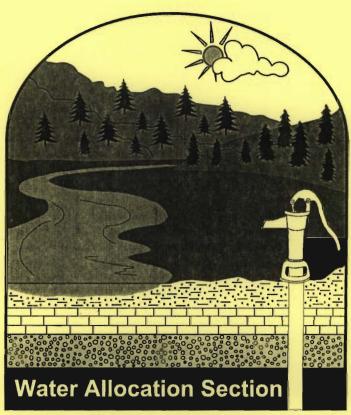
ANNUAL STATUS REPORT CAPACITY USE AREA #1

September 1998 to August 1999



NC Division of Water Resources

North Carolina Department of Environment and Natural Resources

May 2000

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Gabrielle Chianese

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EXECUTIVE SUMMARY

Capacity Use Area #1 (CUA#1) was formed in 1968 in response to pumping of the Castle Hayne aquifer associated with a phosphate mining operation in Beaufort County. Within CUA#1, all persons withdrawing more than 100,000 gallons of water per day must first obtain a permit from the Division of Water Resources (DWR). CUA#1 water use permits specify a maximum daily water withdrawal rate to protect the water source and other water users from negative impacts related to the permitted water use.

Water use throughout much of CUA#1 appears to be at sustainable levels. While DWR has recognized some areas of concern with respect to ground water use, it is currently working with the affected parties to mitigate existing or potential negative impacts to the ground water system. Water use by many existing and new permittees has increased. However, the high yield of the Castle Hayne aquifer, coupled with decreased pumping of the Castle Hayne at PCS Phosphate, have lessened the impacts of increased water use.

While compliance of CUA#1 permittees is generally good, DWR has recognized areas which need improvement. DWR will work with permittees to resolve problems related to exceeding their permitted daily withdrawal rate. Additionally, DWR will be working to increase the compliance rate with respect to permittees' submission of monthly water level and water use reports.

DWR is currently working in several areas to improve the management of the water resources within CUA#1. DWR is digitizing permittee information, as well as water use data, to allow for easier interpretation and greater public access to this data. Additionally, DWR has established a field office in New Bern to better monitor and maintain wells in DWR's monitoring well network. DWR is currently developing a hydrogeologic framework and model of the Castle Hayne aquifer. This model will allow DWR to assess cumulative impacts of multiple water withdrawals within CUA#1. DWR has also presented evidence to the Environmental Management Commission (EMC) to support the formation of a new CUA in the Central Coastal Plain of North Carolina to mitigate serious water level declines in the Cretaceous aquifers.

To improve customer service and expedite the application process for the Capacity Use Area #1, the CUA#1 applications may be filled out on the internet at:

http://www.ncenviropermit.com/CUPS/

INTRODUCTION

In 1967, the North Carolina General Assembly passed the Water Use Act of 1967. The Water Use Act gave the Environmental Management Commission (EMC) the power to declare "Capacity Use Areas" (CUAs). A CUA is an area of the state in which the EMC has determined that ground water and/or surface water use must be regulated by a permitting program to prevent or alleviate problems associated with the water use within that area. A copy of the Water Use Act of 1967 is included as Appendix A.

In 1968, the EMC declared the state's first CUA, Capacity Use Area #1. CUA#1 was declared in response to the pumping of tens of millions of gallons of ground water per day to dewater a phosphate mine near the town of Aurora in Beaufort County. This large volume ground water pumping affected water levels in wells tens of miles away. Thus, the EMC declared that CUA#1 includes all or parts of eight eastern North Carolina counties surrounding the mine, as shown in Figure 1. A copy of the rule governing CUA#1 is included as Appendix B.

Within CUA#1, anyone who withdraws, obtains, or uses more than 100,000 gallons of water per day of must first obtain a water use permit from the North Carolina Division of Water Resources (DWR). In order to obtain this permit, the applicant must show that the proposed water use will not harm the ground water and/or surface water resources or interfere with the use of water by others. Once DWR is satisfied that the proposed water use will not cause significant negative effects on the resource or on other users, DWR issues a water use permit to the applicant.

CUA#1 permits establish the maximum daily water withdrawal rates for each permittee, regardless of the number of days water is used. Additionally, to prevent damage to aquifers by overpumping, the permits establish a maximum drawdown level for each permittee's well or wells. Permittees are required to submit monthly reports of the water levels in their wells and daily water use from each of their water sources. DWR uses the data from these monthly reports to ascertain compliance with CUA#1 permit conditions. DWR also uses these data, along with data collected from the State monitoring well network, to track the water use trends and cumulative and individual effects of water use by the permittees in CUA#1.

This annual report provides information regarding current water use, program compliance trends, and water levels in the major aquifers of CUA#1. Additionally, this report outlines management activities and technical studies undertaken by DWR to provide continued protection and effective use of the water resources of CUA#1.

THE PERMITTING PROCESS

When a CUA#1 permit application arrives at DWR, a hydrogeologist reviews it for completeness. While permit applications may vary in size from a few pages to several volumes of application data, they all must contain the basic information outlined in the official application forms contained in Appendix C. If the application lacks necessary information, the hydrogeologist contacts the applicant with a request for the missing information.

Once a permit application contains all necessary supporting data, it is deemed complete and moves to the review stage. The permitting process is subject to the time limitations and public notice requirements established in the Water Use Act of 1967, as shown in Figure 2. Once the application is complete, DWR has ten days to send a public Notice of Application to individuals on the CUA#1 mailing list. This mailing list consists of all CUA#1 permittees, certain government agencies, and all other parties who request that DWR add them to the mailing list. A copy of the current CUA#1 mailing list is included as Appendix G. For a more detailed list or to be added to the list please check out our website at http://www.dwr.ehnr.state.nc.us/hms/gwbranch/cua1.htm or contact Gabrielle Chianese at (919) 715-5370.

After the initial Notice of Application is issued, DWR typically uses 15 days in which to review feasibility of the applicant's proposed water use. DWR may review the application on the basis of many different factors, depending on the complexity of the water use that the applicant is requesting. DWR evaluates the feasibility of the proposed water use based upon known characteristics and yields of the water source involved, the probability of negative impact to the water source or to other water users, and other factors. DWR uses various tools, such as historical water level and water use data, computer modeling, and field investigations, to assist with these evaluations.

During the review period, the permit application is open to public comment. DWR reviews any comments received from the applicant, other permittees, government agencies, and the general public to assist with its evaluation of the application.

Usually within 15 days of the Notice of Application, DWR decides whether to issue the permit as requested by the applicant, deny the permit altogether, or issue a permit with terms that are modifications of those requested by the applicant. If DWR issues a permit, it prepares a draft permit to send to the applicant for review. At the same time, DWR sends a public Notice

to Issue a CUA#1 Permit to the CUA#1 mailing list.

Once the Notice to Issue and the draft permit have been distributed, DWR has 18 days to review comments received from the applicant and the general public regarding the terms of the draft permit. Modifications to the draft permit may be made based upon review of these comments. At the end of the 18 day comment period, DWR may issue the CUA#1 permit, or, if significant changes in the permit are necessary based on review of public comments, the revised draft permit may be sent to public notice for another 18 days before its issuance. Included in Appendix E is a processing table that summarizes activities of DWR for the CUA#1 permits.

To improve our customer service, DWR has implemented a pilot project to expedite the application process by having the permittee fill out the CUA#1 application on-line. The internet address for the application is:

http://www.ncenviropermit.com/CUPS/

Further information about the Capacity Use Permit System (CUPS) is available in Appendix F.

WATER USE TRENDS

CUA#1 permittees are classified based upon their type of use (e.g., mining, irrigation, aquaculture). Additionally, DWR tracks the sources of their water withdrawals. This section outlines current trends in surface and ground water use within CUA#1.

Ground water is a very important water source for most CUA#1 permittees. Ground water supplies over 95 percent of permittees with at least some of their permitted water withdrawals, as shown in Table 1. Almost 85 percent of permittees use ground water exclusively.

The principal aquifer used in CUA#1 is the Castle Hayne aquifer, which consists predominantly of a porous, highly transmissive limestone. The Castle Hayne aquifer is capable of safely yielding large quantities of water. Some permitted Castle Hayne wells in CUA#1 are capable of producing millions of gallons of water per day. The top of the Castle Hayne aquifer ranges in depth from as little as 10 feet below land surface, in the southwestern portion of CUA#1, to over 400 feet below land surface in the eastern portions of CUA#1. Over 92 percent of permittees are permitted to withdraw ground water from the Castle Hayne aquifer.

