GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

2024 Update to the Statewide Nonpoint Source Management Plan

Veronica Craw, Manager
Nonpoint Source Program

Joy Hinkle, Manager
Grants Unit

AGENDA

- Background and history
- Priority Watersheds
- General Visioning*
- NPS Priorities
  - National*
  - State*
- Section-specific Goals*
- Wrap-up

Brunswick, GA

Flint River, GA

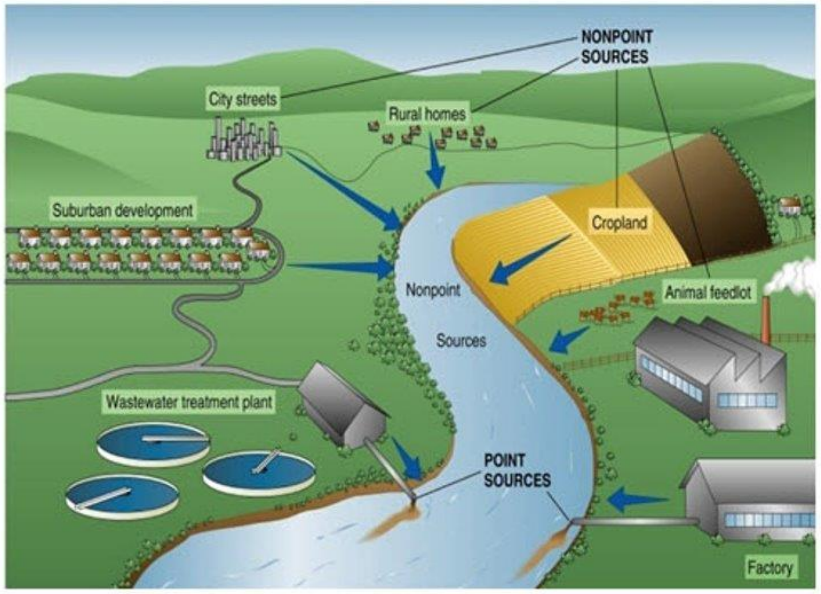
*Feedback desired

NONPOINT SOURCE PROGRAM

What is nonpoint source pollution?

Everything that is not a point source.

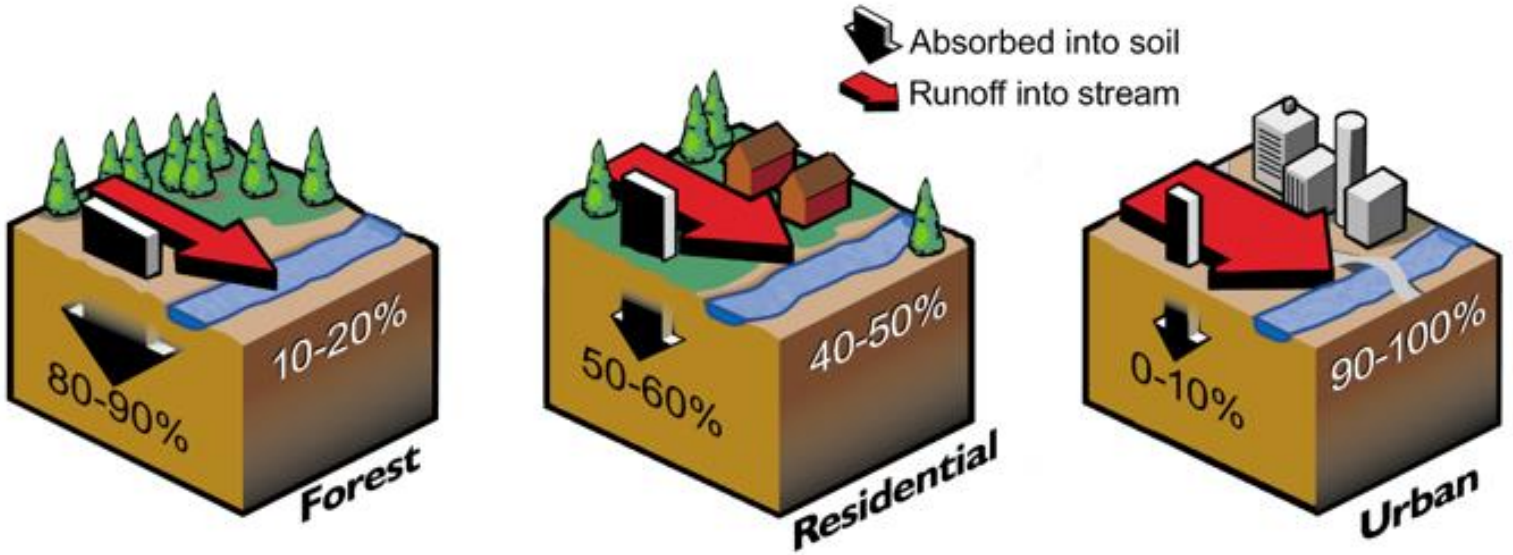
Excess fertilizer, pet waste, erosion, illegal dumping, etc.



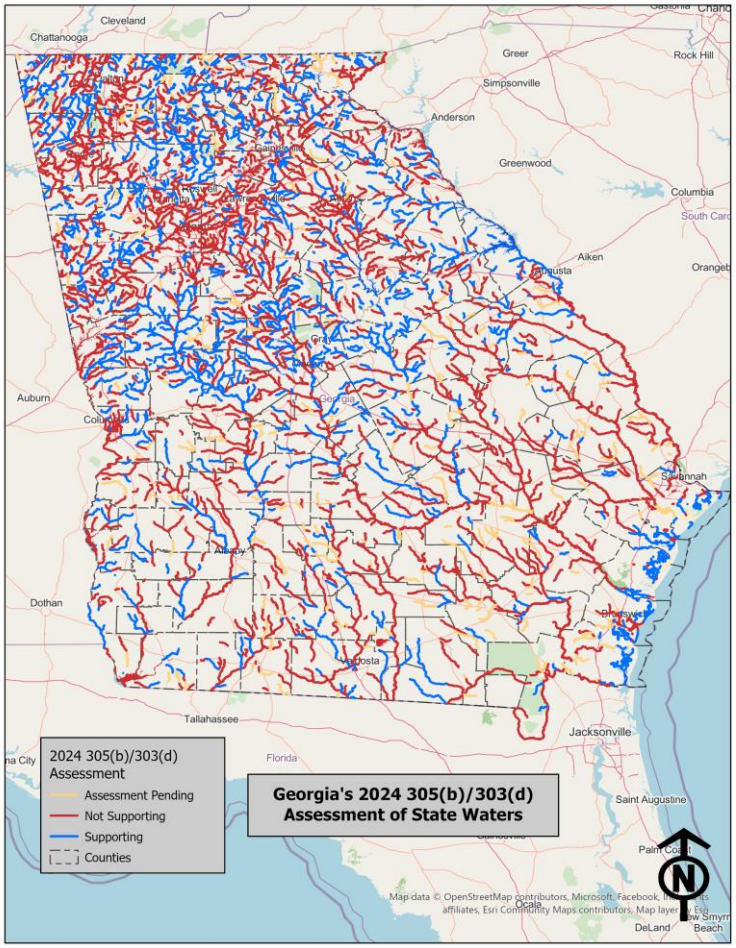
Images from www.walpa.org, divebuddy.com, pineville.net

NONPOINT SOURCE MANAGEMENT

- What is nonpoint source pollution and stormwater?



