Title 15A – Department of Environmental Quality

***Notice*** *is hereby given in accordance with G.S. 150B-21.3A(c)(2)g. that the Environmental Management Commission intends to readopt with substantive changes the rules cited as 15A NCAC 02E .0301, .0501, .0502, .0504, .0505, .0507, .0602, .0603, .0605-.0615, readopt without substantive changes the rules cited as 15A NCAC 02E .0106, .0107, .0601, .0604, and repeal through readoption the rules cited as 15A NCAC 02E .0503, and .0506.*

**Link to agency website pursuant to G.S. 150B-19.1(c):***https://deq.nc.gov/news/events/public-notices-hearings*

**Proposed Effective Date:***January 1, 2022*

**Public Hearing:**

**Date:** *May 20, 2021*

**Time:** *6:00 p.m.*

**Location:**

*In the abundance of caution, and to address protective measures to help prevent the spread of COVID-19, the NC Division of Water Resources is holding an online public hearing that can be joined starting at 5:45 pm via WebEx link:*

*https://ncdenrits.webex.com/ncdenrits/onstage/g.php?MTID=ed24ad39f5c499f4c8a32f8afb034c78d*

*WebEx password: ncdwr*

*WebEx phone number: 1-415-655-0003*

*WebEx access code: 185 923 0287*

*To register for the hearing and provide your preference regarding speaking at the hearing, please visit:*

*https://forms.office.com/Pages/ResponsePage.aspx?id=3IF2etC5mkSFw­zCbNftGRcM2xmuszROiks3JDQp2 RUN0cxVkU2TFFTN!dYSDRFWU4zSTlSVEFYNC4u*

*Or scan the following QR code with your phone:*



*Registration must be completed by 12:00 pm on May 20, 2021. If you have any problems registering online, please call 919-707-9024 by the registration deadline of 12:00 pm on May 20, 2021.*

*The Division of Water Resources highly recommends testing your computer's WebEx capabilities prior to the hearing at https://www.webex.com/test-meeting.html. For instructions about digital ways to join the public hearing, please refer to the WebEx Help Center online at https://help.webex.com/en-us/.*

*To comment during the hearing after your name is called as a registered speaker and/or after the hearing officer asks if any people wish to comment following the registered speakers:*

*-If you join the hearing by phone, press \*3 to "raise your hand," speak once called upon to do so, and*

*press \*3 again to "lower your hand."*

*-If you join the hearing online, press the hand icon to "raise your hand," speak once called upon to do so, and press the hand icon again to "lower your hand."*

*-The Hearing Officer may limit the length of time that you may speak, so that all those who wish to*

*speak may do so.*

**Reason for Proposed Action:** *N.C. Gen. Stat. 150B-21.3A requires state agencies to review existing rules every 10 years, determine which rules are still necessary, and either re-adopt or repeal each rule as appropriate. The proposed rulemaking satisfies these requirements for the re-adoption process for the following 15A NCAC 02E­Water Use Registration and Allocation Rules:*

*.0100 General Provisions*

*.0300 Registration of Water Withdrawals and Transfers*

*.0500 Central Coastal Plain Capacity Use Area*

*.0600 Water Use During Droughts and Water Supply Emergencies*

*The .0300 -Registration of Water Withdrawals and Transfers rules collects annual self-supplied water use data from 85 counties outside of the Central Coastal Plain Capacity Use Area to manage the limited water resources. The .0500 -Central Coastal Plain Capacity Use Area (CCPCUA) was created due to unsustainable ground water withdrawals of two major aquifers in the central coastal plain: the Black Creek and Upper Cape Fear. There is evidence of present and future ground water supply shortages within the area encompassed by the 15 counties in the CCPCUA. Within this area, ground water from the Black Creek and Upper Cape Fear aquifers is being withdrawn at a rate that exceeds the available recharge. To address this problem, DWR created the CCPCU A to regulate water use through permitting to avoid damage to the ground water resources and to maintain those sources of water indefinitely. The .0600 -Water Use During Droughts and Water Supply Emergencies rules established minimum standards and practices for water conservation and water reuse during drought and water supply emergencies. The rules addressed water use by publicly and privately owned water systems, state agencies, local governments, business, industry, agriculture and horticulture. The purpose of the rules is to minimize harmful impacts on public health and safety, environmental quality, and the economy by establishing minimum standards and practices for water shortage response planning, water use reporting, water conservation, and water reuse during droughts and water supply emergencies.*

*Proposed changes to 15A NCAC 02E Water Use Registration and Allocation Rules include:*

*• Updated of agency names and addresses*

*• removed language already codified*

*• removed incorrect reporting requirements already codified*

*• format changes and removed some unnecessary language*

*• repealed outdated language*

*• updated language for clarification*

*• added three definitions (aquifer recharge, cretaceous aquifer system zones, and recharge rate)*

*• alphabetized the definitions*

*• added definitions*

*• reworded language for clarification*

*• updated language for clarification*

*• updated rule cross-reference*

**Comments may be submitted to:** *Linwood Peel, NC DEQ-DWR Planning Section, 1611 Mail Service Center, Raleigh, NC 27699-1611; phone (919) 707-9024; email linwood.peele@ncdenr.gov*

**Comment period ends:***July 2, 2021*

**Procedure for Subjecting a Proposed Rule to Legislative Review:** If an objection is not resolved prior to the adoption of the rule, a person may also submit written objections to the Rules Review Commission after the adoption of the Rule. If the Rules Review Commission receives written and signed objections after the adoption of the Rule in accordance with G.S. 150B-21.3(b2) from 10 or more persons clearly requesting review by the legislature and the Rules Review Commission approves the rule, the rule will become effective as provided in G.S. 150B-21.3(b1). The Commission will receive written objections until 5:00 p.m. on the day following the day the Commission approves the rule. The Commission will receive those objections by mail, delivery service, hand delivery, or facsimile transmission. If you have any further questions concerning the submission of objections to the Commission, please call a Commission staff attorney at 919-431-3000.

**Fiscal impact. Does any rule or combination of rules in this notice create an economic impact? Check all that apply.**

**State funds affected**

**Local funds affected**

**Substantial economic impact (>= $1,000,000)**

**Approved by OSBM**

**No fiscal note required**

Chapter 02 - Environmental Management

SUBCHAPTER 02E ‑ WATER USE REGISTRATION AND ALLOCATION

SECTION .0100 ‑ GENERAL PROVISIONS

15A NCAC 02E .0106 DEFINITIONS (READOPTION WITHOUT SUBSTANTIVE CHANGES)

As used herein, unless the context otherwise requires:

(1) "Director" means the Director of the Division of Water Resources.

(2) "Division" means the Division of Water Resources.

History Note: Authority G.S. 87-87; 143-215.14; 143-215.21;

Eff. March 1, 1985;

Amended Eff. August 1, 2002.

15A NCAC 02E .0107 DELEGATION (READOPTION WITHOUT SUBSTANTIVE CHANGES)

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

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

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

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

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

History Note: Filed as a Temporary Amendment Eff. October 14, 1991 for a Period of 180 Days to Expire on April 11, 1992;

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

Eff. March 1, 1985;

Amended Eff. August 1, 2002; September 1, 1994; April 1, 1992.

SECTION .0300 ‑ REGISTRATION OF WATER WITHDRAWALS AND TRANSFERS

15A NCAC 02E .0301 APPLICATION; PROCESSING FEES

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

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

(1) No registration application form is complete until the registration processing fee is paid.

~~(2)~~ ~~Each facility from which a person withdraws or transfers one million gallons per day or more must be separately registered. The registration application for each facility to be registered must include the fee in the amount set forth in this Rule.~~

~~(3)~~(2) ~~A late registration fee in the amount of five dollars ($5.00) per day for each day the registration of a water transfer or withdrawal is late, up to a maximum of five hundred dollars ($500.00), shall be assessed as a penalty for failure to register the water transfer or withdrawal in a timely manner.~~ The penalty pursuant to G.S. 143-215.22H(e) shall stop ~~stops~~ accruing on the date of receipt of the completed registration application by the Division of Water Resources.

~~(4)~~(3) Payment of the registration processing fee may be by check or money order made payable to the ~~"N. C. Department of Environment, Health, and Natural Resources."~~ "N. C. Department of Environmental Quality." The check or money order shall refer to the water withdrawal or transfer registration application.

