



**GEORGIA**  
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

**GIEC**

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# Regional Water Planning

**“Georgia manages water resources in a sustainable manner to support the state’s economy, to protect public health and natural systems, and to enhance the quality of life for all citizens.”**



*2004 Comprehensive Statewide Water  
Management Planning Act*



# Statewide Water Planning Timeline

- 2004 Comprehensive Statewide Water Management Planning Act
- State Water Plan (2008)
- Regional Water Planning
  - Initial planning process (2009-2011)
    - Councils appointed, kick-off in 2009
    - Plans finalized and adopted by EPD in 2011
  - Review & Revision cycle - Every 5 years
    - 2016-2017



# Since Plan Adoption in 2011

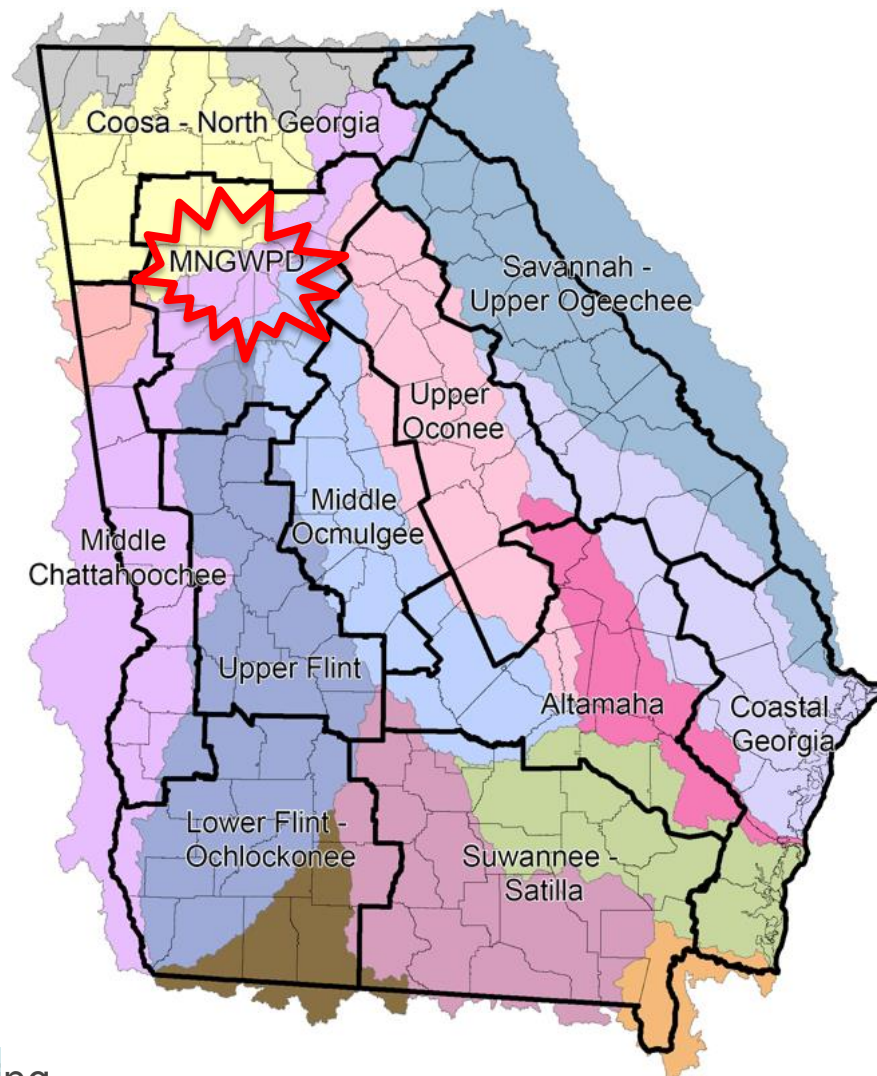
- State funds continued to support Council activities and technical work
- Interim Council activities
  - Continued involvement in plan implementation and regional water issues
  - Regional assessment of implementation status reports (2014)
  - Council plans for coordinating with key implementing actors and other Councils, and prioritization of Plan elements for review and revision process (2015)
- Seed grants to support Plan implementation



# Water Planning Process

The 5-Year Review Process Focus:

