual Reporting Requirements



Georgia Department of Natural Resources
Environmental Protection Division
Watershed Protection Branch

I. Introduction

Implementation of the Watershed Protection Plan (WPP) begins following approval by the Georgia Environmental Protection Division (GAEPD). Watershed protection strategies outlined in the WPP are used to restore and protect waters within the watershed assessment area. This is accomplished through Best Management Practices (BMPs) selected by the permittee, which may involve a variety of activities covering a range of disciplines. Monitoring of the water quality and biological communities for waterbodies within the watershed assessment area, as described in the permittee's WPP Long-term Monitoring Plan, provides a means of measuring the effectiveness of BMPs implemented through the WPP. The information derived from monitoring allows for determining if BMPs are adequately improving and protecting water and biological resources, or if further measures are required to enhance instream conditions.

The WPP requires that the Annual Report be submitted by the permittee to the GAEPD Watershed Planning and Monitoring Program (WPMP). The information provided by the WA/WPP process is primarily intended for the permittee's use in maintaining and improving water quality and biological integrity within the watershed assessment area. The submittal should include:

- Statement certifying the WPP is being implemented
- Progress report summarizing BMPs implemented, monitoring performed, and modifications made to the WPP
- Documentation related to the water quality and biological monitoring

Details for the annual reporting requirements are provided below.

II. Annual Report Submittals

Once the WPP is approved by GAEPD, the permittee is required to submit to the State the following information by June 30th of each year:

A. Annual certification of WPP implementation

1. The Certification Statement states the following:

   I certify, under penalty of law, that the approved Watershed Protection Plan for _____ (permittee) is being implemented. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. This certification is made for the period of _____ to _____.

2. The Certification Statement should be signed and dated by a representative for the permit holder responsible for implementing the WPP.

B. Progress Report

The Progress Report should be a brief summary of activities conducted over the previous calendar year. The Report should be submitted in both hard copy form and electronic version on a CD/DVD, and should include the following:

1. Summary of Best Management Practices (BMPs)

   Permittees must review BMPs implemented and evaluate their effectiveness based on long-term monitoring results from the previous calendar year. Provide a brief summary of BMPs that were implemented the previous calendar year. Include the following:

   a. Newly implemented BMPs that may be a one-time action, or may become an ongoing activity.

   b. BMPs that are a continuous or periodic activity from year-to-year.

   c. BMPs that were implemented, or are ongoing, as a result of programs other than what is covered under the WPP (e.g. National Pollutant Discharge Elimination System (NDPES) MS4 program; 319 Grant funded project, sanitary and storm sewer inspection and maintenance, etc.)

   d. Based on water quality and biological monitoring results, summarize the effectiveness of the BMPs currently in place. Where the need for corrective measures is indicated, propose BMPs that will improve conditions.

2. Water Quality and Biological Monitoring

   a. Monitoring site information

      1) Provided in a tabular format a summary of the monitoring sites sampled. Information should include the site ID, site name, GPS coordinates, Ecoregion level IV, and whether the site is a water quality monitoring site, a bioassessment site, or both.

      2) Map showing the locations of the monitoring sites, stream hydrology within the watershed assessment area, the permittee's service area, permittee's jurisdictional limits, map scale, and a north arrow indicating map orientation. Clearly indicate these items using legible labels and a legend.

      3) Record and report when a sample site is dry or no flow exists. Under these conditions, water quality samples should not be collected. GAEPD should be consulted if this situation occurs to schedule alternative sampling.

   b. Summary of Water Quality Monitoring

      1) Provide a brief discussion summarizing the water quality of the waterbodies sampled based on results of the *in situ* measurements and chemical parameters sampled. Compare these results to instream water quality standards. Where standards do not exist, evaluate the sample results based on EPA guidance criteria, if

available Supplement the discussion with tables presenting the water quality data and dates samples were collected.

2) Compare the current sample results to those taken from previous years, and discuss any detectable trends indicating the water quality is improving, declining, or showing no significant changes. Graphical presentations are often helpful and recommended when presenting trend data.

c. Summary of Macroinvertebrate Assessments

1) Include an evaluation of the physical and habitat components of the bioassessment for each site. Indicate the habitat condition based on the results. Provide habitat rankings for each site in a table that allows for comparison among sites. Where significant degradation or improvement of the habitat has occurred, determine the cause(s).

2) Discuss the particle substrate count results for each site. Indicate the condition of the stream substrate based on the sample results. Where the substrate has been significantly altered from its original state, discuss the cause(s).

3) Discuss results of the macroinvertebrate assessment for each site. Summarize the health of the macroinvertebrate community based on the number of specimens present, diversity of the species (taxa), presence of intolerant and tolerant species (taxa), and the Macroinvertebrate Multimetric Index (MMI) scores. Present the MMI scores in a table that allows for comparison among the sites. Compare current results of the macroinvertebrate assessments with those conducted for previous years and discuss detected trends, indicating whether the health of the macroinvertebrate community is improving, declining, or showing no significant change. Present tables and/or graphs of the trend data.

d. Summary of Fish Assessments

1) Include an evaluation of the physical and habitat components of the bioassessment for each site. Provide habitat rankings for each site in a table that allows for comparison among sites. Where significant degradation or improvement of the habitat has occurred, determine the cause(s).