(c) Except as otherwise provided in this Rule, upon receipt of a ~~properly~~ completed application form and the registration processing fee, the applicant shall be issued a receipt of registration.

(d) Pursuant to G.S. 143-215.3(a)(la), and G.S. 143-215.22H, no fees including late registration fees for failing to register or update registrations in a timely manner, are required to be paid under this Rule by a farmer ~~who submits an application for or an update of a registration of a withdrawal or transfer that pertains to farming operations. Upon receipt of a properly completed application from a farmer, the applicant will be issued a receipt of registration.~~ whose activities are directly related or incidental to the production of crops, fruits, vegetables, ornamental and flowering plants, dairy products, livestock, poultry, and other agricultural products, or to the creation or maintenance of waterfowl impoundments.

~~(e) Pursuant to G.S. 143-215.22H(c), separate registration of a water withdrawal or transfer is not required of a local government that completes and periodically revises and updates its water supply plan pursuant to G.S. 143-355(l).~~

~~(f) Any person who withdraws or transfers one million gallons or more in any single day must register the withdrawal or transfer.~~

History Note: Filed as a Temporary Rule Eff. October 14, 1991 for a Period of 180 Days to Expire on April 11, 1992;

Authority G.S. 143‑215.3(a)(1a); 143‑215.3(a)(1b); 143‑215.22H ~~; 143-355(1)~~;

Eff. April 1, 1992;

Amended Eff. September 1, 1994.

SECTION .0500 - CENTRAL COASTAL PLAIN CAPACITY USE AREA

15A NCAC 02E .0501 DECLARATION AND DELINEATION OF CENTRAL COASTAL PLAIN CAPACITY USE AREA

The area encompassed by the following 15 North Carolina counties and adjoining creeks, streams, and rivers is hereby declared and delineated as the Central Coastal Plain Capacity Use Area:

(1) Beaufort

(2) Carteret

(3) Craven

(4) Duplin

(5) Edgecombe

(6) Greene

(7) Jones

(8) Lenoir

(9) Martin

(10) Onslow

(11) Pamlico

(12) Pitt

(13) Washington

(14) Wayne; and

(15) Wilson.

~~The Environmental Management Commission finds that the~~ The use of ground water requires coordination and limited regulation in this delineated area for protection of the public interest. The intent ~~of this Section~~ is to protect the long -term productivity of aquifers within the designated area and to allow the use of ground water for ~~beneficial~~ uses at rates which do not exceed or threaten to exceed the recharge rate of the aquifers within the designated area.

History Note: Authority G.S. 143-215.13;

Eff. August 1, 2002.

15A NCAC 02E .0502 WITHDRAWAL PERMITS

(a) ~~Existing ground water withdrawal permits issued in Capacity Use Area No. 1 (15A NCAC 02E .0200) within the Central Coastal Plain Capacity Use Area are reissued under Section .0500 of this Subchapter and are valid until the expiration date specified in each permit. Water use permits are no longer required for withdrawals in Hyde and Tyrrell Counties as of the effective date of this Rule.~~ Permits are not required for surface water use under Section .0500 of this Subchapter in the Central Coastal Plain Capacity Use Area as delineated in Rule .0501 of this Section.

(b) No person shall withdraw ground water ~~after the effective date of this Rule~~ in excess of 100,000 gallons per day by a well, group of wells operated as a system, or sump for any purpose unless ~~such person shall first obtain~~ he or she obtains a water use permit from the Director. ~~Existing withdrawals of ground water as of the effective date of this Rule and proposed withdrawals previously approved for funding appropriated pursuant to the "Clean Water and Natural Gas Critical Needs Bond Act of 1998" or other local, state or federally funded projects as of the effective date of this Rule shall be allowed to proceed with construction or to continue to operate under interim status until a permit has been issued or denied by the Director, provided that persons withdrawing in excess of 100,000 gallons per day by a well, group of wells operated as a system, or sump comply with the following requirements:~~

~~(1)~~ ~~Persons conducting withdrawals in the Capacity Use Area that require a permit shall submit a permit application to the Division of Water Resources within 180 days of the effective date of this Rule.~~

~~(2)~~ ~~Persons who have submitted applications shall provide any additional information requested by the Division of Water Resources for processing of the permit application within 30 days of the receipt of that request.~~

~~(3)~~ ~~Persons conducting withdrawals in the Capacity Use Area that require a permit shall submit water level and water use data on a form supplied by the Division four times a year, within 30 days of the end of March, June, September, and December until a permit has been issued or denied by the Division of Water Resources.~~

(c) No ground water withdrawal shall result in adverse impacts, including dewatering of aquifers, encroachment of salt water, land subsidence or sinkhole development, or decline in aquifer water levels that indicate aggregate water use exceeds the aquifer recharge rate. ~~Ground water withdrawals shall be governed by the following standards:~~

~~(1)~~ ~~Adverse impacts of ground water withdrawals shall be avoided or minimized. Adverse impacts include, but are not limited to:~~

~~(A)~~ ~~dewatering of aquifers;~~

~~(B)~~ ~~encroachment of salt water;~~

~~(C)~~ ~~land subsidence or sinkhole development; or~~

~~(D)~~ ~~declines in aquifer water levels that indicate that aggregate water use exceeds the aquifer replenishment rate.~~

~~(2)~~ ~~Adverse impacts on other water users from ground water withdrawals shall be corrected or minimized through efficient use of water and development of sustainable water sources.~~

~~(3)~~ ~~In determining the importance and necessity of a proposed withdrawal the efficiency of water use and implementation of conservation measures shall be considered.~~

(d) An application for a water use permit must be submitted on a form ~~approved by the Director~~ to the North Carolina Division of Water Resources. The application shall describe the purpose or purposes for which water shall be used, shall set forth the method and location of withdrawals, shall justify the quantities needed, and shall document water conservation measures to be used by the applicant to ensure efficient use of water and avoidance of waste. Any other information necessary to determine whether to grant or deny an application as requested by the Division shall be submitted to the Division within 30 days of the request. Withdrawal permit applications shall include the following information:

(1) location ~~Location~~ by latitude and longitude of all wells to be used for withdrawal of ~~water.~~ water and all other wells within 1500 feet of the applicant's wells;

(2) specifications ~~Specifications~~ for design and construction of existing and proposed production and monitoring wells ~~including:~~ including well diameter, total depth of well, depths of all open hole or screened intervals that will yield water to the well, depth of pump intake(s), size, capacity, and type of pump, depth to gravel pack, and depth measurements shall be within accuracy limits of plus or minus 0.10 feet and referenced to a known land surface elevation;

~~(A)~~ ~~Well diameter;~~

~~(B)~~ ~~Total depth of the well;~~

~~(C)~~ ~~Depths of all open hole or screened intervals that will yield water to the well;~~

~~(D)~~ ~~Depth of pump intake(s);~~

~~(E)~~ ~~Size, capacity and type of pump;~~

~~(F)~~ ~~Depth to top of gravel pack; and~~

~~(G)~~ ~~Depth measurements shall be within accuracy limits of plus or minus 0.10 feet and referenced to a known land surface elevation.~~

Exceptions may be made where specific items of information are not critical, as determined by the Director, to manage the ground water resource;

(3) withdrawal ~~Withdrawal~~ permit applications for use of ground water from the Cretaceous aquifer system shall be reviewed recognizing the Cretaceous aquifer system zones. ~~include plans to reduce water use from these aquifers as specified in Rule .0503 of this Section. Withdrawal rates from the Cretaceous aquifer system that exceed the approved base rate may be permitted during Phase I of Rule .0503 of this Section if the applicant can demonstrate to the Director's satisfaction a need for the greater amount.~~ Cretaceous aquifer system wells shall be identified using the specifications in Rule .0502(d)(1) and .0502(d)(2) of this Section and the hydrogeological framework;

(4) withdrawal ~~Withdrawal~~ permit applications for dewatering of mines, pits or quarries shall include a dewatering or depressurization plan that includes:

(A) the current withdrawal rate or estimates of the proposed withdrawal rate;

(B) the location, design and specifications of any sumps, drains or other withdrawal sources including wells and trenches;

(C) the lateral extent and depth of the zone(s) to be dewatered or depressurized;

(D) location by latitude and longitude of all wells within 1500 feet of the excavation boundary;

(E)~~(D)~~ a monitoring plan that provides data to delineate the nature and extent of dewatering or depressurization; and

(F)~~(E)~~ certification of all engineering plans and hydrogeological analyses prepared to meet these requirements consistent with professional licensing board statutes and rules governing such activities.