NONPOINT IMPACTS



2024 Assessed Waters

Red = Impaired
Orange = More Info Needed
Blue = Meeting Designated Use

WATER QUALITY IN GEORGIA – HISTORY

- 1948: Federal Water Pollution Control Act
- 1972: Federal Clean Water Act and NPDES
- 1987: Federal Clean Water Act Amendments
  - Section 319 – National Program to Control Nonpoint Sources of Water Pollution

Two men wearing life jackets on a small boat on Lake Erie in 1976. Both the boat and the men are covered in oil polluting Lake Erie from the Cuyahoga River. Cleveland Press Collection, Cleveland State University Library

title, as the Administrator determines necessary to carry out the objective of this Act.

(c) Each State desiring to administer its own permit program within its jurisdiction for discharge of a specific pollutant or pollutants under controlled conditions associated with an approved aquaculture project may do so if upon submission of such program the Administrator determines such program is adequate to carry out the objective of this Act.

(33 U.S.C. 1328)

SEC. 319. NONPOINT SOURCE MANAGEMENT PROGRAMS.

(a) STATE ASSESSMENT REPORTS.—

(1) CONTENTS.—The Governor of each State shall, after notice and opportunity for public comment, prepare and submit to the Administrator for approval, a report which—

(A) identifies those navigable waters within the State which, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain applicable water quality standards or the goals and requirements of this Act;

(B) identifies those categories and subcategories of nonpoint sources or, where appropriate, particular nonpoint sources which add significant pollution to each portion of the navigable waters identified under subparagraph (A) in amounts which contribute to such portion not meeting such water quality standards or such goals and requirements;

(C) describes the process, including intergovernmental coordination and public participation, for identifying best management practices and measures to control each category and subcategory of nonpoint sources and, where appropriate, particular nonpoint sources identified under subparagraph (B) and to reduce, to the maximum extent practicable, the level of pollution resulting from such category, subcategory, or source; and

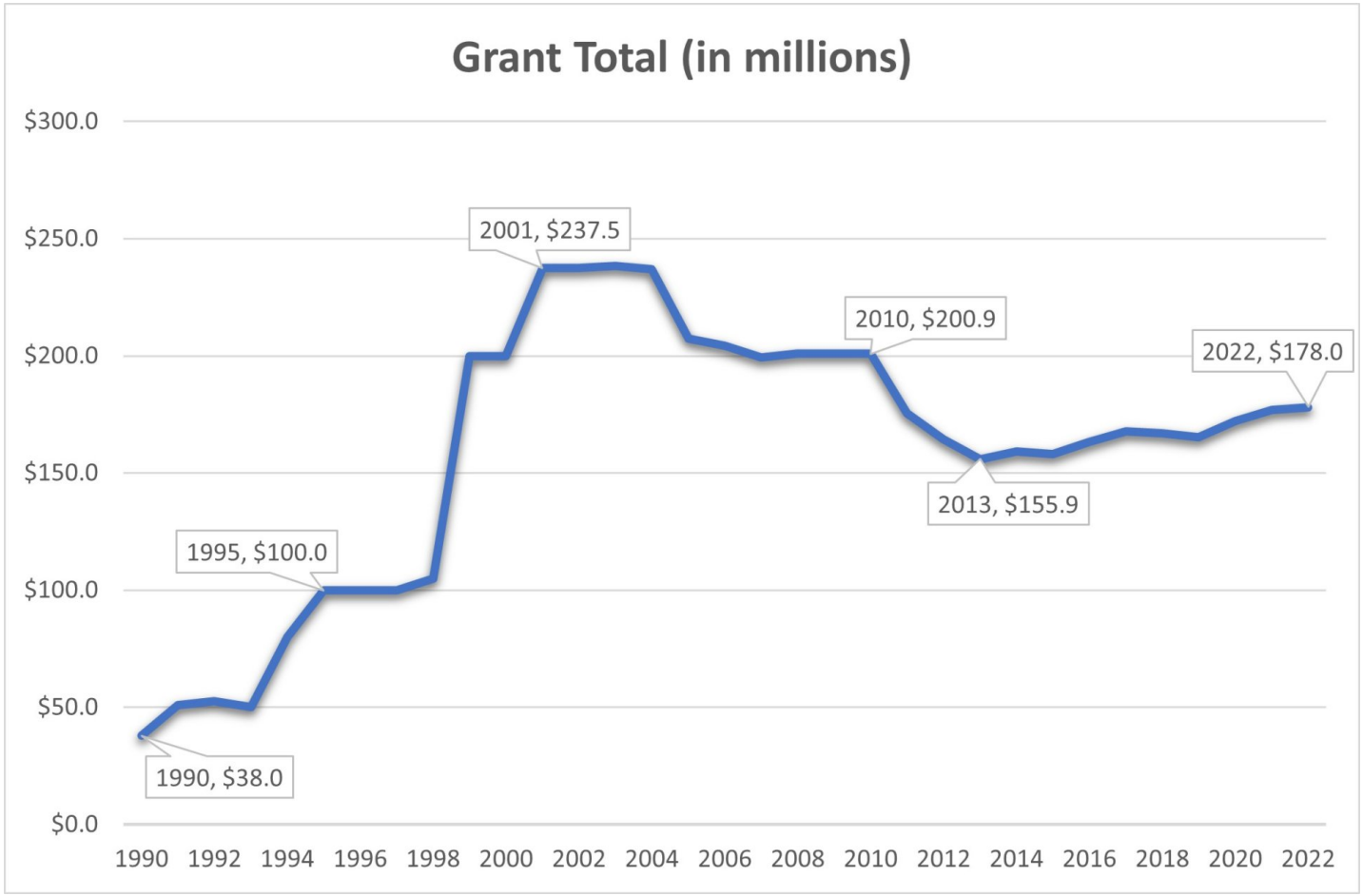
(D) identifies and describes State and local programs for controlling pollution added from nonpoint sources to, and improving the quality of, each such portion of the navigable waters, including but not limited to those programs which are receiving Federal assistance under subsections (h) and (i).

(2) INFORMATION USED IN PREPARATION.—In developing the report required by this section, the State (A) may rely upon information developed pursuant to sections 208, 303(e), 304(f), 305(b), and 314, and other information as appropriate, and (B) may utilize appropriate elements of the waste treatment management plans developed pursuant to sections 208(b) and 303, to the extent such elements are consistent with and fulfill the requirements of this section.

(b) STATE MANAGEMENT PROGRAMS.—

(1) IN GENERAL.—The Governor of each State, for that State or in combination with adjacent States, shall, after notice and opportunity for public comment, prepare and submit to the Administrator for approval a management program which such

FEDERAL FUNDING



SUCCESS STORIES

NONPOINT SOURCE SUCCESS STORY

Georgia

Installing Agricultural and Stormwater Management Practices Reduces Bacteria in the Lower Soque River below the City of Clarkesville

Waterbody Improved

Bacteria in runoff from agricultural and urban lands led to high bacteria counts in Georgia's Soque River below Clarkesville. As a result, the Georgia Environmental Protection Division (GAEPD) added a 6-mile segment of the lower Soque River to its 2002 Clean Water Act (CWA) section 303(d) list of impaired waters for failure to attain its fishing designated use. Beginning in 2008, the installation of agricultural and stormwater best management practices (BMPs) resulted in decreased bacteria levels that met state water quality standards. These measures allowed Georgia to remove fecal coliform as an impairment from the 6-mile segment of the Soque River below Clarkesville in 2012.

Problem

The Soque River is the northeastern-most tributary of the Chattahoochee River and has a number of important uses both locally and regionally within the state (Figure 1). The main stem of the river serves as the drinking water source for the city of Clarkesville, and the river's tributaries provide water for other localities in Habersham County. In addition, the river supplies an estimated 1/6 of the inflow to Lake Lanier, the major drinking water reservoir for the city of Atlanta. The Soque River is also renowned for the recreational opportunities it provides (primarily fishing). The watershed covers approximately 160 square miles and rests wholly within Habersham County, thus presenting a unique opportunity for watershed protection and management while avoiding jurisdictional conflicts.

