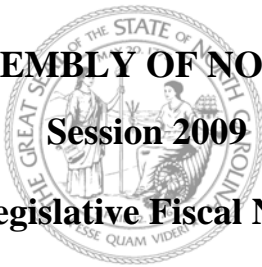


GENERAL ASSEMBLY OF NORTH CAROLINA



Session 2009

Legislative Fiscal Note

BILL NUMBER: Senate Bill 907 (First Edition)

SHORT TITLE: Water Resource Policy Act of 2009

SPONSOR(S): Senator Clodfelter

| FISCAL IMPACT | | | | | |
|--|---|--------------------------|----------------------------------|--------------------------|--------------------------|
| | Yes (x) | No () | No Estimate Available () | | |
| | <u>FY 2009-10</u> | <u>FY 2010-11</u> | <u>FY 2011-12</u> | <u>FY 2012-13</u> | <u>FY 2013-14</u> |
| REVENUES | | | | | |
| General Fund | \$4,698,750 | \$3,283,250 | \$3,283,250 | \$3,283,250 | \$3,283,250 |
| Civil Penalty & Forfeiture Fund | *Estimate not available. See Assumptions and Methodology* | | | | |
| EXPENDITURES | | | | | |
| General Fund – DENR | \$2,965,164 | \$3,068,766 | \$3,187,454 | \$3,305,666 | \$3,426,182 |
| POSITIONS (cumulative): | | | | | |
| DENR | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 |
| PRINCIPAL DEPARTMENT(S) & PROGRAM(S) AFFECTED: Department of Environment and Natural Resources; Office of State Treasurer; Wildlife Resources Commission; Department of Agriculture and Consumer Services | | | | | |
| EFFECTIVE DATE: When the bill becomes law | | | | | |

BILL SUMMARY:

SB 907 adds a new section to Article 38 of GS Chapter 143 to establish ten policies that govern administrative and judicial decisions about water allocation. The bill establishes a water withdrawal permit program for persons who withdraw more than 100,000 gallons of water per 24-hour period from surface or groundwater in the state. The bill also establishes a schedule of application and annual fees for water withdrawal permits and interim allocations based on the quantity of withdrawal.

This bill requires statewide creation of hydrologic models that summarize all known information about water inflows and withdrawals and that give a scientific basis for projecting where future shortages will occur. Furthermore, the bill establishes a system to adjust withdrawal amounts in river basins where existing or future withdrawals are projected by the hydrologic models to exceed available supply (overallocated basins). Section 3.1 establishes a procedure for the Department of Environment and Natural Resources (DENR) to issue interim allocations for water withdrawals in a river basin for which an approved hydrologic model has not been adopted.

The bill authorizes the General Assembly to create a river basin planning organization to plan for and manage water resource supply and demand in the river basin or a portion of the river basin in order to prevent or eliminate overallocation. Specified criteria for formation and administration of the planning organization are included.

Section 4.6 of the bill directs DENR, in conjunction with the North Carolina League of Municipalities, the North Carolina Association of County Commissioners, and interested private water systems, and with assistance from the Institute for the Environment at the University of North Carolina at Chapel Hill, to develop a plan for integrating water information provided by water systems for reporting to the State and the public.

Section 4.7 directs the Environmental Review Commission to continue to study topics identified for further research and study in the 2008 Report of the Water Allocation Study to the Environmental Review Commission.

Section 4.8 provides for enhanced oversight of revenues and expenses of water systems by DENR and the Local Government Commission to ensure their maintenance.

Section 4.9 directs the Division of Pollution Prevention and Environmental Assistance and other appropriate divisions in DENR and the Department of Agriculture and Consumer Services to report, by April 1, 2010, on the implementation of water efficiency measures, the coordination of water efficiency audits and energy efficiency audits, the water efficiency standards and accomplishments of significant industrial and agricultural users in the state, and other water efficiency efforts that are being implemented in the State.

