

CAPACITY USE AREA #1 PROGRAM

ANNUAL REPORT

**Water Use and Compliance Trends
from September 1996 to August 1997**

**North Carolina Department of Environment
and Natural Resources**

Division of Water Resources

February 1998

INTRODUCTION

The Capacity Use Program requires permits for water withdrawal at rates equal to or exceeding 100,000 gallons per day in Capacity Use Area (CUA) #1, located in the east-central Coastal Plain (see Figure 1). Proposed withdrawals of ground or surface water are reviewed and approved through the permitting process. When the Division of Water Resources (DWR) receives a permit application, it is reviewed to assure that the proposed withdrawal will not harm the resource, or interfere with the use of water by others. Well construction details, water intake locations and pumping rates are compared to information on surface water body or aquifer properties, water levels and water quality data gathered from other permittees and from the state's regional monitoring network. Once a permit is issued, the permittee must perform monitoring of water levels and pumping rates and report this information to the Division of Water Resources. This monitoring data is added to Division's data bases and is reviewed to identify trends and potential problems in CUA #1. Currently, the permitting program establishes a daily maximum withdrawal rate, regardless of the number of days that water is used. The daily maximum withdrawal rate is specified in the permit as required by the Water Use Act of 1967.

This Annual Report provides a summary of CUA #1, including current water use, aquifer water levels and management activities being undertaken to assure the continued protection and effective use of water sources in CUA #1.

CURRENT WATER USE TRENDS

Current users can be classified by type of use (such as agricultural, mining or public supply). The demand for water may vary over time for different uses, being relatively constant for some uses (public supply or industrial) or more variable for others (such as crop irrigation or filling of aquaculture ponds). The most important aquifer in CUA #1 is the Castle Hayne Limestone, which yields large quantities of usable water across most of the area. The top of the Castle Hayne aquifer occurs at a depth of less than 10 feet along part of the southern edge of CUA #1 to a depth of greater than 400 feet in eastern parts of the area. Most large capacity wells are completed in the Castle Hayne. Locally, some wells withdraw water from the overlying surficial and Croatan aquifers. In the western part of CUA #1, some wells are completed in the underlying Cretaceous aquifers. The following summary is based on the usage reports submitted by permittees in CUA #1 from September 1996 to August 1997.

Surface Water Use

Surface water is an important source for several users, however, most surface water withdrawals in CUA #1 are treated and returned to the water body after use. Surface water used for irrigation or withdrawn to promote drainage are replaced, in part, by return flows or discharges to the drainage system. As shown in Table 1 and Figure 2, surface water is used primarily for industrial supply, drainage and irrigation. Each chart in Figure 2 shows the proportion of water volume reported by users and the maximum annual permitted withdrawals. Reported total withdrawals were just over 62 billion gallons (42 billion gallons of surface water and 20 billion gallons of ground water). If each permittee used the maximum permitted amount, 119 billion gallons per year would be used (about 59 billion gallons each for surface water and ground water).

Surface water is a relatively minor source for public supply in CUA #1 because the flat topography of the Coastal Plain does not provide locations suitable for the construction of dams and reservoirs along the region's rivers. More than half of the surface water used in CUA #1 is withdrawn from

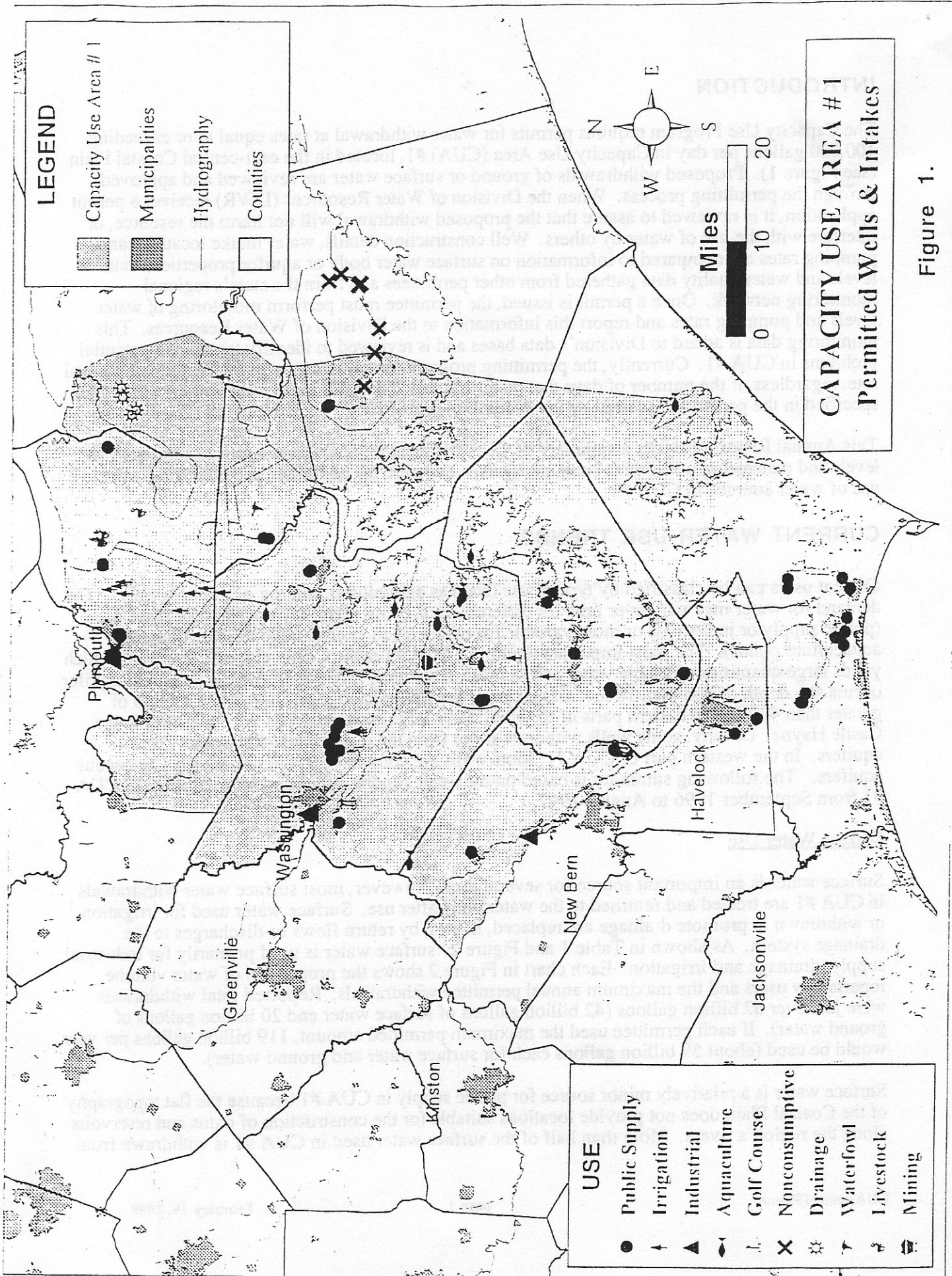
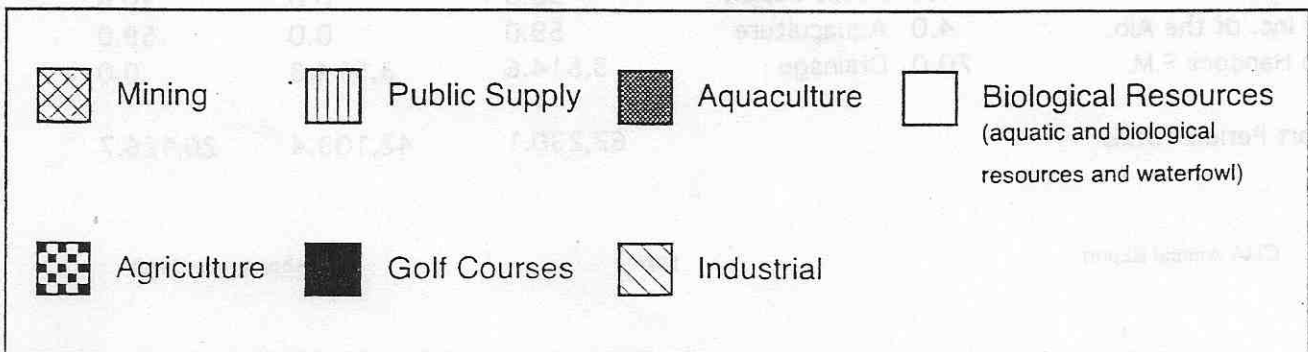
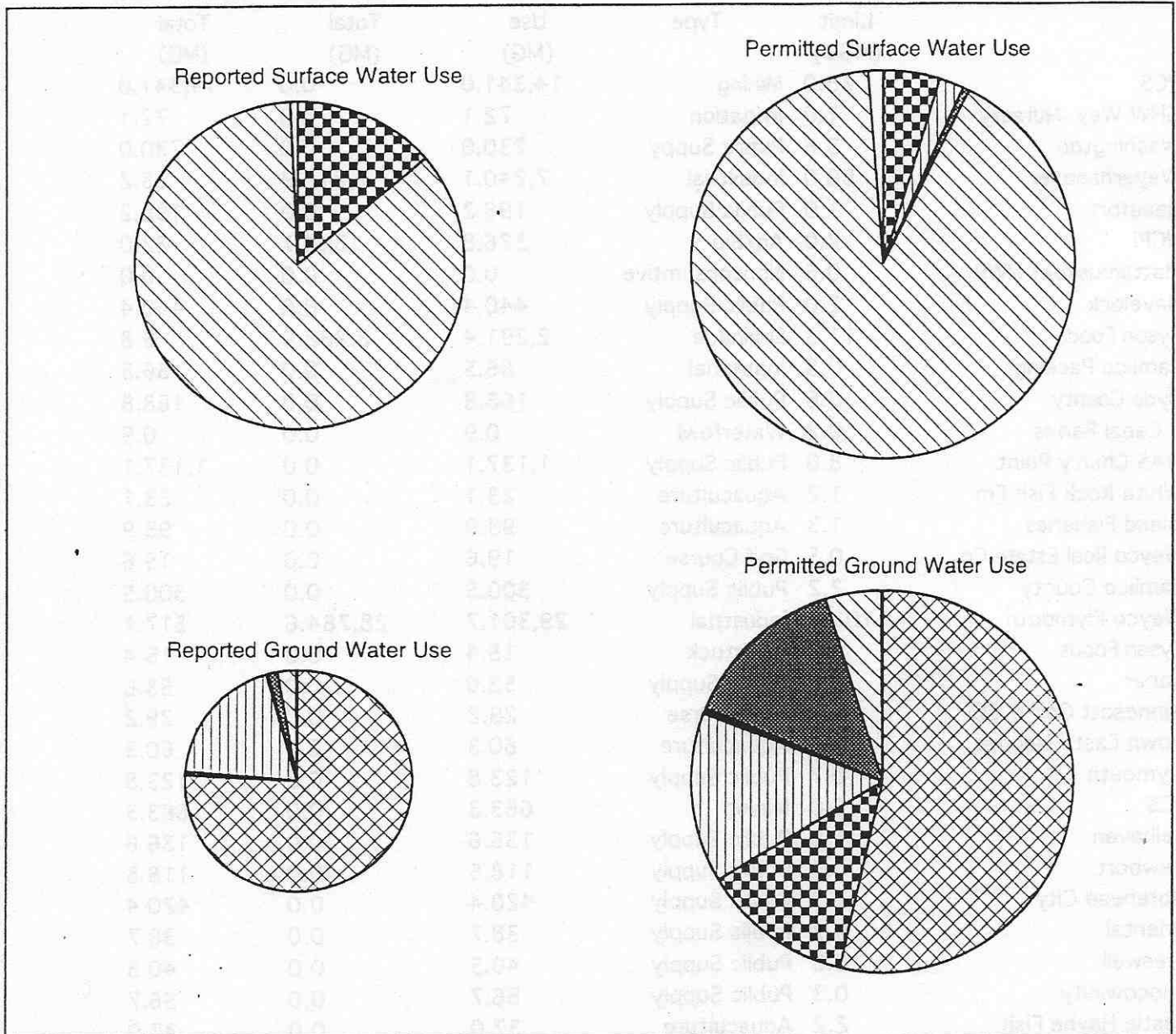


