SUBCHAPTER 2E - WATER USE REGISTRATION AND ALLOCATION

SECTION .0100 - GENERAL PROVISIONS

15A NCAC 02E .0106 DEFINITIONS

In addition to the definitions set forth in G.S. 143-215.21, the following definitions shall apply to this Subchapter:

(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;
Readopted Eff. January 1, 2022.

15A NCAC 02E .0107 DELEGATION

(a) The Director is delegated the authority to grant, modify, revoke or deny permits under G.S. 143-215.15 and G.S. 143-215.16.
(b) The Director may delegate any permitting function given by the Rules of this Subchapter.
(c) The Director is delegated the authority to assess civil penalties and request the Attorney General to institute civil actions under G.S. 143-215.17.
(d) The Director 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: *Authority G.S. 143-215.3(a)(1); 143-215.3(a)(4);*
Eff. March 1, 1985;
Temporary Amendment Eff. October 14, 1991 for a Period of 180 Days to Expire on April 11, 1992;
Amended Eff. August 1, 2002; September 1, 1994; April 1, 1992;
Readopted Eff. January 1, 2022.

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 shall be mailed to the Division of Water Resources, North Carolina Department of Environmental Quality. The 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) The penalty pursuant to G.S. 143-215.22H(e) shall stop accruing on the date of receipt of the completed registration application by the Division of Water Resources.
(3) Payment of the registration processing fee may be by check or money order made payable to the "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 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 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.

History Note: *Authority G.S. 143-215.3(a)(1a); 143-215.3(a)(1b); 143-215.22H ;*
Temporary Rule Eff. October 14, 1991 for a Period of 180 Days to Expire on April 11, 1992;
Eff. April 1, 1992;
Amended Eff. September 1, 1994;
Readopted Eff. January 1, 2022.

SECTION .0400 - REGULATION OF SURFACE WATER TRANSFER

15A NCAC 02E .0401 PURPOSE

The purpose of the rules in this Section is to implement the provisions of G.S. 143-215.22L.

History Note: *Authority G.S. 143-215.22L; 143B-282(a)(2);*
Eff. September 1, 1994;
Readopted Eff. March 1, 2023.

15A NCAC 02E .0402 DEFINITIONS

The following definitions apply to this Section.

(1) "Co-applicant" means an entity other than the primary applicant identified on an Interbasin Transfer Certificate, issued after 30 June 1993, as being eligible to send or receive transferred water, often purchased from the primary applicant. A co-applicant is subject to all the terms, conditions, limitations, benefits, and entitlements applicable to the primary applicant.

(2) "Commission" means the Environmental Management Commission.

(3) "Department" means the North Carolina Department of Environmental Quality.

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

(5) "Emergency transfer" means a temporary transfer of surface water meeting the requirements of, and satisfying water demand needs, defined in G.S. 143-215.22L(q), for situations in which the public health, safety, or welfare requires a transfer of water between river basins as defined in G.S. 143-215.22G(1b).

(6) "Interbasin Transfer Certificate" or "IBT Certificate" means an authorization issued by the Commission to transfer up to a specified amount of water between two river basins as defined in G.S. 143-215.22G(1b).

(7) "Large community water system" means a community water system, as defined in G.S. 130A-313(10), that regularly serves 1,000 or more service connections or 3,000 or more individuals.

(8) "Major river basin" means the combination of the river basins, as defined in G.S .143-215.22G(1b), sharing the numerical digits preceding the hyphen.

(9) "Preexisting transfer capacity" means the existing water system transfer capacity prior to 1 July 1993, as defined in G.S. 143-215.22L(b). The transfer capacity of a water system is limited by its most restrictive system element: potable water capacity, maximum transfer capacity of distribution system, or discharge capacity in receiving basin.

(a) Potable water (treatment and/or purchase) capacity is the sum of all surface water inputs to the system, including water treatment plant capacity and regular surface water contracts.

