



GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

2019 Update to the Statewide Nonpoint Source Management Plan

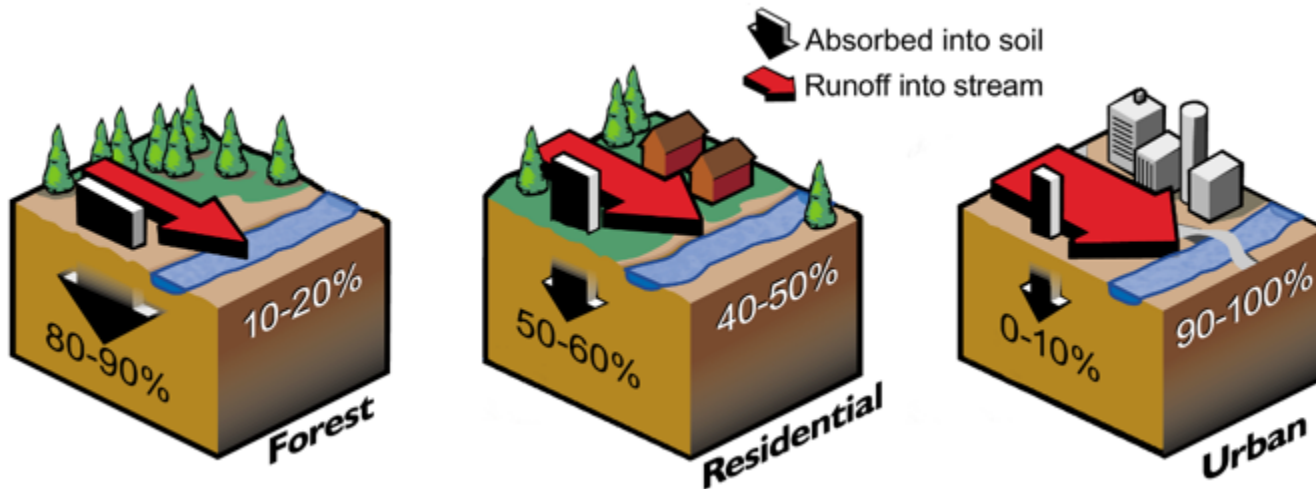
Veronica Crow, Grants Unit Manager
NonPoint Source Program

Middle Ocmulgee RWP Council
June 6, 2019



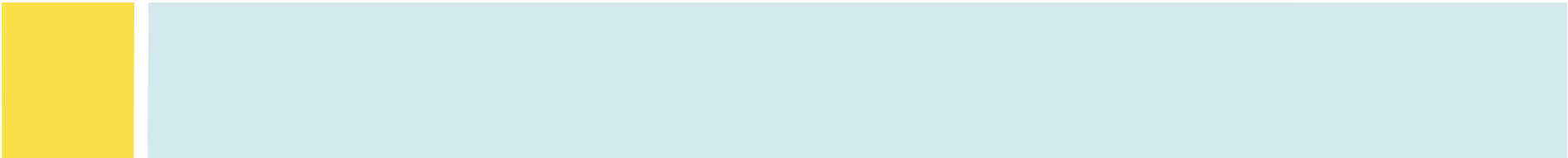
NONPOINT SOURCE MANAGEMENT

- What is nonpoint source pollution?
 - Negatively defined in the Clean Water Act as everything that is not a point source
 - Stormwater, erosion, illegal dumping, etc.





NONPOINT IMPACTS





WATER QUALITY IN GEORGIA – HISTORY

- 1972: Federal Clean Water Act and NPDES
- 1987: Federal Clean Water Act Amendments
 - ❖ Section 319 – National Program to Control Nonpoint Sources of Water Pollution



Photo: Cleveland State University Library



WHAT IS THE NONPOINT SOURCE MANAGEMENT PLAN?

