

Warren County Public Utilities

Water Shortage Response Plan

Required by North Carolina Department of Environment and Natural Resources

Water Shortage Response Ordinance
Warren County, North Carolina

- (h) “Non-Residential Customer,” as the term is used in this ordinance, shall mean commercial, industrial, institutional, public and all other such users, with the exception of hospitals and health care facilities.
- (i) “Rationing, as the term is used in this ordinance, shall mean procedures established to provide for the equitable distribution of critically-limited water supplies, in order to balance demand and limited available supplies, and to assure that sufficient water is available to preserve public health and safety.
- (j) “Reclaimed Water,” as the term used in this ordinance, shall mean wastewater that has been treated to allow reuse.
- (k) “Residential Customer,” as the term is used in this ordinance, shall mean any customers who receive water service for a single or multi-family dwelling unit. The term residential customer does not include educational or other institutions, hotel, motel, or similar commercial establishments.
- (l) “Service Interruption,” as the term is used in this ordinance, shall mean the temporary suspension of water supply, or reduction of pressure below that required for adequate supply, to any customer, portion of a water supply, or entire system.
- (m) “Voluntary Conservation,” as the term is used in this ordinance, shall mean that conditions exist which indicate the potential for serious water supply shortages.
- (n) “Waste of Water,” as the term is used in this ordinance, includes, but is not limited to (1) permitting water to escape down a gutter, ditch, or other surface drain, or (2) failure to repair a controllable leak of water due to defective plumbing.
- (o) “Wastewater,” as the term is used in this ordinance, shall mean water, which has been previously used for industrial, municipal, domestic, or other purpose, and has not been returned to the surface or groundwater source.
- (p) “Water,” as the term is used in this ordinance, shall mean water available to Warren County by virtue of its water rights or contract, or any treated water introduced by Warren County into its water distribution system, including water offered for sale.

Commercial, Agricultural, Industrial and Institutional Uses

- Outdoor commercial watering (public or private) using conservation measures and to the extent that sources of water other than fresh water are not available to use.
- Irrigation for commercial vegetable gardens and fruit orchards or the maintenance of livestock.
- Watering by commercial nurseries at a minimum level necessary to maintain stock.
- Water use by arboretums and public gardens or national, state, or regional significance where necessary to preserve specimens.
- Use of fresh water at a minimum rate necessary to implement vegetation following earth moving, where such vegetation is required by law or regulation.
- Watering of golf course greens.
- Filling and Operation of Swimming Pools:
 1. Residential pools which serve more than 25 dwelling units.
 2. Pools used by health care facilities for patient care and rehabilitation.
 3. Municipal pools.
- Commercial car and truck washes.
- Commercial Laundromats.
- Restaurants, clubs, and Eating Places.
- Air Conditioning:
 1. Refilling for start up at the beginning of the cooling season.
 2. Make-up of water during the cooling season.
 3. Refilling specifically approved by health officials and the municipal governing body, where the system has been drained for health protection or repair purposes.
- Schools, Churches, Motels/Hotels and Similar Commercial Establishments.

CLASS 3 NON-ESSENTIAL USES OF WATER:

Ornamental Purposes:

- Fountains, reflecting pools, and artificial waterfalls.

Outdoor Non-Commercial Watering (public or private):

- Gardens, lawns, parks, golf courses (except greens), playing fields and other recreational areas.
- Filling and operation of recreational swimming pools which serve fewer than 25 dwellings.
- Non-commercial washing motor vehicles.
- Serving water in restaurants, clubs, or eating places except by specific request.
- Air Conditioning: refilling cooling towers after draining except as specified in Class 1.

Public Use:

- Fire Hydrants: any purpose, including use of sprinkler caps and testing fire apparatus and for fire department drills, except as listed Class 1.
- Flushing of Sewers and Hydrants except as listed in Class 1.

SECTION 3 DECLARATION OF VOLUNTARY CONSERVATION:

Whenever the County Manager is informed by the Public Utilities Director that either the drinking water supply is limited or that a potential shortage of raw water supply is indicated, the governing body shall be empowered to declare by adoption of this ordinance that Voluntary Conservation conditions exist. The Public Utilities Director or ORC of the Warren County Regional Water System shall, on a daily basis, monitor the supply and demand upon that supply.