In addition to the Castle Hayne aquifer, other aquifers used by CUA#1 permittees include the Cretaceous, Croatan, and Yorktown aquifers. Use from the Cretaceous and Croatan aquifers is very minor. The Cretaceous aquifers are used by some permittees in the westernmost portion of CUA#1. The surficial Croatan aquifer is pumped at a mining operation in Beaufort County to keep the mine pit dry. The Yorktown aquifer is an important water source for some permittees in the eastern portion of CUA#1 where the water in the Castle Hayne aquifer is too salty for irrigation or potable supply.

As shown in Figures 3 and 4, mining operations account for approximately 63 percent of total reported ground water withdrawals. These withdrawals are made by PCS Phosphate (PCS), a phosphate mining operation located in Beaufort County, near Aurora. The bulk of PCS's withdrawals are made under permit #03 to depressurize the Castle Hayne aquifer, which underlies the phosphate ore bed. PCS also makes additional withdrawals from the Castle Hayne aquifer under permit #03 to supply process and potable water for their mining and processing operations. Under permit #CU1007, PCS withdraws ground water from the Yorktown and surficial Croatan aquifers to keep water from flowing into the mine pit from the pit walls.

Another major ground water use in CUA#1 is public supply. Public supply accounted for nearly 20 percent of reported withdrawals within CUA#1. The amount of ground water withdrawn for public supply continues to increase as water demand increases and as water supply systems continue to expand their boundaries and serve more customers.

Other ground water uses within CUA#1 include industry, aquaculture, agriculture, and non-agricultural irrigation. Together, these uses accounted for less than seven percent of reported withdrawals during the report period.

Surface Water Use

While relatively few CUA#1 permittees utilize surface water, it is an important source of water for those that use it. Approximately 15 percent of CUA#1 permittees are permitted to use surface water. However, as shown in Figures 3 and 4, surface water use accounts for over 78 percent of permitted withdrawal limits and over 63 percent of reported use within CUA#1.

The major surface water sources used by CUA#1 permittees are the Roanoke and Neuse Rivers, with industry using the bulk of reported withdrawals from both rivers. Weyerhaeuser operates a paper mill on each of these two rivers, one mill being located in Martin County, and the other mill being located in Craven County. These two mills accounted for 93 percent of reported surface water use during the report period. The other major surface water use in

CUA#1 is farmland drainage which accounts for 74 percent of the permitted surface water use. During the report period, two users held permits for farmland drainage in Tyrrell County. The largest permitted water withdrawal for farmland drainage is 345.6 mgd for Farmland Management Company. Reported water use for farmland drainage accounted for almost 6 percent of reported surface water use. Minor surface water uses in CUA#1 include aquaculture, public supply, and biological research.

Ground Water Levels

Since the late 1960s, ground water levels in the Castle Hayne aquifer in CUA#1 have been influenced primarily by PCS Phosphate's pumping. Historical water level data indicate that PCS's radius of influence in the Castle Hayne aquifer may have extended as far north as northern Washington County and as far south as southern Carteret County. However, current water level data show that the radius of influence of pumping at PCS has significantly diminished as pumping for mine dewatering has decreased from an average of over 50 MGD in the late 1980s to 34 MGD during the period covered by this report.

Figure 5 is a potentiometric surface map of the Castle Hayne aquifer during 1999. The cone of depression centered on PCS's mining operation in Beaufort County is the most notable feature of the potentiometric surface. A smaller cone of depression appears also in Beaufort County around the Town of Vanceboro. This cone of depression is associated with pumping for the town and a large fish farm in the area. Even though the potentiometric surface map is a little unclear around the Morehead City area, water use reports indicate the water levels are declining. The potentiometric surface map clearly indicates that additional withdrawals are having a greater influence on water levels in the Castle Hayne aquifer than that in the past. This is due primarily to decreased water withdrawals at PCS and increasing water use by other users throughout CUA#1.

COMPLIANCE EVALUATION

Historically, regulatory compliance has been generally good within CUA#1. However, there are several areas in which DWR will seek improvement in the coming year.

Table 2 presents a compliance summary for CUA#1 during the report period. For each permittee, Table 2 shows whether the permittee submitted the required monthly usage and water level reports and whether the permittee used more water than allowed. For permittees who used

more water than allowed, Table 2 gives the number of days the permittee used too much water, the maximum daily overuse, and the total overuse by that permittee during the report period.

As shown in Table 2, approximately 18 percent of CUA#1 permittees reported using more water than allowed by their permits. Over half of those in violation were public water suppliers. The remaining violators were an industrial permittee, golf community, and a biological research facility. The greatest total overuse was over 34.5 million gallons by the Town of Plymouth, which occurred over a span of 357 days. National Spinning Company had the maximum overuse in one day, exceeding the permit limit by almost 1.6 million gallons.

Approximately half of the permittees who exceeded their water use permit limit did so on more than one day during the report period. DWR will work with repeat violators to help them determine the nature of their overuse and, if necessary, whether they need to apply for an amendment to their permit. Also, DWR encourages permittees to keep close track of their water use and to promptly contact DWR with any concerns or if a larger permitted withdrawal amount becomes necessary.

Another area of concern is the number of users who are not submitting monthly water use and water level reports. Water use and water level reports are important as sources of information for compliance data. Additionally, these reports help DWR understand how the ground and surface water systems respond to water withdrawal and in turn helps the public protect their natural resource from depletion. As shown in Table 2, approximately 27 permittees, or 42 percent of permittees, did not submit either one or both of the **required** monthly reports during this report period. Of these permittees, almost 81 percent were agricultural or aquaculture users. Non-agricultural irrigation and public supply users make up the remaining 19 percent.

Some of these users may not have submitted monthly reports because they did not use water during the report period. This may be especially true for agricultural and aquaculture users due to the seasonal nature of their water use. However, not using water during a given month does **not** dismiss a permittee from submitting water level and water use reports for that month.

DWR will continue to work with permittees on these compliance issues. However, it is the responsibility of permittees to comply with their water use permits. While DWR makes every effort to work with permittees to get them in compliance with their permits, permittees who continually violate the conditions of their permits may be subject to civil and criminal penalties provided in the Water Use Act. Also, submittal of the water use and water level reports are taken into consideration when renewing a permit.

PROGRAM DEVELOPMENT

During the report period, DWR has put great effort into improving the CUA#1 program. The following section lists some of the aspects of these improvement efforts.

CUA#1 Permit and Compliance Data

DWR is well underway in its efforts to digitize basic permittee data and all water use and water level reports. Information on permittees, pending permit applications, and compliance status is contained in the division's databases. Additionally, DWR inputs data from the CUA#1 monthly water level and water use reports into databases. The division is also working on entering historical water level and water use information into the databases, approximately 50% has already been entered. Some of this data is available to the general public via the internet on the CUA#1 home page at:

http://www.dwr.ehnr.state.nc.us/hms/gwbranch/cual.htm

Monitoring Well Network

Understanding regional and local water level trends is key to effective management of the State's ground water resources. To this end, DWR monitors and maintains a network of several hundred wells across the Coastal Plain. The General Assembly appropriated funds for DWR to expand this well network and refurbish many of the wells which have deteriorated with age or have been damaged.

As part of this expansion, DWR has established a field office in New Bern. The New Bern personnel contribute to upkeep and monitoring of the well network. The data from the expanded network will greatly aid DWR in its management of the ground water resources of CUA#1 and the other areas of the Coastal Plain. The field personnel will also be available as needed to assist CUA#1 permittees with questions and concerns regarding the CUA#1 program. The field office is located at:

2503 G Neuse Blvd New Bern, NC 28560

> Phone: (252) 672-4620 Fax: (252) 672-4622

Office contact: Gregory Rudolph

Data collected from DWR's well network and information about the network may be viewed on the internet at:

http://www.dwr.ehnr.state.nc.us/hms/gwbranch/gwb.htm

Castle Hayne Aguifer Framework

As stated previously, potential impacts of proposed water uses within CUA#1 are reviewed on an individual basis. To date, DWR has not had an accurate, quantitative method to assess the cumulative impact of proposed and existing withdrawals on the ground water system as a whole. To better understand these cumulative effects, DWR is developing a hydrogeologic framework of the Castle Hayne aquifer within CUA#1. This framework consists of the accumulation and interpretation of hydrogeologic data from DWR's well network, geophysical data, and other sources. Once the framework is complete in the winter of 2000, DWR will use it to develop a hydrogeologic model of the Castle Hayne aquifer system. This model will be an important ground water management tool for DWR as it will help DWR assess cumulative impacts of withdrawals from the ground water system in CUA#1.

