

Regulatory Impact Analysis

Rule Citation Number: 15A NCAC 02E, Section .0601 - .0615

Rule Topic: Readoption of Rules under 02E - .0600
Water Use During Droughts and Water Supply Emergencies

DEQ Division: Division of Water Resources (DWR)

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Impact Summary: State government: No
Local government: No
Private entities: No
Substantial Impact: No
Federal government: No

Necessity: 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 a portion of the Department's rules.

1. Summary

The DWR reviewed the Water Use During Droughts and Water Supply Emergencies rules in accordance with G.S. §150B-21.3A and proposes to re-adopt all the rules with minor changes including removal of text which is deemed to be no longer necessary and changes to text to improve clarity.

As measured from the baseline conditions, these rule readoptions are proposed with no substantive changes. G.S. §150B-21.3A (d)(2) states: "If a rule is readopted without substantive change, or if the rule is amended to impose a less stringent burden on regulated persons, the agency is not required to prepare a fiscal note as provided by G.S. 150B-21.4." As such, a fiscal note has not been prepared for this rulemaking package.

2. Background

Water Use During Drought and Water Supply Emergencies

The multi-year drought that culminated in 2002 affected most of North Carolina's water users. The drought emphasized the importance of efficient water resources management in North Carolina. Steady growth in population and in water needs for economic development, together with the prospect of future droughts, highlight the need to continually improve water resources management, water conservation and water use efficiency.

As one response to the drought, the North Carolina General Assembly passed House Bill 1215 (Session Law 2002-167) in the 2002 legislative session. Session Law 2002-167 required the Environmental Management Commission to develop rules establishing minimum standards and practices for water conservation and water reuse during drought and water supply emergencies. The rules must address 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.

Also in response to the 2002 drought, the North Carolina General Assembly passed House Bill 1062 (Session Law 2002-387) in the 2003 legislative session. Session Law 2002-387 requires all community water systems that regularly serve at least 1,000 connections or 3,000 individuals to submit a Local Water Supply Plan as well as all units of local government that supply water to the public. The Local Water Supply Planning process was originally established in 1989 by North Carolina General Statute 143-355(l). The Local Water Supply Plans must include the following information: water system statistics for a given calendar year, a service area map, projected service area populations and water demands, water conservation and demand management activities, a water shortage response plan, and interbasin transfer worksheets with past, present, and projected future transfer amounts. Local Water Supply Plans must be updated at least every five years.

Session Law 2002-387 also added the requirement that all units of local government and community water systems that prepare a Local Water Supply Plan provide in the plan a description of how the water system will respond to drought and other water shortage emergencies and continue to meet essential public water supply needs. This part of the plan is known as the Water Shortage Response Plan.

North Carolina General Statute 143-215.22H applies to systems not required to prepare a Local Water Supply Plan. It requires water users who withdraw or transfer 100,000 gallons of water or more in any single day, for all purposes except agriculture, to register the withdrawal or transfer. This statute also requires that agricultural water users who withdraw or transfer 1,000,000 gallons of water or more in any single day to register the withdrawal or transfer. Registrations must be updated every five years. Water users in the Central Coastal Plain Capacity Use Area are currently required to register their water use of 10,000 gallons or more of surface or ground water in any single day under the Capacity Use Area Rules.

The Water Withdrawal & Transfer Registration Statute (NCGS 143-215.22H) requires water users to report the following information: facility information, water users' contact information, type of water use, amount of water use, water source, discharge amounts and methods, and surface water interbasin transfers.

Rules Review and Readoption Process

G.S. §150B-21.3A requires the Department to evaluate each of its existing rules and make an initial determination as to whether the rules are:

1. Necessary with substantive public interest – the agency has received public comment on the rule within the past two years or the rule affects the property interest of the

regulated public, and the agency knows or suspects that any person may object to the rule.

2. Necessary without substantive public interest – the agency determines that the rule is needed, and the rule has not had public comment in the last two years. This category includes rules that identify information that is readily available to the public, such as an address or telephone number.
3. Unnecessary – the agency determines that the rule is obsolete, redundant or otherwise not needed.