Table 1. Usage Totals for Capacity Use Area #1

Permittee	Permit Limit (MGD)	Use Type	Total Use (MG)	Surface Water	Ground Water
				Total (MG)	Total (MG)
PCS	78.0	Mining	14,341.0	0.0	14,341.0
GHW Wey. Nursery	1.0	Irrigation	72.1	0.0	72.1
Washington	3.6	Public Supply	730.0	0.0	730.0
Weyerhaeuser	50.0	Industrial	7,240.1	7,216.9	23.2
Beaufort	1.0	Public Supply	198.2	0.0	198.2
NCPI	2.0	Aq/Bio	326.8	304.7	22.0
Mattamuskeet NWR	0.5	Nonconsumptive	0.0	0.0	0.0
Havelock	2.0	Public Supply	440.4	0.0	440.4
Tyson Foods	11.3	Drainage	2,291.4	2,282.6	8.8
Pamlico Packing	0.5	Industrial	86.5	0.0	86.5
Hyde County	0.6	Public Supply	168.8	0.0	168.8
C Canal Farms	0.2	Waterfowl	0.9	0.0	0.9
MAS Cherry Point	8.0	Public Supply	1,137.1	0.0	1,137.1
White Rock Fish Fm	1.2	Aquaculture	23.1	0.0	23.1
Island Fisheries	1.3	Aquaculture	93.9	0.0	93.9
Weyco Real Estate Co.	0.5	Golf Course	19.6	0.0	19.6
Pamlico County	2.2	Public Supply	300.5	0.0	300.5
Weyco Plymouth	101.1	Industrial	29,301.7	28,784.6	517.1
Tyson Foods	0.2	Livestock	15.4	0.0	15.4
Roper	0.3	Public Supply	53.6	0.0	53.6
Minnesott Golf & CC	0.3	Golf Course	29.2	0.0	29.2
Down East Fisheries	0.7	Aquaculture	60.3	0.0	60.3
Plymouth	0.7	Public Supply	123.8	0.0	123.8
PCS	8.0	Mining	663.3	0.0	663.3
Belhaven	1.0	Public Supply	136.6	0.0	136.6
Newport	0.9	Public Supply	118.5	0.0	118.5
Morehead City	2.5	Public Supply	420.4	0.0	420.4
Oriental	0.2	Public Supply	38.7	0.0	38.7
Creswell	0.6	Public Supply	40.3	0.0	40.3
Chocowinity	0.3	Public Supply	56.7	0.0	56.7
Castle Hayne Fish.	2.2	Aquaculture	37.0	0.0	37.0
CWS Systems	1.0	Public Supply	90.8	0.0	90.8
Bray Inc. of the Alb.	4.0	Aquaculture	59.0	0.0	59.0
John Hancock F.M.	70.0	Drainage	3,514.6	3,514.6	0.0
Report Period Totals			62,230.1	42,103.4	20,126.7

Figure 2. Surface and Ground Water Total Permitted and Reported Use Values



the Roanoke River in Martin County for use by a paper mill. Most surface water usage for agricultural irrigation and drainage is withdrawn by large commercial farms in Tyrrell County. Agricultural and aquaculture operations only require withdrawal during certain periods for the crop growing season, or to refill the fish raising ponds. Other uses, such as industrial activity, mining and public supply require water withdrawals at a more constant rate. Figure 3 shows the monthly use totals reported for agricultural and industrial uses. Note the large volumes withdrawn in September and October 1997 reflect drainage requirements in response to tropical storms that affected the area. Large rainfall events required high volume discharges to minimize flooding of agricultural lands.

Ground Water Use

As shown in Table 1 and Figure 2, approximately 75 percent of permitted ground water withdrawals are made for mining operations. Both mining permits are held by PCS Phosphate, a mining operation near Aurora. Permit CU1007 is for dewatering of the Croatan and Surficial Aquifers, which overly the phosphate ore; permit 03 allows pumping from the Castle Hayne aquifer, beneath the phosphate beds. Pumping the Castle Hayne reduces pressure in the aquifer, which prevents upward flow from the aquifer into the mining pits. During the reporting period, the Castle Hayne aquifer was pumped by PCS at a rate of just under 40 million gallons per day (MGD). In the past, up to 60 MGD has been pumped from the Castle Hayne for phosphate mining, but changes in geologic conditions currently allow the operators to keep the mine pit dry at lower pumping rates. Available information indicates that pumping rates may increase in the future as ore is mined at greater depths and under varying geologic conditions. Most other large volume users of ground water are industries and cities and towns which use ground water for public supply.

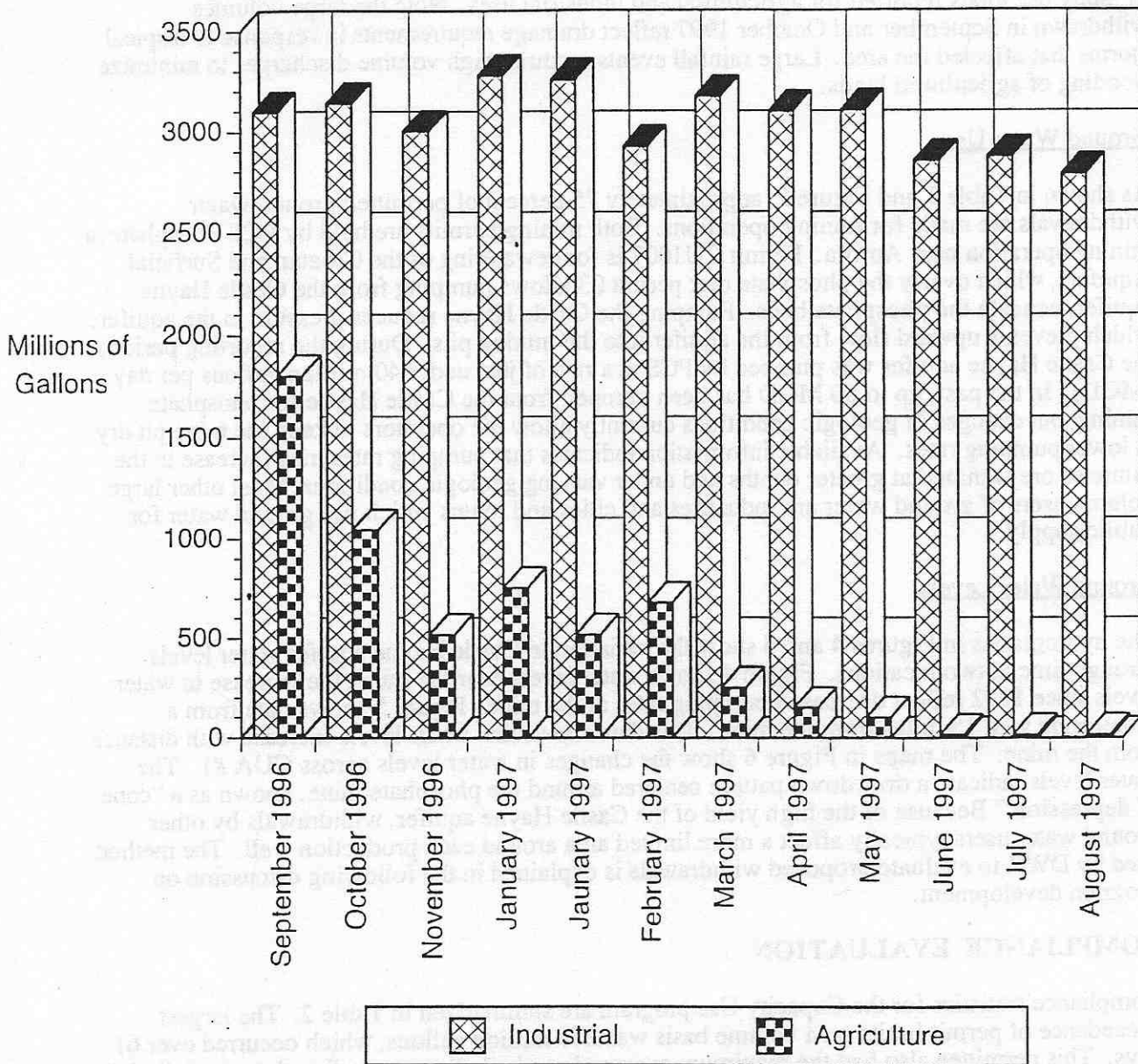
Ground Water Levels

The hydrographs in Figures 4 and 5 show the variation in Castle Hayne aquifer water levels through time at two locations. Figure 4 shows water levels near the mine; the increase in water levels since 1992 reflect decreased pumping rates at the mine. Figure 5 shows data from a monitoring well 15 miles from the mine. This data shows that water levels increase with distance from the mine. The maps in Figure 6 show the changes in water levels across CUA #1. The water levels indicate a drawdown pattern centered around the phosphate mine, known as a "cone of depression." Because of the high yield of the Castle Hayne aquifer, withdrawals by other ground water users typically affect a more limited area around each production well. The method used by DWR to evaluate proposed withdrawals is explained in the following discussion on program development.