Georgia's water quality standards for the months of May through October require that fecal coliform not exceed a geometric mean of 200 colony-forming units per 100 milliliters (cfu/100 mL). For the months of November through April, fecal coliform is not to exceed a geometric mean of 1,000 cfu/100 mL or a maximum of 4,000 cfu/100 mL for any single sample. Data collected by GAEPD indicated that these standards were not being met. The fecal coliform geometric mean from Georgia sampling station 12024001 (now called 12010202O1) was 304 cfu/100 mL in July 2000. This prompted GAEPD to add a 29-mile segment of the Soque River (beginning at Goshen Creek and ending at the State Route 17 Bridge in the city of Clarkesville) to the 2002 CWA section 303(d) list for not supporting its fishing designated use. In 2003 GAEPD developed a total maximum daily load (TMDL) for fecal coliform in the impaired segment (Goshen Creek to SR 17, Clarkesville - segment # GAR031300010202). The TMDL was revised in 2008.

Figure 1. The Upper Soque River is in northeastern Georgia.

Section 319
NONPOINT SOURCE PROGRAM SUCCESS STORY

Georgia

Repairing Failing Septic Systems and Installing Best Management Practices Restore Rubes Creek

Waterbody Improved

Leaking septic tanks in residential areas and polluted runoff from impervious surfaces caused abnormally high fecal coliform (FC) bacteria levels in Georgia's Rubes Creek. As a result, the Georgia Environmental Protection Division (GEPD) placed a 7-mile segment of the creek on its Clean Water Act (CWA) section 305(b)/303(d) list of impaired waters in 2003. Using CWA section 319 and third-party grant funding, stakeholders installed a number of best management practices (BMPs), including septic system repairs, on properties adjoining the creek's impaired segment. Water quality improved, prompting GEPD to remove the 7-mile segment from the state's 2010 CWA section 305(b)/303(d) list of impaired waters for FC bacteria.

Problem

Rubes Creek flows through Cherokee and Cobb counties in northwest Georgia's Coosa River watershed (Figure 1). Rubes Creek is in the Blue Ridge ecoregion. One of the most floristically diverse areas in the eastern United States, the southern Blue Ridge is home to Appalachian oak forests; shrub, grass and heath balds; and hemlocks, cove hardwoods and oak-pine communities.

Rubes Creek is designated for fishing use (i.e., secondary contact recreational use). To support that designated use, the FC geometric means in Rubes Creek must remain below 200 colony-forming units (cfu) per 100 milliliters (mL) of water in the summer (May to October) and below 1,000 cfu/100 mL in the winter (November to April). A single-sample maximum criterion of 4,000 cfu/100 mL for the winter months also applies. Water quality data collected in Rubes Creek from 1993 to 2003 showed that four of five FC summer-time geometric means exceeded the state's bacteria water quality criteria for fishing use (Table 1). As a result, GEPD added a 7-mile segment to the 2003 CWA section 305(b)/303(d) list of impaired water for high FC bacteria levels. GEPD identified urban run-off, animal waste, sanitary sewer leaks, and failing septic systems as likely bacteria sources.

A total maximum daily load (TMDL) study for pathogens in 58 stream segments in the Coosa River watershed, which includes Rubes Creek, was

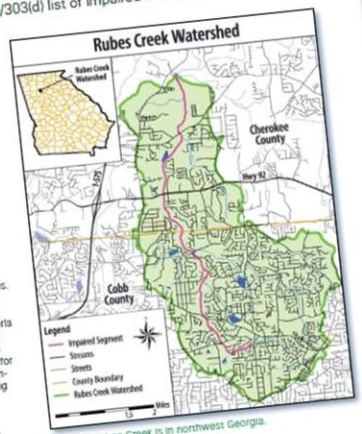
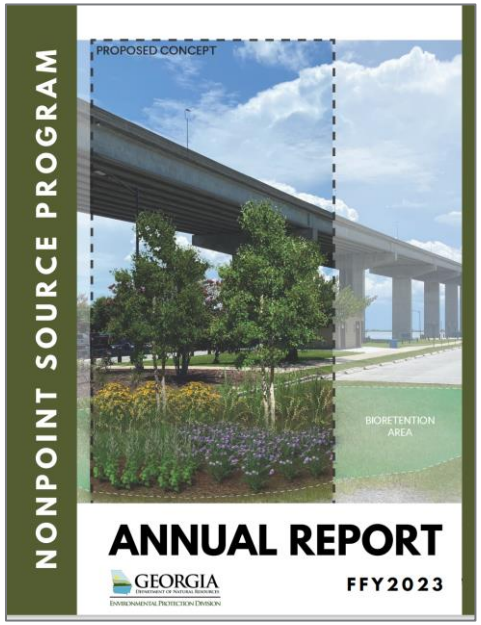


Figure 1. Rubes Creek is in northwest Georgia.

WHAT IS THE NONPOINT SOURCE MANAGEMENT PLAN?

- Required under Section 319 of CWA – all states must develop Nonpoint Source Management Programs
- Must be updated every 5 years
- Annual reporting to US EPA
- Georgia implements the Nonpoint Source Management **Program** through the Nonpoint Source Management **Plan**
- Georgia also has a Coastal Nonpoint Source Program integrated into the Statewide Plan
- Organized by land use to align with TMDL development and implementation



KEY COMPONENTS OF A NPS MANAGEMENT PLAN

- Explicit short- and long-term goals, objectives and strategies
- Strong working partnerships
- Use of programs (staff, education) and projects (implementation) to achieve water quality benefits
- Description of resource allocation/priority setting
- Identifies waters impaired by NPS pollution and priority unimpaired waters
- Establishes strategic approaches and adaptive management
- Manages program efficiently and effectively, including financial management
- Revises Program every 5 years

PARTNERSHIPS

GEORGIA'S PLAN, not an agency plan.

We rely on many partners to implement outputs and achieve outcomes.

Limestone Valley RC&D

Soque River SRWA Watershed Association

City of Brunswick Incorporated February 22, 1856 Georgia

Georgia Mountains Regional Commission

The University of Georgia Cooperative Extension

GEFA

GSWCC

Georgia Forestry Commission

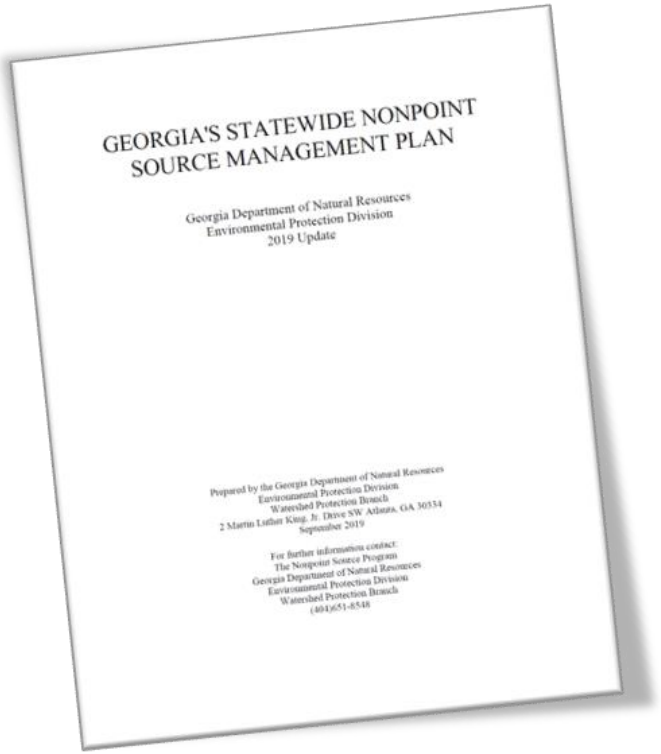
Georgia Department of Natural Resources Coastal Resources Division