Central Coastal Plain

For several years, ground water levels in the Cretaceous aquifers of the Central Coastal Plain of North Carolina have been declining at an alarming rate. These declines have been caused by water users in this area withdrawing more ground water than can be recharged to the aquifers.

In March 1998, DWR held a public meeting in Greenville to update water users in this area on the nature of the water level declines in many parts of the Central Coastal Plain. The general consensus from this meeting was that the magnitude of these declines had become so great that the State needed to intervene and form a new CUA.

In December 1998, DWR went before the EMC to propose forming a new CUA to address the water level declines in the Central Coastal Plain. This new CUA would encompass all of the following counties: Beaufort, Carteret, Craven, Duplin, Edgecombe, Greene, Jones, Lenoir, Martin, Onslow, Pamlico, Pitt, Washington, Wayne and Wilson.

DWR presented the draft rule for this new CUA to the EMC in early 1999. The EMC approved the draft rule and has initiated the public hearing process. Public comment on the draft rule is being solicited through the prescribed system of hearings and comment periods. DWR invites all interested parties to share their ideas and information to effect the most efficient management of the ground water resources of eastern North Carolina.

This new CUA will have a minimal effect on most current CUA#1 permittees. The greatest effect will be on permittees in Hyde and Tyrrell Counties, where water use permits will no longer be required. Additionally, surface water withdrawals throughout the CUA will not require a water use permit. Existing CUA#1 permits for ground water withdrawals in Beaufort, Carteret, Craven, Martin, Pamlico, and Washington Counties will remain in effect in the new CUA. The greatest effect the new CUA may have on existing CUA#1 permittees in these counties will be an expected increase in water withdrawals from the Castle Hayne aquifer as water users in the Central Coastal Plain seek other water sources. DWR oversight and permitting of these new withdrawals will prevent adverse effects to the aquifer system or to existing water users.

