

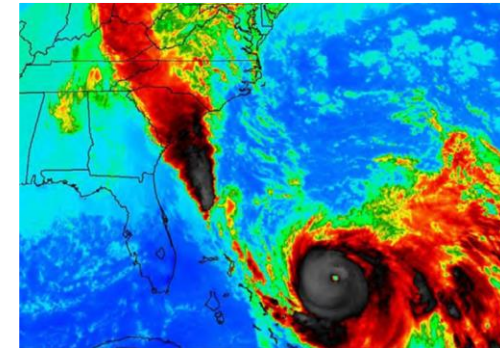
Water Planning and Management in the Southeastern United States

Jeffery Allen, Ph.D.
Director, SC Water Resources Center



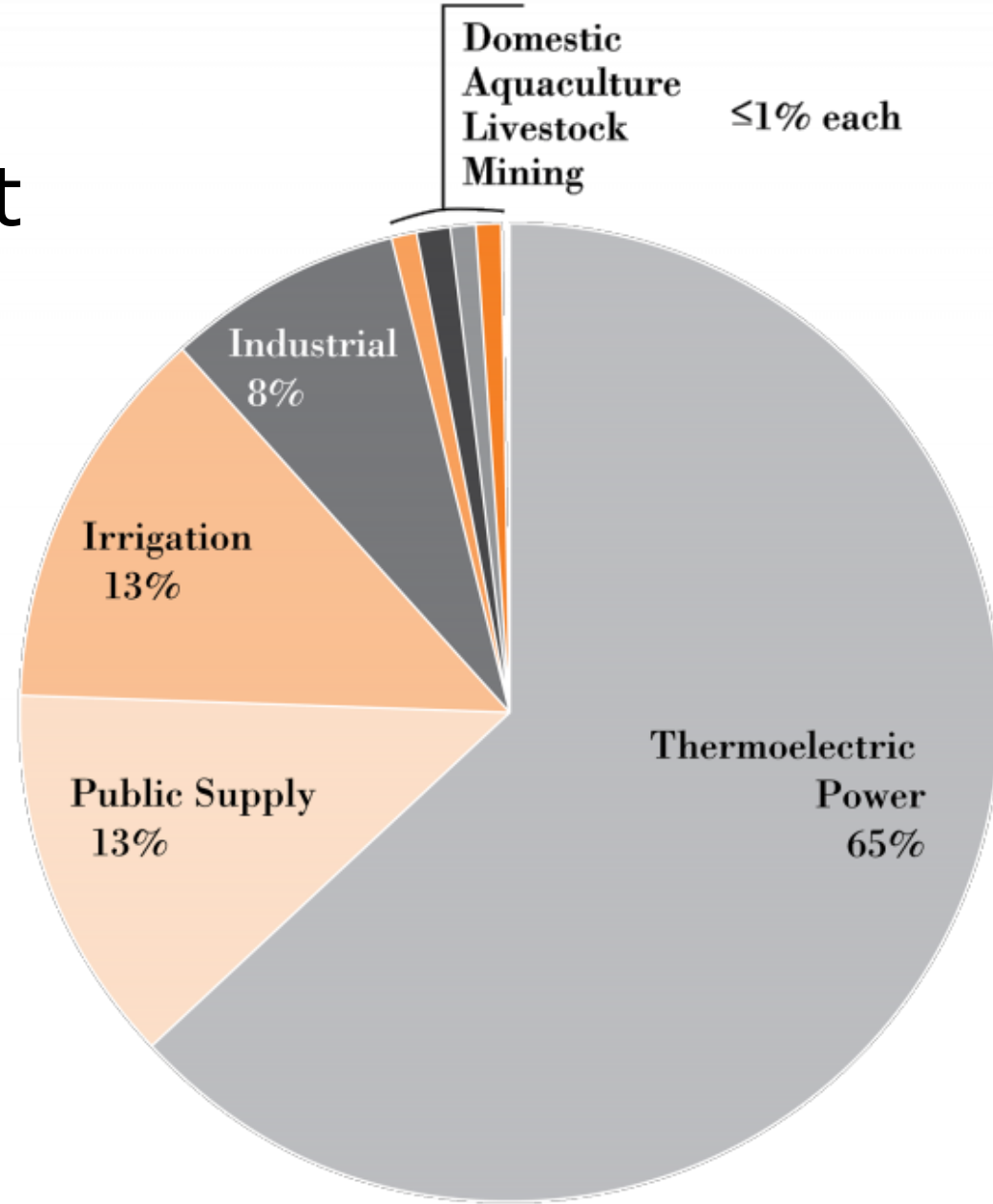
Water Issues Facing the Southeast

- Weather Extremes/Climate Change
- Economic impact
 - Agriculture
 - Tourism
- Current and Future Water Demands
 - Industry
 - Environmental
 - Power
 - Municipal
 - Agriculture...
- Interstate Conflicts
- Aging Infrastructure