- Updated water demand and wastewater forecasts using revised population projections
- Updated Surface Water and Groundwater Availability Resource Assessments (Quantity)
- Updated Surface Water Quality Availability Resource Assessment
- Refining Management Practices, if needed, to meet demands, address capacities, and move toward Council vision and goals through 2050
- Joint Council meetings
  - Councils sharing resources & coordinating with Metro





# INDUSTRIAL STORMWATER GENERAL PERMIT

- **Current permit expires May 30, 2017**
  - <http://epd.georgia.gov/npdes-industrial-storm-water-general-permits>
- **EPD conducted stakeholder process – public stakeholder meetings were held August 9, 18, and 25<sup>th</sup>**
  - Comments were due in September
  - Thanks to all who participated in the stakeholder process
- **Draft permit and response to comments will be available at web page above very soon**
- **30 day public comment period**



# INDUSTRIAL STORMWATER GENERAL PERMIT

## Some changes in new draft permit

- Removes requirement to photograph samples
- Returned to previous public access procedure for Pollution Prevention Plans through EPD
- Deadlines for corrective actions returned to 30/90 days as per current permit
- No discharge analysis definition removed. – will be evaluated on a case by case basis
- Many changes to make text clearer based on stakeholder input



# INDUSTRIAL STORMWATER GENERAL PERMIT

## Compliance Issues

- Pressure from EPA (and 3<sup>rd</sup> parties) for EPD to do more inspections and related compliance efforts
- No stormwater samples / rain events
- No inspections
- Lack of documentation – Stormwater Pollution Prevention Plans (SWPPP)
- Failure to file Annual Report
- Failure to file Notice of Intent or No Exposure Exclusion





# INDUSTRIAL STORMWATER GENERAL PERMIT

## GEOS

- Annual Report submittal will be available online through the GEOS system in December for the 2016 report.
- NOIs for the new permit will be required to be filed through the online system next year.
- We recommend that permittees register for the GEOS system now, register at
  - <https://geos.epd.georgia.gov/GA/GEOS/Public/GovEnt/Shared/Pages/Main/Login.aspx>



# STATUS OF: GEORGIA'S PLAN FOR ADOPTION OF WATER QUALITY STANDARDS FOR NUTRIENTS' (2013 EDITION)

## Lakes

- GA EPD revised the Nutrient Criteria Development Plan in 2013 putting emphasis on developing numeric criteria for lakes and estuaries.
- As part of the State Water Plan, GA EPD is developing watershed, lake, and estuary models.
  - The Lake Oconee and Sinclair models are fully calibrated and permitted scenarios have been run. As part of the 2016 Triennial Review, we are in the process of developing lake criteria for these lakes. Adoption tentatively set for 2018.
- Lakes we have developed models for that currently have criteria include Lake Jackson, Lake Allatoona, Carters Lake, Lake Lanier, West Point Lake and Lake Walter F. George.



# NUTRIENTS CONT.

## Lakes

- We are in the process of developing models for Lake Seminole, Lake Blackshear, Lake Chehaw/Worth, Lake Nottley, Lake Blue Ridge, and Lake Chutuge.
- We also have a contract to develop models for Lake Juliette, Lake Tobesofkee, and High Falls Lake.
- Lake criteria will be developed for these lakes once we feel comfortable with their calibration and permit scenarios.
- As funding becomes available, EPD will develop models for the six Lakes in the Savannah River Basin. Finally, we will examine the appropriate approach to use to develop lake criteria for Banks Lake, a small lake in the Suwannee River Basin, and the four run of the river lakes in the Chattahoochee River Basin: Harding Lake, Goat Rock Lake, Lake Oliver and Lake Andrews.



# NUTRIENTS CONT.

## Estuaries

- In the summer of 2015 GA EPD along with SCDHEC, EPA and some technical advisors from universities and other federal agencies developed a document titled “An Approach to Develop Numeric Nutrient Criteria for Georgia and South Carolina.”
- The document outlines three scientifically viable approaches that may be used to develop numeric nutrient criteria for estuaries: The Reference Condition Approach, the Stressor-Response Relationship or Regression Modeling Approach and the Water Quality Modeling Approach.
- GA EPD prefers the Water Quality Modeling Approach.