(b) Maximum transfer capacity of the distribution network is the calculation of the physical ability of the distribution system to transmit water across a basin boundary, based on pipe sizing or pump systems.

(c) Discharge capacity in the receiving basin is a combination of wastewater discharges and consumptive losses.

(10) "Primary applicant" means the entity who owns an existing or planned water line used to transmit raw or finished water from one river basin to another, as defined in G.S. 143-215.22G(1b). For water systems that involve crossing multiple river basin boundaries, the primary applicant represents the transfer pipe owner where the first river basin boundary crossing occurs.

History Note: *Authority G.S 143-215.22L; 143B-282(a)(2);*
Eff. September 1, 1994;
Readopted Eff. March 1, 2023.

15A NCAC 02E .0403 APPLICABILITY

(a) The amount of a transfer shall be calculated as a net total, determined by the amount of surface water moved from the source river basin to the receiving basin, minus any water returned to the source river basin.

(b) Notwithstanding the definition of "river basin" in G.S. 143-215.22G, the following are not transfers that require issuance of an IBT Certificate:

(1) The discharge point is situated upstream of the withdrawal point such that the water discharged will naturally flow past the withdrawal point.

(2) The discharge point is situated downstream of the withdrawal point such that water flowing past the withdrawal point will naturally flow past the discharge point.

(3) The withdrawal and discharge points are located in the same water impoundment.

(c) The withdrawal of surface water from one river basin by one entity and the transmission of all or any part of this water between river basins by one or more entities, resulting in a discharge to another river basin, shall be considered a transfer. The entity owning the pipe or other conveyance that carries the surface water across the basin boundary shall be responsible for obtaining an IBT Certificate from the Commission. Another entity involved in the transfer may assume responsibility for obtaining the IBT Certificate, with approval by the Department.

(d) The full capacity of a facility to transfer water shall be determined by the facility's potable water treatment capacity, maximum transfer capacity of distribution system, or discharge capacity in the receiving basin, limited by the element of this system with the least capacity as existing or under construction on 1 July 1993. Existing conveyances and infrastructure for basin transfers in place before 1 July 1993 are deemed a preexisting transfer capacity per G.S. 143-215.22L(b).

(e) To calculate a preexisting transfer capacity the applicant shall provide data regarding the movement of water within and outside of the water system distribution system. The applicant shall provide to the Department a current and projected water balance that includes:

(1) the total withdrawal from the surface water source;

(2) the treatment capacities;

(3) the consumptive losses, meaning water withdrawn from a stream, reservoir, river, or other surface water source for any use which is not directly returned to a waterbody, for both the source and receiving river basins;

(4) the treated wastewater discharges in both the source and receiving river basins;

(5) the total return to the source river basin; and

(6) the total surface water transfer.

The applicant shall provide this information for the current or baseline year and projected data for a minimum of 30-years into the future in no less than 10-year intervals. Water balances are to be conducted on an annual average day basis and a maximum-month average day basis. The applicant may use the Preexisting Transfer Capacity Worksheet as a guide to complete the required information to help calculate and document a system's transfer capacity. A copy of the Preexisting Transfer Capacity Worksheet can be obtained free of charge from the Water Supply Planning Branch, located in the Archdale Building at 512 N. Salisbury Street, Raleigh, NC 27604.

History Note: *Authority G.S. 143-215.22L; 143B-282(a)(2);*
Eff. March 1, 2023.

15A NCAC 02E .0404 NOTIFICATION

(a) As used in G.S. 143-215.22L(c)(3)(c), notification of the "governing body of any public water system" refers to public water systems that use surface water as their source rather than groundwater. The governing body may be located in a state adjoining North Carolina that is located in whole or in part of the surface drainage basin area of the source river basin.

(b) Notice shall be provided to all persons who hold a National Pollutant Discharge Elimination System (NPDES) wastewater discharge permit for 100,000 gallons per day or more for a discharge located within the area denoted by one of the eight-digit cataloging units listed in G.S. 143-215.22L(c)(2)(b) in which the withdrawal or discharge will occur.

