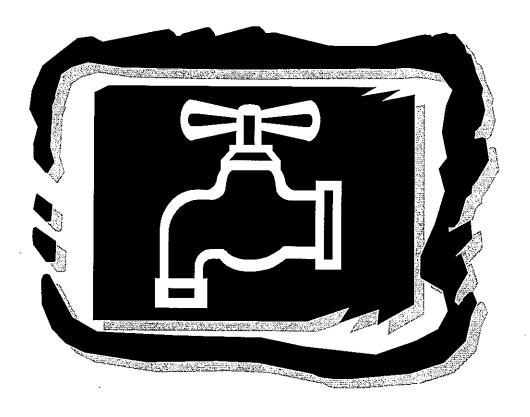
Water Shortage Response Plan for the Town of Elkin Water Supply System



Sec. 1 Declaration.

Whenever the water supply of the Town of Elkin's public water system is low or declining due to conditions which may adversely affect the continued availability of water for human consumption, sanitation, health and fire protection, it may become necessary to declare a Water Shortage and implement conservation requirements under the standards set forth below.

Sec. 2 <u>Definitions.</u>

For the purpose of this Ordinance, the following terms, words and phrases and their derivations shall have the meaning given herein:

- A. "Town" means the Town of Elkin.
- B. "Person" means any person, firm, partnership, association, corporation, limited liability company, professional association or organization of any kind.
- C. "Water" means raw or treated water from the Town's public water supply system.
- D. "Customer" means a Person in whose name a water connection is made and to whom a bill is issued, whether such connection is inside or outside the corporate limits of the Town.
- E. "Water Shortage" means whenever the water supply of the Town's public water system is low or declining.
- F. "Notice" (Notification) means informing or make known a change for the citizens of the Town.
- G. "Stage" shall mean any one of the four (4) stages or levels of severity of Water Shortage as designated herein.
- **Sec. 3** General. A Water Shortage shall be declared to exist when the water supply available to the Town shall have declined to where the Customers cannot be provided with water to protect their health and safety without substantially curtailing the water demand.

Sec. 4 Notice to General Public of Water Shortage.

- A. Should a Water Shortage occur in the Town water supply which may put the health and safety of the Customers at risk, the Utilities Director, after careful evaluation, will notify the Town Manager with appropriate recommendations. The Town Manager is authorized and empowered to give Notification to the public of the existence of the Water Shortage and the severity thereof as follows:
 - 1. In order to notify the public of any changes to water restrictions, the Town will place ads in the local newspaper as well as place flyers at all Town facilities. The Town will also post the water restrictions on their website. The ads and flyers will state the required response

- measures set forth in Section 6 from each stage of restrictions. The Town will run a new ad in the newspaper and use new flyers with every change in water restriction level.
- 2. In order to protect the health and safety of the Customers served by the Town, the Town Manager shall place in effect the appropriate restrictive Stage hereinafter authorized. Notice of such restrictive Stage shall be given by the Town Manager through public written Notice in issuance of the appropriate Water Shortage Notice, to be effective within twenty-four (24) hours following the issuance thereof.
- 3. In the event of a sudden severe Water Shortage by a disrupted waterline or some other malfunction of the Town's water system, the Utilities Director shall immediately advise the Town Manager, and the Town Manager may immediately, without Notice, place into effect the appropriate restrictive Stage hereinafter authorized.
- **B.** Once a state of Water Shortage is declared, the Utilities Director shall review the supply of water available to the Town system at least once per day. Following such periodic review, the Utilities Director shall notify the Town Manager of available water supply and recommend appropriate action.

Sec. 5 Compliance Required in the Event of Water Shortage.

- A. In the event the Town Manager issues the Notice described in Section 2-F, it shall thereafter be unlawful for any person to use or permit the use of water from the water system or from a water system served by the Town for any of the hereinafter set forth prohibited purposes until such time as this policy is amended or repealed or until the Town Manager has declared such water usage restrictions are no longer in effect.
- B. In exercising this authority, consideration shall be primarily given to the following criteria: water levels in the Big Elkin Creek, water levels in the Town's reservoir, capabilities of water production and distribution system, outlook for precipitation, daily water use patterns, seasonal and long-term weather patterns and availability of water from other sources.
- C. Hospitals, nursing homes and health care facilities shall comply with all restrictions imposed on residential and non-residential Customers by the Town Manager and which may be applicable to any Person, except to the extent such compliance will reasonably endanger the health of the patients or residents of the said facilities.
- D. Hospitals, nursing homes and health care facilities shall survey their water usage patterns and requirements and implement substitute conservation measures as may be reasonably possible without endangering the health of their patients or residents to achieve a reasonable reduction in the facilities' water usage.