Georgia Department of Natural Resources Wildlife Resources Division

NPS MANAGEMENT PLAN TIMELINE

- 1990 - GA NPS Management Program approved by US EPA
- **2000 - GA NPS Management Plan**
- 2013 - USEPA published Nonpoint Source Program and Grants Guidelines
- **2014 – GA NPS Management Plan Updated**
- 2018 – GA Coastal Nonpoint Source Program approved
- **2019 – GA NPS Management Plan Updated**
- 2024 – USEPA published Nonpoint Source Program and Grants Guidelines for States and Territories
- **2024 – Submit GA NPS Management Plan Update to USEPA for Approval**

2019 NPS MANAGEMENT PLAN


GEORGIA'S STATEWIDE NONPOINT SOURCE MANAGEMENT PLAN

Georgia Department of Natural Resources
Environmental Protection Division
2019 Update

Prepared by the Georgia Department of Natural Resources
Environmental Protection Division
Watershed Protection Branch
2 Martin Luther King, Jr. Drive SW Atlanta, GA 30334
September 2019

For further information contact:
The Nonpoint Source Program
Georgia Department of Natural Resources
Environmental Protection Division
Watershed Protection Branch
(404)651-8548

* *Long-Term Goal 3:* Identify new tools and strategies for reducing fecal coliform, sediment, and nutrient loads from agriculture nonpoint sources.

Activity 1: Utilize existing monitoring data and encourage longer-term monitoring of WMP and post-construction BMP sampling locations to target BMP placement and reduce pollutant loads in agricultural areas.
Timeframe: Ongoing.
Funding: Staff time, 319 funds and match.
Performance measure: Reduced loads in targeted stream segments where agriculture is identified as the cause of impairment, resulting in the delisting of impaired stream segments.
Results: This data could inform the effectiveness of current employed methods, along with providing support toward delisting efforts.
Deliverables: Data, updated priority lists.

Activity 2: Assess new water quality management tools, such as water quality trading, to determine if they can be effectively applied to support the objectives of this plan and Georgia's water quality control program.
Timeframe: Ongoing, with work to be completed by 2022.
Funding: Staff time, 319 funds and match.
Performance measure: GAEPD will lead the development of a water quality trading guidance document.
Results: Water quality trading and other market-based strategies have the potential to lead to cost-effective reductions in pollutant loads in impaired watersheds. As such, this tool should be fully explored and implemented to the extent practicable.
Deliverables: Water quality trading guidance document.

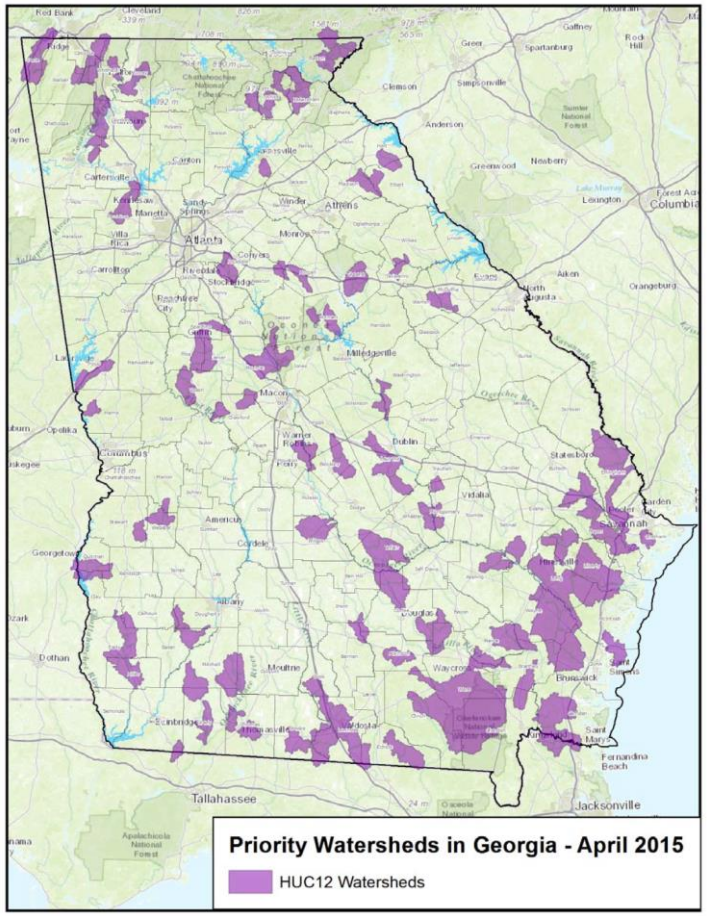
Long-Term Goal 4: Reduce nutrient loads from agriculture sources.

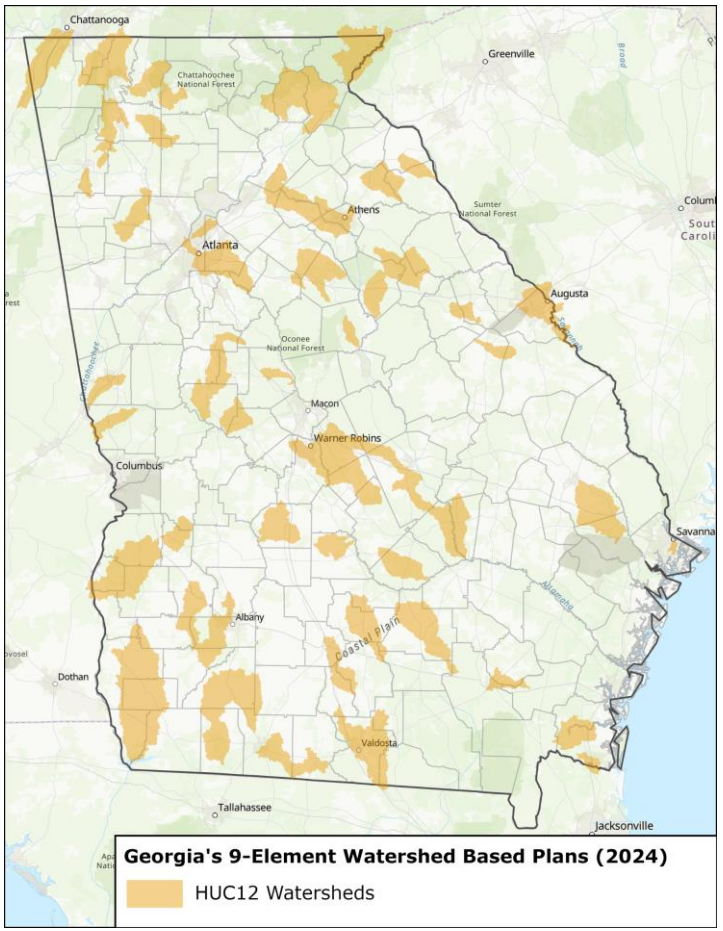
Activity 1: Assist Georgia's agricultural water permittees in developing Nutrient Management Plans (NMPs) and documenting current nutrient reduction efforts on their farms.
Timeframe: 2019-2024.
Funding: Staff time, 319 funds and match.
Performance measure: Develop outreach materials, including template documents, guidance information, presentations, and websites, that target agriculture water permit holders. Work with partners to implement a two-year pilot program where selected participants attend two facilitated workshops where they will receive an introduction to environmental farm planning and assistance in completing an initial NMP workbook to document current nutrient management efforts by that producer.
Results: These efforts will encourage the voluntary development and submittal of NMPs that can become a part of a Farm Use Permit file. NMPs can be linked with agriculture water permits, which would provide protection of agriculture water users, protective of Georgia's watersheds, and a proactive move that would convey a "good faith" effort to partners. Using an Environmental Farm Plan (EFP) framework as a voluntary, confidential, self-assessment, farm managers can identify nutrient management strengths and