Throughout the bill, several existing statutes are amended, including: GS 143-354 is amended to authorize the Environmental Management Commission to adopt any rules necessary to implement the water withdrawal permit program; GS 143-355 to require DENR to issue the water withdrawal permits; GS 143-355.6 to authorize the Secretary of DENR to assess a civil penalty of not more than \$10,000 per month against any person who violates a provision of Article 38 or the rules adopted under the authority of Article 38; and GS 113A-12 to provide a means to expedite the environmental review of water storage systems that meet specified criteria. GS 143-350 is amended to define the following terms: approved basinwide hydrologic model, consumptive use, ecological integrity, groundwater resource, historical withdrawal, nonconsumptive use, permit holder, person, prior allocation, and surface water resource. Conforming and technical changes are made to GS 143-211(a) and GS 143-214.13(b). The bill repeals the following statutes: GS 143-215.22H(b), GS 162A-20, GS 162A-21, GS 162A-22, GS 162A-23, GS 162A-24, and GS 162A-25.

ASSUMPTIONS AND METHODOLOGY:

Expenditures

Overall Bill and Basinwide Models (Various sections throughout the bill)

This bill is quite broad and constitutes a major change in the State. The policy goals established in section 1 of the bill, the permitting program, and other work, such as establishing basinwide hydrologic models, will require new resources, primarily staff for the Department of Environment and Natural Resources (DENR). It is anticipated that most parts of the bill will be implemented by the Division of Water Resources (DWR) within DENR. In order to evaluate permit applications, DWR will first need to evaluate the seventeen river basins in the State along the guidelines provided in new GS 143-355.13. Moreover, the Division’s existing modeling, planning, instream flow, and monitoring network programs will need additional resources to conduct the basinwide hydrologic models that would be required under new GS 143-355.19. The proposed models are significantly more complex and enhanced than existing models; DWR would need to incorporate the concepts of minimum ecological flows, ground water flows, and water quality aspects. DENR estimates that in order to successfully implement the new river basin models DWR would need to be capable of producing two basinwide models per year. At present, the existing staff is only capable of producing one model per year. DWR estimates it will need four additional positions to meet this goal. In addition to staff time, the basinwide models require contracts for part of the work. DENR estimates costs of \$300,000 for FY 2010-2011 and \$1,100,000 for all the remaining fiscal years.

In addition to the other basinwide model requirements, new GS 143-355(b2) requires that the Department, in consultation with the Wildlife Resources Commission (WRC), US Fish and Wildlife Service, and the National Marine Fisheries Service, develop ecological criteria that will protect the ecological integrity of each river basin and sub basin. DENR estimates that incorporating the ecological criteria into the models will require the addition of three (3) new Environmental Senior Specialist positions in DWR. However, Fiscal Research does not agree with this assumption and anticipates that collaboration with the listed agencies should provide the technical expertise needed such that DWR does not need additional staff to have such expertise in house. WRC anticipates that existing WRC staff can assume the responsibility as proposed under this section for their agency and anticipates negligible fiscal impact.

The following table provides a breakdown of the new position costs Fiscal Research projects related to developing the basinwide models.

| Position Title | Grade | Salary (at midpoint) | Soc. Sec. & Med. | Retire-ment | Health Insur. | Operating | Total per Position | Number | Grand Total |
|-----------------------|--------------|-----------------------------|-----------------------------|--------------------|----------------------|------------------|---------------------------|---------------|--------------------|
| Env Engineer II | 77 | \$67,816 | \$5,188 | \$5,791 | \$4,527 | \$8,332 | \$91,732 | 2 | \$183,463 |
| Comm Planner II | 72 | \$54,271 | \$4,152 | \$4,635 | \$4,527 | \$6,758 | \$74,415 | 2 | \$148,830 |
| | | | | | | | | 4 | \$332,293 |

This note assumes these positions will be established at the start of FY 2009-10; an inflationary factor was applied for annual position costs as follows:

| | FY 2009-10 | FY 2010-11 | FY 2011-12 | FY 2012-13 | FY 2013-14 |
|--------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Total Modeling Positions Costs | \$343,126 | \$360,111 | \$380,133 | \$400,318 | \$420,814 |

Based on current costs spent on basinwide modeling contracts, Fiscal Research agrees with DENR's estimate of \$1.1 million in annual costs; however, Fiscal estimates that these costs would first be incurred starting in FY 2009-10 not in FY 2010-11 as DENR estimates. After applying an inflationary factor, total costs for modeling and planning are as follows:

| | FY 2009-10 | FY 2010-11 | FY 2011-12 | FY 2012-13 | FY 2013-14 |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Total Modeling Positions Costs | \$343,126 | \$360,111 | \$380,133 | \$400,318 | \$420,814 |
| Modeling Contract Costs | \$1,120,350 | \$1,140,628 | \$1,161,730 | \$1,181,828 | \$1,202,628 |
| Total Modeling Costs | \$1,463,476 | \$1,500,739 | \$1,541,863 | \$1,582,146 | \$1,623,442 |