The Department must then determine which rules are still necessary and propose to re-adopt, with or without modifications, or to repeal each rule as appropriate. The Division categorized all the subject rules as “Necessary with substantive public interest.”

A staff attorney to the NC Rules Review Commission performed a pre-review of the rules, and the Division has edited the rules accordingly.

3. Economic Impact Analysis

The following table briefly describes the proposed rule changes. None of these changes will result in an economic or environmental impact.

3.1: Subchapter 02E – Water Use Registration and Allocation

Section .0600 – Water Use During Drought and Water Supply Emergencies

Rule	Proposed Change
15A NCAC 02E .0601 Scope	No changes.
15A NCAC 02E .0602 Definitions	Alphabetized the definitions, added definitions and reworded language for clarification.
15A NCAC 02E .0603 General Information	Updated language for clarification, updated rule cross-reference and added statutory authority to History Note.
15A NCAC 02E .0604 Annual Reporting of Water Use Data	No changes.
15A NCAC 02E .0605 Water Use Reduction Reporting, New Water Withdrawal Reporting and Regional Coordination During Droughts	No changes.
15A NCAC 02E .0606 Water Shortage Response Planning Requirements	Updated language for clarification.
15A NCAC 02E .0607 Publicly and Privately owned Water System Water Shortage Response Planning Requirements	Updated language for clarification.
15A NCAC 02E .0608 State Agency Water Shortage Response Planning Requirements	No changes.
15A NCAC 02E .0609 Local Government Water Shortage Response Planning Requirements	Updated language for clarification.
15A NCAC 02E .0610 Business and Industrial Water Shortage Response Planning Requirements	No changes.

15A NCAC 02E .0611 Agricultural and Horticultural Water Shortage Response Planning Requirements	No changes.
15A NCAC 02E .0612 Default Water Shortage Response Planning Measures	No changes.
15A NCAC 02E .0613 Default Water Use Reduction Measures During NCDMAC Extreme Drought Designations	Updated language for clarification and updated rule cross-reference.
15A NCAC 02E .0614 Default Water Use Reduction Measures During NCDMAC Exceptional Drought Designations	Updated language for clarification and updated rule cross-reference.
15A NCAC 02E .0615 Water Reuse During Droughts and Water Emergencies	Updated language for clarification and updated rule cross-reference.

3.2 Costs and Benefits Analysis

State Government, Local Government, Regulated Community, and the Environment

Changes to the Water Use During Drought and Water Supply Emergencies Rules are technical in nature and include updated language for clarification, added definitions, and updated rule cross-reference language. There are no substantive changes, and no changes that will impose an additional burden on the regulated community. None of the changes will require DEQ or local governments to revise their existing procedures or to procure additional staff; as such, there should be no economic cost to state agencies or local governments.

The improved clarity of the rules should translate into less time spent by the regulated community on the registration and reporting processes as well as less time spent by regulatory staff providing technical assistance. The amount of time saved will be negligible and will not provide a significant financial benefit; however, it is noted here for completeness.

Lastly, as measured from the baseline conditions, the proposed changes will maintain existing environmental protections at an equivalent level with no cost or benefit to the environment.

4. Total Economic Impact

As measured from the baseline conditions, there are no substantive changes associated with the proposed rule readoptions. Consequently, no new economic or environmental impacts are anticipated to result from the proposed rule readoptions.

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

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3 **15A NCAC 02E .0601 SCOPE**

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

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9 *History Note:* *Authority G.S. 143-354(a)(1); 143-354(a)(8); S.L. 2002-167;*
10 *Eff. March 19, 2007.*

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12 **15A NCAC 02E .0602 DEFINITIONS**