Exceptions may be made where specific items of information are not critical, as determined by the Director, to manage the ground ~~water.~~ water resource; and

(5) ~~conservation measures.~~ the ~~The~~ applicant shall provide information on existing conservation measures and conservation measures to be implemented during the permit period as follows:

(A) Public water supply systems shall develop and implement a ~~feasible~~ water conservation plan incorporating, at a minimum, the following components. Each component shall be described, including a timetable for implementing each component that does not already exist.

(i) adoption ~~Adoption~~ of a water conservation-based rate structure, such as ~~:~~ flat rates, increasing block rates, seasonal rates, or quantity-based surcharges; ~~surcharges.~~

(ii) implementation ~~Implementation~~ of a water loss reduction program if unaccounted for water is greater than 15 percent of the total amount produced, as documented annually using a ~~detailed~~ water audit. Water loss reduction programs shall consist of annual water audits, in-field leak detection, and leak repair; ~~repair.~~

(iii) adoption ~~Adoption~~ of a water conservation ordinance for irrigation, ~~including~~ such ~~measures as:~~ as time-of-day and day-of-week restrictions on lawn and ornamental ~~irrigation,~~ irrigation or automatic irrigation system shut-off devices; ~~or other appropriate measures.~~

(iv) implementation ~~Implementation~~ of a retrofit program that makes available indoor water conservation devices to customers, such ~~(such~~ as showerheads, toilet flappers, and faucet aerators; ~~aerators).~~

(v) implementation ~~Implementation~~ of a public education program, such ~~(such~~ as water bill inserts, school and civic presentations, water treatment plant tours, and public services announcements; and ~~announcements, or other appropriate measures) .~~

(vi) evaluation ~~Evaluation~~ of the feasibility of water reuse as a means of conservation, where applicable.

(B) Users of water for commercial purposes, other than irrigation of crops and forestry stock, shall develop and implement a water conservation plan as follows:

(i) an audit of water use by type of activity, such as process make up water and non-contact cooling water, ~~activity (for example, process make-up water, non-contact cooling water)~~ including existing and potential conservation and reuse measures for each type of water use; and

(ii) an implementation schedule for feasible measures identified in the above item for conservation and reuse of water at the facility.

(C) Users of water for irrigation of crops and forestry stock shall provide the following information:

(i) total acreage with irrigation available;

(ii) types of crops that may be irrigated;

(iii) method of irrigation such as ~~(for example,~~ wells that supply water to canals, ditches or central pivot systems or any other irrigation method using ground water); and

(iv) a statement that the applicant uses conservation practice standards for irrigation as defined by the Natural Resources Conservation Service.

(6) if ~~If~~ an applicant intends to operate an aquifer storage and recovery program (ASR), the applicant shall provide information on the storage zone, including the depth interval of the storage zone, lateral extent of the projected storage area, construction details of wells used for injection and withdrawal of water, and performance of the ASR program.

~~(e) The Director shall issue, modify, revoke, or deny each permit as set forth in G.S. 143-215.15. Permittees may apply for permit modifications. Any application submitted by a permittee shall be subject to the public notice and comment requirements of G.S. 143-215.15(d).~~

~~(f) Permit duration shall be set by the Director as described in G.S. 143-215.16(a). Permit transferability is established in G.S. 143-215.16(b).~~

(e)~~(g)~~ Persons holding a permit shall submit signed water usage and water level reports to the Director not later than 30 days after the end of each permit reporting period as specified in the permit. Monitoring report requirements shall ~~may~~ include:

(1) amounts ~~Amounts~~ of daily withdrawal from each well; ~~well.~~

(2) pumping ~~Pumping~~ and static water levels for each supply well as measured with a steel or electric tape, or an alternative method as specified in the permit, at time intervals specified in the permit; ~~permit.~~

(3) static ~~Static~~ water levels in observation wells at time intervals specified in the permit; ~~permit.~~

(4) annual ~~Annual~~ sampling by applicants located in the salt water encroachment zone and chloride concentration analysis by a State certified laboratory; and ~~laboratory.~~

(5) any ~~Any~~ other information the Director determines to be pertinent and necessary to the evaluation of the effects of ~~withdrawls.~~ withdrawals during the application review process.

(f)~~(h)~~ Water use permit holders shall not add new wells without prior approval from the ~~Director.~~ Director through a permit modification.

(g)~~(i)~~ The Director may require permit holders to construct observation wells to observe water level and water quality conditions before and after water withdrawals begin if there are concerns about adverse impacts to the aquifer based on the withdrawal amount and location. ~~there is a demonstrated need for aquifer~~ Aquifer monitoring may be necessary to assess the impact of the withdrawal on the aquifer.

(h)~~(j)~~ For all water uses other than dewatering of mines, pits or quarries, withdrawals shall be permitted only from wells that are constructed such that the pump intake or intakes are at a shallower depth than the top of the uppermost confined aquifer that yields water to the well. Confined aquifer tops are established in the hydrogeological framework. Where wells in existence as of the effective date of this Rule are not in compliance with the requirements of this provision, the permit shall include a compliance schedule for retrofitting or replacement of non-compliant wells. Withdrawals from unconfined aquifers shall not lower the water table by an amount large enough to decrease the effective thickness of the unconfined aquifer by more than 50 percent.

(i)~~(k)~~ For withdrawals to dewater mines, pits or quarries, the permit shall delimit the extent of the area and depths of the aquifer(s) to be dewatered or depressurized. Maximum withdrawal rates and the permissible extent of dewatering or depressurization shall be determined by the Director using data provided by the applicant, data related to permits under G.S. 74-50, ~~74-47,~~ and other publicly available information. Withdrawal rates that do not cause adverse impacts, as defined in Rule .0502(c) of this Section, shall be approved.

(j)~~(l)~~ Withdrawals of water that cause changes in water quality such that the available uses of the resource are adversely affected, by dewatering or salt water encroachment, shall not be permitted. ~~For example, withdrawals shall not be permitted that result in migration of ground water that contains more than 250 milligrams per liter chloride into pumping wells that contain chloride at concentrations below 250 milligrams per liter.~~

(k)~~(m)~~ General permits may be developed by the Division and issued by the Director for categories of withdrawal that involve the same or substantially similar operations, have similar withdrawal characteristics, require the same limitations or operating conditions, and require similar monitoring.

(l)~~(n)~~ Permitted water users may withdraw and sell or transfer water to other users provided that their permitted withdrawal limits are not exceeded.

(m)~~(o)~~ A permitted water user may ~~sell or~~ transfer to other users a portion of his permitted withdrawal. To carry out such a transfer, the original permittee must request a permit modification to reduce his permitted withdrawal and the proposed recipient of the transfer must apply for a new or amended withdrawal permit. ~~permit under Section .0500 of this Subchapter.~~

(n)~~(p)~~ The Director shall issue a temporary permit when the following conditions are met:

(1) ~~Where~~ an applicant or ~~a~~ permit holder ~~can demonstrate~~ demonstrates that compliance with water withdrawal limits established pursuant to this Section ~~under Section .0500 of this Subchapter~~ is not possible because of construction schedules, requirements of other laws, or other reasons beyond the control of the applicant or permit holder; ~~holder,~~ and ~~where~~

(2) the applicant or permit holder has made ~~good faith~~ efforts to conserve water and ~~to plan the~~ develop ~~ment~~ ~~of~~ other water sources, and ~~sources, the Director may issue a temporary permit with an alternative schedule to attain compliance with provisions of Section .0500 of this Subchapter, as authorized in G.S. 143-215.15(c)(ii).~~

(3) the applicant or permit holder provides data from monitoring wells which support a higher withdrawal rate which does not exceed the recharge rate.

History Note: Authority G.S. 143-215.14; 143-215.15; 143-215.16;

Eff. August 1, 2002.