DWR also estimates needing two additional positions with a total cost of \$171,169 to provide technical support for assisting applicants in developing water conservation plans. Fiscal Research has not included these positions for the purposes of this note because assisting applicants with water conservation plans is not an explicit requirement in the bill. Additionally, this note estimates the need for 18 new positions in DWR, and some of the local technical support, if needed, could be done by those 18 positions.

Surface and Groundwater Permitting Program & Interim Allocations (Part II & Part III)

The permitting program will require the review and analysis of over 1,500 application permits. Permit applications will be highly technical in nature; new GS 143-355.14 provides a set of sixteen standards for approval. Permits will need to be renewed annually and reapplied for at least every five years (new GS 143-355.15(a)). DENR estimates needing 15 additional staff in order to implement the surface and ground water permitting program: one supervisor, one administrative assistant, one data entry specialists, six engineers, and six hydrogeologists. The engineers and hydrogeologists will perform the permit analysis and related tasks. Fiscal Research agrees with DENR's estimate with the exception of needing a data entry specialist. A breakdown of these costs is provided below.

| Position Title | Grade | Salary (at midpoint) | Soc. Sec. & Med. | Retire - ment | Health Insur. | Operating | Total per Position | Number | Grand Total |
|-----------------------|--------------|-----------------------------|-----------------------------|----------------------|----------------------|------------------|---------------------------|---------------|--------------------|
| Env Prog Supv III | 79 | \$74,323 | \$5,686 | \$6,347 | \$4,527 | \$9,088 | \$99,971 | 1 | \$99,971 |
| Admin Assistant I | 61 | \$37,418 | \$2,862 | \$3,195 | \$4,527 | \$4,800 | \$52,803 | 1 | \$52,803 |
| Env Engineer II | 77 | \$67,816 | \$5,188 | \$5,791 | \$4,527 | \$8,332 | \$91,655 | 6 | \$549,928 |
| Hydrogeologist II | 75 | \$61,956 | \$4,740 | \$5,291 | \$4,527 | \$7,651 | \$84,165 | 6 | \$504,990 |
| | | | | | | | | 14 | \$1,207,693 |

This note assumes these positions will be established at the start of FY 2009-10; an inflationary factor was applied for annual costs as follows:

| | FY 2009-10 | FY 2010-11 | FY 2011-12 | FY 2012-13 | FY 2013-14 |
|----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Total Permitting Positions Costs | \$1,247,063 | \$1,308,793 | \$1,381,562 | \$1,454,923 | \$1,529,415 |

Cost of Notices (new GS 143-355.11(c))

Assuming 10 new/expanded permits per year, the estimated notice cost is \$250,000 per year. Each notice costs approximately \$25,000 – with the majority of those expenses being newspaper advertisement costs. The estimated cost is based on the Division’s current costs for Capacity Use Area permit notices and the cost for the Kerr Lake Regional Water System to do the required Interbasin Transfer newspaper notices.

An inflationary factor was applied to arrive at the following annual costs:

| | FY 2009-10 | FY 2010-11 | FY 2011-12 | FY 2012-13 | FY 2013-14 |
|---------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Notices | \$254,625 | \$259,234 | \$264,030 | \$268,597 | \$273,325 |

Public Access to Information (Section 4.6)

Section 4.6 requires that DENR, in conjunction with the North Carolina League of Municipalities, the North Carolina Association of County Commissioners, interested private water systems, and with assistance from the Institute for the Environment at UNC-Chapel Hill, identify water-reporting requirements at both the State and federal levels, provide greater public access to water and water funding information, and develop and implement a plan to consolidate water data into one or more reports. Based on other experiences implementing similar types of information access programs, DENR estimates that it may take \$200,000 per year for 5 years to implement this section of the proposed legislation. This \$200,000 per year includes the cost of one additional staff person needed to manage this program for DENR. Fiscal Research does not agree that DENR will need additional staff or funding to implement this section and feels that DENR can manage this program with existing and new staff resources described above, as well as with assistance and collaboration from the named parties.