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

- 14 ~~(9)~~(1) "Council" and "NCDMAC" mean the North Carolina Drought Management Advisory Council.
- 15 ~~(8)~~(2) "Department" means the North Carolina Department of ~~Environment and Natural Resources~~
16 ~~(DENR)~~Environmental Quality (DEQ).
- 17 ~~(10)~~(3) "Drought Advisory" means an advisory issued by the NCDMAC that delineates the geographic
18 extent and severity of a water deficit significant enough to have social, environmental or economic
19 effects. Drought Advisories shall be designated as Abnormally Dry, Moderate Drought, Severe
20 Drought, Extreme Drought and Exceptional Drought to indicate the severity of conditions from least
21 to most severe, respectively.
- 22 (4) "Effective" means successful in producing the desired or intended result.
- 23 (5) "Efficient" achieving maximum productivity with minimum wasted effort or expense.
- 24 (6) "Efficient use" is reducing water wastage by measuring the amount of water required for a particular
25 purpose and the amount of water used or delivered.
- 26 ~~(4)~~(7) "Essential water use" means the use of water necessary for fire fighting, health and safety purposes;
27 water needed to sustain human and animal life; and water necessary to satisfy federal, state and local
28 public health, safety or environmental protection requirements.
- 29 (8) "Industry Best Management Practices" are methods that have been determined to be the most
30 effective and practical means of completing a task.
- 31 (9) "Industry Standards" are a set of criteria within an industry relating to the standard functioning and
32 carrying out of operations in their respective fields of production.
- 33 (10) "Normal Operating Procedures (NOPs)" is a set of step-by-step instructions compiled by an
34 organization to help workers carry out complex routine operations. NOPs aim to achieve efficiency,
35 quality output and uniformity of performance, while reducing miscommunication and failure to
36 comply with industry regulations.

1 ~~(5)~~(11) "Non-essential water use" means categories of water use, other than essential water use, that may
2 be curtailed during droughts and water emergencies.

3 ~~(2)~~(12) "Person" means any individual, corporation, company, association, partnership, unit of local
4 government, state agency, federal agency, or other legal entity.

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

7 (14) "Publicly owned" are water systems that can be for-profit systems managed by investors or
8 shareholders.

9 ~~(6)~~(15) "State agencies" includes all agencies of the executive branch of the government of North Carolina,
10 the General Assembly, the General Court of Justice, and the University of North Carolina.

11 ~~(4)~~(16) "Syrringing" means the application of ~~a small volume of water,~~ usually 0.10 inch or less of water,
12 near midday to correct plant water deficits, reduce plant tissue temperatures and reduce the heat
13 stress on turfgrass plants.

14 ~~(7)~~(17) "Unit of local government" means a county, city, town, incorporated village, consolidated city-
15 county, sanitary district or other local political subdivision, or authority or agency of local
16 government.

17 ~~(4)~~(18) "Water" means any waters of the State located on or below the land surface as well as water
18 contained within a water treatment and distribution system.

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

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24 *History Note:* Authority G.S. 143-354(a)(8); S.L. 2002-167;
25 *Eff. March 19, 2007.*
26

27 **15A NCAC 02E .0603 GENERAL INFORMATION**

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

- 29 (1) publicly owned and privately owned water supply systems;
- 30 (2) state agencies;
- 31 (3) units of local government;
- 32 (4) business and industrial water users; and
- 33 (5) agricultural and horticultural water users.

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

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

3 (c) All established and new uses of reclaimed water, consistent with the provisions of 15A NCAC ~~02H-0200~~02U
4 .0100 and any successive rules and amendments that define and the use of reclaimed water, as administered by the
5 Department's Division of Water ~~Quality Resources~~, shall be exempt from the requirements set forth in this Section.

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7 *History Note: Authority S.L. 2002-167; G.S. 143-215.1; 143-215.3(a)(1); 143-355.5;*
8 *Eff. March 19, 2007.*

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10 **15A NCAC 02E .0604 ANNUAL REPORTING OF WATER USE DATA**