- Required under Section 319 – all states must develop Nonpoint Source Management Programs
- Georgia implements the Nonpoint Source Management Program through the Nonpoint Source Management Plan
- Georgia also has a Coastal Nonpoint Source Program



NPS MANAGEMENT PLAN TIMELINE

**Georgia NPS
Management Program
approved by USEPA**

- January 1990

**Georgia NPS
Management
Plan updated**

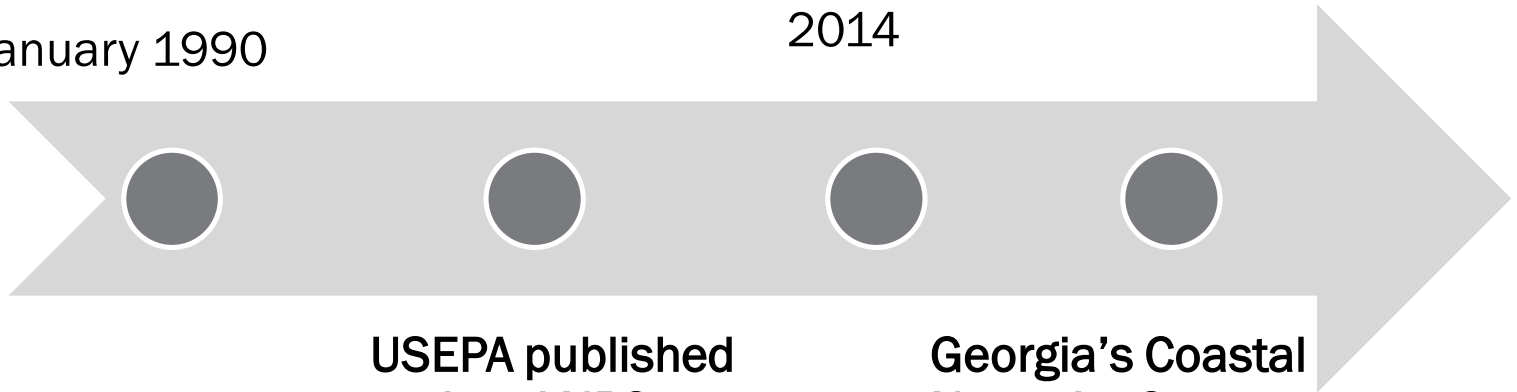
- September 2014

**USEPA published
updated NPS
Management Plan
Guidance**

- April 2013

**Georgia's Coastal
Nonpoint Source
Program approved**

- November 2018





WHY UPDATE THE PLAN?

- Required by the USEPA for Georgia to receive Section 319(h) grant funds
- Must be revised every five years





SUCCESS STORY: GEORGIA

- 2000: Piscicola Creek impaired for DO
- 2012-2014: Implemented 9,811 acres of conservation practices
 - NRCS National Water Quality Initiative
- 2014: GAEPD collect samples
- Piscicola Creek no longer impaired



NONPOINT SOURCE SUCCESS STORY

Georgia

Implementing Agricultural Best Management Practices Through the National Water Quality Initiative Improves Dissolved Oxygen Levels in Piscicola Creek

Waterbody Improved Because of low dissolved oxygen levels, 25 miles of Piscicola Creek were added to the Clean Water Act (CWA) section 303(d) list of impaired waters in 2000. In 2013, the U.S. Department of Agriculture's (USDA's) National Water Quality Initiative (NWQI) designated Piscicola Creek a priority watershed for Natural Resources Conservation Service's Environmental Quality Incentives Program (EQIP) investments in voluntary conservation practices that reduce pollutants from agricultural sources. After investments of over \$1,600,000 in BMP implementation through EQIP, in-stream water quality data collected by Georgia Environmental Protection Division (GAEPD) in 2014 indicated that 13 of Piscicola Creek's 25 impaired miles were meeting water quality criteria for dissolved oxygen. Therefore, GAEPD recommended that the downstream 13-mile section of Piscicola Creek be removed from the state's list of impaired waters, pending EPA approval of Georgia's DRAFT 2016 Integrated Report.

Problem

The Piscicola Creek watershed is within the hydrologic unit code (HUC) #0311020307 and includes Brooks and Thomas counties as well as the city of Quitman. The segment of Piscicola Creek from downstream Whitlock Branch at Ozell Road to Okapilco Creek near Boston, was added to the CWA section 303(d) list for low dissolved oxygen in 2000. Total maximum daily loads (TMDLs), a TMDL implementation plan, and a watershed management plan recommend best management practices (BMPs) to reduce oxygen-demanding and bacteria loads from forestry and agricultural sources. The 13-mile reach of Piscicola Creek highlighted in this story is located in the Lower Piscicola Creek watershed (41,309 acres) in Brooks County, Georgia, immediately north of the Georgia-Florida border. As seen in Figure 1, the watershed is dominated by agricultural land use, most of which is classified as row crops (29.7 percent). Of the 14,137 acres currently classified as agriculture, approximately 53 percent is irrigated by groundwater. Several classified evergreen forests (18.8 percent) appear to be intensively managed for pine and oak plantations.