COMPLIANCE EVALUATION

Compliance statistics for the Capacity Use program are summarized in Table 2. The largest exceedance of permit limits on a volume basis was 276 million gallons, which occurred over 61 days. This permittee also had the maximum overuse in a single day, exceeding the permit limit by 6 million gallons. The greatest number of days the permit limit was exceeded by a single permittee was 145 days, but resulted in a total withdrawal above the permit limit of just over 11 million gallons. 75 percent of permittees had no violations. Because existing permit limits are based on the volume requested in the application, DWR will re-evaluate the permit limits of repeat violators and may modify the limits of some existing permits (once an assessment has been conducted that shows the new limit would not result in negative impacts on the aquifer). Also, some violations appear to be the result of reporting problems, such as usage volumes for multiple

Figure 3. Monthly Water Use Totals for Industrial and Agricultural Uses



(Note: Incomplete data may have been reported for agricultural use in June, July and August, 1997)

Figure 4. Hydrograph of Aurora Research Station Monitoring Well

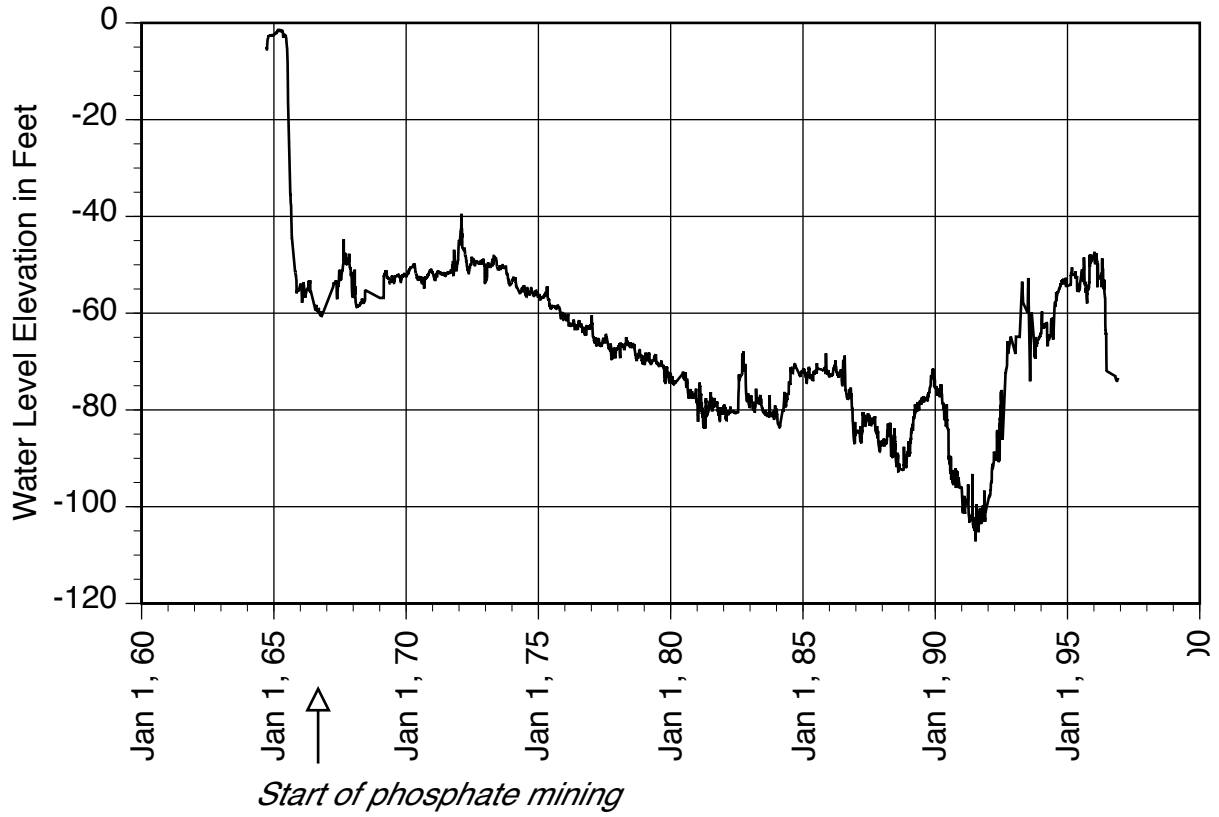
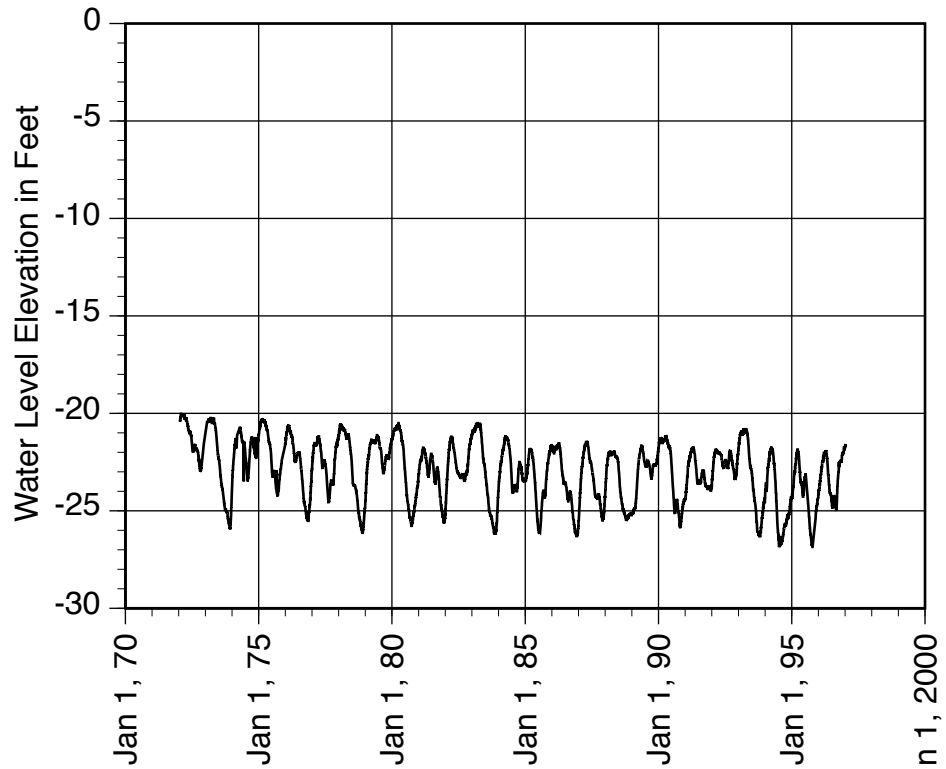
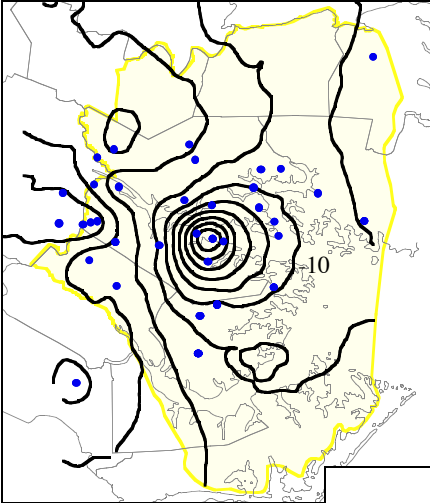


Figure 5. Hydrograph of Creeping Swamp Research Station Monitoring Well (southwestern Beaufort County)

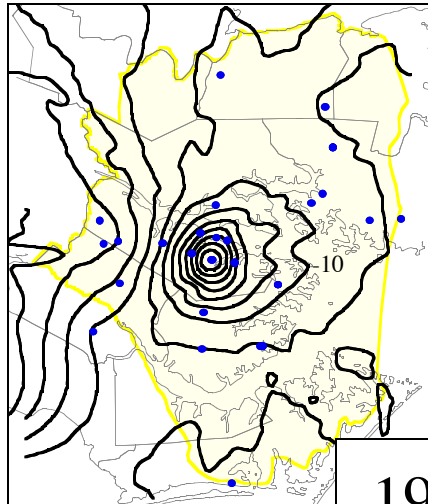


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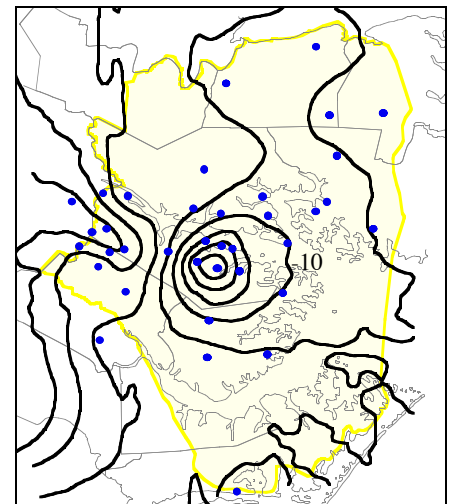


Capacity Use Area #1

1991



1994



The potentiometric surface maps of the Castle Hayne aquifer shown here illustrate the cone of depression surrounding the phosphate mine near Aurora, Beaufort County. The contour interval is ten feet and the "-10" foot contour is labeled to point out the relative size of the drawdown area. The drawdowns are deepest in the 1991 map and correlate to the hydrograph pictured on the reverse side of this page. As the hydrograph shows, water levels rebound after 1991 and the cone of depression is shallower.