FIGURES

FIGURE 1: Capacity Use Area #1
Permitted Wells & Intakes
August 1999

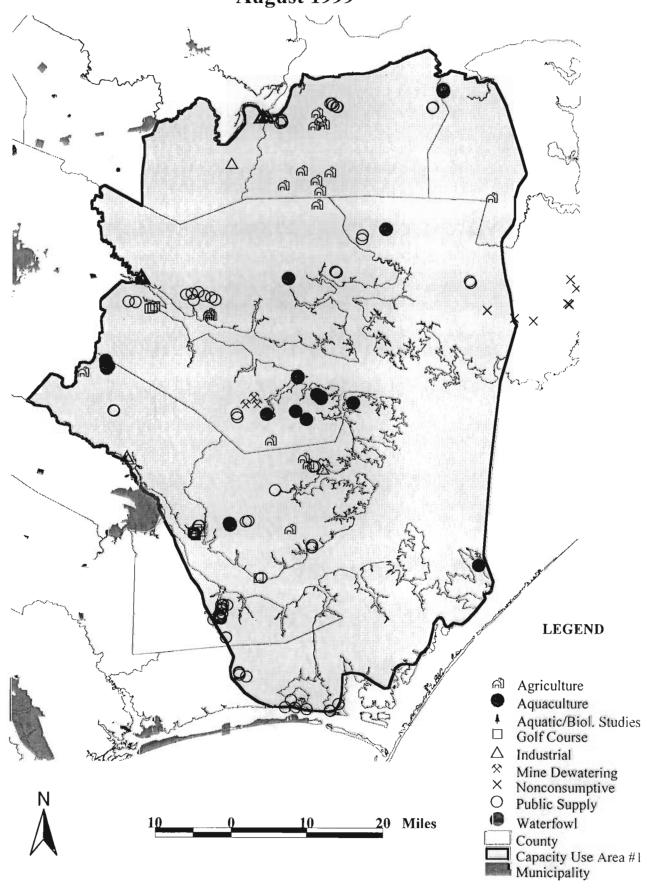


Figure 2: Capacity Use Area #1 Permit Application Process

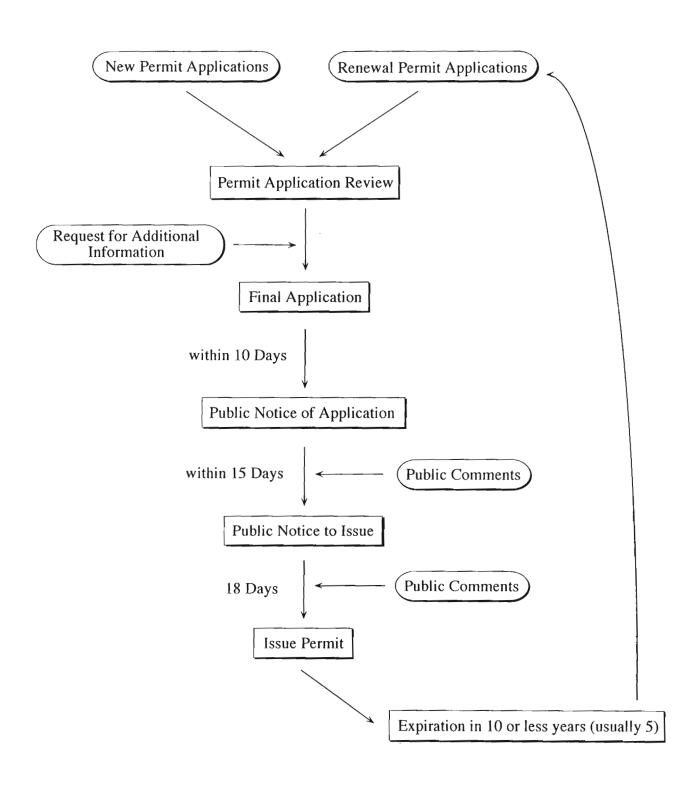


FIGURE 3: Total Permitted and Reported Surface and Ground Water Use Values

September 1998 - August 1999

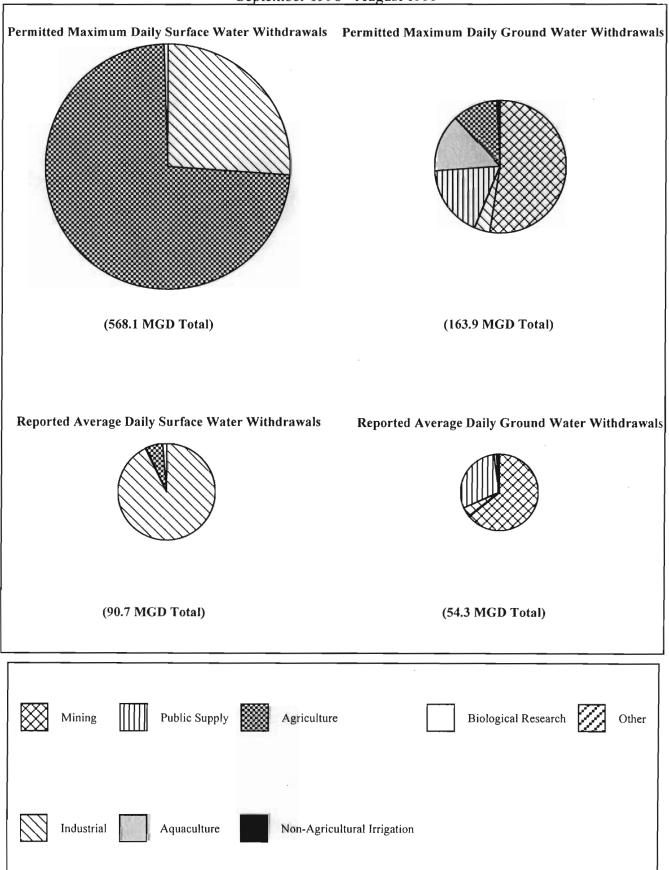


FIGURE 4: Total Permitted and Reported Surface and Ground Water Use Values

September 1998 - August 1999

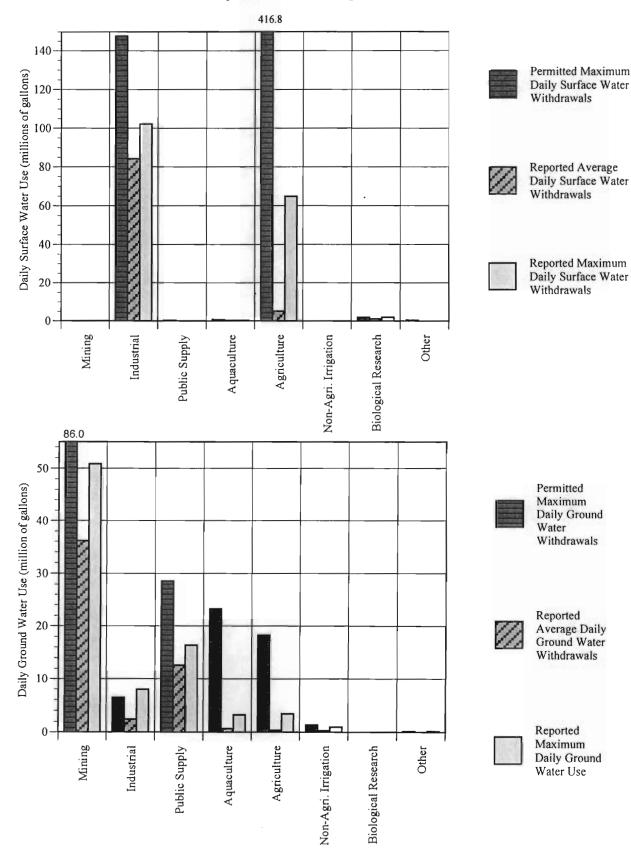
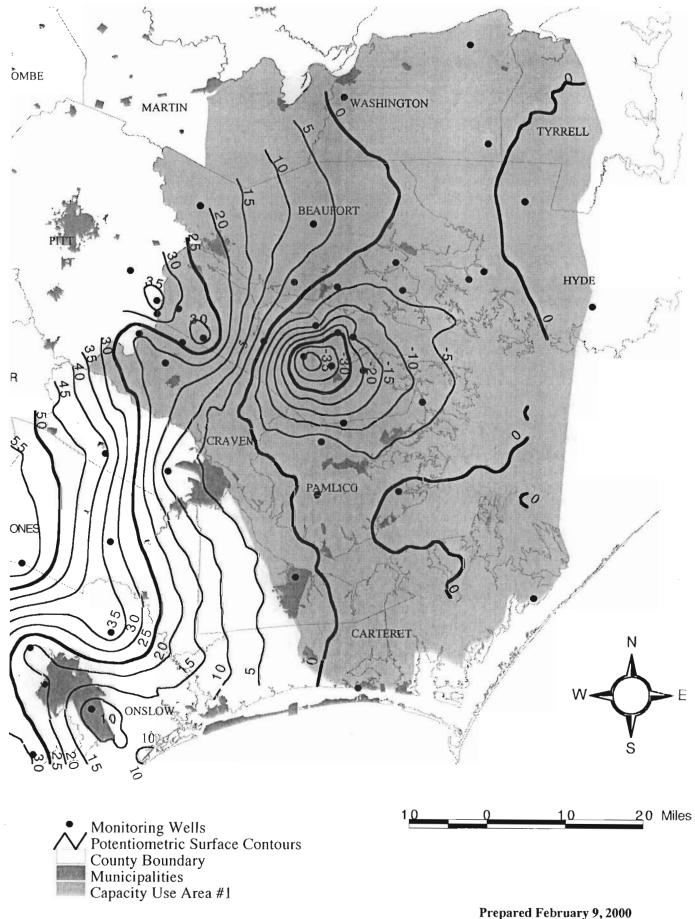


FIGURE 5: 1999 Potentiometric Surface of the Castle Hayne Aquifer in the Vicinity of Capacity Use Area #1



TABLES

TABLE 1: Permitted Maximum Daily Withdrawals for Capacity Use Area #1 (August 1999)

Permittee	County	Permit	Type of use	Maximum Da	Maximum Daily Withdrawal	(MGD)*
		Number	The state of the s	Ground Water	Surface Water	Total
AgResource Ltd Dannenberg Farms	Washington	CU1044	Irrigation, Agriculture	1	0	1
AgResource Ltd Grace Farms	Washington	CU1047	Irrigation, Agriculture	0.384	0	0.384
Alston Spruill Farms	Pamlico	CU0200009	Irrigation, Agriculture	0.72	0	0.72
Bernard F Kornegay	Washington	CU0200016	Irrigation, Agriculture	0.504	0	0.504
Bray Inc of the Albemarle	Tyrrell	CU1098	Aquaculture	4	0	4
"C" Canal Farms	Hyde	CU1054	Waterfowl	0.192	0	0.192
Carolina Fisheries	Beaufort	CU1058	Aquaculture	2.5	0	2.5
Castle Hayne Fisheries	Beaufort	CU1073	Aquaculture	2.16	0	2.16
City of Havelock	Craven	CU1029	Public Supply	2	0	2
City of Washingtonngton	Beaufort	60	Public Supply	4.2	0	4.2
Coastal Plains Catfish	Craven	CU1108	Aquaculture	0.518	0	0.518
Coastal USA Fish Company	Carteret	CU1096	Aquaculture	0.259	0.576	0.835
Country Club of Plymouth Inc	Washington	CU0200013	Irrigation, Golf Course	0.2	0	0.2
CWS Systems Inc	Craven	CU1087	Public Supply	1	0	1
Cypress Swamp Fisheries	Beaufort	CU1101	Aquaculture	92.0	0	92.0
David C Austin	Beaufort	CU1103	Aquaculture	2.16	0	2.16
David W Waters	Beaufort	CU1094	Irrigation, Agriculture	0.864	0	0.864
Down East Fisheries	Beaufort	CU0200017	Aquaculture	0.72	0	0.72
Fairfield Harbour	Craven	CU1027	Irrigation, Golf Course	0.3	0	0.3
Farm Management Company	Tyrrell	CU1115	Surface Drainage	0	345.6	345.6
First Cravenn Sanitary District	Craven	CU1105	Public Supply	0.864	0	0.864
GHW Weyerhaeuser Nursery	Beaufort	CU1006	Irrigation, Agriculture	2	0	2
H L Respass Farms	Washington	CU1093	Irrigation, Agriculture	0.406	1.2	1.606
Harrison's Aquafarm Inc	Pamlico	CU1102	Aquaculture	1.728	0	1.728
Hyde County Water System	Hyde	CU1053	Public Supply	1.15	0	1.15
Island Fisheries	Pamlico	CU1091	Aquaculture	1.296	0	1.296
John Hancock Farmland Management	Tyrrell	CU1100	Drainage, Irrigation	0.01	70	70.01
Manning Farms Inc	Washington	CU1085	Irrigation, Agriculture	1.296	0	1.296
Mattamuskeet Natural Wildlife Refuge	Hyde	25	Nonconsumptive	0	0.45	0.45
McCotter Farms	Pamlico	CU1099	Irrigation, Agriculture	3.5	0	3.5
Minnesott Golf and Country Club	Pamlico	CU0200015	Irrigation, Golf Course	0.3	0	0.3
National Spinning Co	Beaufort	CU1005	Industrial		0	7
NCASI	Craven	20	Aquatic and Biological Studies	0	2	2

TABLE 1: Permitted Maximum Daily Withdrawals for Capacity Use Area #1 (August 1999)

