§ 143-355. Powers and duties of the Department.

(a) Repealed by Session Laws 1989, c. 603, s. 1.

(b) Functions to Be Performed. – The Department shall:

(1) Request the North Carolina Congressional Delegation to apply to the Congress of the United States whenever deemed necessary for appropriations for protecting and improving any harbor or waterway in the State and for accomplishing needed flood control, shore-erosion prevention, and water-resources development for water supply, water quality control, and other purposes.

(2) Initiate, plan, and execute a long-range program for the preservation, development and improvement of rivers, harbors, and inland ports, and to promote the public interest therein.

(3) Prepare and recommend to the Governor and the General Assembly any legislation which may be deemed proper for the preservation and improvement of rivers, harbors, dredging of small inlets, provision for safe harbor facilities, and public tidewaters of the State.

(4) Make engineering studies, hydraulic computations, hydrographic surveys, and reports regarding shore-erosion projects, dams, reservoirs, and river-channel improvements; to develop, for budget and planning purposes, estimates of the costs of proposed new projects; to prepare bidding documents, plans, and specifications for harbor, coastal, and river projects, and to inspect materials, workmanship, and practices of contractors to assure compliance with plans and specifications.

(5) Cooperate with the United States Army Corps of Engineers in causing to be removed any wrecked, sunken or abandoned vessel or unauthorized obstructions and encroachments in public harbors, channels, waterways, and tidewaters of the State.

(6) Cooperate with the United States Coast Guard in marking out and establishing harbor lines and in placing buoys and structures for marking navigable channels.

(7) Cooperate with federal and interstate agencies in planning and developing water-resource projects for navigation, flood control, hurricane protection, shore-erosion prevention, and other purposes.

(8) Provide professional advice to public and private agencies, and to citizens of the State, on matters relating to tidewater development, river works, and watershed development.

(9) Discuss with federal, State, and municipal officials and other interested persons a program of development of rivers, harbors, and related resources.

(10) Make investigations and render reports requested by the Governor and the General Assembly.

(11) Participate in activity of the National Rivers and Harbors Congress, the American Shore and Beach Preservation Association, the American Watershed Council, the American Water Works Association, the American Society of Civil Engineers, the Council of State Governments, the Conservation Foundation, and other national agencies concerned with conservation and development of water resources.

(12) Prepare and maintain climatological and water-resources records and files as a source of information easily accessible to the citizens of the State and to the public generally.
(13) Formulate and administer a program of dune rebuilding, hurricane protection, and shore-erosion prevention.

(14) Include in the biennial budget the cost of performing the additional functions indicated above.

(15) Initiate, plan, study, and execute a long-range floodplain management program for the promotion of health, safety, and welfare of the public. In carrying out the purposes of this subsection, the primary responsibility of floodplain management rests with the local levels of government and it is, therefore, the policy of this State and of this Department to provide guidance, coordination, and other means of assistance, along with the other agencies of this State and with the local levels of government, to effectuate adequate floodplain management programs.

(16) Cooperate with units of local government in the identification of water supply needs and appropriate water supply sources and water storage projects to meet those needs. By agreement with a unit of local government, the Department may do any of the following:
   a. Assist in the assessment of alternatives for meeting water supply needs; the conduct of engineering studies, hydraulic computations, and hydrographic surveys; and the development of a plan of study for purposes of obtaining necessary permits.
   b. For budget and planning purposes, develop estimates of the costs of the proposed new water supply project.
   c. Apply for State and federal permits for the development of regional water supplies.

(17) Be the principal State agency to cooperate with other State agencies, the United States Army Corps of Engineers, and all other federal agencies or instrumentalities in the planning and development of water supply sources and water storage projects for the State.

(b1) The Department is directed to pursue an active educational program of floodplain management measures, to include in each biennial report a statement of flood damages, location where floodplain management is desirable, and suggested legislation, if deemed desirable, and within its capacities to provide advice and assistance to State agencies and local levels of government.

(c) Repealed by Session Laws 1961, c. 315.