USGS and NC DEHNR data -- contours delineate altitudes of the potentiometric surface -- datum equals mean sea level)

Table 2. Capacity Use Area #1 Report Period Compliance Summary

Permittee	Permit #	Overuse (MG)	# of days over	Maximum Overuse (MGD)
PCS	03	0	0	
GHW Wey. Nursery	06	0	0	
Washington	09	0	0	
Weyerhaeuser	13	0	0	
Beaufort	15	0.394	6	1.141
NCPI	20	0	0	
Mattamuskeet NWR	25	0	0	
Havelock	29	0.125	2	2.088
Tyson Foods	33	276.971	61	17.782
Pamlico Packing	34	0	0	
Hyde County	53	0.799	23	0.725
C Canal Farms	54	0	0	
MAS Cherry Point	60	0	0	
White Rock Fish Fm	90	0	0	
Island Fisheries	91	0	0	
Weyco Real Estate Co.	CU0200003	0	0	
Pamlico County	CU0200008	0	0	
Weyco Plymouth	CU0200011	0	0	
Tyson Foods	CU0200012	0	0	
Roper	CU0200014	0.436	1	0.736
Minnesott Golf & CC	CU0200015	0	0	
Down East Fisheries	CU0200017	0	0	
Plymouth	CU1001	11.222	145	1.631
PCS	CU1007	0	0	
Belhaven	CU1008	0	0	
Newport	CU1012	0	0	
Morehead City	CU1014	0	0	
Oriental	CU1022	1.806	62	0.280
Creswell	CU1046	0	0	
Chocowinity	CU1051	0.436	13	0.323
Castle Hayne Fish.	CU1073	0	0	
CWS Systems	CU1087	0	0	
Bray Inc. of the Alb.	CU1098	0	0	
John Hancock F.M.	CU1100	0	0	
Report Totals		292.189	313.000	24.706

days reported as usage for a single day after weekends and holidays. DWR will also work with these permittees to improve reporting. Some permittees did not submit reports and DWR will determine whether the permittees failed to report use and water level data or the permittees did not use water during those periods. For example, it has been determined that two permittees were commercial facilities that have gone out of business, but had not notified DWR of this.

PROGRAM DEVELOPMENT

Currently, the Capacity Use permitting process is based on an assessment of the potential impacts of each proposed withdrawal on an individual basis. Factors considered in the assessment include: proposed withdrawal rate, well location and construction, hydraulic properties of the aquifer; hydrologic relationships between the source aquifer and other aquifers and surface water; and potential for adverse impacts, including salt water intrusion, land subsidence, sinkhole development. Because multiple wells may draw water from the same aquifer in an area, there may be cumulative effects of these withdrawals. DWR is preparing geologic interpretations, collecting hydrologic data and preparing a computer simulation that will be used to evaluate the cumulative impacts of all permitted ground water withdrawals. This assessment will provide a basis for permit limits that prevent cumulative impacts that degrade or threaten aquifers. In addition, DWR is also initiating studies to identify other areas of the Coastal Plain that may be established as Capacity Use areas in the future. Findings of these studies will be presented to the Environmental Management Commission, which has authority to designate and modify Capacity Use Areas under the Water Use Act of 1967. The Act and implementing departmental regulations are included in Appendix A.

SUMMARY

Currently, overall use of water in CUA #1 is within sustainable levels. No short term or localized negative impacts have been identified in CUA #1, primarily because growth in the number of users and increased development in the Coastal Plain have been offset by decreased withdrawals related to phosphate mining, and because of the high yield of the Castle Hayne aquifer throughout CUA #1. DWR is preparing a ground water flow model that will be used to evaluate cumulative impacts of permitted withdrawals and to identify any regional problems and safe yield limits before the resource has been negatively impacted. Other areas of the Coastal Plain are also being evaluated to identify potential problems and to develop management strategies for effective and sustainable use of the available water sources.

APPENDIX A

**WATER USE ACT, REGULATIONS, CUA #1 APPLICATION FORM,
CUA #1 WATER LEVEL AND USE REPORTING FORMS**

**APPLICATION FOR
WATER USE PERMIT IN
CAPACITY USE AREA #1**

North Carolina Environmental Management Commission
Department of Environment and Natural Resources
Division of Water Resources
PO Box 27687, Raleigh, NC 27611-7687, phone: 919-733-4064

New Application Permit # Application for Permit Renewal Permit Amendment

I. Applicant Information:

(a) Applicant: _____
(Name of Person, Company, or Corporation)

(b) Mailing Address: _____
City: _____ State: _____ Zip Code: _____

(c) Authorized Contact Person: _____
(Name)

(Title) _____ (Phone Number)

II. Purpose(s) for which water is to be used (check all that apply):

- (a) Public Water Supply System* (e) Livestock Supply
- (b) Agricultural Irrigation (f) Mining, describe briefly _____
- (c) Surface drainage (g) Industrial, describe briefly _____
- (d) Aquaculture (h) Other, describe briefly _____

*If (a) above is checked, applicant must have a valid Local Water Supply Plan {GS 143-355(l) and (m)} and indicate their PWSID# _____.

III. Source(s) of Water (attach extra sheets if necessary):

(a) Ground Water: Fill in table below. Depths: feet below land surface. Land surface elevation: feet above mean sea level.

Well #	Latitude	Longitude	Well Depth	Depth to Top of Screen	Depth to Bottom of Screen	Depth to Pump Intake	Land Surface Elevation	Existing (E) or Proposed (P)	# of Gallons to be Withdrawn Daily	# of Hours to be Pumped Daily

(b) Surface Water: Fill in table below.

Intake #	Latitude	Longitude	Name of Water Body	Existing (E) or Proposed (P)	# of Gallons to be Withdrawn Daily	# of Hours to be Pumped Daily

(c) Daily withdrawals from ground water = _____ gallons.

(d) Daily withdrawals from surface water = _____ gallons.

If (c) or (d) above equals or exceeds 1,000,000 gallons, a Capacity Use Area #1 permit substitutes as a water withdrawal registration {GS 143-215.22H}.

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IV. Location of sources of withdrawal (Attach the relevant portion of a United States Geological Survey topographic map and specify the following information):

- (a) name of quadrangle
- (b) county(ies) in which withdrawal sources are located
- (c) positions of all withdrawal wells indicated in section III. (a) with daily number of gallons to be withdrawn
- (d) locations of all existing water supply wells within 1500 feet of the existing or proposed wells listed in section III. (a)
- (e) positions of all surface water withdrawal points indicated in section III. (b) with daily number of gallons to be withdrawn
- (f) locations of all discharge points for water withdrawals covered under this application with daily number of gallons to be discharged.

V. Substantiation for the amount of withdrawal requested:

Submit documentation that justifies the total withdrawal requested. Documentation could include design plans, development plans, planning studies, operation reports, past pumping records, etc. If withdrawals are to be seasonal or vary significantly from month-to-month throughout the year, describe the reasons for the variations and specify those variations.

VI. Disposal of water:

Describe how the water will be disposed of after it has been used and provide an evaluation of the potential impacts of the disposal methods.

VII. Certification:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete.

(Name)	(Official Title)	(Date)
(Signature)		

Latitude	Longitude	Point of Withdrawal	Existing (G) or Proposed (P)	Number of Gallons to be Withdrawn Daily

PART 2.

REGULATION OF USE OF WATER RESOURCES.

§ 143-215.11. Short title.

This Part shall be known and may be cited as the Water Use Act of 1967.
(1967, c. 933, s. 1.)

§ 143-215.12. Declaration of purpose.

It is hereby declared that the general welfare and public interest require that the water resources of the State be put to beneficial use to the fullest extent to which they are capable, subject to reasonable regulation in order to conserve these resources and to provide and maintain conditions which are conducive to the development and use of water resources.

(1967, c. 933, s. 2.)

§ 143-215.13. Declaration of capacity use areas.

- (a) The Environmental Management Commission may declare and delineate from time to time, and may modify, capacity use areas of the State where it finds that the use of groundwater or surface water or both require coordination and limited regulation for protection of the interests and rights of residents or property owners of such areas or of the public interest.
- (b) Within the meaning of this Part "a capacity use area" is one where the Commission finds that the aggregate uses of groundwater or surface water, or both, in or affecting said area (i) have developed or threatened to develop to a degree which requires coordination and regulation, or (ii) exceed or threaten to exceed, or otherwise threaten or impair, the renewal or replenishment of such waters or any part of them.
- (c) The Commission may declare and delineate capacity use areas in accordance with the following procedures:
 - (1) Whenever the Commission believes that a capacity use situation exists or may be emerging in any area of the State, it may direct the Department to investigate and report to the Commission thereon.
 - (2) In conducting its investigation the Department shall consult with all interested persons, groups and agencies; may retain consultants; and shall consider all factors relevant to the conservation and use of water in the area, including established or pending water classifications under Part 1 of this Article and the criteria for such classifications. Following its investigation the Department shall render a written report to the Commission. This report shall indicate whether the water use problems of the area involve surface waters, groundwaters or both and shall identify the Department's suggested boundaries for any capacity use area that may be proposed. It shall present such alternatives as the Department deems appropriate, including actions by any agency or person which might preclude the need for additional regulation at that time, and measures which might be employed limited to surface water or groundwater.
 - (3) If the Commission finds, following its review of the departmental report (or thereafter following its evaluation of measures taken falling short of regulation) that a capacity use area should be declared, it may adopt a rule declaring said capacity use area. A rule declaring an area to be a capacity use area shall delineate the boundaries of the area.
 - (4) to (6) Repealed by Session Laws 1981, c. 585, s. 3.
 - (7) Repealed by Session Laws 1987, c. 827, s. 167.
- (d) The Commission may conduct a public hearing pursuant to the provisions of this subsection in any area of the State, whether or not a capacity use area has been declared, when it has reason to believe that the withdrawal of water from or the discharge of water pollutants to the waters in such area is having an unreasonably adverse effect upon such waters. If the Commission determines that withdrawals of water from or discharge of water pollutants to the waters within such area has resulted or probably will result in a generalized

condition of water depletion or water pollution within the area to the extent that the availability or fitness for use of such water has been impaired for existing or proposed uses and that injury to the public health, safety or welfare will result if increased or additional withdrawals or discharges occur, the Commission may issue a rule:

- (1) Prohibiting any person withdrawing waters in excess of 100,000 gallons per day from increasing the amount of the withdrawal above such limit as may be established in the rule.
- (2) Prohibiting any person from constructing, installing or operating any new well or withdrawal facilities having a capacity in excess of a rate established in the rule; but such prohibition shall not extend to any new well or facility having a capacity of less than 10,000 gallons per day.
- (3) Prohibiting any person discharging water pollutants to the waters from increasing the rate of discharge in excess of the rate established in the rule.
- (4) Prohibiting any person from constructing, installing or operating any facility that will or may result in the discharge of water pollutants to the waters in excess of the rate established in the rule.
- (5) Prohibiting any agency or political subdivision of the State from issuing any permit or similar document for the construction, installation, or operation of any new or existing facilities for withdrawing water from or discharging water pollutants to the waters in such area in excess of the rates established in the rule.

The determination of the Commission shall be based upon the record of the public hearing and other information considered by the Commission in the rule-making proceeding. The rule shall describe the geographical area of the State affected thereby with particularity and shall provide that the prohibitions set forth therein shall continue pending a determination by the Commission that the generalized condition of water depletion or water pollution within the area has ceased.

Upon issuance of any rule by the Commission pursuant to this subsection, a certified copy of such rule shall be mailed by registered or certified mail to the governing body of every county, city, town, and affected political subdivision lying, in whole or in part, within the area and to every affected or interested State and federal agency. A certified copy of the rule shall be posted at the courthouse in every county lying, in whole or in part, within the area, and a notice setting forth the substantive provisions and effective date of the rule shall be published once a week for two successive weeks in a newspaper or newspapers having general circulation within the area. After publication of notice is completed, any person violating any provision of such rule after the effective date thereof shall be subject to the penalties and proceedings set forth in G.S. 143-215.17.

(1967, c. 933, s. 3; 1973, c. 698, s. 14; c. 1262, s. 23; 1977, c. 771, s. 4; 1981, c. 585, ss. 1-4; 1987, c. 827, ss. 154, 167.)

§ 143-215.14. Rules within capacity use areas; scope and procedures.

(a) Following the declaration of a capacity use area by the Commission, it shall prepare proposed rules to be applied in said area, containing such of the following provisions as the Commission finds appropriate concerning the use of surface waters or groundwaters or both:

- (1) Provisions requiring water users within the area to submit reports not more frequently than at 30-day intervals concerning quantity of water used or withdrawn, sources of water and the nature of the use thereof.
- (2) With respect to surface waters, groundwaters, or both: provisions concerning the timing of withdrawals; provisions to protect against or abate salt water encroachment; provisions to protect against or abate unreasonable adverse effects on other water users within the area, including but not limited to adverse effects on

- public use.
- (3) With respect to groundwaters: provisions concerning well-spacing controls; and provisions establishing a range of prescribed pumping levels (elevations below which water may not be pumped) or maximum pumping rates, or both, in wells or for the aquifer or for any part thereof based on the capacities and characteristics of the aquifer.
 - (4) Such other provisions not inconsistent with this Part as the Commission finds necessary to implement the purposes of this Part.
- (b) In adopting rules for a capacity use area, the Commission shall consider the factors listed in G.S. 143-215.15(h).
(1967, c. 933, s. 4; 1973, c. 1262, s. 23; 1981, c. 585, s. 5; 1987, c. 827, ss. 154, 168.)

§ 143-215.15. Permits for water use within capacity use areas - Procedures.

- (a) In areas declared by the Commission to be capacity use areas no person shall (after the expiration of such period, not in excess of six months, as the Commission may designate) withdraw, obtain, or utilize surface waters or groundwaters or both, as the case may be, in excess of 100,000 gallons per day for any purpose unless such person shall first obtain a permit therefor from the Commission.
- (b) When sufficient evidence is provided by the applicant that the water withdrawn or used from a stream or the ground is not consumptively used, a permit therefor shall be issued by the Commission without a hearing and without the conditions provided in subsection (c) of this section. Applications for such permits shall set forth such facts as the Commission shall deem necessary to enable it to establish and maintain adequate records of all water uses within the capacity use area.
- (c) In all cases in which sufficient evidence of a nonconsumptive use is not presented the Department shall notify each person required by this Part to secure a permit of the Commission's proposed action concerning such permit, and shall transmit with such notice a copy of any permit it proposes to issue to such persons, which permit will become final unless a request for a hearing is made within 15 days from the date of service of such notice. If sufficient evidence of a nonconsumptive use is not presented, the Commission may: (i) grant such permit with conditions as the Commission deems necessary to implement the rules adopted pursuant to G.S. 143-215.14; (ii) grant any temporary permit for such period of time as the Commission shall specify where conditions make such temporary permit essential, even though the action allowed by such permit may not be consistent with the Commission's rules applicable to such capacity use area; (iii) modify or revoke any permit upon not less than 60 days' written notice to any person affected; and (iv) deny such permit if the application therefor or the effect of the water use proposed or described therein upon the water resources of the area is found to be contrary to public interest. Before issuing a permit under this subsection, the Commission shall notify the permit applicant of its proposed action by sending the permit applicant a copy of the permit the Commission proposes to issue. Unless the permit applicant contests the proposed permit, the proposed permit shall become effective on the date set in the proposed permit. A water user who is dissatisfied with a decision of the Commission concerning that user's or another user's permit application or permit may commence a contested case under G.S. 150B-23.
- (d) The Commission shall give notice of receipt of an application for a permit under this Part to all other holders of permits and applicants for permits under this Part within the same capacity use area, and to all other persons who have requested to be notified of permit applications. Notice of receipt of an application shall be given within 10 days of the receipt of the application by the Commission. The Commission shall also give notice of its proposed action on any permit application under this Part to all permit holders or permit applicants within the same capacity use area at least 18 days prior to the effective date of the

proposed action. Notices of receipt of applications for permits and notice of proposed action on permits shall be by first-class mail and shall be effective upon depositing the notice, postage prepaid, in the United States mail.

- (e) Repealed by Session Laws 1981, c. 585, s. 8.
- (f) (1) Recodified as 143-215.4(d) by Session Laws 1987, c. 827, s. 169.
(2), (3) Repealed by Session Laws 1987, c. 827, s. 169.
- (g) Repealed by Session Laws 1987, c. 827, s. 169.
- (h) In determining whether to issue, modify, revoke, or deny a permit under this section, the Commission shall consider:
 - (1) The number of persons using an aquifer or stream and the object, extent and necessity of their respective withdrawals or uses;
 - (2) The nature and size of the stream or aquifer;
 - (3) The physical and chemical nature of any impairment of the aquifer or stream, adversely affecting its availability or fitness for other water uses (including public use);
 - (4) The probable severity and duration of such impairment under foreseeable conditions;
 - (5) The injury to public health, safety or welfare which would result if such impairment were not prevented or abated;
 - (6) The kinds of businesses or activities to which the various uses are related;
 - (7) The importance and necessity of the uses claimed by permit applicants (under this section), or of the water uses of the area (under G.S. 143-215.14) and the extent of any injury or detriment caused or expected to be caused to other water uses (including public use);
 - (8) Diversion from or reduction of flows in other watercourses or aquifers; and
 - (9) Any other relevant factors.

(1967, c. 933, s. 5; 1973, c. 108, s. 89; c. 698, s. 15; c. 1262, s. 23; 1977, c. 771, s. 4; 1981, c. 585, ss. 6-10; 1987, c. 827, ss. 154, 169.)

§ 143-215.16. Permits for water use within capacity use areas - Duration, transfer, reporting, measurement, present use, fees and penalties.

- (a) No permit under G.S. 143-215.15 shall be issued for a longer period than the longest of the following: (i) 10 years, or (ii) the duration of the existence of a capacity use area, or (iii) the period found by the Commission to be necessary for reasonable amortization of the applicant's water-withdrawal and water-using facilities. Permits may be renewed following their expiration upon compliance with the provisions of G.S. 143-215.15.
- (b) Permits shall not be transferred except with the approval of the Commission.
- (c) Every person in a capacity use area who is required by this Part to secure a permit shall file with the Commission in the manner prescribed by the Commission a certified statement of quantities of water used and withdrawn, sources of water, and the nature of the use thereof not more frequently than 30-day intervals. Such statements shall be filed on forms furnished by the Department within 90 days after the adoption of an order by the Commission declaring a capacity use area. Water users in a capacity use area not required to secure a permit shall comply with procedures established to protect and manage the water resources of the area. Such procedures shall be adapted to the specific needs of the area, shall be within the provisions of this and other North Carolina water resource acts, and shall be adopted after public hearing in the area. The requirements embodied in the two preceding sentences shall not apply to individual domestic water use.
- (d) If any person who is required to secure a permit under this Part is unable to furnish accurate information concerning amounts of water being withdrawn or used, or if there is evidence that his certified statement is false or inaccurate or that he is withdrawing or using a larger quantity of water or under different conditions than has been authorized by the

Commission, the Commission shall have the authority to require such person to install water meters, or some other more economical means for measuring water use acceptable to the Commission. In determining the amount of water being withdrawn or used by a permit holder or applicant the Commission may use the rated capacity of his pumps, the rated capacity of his cooling system, data furnished by the applicant, or the standards or methods employed by the United States Geological Survey in determining such quantities or by any other accepted method.