STAKEHOLDER PROCESS SUMMARY

- **Three presentations at professional conferences**
  - GAWP SW Specialty (5/17), GAWP Annual (7/15), Georgia Env Conference (8/21)
- **Five stakeholder meetings across Georgia**
  - Albany (10/2), Dalton (10/8), Brunswick (10/18), Bogart (10/21), Atlanta (10/30)
- **Presentation, followed by anonymous interactive engagement**
  - Visioning exercise: what does a successful plan update look to you
  - Priority exercise: National and State priority rankings
  - Section-specific feedback: input on long-term goals

PRIORITY WATERSHEDS





For more information and to provide input, please contact **Joy Hinkle** at joy.hinkle1@dnr.ga.gov

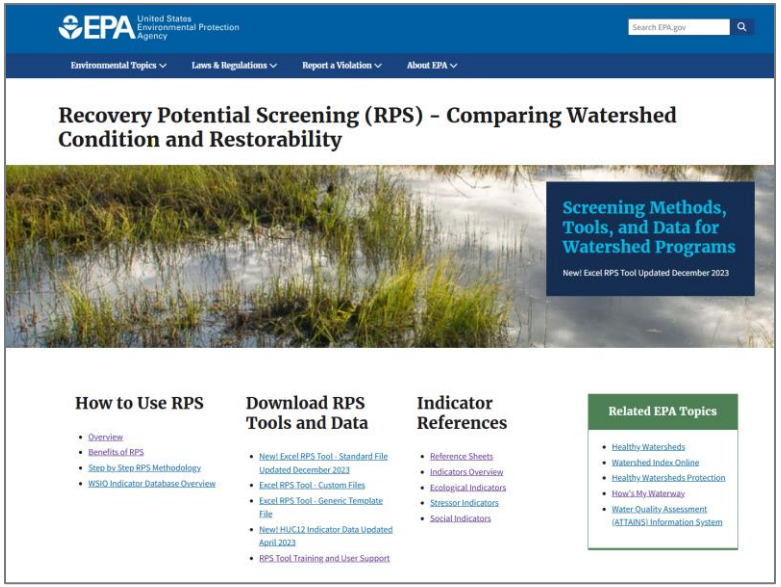
PRIORITY WATERSHEDS

Recovery Potential Screening Tool

Spreadsheet tool calculates an index score to identify differences among GA's <u>1,864 HUC12 watersheds</u>

Major Categories of Indicators

- Ecological
- Stressor
- Social

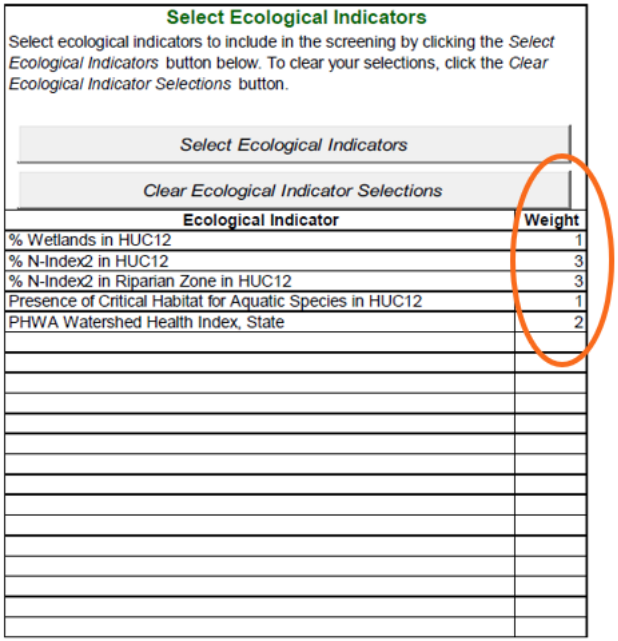


https://www.epa.gov/rps

For more information and to provide input, please contact **Joy Hinkle** at joy.hinkle1@dnr.ga.gov

PRIORITY WATERSHEDS: ECOLOGICAL INDICATORS

- Percent Wetlands
- Percent Natural Cover
- Percent Natural Cover in Riparian Zone
- Presence of Critical Habitat for Aquatic Species
- Watershed Health Index (EPA Preliminary Healthy Watersheds Assessments)



Select Ecological Indicators

Select ecological indicators to include in the screening by clicking the *Select Ecological Indicators* button below. To clear your selections, click the *Clear Ecological Indicator Selections* button.

Select Ecological Indicators

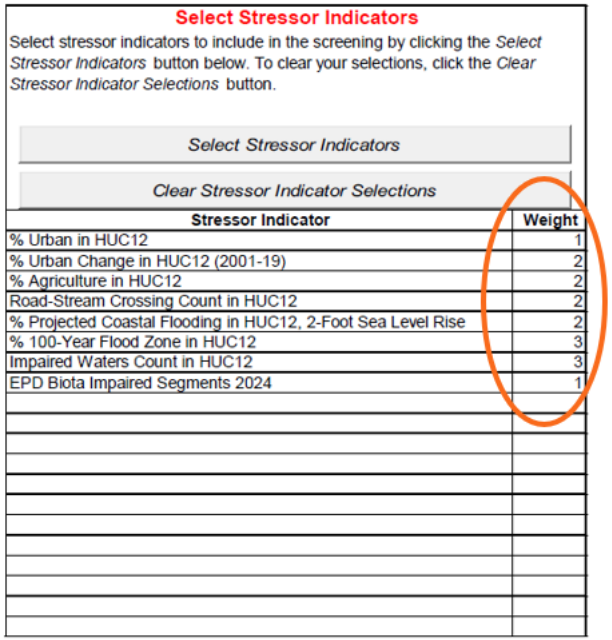
Clear Ecological Indicator Selections

Ecological Indicator	Weight
% Wetlands in HUC12	1
% N-Index2 in HUC12	3
% N-Index2 in Riparian Zone in HUC12	3
Presence of Critical Habitat for Aquatic Species in HUC12	1
PHWA Watershed Health Index, State	2

For more information and to provide input, please contact **Joy Hinkle** at joy.hinkle1@dnr.ga.gov

PRIORITY WATERSHEDS: STRESSOR INDICATORS

- Percent Urban
- Percent Urban Change (2001-2019)
- Percent Agriculture
- Count of Road-Stream Crossings
- Percent Projected Coastal Flooding w/2-Foot Sea Level Rise
- Percent 100-Year Flood Zone
- Count of Impaired Waters
- Count of EPD Biota Impaired Segments 2024



Select Stressor Indicators

Select stressor indicators to include in the screening by clicking the *Select Stressor Indicators* button below. To clear your selections, click the *Clear Stressor Indicator Selections* button.