In addition the County Manager (or his/her agent) is authorized to call upon all water customers to employ voluntary water conservation measures (see Addendum) to limit water use (especially Class 3 uses) and eliminate the waste of water. This resolution shall be published in a newspaper of general circulation in the area which qualifies under GS 1-597, and may be publicized through the general news media or any other appropriate method for making such resolutions public.

SECTION 4. DECLARATION MANDATORY CONSERVATION:

The County Manager is hereby authorized to impose mandatory water restrictions, as described below, on the usage of water obtained directly or indirectly from the Warren County Regional water distribution system by declaring that Mandatory Conservation conditions exist. This declaration shall be based on written recommendations from the Warren County Public Utilities Director that conditions exist such that a water shortage is imminent. These restrictions may be imposed by the County Manager after consideration of all the following factors:

- A: The water level in Kerr Lake is nearing elevation 290. This implies that the lake level is nearing a level where insufficient water can enter the raw water intake.
- B: Water pressure at monitoring locations of the Warren County Regional Water System.
- C: Ability to fill elevated water tanks of the Warren County Regional Water System.
- D: Ability to maintain minimum water pressure standards in the entire Warren County Regional Water System.

SECTION 5. DECLARATION OF A WATER SHORTAGE EMERGENCY:

Whenever the governing body of Warren County finds that raw water supplies are below the level necessary to meet normal water supply needs and that serious shortages exist, it shall be empowered to declare by adoption of an ordinance that a Water Shortage Emergency exists. Class 1, Essential Uses shall be identified, specifically, as targets for voluntary conservation initiatives. Also, all Class 2, Socially or Economically Important uses shall be banned in addition to the Class 3, Non-Essential Uses. These restrictions shall continue until the emergency is declared ended by ordinance of the governing body. Publication of these ordinances shall follow the provisions in Section 3 of this ordinance.

SECTION 6. DECLARATION OF RATIONING:

Whenever the governing body of Warren County has declared a Water Shortage Emergency and finds a need to provide for the equitable distribution of critically-limited water supplies, in order to balance demand and limited available supplies, and to assure that sufficient water is available to preserve public health and safety, it shall be empowered to provide for mandatory rationing by adoption of this ordinance.

SECTION 6A. OBJECTIVES OF RATIONING:

An ordinance that provides for mandatory rationing shall state findings that:

- (a) It is imperative that water customers achieve an immediate further reduction in water use in order to extend existing water supplies and at the same time, assure that sufficient water is available to preserve the public health and sanitation and to provide fire protection service.
- (b) The immediate further reduction in water usage is another step along a continuum of responses to the present water supply shortage. Should shortages continue, further reductions in usage may be required. It must be emphasized that the additional usage reduction in the rationed area is a valid and attainable goal reflective of the conditions that currently exist.
- (c) The plan provides for equitable reductions in water usage and for equal sacrifice on the part of each water customer. The success of this ordinance depends on the cooperation of all water customers in the emergency area.

SECTION 6B. WATER USE RATIONING FOR RESIDENTIAL USERS

- (a) Metered Residential Water Customers and Allotments:
 - 1. The number of permanent residents in each dwelling unit (household) will determine the amount of water that each household will be allowed.
 - 2. Each dwelling unit (household) shall be allotted 100 gallons per day for each resident of the household.
 - 3. Residential water customers are required to provide Warren County and utility personnel with reasonable access to read meters as necessary to this rationing declaration. Where access is not readily available, all reasonable efforts to contact customers in order to arrange for access to read meters shall be made. In the even a water customer does not allow entry to read the meter after reasonable efforts to arrange for such access, the dwelling unit (household) allotment may be further reduced from 100 gallons per day at the discretion of the Public Utilities Director in consultation with the System ORC.

