RED ZONE WATER SUPPLY MANAGEMENT PLAN FOR CHATHAM AND EFFINGHAM COUNTIES

Robert A. Brown and Courtney Reich

AFFILIATION: Ecological Planning Group, 35 Abercorn St., Suite 210, Savannah, GA 31401 REFERENCE: *Proceedings of the 2017 Georgia Water Resources Conference*, held April 19-20, 2007, at the University of Georgia

Saltwater intrusion into the Floridan aquifer has occurred in Hilton Head Island area. Modeling studies show that the saltwater plume is migrating towards the Savannah area because of historic groundwater pumping from this aquifer. In 1995, the first Chatham County Water Supply Management Plan was written to identify strategies for reducing groundwater withdrawals and hopefully slow the migration. This Plan was updated in 2000 and 2006, but it has been dormant since. Recently, the Chatham County-Savannah Metropolitan Planning Commission received a Coastal Incentive Grant from GA DNR's Coastal Resources Division to revisit and update this plan for the "Red Zone," which includes Chatham County and southeastern Effingham County. There is a need for an update because continued action is necessary to ensure continued access to water supplies while still supporting future economic growth in this region. Goals for this project include: 1 evaluating the effects of the 28 management strategies identified in the 2006 Plan and 2 developing new strategies (tools and policies) to meet new groundwater withdrawal permit reductions by 2025 (typically 22% reductions from 2015 permit levels). As with previous plans, this plan uses a Task Force comprised of large water users (e.g. municipalities and industries), local environmental and civic groups, and GA DNR's Environmental Protection Division to provide program guidance and technical assistance throughout the planning process. This presentation will highlight the progress that Chatham County has had with its original plan and subsequent revisions, as well as highlight strategies moving forward based on research and discussion with the Project Task Force. During the first decade of the Chatham County Plan, groundwater withdrawal rates in Chatham County for domestic/commercial and industry combined were reduced by 16.6 MGD, and withdrawal rates from 2004 to 2015 have been further reduced by 11.7 MGD to 46.9 MGD.

Program reference: 2.6.3