Financial Review of Public Water Supply and Wastewater Systems (Section 4.8)

Section 4.8 requires that DENR and the Local Government Commission monitor revenues and costs of public water supply and wastewater systems and to act in response to that analysis. According to the Local Government Commission within the Office of the State Treasurer, the implementation of this section will have negligible fiscal impact. The Office of State Treasurer currently reviews the annual audits of such units and records the units that have lost money on their water and sewer fund. Thus no new costs should be incurred. DENR, however, estimates that they will need two new staff at a cost of approximately \$130,000. Fiscal Research does not agree that DENR will need new staff and feels that the fiscal impact of this section will be negligible.

Water Efficiency Report (Section 4.9)

Section 4.9 requires that the Division of Pollution Prevention and Environmental Assistance (DPPEA), other divisions within DENR, and the Department of Agriculture and Consumer Services

(DACS) report on various water efficiency activities by April 1, 2010. The description of the study is vague, especially in regards to the requirement to report on “the water efficiency standards and accomplishments of significant industrial and agricultural water users in the State.” It is not clear from the bill what would be involved with the required report. DENR provided an estimate of \$100,000 for contracts to complete the report. DACS provided an estimate of approximately \$50,000 – *if* they are required to survey water users along the lines of the annual agricultural use water survey required by S.L. 2008-143. If additional surveys are not required, the fiscal impact of this bill on DACS is expected to be minor. Thus, Fiscal Research estimates that this section of the bill could have a range of costs from negligible to \$150,000 depending on what is intended for the report. Due to the lack of clarity in what is required, this range of costs is not included in the box on page one of this fiscal note.

River Basin Planning Organizations (new GS 143-355.12)

New GS 143-355.12 allows for the creation of river basin planning organizations. The bill stipulates that funds for the staffing and operation of the organizations will come from annual payments made by each member that withdraws water, with such payments pro-rated based on the amount of water withdrawn. Thus, the river basin planning organizations should be self-sustaining with no impact on State fiscal resources.

Overall, DENR estimates needing 26 positions to implement this bill and a total cost of \$4.4 million annually. Fiscal Research’s estimate is 18 positions and a total cost of \$2.97 million in the first year.

Revenues

Permits (new GS 143-355.17)

New GS 143-355.17 establishes application fees and annual fees for water withdrawal permits and interim allocations. DENR maintains a water withdrawal database and provided the estimates of the number of permits based on that database.

For the first year of the program, water withdrawal permittees would be required to pay both the application processing fee and the annual fee. The following table depicts projected revenue from these two fees in the first year:

| Size of Withdrawal | | Number of Permits | Processing Fee | | Annual Fees | | |
|--------------------|---------------|-------------------|-----------------|--------------------|-------------|--------------------|--|
| | | | Interim/Renewal | | Fee | Revenue | |
| Fee | Revenue | Fee | Revenue | Fee | Revenue | | |
| 1,000,000,000 | + | 11 | \$1,000 | \$11,000 | \$25,000 | \$275,000 | |
| 500,000,000 | - 999,999,999 | 4 | \$1,000 | \$4,000 | \$20,000 | \$80,000 | |
| 100,000,000 | - 499,999,999 | 21 | \$1,000 | \$21,000 | \$15,000 | \$315,000 | |
| 50,000,000 | - 99,999,999 | 17 | \$1,000 | \$17,000 | \$10,000 | \$170,000 | |
| 10,000,000 | - 49,999,999 | 65 | \$1,000 | \$65,000 | \$7,500 | \$487,500 | |
| 5,000,000 | - 9,999,999 | 50 | \$1,000 | \$50,000 | \$5,000 | \$250,000 | |
| 1,000,000 | - 4,999,999 | 345 | \$1,000 | \$345,000 | \$2,500 | \$862,500 | |
| 500,000 | - 999,999 | 273 | \$1,000 | \$273,000 | \$1,000 | \$273,000 | |
| 100,000 | - 499,999 | 657 | \$1,000 | \$657,000 | \$750 | \$492,750 | |
| General Permit | | 100 | \$250 | \$25,000 | \$250 | \$25,000 | |
| Total | | | | \$1,468,000 | | \$3,230,750 | |