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

- 15 (1) Water systems that are required to prepare a Local Water Supply Plan under G.S. 143-355(1) shall,
16 irrespective of the issuance of a drought advisory, annually report to the Department the following
17 information:
- 18 (a) water system identification information;
 - 19 (b) annual average daily water use (total amount of surface and ground water withdrawn as
20 well as water supplied by another system) by the water system, in million gallons per day
21 (MGD);
 - 22 (c) the average daily water use (total amount of surface and ground water withdrawn as well
23 as water supplied by another system) for each month of the prior calendar year, in million
24 gallons per day (MGD);
 - 25 (d) the number of connections for residential, industrial, commercial and institutional metered
26 and non-metered water use, as of December 31st of the reporting year;
 - 27 (e) the annual average daily water use in million gallons per day (MGD) categorized by
28 residential, industrial, commercial, institutional water uses and sales to other systems to the
29 extent that this information by category is available; and
 - 30 (f) water used by the system, in addition to the amount delivered to customers, to meet water
31 treatment and distribution requirements, in million gallons per day (MGD).
- 32 (2) All persons that are required to register water withdrawals and transfers under G.S. 143-215.22H,
33 who are not subject to Item (1) of this Rule, shall annually report to the Department monthly average
34 water use in million gallons per day (MGD) for each month. The following information shall be
35 reported:
- 36 (a) owner and facility identification information;
 - 37 (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. 143-354(a); 143-355(k); 143-355(l);
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, 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.

1 *History Note:* Authority G.S. 143-354(a)(8); 143-355(k); S.L. 2002-167;
2 *Eff. March 19, 2007.*

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4 **15A NCAC 02E .0606 WATER SHORTAGE RESPONSE PLANNING REQUIREMENTS**

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

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13 *History Note:* Authority G.S. 143-354(a)(1); 143-355(l); S.L. 2002-167;
14 *Eff. March 19, 2007.*

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16 **15A NCAC 02E .0607 PUBLICLY AND PRIVATELY OWNED WATER SYSTEM WATER SHORTAGE**
17 **RESPONSE PLANNING REQUIREMENTS**

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

- 21 (1) the designation of a staff position or organizational unit responsible for the implementation of their
22 Water Shortage Response Plan;
- 23 (2) notification procedures that will be used to inform employees and water users about the
24 implementation of the plan and required water conservation response measures;
- 25 (3) tiered levels of response actions to be taken to reduce water use based on the severity of water
26 shortage conditions;
- 27 (4) specific measurements of available water supply, water demand, and system conditions that will be
28 used to determine the severity of water shortage conditions and to initiate water use reduction
29 measures and the movement between various levels;
- 30 (5) procedures that will be used to regulate compliance with the provisions of the plan;
- 31 (6) procedures for affected parties to review and comment on the plan prior to final adoption;
- 32 (7) procedures to receive and review applications for variances from specific requirements of the plan
33 and the criteria that will be considered in the determination to issue a variance;
- 34 (8) an evaluation method to determine the actual water savings accomplished and the effectiveness of
35 the Water Shortage Response Plan when implemented; and
- 36 (9) procedures for revising and updating Water Shortage Response Plans to improve plan effectiveness
37 and adapt to new circumstances.

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

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

- 6 (1) assess their vulnerability to drought and water shortage emergencies; and
- 7 (2) prepare a written plan for responding to water shortage emergencies and drought using the
8 provisions of Paragraph (a) of this Rule.

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

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

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

- 22 (1) implement the provisions of their Water Shortage Response Plan, as determined by the specific
23 indicators established in the plan for initiating response measures;
- 24 (2) monitor and document water supply conditions;
- 25 (3) educate customers and employees on the need to conserve water and how to prepare for potential
26 drought conditions;
- 27 (4) inspect water delivery system components and ensure that existing equipment is operating as
28 efficiently as possible;
- 29 (5) stay informed on drought and water shortage emergency conditions and participate in regional
30 coordination for the management of water resources; and
- 31 (6) evaluate the feasibility of reclaiming and recycling water to meet water needs.

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33 *History Note:* Authority G.S. 143-354(a)(1); 143-355(l); S.L. 2002-167;
34 Eff. March 19, 2007.

35
36 **15A NCAC 02E .0608 STATE AGENCY WATER SHORTAGE RESPONSE PLANNING**
37 **REQUIREMENTS**

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

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

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

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

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

12 (5) evaluate the feasibility of reclaiming and recycling water to meet water needs.
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14 *History Note: Authority G.S. 143-354(a)(1); S.L. 2002-167;*
15 *Eff. March 19, 2007.*
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17 **15A NCAC 02E .0609 LOCAL GOVERNMENT WATER SHORTAGE RESPONSE PLANNING**
18 **REQUIREMENTS**

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

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

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

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

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

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

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

34 (6) evaluate the feasibility of reclaiming and recycling water to meet water needs.
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36 *History Note: Authority G.S. 143-354(a)(1); S.L. 2002-167;*
37 *Eff. March 19, 2007.*

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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).

