

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1997

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HOUSE BILL 1486*
Committee Substitute Favorable 9/3/98

Short Title: Expand Neuse Modeling Project/Funds.

(Public)

Sponsors:

Referred to:

May 25, 1998

A BILL TO BE ENTITLED

AN ACT TO EXPAND THE SCOPE OF THE MONITORING AND MODELING OF THE NEUSE RIVER AND ESTUARY UNDER THE NEUSE RIVER MODELING AND MONITORING (MODMON) PROJECT; TO REQUIRE THE WATER RESOURCES RESEARCH INSTITUTE TO COORDINATE, SUPPORT, AND EXPEDITE NEUSE RIVER RESEARCH; TO APPROPRIATE FUNDS TO EXPAND THE MODMON PROJECT; AND TO PROVIDE FOR ALTERNATIVE FUNDING OF THE MODMON PROJECT BY DIRECTING THE DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES AND THE WATER RESOURCES RESEARCH INSTITUTE TO SEEK ADDITIONAL FUNDING FOR THE MODMON PROJECT FROM AVAILABLE STATE, FEDERAL, AND PRIVATE SOURCES AND TO AUTHORIZE THE DEPARTMENT TO USE REVERSIONS FOR THE MODMON PROJECT.

The General Assembly of North Carolina enacts:

Section 1. (a) Monitoring of the Neuse River and the Neuse estuary under the Modeling and Monitoring (MODMON) Project shall be expanded to include sampling of surface water, groundwater, and sediments in the upper, middle, and lower portions of the Neuse River Basin, as well as the Neuse estuary. The expansion of the scope of monitoring shall be planned and implemented to ensure the timely availability of all data

1 necessary to develop a conceptual model of the surface water and groundwater in the
2 Neuse River Basin, including the Neuse estuary. All sampling of river and estuary water
3 and groundwater shall be completed no later than 1 January 2000. Sampling shall include
4 the following parameters:

- 5 (1) Field parameters, including temperature, pH, dissolved oxygen,
6 alkalinity, and salinity.
- 7 (2) Algae growth.
- 8 (3) Major dissolved species, including calcium, magnesium, sodium,
9 potassium, chloride, and sulfate.
- 10 (4) Nutrients, including nitrate, nitrite, total ammonia, and phosphate.
- 11 (5) Metals, including lead, iron, zinc, cadmium, and mercury.
- 12 (6) Nonmetals, including bromide, silica, and arsenic.
- 13 (7) Stable isotopes, including oxygen, hydrogen, and nitrogen.
- 14 (b) Modeling of the Neuse River and Neuse estuary under the MODMON

15 Project shall be expanded to include the development of a modeling framework to link
16 estuary, watershed, atmospheric, and groundwater loading models. Modeling shall also
17 include development of a land-use database, nonpoint source modeling, and an in-stream
18 transport and fate model for the Neuse River and the Neuse estuary.

19 (c) The Water Resources Research Institute shall provide integrated
20 program management for Neuse River research. Program management shall include the
21 following functions:

- 22 (1) Validation of the scope and deliverables of the MODMON Project to
23 assure that all appropriate scope elements have been clearly established,
24 all relevant data needs have been addressed, and the deliverables
25 requirements will be met on schedule.
- 26 (2) Identification of relevant research, extension, and management
27 programs currently conducted by any North Carolina agency,
28 institution, or company, whether public or private, and regardless of
29 funding, that address Neuse River management issues.
- 30 (3) For research, extension, and management programs identified under
31 subdivision (2) of this subsection that are supported by State funds,
32 establishment of the scope, level of effort, deliverables, and persons and
33 agencies responsible for the program.
- 34 (4) Development of oversight and accountability functions to assist the
35 Department of Environment and Natural Resources in managing and
36 coordinating efforts to monitor, model, and develop a management
37 strategy for the Neuse River and the Neuse estuary.
- 38 (5) Plan and construct a fully integrated Internet website to serve as a
39 coordinated repository for all information related to the MODMON
40 Project and the management strategy for the Neuse River and the Neuse
41 estuary and to facilitate the sharing of this information among interested
42 parties and with the general public. The Internet website shall be
43 constructed no later than 1 October 1999.