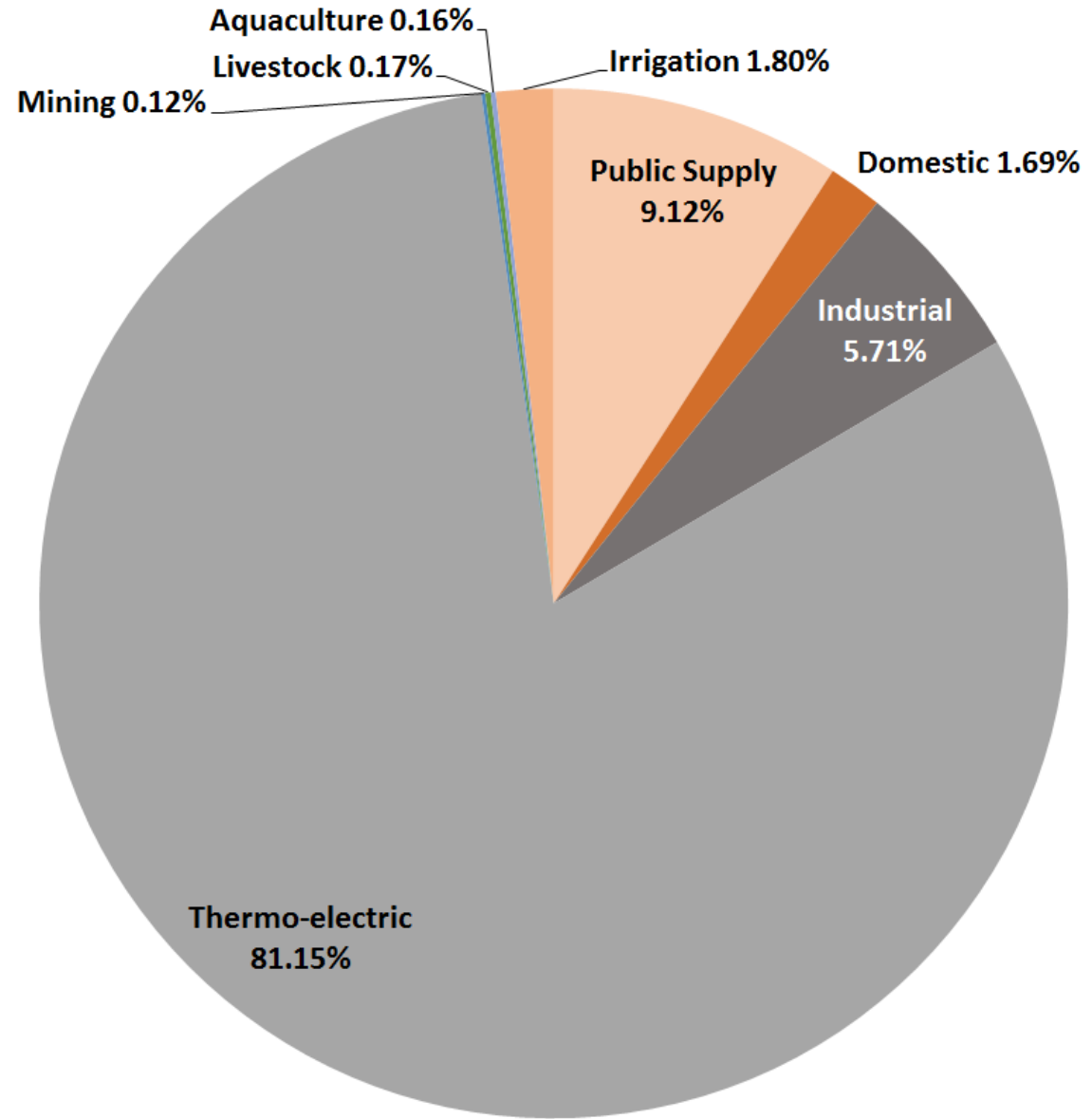
Water Use in the Southeast

Southeast Freshwater Withdrawals, By Use Category, 2000. World Resources Institute



Water Use in South Carolina

South Carolina Freshwater
Withdrawals, By Use Category, 2010.
USGS



Alabama Water Use

- State Water Plan - No
- Non Ag Permit – No (certificate of use – Dept of Commerce)
- Non Ag Registration – Yes
- Ag Permit – No (registration – certificate of use)
- Ag Registration – Yes
- Non Ag App Fee - No
- Ag App fee – No
- Non Ag Permit Duration – 10 yrs.
- Ag Permit Duration – 10 yrs.
- MIF Methodology – N/A