15A NCAC 02E .0503 PRESCRIBED WATER USE REDUCTIONS IN CRETACEOUS AQUIFER ZONES

~~Cretaceous aquifer water use shall be reduced in prescribed areas over a 16 year period, starting from approved base rates on the effective date of this Rule. The Cretaceous aquifer system zones and the three phases of water use reductions are listed as follows:~~

~~(1)~~ ~~Cretaceous aquifer system zones are regions established in the fresh water portion of the Cretaceous aquifer system that delimit zones of salt water encroachment, dewatering and declining water levels. These zones are designated on the paper and digital map entitled "Central Coastal Plain Capacity Use Area Cretaceous Aquifer Zones" (CCPCUA) on file in the Office of the Secretary of State one week prior to the effective date of these Rules~~

~~(2)~~ ~~The reductions specified in this Rule do not apply to intermittent users.~~

~~(3)~~ ~~If a permittee implements an aquifer storage and recovery program (ASR), reduction requirements will be based on the total net withdrawals. The reductions specified in this Rule do not apply if the volume of water injected into the aquifer is greater than the withdrawal volume. If the withdrawal volume is greater than the injected volume, reductions specified in this Rule apply to the difference between the withdrawal volume and the injected volume.~~

~~(4)~~ ~~The reductions specified in this Rule shall not reduce permitted water use rates below 100,001 gallons per day.~~

~~(5)~~ ~~Phase definitions:~~

~~(a)~~ ~~Phase I: The six year period extending into the future from the effective date of this Rule.~~

~~(b)~~ ~~Phase II: The five year period extending into the future from six years after the effective date of this Rule to 11 years after the effective date of this Rule.~~

~~(c)~~ ~~Phase III: The five year period extending into the future from 11 years after the effective date of this Rule to 16 years after the effective date of this Rule.~~

~~(6)~~ ~~Phase reductions:~~

~~(a)~~ ~~Phase I:~~

~~(i)~~ ~~At the end of the Phase I, permittees who are located in the dewatering zone shall reduce annual water use from Cretaceous aquifers by 25% from their approved base rate.~~

~~(ii)~~ ~~At the end of the Phase I, permittees who are located in the salt water encroachment zone shall reduce annual water use from Cretaceous aquifers by 25% from their approved base rate.~~

~~(iii)~~ ~~At the end of the Phase I, permittees who are located in the declining water level zone shall reduce annual water use from Cretaceous aquifers by 10% from their approved base rate.~~

~~(b)~~ ~~Phase II:~~

~~(i)~~ ~~At the end of the Phase II, permittees who are located in the dewatering zone shall reduce annual water use from Cretaceous aquifers by 50% from their approved base rate.~~

~~(ii)~~ ~~At the end of the Phase II, permittees who are located in the salt water encroachment zone shall reduce annual water use from Cretaceous aquifers by 50% from their approved base rate.~~

~~(iii)~~ ~~At the end of the Phase II, permittees who are located in the declining water level zone shall reduce annual water use from Cretaceous aquifers by 20% from their approved base rate.~~

~~(c)~~ ~~Phase III:~~

~~(i)~~ ~~At the end of the Phase III, permittees who are located in the dewatering zone shall reduce annual water use from Cretaceous aquifers by 75% from their approved base rate.~~

~~(ii)~~ ~~At the end of the Phase III, permittees who are located in the salt water encroachment zone shall reduce annual water use from Cretaceous aquifers by 75% from their approved base rate.~~

~~(iii)~~ ~~At the end of the Phase III, permittees who are located in the declining water level zone shall reduce annual water use from Cretaceous aquifers by 30% from their approved base rate.~~

~~(7)~~ ~~The CCPCUA Cretaceous Aquifer Zones map shall be updated, if necessary, in the sixth, eleventh, and sixteenth years following the effective date of this Rule to account for aquifer water level responses to phased withdrawal reductions. The map update shall be based on the following conditions:~~

~~(a)~~ ~~Rate of decline in water levels in the aquifers;~~

~~(b)~~ ~~Rate of increase in water levels in the aquifers;~~

~~(c)~~ ~~Stabilization of water levels in the aquifers; and~~

~~(d)~~ ~~Chloride concentrations in the aquifers.~~

~~This aquifer information shall be analyzed on a regional scale and used to develop updated assessments of aquifer conditions in the Central Coastal Plain Capacity Use Area. The Environmental Management Commission (EMC) may adjust the aquifer zones and the water use reduction percentages for each zone based on the assessment of conditions. The EMC shall adopt the updated map and reduction percentage changes after public hearing.~~

~~(8)~~ ~~The reductions specified in this Rule do not apply to wells exclusively screened or open to the Peedee aquifer.~~

~~(9)~~ ~~An applicant may submit documentation supporting the exemption of a well located in the Declining Water Level Zone from the withdrawal reductions specified in this Rule. This documentation must include a record of monthly static water levels from that well over at least a three-year period, ending with the month when the request for exemption is submitted. The Director may exempt a well from reductions if the water level history shows no pattern of decline during this three-year period. A well previously exempted from the withdrawal reductions shall become subject to the reduction if water levels begin to show a pattern of decline.~~

History Note: Authority G.S. 143-215.15;

Eff. August 1, 2002.

15A NCAC 02E .0504 REQUIREMENTS FOR ENTRY AND INSPECTION

(a) The Division may enter and inspect property in order to evaluate wells, pumps, metering equipment or other withdrawal or measurement devices and records of water withdrawals and water levels, if:

(1) Persons conduct an activity that the Division believes requires the use of water at quantities that subject the person subject to ~~regulation under~~ these Rules;

(2) A permittee or applicant has not provided data or information on use of water and wells and other water withdrawal facilities as required by these Rules; or

(3) Water levels and chloride concentrations at the person's facility, or at nearby facilities and/or ~~or~~ monitoring stations, indicate that aquifers may be damaged by overpumping, ~~overpumping or~~ salt water encroachment, or other adverse impacts ~~affects~~ that may be attributed to withdrawal by the person.

(b) All information submitted to fulfill the requirements of these Rules, or to obtain a permit under these Rules, or obtained by inspection under these Rules, shall be treated as Confidential Business Information, if requested by the applicant, and found to be such by the Division. Reports defined in Rule .0502(e) ~~.0502(g)~~ of this Section are not considered Confidential Business Information.

History Note: Authority G.S. 143-215.19;

Eff. August 1, 2002.

15A NCAC 02E .0505 ACCEPTABLE WITHDRAWAL METHODS THAT DO NOT REQUIRE A PERMIT

(a) ~~As of the effective date of this Rule, any~~ Any person who is not subject to Rule .0502 of this Section and withdraws more than 10,000 gallons per day from surface or ground water in the Central Coastal Plain Capacity Use Area, shall register such withdrawals on a form supplied by the Division and comply with the following provisions:

(1) construct ~~Construct~~ new wells such that the pump intake or intakes are above the top of the uppermost confined aquifer that yields water to the well. Confined aquifer tops are established in the hydrogeological framework;

(2) report ~~Report~~ surface and ground water use to the Division of Water Resources on an annual basis on a form supplied by the Division; and

(3) withdraw ~~Withdraw~~ water in a manner that does not damage the aquifer, ~~aquifer or~~ cause salt water encroachment, ~~encroachment~~ or other adverse impacts.

(b) Requirements of this Rule ~~These requirements~~ do not apply to withdrawals to supply an individual domestic dwelling.

~~(c) Agricultural water users may either register water use with the Division of Water Resources as provided in this Rule or provide the information to the North Carolina Department of Agriculture and Consumer Services.~~

History Note: Authority G.S. 143-215.14; 143-355(k);

Eff. August 1, 2002.

15A NCAC 02E .0506 CENTRAL COASTAL PLAIN CAPACITY USE AREA STATUS REPORT

~~Within two years of the effective date of this Rule, and at five-year intervals thereafter, the Division of Water Resources shall publish a status report on the Central Coastal Plain Capacity Use Area. The report shall include the following:~~

~~(1)~~ ~~Compilations of water use data;~~

~~(2)~~ ~~Evaluations of surface and ground water resources;~~

~~(3)~~ ~~Updated information about the hydrogeologic framework in the Central Coastal Plain Capacity Use Area;~~

~~(4)~~ ~~A summary of alternative water sources and water management techniques that may be feasible by generalized geographic location; and~~

~~(5)~~ ~~A status report on actions by water users to develop new water sources and to increase water use efficiency.~~

History Note: Authority G.S. 143-215.14;

Eff. August 1, 2002.

