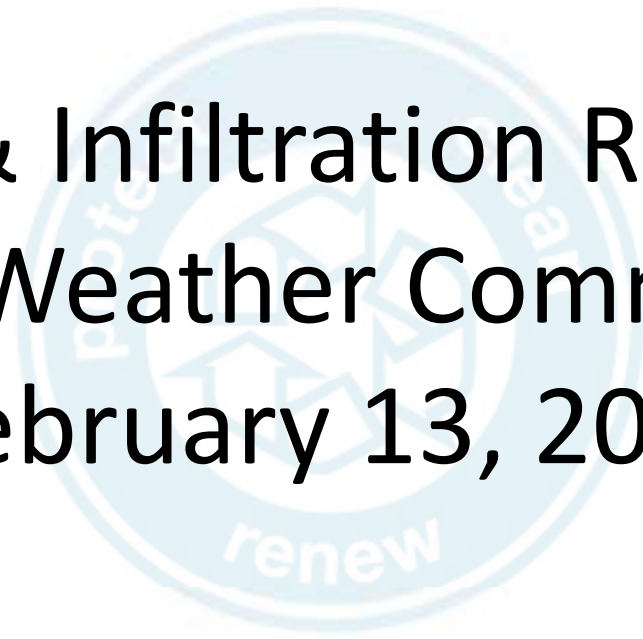




# Inflow & Infiltration Reduction

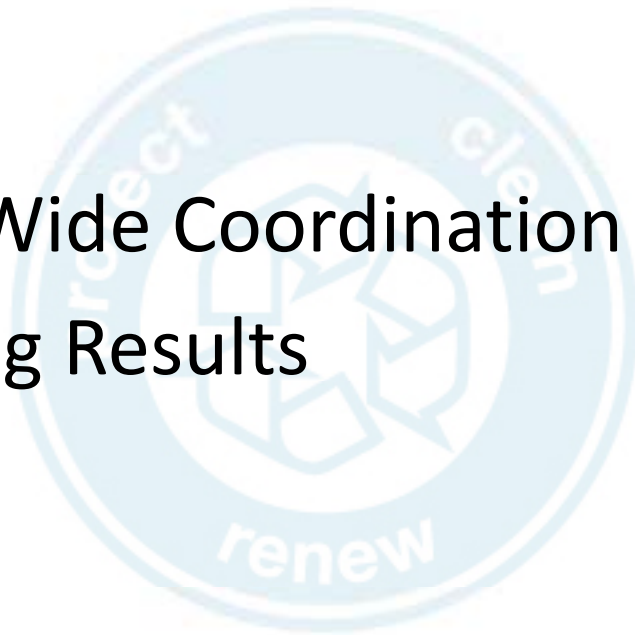
## Wet Weather Committee

### February 13, 2012



# Agenda

- History
- System Wide Coordination
- Reporting Results



# History

- Special Purpose District est. in 1925
- 9 member Board appointed by Governor
- 9 WWTF, 63 Pump Stations and 360 miles of line serving 121,000 customers
- 17 local Subdistricts with 1,955 miles of collector lines

# History

- SCDHEC Court Order in 1988 for Mauldin Road WWTF Basin
- ReWa and 4 Subdistricts
  - Berea Public Service District
  - Gantt Fire, Sewer and Police District
  - Parker Sewer and Fire District
  - City of Greenville



# History

- Agreements with the 4 Subdistricts
- Flow monitoring
- Peak flows measured
  - Babbitt Equation
  - 10 State Standard
  - Pump station run times
  - Manual flow measurement



# History

- Sewer rehabilitation program
  - Pre-rehabilitation flow and rainfall monitoring
  - Sanitary sewer evaluation system
  - Sewer rehabilitation
  - Post-rehabilitation flow and rainfall monitoring
- Annual progress reporting to SCDHEC