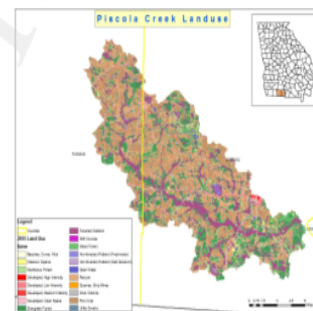


Figure 1. Watershed Map

Project Highlights

The NWQI was launched in 2012 by the USDA NRCS in collaboration with the U.S. Environmental Protection Agency (EPA) and GAEPD, the state water quality agency. In 2012, the NRCS and its partners selected Piscicola Creek to be targeted by the NWQI for financial and technical assistance to farmers, ranchers and forest landowners interested in voluntarily improving water quality and aquatic habitats in priority watersheds with impaired streams. Qualified producers received financial assistance from EQIP to implement conservation and management practices through a systems approach to control and trap nutrient and manure runoff. From 2012 to 2014, BMPs were implemented on 9,811 acres within Brooks County. The BMPs included conservation crop rotation, cover crops, nutrient management, fencing and installation of microirrigation.

Ultimately, the goal of NWQI is to implement conservation practices in a concentrated area so that agriculture no longer contributes to the impairment of water bodies within these priority watersheds.

Partners and Funding

Using EQIP funds in 2012 - 2014, NRCS provided \$1,653,452 in funding

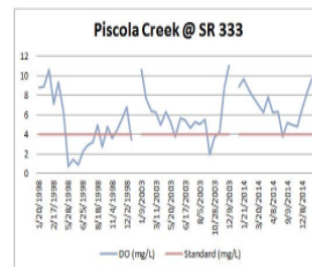


Figure 2. Water Quality Data

Results

During 2014, GAEPD collected monthly water quality samples from Piscicola Creek at State Road 333 below Quitman, Georgia to determine the impact, if any, of NWQI conservation practices implementation on in-



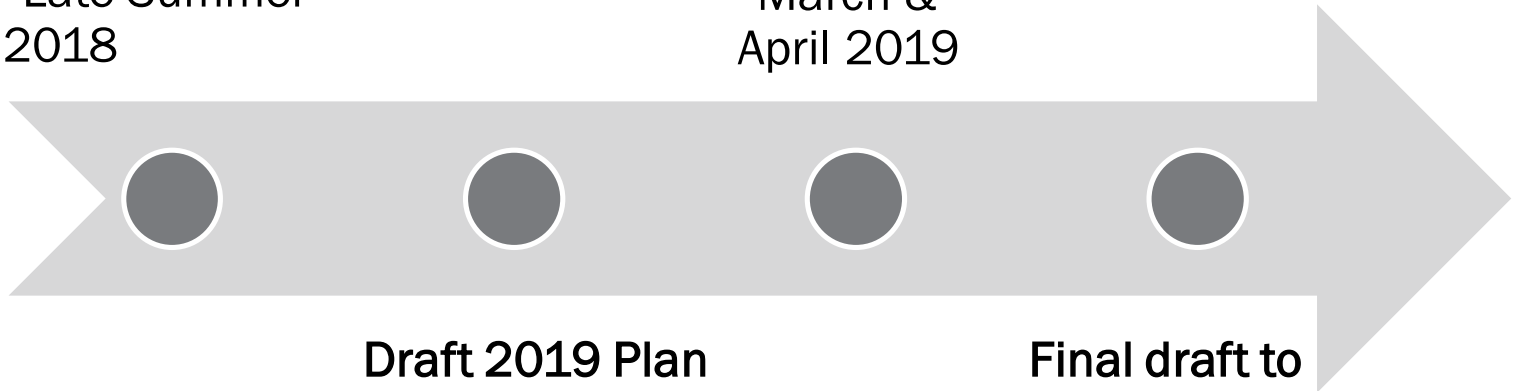
NPS MANAGEMENT PLAN UPDATE TIMELINE

**Sections sent to
GAEPD SMEs,
external partners**

- Late Summer 2018

**Stakeholder
process**

- March & April 2019



**Draft 2019 Plan
Completed**

- March 2019

**Final draft to
USEPA**

- July 2019



VISION FOR THE 2019 PLAN

- Useable, accessible planning document focused on targeted goals to protect and restore Georgia's waters.
- Effectively manage 319 grant funds.
- The Plan is not a comprehensive list of every GAEPD and partner activity, but rather a focused summary of key initiatives and goals.