Select Stressor Indicators

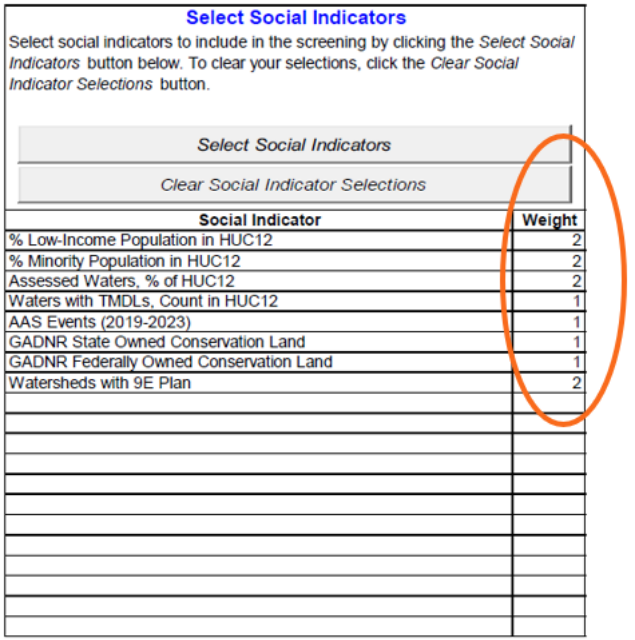
Clear Stressor Indicator Selections

Stressor Indicator	Weight
% Urban in HUC12	1
% Urban Change in HUC12 (2001-19)	2
% Agriculture in HUC12	2
Road-Stream Crossing Count in HUC12	2
% Projected Coastal Flooding in HUC12, 2-Foot Sea Level Rise	2
% 100-Year Flood Zone in HUC12	3
Impaired Waters Count in HUC12	3
EPD Biota Impaired Segments 2024	1

For more information and to provide input, please contact **Joy Hinkle** at joy.hinkle1@dnr.ga.gov

PRIORITY WATERSHEDS: SOCIAL INDICATORS

- Percent Low Income Population
- Percent Minority Population
- Percent Assessed Waters
- Count of Waters with TMDLs
- Count of Adopt-A-Stream Events (2019-2023)
- State Owned Conservation Land
- Federally Owned Conservation Land
- Watersheds with 9-Element Watershed Based Plans funded with GAEPD Section 319 Grant Funds



Select Social Indicators

Select social indicators to include in the screening by clicking the *Select Social Indicators* button below. To clear your selections, click the *Clear Social Indicator Selections* button.

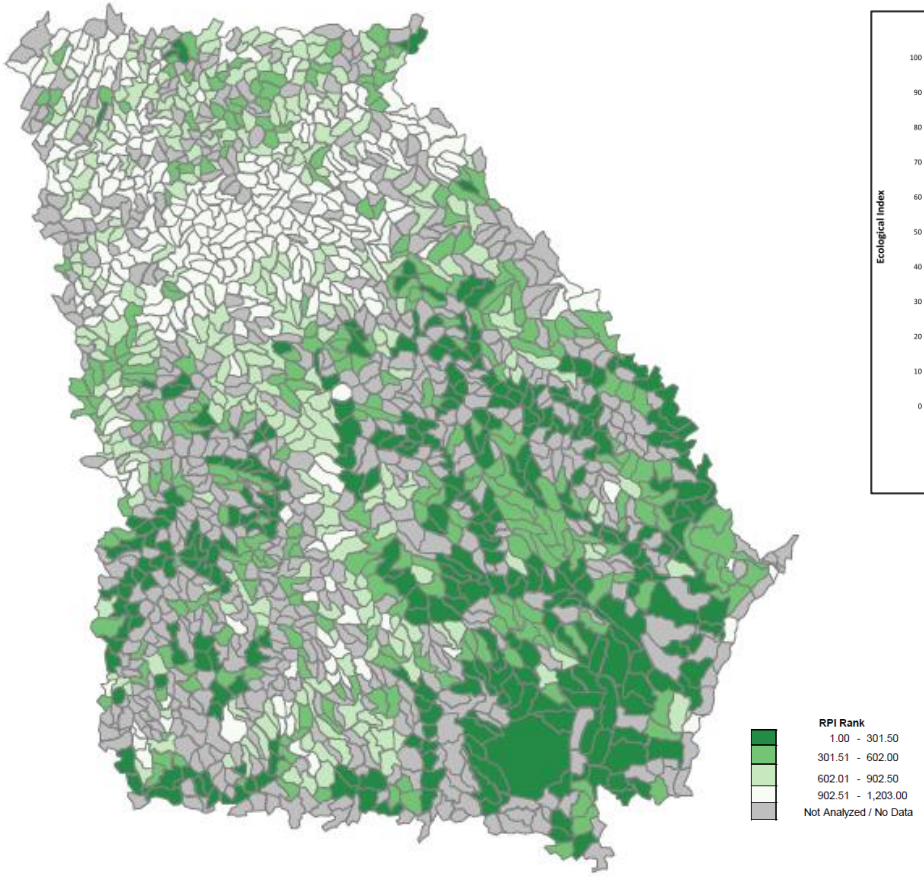
Select Social Indicators

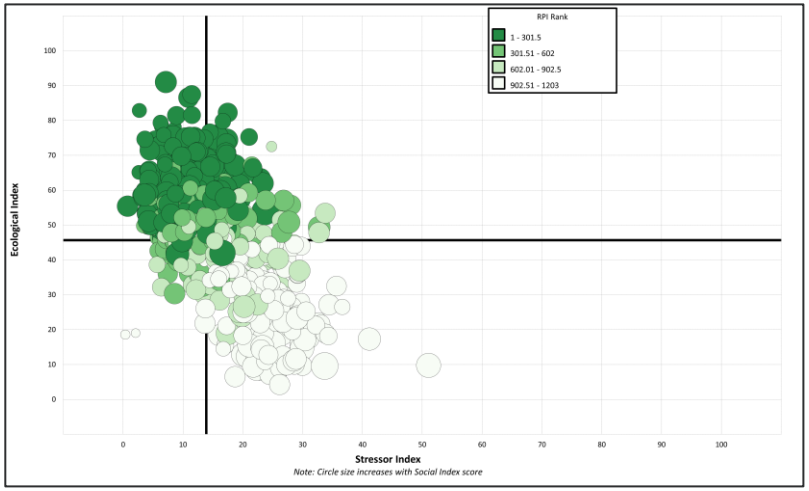
Clear Social Indicator Selections

Social Indicator	Weight
% Low-Income Population in HUC12	2
% Minority Population in HUC12	2
Assessed Waters, % of HUC12	2
Waters with TMDLs, Count in HUC12	1
AAS Events (2019-2023)	1
GADNR State Owned Conservation Land	1
GADNR Federally Owned Conservation Land	1
Watersheds with 9E Plan	2

