

# NATURAL RESOURCES PLANNING AND CONSERVATION AT THE LOCAL LEVEL



Jackie Jackson

Chatham County-Savannah Metropolitan Planning Commission



# CHATHAM COUNTY-SAVANNAH METROPOLITAN PLANNING COMMISSION

- ❑ Since 1956 the MPC has served as the land planning and zoning agency for Chatham County and the City of Savannah.
- ❑ The MPC's Planning Commission consists of a 14 member board that includes six volunteer County representatives, six volunteer City Representatives and the County Manager and City Manager.
- ❑ The MPC also oversees long term planning for historic and natural and historic resources as well as transportation planning.





# Tools to Deal With Local Coastal Water Issues

- ❑ Drinking Water Planning
- ❑ Stormwater Planning
- ❑ Resiliency and Redevelopment Planning
- ❑ Comprehensive Plan
- ❑ Chatham County Resources Protection Commission





# What are Some of Our Local Coastal Issues

- ❑ Fragile Natural Resources
  - Impaired Waterbodies
  - Limited Land with Wetlands Covering 60% of County
  - Floridan Aquifer
- ❑ Infrastructure Placement (Water, Wastewater, Transportation)
- ❑ Climate Change & Sea Level Rise
- ❑ Growth of Population Along the Coast: Coastal zone is the most rapidly growing region in the State of Georgia





So where is all of this new growth and development taking us and how is it effecting our systems?



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**Who Cares?**





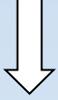
# WATER POLLUTION FACT

□ 59.3 % of Georgia's assessed rivers and streams (13,818.0 miles) have impaired water quality





# COMPREHENSIVE COUNTY-WIDE WATER MANAGEMENT PLANNING

- ❑ Groundwater Withdrawals Have Caused a Concentrated Area of Demand & Deep Cone of Depression  

- ❑ Artesian Water Level Decline  

- ❑ Saltwater Encroachment and Saltwater Intrusion



# COMPREHENSIVE COUNTY-WIDE WATER MANAGEMENT PLANNING

- ❑ Adopted a *Chatham County Comprehensive Water Supply Management Plan* in 1995
  - First of its Kind in the State
  - 28 Strategies were put in place
  - Required to reduce groundwater usage by 10 MGD in Chatham County by December 31, 2005
  - Encourage and promote water conservation and reuse water whenever feasible
  
- ❑ End result: Chatham County saved 16.56 MGD of groundwater over 10 years (domestic/commercial & industry combined)
  
- ❑ Model for the State Water Plan and the Coastal Water and Wastewater Permitting Plan completed in 2006

## Coastal Georgia Water & Wastewater Permitting Plan for Managing Salt Water Intrusion



June, 2006

## CHATHAM COUNTY COMPREHENSIVE WATER SUPPLY MANAGEMENT PLAN

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### 2005 Five-Year Progress Report

February 2006

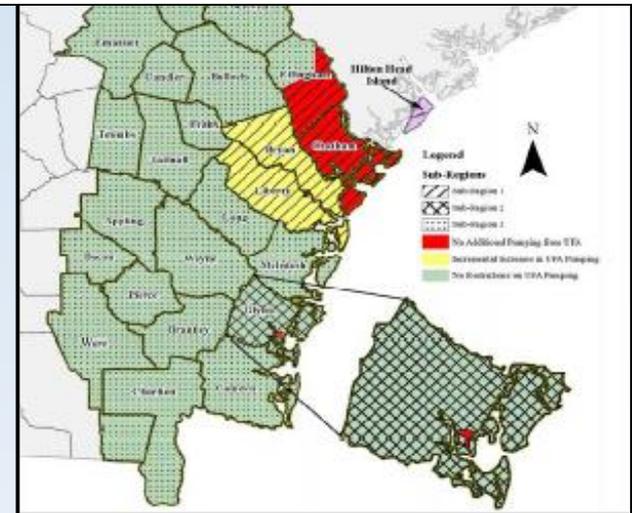
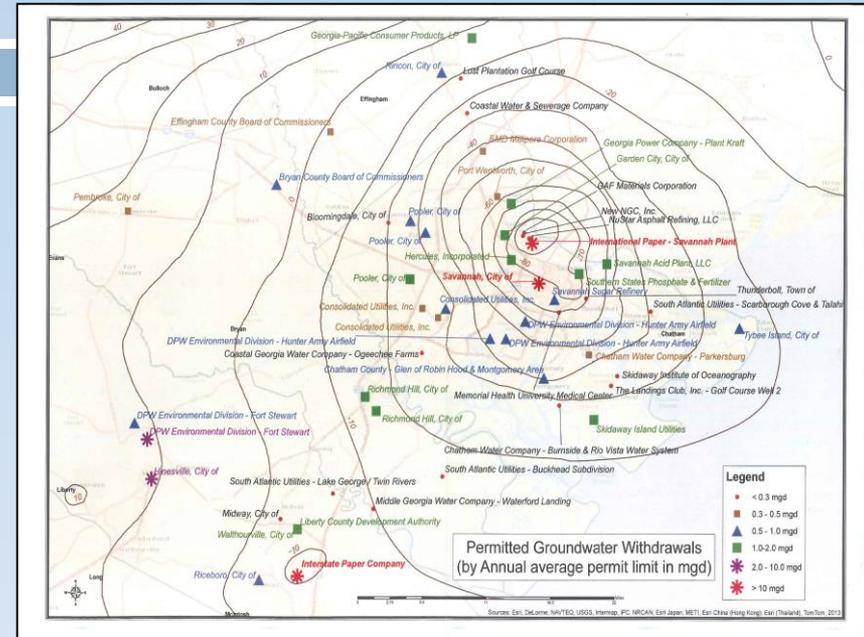
Prepared by the  
CHATHAM COUNTY - SAVANNAH  
METROPOLITAN PLANNING COMMISSION