(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, the NCDENR 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;

- 1 (g) watering golf course tees, fairways, and greens by means of an automated irrigation system
2 between the hours of 8:00 PM and 8:00 AM with less than one inch of water per week;
- 3 (h) syringing golf course tees and greens exhibiting visible signs of stress between the hours
4 of 12:00 PM and 4:00 PM, at the minimum rate necessary; and
- 5 (i) maintaining plant inventories, by means designed and operated to maximize water use
6 efficiency, at retail garden centers, garden centers within mass merchant stores or other
7 businesses with live plants as their stock in trade.
- 8 (4) The use of water for washing or cleaning of mobile equipment including automobiles, trucks, boats
9 and fleet vehicles is prohibited, except for:
- 10 (a) operating commercial car washes that utilize the industry's best management practices for
11 the efficient use of water and those that recycle, reclaim or reuse a portion of their wash
12 water in their daily operations and have reduced total water consumption by 10% below
13 the amount used in the month prior to a NCDMAC Extreme Drought designation in the
14 affected area;
- 15 (b) washing with a hand-held hose with an automatic shutoff device using less than five gallons
16 per vehicle;
- 17 (c) cleaning new and used vehicles using less than five gallons per vehicle to prepare for
18 display in a dealer's show room, upon receipt from the manufacturer or prior owner, and
19 following a sale prior to delivery to the purchaser; and
- 20 (d) cleaning of construction, emergency, transport or public transportation vehicles if
21 necessary to preserve the proper functioning and safe operation of the vehicle.
- 22 (5) The use of water for washing impervious and paved surfaces is prohibited, except for:
- 23 (a) prewashing in preparation for painting, recoating, or sealing; and
24 (b) applying at the minimum rate necessary for sanitation and public health purposes.
- 25 (6) The use of water for ornamental fountains, artificial waterfalls, misting machines, reflecting pools,
26 and ornamental ponds is prohibited, except for the minimum amount of make-up water necessary
27 to maintain aquatic life.
- 28 (7) The use of water for power washing of buildings and other structures is prohibited except when
29 necessary to meet federal, State and local public health and safety requirements.
- 30 (8) The use of water for flushing sewer lines is prohibited except when necessary to meet public health
31 and safety standards.
- 32 (9) The use of water from fire hydrants is prohibited, except for:
- 33 (a) fighting fire and fire protection purposes;
34 (b) testing or training if it is necessary to protect public safety and has been approved by the
35 applicable water purveyor; and
36 (c) flushing of potable water lines to protect the public health.

- 1 (10) The filling of family, public, or private swimming pools, including hot tubs, spas, and whirlpool
2 tubs, is prohibited, except:
- 3 (a) for health and rehabilitative purposes as prescribed by a medical doctor or administered by
4 a medical facility; and
- 5 (b) for the minimal amount of make-up water necessary to maintain a pool's structural integrity
6 and filtration system.
- 7 (11) The serving of water in eating and drinking establishments shall be done on customer request only.
- 8 (12) Water shall be applied at the minimum rate necessary to maintain effective dust and erosion control
9 during the construction of roads and highways initiated prior to the declaration of an Extreme
10 Drought by the NCDMAC.