# NUTRIENTS CONT.

## Estuaries

- We have developed estuary models for Ossabaw Sound, Altamaha Sound, Brunswick Harbor, St Andrews Sound, and St Marys estuary. These models have been calibrated for dissolved oxygen (DO), and can be calibrated to chlorophyll in the future.
- We are also in the process of contracting with UGA using the EPA multipurpose grant to develop an FVCOM water quality model for the Altamaha/Sapelo/Doboy Estuary system and conduct field studies to collect the necessary data to calibrate this model in the in 2017. Field studies will include chemical sampling including nutrients and chlorophyll monthly for a year at 25 locations, continuous DO, conductivity and temperature measurements for a year at 25 locations, seasonal Sediment Oxygen Demand measurements at 12 locations, and Dissolved Organic Carbon studies at 15 locations.
- This work will provide EPD an understanding of response of the estuary in terms of chlorophyll and DO to nutrients and provide us a tool that can be used to develop numeric nutrient criteria for this estuary.



# WASTEWATER PERMITTING

- NetDMR – Deadline for submitting DMRs electronically is December 21, 2016
- EPD in 2016 ensured that all NPDES permits were entered correctly into federal database so that these facilities could use NetDMR as required. Facilities were individually notified in writing as their permit was checked
- Latest numbers:
  - Facilities required to register: 820
  - Facilities that have registered: 447 (end of October)
- Extended Permits
  - Under 391-3-6-.06 (15) of the Rules for WQ Control, if a complete application is received 180 days prior to permit expiration, the permit can be “extended.”
  - The EPA goal for individual states for NPDES permits is 85% current.



# WASTEWATER PERMITTING

## Percent Current Totals

Permit Type	Extended permits	Total Universe	Percent Current
NPDES Individual	139	715	80.5%
LAS Individual	11	240	95.4%
General permits	12	427	95%
Pretreatment	11	65	83%
Total	173	1447	88%



# WASTEWATER PERMITTING

- Total No. of Industrial Permits 548
- No. of Permits on Industrial Backlog 113
- Challenges – Staff turnover, GEOS project, other projects





# WASTEWATER PERMITTING

## Ongoing Activities to Improve Permit Issuances

- Lean Six Sigma.
  - Identified several areas to be further evaluated to help improve timeliness.
    - Incomplete applications. The current error rate, or rate of receiving incomplete applications, is 50%. A significant amount of EPD staff time is spent identifying deficiencies in applications and communicating with the applicant to acquire a complete application to continue the permitting process.
  - GEOS Electronic Applications and Application Tracking
- Issuance of General Permits. In August of 2016, EPD issued a GP for Mining and Processing Facilities and we are currently receiving Notice of Intents to transfer individual permittees to the GP. Also, we are currently working with GMA to issue a GP for mine pit pump outs for kaolin mining facilities.
- EPD is currently conducting interviews to add 3 persons to the Industrial Permitting Unit.



# WASTEWATER PERMITTING

## Extended Permits – Focus

- Extended Stream Electric - SIC 4911 (15 affected backlog facilities) - In 2016, EPD issued two Steam Electric Permits, Southern Nuclear Operating Company- Plant Vogtle Units 3 & 4 and GA Power-Plant McDonough-Atkinson. EPD is currently working with Southern Nuclear Operating Company to reissue the Plant Hatch Permit in FY17.
  - Additionally, EPD is working with GA Power to reissue 6 Hydroelectric Power Plant permits, Plant McManus, Plant Hammond, and Plant Mitchel. Our goal is to reissue all 9 extended permits in FY17.
- Savannah 5R (24 affected backlog facilities) - EPD transmitted application request letters to the affected permit holders in July 2016 instructing permittees to submit updated applications by September 2017. Since the transmittal of the letter, EPD has met with several permit holders to discuss proposed projects and future actions necessary to meet the requirements in the 5R document.



# WASTEWATER PERMITTING

## Priority Permits

- Each year, EPA sends the State a Priority Permit list, created from the State's current list of administratively extended permits. The list is composed of extended permits which meet specific criteria established by EPA. EPD is required to commit to the reissuance of 20% of the priority permits to meet our obligations for the 106(g) Workplan
- For FY17, EPD has chosen to reissue 5 industrial permits and they are as follows: Dow Chemical Company, TIN Inc.(Temple Inland), Hercules-Brunswick, Southern Nuclear Company Plant Hatch and GA Power Plant Hammond.
  - Substitutions are allowed as the year progresses