4. (i) If it is found that the residential water allotment provided under this section would create an extraordinary hardship for individual customers, as in the case of special health-related requirements, a revised allotment for the particular customer may be established; (ii) any person aggrieved by a decision relating to such an exemption or variance may file a complaint with the County Manager (or his or her agent) in accordance with Warren County's normal administrative procedures.
- (b) Non-Metered Residential Water Customers and Allotments:
1. In order to effectively implement and monitor the residential water conservation effort, a water allotment shall be established for the entire water system based on 65 gallons per day per capita served or 50 percent of the water use by the entire system during last meter recording as notified individuals by Warren County.
 2. Warren County and the utility will establish a communication system with the customers through public media to inform them of the requirements of the water rationing provisions of this ordinance, possible conservation measures that customers may employ, the system allotment, and a regularly scheduled report of whether the usage was within the allotment.
- (c) Metered and Non-Metered Residential Customers of the Same Water Supply System. Where a water supply system serves both metered and non-metered residential customers, the allotments and procedures provided under both subsections (a) and (b) shall be applied, as appropriate.
- (d) Suggested Conservation Measures. See Addendum.

SECTION 6C. WATER USE RATIONING FOR NON-RESIDENTIAL WATER USERS

- (a) Non-residential customers include commercial, industrial, public and all other such users with the exception of hospitals and health care facilities.
- (b) Non-residential water customers shall further reduce their water usage to 65 gallons per person per day or to 50 percent of use levels during last metered recording.
- (c) It is the primary responsibility of each non-residential water customer to meet the mandated water use reduction goal in whatever manner possible, including limitation of operating hours or days if necessary.
- (d) Warren County will establish a water allotment for each non-residential water customer, based upon a required further reduction water usage from the rate of water used by the customer at the last recorded use level.

Water Shortage Response Ordinance
Warren County, North Carolina

- (e) Each non-residential water user shall provide access to the County's personnel for the purpose of meter reading and monitoring of compliance with this ordinance. All reasonable efforts will be made to contact customers to arrange for access.
- (f) See numbered items.
 - 1. If the mandated further reduction in water usage cannot be obtained without imposing extraordinary hardship which threatens health and safety, the non-residential customer may apply to Warren County for a variance. For these purposes "extraordinary hardship" means a permanent damage to property or an economic loss which is substantially more severe than the sacrifices borne by other water users subject to this water rationing ordinance. If the further reduction would cause an extraordinary hardship or threaten health or safety, a variance may be granted by the County Manager, and a revised water use reduction requirement for the particular customer may be established.
 - 2. Any person aggrieved by a decision relating to such a variance may file a complaint with the County Manager in accordance with established procedures. Decisions rendered by the County Manager may be appealed to the County Board of Commissioners.
- (g) Warren County will provide each non-residential customer with suggested means to reduce usage levels. (See Addendum.)

SECTION 6D. WATER USE RATIONING FOR HOSPITALS AND HEALTH CARE FACILITIES

- (a) Hospitals and health care facilities shall comply with all restrictions imposed on residential and non-residential water customers as may be applicable to each individual institution to the extent compliance will not endanger the health of the patients or residents of the institution.
- (b) Each hospital or health care facility shall survey its water usage patterns and requirements and implement such additional conservation measures as may be possible without endangering the health of its patients or residents to achieve a further reduction in the institution's water usage.
- (c) Warren County will provide each hospital and health care facility with suggested means to reduce usage levels. (See Addendum.)

SECTION 6E. ENFORCEMENT OF WATER RATIONING

- (a) Warren County or its water utility will have primary responsibility for monitoring compliance with the water-rationing ordinance.
- (b) The following provisions shall govern the implementation of temporary service interruptions:
 1. In order to effectuate compliance with this ordinance, Warren County is hereby authorized to plan and implement temporary service interruption to all or part of its water supply system, as may be deemed appropriate, when any/or all of the following conditions are determined to exist: (i) The mandated reduction in system-wide water usage has been achieved; and/or (ii) The mandated reduction in system-wide water usage has been achieved, but has failed to have a significant impact in extending limited water supplies; and/or (iii) Temporary service interruptions are necessary in order to further extend limited and/or dwindling water supplies.
 2. In the event it is determined that temporary service interruptions are necessary, Warren County shall notify its customers through the public media (newspapers, radio, and television), at least one day prior to the temporary service interruptions, that a planned, temporary service interruption is to be imposed. Such notice shall: (i) State the day or days when the planned, temporary service interruption will occur; (ii) State the time(s) when such planned, temporary service interruptions will commence and the time(s) such interruption will cease; (iii) State whether the planned, temporary service interruptions are to be imposed on the entire system, or part thereof, and, if only part(s) of the system will experience planned, temporary service interruptions will occur; and (iv) Advise all customers within the areas affected by planned, temporary service interruptions how to treat any water received from the system, for human consumption, during the period(s) of such interruptions and for such additional time as may be necessary until full pressure is restored to the system.
 3. If a planned, temporary service interruption is imposed as authorized by this ordinance, Warren County must provide for the continued delivery of water to health care facilities within the area(s) affected by such interruptions, by means of any adequate, alternative delivery measures that may be necessary.