Georgia Water Use

- State Water Plan – Yes – 2008 – new basin meetings 2016-17
- Non Ag Permit – Yes
- Non Ag Registration – Yes
- Ag Permit – Yes
- Ag Registration – Yes
- Non Ag App Fee - No
- Ag App fee – Flint Basin only - \$250
- Non Ag Permit Duration – 10 yrs.
- Ag Permit Duration – In Perpetuity, exceptions in 2 basins
- MIF Methodology – 7Q10

Kentucky Water Use

- State Water Plan – Yes – 2015
- Non Ag Permit – Yes
- Non Ag Registration – Yes
- Ag Permit – No
- Ag Registration – No
- Non Ag App Fee - No
- Ag App fee – No
- Non Ag Permit Duration – Permits do not expire
- Ag Permit Duration – N/A
- MIF Methodology – 7Q10

Maryland Water Use

- State Water Plan – No – Water supply program
- Non Ag Permit – Yes
- Non Ag Registration – Yes
- Ag Permit – Yes – Use under 10k per day is exempt
- Ag Registration – Yes
- Non Ag App Fee - No
- Ag App fee – No
- Non Ag Permit Duration – Maximum 12 years
- Ag Permit Duration – Maximum 12 years
- MIF Methodology – 7Q10 & MD Method (flow in 85th percentile)

Mississippi Water Use

- State Water Plan – No – Four source water protection plans
- Non Ag Permit – Yes
- Non Ag Registration – Yes
- Ag Permit – Yes
- Ag Registration – Yes
- Non Ag App Fee – Yes (\$10)
- Ag App fee – Yes (\$10)
- Non Ag Permit Duration – 10 years
- Ag Permit Duration – 10 years
- MIF Methodology – 7Q10

North Carolina Water Use

- State Water Plan – Yes – 2001 – No current planning activity
- Non Ag Permit – No
- Non Ag Registration – Yes
- Ag Permit – No
- Ag Registration – Yes
- Non Ag App Fee – Yes – First time registration
- Ag App fee – No
- Non Ag Permit Duration – Update every 5 years
- Ag Permit Duration – Update every 5 years
- MIF Methodology – 7Q10 – Maybe/Sometimes

Tennessee Water Use

- State Water Plan – No – 2008 Regional Water Plans
- Non Ag Permit – No
- Non Ag Registration – Yes
- Ag Permit – No
- Ag Registration – No
- Non Ag App Fee – No
- Ag App fee – No
- Non Ag Permit Duration – Update registration annually
- Ag Permit Duration – N/A
- MIF Methodology – N/A