Sec. 6 Triggers

Triggers to enact water restriction are set based on river flow and pump run time. The triggers will enact the restrictions outlined in Section 7. The triggers are set as follows:

- A. **Stage I** will be enacted if flow drops to 2.34 cubic feet per second for seven (7) consecutive days, or if pump run times increase 30% in order to maintain previous rates, or any other event which causes a 30% reduction in the water system's capacity.
- B. **Stage II** will be enacted if flow drops to 1.67 cubic feet per second for three (3) consecutive days, or if pump run times increase 50% in order to maintain previous rates, or any other event which causes a 50% reduction in the system's capacity.
- C. Stage III will be enacted if flow drops to 1.22 cubic feet per second at any point, or if pump run times increase 65% in order to maintain previous rates, or any other event which causes a 65% reduction in the system's capacity.
- D. Stage IV will be enacted if flow drops to or below 0.67 cubic feet per second at any point, or if pump times increase 80% in order to maintain previous rates, or any other even which causes an 80% reduction in the system's capacity.

Rescission of stages can occur when reservoir volumes increase and remain above specific storage for 7 days. The table describes the triggers for moving to decreasing levels of restrictions as a water shortage becomes less severe.

- E. If at Stage IV-Return to Stage III will be enacted when flow returns to or above 1.22 cubic feet per second, or if pump run times decrease to less than 65% for 7 consecutive days.
- F. If at Stage III-Return to Stage II will be enacted when flow returns to or above 1.67 cubic feet per second, or if pump run times decrease to less than 50% for 7 consecutive days.
- G. If at Stage II-Return to stage I will be enacted when flow returns to or above 2.34 cubic feet per second, or if pump run time decrease to less than 30% for 7 consecutive days.
- H. If at Stage I-Return to normal will be enacted when the flow returns to and can maintain 3.34 cubic feet per second and or pump run times return to normal for 7 consecutive days or longer.
- Sec. 7 <u>Restrictions.</u> The severity of the Water Shortages shall be determined primarily by following the criteria set out in Section 4-B. Once the criteria in Section 4-B is met, the Public Utilities Director and the Town Manager will enact Water Restrictions. The restrictive measures in effect at each Stage are as follows:
- A. Stage I Water Conservation Alert (Voluntary). Upon determining that there is a Water shortage, the Utilities Director shall immediately notify the Town Manager and make appropriate recommendations. Upon such notification, the Town Manager shall review these recommendations and may, if appropriate, declare a Stage I Voluntary Water Conservation Alert. After complying with the Notification provisions contained in Sec. 4A, the following Voluntary water restrictions and conservation measures shall be encouraged, recommended and requested:
 - 1. Inspect and repair all faulty and defective parts of faucets and toilets causing water waste.

- 2. Use shower for bathing rather than bathtub and limit shower to no more than five (5) minutes.
- 3. Do not leave faucets running while shaving, rinsing dishes or brushing teeth.
- 4. Limit use of clothes washers and dishwashers, and when used, operate fully loaded.
- 5. Limit lawn watering and all other outside water use to the following schedules:
 - A. All even numbered street addresses to water on Monday, Wednesday, and Friday between 7 p.m. to 6 a.m.
 - B. All odd numbered street addresses to water on Tuesday, Thursday, and Saturday between 7 p.m. to 6 a.m.
 - C. No watering on Sunday.
- 6. Limit the washing of vehicles.
- 7. Limit the watering of shrubbery.
- 8. Do not wash down sidewalks, patios, and driveways.
- 9. Install water flow restrictions in showerheads and other water-saving devices.
- 10. Use disposable and biodegradable dishes where possible.
- 11. Install water-saving devices in toilets.
- 12. Limit hours of operation of water-cooled air conditioners.
- 13. Limit refilling of swimming or wading pools.
- 14. Conservation in public buildings, institutions, dormitories and similar facilities is Encouraged.
- 15. Water conservation should be followed during all phases of construction-related activities. Where available, water needed should be obtained from supplemental sources.
- 16. To do everything else that is reasonable to accomplish water conservation.
- **B.** Stage II Water Shortage Warning. In the event the above listed voluntary restrictions are not sufficient to reduce water consumption, the Utilities Director shall notify the Town Manager. Upon such notification, the Town Manager may, declare a Stage II Water Shortage Warning. After complying with those Notice provisions contained in Sec. 4-A, the Town Manager shall:

- 1. Issue the following mandatory water restrictions, and thereafter, it shall then be unlawful for a Customer to:
 - a. Water shrubbery, trees, ornamental plants, flowers and vegetable gardens, except by water hose utilizing a hand-held spring-loaded nozzle or hand-held container (bucket, jug, etc.)
 - b. Water lawns and grass by sprinkler, irrigation or drip irrigation except on such days and during such hours as established by the Town Manager at the direction of the Town Board. All other outside water uses except by the following schedules and restrictions:
 - 1). All even numbered street addresses shall water only on Wednesday and Friday between 7 p.m. to 6 a.m.
 - 2). All odd numbered street addresses shall water only Thursday and Saturday between 7 p.m. to 6 a.m.
 - 3). There shall be no watering on Sunday, Monday, or Tuesday.
 - 4). Water newly sewn lawns daily only for the first 30 days, then water by the schedules listed in 1, 2, and 3 above.
 - 5). No filling of swimming pools or wading pools of any kind.

NOTWITHSTANDING THE FOREGOING, A PERSON or BUSINESS REGULARLY ENGAGED IN THE SALE OF PLANTS, SHRUBBERY, TREES AND FLOWERS SHALL BE PERMITTED TO USE WATER, BY ANY METHOD AT ANY TIME, FOR IRRIGATION OF ITS COMMERCIAL STOCK IN TRADE.

- c. Operate water-cooled air conditioners or other equipment that does not recycle cooling water, except when health and safety are adversely affected.
- d. Wash automobiles, trucks, trailers, boats, airplanes or any other type of mobile equipment, except that parts of vehicles may be washed where required by Federal, State or Local Laws or for safety reasons. Provided, however, that any commercial or business-operated car wash facility shall be permitted to use water for such purposes. Further, a person regularly engaged in the sale and/or renting of motor vehicles shall be permitted to use water for the cleaning of its commercial stock; however, any such person shall ensure that water is not wasted. Notwithstanding the foregoing, persons may wash their personal motor vehicles by water hose utilizing a hand-held spring-loaded nozzle or hand-held container (bucket, jug, etc.).
- e. Wash down outside areas such as streets, driveways, service station aprons, parking lots, office buildings, exteriors of existing or newly constructed homes or apartments, sidewalks or patios, or to use water for similar purposes; provided, however, hand-

washing of exterior surfaces of a building for the purpose of preparing them for painting shall be permitted. Provided further, licensed commercial pressure washers shall be permitted to operate. However, any such facility's owner/operator shall ensure that water is not wasted.

- f. Operate or introduce water, except where such water is totally recycled, into any ornamental fountain, pool or pond or other structure making similar use of water.
- g. Serve drinking water in restaurants, cafeterias or other food establishments, except upon specific request.
- h. Use water from any public or private fire hydrants for any purpose other than fire suppression or other public emergency. Water use for normal maintenance of water and/or sewer lines is permitted.
- i. Use water for dust control or compaction; however, licensed contractors engaged in construction activities shall be permitted to operate essential dust control and compaction activities. Commercial, industrial and construction operations shall eliminate all waste of water.
- j. Use water for any unnecessary purpose or to waste water.
- k. Install new irrigation meters.
- 2. Regarding connections to and/or extensions of the Town's water systems outside its corporate limits, temporarily suspend the following:
 - a. The approval of subdivision preliminary plats for the duration of the water shortage;
 - b. Engineering review of subdivision construction drawing(s) for potential water service; and
 - c. The issuance of zoning clearance permits.
- 3. At the direction of the Town Board, the Town Manager shall allow connections to the Town water system outside the Town limits in the following cases if all other requirements of law pertaining to such connections have been met:
 - a. On those lots, upon which construction has been authorized pursuant to a valid building permit issued prior to the effective date of the Stage II Water Shortage Warning; provided that this exemption shall be effective only so long as such building permit remains in effect.
 - b. At public and other schools satisfying the compulsory education requirements of the laws of the State of North Carolina, public facilities for sheriff, police, jails, fire protection, hospitals, emergency medical services and facilities of public