Water Shortage Response Ordinance
Warren County, North Carolina

4. If a planned, temporary service interruption is implemented, Warren County must make provisions, by any reasonable means possible, for the continued delivery of such water as may be necessary for the proper operation of sewage collection, treatment, and disposal systems and facilities.
- (c) Any residential or non-residential water customer who exceeds the allotments established pursuant to this water rationing will be subject to the following penalty:
- An administrative fine not to exceed \$100 will be assessed per violation if a customer's water use exceeds the water allotments established pursuant to the local water rationing declaration schedule.
- (d) In addition to the assessment of an administrative fine, non-compliance with the water rationing provisions of this ordinance will result in the following:
1. For the first excess use, a warning of possible discontinuation shall be issued to the customer.
 2. For the second or subsequent excess use, service to the customer may be interrupted or shut off for a period not to exceed 48 hours, or, if the customer provides access, a flow restrictor may be installed in the customer's service line for the duration of the emergency. The cost incurred to interrupt or shut off and reinstate service, or to install and remove a flow restrictor, shall be assessed to the water customer. Before service to an individual may be terminated under this provision, actual notice of the intent to discontinue shall be given, which shall include notice that the customer may appear at designated time and place (within 24 hours) for an informal hearing to show why service should not be discontinued.

- (e) Meter reading schedules are authorized to be altered to assure adequate monitoring of compliance with this ordinance.
- (f) Any customer or other person aggrieved by a decision or action imposing an administrative fine or other remedy for non-compliance with the requirements of this ordinance may proceed in accordance with the following provisions:
 - 1. The customer or aggrieved party shall file a letter of appeal to the County Manager within (10) days of action to rebut the finding of a violation, or provide evidence of circumstances beyond the customer's control that resulted in the violation.
 - 2. A record of evidence regarding disputed violations shall be kept, and a written notice of the County Manager's final decision and action in such cases shall be provided to the customer or aggrieved party.

SECTION 7. SHORTAGE WATER RATES

Upon the declaration of a water supply shortage as provided in Sections 3-6 the governing body of Warren County shall have the power to adopt shortage water rates by ordinance designed to conserve water supplies. Such rates may provide for, but not be limited to: (a) higher charges per unit for increasing usage (increasing block rates); (b) uniform charges for water usage per unit of used (uniform unit rate); (c) extra charges for use in excess of a specified level (excess demand surcharge); or (d) discounts for conserving water beyond specific levels. Nothing herein shall be construed to imply any limitations on the County's general rate adoption and/or amendment authority.

SECTION 8. REGULATIONS

Any person who violates the provisions of this ordinance, who fails to carry out the duties and responsibilities imposed by this ordinance, or who impedes or interferes with any action undertaken or ordered pursuant to this ordinance shall be subject to the following penalties:

- (a) If the, County Manager, Director of Public Utilities, or other County official or officials charged with implementation and enforcement of this ordinance or a water supply shortage resolution learns of any violation of any water use restriction imposed pursuant to this ordinance, a written notice of the record shall be affixed to the property where the violation occurred and mailed to the customer and to any other person known to Warren County who is responsible for the violation or its correction. Said notice shall describe the violation and order that is to be corrected, cured, or abated immediately or within such specified time as Warren County determines is reasonable under the circumstances. If the order is not complied with, Warren County may terminate water service to the customer subject the following procedures:
 - 1. Warren County shall give the customer notice by mail that, due to the violation, water services will be discontinued within a specified time and that the customer will have the opportunity to appeal the termination by requesting a hearing to be scheduled before Warren County's governing body or a County official designated as a hearing officer by the governing body;
 - 2. If such a hearing is requested by the customer charged with the violation, he or she shall be given full opportunity to be heard before termination is ordered; and,
 - 3. The governing body or hearing officer shall make findings of fact and order whether service should continue or be terminated.
- (b) A fee of \$100 shall be paid for the reconnection of any water service terminated pursuant to subsection (a). In the event of subsequent violation(s) the reconnection fee shall be \$200 for the second violation and \$300 for each additional violation.
- (c) Any customer may also be charged with any willful violation of this ordinance and prosecuted in District Court. Any person so charged and found guilty of violating the provisions of this ordinance shall be guilty of a misdemeanor. Each day's violation shall constitute a separate offense. The penalty for violation shall be a maximum fine of \$100 and/or imprisonment for not more than 30 days.