Permittee	County	Permit	Type of use	Maximum Dai	Maximum Daily Withdrawal (MGD)*	(MGD)*
		Number		Ground Water	Surface Water	Total
NCDA Tidewater Research Center	Washington	CU1016	Irrigation, Aquaculture, Livestock	3.673	0	3.673
NCSU Pamlicoco Aquaculture Field Lab	Beaufort	CU1031	Aquaculture	2.36	0.3	2.66
North State Fisheries	Beaufort	CU0200005	Aquaculture	1.728	0	1.728
Pamlicoco County Water System	Pamlico	CU0200008	Public Supply	2.21	0	2.21
Pamlicoco Packing Co Inc	Pamlico	34	Industrial	0.517	0	0.517
Paul Farms Inc	Pamlico	CU1057	Irrigation, Agriculture	1.44	0	1.4
PCS Phosphate Co	Beaufort	03	Mine Dewatering	78	0	78
PCS Phosphate Co	Beaufort	CU1007	Mine Dewatering	∞	0	∞
Peace and Plenty Farms	Craven	CU11111	Irrigation, Agriculture	0.55	0	0.55
Richland Townshp W&S Beaufort County #VII	Beaufort	CU0200006	Public Supply	0.515	0	0.515
Selvie James	Washington	CU1104	Irrigation, Agriculture	0.504	0	0.504
Sullivan Fish Farm	Beaufort	CU1056	Aquaculture	0.54	0	0.54
Swindell Fish Farms	Beaufort	CU0200002	Aquaculture	0.576	0	0.576
T L Harris Jr	Washington	CU0200010	Irrigation, Agriculture	1.44	0	1.4
Town of Beaufortort	Carteret	CU1015	Public Supply	1	0	1
Town of Belhaven	Beaufort	CU1008	Public Supply	1	0	1
Town of Chocowinity	Beaufort	CU1051	Public Supply	0.25	0	0.25
Town of Creswell	Washington	CU1046	Public Supply	0.288	0.36	0.648
Town of Morehead City	Carteret	CU1014	Public Supply	2.5	0	2.5
Town of Newport	Carteret	CU1012	Public Supply	0.923	0	0.923
Town of Oriental	Pamlico	CU1022	Public Supply	0.15	0	0.15
Town of Plymouth	Washington	CU1001	Public Supply	0.735	0	0.735
Town of Roper	Washington	CU0200014	Public Supply	0.3	0	0.3
Town of Vanceboro	Craven	CU1097	Public Supply	0.412	0	0.412
US Marine Corps Cherry Point	Craven	CU1060	Public Supply	8	0	8
Vanguard Farms Inc	Craven	CU1106	Aquaculture	2	0	2
Washingtonngton County Water System	Washington	CU1113	Public Supply	1	0	1
Weyerhaeuser Company	Craven	CU1013	Industrial	0.2	20	50.2
Weyerhaeuser Plymouth Plant	Martin	CU0200011	Industrial	3.54	109.76	101.141
Weyerhaeuser Real Estate Company	Beaufort	CU0200003	Irrigation, Golf Course	0.52	0	0.52
White Rock Fish Farm Inc	Craven	CU1090	Aquaculture	0.432	0	0.432
Woodridge Timber Inc	Martin	CU1107	Industrial, Timber wet storage yard	0.144	0	0.144
TOTALS				164.438	568.087	732.525

* MGD = Million Gallons per Day

TABLE 2: Capacity Use Area #1 Compliance Summary

Permit #	Permittee	Permitted	Total Overuse	Maximum Daily Overuse	# of Days	# of Monthy Reports
1100	Sent Sent Committee	(mgd)	(gallons)	(gallons)	Over	Submitted
03	PCS Phosphate Co	78.000	0	0	0	11
60	City of Washington	4.200	0	0	0	12
20	National Council of the Paper Industry NCASI	2.000	20,000	20,000	1	12
25	Mattamuskeet Natural Wildlife Refuge	0.450	2.	2	ł	0
34	Pamlico Packing Co Inc	0.517	0	0	0	10
CU0200003	Weyerhaeuser Real Estate Company	0.520	0	0	0	12
CU0200005	North State Fisheries	1.728	ı	2	1	0
CU0200006	Richland Townshp W&S Beauf County #VII	0.515	27,000	27,000	1	12
CU0200008	Pamlico County Water System	2.210	201,000	201,000	1	12
CU0200009	Alston Spruill Farms	0.720	~	2	ì	0
CU0200010	T.L. Harris Jr.	1.440	2	2	ì	0
CU0200011	Weyerhaeuser Plymouth Plant	101.141	0	0	1	12
CU0200013	Country Club Plymouth, Inc.	0.200	2	2	ł	0
CU0200014	Town of Roper	0.300	1,000	1,000	1	12
CU0200015	Minnesott Golf and Country Club	0.300	8,277,992	267,032	31	6
CU0200016	Bernard F. Kornegay	0.504	~	2	₹	0
CU0200017	Down East Fisheries	0.720	₹	2	ł	0
CU1001	Town of Plymouth	0.735	34,867,000	735,000	357	8
CU1002	Swindell Fish Farm	0.576	~	2	1	9
CU1005	National Spinning Co	2.000	2,761,000	1,680,000	2	11
CU1006	GHW Weyerhaeuser Nursery	2.000	0	0	0	12
CU1007	PCS Phosphate Co	8.000	0	0	0	11
CU1008	Town of Belhaven	1.000	0	0	0	11
CU1012	Town of Newport	0.923	44,200	44,200	1	11
CU1013	Weyerhaeuser Company	50.200	0	0	0	12
CU1014	Town of Morehead City	2.500	0	0	0	12
CU1015	Town of Beaufort	1.000	0	0	0	11
CU1016	NCDA Tidewater Research Center	3.673	0	0	0	The H