# FLORIDAN AQUIFER GROUNDWATER USERS STAKEHOLDER GROUP

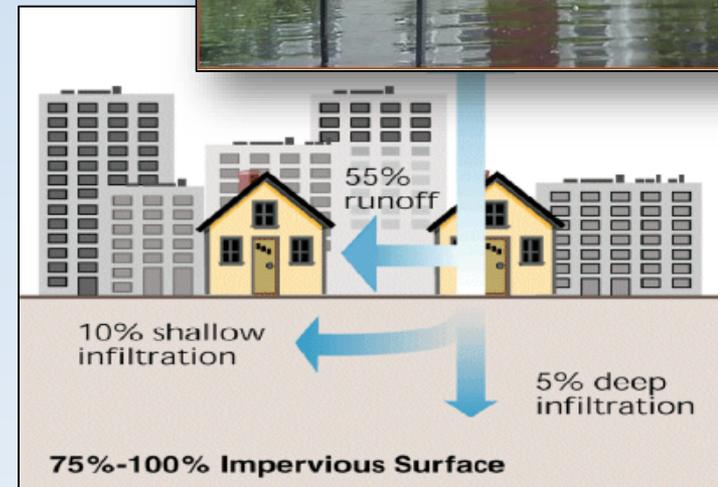
- ❑ 54 Stakeholders at the table (40 in the **Red** Zone and 14 in the **Yellow** Zone)
- ❑ 15 MGD permit limits/use reduction by in the **Red** Zone by 2025 (10 MGD by 2020)
- ❑ 1 MGD permit limits/use reduction by in the **Yellow** Zone by 2025
- ❑ =36.4 % reduction (25 MGD) in Coastal area
- ❑ Working to explore ways to conserve water and reduce groundwater withdrawals and over pumping from the Floridan Aquifer





# RED ZONE WATER MANAGEMENT PLAN

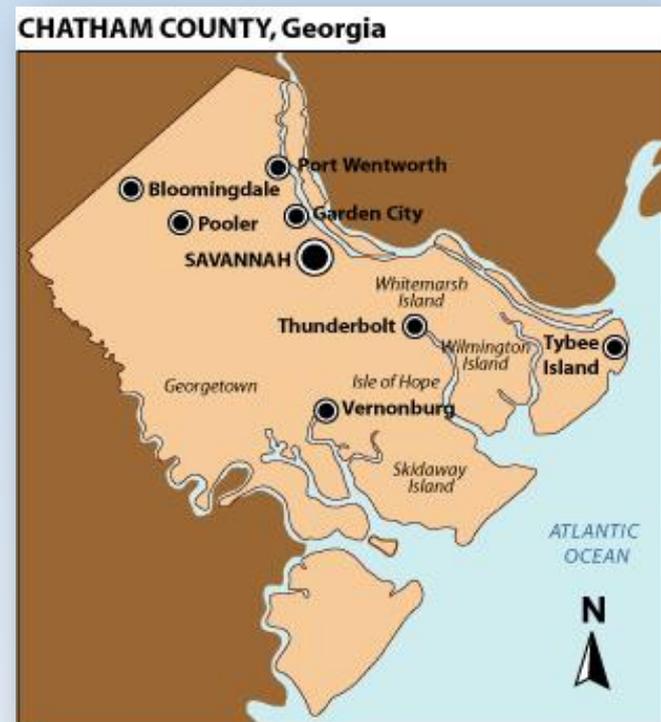
- ❑ In light of the new directives from EPD, the municipal water providers within Chatham County wish to work together on updating Chatham County's Water Management Plan to be more specific to the "Red Zone".
- ❑ Updated "Red Zone Water Management Plan" would include discussions not included in the last plan:
  - Sea level rise & Climate Change
  - Land Use Planning BMPs
  - Stormwater
- ❑ Currently dependant on funding