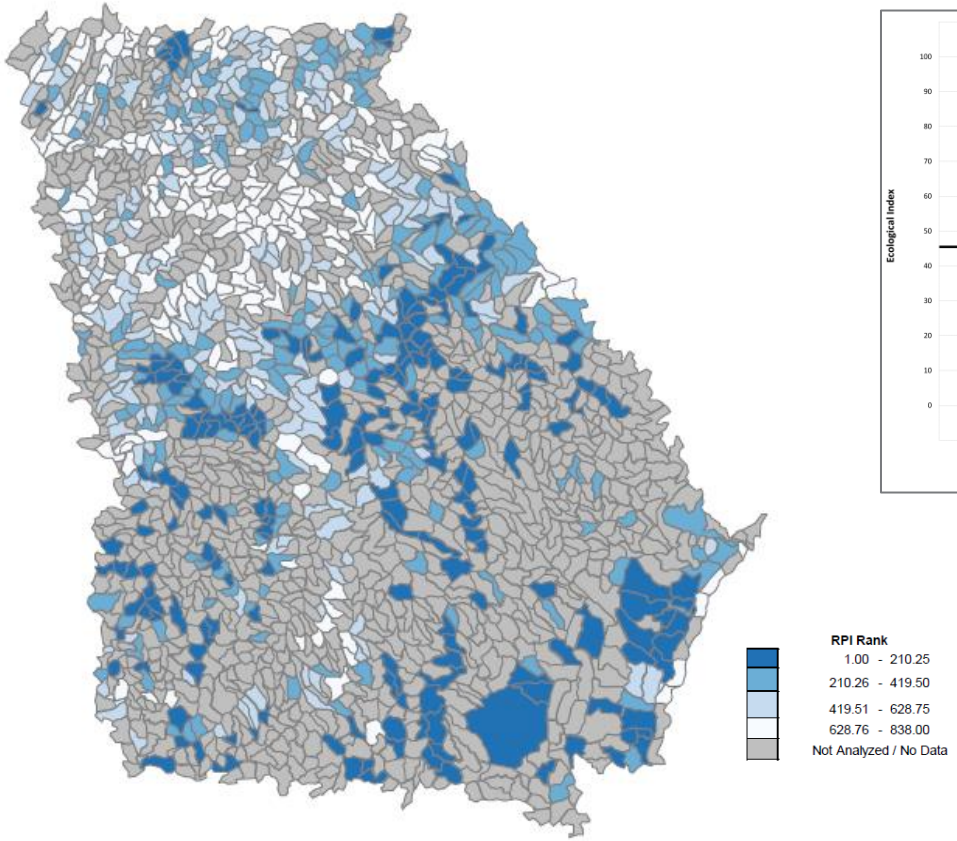
For more information and to provide input, please contact **Joy Hinkle** at joy.hinkle1@dnr.ga.gov

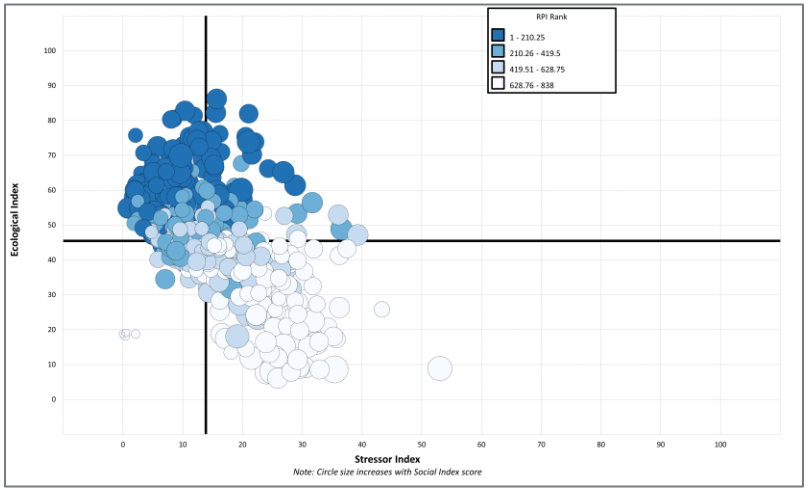
PRIORITY WATERSHEDS: IMPAIRED WATERSHEDS



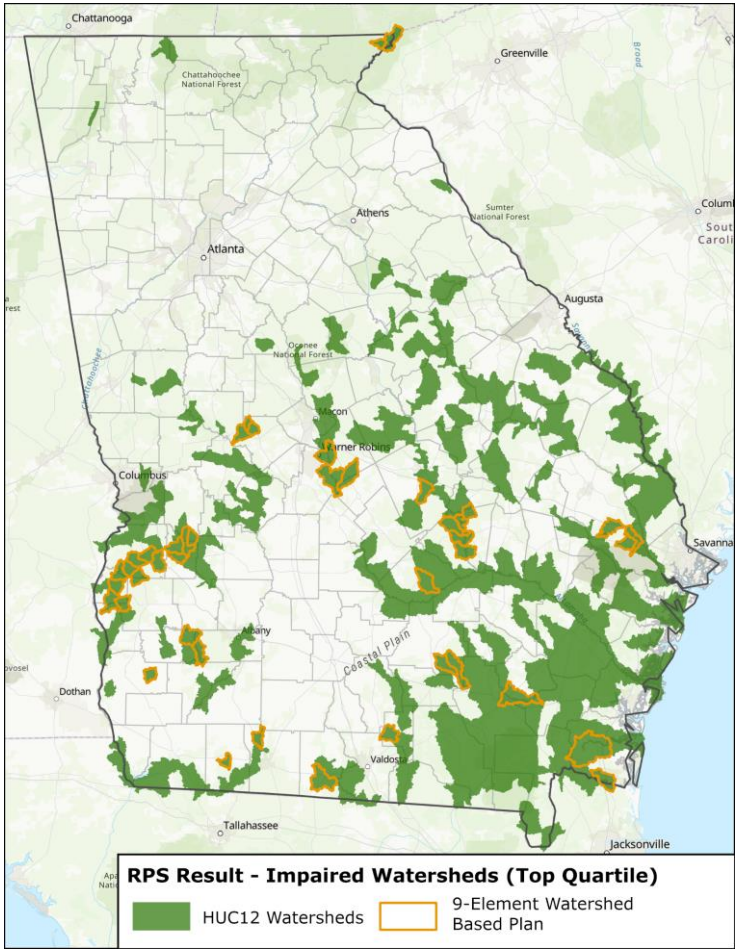


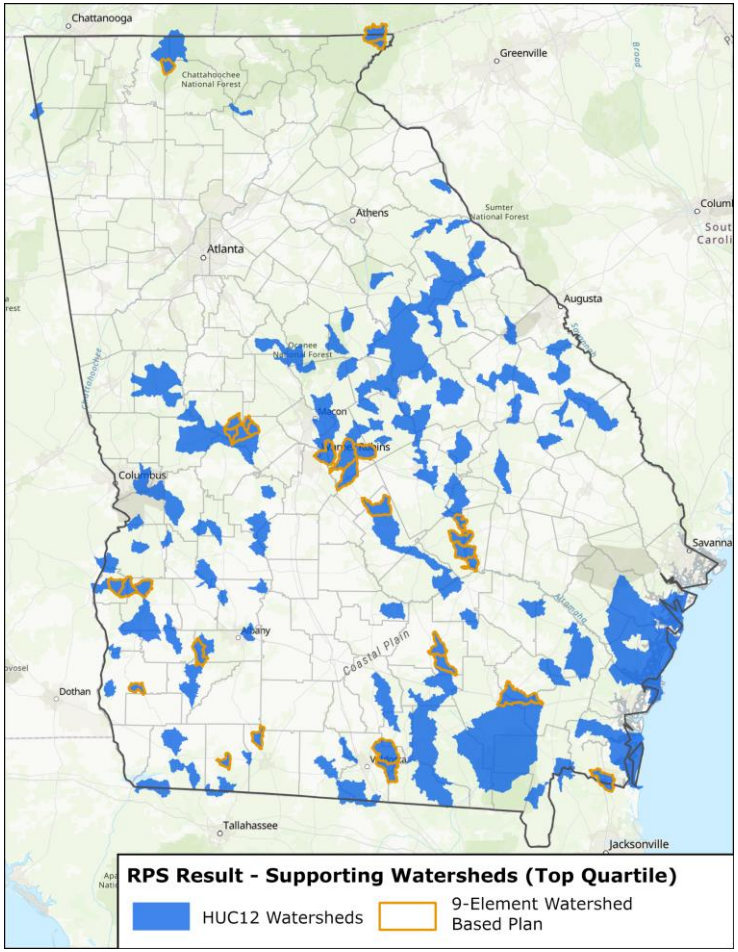
PRIORITY WATERSHEDS: SUPPORTING WATERSHEDS





PRIORITY WATERSHEDS





VISIONING EXERCISE

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What is the first word you think of when we say, "Georgia's Statewide Nonpoint Source Management Plan"?

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How have you or your community interacted with the Plan?