15A NCAC 02E .0507 DEFINITIONS

The following is a list of definitions for terms found in Section .0500 of this Subchapter:

(1) Approved base rate: The larger of a person's January 1, 1997 through December 31, 1997 or August 1, 1999 through July 31, 2000 annual water use rate from the Cretaceous aquifer system, or an adjusted water use rate determined by ~~through negotiation with~~ the Division based upon documentation of the following information: ~~using documentation provided by the applicant of:~~

(a) water use reductions made since January 1, 1992;

(b) use of wells for which funding has been approved or for which plans have been approved by the ~~Division of Environmental Health~~ Department of Environmental Quality by ~~the effective date of this Rule~~ August 1, 2002;

(c) the portion of a plant nursery operation using low volume micro-irrigation; or

(d) other ~~relevant~~ information pertaining to water use during the time periods specified.

(2) Aquifer: Water-bearing earth materials that are capable of yielding water in usable quantities to a well or spring.

(3) Aquifer recharge: Precipitation that infiltrates into the subsurface.

(4)~~(3)~~ Aquifer storage and recovery program (ASR): Controlled injection of water into an aquifer with the intent to store water in the aquifer for subsequent withdrawal and use.

(5)~~(4)~~ Confining unit: A geologic formation that does not yield usable ~~economically practical~~ quantities of water to wells or springs. Confining units separate aquifers and slow the movement of ground water.

(6)~~(5)~~ Cretaceous aquifer system: A system of aquifers in the North Carolina coastal plain that is comprised of water-bearing earth materials deposited during the Cretaceous period of geologic time. The extent of the Cretaceous Aquifer System is defined in the hydrogeological framework and includes the Peedee, Black Creek, Upper Cape Fear and Lower Cape Fear aquifers.

(7) Cretaceous aquifer system zones: Regions established in the fresh water portion of the Cretaceous aquifer system that delimit zones of salt water encroachment, dewatering and declining water levels. These zones are designated on the paper and digital map entitled "Central Coastal Plain Capacity Use Area Cretaceous Aquifer Zones" (CCPCUA) on file in the Office of the Secretary of State. These zones encompass areas sensitive to over-development because aquifer withdrawal rates can exceed recharge rates. Between August 1, 2002 and July 31, 2019 Cretaceous Aquifer system zone users were required to reduce withdrawals from their Approved Base Rates up to 30% in the declining water level zone and up to 75% in the dewatering and salt water encroachment zones. The reductions came about through large investments by water users in alternative water sources and water treatment systems. Intermittent users were not required to reduce withdrawals. Users of wells exclusively screened or open to the Peedee aquifer were not required to reduce withdrawals.

(8)~~(6)~~ Dewatering: Dewatering occurs when aquifer water levels are depressed below the top of a confined aquifer or water table declines adversely impact ~~affect~~ the resource.

(9)~~(7)~~ Flat rates: Unit price remains the same regardless of usage within customer class.

(10)~~(8)~~ Fresh water: Water containing chloride concentrations ~~equal to or~~ less than 250 milligrams per liter.

(11)~~(9)~~ Gravel pack: Sand or gravel sized material inside the well bore and outside the well screen and casing.

(12)~~(10)~~ Ground water: Water in pore spaces or void spaces of subsurface sediments or consolidated rock.

(13)~~(11)~~ Hydrogeological framework: A three-dimensional representation of aquifers and confining units that is stored in Division data bases and may be adjusted by applicant supplied information.

(14)~~(12)~~ Increasing block rates: Unit price increases with additional usage.

(15)~~(13)~~ Intermittent users: Persons who withdraw ground water less than 60 days ~~per calendar year~~ and ~~or who withdraw~~ less than 15 million gallons ~~of ground water~~ in a calendar year; or aquaculture operations registered by the Board of Agriculture in accordance with G.S. 106-761 ~~licensed under the authority of G.S. 106-761~~ using water for the initial filling of ponds or refilling of ponds no more frequently than every five years.

(16)~~(14)~~ Observation well: A non-pumping well screened in a particular aquifer where water levels can be measured and water samples can be obtained.

(17)~~(15)~~ Pumping water level: The depth to ground water in a pumping well as measured from a known land surface elevation. Measurements shall be made four hours after pumping begins. Measurements shall be within accuracy limits of plus or minus 0.10 feet.

(18)~~(16)~~ Quantity based surcharges: Surcharges billed with usage over a certain determined quantity.

(19)~~(17)~~ Recharge rate: The rate of which water replenishes an aquifer. Recharge rates for the Cretaceous aquifer system vary depending on the thickness and hydraulic conductivity of the overlying sedimentary layers. A best fit line through water levels from the Division operated monitoring wells over a given time interval will show if withdrawals exceed, are less than, or are equal to the aquifer recharge rate.

(20)~~(17)~~ Salt water: Water containing chloride concentrations equal to and in excess of 250 milligrams per liter.

(21)~~(18)~~ Salt water encroachment: The lateral or vertical migration of salt water toward areas occupied by fresh water. This may occur in aquifers due to natural or man-made causes.

(22)~~(19)~~ Seasonal rates: Unit price changes ~~prices change~~ according to the season.

(23)~~(20)~~ Static water level: The depth to ground water in a non-pumping well as measured from a known land surface elevation. Measurements shall be made after pumping has ceased for 12 hours. Measurements shall be within accuracy limits of plus or minus 0.10 feet.

(24)~~(21)~~ Unaccounted for water: The difference between the total water entering the system, including produced and purchased, ~~system (produced and purchased)~~ and the total metered or otherwise accounted for water usage.

(25)~~(22)~~ Water table: The water level in an unconfined aquifer.

History Note: Authority G.S. 143-215.14;

Eff. August 1, 2002.

SECTION .0600 – WATER USE DURING DROUGHTS AND WATER SUPPLY EMERGENCIES

15A NCAC 02E .0601 SCOPE (READOPTION WITHOUT SUBSTANTIVE CHANGES)

The purpose of this Section is to minimize harmful impacts of drought and water supply emergencies on public health and safety, environmental quality, and the economy by establishing minimum standards and practices for water shortage response planning, water use reporting, water conservation, and water reuse during droughts and water supply emergencies.

History Note: Authority G.S. 143-354(a)(1); 143-354(a)(8); S.L. 2002-167;

Eff. March 19, 2007.

15A NCAC 02E .0602 DEFINITIONS

The following definitions shall apply for the purposes of this Section,

~~(9)~~(1) "Council" and "NCDMAC" mean the North Carolina Drought Management Advisory Council.

~~(8)~~(2) "Department" means the North Carolina Department of ~~Environment and Natural Resources (DENR)~~ Environmental Quality (DEQ).

~~(10)~~(3) "Drought Advisory" means an advisory issued by the NCDMAC that delineates the geographic extent and severity of a water deficit significant enough to have social, environmental or economic effects. Drought Advisories shall be designated as Abnormally Dry, Moderate Drought, Severe Drought, Extreme Drought and Exceptional Drought to indicate the severity of conditions from least to most severe, respectively.

(4) "Effective" means successful in producing the desired or intended result.

(5) "Efficient" achieving maximum productivity with minimum wasted effort or expense.

(6) "Efficient use" is reducing water wastage by measuring the amount of water required for a particular purpose and the amount of water used or delivered.

~~(4)~~(7) "Essential water use" means the use of water necessary for fire fighting, health and safety purposes; water needed to sustain human and animal life; and water necessary to satisfy federal, state and local public health, safety or environmental protection requirements.

(8) "Industry Best Management Practices" are methods that have been determined to be the most effective and practical means of completing a task.

(9) "Industry Standards" are a set of criteria within an industry relating to the standard functioning and carrying out of operations in their respective fields of production.

(10) "Normal Operating Procedures (NOPs)" is a set of step-by-step instructions compiled by an organization to help workers carry out complex routine operations. NOPs aim to achieve efficiency, quality output and uniformity of performance, while reducing miscommunication and failure to comply with industry regulations.

~~(5)~~(11) "Non-essential water use" means categories of water use, other than essential water use, that may be curtailed during droughts and water emergencies.