(c) Comments submitted pursuant to G.S. 143-215.22L(c), (e), and (j) that are received after the 30-calendar day comment period shall not be considered in making determinations unless the Department extends the comment period.

(d) Notification is to be printed in a single newspaper of general circulation, as defined in G.S. 1-597, for each county in which notification is required as defined in G.S. 143-215.22L(c)(2)(b).

History Note: *Authority G.S. 143-215.22L; 143B-282(a)(2);*
Eff. March 1, 2023.

15A NCAC 02E .0405 ENVIRONMENTAL DOCUMENTS

(a) An evaluation of beneficial and adverse impacts pursuant to G.S. 143-215.22L(d) shall include, but not be limited to, the results of an approved basinwide hydrologic model specified in G.S. 143-355(o), if available. The Applicant is responsible for any necessary model modifications, scenario development, and analysis of results. All model modifications and scenarios must be approved by the Department. All basinwide models used and the corresponding modeling results shall be made publicly available.

(b) For purposes of this Rule, an alternative is considered economically infeasible if the demonstrated financial costs exceed the applicants' ability to cover the cost of the alternative over the span of the planning horizon.

(c) The required environmental document shall include projections of future water supply, transfers, and demands with a planning horizon of at least 30-years. The baseline year for the planning horizon shall be determined based on project-specific considerations, including the applicant's proposed baseline year, the timing of the submission of the environmental documents required by G.S. 143-215.22L(d), the applicant's demonstrated current and projected water demand, and any other project-specific considerations related to the needs of the requested transfer. Projections shall be conducted on 10-year increments, at a minimum.

History Note: *Authority G.S. 143-215.22L; 143B-282(a)(2);*
Eff. March 1, 2023.

15A NCAC 02E .0406 PETITION

(a) Pursuant to G.S. 143-215.22L(g)(7), the petition shall include an evaluation of impacts to reservoir water levels that take into consideration the purposes for which the reservoir was constructed, and any mandatory management activities required to maintain the reservoir per any binding agreements between two or more parties related to such purposes.

(b) Reasonably foreseeable future water supply needs shall mean the projected water transfers necessary to meet demands for not less than 30-years from the year in which the Notice of Intent is filed in compliance with G.S. 143-215.22L(c).

(c) Unless already approved by the Division, an updated local water supply plan meeting the requirements set forth in G.S. 143-355(l) for the previous full calendar year shall be submitted to the Division for review and approval. Once approved, the plan shall be adopted by the local government or large community water system governing board.

History Note: *Authority G.S. 143-215.22L; 143B-282(a)(2);*
Eff. March 1, 2023.

15A NCAC 02E .0407 SETTLEMENT/MEDIATION

The Commission may appoint a mediation officer to initiate settlement discussions. The mediation officer shall follow the most recent guidance or mediation and settlement procedures approved by the Commission.

History Note: *Authority G.S. 143-215.22L; 143B-282(a)(2);*
Eff. March 1, 2023.

15A NCAC 02E .0408 FINAL DETERMINATION

(a) The water conservation plan shall meet all the requirements of G.S. 143-215.22L(n)(1). Any proposed ordinances, initiatives, or programs shall be approved by the unit of local government within 90 calendar days of issuance of the IBT Certificate to document the water conservation efforts. Consistent with the requirements contained in G.S. 143-215.22L(n)(1) an applicant shall demonstrate, through its water conservation plan, that its existing or proposed water conservation measures are equal to or exceed the most stringent water conservation plan implemented by any public water system in the source basin. The required demonstration shall be based on the existing water conservation measures implemented by each of the public water supply systems that withdraw from the source river basin. The water conservation plan is subject to approval by the Department.