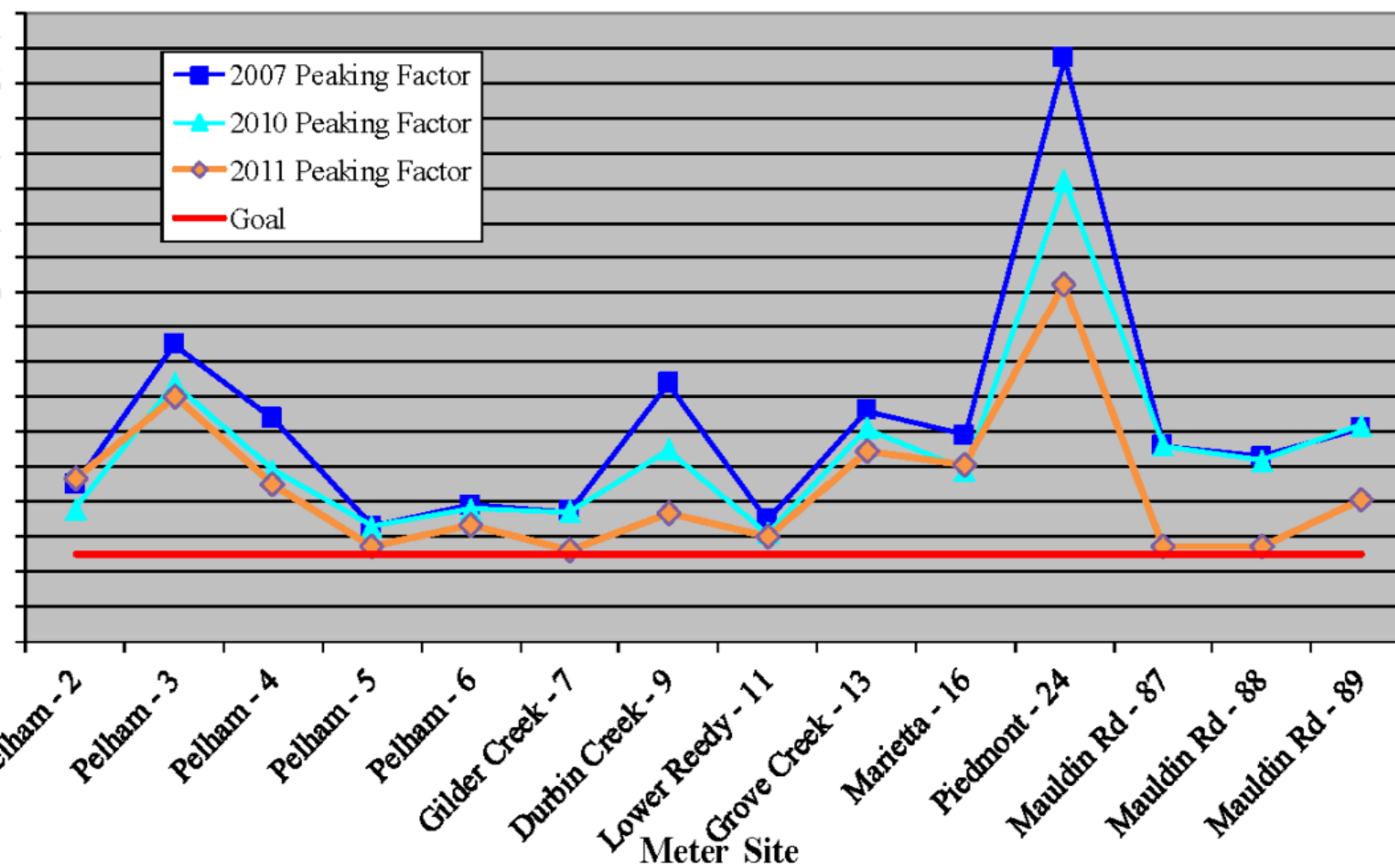


# System Wide Coordination

- Agreements with other Subdistricts
- Work plan for 15 years
  - Commitments
  - Milestones
  - Funding sources
- Annual Report to ReWa