~~(2)~~(12) "Person" means any individual, corporation, company, association, partnership, unit of local government, state agency, federal agency, or other legal entity.

(13) "Privately owned" are water systems that can be for-profit systems managed by investors or shareholders.

(14) "Publicly owned" are water systems that are usually non-profit entities managed by local or state governments, for which rates are set by a governing board.

~~(6)~~(15) "State agencies" includes all agencies of the executive branch of the government of North Carolina, the General Assembly, the General Court of Justice, and the University of North Carolina.

~~(11)~~(16) "Syringing" means the application of ~~a small volume of water, usually~~ 0.10 inch or less of water, near midday to correct plant water deficits, reduce plant tissue temperatures and reduce the heat stress on turfgrass plants.

~~(7)~~(17) "Unit of local government" means a county, city, town, incorporated village, consolidated city-county, sanitary district or other local political subdivision, or authority or agency of local government.

~~(1)~~(18) "Water" means any waters of the State located on or below the land surface as well as water contained within a water treatment and distribution system.

~~(3)~~(19) "Water delivery system" means any open or closed conveyance system used to move water for potable or non-potable purposes from its point of origin to a point of use, including: municipal water systems; residential, commercial, industrial, and commercial plumbing systems; irrigation systems; water using equipment; and flexible hoses.

History Note: Authority G.S. 143-354(a)(8); S.L. 2002-167;

Eff. March 19, 2007.

15A NCAC 02E .0603 GENERAL INFORMATION

(a) The provisions of this Section apply to the following classes of water users:

(1) Publicly owned and privately owned water supply systems;

(2) State agencies;

(3) Units of local government;

(4) Business and industrial water users; and

(5) Agricultural and horticultural water users.

~~(b) This Section does not prevent owners and operators of a water delivery system or other persons from developing, implementing and requiring water use measures in response to droughts or emergency water shortages that are more restrictive than the specified response measures in Rules .0612 through .0614.~~

(b) All owners and operators of a water delivery system may develop, implement, and require more stringent standards than those set forth in Rules .0612 through .0614 of this Section in response to droughts or emergency water shortages.

(c) All established and new uses of reclaimed water, consistent with the provisions of 15A NCAC ~~02H .0200~~ 02U .0100 and any successive rules and amendments that define and the use of reclaimed water, as administered by the Department's Division of Water Resources ~~Quality~~, shall be exempt from the requirements set forth in this Section.

History Note: Authority S.L. 2002-167;

Eff. March 19, 2007.

15A NCAC 02E .0604 ANNUAL REPORTING OF WATER USE DATA (READOPTION WITHOUT SUBSTANTIVE CHANGES)

In order to improve the availability of data for the development of the State water supply plan to be used when managing water resources during drought and water supply emergencies and to provide a basis for evaluating the effectiveness of emergency water conservation measures, the following data reporting requirements have been established:

(1) Water systems that are required to prepare a Local Water Supply Plan under G.S. 143-355(l) shall, irrespective of the issuance of a drought advisory, annually report to the Department the following information:

(a) Water system identification information;

(b) Annual average daily water use (total amount of surface and ground water withdrawn as well as water supplied by another system) by the water system, in million gallons per day (MGD);

(c) The average daily water use (total amount of surface and ground water withdrawn as well as water supplied by another system) for each month of the prior calendar year, in million gallons per day (MGD);

(d) The number of connections for residential, industrial, commercial and institutional metered and non-metered water use, as of December 31st of the reporting year;

(e) The annual average daily water use in million gallons per day (MGD) categorized by residential, industrial, commercial, institutional water uses and sales to other systems to the extent that this information by category is available; and

(f) Water used by the system, in addition to the amount delivered to customers, to meet water treatment and distribution requirements, in million gallons per day (MGD).

(2) All persons that are required to register water withdrawals and transfers under G.S. 143-215.22H, who are not subject to Item (1) of this Rule, shall annually report to the Department monthly average water use in million gallons per day (MGD) for each month. The following information shall be reported:

(a) Owner and facility identification information;

(b) Sources of water withdrawn;

(c) Number of days water was withdrawn for each month; and

(d) Average daily withdrawal for the actual number of days water was withdrawn each month, in million gallons per day (MGD).

(3) Data shall be submitted electronically. Water users that exhibit to the Division of Water Resources an inability to submit data electronically may submit data in writing on a form supplied by the Department.

(4) Data shall be submitted to the Department by April 1st of each year for the period of January 1st to December 31st of the prior year.

History Note: Authority G.S. 143-355(k); 143-355(l); 143-354(a);

Eff. March 19, 2007.

15A NCAC 02E .0605 WATER USE REDUCTION REPORTING, NEW WATER WITHDRAWAL REPORTING AND REGIONAL COORDINATION DURING DROUGHTS

In order to promote regional cooperation for the equitable use of water resources during a drought or other water supply emergency, all persons, as specified below, shall comply with the following reporting and coordination procedures:

(1) Publicly and privately owned community water systems and units of local government shall report to the Division of Water Resources the implementation of mandatory water conservation measures within 72 hours of their initial enactment.

(2) All persons that intend to make a new water withdrawal ~~, which~~ that has not previously been registered under G.S. 143-215.22H, of 100,000 gallons or more in an area designated by the Council as suffering from Extreme or Exceptional Drought shall report to the Division of Water Resources, by the same means outlined in ~~Item (3) of Rule .0604,~~ Rule .0604(3) of this Section, the following information at least seven days prior to the withdrawal:

(a) Contact information for the person making the water withdrawal;

(b) Source(s) of water to be withdrawn;

(c) Number of days water is anticipated to be withdrawn; and

(d) Anticipated average daily withdrawal in million gallons per day (MGD).

(3) All persons that withdraw water shall monitor drought and water supply conditions and shall participate in regional coordination for the management of water resources, evaluation of the cumulative effects of water withdrawals on regional water resources and the development of alternative water supply sources. Based on an assessment of drought severity and regional water supply conditions, the Department may contact water systems within the affected region to arrange a consultation meeting between water systems and relevant state and local agencies. The Department shall moderate these consultations and provide technical assistance.

History Note: Authority G.S. 143-354(a)(8); 143-355(k); S.L. 2002-167;

Eff. March 19, 2007.

15A NCAC 02E .0606 WATER SHORTAGE RESPONSE PLANNING REQUIREMENTS

~~All classes of water users shall prepare a Water Shortage Response Plan according to the water shortage response planning provisions in Rules .0607 through .0611 for their appropriate class of water use.~~ All classes of water users shall prepare a Water Shortage Response Plan in accordance with Rules .0607-.0611 of this Section. The purpose of these Water Shortage Response Plans is to plan for an effective course of action to minimize harmful impacts of drought and water supply emergencies on public health and safety, environmental quality, and the economy. Water Shortage Response Plans shall take into account the specific characteristics of the water sources and the water uses for which the plan is prepared.

History Note: Authority G.S. 143-354(a)(1); 143-355(l); S.L. 2002-167;

Eff. March 19, 2007.

15A NCAC 02E .0607 PUBLICLY AND PRIVATELY OWNED WATER SYSTEM WATER SHORTAGE RESPONSE PLANNING REQUIREMENTS

(a) ~~Publicly and privately owned~~ Units of local governments and large community water systems that are required to prepare a Local Water Supply Plan under G.S. 143-355(l) shall include the following information in their local Water Shortage Response Plans for review by the Division of Water Resources:

(1) The designation of a staff position or organizational unit responsible for the implementation of their Water Shortage Response Plan;

(2) Notification procedures that will be used to inform employees and water users about the implementation of the plan and required water conservation response measures;

(3) Tiered levels of response actions to be taken to reduce water use based on the severity of water shortage conditions;

(4) Specific measurements of available water supply, water demand and system conditions that will be used to determine the severity of water shortage conditions and to initiate water use reduction measures and the movement between various levels;

(5) Procedures that will be used to regulate compliance with the provisions of the plan;

(6) Procedures for affected parties to review and comment on the plan prior to final adoption;

(7) Procedures to receive and review applications for variances from specific requirements of the plan and the criteria that will be considered in the determination to issue a variance;

(8) An evaluation method to determine the actual water savings accomplished and the effectiveness of the Water Shortage Response Plan when implemented; and

(9) Procedures for revising and updating Water Shortage Response Plans to improve plan effectiveness and adapt to new circumstances.