CHANGES IN THE 2019 PLAN

- **Move from functional area to land use to align with the TMDL development and implementation process.**
 - Current chapters: agriculture, silviculture, urban, wetlands, coast, surface mining, and groundwater
 - Also include a programmatic chapter
 - Still covers required USEPA categories of nonpoint source pollution: agriculture, silviculture, construction, urban runoff, resource extraction, land disposal, and other



CHANGES IN THE 2019 PLAN

- **Move from a historical document to an active planning document**
 - Plan too lengthy and cumbersome for effective implementation
 - Historical documents, a link to GRTS, tracking spreadsheets, and the Annual Reports will be made available online



CHANGES IN THE 2019 PLAN

- **New Assessment of Plan Implementation section**
 - Tracking tables measure activity, but not outcomes
 - Develop database and GIS layer to track outcomes of plan implementation



CHANGES IN THE 2019 PLAN

- **Updated goals**
 - Removed completed goals
 - Removed goals that no longer aligned with EPD priorities
 - Removed or modified goals that were not clear, specific, and measurable
 - Added new goals per SME recommendations



STAKEHOLDER PROCESS SUMMARY

- **Five stakeholder meetings across Georgia**
 - Dawson (3/29), Watkinsville (4/1), Calhoun (4/2), Brunswick (4/10), Atlanta (4/19)
- **Presentation, followed by interactive engagement**
 - Visioning exercise: how does a successful plan update look to you
 - Dot exercise: prioritization of long-term goals, identification of overlooked goals



STAKEHOLDER PROCESS SUMMARY

- **Visioning exercise comments:**
 - 10,000 foot view
 - Outline for partners to use
 - Highlights priorities, uses prioritization
 - Can be easily used to apply for grants
 - Action-focused
 - Results in water quality improvement



STAKEHOLDER PROCESS SUMMARY

- **Dot exercise results:**
 - Overall top goals:
 - **Improve communication** with stakeholders and the public about stream buffer protections and variances.
 - Increase **understanding of wetland restoration** and mitigation sites to ensure effective practices.
 - Develop a model for **connecting all relevant components** of the NPS Program activities to water quality outcomes.
 - Continue restoring impaired waters and protecting healthy waters through **supporting BMP implementation** in priority, impaired, and healthy watersheds.
 - Continue to support the implementation of **GI and LID projects**, with an emphasis on **operations and maintenance** and post-construction **monitoring**.



STAKEHOLDERS

- **State agencies:** Georgia Department of Agriculture, Georgia Forestry Commission, Georgia Soil and Water Conservation Commission
- **Resource Conservation and Development Councils:** Golden Triangle RC&D, Limestone Valley RC&D, Seven Rivers RC&D
- **Regional Commissions:** Northwest Georgia Regional Commission, Southern Georgia Regional Commission
- **Local governments:** City of Atlanta, City of Gainesville, Macon Water Authority, City of Madison, Peach County, City of Savannah
- **Watershed organizations:** Chattahoochee Riverkeeper, Chattooga Conservancy, Lake Lanier, Suwanee Riverkeeper, Upper Oconee Watershed Network
- **Federal agencies:** US EPA, US Fish & Wildlife, Natural Resource Conservation Service
- **Consultants:** GMC, Nutter & Associates
- **Institutions:** University of Georgia Cooperative Extension, University of Georgia Marine Extension
- **Private industry:** D. S. Smith, Rayonier



<https://epd.georgia.gov/watershed-protection-branch-technical-guidance>

About EPD	Enforcement	Forms and Publications	Technical Guidance	Rules and Laws	EPD News	Contact Us
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Technical Guidance
► Air Protection Branch Technical Guidance
► Land Protection Branch Technical Guidance
▼ Watershed Protection Branch Technical Guidance
Drinking Water
Environmentally Sensitive Property
Erosion and Sedimentation
Floodplain Management
Guidance For Submitting Data For 305(b)/303(d) Listings (SQAP)
Land Activity Management
Macroinvertebrate Bioassessment Standard Operating Procedures (SOP) and Metric Spreadsheets
Regional Water Planning Guidance

[Home](#) » [Technical Guidance](#) » Watershed Protection Branch Technical Guidance

Watershed Protection Branch Technical Guidance

Drinking Water and Water Withdrawal

- [Drinking Water Permitting and Engineering Unit County Assignments](#) - May 2019
- [Drinking Water](#)
- [Water Well Driller Standards](#)
- [Water Withdrawal Permitting](#)