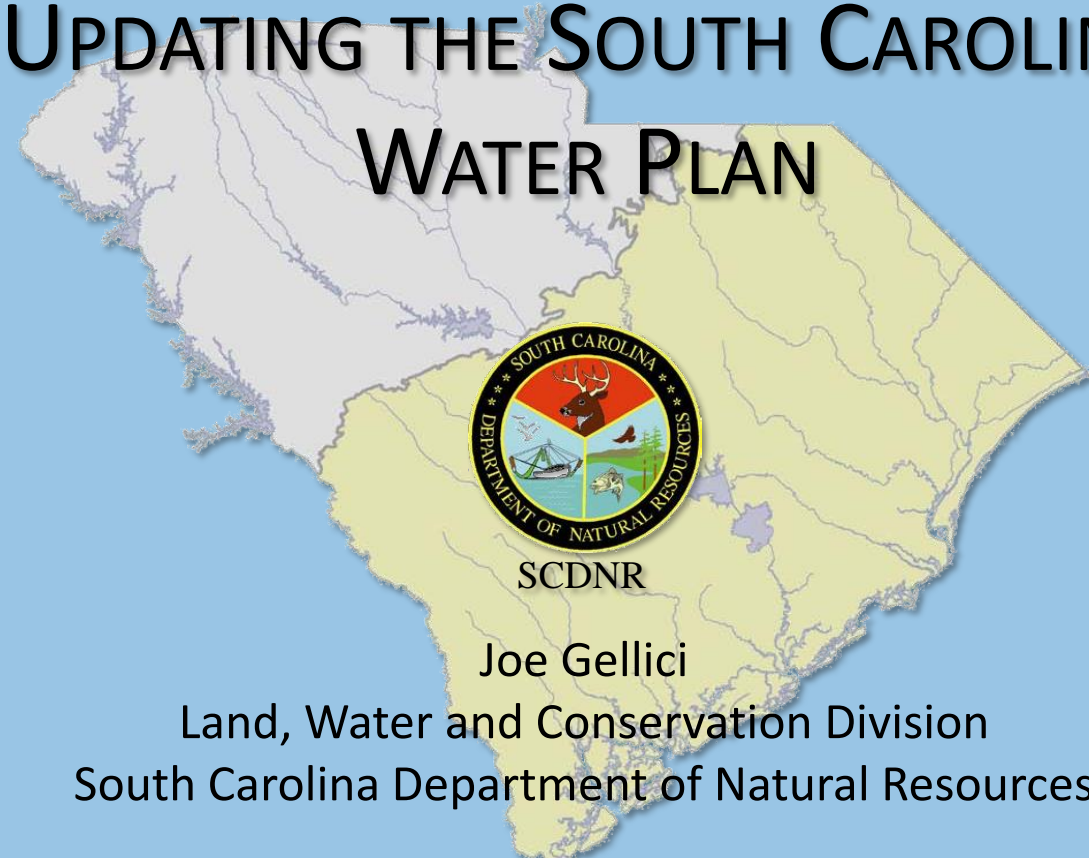
Virginia Water Use

- State Water Plan – Yes – 2015
- Non Ag Permit – Yes
- Non Ag Registration – Yes
- Ag Permit – Yes (Exempt if under 1 MGM)
- Ag Registration – Yes
- Non Ag App Fee – Yes
- Ag App fee – No
- Non Ag Permit Duration – 15 years
- Ag Permit Duration – 15 years
- MIF Methodology – Case by case

South Carolina Water Use

- State Water Plan – Yes – 2004 - currently being updated
- Non Ag Permit – Yes (over 3 MGM)
- Non Ag Registration – Yes (prior to 2011)
- Ag Permit – Yes (in Capacity Use Areas – 3 MGM)
- Ag Registration – Yes (outside of Capacity Use Areas – 3 MGM)
- Non Ag App Fee – Yes for public water systems, wells
- Ag App fee – Yes for wells (\$50)
- Non Ag Permit Duration – 30-40 years
- Ag Permit Duration – 30-40 years
- MIF Methodology – 40-30-20 Rule

UPDATING THE SOUTH CAROLINA WATER PLAN



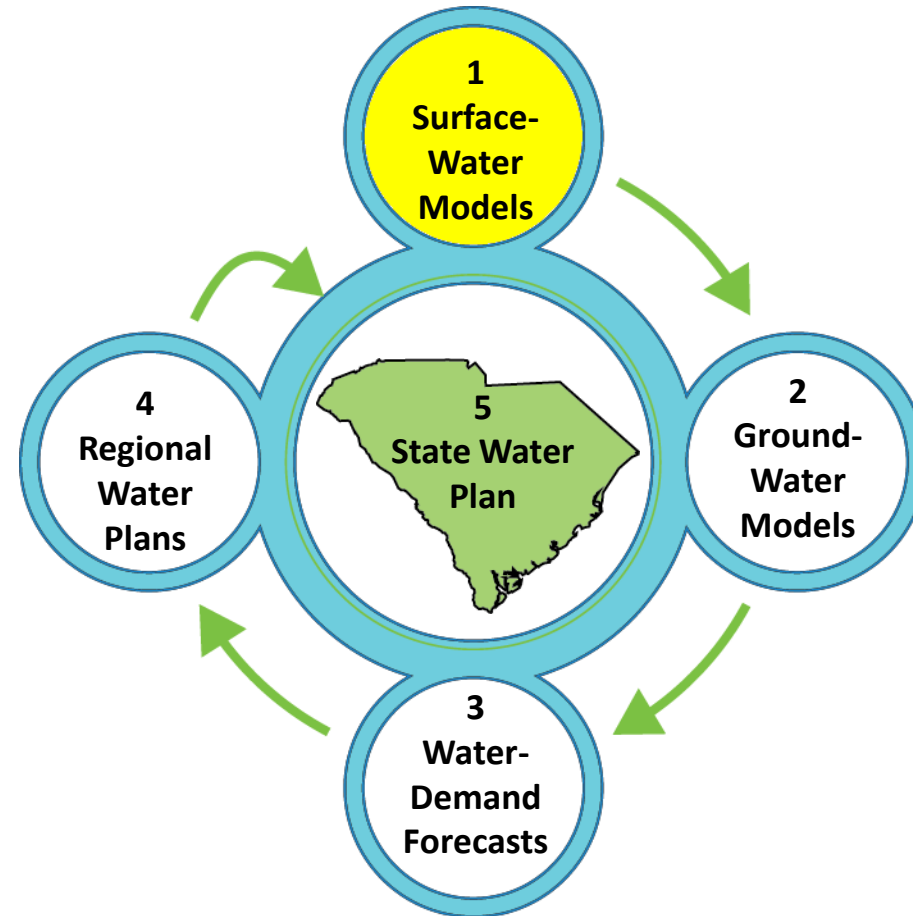
Joe Gellici

Land, Water and Conservation Division
South Carolina Department of Natural Resources

May 2011

SCDNR Five-Step Process for Water Planning

Development of models and water demand forecasts feed the regional water plans which ultimately leads to better statewide management of our water resources.



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