SECTION 9.A CIVIL PENALTIES

In addition to or in lieu of criminal prosecution, violation of this ordinance may subject the offender to civil penalties in the amounts provided or otherwise an amount of \$50 per day, collectible in a civil action in the nature of debt.

SECTION 10. SEVERABILITY

If any provision of this ordinance is declared unconstitutional, or the application thereof to any person or circumstance is held invalid, the constitutionality of the remainder of the ordinance and its applicability to other persons and circumstances shall not be affected thereby.

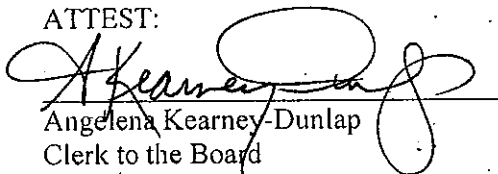
SECTION 11. EFFECTIVE DATE


This ordinance shall take effect immediately upon adoption or passage by Warren County's governing body.

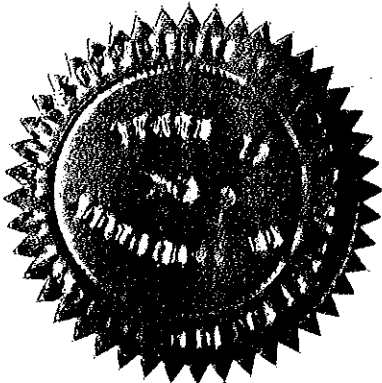
Adopted by County Board the 5th day of November 2007.

WARREN COUNTY

ATTEST:


Angelena Kearney-Dunlap
Clerk to the Board


Clinton G. Alston, Chairman
Board of County Commissioners



WARREN COUNTY, NORTH CAROLINA
WATER SHORTAGE RESPONSE ORDINANCE
ADDENDUM
CONSERVATION MEASURES

Direct users to adopt the following conservation measures:

INDOOR RESIDENTIAL USE:

CONSERVATION FOR VOLUNTARY CONSERVATION PHASES:

- Use dishwashers only when they are full. Washing dishes by hand (don't let the tap run!) Saves about 25 gallons.
- Adjust water level on clothes washing machines, if possible. Use full load only, if not adjustable.
- Turn off faucets while brushing teeth, etc. Saves about 5 gallons per day.
- Reduce water used per flush by installing toilet tank displacement inserts. A plastic jug may often be used as an alternative. DO NOT USE BRICKS – they disintegrate when soaked and the resulting grit hinders closing of the flap valve.
- Do not use the toilet as a trash can.
- Use sink and tub stoppers to avoid wasting water.
- Keep a bottle of chilled water in the refrigerator for drinking.
- Find and fix leaks in faucets and water-using appliances. Faucets can usually be fixed cheaply and quickly by replacing washers.
- Learn to read your water meter so you can judge how much water you use and what difference conservation makes.
- Take shorter showers and shallow baths. Saves about 25 gallons.
- Reduce the number of toilet flushes per day. Each flush uses about 5 gallons (2-3 if you have water saving toilets).
- Don't use a garbage disposal.
- Use non-phosphate detergent and save laundry water for lawns and plants.

CONSERVATION FOR EMERGENCY CONSERVATION OR RATIONING PHASE (In addition to measures listed above).

- Turn off shower while soaping up.
- Use disposable eating utensils.