# Chatham County's Stormwater Program

- Stormwater requirements for all of the jurisdictions in Chatham County to include:
  1. City of Bloomingdale
  2. City of Garden City
  3. City of Pooler
  4. City of Port Wentworth
  5. City of Savannah
  6. Town of Thunderbolt
  7. City of Tybee Island
  8. Unincorporated Chatham County
  9. Town of Vernonburg





# STORMWATER MONITORING & PLANNING

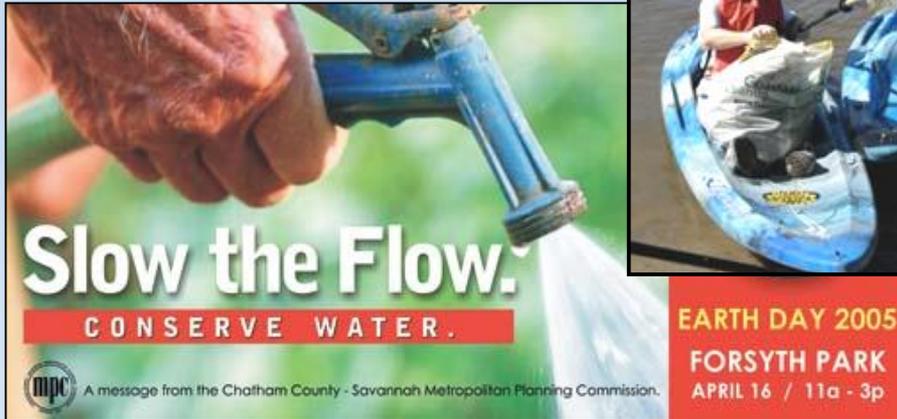


## Multi-jurisdictional Stormwater Compliance

- ❑ Annual NPDES Stormwater Reporting for seven Chatham County Municipalities
- ❑ Track and Report of Changes and Updates to Pertinent State and Federal Environmental Regulations
- ❑ Stormwater and Related Ordinance Assistance
- ❑ Countywide Illicit Discharge Detection Monitoring
- ❑ Staff Training
- ❑ MPC Natural Resources Website Maintenance
- ❑ Public Education and Outreach



# NATURAL RESOURCES PUBLIC EDUCATION & OUTREACH



## OUTLETS:

- [www.mpcnaturalresources.org](http://www.mpcnaturalresources.org)
- Radio, TV, Billboards & Print Media
- Earth Day Festival
- Education Video Distribution
- Best Management Practices Seminars
- Bag Lunch Presentations
- Rivers Alive Clean-up Events

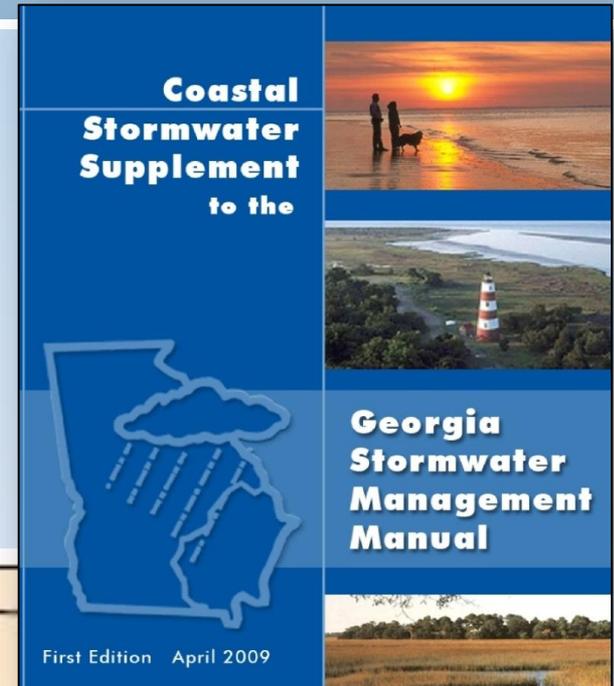
## TARGET AUDIENCE:

- Builders, Developers & Realtors
- Homeowners Associations
- Garden Clubs, K-12 Schools and Universities
- County & Municipal Staff
- Local Business Industry:
  - Car Wash & Oil Change Facilities
  - Carpet Cleaners
  - Landscape Professionals
  - Septic/Portable Toilet Companies
  - Lagoon Maintenance
  - Construction Site Operators



# COASTAL STORMWATER SUPPLEMENT (CSS)

- ❑ The MPC along with Georgia DNR's EPD and CRD and the Center for Watershed Protection concluded a project to assist area coastal communities in addressing their stormwater quality and quantity concerns.
- ❑ The CSS focuses post-construction stormwater management onto PREVENTION rather than MITIGATION of the negative impacts of land development.
- ❑ Provides comprehensive guidance on an integrated, green infrastructure-based approach to natural resource protection, stormwater management and site design.





# IN THE PAST...

Traditional stormwater management relied upon the use of structural stormwater BMPs (pipes, curbing and gutter) to control and minimize impacts BUT...



They don't account for the water quality impacts.

INSTEAD...

The CSS presents green infrastructure and Low Impact Development (LID) in the site design that can address the water quality and quantity concerns





# LID and Green Infrastructure Examples





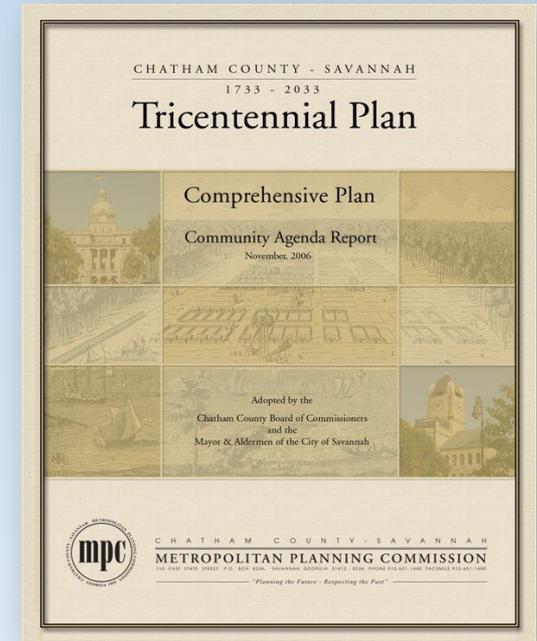
# CSS STATUS

- ❑ Once voluntary – now mandated by GA EPD NPDES Stormwater permits. First-time LID/GI program also mandated as of 2012.
- ❑ All of the 8 municipalities within Chatham County’s boundaries as well as numerous other jurisdictions in the State have adopted the CSS’ recommendations into their stormwater ordinances and development processes.
- ❑ Education and implementation process has been positive
- ❑ Has become a model for the State and fully endorsed by GA EPD



# COMPREHENSIVE PLAN

- Comprehensive Plan establishes long range community vision and goals with regard to the following elements:
  - Land Use
  - Economic Development
  - Housing
  - Natural Resources
  - Historic and Cultural Resources
  - Transportation
  - Community Facilities
  
- Comprehensive Plan must be updated every 5 years
  - The impact of climate change and sea level rise on development patterns;
  - Countywide Strategic Plan strategies
  - Water Management Plan updated strategies





# CHATHAM COUNTY RESOURCES PROTECTION COMMISSION (RPC)

- ❑ MPC staff began process in late 2004
- ❑ Purpose of the RPC is to identify sites within the County that are of ecological, historical, and/or cultural significance and to find ways to protect, conserve, or rehabilitate these sites.
- ❑ In April of 2008, the Chatham County Board of Commissioners officially established the Chatham County Resource Protection Commission (CCRPC) through the approval of the Resource Protection Ordinance. In addition to a board of commissioners, this ordinance created a Technical Advisory Committee (TAC).
- ❑ Process and ordinance has become a model for the coast.
- ❑ Funding continues to be a challenge...



# Questions? Comments?

**JACKIE JACKSON, LEED - AP BD+C**

**DIRECTOR OF COMPREHENSIVE & NATURAL RESOURCES PLANNING**

**Chatham County - Savannah Metropolitan Planning Commission**

[www.MPCNaturalResources.org](http://www.MPCNaturalResources.org)

[JacksonJ@thempc.org](mailto:JacksonJ@thempc.org)

Phone: (912) 651-1454/1440