

Draft History of Water Use,
Regulatory Oversight and Saltwater
Intrusion

Saltwater Intrusion Steering
Committee

October 19, 2010

1888 to 1900

- City of Savannah begins production from the Upper Floridan Aquifer
- By 1900, production increased to 11.5 Mgd

1901 to 1940

- 1916: Saltwater contamination of Upper Floridan wells at Parris Island SC is documented.
- 1939: Metering of Savannah water customers is completed
- 1940: Savannah/Chatham Co. increase production to 35 Mgd
- 1940: Savannah completes study to investigate water supply resources

1941 to 1960

- 1948: Savannah constructed the Industrial and Domestic (I and D) surface water treatment plant.
- 1953: Savannah connects water lines from the I and D plant to City's main water system
- 1960: Savannah/Chatham County increase production to 60 Mgd
- 1960: Development of Hilton Head SC begins. Production of approximately 0.9 Mgd

1961 to 1970

- 1969: SC passes the Groundwater Use Act
- Savannah/Chatham County increase production to 70 Mgd
- Hilton Head Island increase production to 6.6 Mgd.

1971 to 1980

- 1972: Georgia passes the Groundwater Use Act
- 1979: First Middle Floridan well at Hilton Head Island
- Port Royal Sound Environmental Study recommends no further dredging in Port Royal Sound.
- Savannah/Chatham County increase production to approximately 75 Mgd
- Hilton Head Island increase production to 9.1 Mgd

1981 to 1990

- SC Water Resources Commission (SCWRC) identifies salt water in 2 wells on HHI.
- Most golf courses on HHI irrigated with treated effluent
- Research drilling in Port Royal Sound to evaluate groundwater quality.
- 1981: Beaufort County begins reporting GWU
- 1986: Second Middle Floridan well drilled on HHI
- Savannah/Chatham County increase production to 85 Mgd
- HHI increase production to 14.3 Mgd
- SCWRC caps water production on HHI at 9.7 Mgd

1991 to 2000

- 1995: Georgia holds public meetings on SWI
- 1997: Coastal Sound Science Initiative
- 1997: Georgia releases Interim Strategy for Managing Salt Water Intrusion.
- 1997: Travis Field in Savannah converted from GW to SW (0.6 Mgd).
- 1998: First Cretaceous well completed in SC
- 1998: Savannah expanded I and D plant to 62.5 Mgd
- Reclaimed water agreement between Savannah and Savannah Golf Club (0.5 Mgd).
- 1999: Surface water line run to HHI from Beaufort Jasper Water and Sewer Authority.

1991 to 2000 (cont' d)

- 1999: Routine monitoring of vertical chloride profiles begin.
- Savannah converts UF groundwater use to Miocene at Bacon Park (0.5 Mgd) and SW at Walstrom Rd (0.28 Mgd).
- 2000: Savannah and Pooler sign agreement for SW use (currently 1.5 Mgd).
- 2000: Three wells on HHI taken out of production due to chloride contamination
- Savannah/Chatham County reduce production to 72 Mgd
- HHI reduce production from to 12.8 Mgd.

2001 to Present

- Savannah signs wholesale SW agreement with Port Wentworth, Effingham County, Bryan County, Bloomingdale, Garden City, and Thunderbolt.
- Georgia develops a protocol for use of the LF aquifer as an alternate water source.
- 2003: Aquifer Storage and Recovery well is operational in Bluffton
- 2006: Georgia releases the Coastal Georgia Water and Wastewater Permitting Plan for Managing Saltwater Intrusion (CPP).
- Chloride map generated by SC for the year 2007

2001 to Present (Cont'd)

- 2007: Another well taken out of production on HHI due to chloride contamination
- 2007: MOA between GA and SC agreeing to mutually manage SWI
- 2008: Georgia met with 48 permit holders in 4 counties to discuss how they will be effected by Georgia's CPP.
- 2008: permit limits for 36 GWU permit holders in the Chatham and Effingham Counties reduced to 2004 withdrawal levels or placed on an enforceable schedule.
- 2008: Savannah and IP voluntarily agreed to reduce their permit limits an additional 3.5 Mgd below their 2004 withdrawals.

2001 to Present (Cont'd)

- 2008: City of Springfield in Effingham County moved all production outside the Red Zone.
- Reported Municipal and Industrial production in the Red Zone (Chatham and S. Effingham County) is reduced from 62 Mgd in 2000 to 54 Mgd in 2009.
- Reported Municipal and Industrial production in Savannah/Chatham County is reduced from 60 Mgd in 2000 to 51 Mgd in 2009.
- By 2008, production on HHI reduced to 9.6 Mgd.