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How do you and your partners intend to use the Plan?

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What would a successful update mean for you and your community?

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Who else should we engage with?

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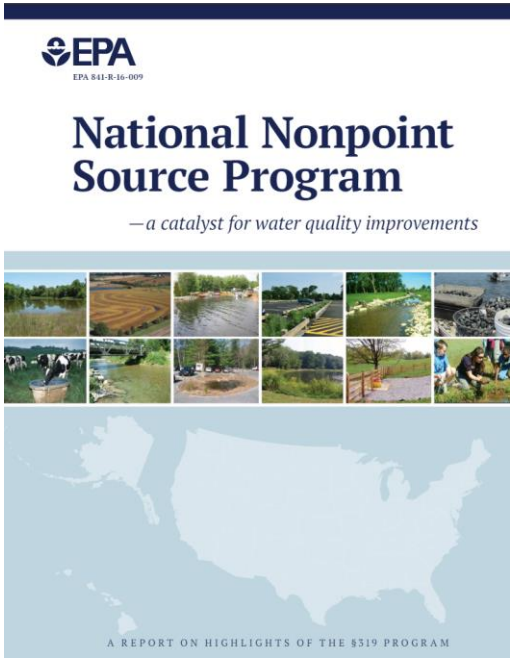
PRIORITIES FOR 2024 UPDATE

USEPA National Priorities

- Protect **Healthy Waters** and Watersheds
- Reduce **Nutrient** Pollution
- Advance **Climate Resilience** through Nonpoint Source Solutions
- Ensure **Equitable Access** to Nonpoint Source Program Benefits
- Leverage Innovative **Financing** for Nonpoint Source Solutions



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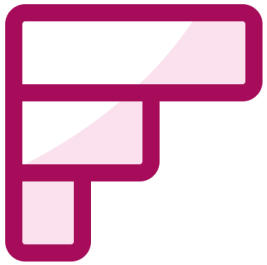

Please rank the National Priorities?

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Protecting healthy waters: What does this mean to you? What would success look like?

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Reducing Nutrient Pollution: What does this mean to you? What would success look like?

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Climate Resilience: What does this mean to you? What does success look like?

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Equitable Access: What does this mean to you? What would success look like?

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Innovative Financing: What does this mean to you? What does success look like?

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PRIORITIES FOR 2024 UPDATE

GAEPD State Priorities

- Identify Priority Watersheds for Restoration of Impaired Waters
- Identify Priority Watersheds for Protection of Healthy Waters
- Environmental Equity – Align with GEFA and other state programs
- Climate Resiliency – Identify efforts in ongoing Plan activities

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- Hydromodification – barrier removal, stream crossing designs
- Emerging Contaminants – microplastics/trash, PFAS
- Align activities with other state efforts
  - State Wildlife Action Plan – GADNR Wildlife Resources Division
  - Statewide Forest Resources Strategy – Georgia Forestry Commission

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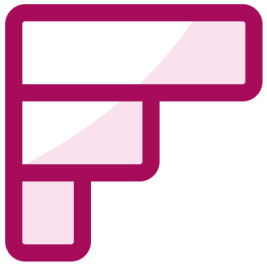

Please rank the State priorities

ⓘ Start presenting to display the poll results on this slide.

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Hydromodification: What does this mean to you? What does success look like?

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Emerging Contaminants: What does this mean to you? What does success look like?

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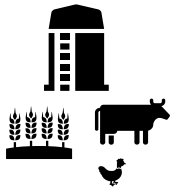
Alignment with other efforts: What does this mean to you? What does success look like?

ⓘ Start presenting to display the poll results on this slide.

INPUT ON SECTOR-SPECIFIC GOALS

Stormwater

Silviculture



Agriculture

Onsite Sewage Disposal Systems (Septic)

Dirt Roads

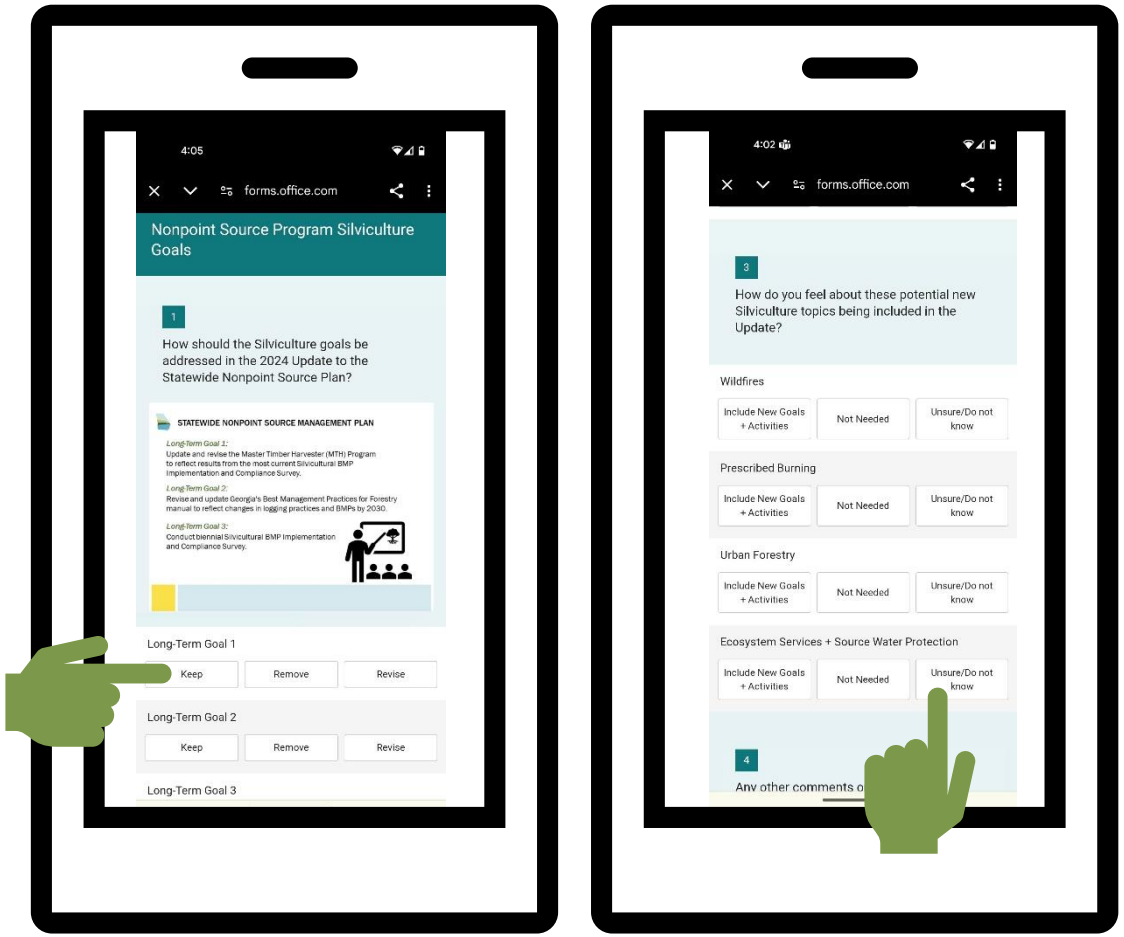
Floodplains

Safe Dams

Land Disturbing Activities

Coastal

INPUT ON SECTOR-SPECIFIC GOALS



STAY INVOLVED WITH THE PLAN UPDATE

epd.georgia.gov/watershed-protection-branch/nonpoint-source-program

epd.nps@dnr.ga.gov

- **Submit comments:**
  - Due November 15
  - epd.nps@dnr.ga.gov
  - Subject line: NPS Plan

Clark Hill Farm, Jefferson, GA

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