(b) Examples of metrics for supply-side water conservation measures may include:

(1) regularly conducted water system water audits, where the schedule and methodology used are outlined;
(2) a flushing optimization plan and accounting of use by a fire department;
(3) a leak detection program where the repair program abilities are described;
(4) storage tank level and pressure management;
(5) water meter replacement;
(6) metering testing schedule;
(7) a plan to identify failing meters; and

(8) details of any existing water reuse programs.

(c) Examples of metrics for demand-side water conservation measures may include:

(1) a tiered-rate pricing structure that incentivizes and promotes customer conservation;

(2) public outreach and education programs;

(3) encouraging all households to conduct simple water audits to improve individual water conservation and efficiency measures;

(4) the use of irrigation controls, including schedule restrictions, a ban on watering impervious surfaces, a separate conservation rate pricing structure;

(5) encourage the use of mulch, and the use of drought tolerant plants and grass species;

(6) the use of water conservation irrigation devices including rain or soil moisture sensors, rain barrels, or cisterns to collect rainwater for outdoor irrigation;

(7) registration of, and accounting for, pre-arranged (bulk) potable water usage sales;

(8) separate meters for outdoor irrigation; and

(9) encouraging the replacement of older, inefficient water fixtures with more water-efficient fixtures and devices.

(d) Pursuant to G.S. 143-215.22L(n)(7), the certificate shall include all current and anticipated applicants and co-applicants. To be eligible to receive transferred water under a certificate, any public water system not listed as the primary applicant on a certificate but is anticipated to receive transferred water made available through a certificate at any time, present or future, shall be identified as a co-applicant on the certificate. All water systems beyond the applicant, that serve customers or sell transferred water in the receiving basin, shall be listed as co-applicants in the petition document. This shall include any projected water sales that are anticipated to occur during the planning period identified in the petition. A modification to the certificate shall be necessary for sales to entities not listed on the certificate.

(e) Pursuant to G.S. 143-215.22L(n)(7), water sales to water systems or wholesale customers not listed as co-applicants in receiving basins, or are not listed in a modification, shall be considered a violation of the terms of the certificate and could result in the Commission rescinding the certificate. Allowable emergency transfers as outlined in Rule .0409 of this Section are not subject to this Paragraph.

(f) As used in G.S. 143-215.22L(m), detriment means harmful or damaging conditions not caused by a natural condition where an entity with a Department approved water use cannot carry out the beneficial uses for which the water use was granted.

(g) As used in G.S. 143-215.22L(k) and G.S. 143-215.22L(n), detrimental effects means harmful or damaging effects to the water quality, water quantity, fish and wildlife habitat, wastewater assimilation, navigation, electric power generation, public water supplies, and other industrial, economic, recreational, or agricultural water supply needs within either the source or receiving river basins due to the proposed water transfer.

History Note: *Authority G.S. 143-215.22L; 143B-282(a)(2);*
Eff. March 1, 2023.

15A NCAC 02E .0409 EMERGENCY TRANSFERS

(a) Pursuant to G.S. 143-215.22L(q), an emergency transfer of water may be requested in situations resulting from water supply problems caused by a water quality incident, temporary failure of a water plant or infrastructure, or any other temporary condition in which the public health, safety, or welfare requires the transfer of water. With the understanding that these proposed actions are occurring under emergency situations, the Secretary shall make reasonable attempts to consult with parties described in G.S. 143-215.22L(3)(c) prior to making a determination. Emergency transfers shall not take the place of, or be issued in lieu of, a permanent or modified transfer certificate. Per G.S. 143-215.22L(q), as a condition of the transfer, the applicant shall demonstrate and convey to the Department that the amount of water transferred shall be minimized through water efficiency measures for the duration of the transfer.

(b) When possible, a request for an emergency transfer shall be submitted to the Department prior to the transfer, such as in the case of drought, plant maintenance, or other planned or foreseeable activities. Prior to starting the emergency transfer, the applicant shall submit a request to the Department for Secretary approval, either in writing or electronically, which shall include:

(1) the nature or circumstances of the event that is prompting the transfer request;

(2) the affected river basins between which the requested emergency transfer would occur;

(3) the estimated quantity of water to be transferred; and

(4) the anticipated duration of the requested emergency transfer.