- (e) In any case where a permit applicant can prove to the Commission's satisfaction that the applicant was withdrawing or using water prior to the date of declaration of a capacity use area, the Commission shall take into consideration the extent to which such prior use or withdrawal was reasonably necessary in the judgment of the Commission to meet its needs, and shall grant a permit which shall meet those reasonable needs. Provided, however, that the granting of such permit shall not have unreasonably adverse effects upon other water uses in the area, including public use, and including potential as well as present use.
 - (f) The Commission shall also take into consideration in the granting of any permit the prior investments of any person in lands, and plans for the usage of water in connection with such lands which plans have been submitted to the Commission within a reasonable time after June 27, 1967. Provided, however, that the granting of such permit shall not have unreasonably adverse effects upon other water uses in the area, including public use, and including potential as well as present use.
 - (g) It is the intention of the General Assembly that if the provisions of subsection (e) or subsection (f) of this section are held invalid as a grant of an exclusive or separate emolument or privilege, within the meaning of Article I, Sec. 7 of the North Carolina Constitution, the remainder of this Part shall be given effect without the invalid provision or provisions.
 - (h) Pending the issuance or denial of a permit pursuant to subsection (e) or (f) of this section, the applicant may continue the same withdrawal or use which existed prior to the date of declaration of the capacity use area.
- (1967, c. 933, s. 6; 1973, c. 1262, s. 23; 1977, c. 771, s. 4; 1987, c. 827, s. 154.)

§ 143-215.17. Enforcement procedures.

- (a) Criminal Penalties. - Any person who shall be adjudged to have violated any provision of this Part shall be guilty of a Class 3 misdemeanor and shall only be liable to a penalty of not less than one hundred dollars (\$100.00) nor more than one thousand dollars (\$1,000) for each violation. In addition, if any person is adjudged to have committed such violation willfully, the court may determine that each day during which such violation continued constitutes a separate violation subject to the foregoing penalty.
- (b) Civil Penalties. -
 - (1) The Secretary may assess a civil penalty of not less than one hundred dollars (\$100.00) nor more than two hundred fifty dollars (\$250.00) against any person who violates any provisions of, or any order issued pursuant to this Part, or who violates a rule of the Commission implementing this Part.
 - (2) If any action or failure to act for which a penalty may be assessed under this Part is willful, the Secretary may assess a penalty not to exceed two hundred fifty dollars (\$250.00) per day for each day of violation.
 - (3) In determining the amount of the penalty the Secretary shall consider the factors set out in G.S. 143B-282.1(b). The procedures set out in G.S. 143B-282.1 shall apply to civil penalty assessments that are presented to the Commission for final agency decision.
 - (4) The Secretary shall notify any person assessed a civil penalty of the assessment and the specific reasons therefor by registered or certified mail, or by any means

authorized by G.S. 1A-1, Rule 4. Contested case petitions shall be filed within 30 days of receipt of the notice of assessment.

- (5) Requests for remission of civil penalties shall be filed with the Secretary. Remission requests shall not be considered unless made within 30 days of receipt of the notice of assessment. Remission requests must be accompanied by a waiver of the right to a contested case hearing pursuant to Chapter 150B and a stipulation of the facts on which the assessment was based. Consistent with the limitations in G.S. 143B-282.1(c) and (d), remission requests may be resolved by the Secretary and the violator. If the Secretary and the violator are unable to resolve the request, the Secretary shall deliver remission requests and his recommended action to the Committee on Civil Penalty Remissions of the Environmental Management Commission appointed pursuant to G.S. 143B-282.1(c).
 - (6) If any civil penalty has not been paid within 30 days after notice of assessment has been served on the violator, the Secretary shall request the Attorney General to institute a civil action in the Superior Court of any county in which the violator resides or has his or its principal place of business to recover the amount of the assessment, unless the violator contests the assessment as provided in subdivision (4) of this subsection, or requests remission of the assessment in whole or in part as provided in subdivision (5) of this subsection. If any civil penalty has not been paid within 30 days after the final agency decision or court order has been served on the violator, the Secretary shall request the Attorney General to institute a civil action in the Superior Court of any county in which the violator resides or has his or its principal place of business to recover the amount of the assessment.
 - (7) The Secretary may delegate his powers and duties under this section to the Director of the Division of Environmental Management of the Department.
- (c) Injunctive Relief. - Upon violation of any of the provisions of this Part, a rule implementing this Part, or an order issued under this Part, the Secretary may, either before or after the institution of proceedings for the collection of the penalty imposed by this Part for such violations, request the Attorney General to institute a civil action in the superior court of the county or counties where the violation occurred in the name of the State upon the relation of the Department for injunctive relief to restrain the violation or require corrective action, and for such other or further relief in the premises as said court shall deem proper. Neither the institution of the action nor any of the proceedings thereon shall relieve any party to such proceedings from the penalty prescribed by this Part for any violation of same.

(1967, c. 933, s. 7; 1973, c. 698, s. 16; c. 1262, s. 23; 1975, c. 842, s. 2; 1977, c. 771, s. 4; 1981, c. 585, s. 11; 1987, c. 827, ss. 154, 170; 1989 (Reg. Sess., 1990), c. 1036, s. 4; 1993, c. 539, s. 1020; 1994, Ex. Sess., c. 24, s. 14(c).)

§ 143-215.18. Map or description of boundaries of capacity use areas.

- (a) The Commission in designating and the Department in recommending the boundaries of any capacity use area may define such boundaries by showing them on a map or drawings, by a written description, or by any combination thereof, to be designated appropriately and filed permanently with the Department. Alterations in these lines shall be indicated by appropriate entries upon or additions to such map or description. Such entries shall be made under the direction of the Secretary of Environment, Health, and Natural Resources. Photographic, typed or other copies of such map or description, certified by the Secretary of Environment, Health, and Natural Resources, shall be admitted in evidence in all courts and shall have the same force and effect as would the original map or description. If the boundaries are changed pursuant to other provisions of this Part, the Department may provide for the redrawing of any such map. A redrawn map shall supersede for all purposes the earlier map or all maps which it is designated to replace.

- (b) The Department shall file with the Secretary of State a certified copy of the map, drawings, description or combination thereof, showing the boundaries of any capacity use area designated by the Commission; and a certified copy of any redrawn or altered map or drawing, and of any amendments or additions to written descriptions, showing alterations to said boundaries.

(1967, c. 933, s. 8; 1973, c. 1262, s. 23; c. 1331, s. 3; 1977, c. 771, s. 4; 1987, c. 827, ss. 154, 171; 1989, c. 727, s. 218(107).)

§ 143-215.19. Administrative inspection; reports.

- (a) When necessary for enforcement of this Part, and when authorized by rules of the Commission, employees of the Commission may inspect any property, public or private, to investigate:

- (1) The condition, withdrawal or use of any waters;
- (2) Water sources; or
- (3) The installation or operation of any well or surface water withdrawal or use facility.

- (b) The Commission's rules must state appropriate standards for determining when property may be inspected under subsection (a).

- (c) Entry to inspect property may be made without the possessor's consent only if the employee seeking to inspect has a valid administrative inspection warrant issued pursuant to G.S. 15-27.2.

- (d) The Commission may also require the owner or possessor of any property to file written statements or submit reports under oath concerning the installation or operation of any well or surface water withdrawal or use facility.

- (e) The Commission shall accompany any request or demand for information under this section with a notice that any trade secrets or confidential information concerning business activities is entitled to confidentiality as provided in this subsection. Upon a contention by any person that records, reports or information or any particular part thereof to which the Commission has access under this section, if made public would divulge methods or processes entitled to protection as trade secrets or would divulge confidential information concerning business activities, the Commission shall consider the material referred to as confidential, except that it may be made available in a separate file marked "Confidential Business Information" to employees of the department concerned with carrying out the provisions of this Part for that purpose only. The disclosure or use of such information in any administrative or judicial proceeding shall be governed by the rules of evidence, but the affected business shall be notified by the Commission at least seven days prior to any such proposed disclosure or use of information, and the Commission will not oppose a motion by any affected business to intervene as a party to the judicial or administrative proceeding.

(1967, c. 933, s. 9; 1973, c. 1262, s. 23; 1981, c. 585, s. 12; 1987, c. 827, ss. 154, 172.)

§ 143-215.20: Repealed by Session Laws 1987, c. 827, s. 173.

§ 143-215.21. Definitions.

Unless the context otherwise requires, the following terms as used in this Part are defined as follows:

- (1), (2) Repealed by Session Laws 1987, c. 827, s. 174.
- (3) "Consumptive use" means any use of water withdrawn from a stream or the ground other than a "nonconsumptive use," as defined in this Part.
- (4) Repealed by Session Laws 1987, c. 827, s. 174.
- (5) "Nonconsumptive use" means (i) the use of water withdrawn from a stream in such a manner that it is returned to the stream without substantial diminution in quantity at or near the point from which it was taken; or, if the user owns both sides of the stream at the point

of withdrawal, the water is returned to the stream upstream of the next property below the point of diversion on either side of the stream; (ii) the use of water withdrawn from a groundwater system or aquifer in such a manner that it is returned to the groundwater system or aquifer from which it was withdrawn without substantial diminution in quantity or substantial impairment in quality at or near the point from which it was withdrawn; (iii) provided, however, that (in determining whether a use of groundwater is nonconsumptive) the Commission may take into consideration whether any material injury or detriment to other water users of the area by reason of reduction of water pressure in the aquifer or system has not been adequately compensated by the permit applicant who caused or substantially contributed to such injury or detriment.

(6), (7) Repealed by Session Laws 1987, c. 827, s. 174.
(1967, c. 933, s. 11; 1973, c. 1262, s. 23; 1977, c. 771, s. 4; 1987, c. 827, ss. 154, 174.)

§ 143-215.22. Law of riparian rights not changed.

Nothing contained in this Part shall change or modify existing common or statutory law with respect to the relative rights of riparian owners concerning the use of surface water in this State.
(1967, c. 933, s. 12.)