(b) ~~Publicly and privately owned~~ Units of local governments and large community water systems that are required to prepare a Local Water Supply Plan shall submit a copy of their Water Shortage Response Plan and any subsequent revisions of the plan to the Division of Water Resources for review every five years with the full Local Water Supply Plan, as required by G.S. 143-355(l).

(c) Publicly and privately owned water systems not required to prepare a Local Water Supply Plan shall:

(1) Assess their vulnerability to drought and water shortage emergencies; and

(2) Prepare a written plan for responding to water shortage emergencies and drought using the provisions of Paragraph (a) of this Rule.

(d) Publicly and privately owned water systems that depend on the water storage in a private or public impoundment that they do not own and operate under a contract for the withdrawal of water issued by the owner of an impoundment shall prepare a written plan for responding to water shortages that is consistent with the provisions of the contract and shall comply with all Water Shortage Response Plan provisions established by the owner of the impoundment.

(e) Water Shortage Response Plans shall provide for water users who have made improvements to maximize water use efficiency in their daily operations and may face disproportionate hardships when making further water use reductions. Water Shortage Response Plans shall avoid restricting efficient water users in ways that would undermine incentives for water users to seek continued improvements in water use efficiency and shall honor locally approved certification programs that recognize efficient water users who meet industry standards for water use efficiency and water conservation.

(f) When the NCDMAC issues a drought advisory designating an area of the state as currently suffering from drought, publicly and privately owned water systems that depend on water from the designated area shall for the duration of the designation:

(1) Implement the provisions of their Water Shortage Response Plan, as determined by the specific indicators established in the plan for initiating response measures;

(2) Monitor and document water supply conditions;

(3) Educate customers and employees on the need to conserve water and how to prepare for potential drought conditions;

(4) Inspect water delivery system components and ensure that existing equipment is operating as efficiently as possible;

(5) Stay informed on drought and water shortage emergency conditions and participate in regional coordination for the management of water resources; and

(6) Evaluate the feasibility of reclaiming and recycling water to meet water needs.

History Note: Authority G.S. 143-354(a)(1); 143-355(l); S.L. 2002-167;

Eff. March 19, 2007.

15A NCAC 02E .0608 STATE AGENCY WATER SHORTAGE RESPONSE PLANNING REQUIREMENTS

(a) State agencies that supply their own water shall prepare a written plan for responding to water shortages using the provisions of Rule ~~.0607(a).~~ .0607(a) of this Section.

(b) State agencies that are supplied water by a publicly or privately owned water system shall:

(1) Review normal operating procedures and water use to identify options to reduce water use and maximize water use efficiency during water supply emergencies, including changes to normal operating procedures;

(3) Provide information to their water purveyor(s) upon request to support development of the purveyor's Water Shortage Response Plan(s), including the agency's ability to reduce water use and limitations to reducing water use during droughts and water emergencies;

(4) Develop procedures for informing employees of drought designations, water emergency declarations and response measures; and

(5) Evaluate the feasibility of reclaiming and recycling water to meet water needs.

History Note: Authority G.S. 143-354(a)(1); S.L. 2002-167;

Eff. March 19, 2007.

15A NCAC 02E .0609 LOCAL GOVERNMENT WATER SHORTAGE RESPONSE PLANNING REQUIREMENTS

(a) Units of local government that provide water to the public shall meet the requirements of Rule ~~.0607(a).~~ .0607(a) of this Section.

(b) Units of local government that do not provide water to the public shall:

(1) Review normal water use for the types and number of facilities operated to identify options to reduce water use and maximize water use efficiency by local government operations during water shortage emergencies, including possible changes to normal operating procedures;

(2) Cooperate with local water purveyor(s) on the development and implementation of the purveyor's Water Shortage Response Plan(s);

(3) Establish a procedure for informing citizens of drought designations, recommended conservation activities and mandatory response measures to reduce water use during droughts and water shortage emergencies;

(4) Provide a mechanism whereby residents can apply for and receive a variance from specific water use reduction requirements implemented by local governments;

(5) Consider disproportionate hardships that water shortage response policies and ordinances may cause water users who have already made improvements to maximize water use efficiency in their daily operations; and

(6) Evaluate the feasibility of reclaiming and recycling water to meet water needs.

History Note: Authority G.S. 143-354(a)(1); S.L. 2002-167;

Eff. March 19, 2007.

15A NCAC 02E .0610 BUSINESS AND INDUSTRIAL WATER SHORTAGE RESPONSE PLANNING REQUIREMENTS

(a) Self-supplied business and industrial water users subject to the water withdrawal registration requirements of G.S. 143-215.22H shall prepare a written plan, for responding to water shortages that is consistent with industry water efficiency and drought response guidelines, that incorporate the relevant provisions of Rule ~~.0607(a).~~ .0607(a) of this Section.

(b) Business and industrial water users that depend on the water storage of a privately or publicly owned impoundment or withdraw water under a contract issued by the owner of an impoundment shall have a written plan for responding to water shortages that is consistent with the provisions of the contract and with any Water Shortage Response Plan provisions established by the owner of the impoundment.

(c) Business and industrial water users that are supplied water by a publicly or privately owned water system shall establish a procedure for responding to water shortages that is complementary to their water purveyor's Water Shortage Response Plan.

History Note: Authority G.S. 143-354(a)(1); S.L. 2002-167;

Eff. March 19, 2007.

15A NCAC 02E .0611 AGRICULTURAL AND HORTICULTURAL WATER SHORTAGE RESPONSE PLANNING REQUIREMENTS

(a) Agricultural and horticultural water users subject to the water withdrawal registration requirements of G.S. 143-215.22H shall develop a written plan for responding to water shortages to maximize water use efficiency and reduce water usage to the maximum extent possible. Any of the guidance documents on best management practices for the efficient use of water in agricultural and horticultural operations developed by the United States Department of Agriculture's Natural Resources Conservation Service, the North Carolina Department of Agriculture and Consumer Services (NCDA&CS), the ~~NCDENR~~ NCDA&CS Division of Soil and Water Conservation, North Carolina State University, the North Carolina Cooperative Extension Service or other industry trade organizations may be used to assist agricultural and horticultural water users identify the most appropriate water use efficiency measures that they may incorporate into the plan for their particular operational needs.

(b) When a region of the state is designated as suffering from Severe Drought, Extreme Drought or Exceptional Drought by a NCDMAC drought advisory, agricultural and horticultural water users shall reexamine and maintain water delivery systems to minimize water loss and maximize water use efficiency.

(c) Agricultural and horticultural water users that depend on the water storage of a privately or publicly owned impoundment or withdraw water under a contract issued by the owner of an impoundment shall have a written plan for responding to water shortages that is consistent with the provisions of the contract and with any Water Shortage Response Plan provisions established by the owner of the impoundment.

History Note: Authority S.L. 2002-167;

Eff. March 19, 2007.

15A NCAC 02E .0612 DEFAULT WATER SHORTAGE RESPONSE PLANNING MEASURES

Publicly or privately owned water systems that are required to prepare a Local Water Supply Plan under G.S. 143-355(l) that do not have a written Water Shortage Response Plan, as outlined in Rule ~~.0607,~~ .0607 of this Section, shall implement the default water use reduction measures of Rules .0613 and .0614 of this Section when their water system or water source is located in an area designated as suffering from Extreme or Exceptional Drought by the Council.

History Note: Authority S.L. 2002-167;

Eff. March 19, 2007.

15A NCAC 02E .0613 DEFAULT WATER USE REDUCTION MEASURES DURING NCDMAC EXTREME DROUGHT DESIGNATIONS

When the NCDMAC designates a region of the state as suffering from Extreme Drought, the following water use reduction standards shall apply to water users in the designated area, as indicated in Rule ~~.0612:~~ .0612 of this Section:

(1) Water users shall reduce water use by at least 10% below the amount used in the month prior to a NCDMAC Extreme Drought designation in the affected area.

(2) All water users shall minimize non-essential use of water.