1 (6) Establish a Task Force on issues related to the Neuse River to
2 coordinate research, facilitate peer review of interdisciplinary research,
3 and promote the exchange of technology and information among those
4 involved in research activities. The Water Resources Research Institute
5 shall convene meetings of the Task Force at least once in each calendar
6 quarter and more often as needed.

7 (7) Identify any gaps in monitoring, modeling, or other research that, if not
8 corrected, would impair the effectiveness of the research and implement
9 adjustments in the scope of the MODMON Project to correct those
10 deficiencies.

11 (8) Facilitate expedient development of sound policy recommendations by
12 ensuring timely delivery and analysis of research findings and by
13 providing independent review and validation of those findings.

14 (9) Develop and validate a detailed schedule for the completion of
15 deliverables.

16 (10) Meet at least monthly with designated representatives of the Department
17 to review progress and coordinate future activities.

18 (d) The Department of Environment and Natural Resources, with the
19 assistance of the Water Resources Research Institute, shall review and validate the scope
20 and budget of all activities in the MODMON Project no later than 1 January 1999.

21 (e) The Water Resources Research Institute shall implement the schedule
22 for the completion of deliverables to ensure that the MODMON Project will provide
23 dependable scientific findings to support sound policy decisions no later than 1 July
24 2000. The Water Resources Research Institute and the Department of Environment and
25 Natural Resources shall make joint interim reports on the progress, findings, and gap
26 analysis of the MODMON Project, including project specific tasks and technical
27 findings, to the Environmental Review Commission on 1 July 1999 and 1 January 2000.
28 The Water Resources Research Institute and the Department of Environment and Natural
29 Resources shall make a joint final report on the progress, findings, and recommendations
30 of the MODMON Project, including data on sources and seasonality of inputs, model
31 calibration and results, project specific tasks, and technical findings, to the Environmental
32 Review Commission on 1 July 2000.

33 Section 2. (a) There is appropriated from the General Fund to the Department
34 of Environment and Natural Resources to be transferred to the Board of Governors of
35 The University of North Carolina for the Water Resources Research Institute the sum of
36 one million two hundred thousand dollars (\$1,200,000) for the 1998-99 fiscal year to be
37 used to implement Section 1 of this act.

38 (b) Of the funds appropriated by subsection (a) of this section, the Water
39 Resources Research Institute shall transfer one hundred thousand dollars (\$100,000) to
40 the North Carolina Agricultural Research Service of the College of Agriculture and Life
41 Sciences of North Carolina State University for the purchase of four in-stream continuous
42 monitoring devices and related computer equipment to provide data for the MODMON
43 Project.

1 (c) It is the intent of the General Assembly that at least one million two
2 hundred thousand dollars (\$1,200,000) be made available to the Water Resources
3 Research Institute to implement this act. In the event that the General Assembly
4 appropriates less than the one million two hundred thousand dollars (\$1,200,000)
5 provided in subsection (a) of this section, the provisions of this subsection shall apply
6 with respect to the difference between one million two hundred thousand dollars
7 (\$1,200,000) and the amount actually appropriated. The Department of Environment and
8 Natural Resources and the Water Resources Research Institute shall apply for available
9 State, federal, and private sources of funding to implement this act. The Department
10 shall transfer to the Board of Governors of The University of North Carolina for the
11 Water Resources Research Institute any funds to implement this act that are made
12 available to the Department from federal and private sources. The Department shall
13 transfer funds that would otherwise revert to the General Fund during the 1998-99 fiscal
14 year, not to exceed one million two hundred thousand dollars (\$1,200,000), to the Board
15 of Governors of The University of North Carolina for the Water Resources Research
16 Institute to implement this act.

17 Section 3. This act becomes effective 1 July 1998.