- service companies regulated as public utilities under the laws of the State of North Carolina.
- c. For commercial or industrial projects that will provide the Town significant tax base, significant sales tax revenues or significant employment opportunities for the residents of the Elkin and the Surry County area. Projects will also be evaluated as to their water usage to determine the impact, present and future, of the project or development.
- C. Stage III Water Shortage Crisis. In the event the above listed Stage I and Stage II water use restrictions are not sufficient to reduce water production by 30% for five (5) consecutive days, the Utilities Director shall so notify the Town Manager. Upon such notification, the Town Manager may, if appropriate, declare a Stage III Water Shortage Crisis. After complying with the Notice provisions contained in Sec.4-A, the following mandatory water restrictions shall be imposed and therefore, it shall be unlawful for Customers served by the Town's water system to:
 - 1. Water lawns or do any other outside watering except by hand-held hoses with a spring loaded handle or a bucket according to the following schedules:
 - A. All even numbered street addresses on Wednesday only from 7 p.m. to 9 p.m. and 4 a.m. to 6 a.m.
 - B. All odd numbered street addresses on Saturday only from 7 p.m. to 9 p.m. and 4 a.m. to 6 a.m.
 - 2. Exceed the following water usage mandate for "Non-Residential" Customers:
 - a. Commercial, industrial ("Non-Residential") Customers and construction activities which utilize 5,000 or more gallons of water per day shall achieve mandatory reductions in daily water usage of 25%, 50% or 75%, as ordered, through whatever means is available.
 - b. The Utilities Director or his/her designee shall determine the target reduction percentage by the severity of the water emergency. The Utilities Director will inform the Town Manager, who shall ensure that such percentages will be publicly announced as a part of an emergency declaration, which shall be published by the Town. The Utilities Director or his/her designee shall determine compliance with the daily usage reduction targets, based on average usage during the corresponding billing period of the most recent twelve (12) month period ending on June 30, in which no Stage of this Ordinance was in effect.
 - c. If no meter readings are recorded or otherwise available for a customer's billing period, the Finance/Billing Department of the Town will establish an average of similar users for the Customer.

- d. If the managed reduction in water usage cannot be obtained without threatening health or safety, or if there has been a significant change in the Customer's circumstances, the Customer may apply to the Town Manager for a variance to the ordinance.
- e. Variances to this restriction may be granted by the Town Manager to public health facilities, included, but not limited to, hospitals and nursing homes.
- f. Fail to meet the mandated water use reduction by each Non-Residential customer in whatever manner possible, including limitation of operating hours, or days, if necessary.
- 3. Fail to provide access to its property to Town personnel by each Non-Residential Customer for the purposes of meter reading and monitoring of compliance with this Ordinance.
- 4. Make any water service connections, whether inside or outside the Town limits, except as herein provided.
- **D.** Stage IV Water Shortage Emergency. In the event the previous voluntary and mandatory restrictions are not sufficient to reduce water production by 50% for five (5) consecutive days, the Utilities Director shall so notify the Town Manager. Upon such notification, the Town Manager may declare a Stage IV Water Shortage Emergency to exist. After complying with the Notice provisions contained in Sec. 4-A, the following mandatory water restrictions shall be imposed:
 - 1. All use of water for purposes other than maintenance of public health and safety is prohibited. (To include any and all outside use of water except for fire suppression.)
 - 2. Usage by individuals shall be limited to those amounts necessary to sustain life through drinking, food preparation and personal hygiene.
 - 3. Where the Town system is not functional, National Guard, Emergency Service vehicles and private water sources may be utilized to distribute water for household use at prearranged locations within the affected area(s).
- Sec. 8 Excessive-use Water Rates. Any Customer who exceeds the allotment established pursuant to this Ordinance will be subject to the following "excessive-use water rates:"
- A. "Excessive-use water rates" will be collected, based on the amount by which a Customer's use exceeds the water allotment established pursuant to the local water rationing declaration, computed on the basis that all water used in excess of the allotment shall be billed at five (5) times the normal rate.

- B. Any monies collected through "excessive-use water rates" shall be placed in a reserve account that is dedicated to addressing Water Shortage problems and water conservation initiatives.
- C. Failure of the Customer to remit the periodic amount billed by the due date may result in termination or reduction of water service to the Customer pursuant to the Town's water Ordinances.
- Sec. 9 Compliance Plans for Non-Residential Customers. Non-Residential Customers utilizing 5,000 or more gallons of water per day shall prepare plans detailing measures to be taken by said Customers to achieve 25%, 50% and 75% reductions in their daily water usage during Stage III Water Shortage Crisis situations. Such plans shall be submitted to the Utilities Director for review and approval within ninety (90) days from the adoption of this Ordinance or within 90 days of demand of the Utilities Director or his/her designee. Plans shall be updated at least every five (5) years and must be revised as may be reasonably directed by the Utilities Director.
- Sec. 10 <u>Compliance with Ordinance</u>. Compliance with the provisions of this Ordinance shall be enforced by personnel of the Utilities Department, the Elkin Police Department and other such personnel as designated by the Town Manager. Failure to comply with any of the regulations of these sections shall be unlawful and a violation of the Ordinance, and all remedies authorized by law for noncompliance with this Ordinance, including the issuance of a civil citation as hereinafter set forth or action for injunctive relief, may be exercised to enforce its provisions. It shall be unlawful to fail to act in accordance herewith to use water in any illegal manner or attempt to evade or avoid such water restrictions.
- Sec. 11 Signage. The Customer who has a Town water service connection, but wishes to use water from a well or other non-Town supply during a Stage II Water Shortage Warning or Stage III Water Shortage Crisis shall post a sign in a conspicuous place identifying the water use source as a non-Town supply. The Town will supply these signs at no cost to the Customer. The Owner of any such well may be requested by Town personnel to demonstrate that the source of such water is not in any way connected to, and does not use, water originating from the Town's public water system. During a Stage IV Water Shortage Emergency, the well shall be available for inspection by the Town.