§ 143-215.22A. Water withdrawal policy; remedies.

- (a) It is against the public policy of North Carolina to withdraw water from any major river or reservoir if both of the following factors are present: (i) the withdrawal will cause the natural flow of water in the river or a portion of the reservoir to be reversed; and (ii) substantial portions of the water are not returned to the river system after use. For purposes of this section, a withdrawal will cause natural flow to be reversed if as a result of the withdrawal, the rate of flow in the river or discrete portion of the reservoir is 15 cubic feet per second or more, moving in a generally opposite direction than prior to the withdrawal, over a distance of more than one mile. To correct for periodic effects, including tidal influences and reservoir fluctuations, flow speed and direction shall be calculated by using annual average flow data to determine pre-withdrawal flows, and projected annual average flow assuming the maximum practical rate of withdrawal, to determine post-withdrawal flows.
- (b) This section shall not be construed to create an independent cause of action by the State or by any person. This section shall not apply to any project or facility for which a withdrawal of water began prior to the date this section is effective.

(1991, c. 567, s. 1; c. 712, ss. 5, 6.)

§ 143-215.22B. Roanoke River Basin water rights.

The State reserves and allocates to itself, as protector of the public interest, all rights in the water located in those portions of Kerr Lake and Lake Gaston that are in the State.
(1995, c. 504, s. 1.)

§§ 143-215.22C through 143-215.22F: Reserved for future codification purposes.

SUBCHAPTER 15A-2E
CAPACITY USE AREA WATER WITHDRAWAL

15A-2E.01. GENERAL PROVISIONS.

15A-2E.02. CAPACITY USE AREA NO. 1

15A-2E.03. REGISTRATION OF WATER WITHDRAWALS AND TRANSFERS.

15A-2E.04. REGULATION OF SURFACE WATER TRANSFERS.

15A-2E.01. GENERAL PROVISIONS

15A-2E.0101. AUTHORITY.

15A-2E.0102. PURPOSE.

15A-2E.0103. SCOPE.

15A-2E.0104. WATER MANAGEMENT MEASURES.

15A-2E.0105. WATER WITHDRAWAL AND USE IN YADKIN RIVER BASIN.

15A-2E.0106. DEFINITIONS.

15A-2E.0107. DELEGATION.

15A-2E.0101. AUTHORITY

Statutory Authority G.S. 143-215.12; 143-215.14;

Eff. February 1, 1976; Repealed Eff. March 1, 1985.

15A-2E.0102. PURPOSE

These regulations are intended to provide for the management of water withdrawal and uses in the designated capacity use areas as needed to conserve water resources in the areas, and to maintain conditions that are conducive to the orderly development and beneficial use of these resources.

Statutory Authority G.S. 143-215.12; 143-215.14;

Eff. February 1, 1976.

15A-2E.0103. SCOPE

These regulations establish general and specific requirements that are applicable to all persons who withdraw, obtain or utilize water within the designated capacity use areas. Special requirements applicable to individual users will normally be included in appropriate water use permits.

Statutory Authority G.S. 143-215.14;

Eff. February 1, 1976.

15A-2E.0104. WATER MANAGEMENT MEASURES

Statutory Authority G.S. 143-215.14;

Eff. February 1, 1976; Repealed Eff. March 1, 1985.

15A-2E.0105. WATER WITHDRAWAL AND USE IN YADKIN RIVER BASIN

Statutory Authority G.S. 143-215.13; 143-215.20; 143-215.3(a)(1);

Eff. February 17, 1977; Amended Eff. January 1, 1979; Repealed Eff. March 1, 1985.

15A-2E.0106. DEFINITIONS

As used herein, unless the context otherwise requires:

(1) "Director" means the Director of the Division of Environmental Management.

(2) "Division" means the Division of Environmental Management.

Statutory Authority G.S. 87-87; 143-215.14; 143-215.21;

Eff. March 1, 1985.

15A-2E.0107. DELEGATION

(a) The Director is delegated the authority to grant, modify, revoke or deny permits under G.S. 143-215.15 and G.S. 143-215.16.

(b) The Director may delegate any permitting function given by the rules of this Subchapter.

(c) The Director is delegated the authority to assess civil penalties and request the Attorney General to institute civil actions under G.S. 143-215.17.

(d) The Director of the Division of Water Resources is delegated the authority to process applications and collect fees for registration of water withdrawals and transfers under G.S. 143-215.22H and G.S. 143-215.3(a)(1b).

(e) The Director of the Division of Water Resources may delegate any water withdrawal or transfer registration processing functions given by the rules of this Subchapter.

Statutory Authority G.S. 143-215.3(a)(1); 143-215.3(a)(4);

Filed as a Temporary Amendment Eff. October 14, 1991 for a Period of 180 Days to Expire on April 11, 1992; Eff. March 1, 1985; Amended Eff. September 1, 1994; April 1, 1992.

15A-2E.02. CAPACITY USE AREA NO. 1

15A-2E.0201. DECLARATION AND DELINEATION OF CAPACITY USE AREA NO. 1

15A-2E.0202. PERSONS WITHDRAWING GROUNDWATER IN CAPACITY USE AREAS.

15A-2E.0203. WITHDRAWALS BETWEEN 10,000 G.P.D. AND ONE MILLION G.P.D.

15A-2E.0204. PERSONS WITHDRAWING ONE MILLION G.P.D.

15A-2E.0205. ACTIVITIES.

15A-2E.0206. NONCONSUMPTIVE USE PERMITS.

15A-2E.0207. CONFIDENTIAL INFORMATION.

15A-2E.0208. SEVERABILITY.

15A-2E.0201. DECLARATION AND DELINEATION OF CAPACITY USE AREA NO. 1

The Environmental Management Commission on the 18th day of December, 1968, declared and delineated the following described geographical area a capacity use area:

"That area bounded by a line beginning at the intersection of Highway US 17 and Roanoke River, at Williamston, and running south along Highway US 17 to the Martin-Beaufort Counties line; thence northwest along the Martin-Beaufort Counties line to the Pitt County line; thence generally south along the Pitt-Beaufort Counties line to the Craven County line; thence southwest along the Pitt-Craven Counties line to the Neuse River; thence southeast along the Neuse River to New Bern; thence south along Highway US 70 to Morehead City and on to Atlantic; thence north along the eastern edge of Cedar Island, across Pamlico Sound, along the eastern edge of Great Island, to the intersection of Highways US 264 and NC 94 near the south shore of Lake Mattamuskeet; thence north along Highway NC 94 to Columbia; thence west along the south shore of Albemarle Sound to the mouth of Roanoke River; thence generally southwest along Roanoke River to Highway US 17 at Williamston, the beginning."

Statutory Authority G.S. 143-215.13;

Eff. February 1, 1976.

15A-2E.0202. PERSONS WITHDRAWING GROUNDWATER IN CAPACITY USE AREAS

(a) Permits Required

(1) Water Use Permit

(A) No person shall, after June 18, 1969 (as designated the Commission), withdraw, obtain or utilize surface waters or ground waters, or both, in excess of 100,000 gallons per day for any purpose unless such person shall first apply for a water use permit therefor from the Director.

(B) Application for such water use permit shall be submitted on a form approved by the Director. An approved form, may be obtained from the Department of Natural Resources and Community Development, P.O. Box 27687, Raleigh, N.C. 27611. The application shall describe the specific purpose or purposes for

which the water will be withdrawn or used, and shall justify the quantity needed for each purpose. Each application submitted to the Division will be considered and acted upon as soon as practicable. Pending the Director's issuance or denial of a permit, the applicant may continue the same withdrawal or use which existed prior to the date of declaration of the capacity use area.

(C) Water use permits shall be issued for a period to be determined by the Director but not to exceed the longest of the following:

(i) 10 years, or

(ii) the duration of the existence of the capacity use area, or

(iii) the period found by the Director to be necessary for reasonable amortization of the applicant's water withdrawal and water using facilities.

(D) Each water use permit shall be subject to review, modification or renewal by the Director as set forth in Section 143-215.15(c) of the General Statutes of North Carolina (Water Use Act of 1967). Holders of water use permits will be expected to notify the Director of any major changes in usage. Review of water use permits may require the justification of continuing needs and the documentation of all water conservation measures.

(E) Water use permits shall not be transferred except with the approval of the Director.

(F) Water withdrawn under any water use permit shall be used only for the purpose(s) set forth in the permit.

(2) Well Construction Permit

(A) A well construction permit shall be obtained prior to construction of all wells except those constructed for individual domestic water supplies.

(B) Application for a well construction permit shall be made of Form GW22, "Application for Permit to Construct a Well," which can be obtained from the Division. The application shall state the purpose of the well, and shall include the proposed location, construction specifications, the estimated withdrawal rate, the location and ownership of all water-supply wells within a radius of either:

(i) 1,000 feet for wells withdrawing less than 100,000 gallons per day;

(ii) 1,500 feet for wells withdrawing 100,000 to 1,000,000 gallons per day;

(iii) 2,500 feet for wells withdrawing more than 1,000,000 gallons per day; and such other information as the Director may reasonably deem necessary.

(b) Withdrawal and Water-Level Controls Required

(1) Total Quantity. The water use permit issued by the Director shall establish the maximum total quantity that may be withdrawn daily, and may specify the timing of withdrawals.

(2) Maximum Withdrawal Rates. Maximum rates of withdrawal of water from individual wells or surface-water intakes may be set forth in the water use permit issued by the Director, when the Director determines that such control is required to conserve water or protect the water quality.

(3) Maximum Drawdown Levels. The water use permit may specify the lowest water level that may be produced in any well or wells.

