

WATER RESOURCES AVAILABILITY IN THE CAPE FEAR RIVER BASIN



Cape Fear River Partnership meeting

September 24, 2016

Fred Tarver
Division of Water Resources
Department of Environmental Quality



SESSION LAW 2015-196

(amended S.L. 2015-264)

“AN ACT TO REQUIRE THE ENVIRONMENTAL REVIEW COMMISSION TO CONDUCT A STUDY OF WATER RESOURCES AVAILABILITY IN THE CAPE FEAR RIVER BASIN....”

SECTION 1. The Environmental Review Commission, with the assistance of the Department of Environment and Natural Resources, shall study the aggregate uses of groundwater and surface water in or affecting the Cape Fear River Basin by all users, including, but not limited to, public water systems, industrial facilities, and agricultural operations. The study shall include all of the following elements: (i) a summary of the current and 50-year projected water-use demands along with the available water supplies within the Cape Fear River Basin; (ii) an evaluation of the adequacy of currently available supplies to meet the expected long-term needs for all water demands, including the identification of those areas of the basin that do not have a sustainable long-term water supply for the anticipated growth of that area; (iii) the identification of potential conflicts among the various users and recommendations for developing and enhancing coordination among users and groups of users in order to avoid or minimize those conflicts; and (iv) an enhanced review of the portions of the Cape Fear River Basin within Brunswick, New Hanover, and Pender counties addressing the increased demands on groundwater and limited surface water options in that area.

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SL 2015-196: Tasks Completed

Cape Fear Basin
Hydrologic
Model -
Schematic
(OASIS, 2008)

{SL 2010-143}



Department of Environmental Quality

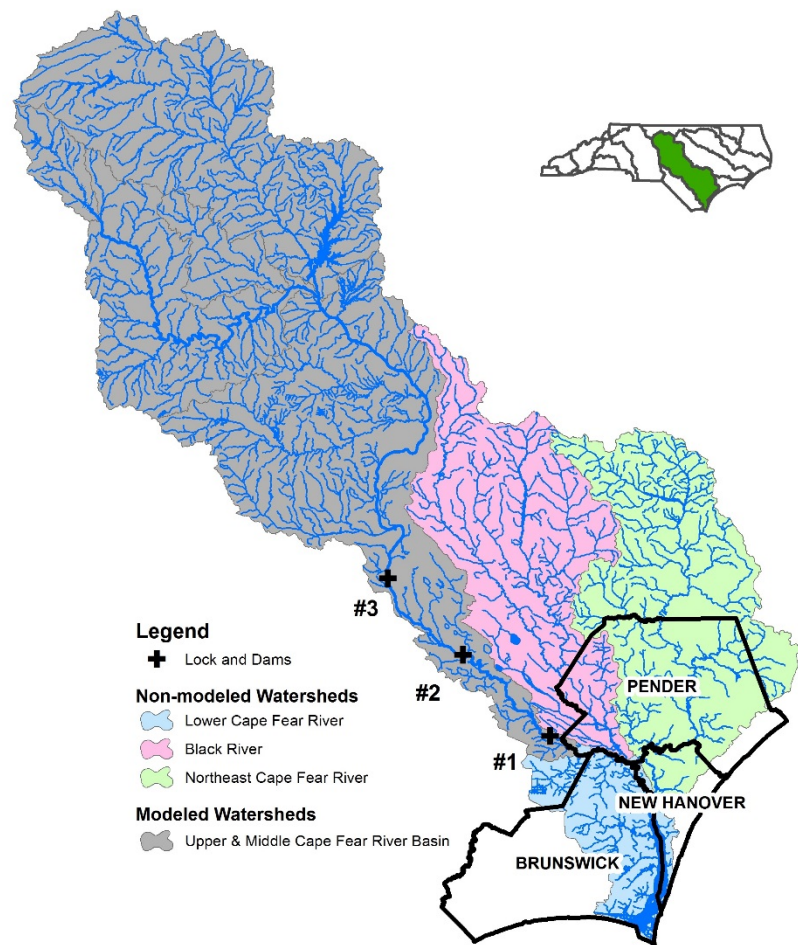


Cape Fear Basin Hydrologic Model

Includes:

- ✓ Surface water withdrawals;
- ✓ Wastewater discharges;
- ✓ Reservoir management protocols + flow targets;
- ✓ Water shortage/drought response protocols;
- ✓ Water connections & transfers between Cape Fear and adjoining basins.