(d) Investigation of Coasts, Ports and Waterways of State. – The Department is designated as the official State agency to investigate and cause investigations to be made of the coasts, ports and waterways of North Carolina and to cooperate with agencies of the federal and State government and other political subdivisions in making such investigations. The provisions of this section shall not be construed as in any way interfering with the powers and duties of the Utilities Commission, relating to the acquiring of rights-of-way for the Intra-Coastal Waterway; or to authorize the Department to represent the State in connection with such duties.


(f) Samples of Cuttings to Be Furnished the Department When Requested. – Every person, firm or corporation engaged in the business of drilling, boring, coring or constructing wells in any manner by the use of power machinery shall furnish the Department samples of cuttings from such depths as the Department may require from all wells constructed by such person, firm or corporation, when such samples are requested by the Department. The Department shall bear the expense of delivering such samples. The Department shall, after an analysis of the samples submitted, furnish a copy of such analysis to the owner of the property.
on which the well was constructed; the Department shall not report the results of any such
analysis to any other person whatsoever until the person legally authorized to do so authorizes
in writing the release of the results of the analysis.

(g) Reports of Each Well Required. – Every person, firm or corporation engaged in the
business of drilling, boring, coring, or constructing wells with power machinery within the
State of North Carolina shall, within 30 days of the completion of each well, report to the
Department on forms furnished by the Department the location, size, depth, number of feet of
casing used, method of finishing, and formation log information of each such well. In addition
such person, firm or corporation shall report any tests made of each such well including the
method of testing, length of test, draw-down in feet and yield in gallons per minute. The
person, firm or corporation making such report to the Department shall at the time such report
is made also furnish a copy thereof to the owner of the property on which the well was
constructed.

(h) Drilling for Petroleum and Minerals Excepted. – The provisions of this Article shall
not apply to drillings for petroleum and minerals.

(i) Penalty for Violation. – Any person violating the provisions of subsections (e), (f)
and (g) of G.S. 143-355 shall be guilty of a Class 3 misdemeanor and, upon conviction, shall
only be punished by a fine of fifty dollars ($50.00). Each violation shall constitute a separate
offense.

(j) Miscellaneous Duties. – The Department shall make investigations of water supplies
and water powers, prepare and maintain a general inventory of the water resources of the State
and take such measures as it may consider necessary to promote their development; and to
supervise, guide, and control the performance of the duties set forth in subsection (b) of this
section and to hold hearings with regard thereto. In connection with administration of the
well-drilling law the Department may prepare analyses of well cuttings for mineral and
petroleum content.

(k) Water Use Information. – Any person using, withdrawing, diverting or obtaining
water from surface streams, lakes and underground water sources shall, upon the request of the
Department, file a monthly report with the Department showing the amount of water used,
withdrawn, diverted or obtained from such sources. Such report shall be on a form supplied by
the Department and shall show the identification of the water well or other withdrawal facility,
location, withdrawal rate (measured in gallons per minute), and total gallons withdrawn during
the month. Reports required to be filed under this subsection shall be filed on or before the
fifteenth day of the month succeeding the month during which the using, withdrawing,
diverting or obtaining water required to be reported occurred. This subsection does not apply to
withdrawals or uses by individuals or families for household, livestock, or gardens. All reports
required under this subsection are provided solely for the purpose of the Department. Within
the meaning of this subsection the term "person" means any and all persons, including
individuals, firms, partnerships, associations, public or private institutions, municipalities or
political subdivisions, governmental agencies, and private or public corporations organized or
existing under the laws of this State or any other state or country. In the event of extreme or
exceptional drought or other water shortage, the Department may require each local
government water system and each large community water system in the affected area to report
the amount of water used, withdrawn, diverted, or obtained on a weekly basis and may require
the reporting of additional information necessary to assess and manage the drought or water
shortage.