(4) Additional Provisions. The water use permit shall be issued subject to such other provisions as the Director deems necessary to conserve or protect the water resources of the capacity use area. The permit may:

(A) require that the applicant cooperate with the Division, and with other users of water in the affected area, in determining and implementing reasonable and practical methods and processes to conserve and protect the water resources while avoiding or minimizing adverse effects on the quantity and quality of water available to persons whose water supply has been materially reduced or impaired as a result of withdrawals made pursuant to water use permits;

(B) require that any portion of the water withdrawn be returned to the source or to any other stream or aquifer as approved by the Director;

(C) require the holder of a water use permit to obtain the Director's approval of the locations and distribution of individual surface-water intakes and wells, and of the depths, zones, aquifers or parts of aquifers from which withdrawals may be made;

- (D) require that each well or surface-water intake be equipped with an approved monitoring device that will provide a continuous record of withdrawals within an accuracy of plus or minus five percent;
- (E) require that observation stations or wells be installed and maintained for monitoring water levels and water quality;
- (F) require that holders of water use permits unite in joint efforts to conserve water quantity and quality by any and all of the requirements in this Rule when applicable.

(c) Reports Required

(1) Well Record or Well Completion or Abandonment Report. Any person completing or abandoning any well shall furnish the Director, on Form GW-1, a certified record of the construction or abandonment of such well within a period of 30 days from completion of construction or abandonment, as required in the provisions of Article 7, Chapter 87 and Article 38, Chapter 143, General Statutes of North Carolina. The required completion report shall include the location, size, depth, casing record, method of finishing, formation log, static water level, yield data and records of any surveys, geophysical logs, test or water analyses. Samples of formation cuttings from all wells shall be furnished to the Director except when the Director specifies that such samples are not required. For wells withdrawing more than 1,000,000 gallons a day, a description of the proposed device for metering withdrawals is required. The required abandonment report shall include the location and method of sealing and plugging.

(2) Reports and Records of Withdrawal from each Source. For withdrawals of more than 100,000 gallons per day, monthly reports of daily withdrawals from each well or surface-water intake shall be furnished to the Director not later than 15 days after the end of each calendar month. Withdrawals shall be measured by a method acceptable to the Director. Withdrawals of 1,000,000 gallons per day or more shall be measured by an approved metering device, equipped with an automatic chart recorder, and having any accuracy of plus or minus five percent. The required reports shall include copies of chart recordings.

(3) Reports of Water Levels. For withdrawals of less than 1,000,000 gallons per day, water level reporting, if required, may be specified in the permit. For withdrawals of 1,000,000 gallons per day or more monthly reports of water levels shall be furnished to the Director not later than 15 days after the end of each calendar month as follows:

(A) the pumping water level for each supply well as measured with a steel or electric tape from a fixed reference point each day at approximately the same hour, or at such other time intervals as may be satisfactory to the Director. The measurements shall be within accuracy limits of plus or minus 0.25 of a foot or three inches.

(B) The level of each surface water used as a source of supply, as measured by a method and at such frequency as specified in the permit.

(C) The Water levels in observation wells other than supply wells as measured from a fixed reference point at intervals specified by the permit.

(4) Other Reports. The Director may require reports of other data pertinent and necessary to the evaluation of the effects of withdrawals.

Statutory Authority G.S. 143-215.14; 143-215.15;

Eff. February 1, 1976; Amended Eff. March 1, 1985.

15A-2E.0203. WITHDRAWALS BETWEEN 10,000 G.P.D. AND ONE MILLION G.P.D.

15A-2E.0204. PERSONS WITHDRAWING ONE MILLION G.P.D.

Statutory Authority G.S. 143-215.1; 143-215.14; 143-215.15;

Eff. February 1, 1976; Amended Eff. January 1, 1979; November 1, 1978; Repealed Eff. March 1, 1985.

15A-2E.0205. ACTIVITIES

Activities Requiring Prior Approval by the Commission. No construction or installation of works of improvement which may significantly affect the quantity or quality of the water resources shall be undertaken without prior approval from the Commission. These include, but are not necessarily limited to,

the following:

(1) Surface Drainage Projects

(a) Any project involving the drainage or diversion of ponded or standing water, except water temporarily impounded as the result of flooding, from an area in excess of five acres;

(b) Application for approval of any such project shall include:

(i) a description of the area,

(ii) purpose of the project and method of drainage, and

(iii) a general evaluation of the probable effects of the project on the water resources.

(2) Subsurface Drainage Projects

(a) Any project involving the withdrawal or diversion of ground water, except for the purpose of water supply or agricultural use, that will probably result in lowering existing ground water levels or artesian head more than three feet for a period of one year in any area of more than five acres;

(b) Application for approval of any such project shall include a description of the area, purpose of the project and method of drainage, and a general evaluation of the probable effects of the project on the water resources.

(3) Well Mining Projects

(a) Any projects involving the removal or extraction of minerals through wells;

(b) Application for approval of any such project shall include:

(i) a description of the location and extent of the area;

(ii) methods, procedures and processes of removal or extraction;

(iii) well-plugging and abandonment procedures, and

(iv) an evaluation of the effects of the water resources.

(4) Excavation Projects

(a) Any project involving the excavation of any land that lies under water;

(b) Any project involving the excavation of any single area in excess of five acres to any depth below the highest natural level of groundwater;

(c) Application for approval of any such projects shall include a description of the location and the extent of the area, purpose, depth, and excavation methods.

Statutory Authority G.S. 143-215.14; 143-215.20;

Eff. February 1, 1976.

15A-2E.0206. NONCONSUMPTIVE USE PERMITS

15A-2E.0207. CONFIDENTIAL INFORMATION

15A-2E.0208. SEVERABILITY

Statutory Authority G.S. 143-215.14; 143-215.15;

Eff. February 1, 1976; Repealed Eff. March 1, 1985.

15A-2E.03. REGISTRATION OF WATER WITHDRAWALS AND TRANSFERS

15A-2E.0301. APPLICATION; PROCESSING FEES.

15A-2E.0301. APPLICATION; PROCESSING FEES

(a) Any person subject to G.S. 143-215.22H, shall complete, sign, and submit an application for registration, on a form provided by the Department, to the Director of the Division of Water Resources. The registration application and registration processing fee (if applicable) shall be mailed to the Division of Water Resources, North Carolina Department of Environment, Health, and Natural Resources, Post Office Box 27687, Raleigh, North Carolina 27611-7687.

(b) Except as otherwise provided in this Rule, a non-refundable registration processing fee in the amount of fifty dollars (\$50.00) shall be paid when the registration application form is submitted.

- (1) No registration application form is complete until the registration processing fee is paid.
 - (2) Each facility from which a person withdraws or transfers one million gallons per day or more must be separately registered. The registration application for each facility to be registered must include the fee in the amount set forth in this Rule.
 - (3) A late registration fee in the amount of five dollars (\$5.00) per day for each day the registration of a water transfer or withdrawal is late, up to a maximum of five hundred dollars (\$500.00), shall be assessed as a penalty for failure to register the water transfer or withdrawal in a timely manner. The penalty stops accruing on the date of receipt of the completed registration application by the Division of Water Resources.
 - (4) Payment of the registration processing fee may be by check or money order made payable to the "N. C. Department of Environment, Health, and Natural Resources." The check or money order shall refer to the water withdrawal or transfer registration application.
 - (c) Except as otherwise provided in this Rule, upon receipt of a properly completed application form and the registration processing fee, the applicant shall be issued a receipt of registration.
 - (d) Pursuant to G.S. 143-215.3(a)(1a), and G.S. 143-215.22H, no fees including late registration fees for failing to register or update registrations in a timely manner, are required to be paid under this Rule by a farmer who submits an application for or an update of a registration of a withdrawal or transfer that pertains to farming operations. Upon receipt of a properly completed application from a farmer, the applicant will be issued a receipt of registration.
 - (e) Pursuant to G.S. 143-215.22H(c), separate registration of a water withdrawal or transfer is not required of a local government that completes and periodically revises and updates its water supply plan pursuant to G.S. 143-355(1).
 - (f) Any person who withdraws or transfers one million gallons or more in any single day must register the withdrawal or transfer.
- Statutory Authority G.S. 143-215.3(a)(1a); 143-215.3(a)(1b); 143-215.22H; 143-355(1);
Filed as a Temporary Rule Eff. October 14, 1991 for a Period of 180 Days to Expire on April 11, 1992; Eff. April 1, 1992; Amended Eff. September 1, 1994.

15A-2E.04. REGULATION OF SURFACE WATER TRANSFERS

15A-2E.0401. APPLICABILITY.

15A-2E.0402. JUDICIAL REVIEW.

15A-2E.0401. APPLICABILITY

- (a) Pursuant to G.S. 143-215.22G(3), the amount of a transfer shall be determined by the amount of water moved from the source basin to the receiving basin, less the amount of the water returned to the source basin.
- (b) Pursuant to G.S. 143-215.22G(3)(a) and 143-215.22G(3)(b), and notwithstanding the definition of basin in G.S. 143-215.22G(1), the following are not transfers:
 - (1) The discharge point is situated upstream of the withdrawal point such that the water discharged will naturally flow past the withdrawal point.
 - (2) The discharge point is situated downstream of the withdrawal point such that water flowing past the withdrawal point will naturally flow past the discharge point.
- (c) The withdrawal of surface water from one river basin by one person and the purchase of all or any part of this water by another party, resulting in a discharge to another river basin, shall be considered a transfer. The person owning the pipe or other conveyance that carries the water across the basin boundary shall be responsible for obtaining a certificate from the Commission. Another person involved in the transfer may assume responsibility for obtaining the certificate, subject to approval by the Division of Water Resources.
- (d) Under G.S. 143-215.22I(b), a certificate is not required to transfer water from one river basin to another up to the full capacity of a facility to transfer water from one basin to another if the facility was existing or under construction on July 1, 1993. The full capacity of a facility to transfer water shall be determined as the capacity of the combined system of withdrawal, treatment, transmission, and discharge of water, limited

by the element of this system with the least capacity as existing or under construction on July 1, 1993.
Statutory Authority G.S. 143-215.22G; 143-215.22I; 143B-282(a)(2);
Eff. September 1, 1994.

15A-2E.0402. JUDICIAL REVIEW

Judicial Review of the Commission's decision shall be as provided in G.S. 143-215.5.
Statutory Authority G.S. 143-215.5; 143B-282(a)(2);
Eff. September 1, 1994.