Wastewater Regulatory Program

- [Technical and Environmental Review Process Guidance and Forms](#)

Wetlands

- [Environmentally Sensitive Property](#)

Nonpoint Source

- [Notice of Public Meetings for the Revisions to Georgia's Statewide Nonpoint Source Management Plan](#)
- [Draft 2019 Update to Georgia's Statewide Nonpoint Source Management Plan](#)
- [Draft 2019 Update to Georgia's Statewide Nonpoint Source Management Plan Goal Tracker](#)
- [Georgia's Statewide Nonpoint Source Management Plan](#)
- [Erosion and Sedimentation](#)
- [Floodplain Management](#)
- [Land Activity Management](#)



CONNECTION TO COUNCIL'S MANAGEMENT PRACTICES

Statewide Water Planning Chapter

The Regional Water Plans include a suite of BMPs intended to reduce nonpoint source pollution. These nonpoint source BMPs include:

- nutrient management programs on farms;
- implementing silviculture BMPs;
- encouraging the use of the Better Back Roads Manual;
- floodplain management to prohibit or minimize development in the floodplain;
- protect open space along riparian corridors, wetlands, and groundwater recharge areas;
- increased monitoring and sampling of surface water quality;
- promotion and implementation of GI and LID;
- retrofitting of old or outdated stormwater management structures;
- mandating or enforcing setbacks of septic systems from surface waters;
- point to nonpoint water quality credit trading.



STATEWIDE WATER PLANNING

- ***Long Term Goal 1:*** Track the implementation and effect of nonpoint source BMPs identified in the Regional Water Plans.
 - Activity: Use 319(h) and Seed Grant report information to determine how many of the proposed nonpoint source pollution management practices identified in Regional Water Plans have been implemented.
 - Activity: Identify which water planning regions have had several BMPs implemented and which water planning regions have not have BMPs implemented. Work with those water planning regions to identify barriers to BMP implementation.
 - Activity: Reduce barriers to BMP implementation as identified in the previous activity.



STATEWIDE WATER PLANNING

- ***Long Term Goal 2:*** Encourage Seed Grant applications and see an increase in the number of applications for seed grants from qualifying organizations within each Regional Water Planning Council.
- Activity: Promote Seed Grant opportunities through multiple channels, including the GAEPD website, Regional Water Planning Council Meetings, and other meetings.



STATEWIDE WATER PLANNING

- ***Long Term Goal 5:*** Reduce sediment loads from agriculture nonpoint sources.
 - Activity: Address irrigation water use and associated nutrient and sediment losses from pasture land and crop fields in areas identified by Regional Water Planning efforts and WMPs.



MIDDLE OCMULGEE REGIONAL WATER PLAN

PRIORITY MANAGEMENT PRACTICES		
WQ7-Reduce Runoff from Impervious Surfaces	Reduction of non-point source pollution	<p>Local governments may consider the following programs to address non-point source pollution and stormwater management issues:</p> <ul style="list-style-type: none">• Low Impact Development (LID)• Reduction of impervious surfaces in development and building design• Land (green space) conservation• Transfer of development rights <p>Local governments may adopt incentive programs.</p>
WQ11-Implement Watershed Improvement Projects	Reduction of non-point source pollution; restoration of substantially impacted watersheds	<p>Implement watershed improvement projects to help restore streams to attain designated uses, as well as impacted habitats and flow regimes. Projects can include physical improvements, such as</p> <ul style="list-style-type: none">• Retrofit existing stormwater infrastructure• Restore ecosystem (stream/wetlands restoration)



MIDDLE OCMULGEE REGIONAL WATER PLAN

WQ15-Adopt Stormwater Management Standards for New Development for Rural Areas	Reduction of non-point source pollution	<ul style="list-style-type: none">• Adopt ordinances/policies that require stormwater management for new development• Adopt Georgia Stormwater Management Manual (Blue Book) or an equivalent local design manual
WQ20-Encourage Forest and Dirt Road Best Management Practices (BMPs)	Reduction of non-point source pollution	<ul style="list-style-type: none">• Implement the measures outlined in the Georgia Forestry Commission Best Managements Practices (BMP) manual.• Expand education and enforcement of the measures outlined in the Georgia Forestry Commission BMP manual.• Implement dirt road BMPs



QUESTIONS

Veronica Craw
Grants Unit Manager
Nonpoint Source Program
veronica.craw@dnr.ga.gov
404-651-8532