SL 2015-196: Tasks Remaining



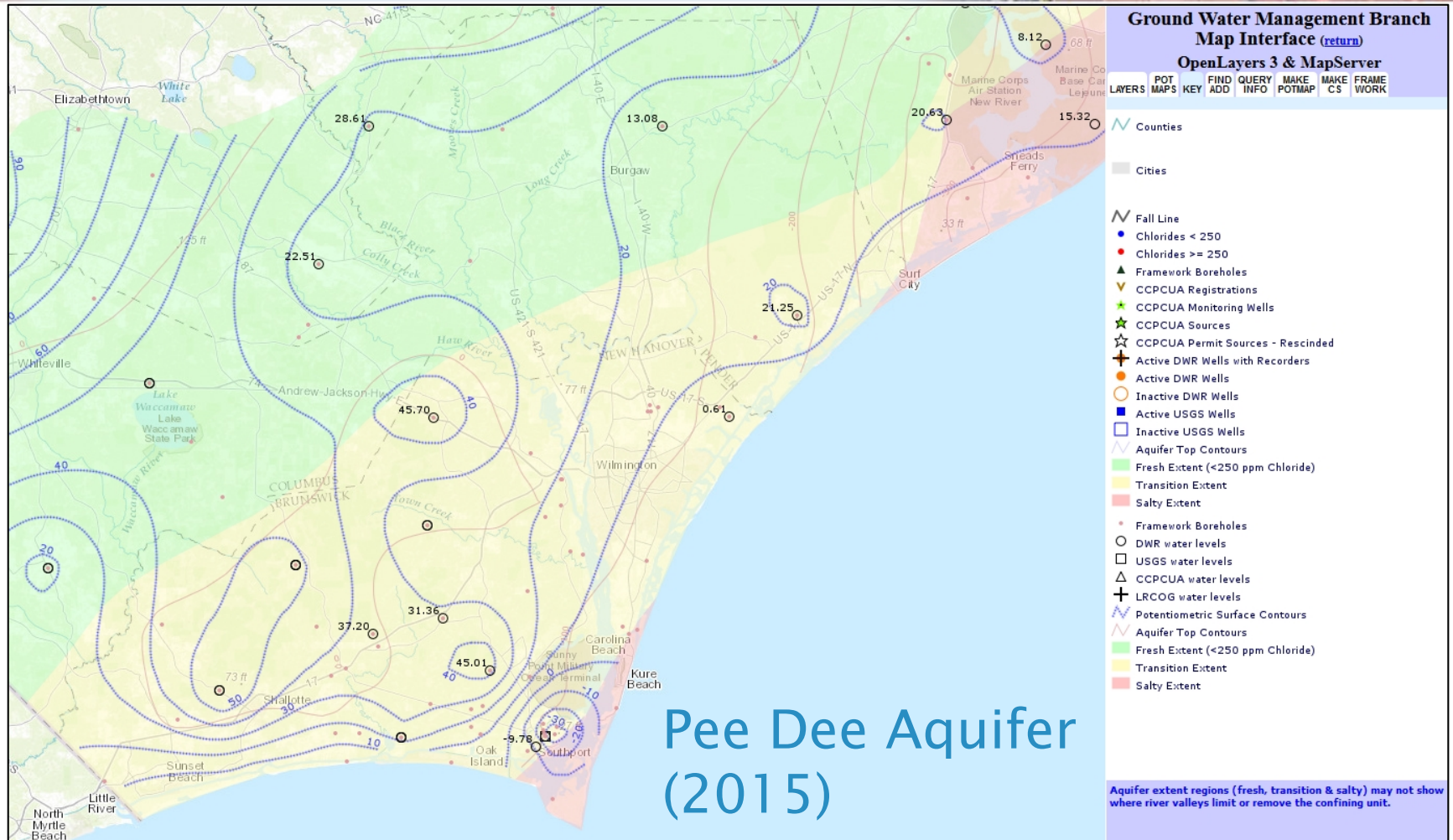
For the Lower Cape Fear River Basin:

- Tidally influenced reach of the Cape Fear River and tributaries below Lock and Dam #1;
- Black & Northeast Cape Fear river sub-basins;
- “Enhanced review” in Brunswick, New Hanover and Pender counties.

Basinwide:

- “identification of potential conflicts”
- groundwater

SL 2015-196: Tasks Remaining



Groundwater assessment

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Contact Information....



Fred Tarver

Division of Water Resources

fred.tarver@ncdenr.gov

919-707-9029

www.ncwater.org/data_and_modeling/Cape_Fear-Neuse/

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