No water shall be transferred prior to Secretary approval.

(c) Where an unplanned situation necessitates a transfer of water and a request cannot be made to the Secretary prior to the transfer event, the applicant, within 72 hours of the start of the transfer, shall provide to the Department the information in Subparagraphs (b)(1) through (b)(4) of this Rule. Provided conditions of this Paragraph are met, the Secretary shall consider the emergency transfer approved.

(d) With any emergency transfer approval, the applicant shall, within 60 calendar days from the end of the transfer period, submit to the Department a summary report detailing the transfer event. The report shall include, to the extent possible, updated information required in Subparagraphs (b)(1) through (b)(4) of this Rule based on the actual event.

History Note: *Authority G.S. 143-215.22L; 143B-282(a)(2);*
Eff. March 1, 2023.

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 use of ground water requires coordination and limited regulation in this delineated area for protection of the public interest. The intent is to protect the long-term productivity of aquifers within the designated area and to allow the use of ground water for 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;
Readopted Eff. January 1, 2022.

15A NCAC 02E .0502 WITHDRAWAL PERMITS

(a) 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 in excess of 100,000 gallons per day by a well, group of wells operated as a system, or sump for any purpose unless he or she obtains a water use permit from the Director.

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

(2) specifications for design and construction of existing and proposed production and monitoring wells 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; exceptions may be made where specific items of information are not critical, as determined by the Director based upon site specific conditions, to manage the ground water resource;

(3) withdrawal permit applications for use of ground water from the Cretaceous aquifer system shall be reviewed protecting the Cretaceous aquifer system zones. 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 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, designs, 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) a monitoring plan that provides data to delineate the nature and extent of dewatering or depressurization; and

(F) 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 based upon site specific conditions, to manage the ground water resource; and

(5) 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 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 of a water conservation-based rate structure, such as flat rates, increasing block rates, seasonal rates, or quantity-based surcharges;

(ii) 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 water audit. Water loss reduction programs shall consist of annual water audits, in-field leak detection, and leak repair;

(iii) adoption of a water conservation ordinance for irrigation, such as time-of-day and day-of-week restrictions on lawn and ornamental irrigation or automatic irrigation system shut-off devices;

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

(v) implementation of a public education program, such as water bill inserts, school and civic presentations, water treatment plant tours, and public services announcements; and

(vi) 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, 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 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 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) 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 include:
(1) amounts of daily withdrawal from each well;
(2) 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;
(3) static water levels in observation wells at time intervals specified in the permit;
(4) annual sampling by applicants located in the salt water encroachment zone and chloride concentration analysis by a State certified laboratory; and
(5) any other information the Director determines to be pertinent and necessary to the evaluation of the effects of withdrawals during the application review process.

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

(g) 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. Aquifer monitoring may be necessary to assess the impact of the withdrawal on the aquifer.

(h) 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 August 1, 2002 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) 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, and other publicly available information. Withdrawal rates that do not cause adverse impacts, as defined in Paragraph (c) of this Rule, shall be approved.

(j) Withdrawals of water that cause changes in water quality such that the available uses of the resource are adversely impacted, by dewatering or salt water encroachment, shall not be permitted.

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

(m) 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.

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

(1) an applicant or permit holder demonstrates that compliance with water withdrawal limits established pursuant to this Section is not possible because of construction schedules, requirements of other laws, or other reasons beyond the control of the applicant or permit holder;
(2) the applicant or permit holder has made efforts to conserve water and develop other water sources; and
(3) the applicant or permit holder provides data from monitoring wells that 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;
Readopted Eff. January 1, 2022.