OUTDOOR RESIDENTIAL USE

CONSERVATION FOR NORMAL CONDITIONS AND VOLUNTARY CONSERVATION PHASE:

Lawns:

- Water before 10:00 a.m. to prevent evaporation that occurs during the hottest part of the day. Morning is better than evening, when the dampness encourages growth of fungus.
- Water only when lawn shows signs of wilt. Grass that springs back when stepped on does not need water.
- Water thoroughly, not frequently: long enough to soak roots. A light sprinkling evaporates quickly and encourages shallow root systems. Water slowly to avoid runoff.
- Don't let the sprinkler run any longer than necessary. In an hour, 600 gallons can be wasted.
- Allow maximum of one inch of water per week on your lawn. To measure, place cake tins outside to collect rain and water from sprinklers.
- Use pistol-grip nozzles on hoses to avoid waste when watering flowers and shrubs.
- Aerate lawns by punching holes 6 inches apart. This allows water to reach roots rather than run off surfaces.
- Position sprinklers to water the lawn, not the pavement.
- Avoid watering on windy days when the wind not only blows water off target, but also causes excess evaporation.
- Keep sprinkler heads clean to prevent uneven watering.
- Adjust hose to simulate gentle rain. Sprinklers that produce a fine mist waste water through evaporation.
- Know how to turn off an automatic sprinkler system in case of rain.
- Use an alarm clock or stove timer to remind you to shut off sprinklers that don't have timers.

Vegetables and Flower Gardens:

- Water deeply, slowly and weekly. Most vegetables require moisture to a depth of 6 to 8 inches.
- Keep soil loose so water can penetrate easily.
- Keep weeds out to reduce competition for water.
- Put the water where you want it and avoid evaporation by using soil-soakers or slow running hoses, not sprinklers.

Trees and Shrubs:

- Water deeply using a soil-soaker or drip-irrigation.
- Water only when needed. Check the depth of soil dryness by digging with a trowel.
- Mulch to reduce evaporation. A 2" to 3" layer of wood chips, pine needles, grass clippings, or straw keeps the soil cool in summer.
- Dig troughs around plants to catch and retain water.
- Water trees growing in full sun more often than those in shade.
- Do not use sprinklers. Apply water directly at base.
- Do not fertilize during the summer. Fertilizing increases a plant's need for water.
- Postpone planting until fall or spring when there is generally less need for water.
- Install trickle-drip irrigation systems close to the roots of your plants. By dripping water slowly, the system doesn't spray water in to the air. Use soil probes for large trees.
- Water when cloudy, at night, or even when a light rain is falling.

OUTDOOR RESIDENTIAL USE CONSERVATION FOR VOLUNTARY CONSERVATION PHASE (in addition to measures listed above).

- Do not allow children to play with hose or sprinklers.
- Limit car washing.
- Be ready to catch rainfall that occurs. Place containers under drain sprouts.
- Use leftover household water if available.
- Consider delaying the seeding or sodding of new lawns.
- Determine the amount of water being used outdoors by comparing water bills for summer and winter.

CONSERVATION FOR MANDATORY CONSERVATION PHASE (In addition to measures listed above).

- Vegetable gardens and food trees should be given minimal amounts of water on an individual basis only.
- Do not water lawns and inedible plants.
- Do not use sprinklers.

Most outdoor watering is prohibited under Emergency Conservation conditions.

HOSPITAL AND HEALTH CARE FACILITY USE:

- Reduce laundry usage or services by changing the linens, etc. only when necessary to preserve the health of patients or residents.
- Use disposable food service items.
- Eliminate, postpone, or reduce, as they may be appropriate, elective surgical procedures during the period of emergency.

INDUSTRIAL USE

- Identify and repair all leaky fixtures and water-using equipment. Give special attention to equipment connected directly to waterlines, such as processing machines, steam-using machines, washing machines, water-cooled air conditioners, and furnaces.
- Assure that valves and solenoids that control water flows are shut off completely when the water-using cycle is not engaged.
- Adjust water-using equipment to use the minimum amount of water required to achieve its stated purpose.
- Shorten rinse cycles for laundry machines as much as possible; implement lower water levels wherever possible.
- For processing, cooling, and other uses, either re-use water or use water from sources that would not adversely affect public water supplies.
- Advise employees, students, patients, customers, and other users not to flush toilets unnecessarily. Install toilet tank displacement inserts; place flow restrictors in showerheads and faucets; close down automatic flushes overnight.
- Install automatic flushing valves to use as little water as possible or to cycle at longer intervals.
- Place water-saving posters and literature where employees, students, patients, customers', etc. will have access to them.
- Check meters on a frequent basis to determine consumptive patterns.
- Review usage patterns to see where other savings can be made.