(l) Local Water Supply Plans. – Each unit of local government that provides public
water service or that plans to provide public water service and each large community water
system shall, either individually or together with other units of local government and large
community water systems, prepare a local water supply plan and submit it to the Department
for approval. The Department shall provide technical assistance with the preparation of plans to units of local government and large community water systems upon request and to the extent that the Department has resources available to provide assistance. At a minimum, each unit of local government and large community water system shall include in local water supply plans all information that is readily available to it. Plans shall include present and projected population, industrial development, and water use within the service area; present and future water supplies; an estimate of the technical assistance that may be needed at the local level to address projected water needs; current and future water conservation and water reuse programs, including a plan for the reduction of long-term per capita demand for potable water; a description of how the local government or large community water system will respond to drought and other water shortage emergencies and continue to meet essential public water supply needs during the emergency; and any other related information as the Department may require in the preparation of a State water supply plan. A unit of local government or large community water system shall submit a revised plan that specifies how the water system intends to address foreseeable future water needs when eighty percent (80%) of the water system's available water supply based on calendar year average daily demand has been allocated to current or prospective water users or the seasonal demand exceeds ninety percent (90%). Local plans shall be revised to reflect changes in relevant data and projections at least once each five years unless the Department requests more frequent revisions. The revised plan shall include the current and anticipated reliance by the local government unit or large community water system on surface water transfers as defined by G.S. 143-215.22G. Local plans and revised plans shall be submitted to the Department once they have been approved by each unit of local government and large community water system that participated in the preparation of the plan.

(m) Repealed by Session Laws 2017-209, s. 4(a), effective October 4, 2017.
(n) Repealed by Session Laws 2017-10, s. 4.16(a), effective May 4, 2017.
(o) Baseline Hydrologic Models. – The Department shall develop a basinwide hydrologic model for each of the 17 major river basins in the State as provided in this subsection.

(1) Definitions. – As used in this subsection:

a. "Ecological flow" means the stream flow necessary to protect ecological integrity.

b. "Ecological integrity" means the ability of an aquatic system to support and maintain a balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to prevailing ecological conditions and, when subject to disruption, to recover and continue to provide the natural goods and services that normally accrue from the system.

c. "Groundwater resource" means any water flowing or lying under the surface of the earth or contained within an aquifer.

d. "Prevailing ecological conditions" means the ecological conditions determined by reference to the applicable period of record of the United States Geological Survey stream gauge data, including data reflecting the ecological conditions that exist after the construction and operation of existing flow modification devices, such as dams, but excluding data collected when stream flow is temporarily affected by in-stream construction activity.

e. "Surface water resource" means any lake, pond, river, stream, creek, run, spring, or other water flowing or lying on the surface of the earth.
(2) Schedule. – The Department shall develop a schedule for basinwide hydrologic model development. In developing the schedule, the Department shall give priority to developing hydrologic models for river basins or portions of river basins that are experiencing or are likely to experience water supply shortages, where the ecological integrity is threatened or likely to become threatened, or for which an existing hydrologic model has not been developed by the Department or other persons or entities.

(3) Model. – Each basinwide hydrologic model shall:

a. Include surface water resources within the river basin, groundwater resources within the river basin to the extent known by the Department, transfers into and out of the river basin that are required to be registered under G.S. 143-215.22H, other withdrawals, ecological flow, instream flow requirements, projections of future withdrawals, an estimate of return flows within the river basin, inflow data, local water supply plans, and other scientific and technical information the Department deems relevant.

b. Be designed to simulate the flows of each surface water resource within the basin that is identified as a source of water for a withdrawal registered under G.S. 143-215.22H in response to different variables, conditions, and scenarios. The model shall specifically be designed to predict the places, times, frequencies, and intervals at which any of the following may occur:
   1. Yield may be inadequate to meet all needs.
   2. Yield may be inadequate to meet all essential water uses.
   3. Ecological flow may be adversely affected.

c. Be based solely on data that is of public record and open to public review and comment.