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 pursuant to Rule .0502(b) of this Section.
(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 or monitoring stations, indicate that aquifers may be damaged by overpumping, salt water encroachment, or other adverse impacts 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 pursuant to G.S. 143-215.19(e). Reports defined in Rule .0502(e) of this Section are not considered Confidential Business Information.

History Note: *Authority G.S. 143-215.19;*
Eff. August 1, 2002;
Readopted Eff. January 1, 2022.

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

(a) 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 pursuant to G.S. 143-355(k) and comply with the following provisions:
(1) 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 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 water in a manner that does not damage the aquifer, cause salt water encroachment, or other adverse impacts.

(b) Requirements of this Rule shall not apply to withdrawals to supply an individual domestic dwelling.

History Note: *Authority G.S. 143-215.14;*
Eff. August 1, 2002;
Readopted Eff. January 1, 2022.

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 the Division based upon documentation of the following information:
(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 Department of Environmental Quality by August 1, 2002;
(c) the portion of a plant nursery operation using low volume micro-irrigation; or
(d) other 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: The addition of water to the zone of saturation.

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

(6) 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 and includes the regions where, 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 percent in the declining water level zone and up to 75 percent in the dewatering and salt water encroachment zones. Intermittent users and users of wells exclusively screened or open to the Peedee aquifer were not required to reduce withdrawals.

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

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

(10) Fresh water: Water containing chloride concentrations less than 250 milligrams per liter.

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

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

(13) 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) Increasing block rates: Unit price increases with additional usage.

(15) Intermittent users: Persons who withdraw ground water less than 60 days per calendar year 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 using water for the initial filling of ponds or refilling of ponds no more frequently than every five years.

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

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

(19) Recharge rate: The rate of which water replenishes an aquifer.

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

(21) 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) Seasonal rates: Unit price changes according to the season.

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

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

History Note: *Authority G.S. 143-215.14;*
Eff. August 1, 2002;
Readopted Eff. January 1, 2022.

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

15A NCAC 02E .0601 SCOPE

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;
Readopted Eff. January 1, 2022.

15A NCAC 02E .0602 DEFINITIONS

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

(1) "Council" and "NCDMAC" mean the North Carolina Drought Management Advisory Council.
(2) "Department" means the North Carolina Department of Environmental Quality (DEQ).
(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 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.
(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 are 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 routine operations. NOPs aim to achieve efficiency, quality output, and uniformity of performance, while reducing miscommunication and failure to comply with industry regulations.
(11) "Non-essential water use" means categories of water use, other than essential water use, that may be curtailed during droughts and water emergencies.
(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 non-profit entities managed by local or state governments, for which rates are set by a governing board.
(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.
(16) "Syringing" means the application of 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.
(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.
(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.
(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;
Readopted Eff. January 1, 2022.

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) 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 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, shall be exempt from the requirements set forth in this Section.

History Note: *Authority S.L. 2002-167;*
Eff. March 19, 2007;
Readopted Eff. January 1, 2022.

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

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;
Readopted Eff. January 1, 2022.

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 that have 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 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;
Readopted Eff. January 1, 2022.

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

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;
Readopted Eff. January 1, 2022.

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

(a) 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) 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 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;
Readopted Eff. January 1, 2022.

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) 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;
Readopted Eff. January 1, 2022.

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) 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 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;
Readopted Eff. January 1, 2022.

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) 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;
Readopted Eff. January 1, 2022.

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 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;
Readopted Eff. January 1, 2022.

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 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;
Readopted Eff. January 1, 2022.

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 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 02U .0100 and any successive rules and amendments;
    (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 functioning and 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;
Readopted Eff. January 1, 2022.

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 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 02U .0100 and any successive rules and amendments;
(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 functioning and 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;
Readopted Eff. January 1, 2022.

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

Water users may use reclaimed water under the provisions of North Carolina Administrative Code 15A NCAC 02U .0100 and any successive rules and amendments, during droughts and other water shortage emergencies as defined by G.S. 143-350 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;
Readopted Eff. January 1, 2022.