TABLE 2: Capacity Use Area #1 Compliance Summary

# of Days Over 54 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					Maximum Daily		# of Monthy
Carlo Carlo Capacidad Capacida Capacidad C	Permit #	Permittee	Permitted	Total Overuse	Overuse	# of Days	Reports
Town of Oriental 0.150 1.247,000 100,000 54			(mgd)	(gallons)	(gallons)	Over	Submitted
City of Havelock 0.300 0.0 0.0	CU1022	Town of Oriental	0.150	1,247,000	100,000	54	12
NCSU Pamilico Aquaeulture Field Lab 2.660 804,000 756,000 3	CU1027	Fairfield Harbour	0.300	0	0	0	9
NCSU Pamlico Aquaculture Field Lab 2.660 0 0 0 AgResource Ltd. Dannebeg Farms 1.000 ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~	CU1029	City of Havelock	2.000	804,000	756,000	3	12
AgResource Ltd. Danneberg Farms 1.000 ~ ~ Town of Creswell 0.648 0 0 0 I can of Chocowinity 0.250 1,621,000 95,000 33 Hyde County Water System 1.150 0 0 0 I Hyde County Water System 0.192 0 0 0 Sullivan Fish Farm 0.192 0 0 0 Carolina Fisheries 2.500 ~ ~ ~ US Marine Corps Cherry Point 8.000 0 0 0 Carolina Fisheries 2.160 ~ ~ ~ Manining Farms Inc 1.296 0 0 0 White Rock Fish Farm Inc 0.432 0 0 0 Aband W. Waters 1.606 ~ ~ ~ Coastal USA Fish Company 0.864 ~ ~ ~ David W. Waters 0.61 0 0 0 Accoastal USA Fish Company 0.412 ~ ~	CU1031	NCSU Pamlico Aquaculture Field Lab	2.660	0	0	0	12
AgResource Ltd. Grace Farms 0.648 0 0 Town of Checowinity 0.250 1,621,000 95,000 33 Hyde County Water System 1.150 0 0 0 "C" Canal Farms 0.192 0 0 0 Paul Farms Inc 1.440 ~ ~ ~ Carolina Fisheries 2.160 ~ ~ ~ US Marine Corps Cherry Point 8.000 0 0 0 Castle Hayne Fisheries 2.160 ~ ~ ~ Manning Farms Inc 1.296 0 0 0 White Rock Fish Farm Inc 0.432 0 0 0 White Rock Fish Farm Inc 0.432 0 0 0 Island Fisheries 1.296 0 0 0 Abrid W. Waters 0.864 ~ ~ ~ Town of the Albemarle 4.001 0 0 0 McOrter Farms 3.500 ~ ~ ~ </td <td>CU1044</td> <td>AgResource Ltd. Danneberg Farms</td> <td>1.000</td> <td>₹</td> <td>2</td> <td>l</td> <td>0</td>	CU1044	AgResource Ltd. Danneberg Farms	1.000	₹	2	l	0
AgResource Ltd. Grace Farms 0.384 ~ <t< td=""><td>CU1046</td><td>Town of Creswell</td><td>0.648</td><td>0</td><td>0</td><td>0</td><td>12</td></t<>	CU1046	Town of Creswell	0.648	0	0	0	12
Town of Chocowinity 0.250 1,621,000 95,000 33 Hyde County Water System 1.150 0 0 0 "C" Canal Farms 0.192 0 0 0 Sullivan Fish Farm 0.540 ~ ~ ~ Paul Farms Inc. 1.440 ~ ~ ~ Carolina Fisheries 2.500 ~ ~ ~ US Marine Corps Cherry Point 8.000 0 0 0 US Marine Corps Cherry Point 8.000 0 0 0 Manning Farms Inc. 1.296 0 0 0 White Rock Fish Farm Inc. 1.296 0 0 0 White Rock Fish Farm Inc. 1.296 0 0 0 H L Respass Farms 1.606 0 0 0 A Coastal USA Fish Company 0.835 ~ ~ ~ Bray Inc of the Albemarle 4.000 0 0 0 McCotter Farms 3.500 ~	CU1047	AgResource Ltd. Grace Farms	0.384	2	2	1	0
Hyde County Water System 1.150 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CU1051	Town of Chocowinity	0.250	1,621,000	95,000	33	12
Carollivan Fish Farms 0.192 0 0 Sullivan Fish Farms Inc. 1.440 ~ ~ ~ Paul Farms Inc. 1.440 ~ ~ ~ Carollina Fisheries 2.500 ~ ~ ~ US Marine Corps Cherry Point 8.000 0 0 0 Castle Hayne Fisheries 2.160 ~ ~ ~ Manning Farms Inc 1.296 0 0 0 White Rock Fish Farm Inc 0.432 0 0 0 H L Respass Farms 1.606 0 0 0 Pavid W. Waters 0.864 ~ ~ ~ Coastal USA Fish Company 0.835 ~ ~ ~ Bray Inc of the Albemarle 4.000 0 0 0 0 McCotter Farms 3.500 ~ ~ ~ ~ John Hancock Farmland Management 70.010 0 0 0 0 Cypress Swamp Fisheries 0.760 <td>CU1053</td> <td>Hyde County Water System</td> <td>1.150</td> <td>0</td> <td>0</td> <td>0</td> <td>12</td>	CU1053	Hyde County Water System	1.150	0	0	0	12
Sullivan Fish Farm 0.540 ~ ~ ~ Paul Farms Inc. 1.440 ~ ~ ~ Carolina Fisheries 2.500 ~ ~ ~ US Marine Corps Cherry Point 8.000 0 0 0 Castle Hayne Fisheries 2.160 ~ ~ ~ Manning Farms Inc 1.296 0 0 0 CWS Systems Inc 1.000 0 0 0 White Rock Fish Farm Inc 0.432 0 0 0 Island Fisheries 1.296 0 0 0 At L Respass Farms 1.606 0 0 0 David W. Waters 0.864 ~ ~ ~ Coastal USA Fish Company 0.812 ~ ~ ~ McCotter Farms 3.500 ~ ~ ~ John Hancock Farmland Management 70.010 0 0 0 Cypress Swamp Fisheries ~ ~ ~ ~	CU1054	"C" Canal Farms	0.192	0	0	0	4
Paul Farms Inc. 1.440 ~ ~ ~ Carolina Fisheries 2.500 ~ ~ ~ US Marine Corps Cherry Point 8.000 0 0 0 Castle Hayne Fisheries 2.160 ~ ~ ~ Manning Farms Inc 1.296 0 0 0 CWS Systems Inc 1.000 0 0 0 White Rock Fish Farm Inc 0.432 0 0 0 H L Respass Farms 1.506 0 0 0 H L Respass Farms 0.864 ~ ~ ~ Coastal USA Fish Company 0.835 ~ ~ ~ Bray Inc of the Albemarle 4.000 0 0 0 McCotter Farms 3.500 ~ ~ ~ John Hancock Farmland Management 70.010 ~ ~ ~ Cypress Swamp Fisheries 0.760 ~ ~ ~ Harrison's Aquafarm Inc. 1.728 ~ ~	CU1056	Sullivan Fish Farm	0.540	₹	2	ł	*66/23/8(0)
Carolina Fisheries 2.500 ~ ~ ~ US Marine Corps Cherry Point 8.000 0 0 0 Castle Hayne Fisheries 2.160 ~ ~ ~ Manning Farms Inc 1.296 0 0 0 White Rock Fish Farm Inc 0.432 0 0 0 White Rock Fish Farm Inc 0.432 0 0 0 H L Respass Farms 1.506 0 0 0 A L Respass Farms 0.864 ~ ~ ~ Coastal USA Fish Company 0.884 ~ ~ ~ Town of Vanceboro 0.412 ~ ~ ~ Bray Inc of the Albemarle 4.000 0 0 0 McCotter Farms 3.500 ~ ~ ~ Cypress Swamp Fisheries 0.760 ~ ~ ~ Harrison's Aquafarm Inc. 1.728 ~ ~ ~	CU1057	Paul Farms Inc.	1.440	. ₹	1	1	0
US Marine Corps Cherry Point 8.000 0 0 Castle Hayne Fisheries 2.160 ~ ~ Manning Farms Inc 1.296 0 0 CWS Systems Inc 0.432 0 0 White Rock Fish Farm Inc 0.432 0 0 H L Respass Farms 1.296 0 0 David W. Waters 0.864 ~ ~ Coastal USA Fish Company 0.835 ~ ~ Town of Vanceboro 0.412 ~ ~ ~ Bray Inc of the Albemarle 4.000 0 0 0 John Hancock Farmland Management 70.010 ~ ~ ~ Cypress Swamp Fisheries 0.760 ~ ~ ~ Harrison's Aquafarm Inc. 1.728 ~ ~ ~	CU1058	Carolina Fisheries	2.500	2	₹	₹	0
Castle Hayne Fisheries 2.160 ~ ~ ~ Manning Farms Inc 1.296 0 0 0 CWS Systems Inc 1.000 0 0 0 White Rock Fish Farm Inc 0.432 0 0 0 Island Fisheries 1.296 0 0 0 H.L Respass Farms 1.606 0 0 0 David W. Waters 0.864 ~ ~ ~ Coastal USA Fish Company 0.835 ~ ~ ~ Town of Vanceboro 0.412 ~ ~ ~ McCotter Farms 3.500 ~ ~ ~ John Hancock Farmland Management 70.010 0 0 0 Cypress Swamp Fisheries 0.760 ~ ~ ~ Harrison's Aquafarm Inc. 1.728 ~ ~ ~	CU1060	US Marine Corps Cherry Point	8.000	0	0	0	12
Manning Farms Inc 1.296 0 0 CWS Systems Inc 1.000 0 0 White Rock Fish Farm Inc 0.432 0 0 Island Fisheries 1.296 0 0 H L Respass Farms 1.606 0 0 David W. Waters 0.864 ~ ~ Coastal USA Fish Company 0.854 ~ ~ Town of Vanceboro 0.412 ~ ~ McCotter Farms 3.500 ~ ~ McCotter Farms 3.500 ~ ~ John Hancock Farmland Management 70.010 0 0 0 Cypress Swamp Fisheries 0.760 ~ ~ ~ Harrison's Aquafarm Inc. 1.728 ~ ~ ~	CU1073	Castle Hayne Fisheries	2.160	₹			0
CWS Systems Inc 1.000 0 0 White Rock Fish Farm Inc 0.432 0 0 0 Island Fisheries 1.296 0 0 0 H L Respass Farms 1.606 0 0 0 David W. Waters 0.864 ~ ~ ~ Coastal USA Fish Company 0.835 ~ ~ ~ Town of Vanceboro 0.412 ~ ~ ~ Bray Inc of the Albemarle 4.000 0 0 0 McCotter Farmland Management 70.010 ~ ~ ~ Iohn Hancock Farmland Management 70.010 ~ ~ ~ Cypress Swamp Fisheries 0.760 ~ ~ ~ ~ Harrison's Aquafarm Inc. 1.728 ~ ~ ~ ~	CU1085	Manning Farms Inc	1.296	0	0	0	3
White Rock Fish Farm Inc 0.432 0 0 0 Island Fisheries 1.296 0 0 0 H L Respass Farms 1.606 0 0 0 David W. Waters 0.864 ~ ~ ~ Coastal USA Fish Company 0.835 ~ ~ ~ Town of Vanceboro 0.412 ~ ~ ~ Bray Inc of the Albemarle 4.000 0 0 0 McCotter Farmland Management 70.010 ~ ~ ~ John Hancock Farmland Management 70.010 ~ ~ ~ Cypress Swamp Fisheries 0.760 ~ ~ ~ Harrison's Aquafarm Inc. 1.728 ~ ~ ~	CU1087	CWS Systems Inc	1.000	0	0	0	11
Island Fisheries 1.296 0 0 0 H L Respass Farms 1.606 0 0 0 David W. Waters 0.864 ~ ~ ~ Coastal USA Fish Company 0.835 ~ ~ ~ Town of Vanceboro 0.412 ~ ~ ~ Bray Inc of the Albemarle 4.000 0 0 0 McCotter Farms 3.500 ~ ~ ~ John Hancock Farmland Management 70.010 0 0 0 Cypress Swamp Fisheries 0.760 ~ ~ ~ Harrison's Aquafarm Inc. 1.728 ~ ~ ~	CU1090	White Rock Fish Farm Inc	0.432	0	0	0	2
H.L. Respass Farms David W. Waters Coastal USA Fish Company Town of Vanceboro Bray Inc of the Albemarle McCotter Farms John Hancock Farmland Management Cypress Swamp Fisheries Harrison's Aquafarm Inc. 1.606 0.864 ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	CU1091	Island Fisheries	1.296	0	0	0	12
David W. Waters 0.864 ~ ~ ~ Coastal USA Fish Company 0.835 ~ ~ ~ Town of Vanceboro 0.412 ~ ~ ~ Bray Inc of the Albemarle 4.000 0 0 0 McCotter Farms 3.500 ~ ~ ~ John Hancock Farmland Management 70.010 0 0 0 Cypress Swamp Fisheries 0.760 ~ ~ ~ Harrison's Aquafarm Inc. 1.728 ~ ~ ~	CU1093	H L Respass Farms	1.606	0	0	0	4
Coastal USA Fish Company 0.835 ~	CU1094	David W. Waters	0.864	~	~	₹.	*66/8/9(0)
Town of Vanceboro 0.412 ~	CU1096	Coastal USA Fish Company	0.835	~	~		0
Bray Inc of the Albemarle 4.000 0 0 0 McCotter Farms 3.500 ~ ~ ~ John Hancock Farmland Management 70.010 0 0 0 Cypress Swamp Fisheries 0.760 ~ ~ ~ Harrison's Aquafarm Inc. 1.728 ~ ~ ~	CU1097	Town of Vanceboro	0.412	~		₹	0
McCotter Farms 3.500 ~ ~ ~ John Hancock Farmland Management 70.010 0 0 0 Cypress Swamp Fisheries 0.760 ~ ~ ~ Harrison's Aquafarm Inc. 1.728 ~ ~	CU1098	Bray Inc of the Albemarle	4.000	0	0	0	4
John Hancock Farmland Management 70.010 0 0 0 Cypress Swamp Fisheries 0.760 ~ ~ ~ Harrison's Aquafarm Inc. 1.728 ~ ~	CU1099	McCotter Farms	3.500	₹		ł	0
Cypress Swamp Fisheries 0.760 \sim \sim \sim Harrison's Aquafarm Inc. 1.728 \sim \sim	CU1100	John Hancock Farmland Management	70.010	0	0	0	12
Harrison's Aquafarm Inc.	CU1101	Cypress Swamp Fisheries	0.760	~	₹	}	0
	CU1102	Harrison's Aquafarm Inc.	1.728	₹	₹	₹	0