In subsequent years, revenue would come from annual permit fees and new or expanded allocation applications. The following table depicts projected revenue from these two fees:

| Size of Withdrawal | | Annual Fees | | | Processing Fee New/Expanded | | |
|--------------------|---------------|-------------------|----------|--------------------|--------------------------------|---------|-----------------|
| | | Number of Permits | Fee | Revenue | Number of Permits | Fee | Revenue |
| 1,000,000,000 | + | 11 | \$25,000 | \$275,000 | 0 | \$5,000 | |
| 500,000,000 | - 999,999,999 | 4 | \$20,000 | \$80,000 | 0 | \$5,000 | |
| 100,000,000 | - 499,999,999 | 21 | \$15,000 | \$315,000 | 0 | \$5,000 | |
| 50,000,000 | - 99,999,999 | 17 | \$10,000 | \$170,000 | 0 | \$5,000 | |
| 10,000,000 | - 49,999,999 | 65 | \$7,500 | \$487,500 | 10 | \$5,000 | \$50,000 |
| 5,000,000 | - 9,999,999 | 50 | \$5,000 | \$250,000 | 0 | \$5,000 | |
| 1,000,000 | - 4,999,999 | 345 | \$2,500 | \$862,500 | 0 | \$5,000 | |
| 500,000 | - 999,999 | 273 | \$1,000 | \$273,000 | 0 | \$5,000 | |
| 100,000 | - 499,999 | 657 | \$750 | \$492,750 | 0 | \$5,000 | |
| General Permit | | 100 | \$250 | \$25,000 | 10 | \$250 | \$2,500 |
| Total | | | | \$3,230,750 | | | \$52,500 |

DENR anticipates that FY 2009-10 would be spent planning and implementing the new program and that fee revenue would not be generated until FY 2010-11. However, Fiscal Research notes that the bill is effective once it becomes law and the fees are established in Statute (not via rule-making, which can be a lengthy process); thus collection of fees could and should commence in FY 2009-10. Additionally, the positions needed for this program would be receipt-supported, so the revenue would need to be generated concurrently with their creation in order for work to begin on the program. The following table projects the fee revenue for the next five years:

| | FY 2009-10 | FY 2010-11 | FY 2011-12 | FY 2012-13 | FY 2013-14 |
|---------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Processing Renewal/Interim Historical | \$1,468,000 | \$0 | \$0 | \$0 | \$0 |
| Processing New/Expanded | \$0 | \$52,500 | \$52,500 | \$52,500 | \$52,500 |
| Annual Permits | \$3,230,750 | \$3,230,750 | \$3,230,750 | \$3,230,750 | \$3,230,750 |
| Total | \$4,698,750 | \$3,283,250 | \$3,283,250 | \$3,283,250 | \$3,283,250 |

The bill clearly establishes that the fee revenue generated cannot exceed the cost of administering the water withdrawal permitting program and the development of hydrologic models, monitoring, and enforcement. Thus, some pieces of the bill are left without an established funding source.

Civil Penalties (new GS 143-355.6(c1))

A maximum penalty of \$10,000 per month is established for violating any provision of Article 38. As this is a new penalty, it is not known how many penalties will be assessed, for how long they will be assessed, and for what amount. Based on experience implementing the Central Coastal Plain Capacity Use Area Rules, DENR anticipates they might issue 27 Notices of Violation that will result in approximately 13 civil penalty assessments per year.

SOURCES OF DATA: Department of Environment and Natural Resources; Office of State Treasurer; Department of Agriculture and Consumer Services; Wildlife Resources Commission; Moody's economy.com

TECHNICAL CONSIDERATIONS:

(1) Fiscal Research notes the fee revenue is restricted in new GS 143-355.17 to “not exceed the aggregate costs of administering the water withdrawal permitting program, including the development of hydrologic models, monitoring, and enforcement.” This language is perhaps overly restrictive in that it prohibits the Department from using fee revenue for other activities and policy goals cited in the bill.

(2) Section 4.9 requires a water efficiency report by April 1, 2010. The requirements for this report are vague which makes estimating the cost difficult. Additionally, the bill does not specify who the report should be given to.

FISCAL RESEARCH DIVISION: (919) 733-4910

PREPARED BY: Kristin Walker, Sarah Poteat, Lanier McRee

APPROVED BY: Marilyn Chism, Director
Fiscal Research Division

DATE: May 15, 2009



Signed Copy Located in the NCGA Principal Clerk's Offices