Sec. 12 Enforcement and Penalties.

A. Civil Penalties Any Customer who shall violate any provisions of this Ordinance shall be subject to civil penalties, and for a violation of Stage II, III and IV mandatory water use restrictions shall be as follows: a fine in the amount of \$100.00 for the first violation; a fine in the amount \$250.00 for the second violation; and a fine in the amount of \$500.00 for the third and each successive violation, which shall be paid within forty-eight (48) hours of its assessment, or the Town may terminate the water supply to the Customer.

- B. Accumulation of Violations. For a period of twelve (12) successive months, violations shall be accumulated by all Customers so long as any of the Stages set forth herein are in effect. Violations of Stages II, III and IV shall accumulate with violations of these Stages. Should a Customer cease and renew service during the Stages described herein, the Customer's violation shall continue to accumulate as if such cessation had not occurred.
- C. Criminal Penalty. In addition to the civil penalties provided for in this Ordinance, any person, firm or corporation who shall make such prohibited connection during such time shall be guilty of a misdemeanor and, upon conviction, shall be punished for a Class 3 misdemeanor and shall be fined not more than \$500.00 as provided in NCGS 14-4.

Sec. 13 <u>Discontinuance of Service</u>.

- A. The Utilities Director or his/her designee is herewith authorized to discontinue, or restrict, water service to a Customer in the event of a violation of the provisions of this Chapter during a Stage II, Stage III or Stage IV Water Shortage. All applicable penalty fees (i.e., reconnect fees and fines) may be applied in the event of service suspensions.
- B. The Utilities Director or his/her designee shall give at least two (2) working days Notice of intent to terminate or restrict.
- C. No Notice shall be required to discontinue, or turn off, outside water service, which is provided solely for lawn and shrubbery sprinkler systems, swimming pools or other non-essential uses. (Irrigation meters)
- D. When a water service has been discontinued, or turned off, while any Stage of a Water Shortage is in effect, it shall be unlawful to reactivate such service without the permission of the Utilities Director.
- E. In the event of continued non-compliance with this Ordinance, the meter will be removed and service will be discontinued. Tap fees and deposits may be forfeited.
- Sec. 14 <u>Municipal Customer</u>, Water Corporations or Company Compliance. Municipalities, water corporations or companies purchasing water from the Town shall agree in writing to enforce Sections 3-13 herein within ninety (90) days of the adoption of this Ordinance, as a condition of continuing existing water sales agreements. Upon declaration of a water emergency, said municipalities and companies shall enforce the appropriate water use restrictions for the Stage of declared emergency.

Sec. 15 Variances

Variance requests must be made at Town Hall through the Town Manager. Any Variance must be approved by the Town Council. The Town Council will determine approval based upon the recommendations of the Town Manager and the Public Utilities Director.

A decision to approve or deny variance will be based upon consideration of criteria including but not limited to: Impact on water demand, expected duration of water shortage, alternative source

options, social and economic importance, purpose of water use, and the prevention of structural damage.

Sec. 16 Evaluation

The water shortage response plan will be evaluated on a weekly basis when restrictions are enacted. This will determine the effectiveness of the measures taken in order to conserve water. These evaluations will also help determine the need to change restriction stages based on the effectiveness or ineffectiveness of the response plan.

Sec. 17 Revisions to Plan

The Water Shortage Response Plan will be reviewed after a new water source(s) have been introduced into the system, after every major drought condition (Stage IV Restrictions), or every five (5) years after implementation.

Sec. 18 Public Review

Prior to implementation, this plan will be available at the Elkin Town Hall for 10 business days for public review and comment before final adoption. A public hearing will be held at a normally scheduled Town Council meeting, this will allow the public to make and comment or suggestion for Town Council consideration prior to final adoption of the plan.

Adopted this 11th day of April, 2011.

Mayor

ATTEST:

Town Clerk

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