(4) Ecological flow. – The Department shall characterize the ecology in the different river basins and identify the flow necessary to maintain ecological integrity. The Department shall create a Science Advisory Board to assist the Department in characterizing the natural ecology and identifying the flow requirements. The Science Advisory Board shall include representatives from the Divisions of Water Resources and Water Quality of the Department, the North Carolina Wildlife Resources Commission, the North Carolina Marine Fisheries Commission, and the Natural Heritage Program. The Department shall also invite participation by the United States Fish and Wildlife Service; the National Marine Fisheries Service; representatives of organizations representing agriculture, forestry, manufacturing, electric public utilities, and local governments, with expertise in aquatic ecology and habitat; and other individuals or organizations with expertise in aquatic ecology and habitat. The Department shall ask the Science Advisory Board to review any report or study submitted to the Department for consideration that is relevant to characterizing the ecology of the different river basins and identifying flow requirements for maintenance of ecological integrity. The Department shall consider such other information, including site specific analyses, that either the Board or the Department considers relevant to determining ecological flow requirements.

(5) Interstate cooperation. – To the extent practicable, the Department shall work with neighboring states to develop basinwide hydrologic models for each river basin shared by North Carolina and another state.
(6) Approval and modification of hydrologic models. –
   a. Upon completion of a hydrologic model, the Department shall:
      1. Submit the model to the Commission for approval.
      2. Publish in the North Carolina Register notice of its
         recommendation that the Commission approve the model and
         of a 60-day period for providing comment on the model.
      3. Provide electronic notice to persons who have requested
         electronic notice of the notice published in the North Carolina
         Register.
   b. Upon receipt of a hydrologic model, the Commission shall:
      1. Receive comment on the model for the 60-day period noticed
         in the North Carolina Register.
      2. Act on the model following the 60-day comment period.
   c. The Department shall submit any significant modification to an
      approved hydrologic model to the Commission for review and
      approval under the process used for initial approval of the model.
   d. A hydrologic model is not a rule, and Article 2A of Chapter 150B of
      the General Statutes does not apply to the development of a
      hydrologic model.

(7) Existing hydrologic models. – The Department shall not develop a
   hydrologic model for a river basin for which a hydrologic model has already
   been developed by a person or entity other than the Department, if the
   Department determines that the hydrologic model meets the requirements of
   this subsection. The Department may adopt a hydrologic model that has been
   developed by another person or entity that meets the requirements of this
   subsection in lieu of developing a hydrologic model as required by this
   subsection. The Department may make any modifications or additions to a
   hydrologic model developed by another person or entity that are necessary to
   meet the requirements of this subsection.

(8) Construction of subsection. – Nothing in this subsection shall be construed
   to vary any existing, or impose any additional regulatory requirements,
   related to water quality or water resources.

(9) Repealed by Session Laws 2017-10, s. 4.16(b), effective May 4, 2017.

(p) Report. – The Department of Environmental Quality shall report to the
Environmental Review Commission on the implementation of this section, including
the development of basinwide hydrologic models, no later than November 1 of each year. The
Department shall submit the report required by this subsection with the report on basinwide
water management plans required by G.S. 143-215.8B(d) as a single report. (1959, c. 779, s. 3;
1961, c. 315; 1967, c. 1069, ss. 1-3; c. 1070, s. 1; c. 1071, ss. 3, 4; c. 1117, s. 1; 1973, c. 1262,
ss. 23, 28, 86; 1977, c. 771, s. 4; 1981, c. 514, ss. 2, 3; 1989, c. 603, s. 1; 1993, c. 513, s. 7(a);
c. 539, s. 1034; 1994, Ex. Sess., c. 24, s. 14(c); 1995, c. 509, s. 85; 1997-358, ss. 5, 6;
1998-129, s. 1; 1998-168, s. 5; 2001-452, s. 2.7; 2002-167, ss. 1, 2; 2003-387, s. 1; 2008-143, s.
7; 2010-143, s. 2; 2010-150, s. 1; 2011-374, ss. 1.1, 3.1; 2015-241, s. 14.30(u); 2017-10, ss.
4.16(a), (b), (c); 2017-209, ss. 4(a), (b).)