(3) Outdoor irrigation is prohibited, except for:

(a) Watering lawns less than one inch of water per week, between the hours of 8:00 PM and 8:00 AM;

(b) Maintaining newly installed landscapes, lawns and erosion control projects that were initiated prior to the issuance of an Extreme Drought advisory, not to exceed the minimum rate necessary on the day of installation and for 60 days following installation, by means designed and operated to maximize water use efficiency and to prevent run-off and excessive watering;

(c) Using spray irrigation by wastewater effluent treatment systems from the NCDMAC Extreme Drought designated area(s) according to permit conditions under the provisions of North Carolina Administrative Code 15A NCAC ~~02H .0200~~ 02U .0100 and any successive rules and amendments; ~~amendments, as administered by the Department's Division of Water Quality;~~

(d) Maintaining athletic fields with less than one inch of water per week between the hours of 8:00 PM and 8:00 AM;

(e) Maintaining personal food gardens;

(f) Maintaining existing landscape plantings at the minimum rate necessary, between the hours of 8:00 PM and 8:00 AM, using a hand held container or hose with an automatic shutoff or using drip irrigation;

(g) Watering golf course tees, fairways and greens by means of an automated irrigation system between the hours of 8:00 PM and 8:00 AM with less than one inch of water per week;

(h) Syringing golf course tees and greens exhibiting visible signs of stress between the hours of 12:00 PM and 4:00 PM, at the minimum rate necessary; and

(i) Maintaining plant inventories, by means designed and operated to maximize water use efficiency, at retail garden centers, garden centers within mass merchant stores or other businesses with live plants as their stock in trade.

(4) The use of water for washing or cleaning of mobile equipment including automobiles, trucks, boats and fleet vehicles is prohibited, except for:

(a) Operating commercial car washes that utilize the industry's best management practices for the efficient use of water and those that recycle, reclaim or reuse a portion of their wash water in their daily operations and have reduced total water consumption by 10% below the amount used in the month prior to a NCDMAC Extreme Drought designation in the affected area;

(b) Washing with a hand-held hose with an automatic shutoff device using less than five gallons per vehicle;

(c) Cleaning new and used vehicles using less than five gallons per vehicle to prepare for display in a dealer's show room, upon receipt from the manufacturer or prior owner, and following a sale prior to delivery to the purchaser; and

(d) Cleaning of construction, emergency, transport or public transportation vehicles if necessary to preserve the proper functioning and safe operation of the vehicle.

(5) The use of water for washing impervious and paved surfaces is prohibited, except for:

(a) Prewashing in preparation for painting, recoating or sealing; and

(b) Applying at the minimum rate necessary for sanitation and public health purposes.

(6) The use of water for ornamental fountains, artificial waterfalls, misting machines, reflecting pools, and ornamental ponds is prohibited, except for the minimum amount of make-up water necessary to maintain aquatic life.

(7) The use of water for power washing of buildings and other structures is prohibited except when necessary to meet federal, state and local public health and safety requirements.

(8) The use of water for flushing sewer lines is prohibited except when necessary to meet public health and safety standards.

(9) The use of water from fire hydrants is prohibited, except for:

(a) Fighting fire and fire protection purposes;

(b) Testing or training if it is necessary to protect public safety and has been approved by the applicable water purveyor; and

(c) Flushing of potable water lines to protect the public health.

(10) The filling of family, public or private swimming pools, including hot tubs, spas and whirlpool tubs, is prohibited, except:

(a) For health and rehabilitative purposes as prescribed by a medical doctor or administered by a medical facility; and

(b) For the minimal amount of make-up water necessary to maintain a pool's structural integrity and filtration system.

(11) The serving of water in eating and drinking establishments shall be done on customer request only.

(12) Water shall be applied at the minimum rate necessary to maintain effective dust and erosion control during the construction of roads and highways initiated prior to the declaration of an Extreme Drought by the NCMDAC.

History Note: Authority S.L. 2002-167;

Eff. March 19, 2007.

15A NCAC 02E .0614 DEFAULT WATER USE REDUCTION MEASURES DURING NCDMAC EXCEPTIONAL DROUGHT DESIGNATIONS

When the NCDMAC designates a region of the state as suffering from Exceptional Drought, the following water use reduction standards shall apply to water users in the designated area, as indicated in Rule ~~.0612:~~ .0612 of this Section:

(1) Water users shall reduce water use by at least 20% below the amount used in the month prior to the most recent NCDMAC Extreme Drought designation in the affected area.

(2) Non-essential water use shall be minimized by the maximum extent possible.

(3) Outdoor irrigation is prohibited, except for:

(a) Using spray irrigation by wastewater effluent treatment systems in NCDMAC Exceptional Drought designated areas according to permit conditions under the provisions of North Carolina Administrative Code 15A NCAC ~~02H .0200~~ 02U .0100 and any successive rules and amendments; ~~amendments, as administered by the Department's Division of Water Quality;~~

(b) Watering personal food gardens by hand with a container or hand held hose with an automatic shutoff device or using drip irrigation between the hours of 8:00 PM and 8:00 AM;

(c) Maintaining existing landscape plantings at the minimum rate necessary, between the hours of 8:00 PM and 8:00 AM, using a hand held container or hose with an automatic shutoff or using drip irrigation;

(d) Watering golf course tees, fairways and greens, athletic fields and lawns between the hours of 8:00 PM and 8:00 AM with less than one half inch of water per week;

(e) Syringing of golf course tees and greens exhibiting visible signs of stress between the hours of 1:00 PM and 4:00 PM, at the minimum rate necessary;

(f) Maintaining newly installed landscapes, lawns and erosion control projects that were initiated prior to the issuance of an Extreme Drought advisory, not to exceed the minimum rate necessary on the day of installation and for 28 days following installation, by means designed and operated to maximize water use efficiency and to prevent run-off and excessive watering; and

(g) Maintaining plant inventories, by means designed and operated to maximize water use efficiency, at retail garden centers, garden centers within mass merchant stores, or other businesses with live plants as their stock in trade.

(4) The use of water for washing or cleaning mobile equipment including automobiles, trucks, boats and fleet vehicles is prohibited, except for:

(a) Operating commercial car washes that utilize the industry's best management practices for the efficient use of water and those that recycle, reclaim or reuse a portion of their wash water and have reduced total water consumption by 20% below the amount used in the month prior to the most recent NCDMAC Extreme Drought designation in the affected area;

(b) Cleaning of new and used vehicles in preparation for display in a dealer's show room, using less than five gallons per vehicle; and

(c) Using the minimum amount of water necessary to clean construction, emergency, transport or public transportation vehicles, if required to preserve the proper functioning and safe operation of the vehicle as required by law.

(5) The use of water for washing impervious and paved surfaces is prohibited except for using the minimum amount of water necessary for sanitation and public health purposes.

(6) The use of water for power washing of buildings and other structures is prohibited.

(7) The use of water for flushing sewer lines is prohibited except when necessary to meet public health and safety standards.

(8) The use of water from fire hydrants is prohibited, except for:

(a) Fighting fire and fire protection purposes; and

(b) Flushing of drinking water lines to protect public health and safety.

(9) The filling of family, public or private swimming pools, including hot tubs, spas and whirlpool tubs, is prohibited except for health and rehabilitative purposes as prescribed by a medical doctor or administered by a medical facility.

(10) The use of water for ornamental fountains, artificial waterfalls, misting machines, reflecting pools, and ornamental ponds is prohibited, except for the minimum amount of make-up water necessary to maintain aquatic life.

(11) The serving of water in eating and drinking establishments shall be done on customer request only.

(12) Water shall be applied at the minimum rate necessary to maintain effective dust and erosion control during the construction of roads and highways initiated prior to the declaration of an Extreme Drought by the NCDMAC.

History Note: Authority S.L. 2002-167;

Eff. March 19, 2007.

15A NCAC 02E .0615 WATER REUSE DURING DROUGHTS AND WATER EMERGENCIES

Water users may use reclaimed water under the provisions of North Carolina Administrative Code 15A NCAC ~~02H .0200~~ 02U .0100 and any successive rules and amendments, ~~as administered by the Department's Division of Water Quality,~~ during droughts and other water emergencies to reduce withdrawals of surface water and ground water and to extend available water supplies.

History Note: Authority G.S. 143-215.1; 143-215.3(a)(1); 143-355.5; S.L. 2002-167;

Eff. March 19, 2007.