

NORTH CAROLINA GENERAL ASSEMBLY

LEGISLATIVE FISCAL NOTE

BILL NUMBER: HB 1541 (First Edition)

SHORT TITLE: Nolichucky River Basin/Basinwide WQ Mgt

SPONSOR(S): Representatives Buchanan, Gibson and Gillespie

FISCAL IMPACT					
	Yes ()	No ()	No Estimate Available ()		
	<u>FY 2002-03</u>	<u>FY 2003-04</u>	<u>FY 2004-05</u>	<u>FY 2005-06</u>	<u>FY 2006-07</u>
REVENUES	\$0	\$0	\$0	\$0	\$0
EXPENDITURES	----- \$250,000* ----- (see Technical Consideration section)				
POSITIONS:					
PRINCIPAL DEPARTMENT(S) & PROGRAM(S) AFFECTED:	Department of Environment and Natural Resource's Division of Water Quality and the Environmental Management Commission.				
EFFECTIVE DATE:	The bill is effective when it becomes law.				
<small>*To modify the Division of Water Quality's main database to incorporate an 18th major river basin will require an expenditure of approximately \$250,000 in the fiscal year the modification actual takes place. Since the bill neither requires the Division to implement the changes immediately nor does it specify a date by which the changes must be completed, it is unclear when the Division will actual incur this cost.</small>					

BILL SUMMARY: This bill amends the basinwide water quality management plans section of the general statutes (G.S. 143-215.8B) by adding a new subsection that delineates the Nolichucky River Basin as a new major river basin. It also requires the Environmental Management Commission (EMC) to develop and implement a separate basinwide water quality management plan for the Nolichucky River Basin and to remove the Nolichucky River Basin from the management plan that is developed for the French Broad River Basin.

ASSUMPTIONS AND METHODOLOGY:

Background -Development of Individual Basinwide Water Quality Management Plans: As staff to the EMC, the NC Division of Water Quality (DWQ) prepares basinwide water quality management plans for each of the major river basins in the state and revises those plans at five-year intervals. Each plan provides an overview of the individual river basin including information on hydrology, land use, local government jurisdictions, population and growth

trends, natural resources, wastewater discharges, animal operations and water usage. The plans also contain summaries of water quality monitoring programs and use support ratings in the basin. Lastly, the plans summarize recommendations and achievements from previous basin plans, identify priority issues and impaired waters, and establish goals and recommendations for the next five years by subbasin.

The preparation of an individual plan takes between three to five years. The first stage of plan development begins with biological data collection and identification of goals and issues for the river basin. The second stage includes data analysis, developing use support ratings and preliminary pollution control strategies, and conducting public workshops. The third and final stage includes preparation of the draft basinwide plan, public review, EMC approval of the plan, issuance of NPDES permits (National Pollutant Discharge Elimination System) and implementation of the basin plan.

Division of Water Quality: The single largest cost of creating a new river basin is the cost of modifying the Division’s main database, the Basinwide Information Management System (BIMS), to remove the certain subbasin references in the French Broad River Basin and to delineate those subbasins as a major river basin, the Nolichucky. This system is comprised of 30 different electronic databases that store data such as benthic, chemical, fish community structure, toxicity, land use, point sources, non-discharge facilities, animal production sites, stream classification system, stream use support overlays, etc. Because the main database structure was not initially designed to accommodate additional river basins, the cost to modify the system is expensive. The Division estimates that a contract to modify the BIMS database would cost approximately \$250,000 on a one-time basis. This estimate was reviewed by the General Assembly’s Information Technology Analyst, who confirms that the estimate is not overstated. The chart below details the hours required to complete each stage of the database modification. The total cost is based on an average cost of \$75 per hour.

Estimated Costs for an Information Technology Contractor

Analysis	500 hours	
Prototype	400 hours	
Design & Development	1675 hours	
System Testing	500 hours	
User Acceptance Testing	160 hours	
Reports Development	<u>80 hours</u>	
Total	3315 hours	(\$248,625)

Other Costs: The bill requires the Environmental Management Commission (EMC) to develop and implement a separate basinwide water quality management plan for the Nolichucky River Basin and to remove the Nolichucky River Basin from the management plan that is developed for the French Broad River Basin. As a result the, Division of Water Quality will need to revise the French Broad River Basinwide Water Quality Plan and develop a new basinwide water quality management plan for the Nolichucky. Additionally, the Division will need to modify all rules that contain references to the French Broad River and create new rules for the Nolichucky River Basin. The Division estimates that these additional activities, which include holding public workshops and hearings in western North Carolina, and gathering more detailed data from local governments and state and federal agencies for the new plan, will take the equivalent of one-half position or approximately \$30,000 on a one-time basis. This fiscal note assumes that

this estimate is not an actual expenditure outlay, but an “internal” cost to the Division and represents the time in dollars that current staff will have to spend on activities that are not currently “budgeted” in their schedules. If these activities can be phased in on the current basinwide planning schedule, the internal costs to the Division would be minimized. The Division also estimates an additional \$6,000 in travel and printing costs per five-year cycle for the Nolichucky plan. However, this note assumes that the Division can absorb this cost in its existing General Fund appropriation of \$16 million.

Additional Considerations: Neither the bill nor the existing statutes require the Department of Environment and Natural Resources to use the river basin concept as an educational tool. In practice, however, the statewide river Basin Awareness Program has been a major environmental education campaign since 1996. The Office of Environmental Education (OEE) has produced river basin materials (brochures, posters, and maps) and encouraged teachers, environmental education centers and grassroots organizations to use those materials in their programs and exhibits. OEE has also worked with the NC Department of Transportation (NCDOT) to highlight North Carolina’s existing 17 river basins on all NCDOT road maps and to place river basin highway signs at all major interstates and tributaries. If the boundaries of the river basins change, the Office of Environment Education would need to redesign their education materials to reflect those changes. According the to OEE, a contract to redesign these materials would cost less than \$1,000. Three DOT river basin highway signs would also need to be replaced at a cost of \$200 per sign. These additional costs are so small that this fiscal note assumes that both agencies can absorb an expenditure of less than \$1,000 into their existing budgets without an additional General Fund appropriation.

SOURCES OF DATA: Division of Water Quality, Office of Environmental Education and NCGA Information Systems Division

TECHNICAL CONSIDERATIONS: The bill, as it is currently written, is unclear about how quickly the Division of Water Quality must prepare a separate basinwide water quality management plan for the Nolichucky and revise the French Broad River Basin plan. To clarify the expected timeframe, language might be added to require the EMC to develop and implement the Nolichucky River Basin plan within a specified amount of time or to allow the Division to use its existing basinwide planning schedule to revise the French Broad River Basin in 2005 as is currently scheduled and to write the initial plan for the Nolichucky following the French Broad River Basin plan revision.

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