2) Discuss results of the fish assessments for each site. Summarize the health of the fish community based on the number of specimens present, diversity of the species (taxa), presence of intolerant and tolerant species (taxa), species showing deformities, erosion, lesions, and tumors, and the Index of Biotic Integrity (IBI) scores. Present the IBI scores in a table that allows for comparison among the sites. Compare current results of the fish assessments with those conducted for previous years and discuss detected trends, indicating

whether the health of the fish community is improving, declining, or showing no significant change. Graphical presentations are often helpful and recommended when presenting trend data.

3. Summary of Changes in the WPP

The WPP is considered a living document, and when necessary, may be modified based on changing conditions within the watershed assessment area. Proposed changes to the WPP should be discussed with GAEPD before being made final. In the Annual Report, discuss any modifications that were made to the WPP during the previous calendar year. A complete update of the WPP is recommended at least every 10 years. If multiple changes or additions have been made, GAEPD may require a more extensive update to the WPP.

C. Required Documentation

The following documents should be submitted electronically on CD/DVD as part of the annual reporting requirements:

1. Water quality monitoring data using GAEPD's Excel Watershed Assessment and Protection Plan Data Submittal Form, available on GAEPD's website at: http://epd.georgia.gov/watershed-assessment-and-protection-plan-guidance-documents.

Include in the Comments field any observations recorded at the time of the water quality and biological sampling events (e.g., weather conditions, presence of outfalls, presence of leaking pipes, odors, water discoloration, etc.).

The format of the Data Submittal Form should not be altered in any manner when entering water quality data. It is specifically designed to allow direct uploading into GAEPDs water quality database. If questions arise about utilizing the Data Submittal Form, contact WPMP at (404)-463-1511.

2. Macroinvertebrate Bioassessment Data

a. Field and Laboratory sheets, including:

- Macroinvertebrate Reconnaissance Form
- Habitat Assessment Forms (for each investigator)
- Habitat Assessment Average Form
- Physical Characterization and Water Quality Data Sheet
- Biological *In Situ* and Grab Sample Water Chemistry Field Sheet
- Discharge/Cross Section Field Sheet
- Substrate Particle Count Field Sheet
- Benthic Macroinvertebrate Collection Field Data Sheet
- Macroinvertebrate Level of Effort Subsampling Sheet
- QA/QC sheets/entry log if QA/QC is conducted (required for plans with 10 or more sites)

b. Taxa list, which includes:

- Site ID
- Site name
- Latitude and longitude
- Date of collection
- Lowest possible/practicable identification
- Number of specimens
- Habit (use abbreviations in GAEPD taxa list)
- Functional feeding group (FFG) (use abbreviations in GAEPD taxa list)
- Tolerance values
- North Carolina Tolerance Values (NCTV, when applicable)

c. Macroinvertebrate bioassessment water quality data is to be included in GAEPD's *Excel Watershed Assessment and Protection Plan Data Submittal Form*, and indicate in the Comments field that this data was collected as part of a macroinvertebrate bioassessment event.

d. Excel MMI workbook used to calculate MMI scores.

e. Sample site photos for day of sampling (i.e., upstream, downstream, left bank, right bank, bench marks, etc.) should be provided in Word or Powerpoint with each photo labeled.

3. Fish Bioassessment Data

a. Field sheets, including:

- Stream Reconnaissance Report
- Stream Collection Report
- Habitat Assessment
- Biological *In Situ* and Grab Sample Water Chemistry Field Sheet
- QA/QC sheets/entry log if QA/QC is conducted (plans with 10 or more sites)

b. Taxa list, which includes:

- Site ID
- Site name
- Latitude and longitude
- Date of collection
- Lowest possible identification
- Number of specimens
- Number of anomalies or deformities, erosion, lesions, tumors (DELTs)
- Common names

c. Fish assessment water quality data bioassessment water quality data is to be included in GAEPD's Excel Watershed Assessment and Protection Plan Data Submittal Form, and indicate in the Comments field that this data was collected as part of a fish bioassessment event.

d. Excel spreadsheets used to calculate IBI scores

e. Sample site photos for day of sampling (i.e., upstream, downstream, left bank, right bank, etc.), and fish specimens should be provided in Word or Powerpoint with each photo labeled

4. WRD Scientific Collecting Permit

   Scientific Collecting Permits issued by the Wildlife Resources Division (WRD) are required for the collection of macroinvertebrates and fish. Provide a copy of the Collecting Permit.

Please submit all required documentation. Failure to follow field and laboratory procedures as described in guidance documents and SOPs may cause certain data to be invalid, and depending on the extent of the discrepancies, could require that certain parts or all of the water quality monitoring or bioassessments to be repeated.