11
12 *History Note: Authority S.L. 2002-167;*
13 *Eff. March 19, 2007.*

14
15 **15A NCAC 02E .0614 DEFAULT WATER USE REDUCTION MEASURES DURING NCDMAC**
16 **EXCEPTIONAL DROUGHT DESIGNATIONS**

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

- 19 (1) Water users shall reduce water use by at least 20% below the amount used in the month prior to the
20 most recent NCDMAC Extreme Drought designation in the affected area.
- 21 (2) Non-essential water use shall be minimized by the maximum extent possible.
- 22 (3) Outdoor irrigation is prohibited, except for:
- 23 (a) using spray irrigation by wastewater effluent treatment systems in NCDMAC Exceptional
24 Drought designated areas according to permit conditions under the provisions of North
25 Carolina Administrative Code 15A NCAC ~~02H-020002U .0100~~ and any successive rules
26 and amendments, ~~as administered by the Department's Division of Water Quality;~~
- 27 (b) watering personal food gardens by hand with a container or hand held hose with an
28 automatic shutoff device or using drip irrigation between the hours of 8:00 PM and 8:00
29 AM;
- 30 (c) maintaining existing landscape plantings at the minimum rate necessary, between the hours
31 of 8:00 PM and 8:00 AM, using a hand held container or hose with an automatic shutoff
32 or using drip irrigation;
- 33 (d) watering golf course tees, fairways, and greens, athletic fields, and lawns between the hours
34 of 8:00 PM and 8:00 AM with less than one half inch of water per week;
- 35 (e) syringing of golf course tees and greens exhibiting visible signs of stress between the hours
36 of 1:00 PM and 4:00 PM, at the minimum rate necessary;

- 1 (f) maintaining newly installed landscapes, lawns and erosion control projects that were
2 initiated prior to the issuance of an Extreme Drought advisory, not to exceed the minimum
3 rate necessary on the day of installation and for 28 days following installation, by means
4 designed and operated to maximize water use efficiency and to prevent run-off and
5 excessive watering; and
- 6 (g) maintaining plant inventories, by means designed and operated to maximize water use
7 efficiency, at retail garden centers, garden centers within mass merchant stores, or other
8 businesses with live plants as their stock in trade.
- 9 (4) The use of water for washing or cleaning mobile equipment including automobiles, trucks, boats,
10 and fleet vehicles is prohibited, except for:
- 11 (a) operating commercial car washes that utilize the industry's best management practices for
12 the efficient use of water and those that recycle, reclaim or reuse a portion of their wash
13 water and have reduced total water consumption by 20% below the amount used in the
14 month prior to the most recent NCDMAC Extreme Drought designation in the affected
15 area;
- 16 (b) cleaning of new and used vehicles in preparation for display in a dealer's show room, using
17 less than five gallons per vehicle; and
- 18 (c) using the minimum amount of water necessary to clean construction, emergency, transport
19 or public transportation vehicles, if required to preserve the proper functioning and safe
20 operation of the vehicle as required by law.
- 21 (5) The use of water for washing impervious and paved surfaces is prohibited except for using the
22 minimum amount of water necessary for sanitation and public health purposes.
- 23 (6) The use of water for power washing of buildings and other structures is prohibited.
- 24 (7) The use of water for flushing sewer lines is prohibited except when necessary to meet public health
25 and safety standards.
- 26 (8) The use of water from fire hydrants is prohibited, except for:
- 27 (a) fighting fire and fire protection purposes; and
28 (b) flushing of drinking water lines to protect public health and safety.
- 29 (9) The filling of family, public or private swimming pools, including hot tubs, spas, and whirlpool
30 tubs, is prohibited except for health and rehabilitative purposes as prescribed by a medical doctor or
31 administered by a medical facility.
- 32 (10) The use of water for ornamental fountains, artificial waterfalls, misting machines, reflecting pools,
33 and ornamental ponds is prohibited, except for the minimum amount of make-up water necessary
34 to maintain aquatic life.
- 35 (11) The serving of water in eating and drinking establishments shall be done on customer request only.

1 (12) Water shall be applied at the minimum rate necessary to maintain effective dust and erosion control
2 during the construction of roads and highways initiated prior to the declaration of an Extreme
3 Drought by the NCDMAC.
4

5 *History Note:* Authority S.L. 2002-167;
6 Eff. March 19, 2007.
7

8 **15A NCAC 02E .0615 WATER REUSE DURING DROUGHTS AND WATER EMERGENCIES**

9 Water users may use reclaimed water under the provisions of North Carolina Administrative Code 15A NCAC ~~02H~~
10 ~~.02002U .0100~~ and any successive rules and amendments, as administered by the Department's Division of Water
11 ~~Quality~~, during droughts and other water emergencies to reduce withdrawals of surface water and ground water and
12 to extend available water supplies.
13

14 *History Note:* Authority S.L. 2002-167; G.S. 143-215.1; 143-215.3(a)(1); 143-355.5;
15 Eff. March 19, 2007.
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