September 1998 - August 1999

TABLE 2: Capacity Use Area #1 Compliance Summary

				Maximum Daily		# of Monthy
Permit #	Permittee	Permitted	Permitted Total Overuse	Overuse	# of Days	Reports
		(mgd)	(gallons)	(gallons)	Over	Submitted
CU1103	David C. Austin	2.160	\	ł	1	0
CU1104	Selvie James	0.504	1	2	₹	0
CU1105	First Craven Sanitary District	0.864	6,000	6,000	П	12
CU1106	Vanguard Farms Inc.	2.000	₹.	2	ł	0
CU1107	Woodridge Timber	0.144	₹	2	}	0
CU1108	Coastal Plains Catfish	0.518	~	2	2	0
CU1111	Peace and Plenty Farms	0.550	₹	?	l	0
CU1113	Washington County Water System	1.000	_ ~	~	≀	*66/92/9 (0)
CU1115	Farm Management Company	345.600	. ₹	₹	₹	(0) 6/3/99*

APPENDICES

APPENDIX A: Water Use Act of 1967

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:

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:

- 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 aguifers; 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.

APPENDIX B: Capacity Use Area #1 Rule

SUBCHAPTER 15A-2E

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.
- 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

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

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

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.

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:

- 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.
- 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.

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

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

- 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;
- 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.

APPENDIX C: Capacity Use Area #1 Permit Application

1

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

1611 Mail Service Center, Raleigh, NC 27699-1611, phone: 919-733-4064

App	olicant Informat	tion:								
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continued on reverse side

- IV. <u>Location of sources of withdrawal</u> (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.

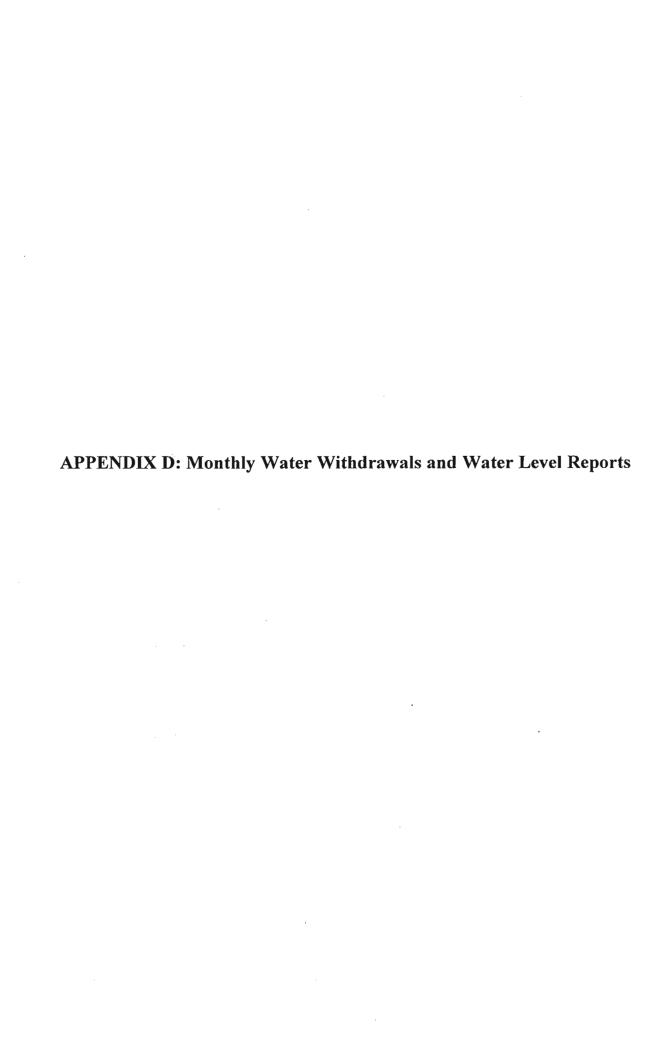
VI. Disposal of water:

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 far documents, and that based on my inquiry of those individuals immediate submitted information is true, accurate, and complete.	•	
(Name)	(Official Title)	(Date)
(Signature)	•	

January 01, 2000



Withdrawals from Report of Water Each Source

North Carolina Department of Environment and Natural Resources Mail to: DIVISION OF WATER RESOURCES

DEPT OF ENVIRONMENT AND NATURAL RESOURCES

1611 MAIL SERVICE CENTER

RALEIGH NORTH CAROLINA 27699-1611 ATTENTION: CAPACITY USE ADMINISTRATION

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Report of Weekly or Monthly Water Levels

North Carolina Department of Environment and Natural Resources

Mail to: DIVISION OF WATER RESOURCES
DEPT OF ENVIRONMENT AND NATURAL RESOURCES
1611 MAIL SERVICE CENTER
RALEIGH NORTH CAROLINA 27699-1611

Attention: Capacity Use Administration

August 23, 1999 Feet Below Land Surface Feet Below Land Surface Feet Below Land Surface ot Land Surface Elev. (ft) Land Surface Elev. (ft) Land Surface Elev. (ft) Sheet # Hour Hour Hour State land surface elevations and deptus below land surface to the nearest 0.1 fee No. Well No. Date Date Well No. Date Well Permit # Feet Below Land Surface Feet Below Land Surface Feet Below Land Surface Land Surface Elev. (ft) Land Surface Elev. (ft) Land Surface Elev. (ft) Hour Hour Hour Date Well No. Date Date Well No. Well No. Facility Feet Below Land Surface Feet Below Land Surface Feet Below Land Surface Land Surface Elev. (ft) _ Land Surface Elev. (ft) · Land Surface Elev. (ft) Year. Hour Hour Hour For month of DWR CUA-6 Date Date Date Well No. Well No. Well No.