## Flow Data Comparison



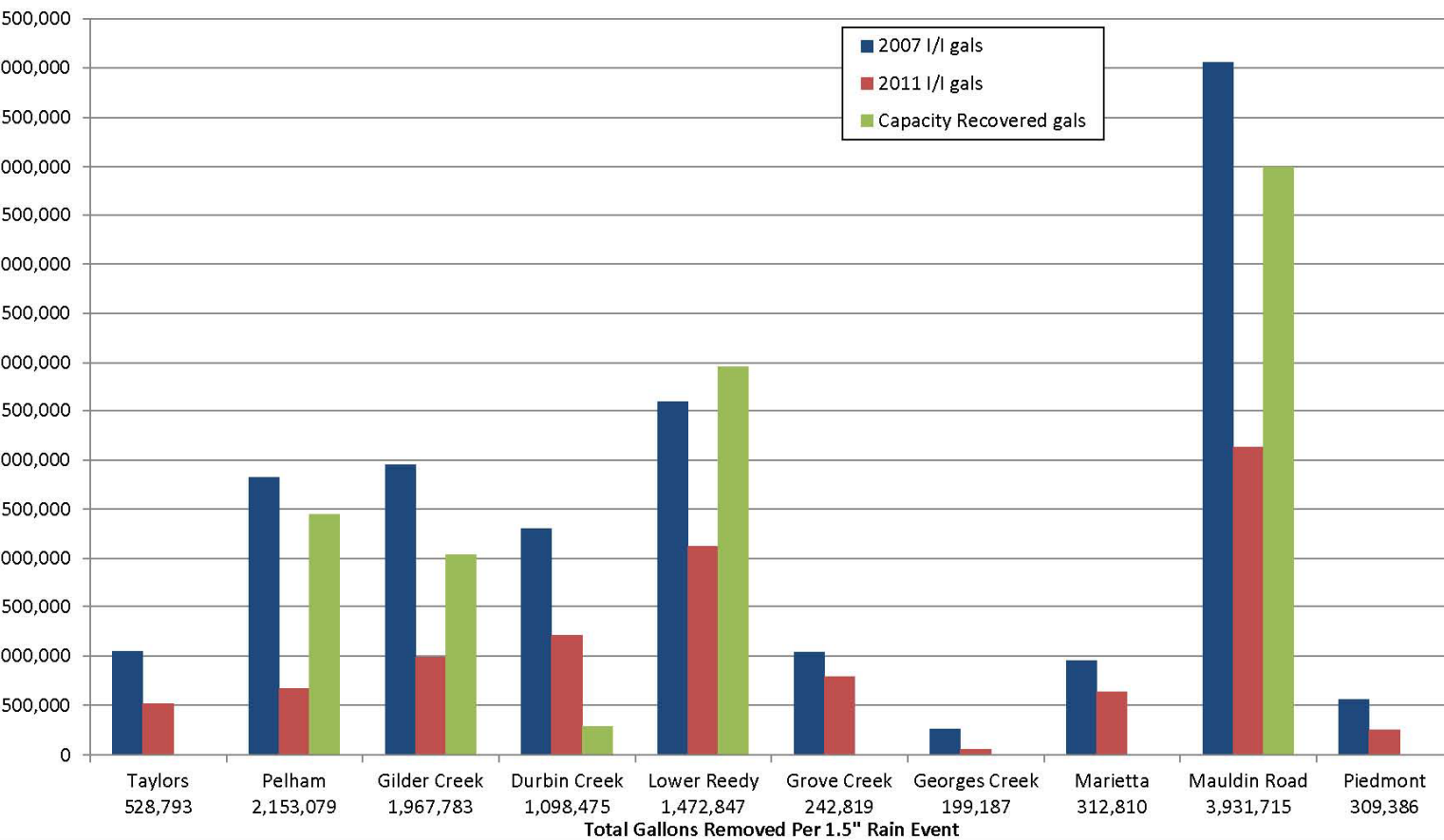


# System Wide Coordination

- Slater
  - 100% replacement
  - Almost complete
- Piedmont
  - 100% replacement
  - Construction began in January
  - Several years to complete



## Total I/I Volume Reduction by Wastewater Treatment Facility



# Reporting Results

- I&I volume reduction during a 1.5" rain event
  - 22.6 million gallons in 2007
  - 10.4 million gallons in 2011
  - 12.2 million gallons reduction



# Reporting Results

- Unit Contributory Loading reduction
  - 2.4 million gallons (375 gpd) at Pelham
  - 2.0 million gallons (350 gpd) at Gilder Creek
  - 0.3 million gallons (350 gpd) at Durbin Creek
  - 4.0 million gallons (400 gpd) at Lower Reedy
  - 6.0 million gallons (300 gpd) at Mauldin Road
  - 14.7 million gallons recovered

# Reporting Results



What does all this mean?

- Rehabilitation provides increased capacity
  - Collection system lines for ReWa & Subdistricts
  - Trunk lines for ReWa
  - Wastewater treatment facilities for ReWa
- UCL Reduction provides increased capacity
  - Wastewater treatment facilities for ReWa
- Delays need for capacity related capital



<http://www.rewaonline.org/inflow-infiltration.php>





# Questions