APPENDIX E: Capacity Use Area Permits Information

Capacity Use Area Permits Information for September 1, 1998 to August 31,1999

No. of Applications in house beginning mo. 2 2 No. New Applications 1 0 No. Apps Requested Additional Information 3 1 No. permits sent to 0 2 No. Draft permits 0 1 Issued 0 1 Total days Elapsed for all permit Decisions 1 Issued 5 49 No. Permit Decisions 5 5	2 0 0 0 0 1 1 219	0 0 0	C	_	,						
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30-60 Days 0 1	1	0	0	0	0		_	1	0	-	9
More than 60 Days 2 0	7	0	0	0	-	_	0	2	0	0	∞
No. of Permits Issued											
Periods 2 1	3	0	0	0	_	2		3	0		14
Minimum Permit											
Decisions 66 49	48	0	0	0	61	47	55	52	0	46	46
Average Permit											
Decisions 81 49	73	0	0	0	61	59	55	75	0	46	42
Maximum Permit											
Decisions 96 49	102	0	0	0	61	71	55	107	0	46	107
No. of permit staff 5 5	4	m	n	ι	4	4	4	4	2	3	5
No. of hours spent											
permitting 157 171	155	41	131	58	81	69	138	181	87	191	1460

APPENDIX F: Capacity Use Permit System (On-line)



Capacity Use Permit System



(On-line)

Capacity Use Area #1 (CUA#1) was formed in 1968 in response to pumping of the Castle Hayne aquifer associated with a phosphate mining operation in Beaufort County. Within CUA#1, all persons withdrawing more than 100,000 gallons of water per day must first obtain a permit from the Ground Water Branch. CUA#1 water use permits specify a maximum daily water withdrawal rate to protect the water source and other water users from negative impacts related to the permitted water use.

Currently, the applications for CUA# 1 water use permits are submitted entirely by mail. In an effort to reduce the application review time and increase the accuracy of the submitted applications, the DWR has released a web site devoted to accepting online CUA#1 water use permit applications. The Capacity Use Permit System (CUPS) can be accessed from the Capacity Use Area #1 Home page — http://www.dwr.ehnr.state.nc.us/hms/gwbranch/cua1.htm.

The CUPS system is designed to make the application process as easy as possible. Several distinct advantages can be realized by submitting an application online:

- Automated data verification assures that the information entered is appropriate.
- Ability to access existing Permit Information to assist in applying for Permit Renewals or Amendments.
- Ability to use Local Water Supply Plan information to assist in applying for a CUA Permit.
- Integrated access to the DENR GIS Mapping capabilities allows the applicant to locate water sources and print maps for application submission.
- Online Help and Glossary assist the applicant in completing the application and reduce the need to contact the Division of Water Resources.
- E-mail notifications keep the applicant in close contact with the Division of Water Resources.
- The result will be more accurate application information, which will speed the application review process.

If you have any other questions regarding the CUPS system please call 919-733-4064 or send Email to denr.cups.dwr@ncmail.net.

The URL for the CUPS system is: http://www.ncenviropermit.com/CUPS/

More information can be found on the web as follows:

Division of Water Resources - http://www.dwr.ehnr.state.nc.us/home.htm
Water Allocation Section - http://www.dwr.ehnr.state.nc.us/hms/hms.htm
Ground Water Branch - http://www.dwr.ehnr.state.nc.us/hms/gwbranch/gwb.htm

APPENDIX G: Capacity Use Area #1 Mailing List

Mailing List

Permit #	Facility	City	State
CU1054	"C" Canal Farms	New Bern	NC
CU1044	AgResource Ltd Dannenberg Farms	Manteo	NC
CU0200009	Alston Spruill Farms	Oriental	NC
	Aquaterra Inc	Raleigh	NC
	Barrett Kays & Associates	Raleigh	NC
	Beaufort County Board of Commissioners	Chocowinity	NC
CU0200016	Bernard F Kornegay	Pantego	NC
CU1098	Bray Inc of the Albemarle		NC
CU1087	CWS Systems Inc	Charlotte	NC
	Carolina Fish Feeds	Ayden	NC
CU1058	Carolina Fisheries	-	NC
CU1073	Castle Hayne Fisheries	Aurora	NC
CU1029	City of Havelock	Havelock	NC
09	City of Washington	Washington	NC
CU1108	Coastal Plains Catfish	Grifton	NC III
CU1096	Coastal USA Fish Company	Wilmington	NC
CU0200013	Country Club of Plymouth Inc	Plymouth	NC III
CU1112	Craven Pond Inc.	Vanceboro	NC
CU1101	Cypress Swamp Fisheries	Aurora	NC
CU1103	David C Austin	Aurora	NC
CU1094	David W Waters	Pinetown	NC
	Division of Coastal Management	Raleigh	NC
	Division of Environmental Health	Raleigh	NC
	Division of Land Resources	Raleigh	NC
	Division of Soil and Water Conservation	Raleigh	NC
	Division of Water Quality	Raleigh	NC
CU0200017	Down East Fisheries	Aurora	NC
CU1027	Fairfield Harbour	New Bern	NC
CU1115	Farm Management Company	Champaign	IL III
CU1105	First Craven Sanitary District	Bridgeton	NC
CU1116	Flyway Farms Hunting Club	Jacksonville	NC
	G & E Engineering	Charlotte	NC
CU1006	GHW Weyerhaeuser Nursery	Washington	NC
	Groundwater Management Associates	Greenville	NC
CU1093	H L Respass Farms	Plymouth	NC
CU1102	Harrison's Aquafarm Inc	Grantsboro	NC
CU1053	Hyde County Water System	Swanquarter	NC
CU1091	Island Fisheries	Lowland	NC
CU1100	John Hancock Farmland Management	Champaign	IL
CU1085	Manning Farms Inc	Pantego	NC
25	Mattamuskeet Natural Wildlife Refuge	Swanquarter	NC
CU1099	McCotter Farms	Vandemere	NC
CU0200015	Minnesott Golf and Country Club	Arapahoe	NC
CU1016	NCDA Tidewater Research Center	Plymouth	NC
CU1031	NCSU Pamlico Aquaculture Field Lab	Aurora	NC
	NCSU Sea Grant College Program	Raleigh	NC

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Permit #	Facility	City	<u>State</u>
20	National Council of the Paper Industry	New Bern	NC
	NCASI		
CU1005	National Spinning Co	Washington	NC
CU0200005	North State Fisheries	Pinetown	NC
03	PCS Phosphate Co	Aurora	NC
CU0200008	Pamlico County Water System	Bayboro	NC
34	Pamlico Packing Co Inc	Vandemere	NC
	Pamlico Tar River Foundation	Washington	NC
CU1057	Paul Farms Inc	New Bern	NC
CU1111	Peace and Plenty Farms	Vanceboro	NC
CU0200006	Richland Townshp W&S Beauf County #VII	Washington	NC
CU1104	Selvie James	Creswell	NC
	Shiloh Farms	Louisburg	NC
	Southern Environmental Law Center	Chapel Hill	NC
CU1056	Sullivan Fish Farm	Washington	NC
CU1002	Swindell Fish Farms	Pantego	NC
CU0200010	T L Harris Jr	Pantego	NC
CU1015	Town of Beaufort	Beaufort	NC
CU1008	Town of Belhaven	Belhaven	NC
CU1051	Town of Chocowinity	Chocowinity	NC
CU1046	Town of Creswell	Creswell	NC
CU1014	Town of Morehead City	Morehead City	NC
CU1012	Town of Newport	Newport	NC
CU1022	Town of Oriental	Oriental	NC
CU1001	Town of Plymouth	Plymouth	NC
CU0200014	Town of Roper	Roper	NC
CU1097	Town of Vanceboro	Vanceboro	NC
	US Fish and Wildlife Service	Raleigh	NC
CU1060	US Marine Corps Cherry Point	Cherry Point	NC
	USDA Natural Resource Conservation	Plymouth	NC
CU1106	Vanguard Farms Inc	Greenville	NC
CU1113	Washington County Water System	Plymouth	NC
CU1013	Weyerhaeuser Company	New Bern	NC
CU0200011	Weyerhaeuser Plymouth Plant	Plymouth	NC
CU0200003	Weyerhaeuser Real Estate Company	Chocowinity	NC
CU1090	White Rock Fish Farm Inc	Vanceboro	NC
	Wildlife Resources Commission	Raleigh	NC
CU1107	Woodridge Timber Inc	Jamesville	NC

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