

Excerpt from Chapel Hill Code of Ordinances

“ARTICLE X. WATER CONSERVATION REGULATIONS

Sec. 11-101. Purpose.

This ordinance is enacted to support the following primary water conservation and demand management goals:

1. To reduce the rate of growth in overall water use so as to maximize the community’s existing and planned water supply sources; and
2. To reduce the upward trend of seasonal peak day demands that drive the costly expansion of water treatment, storage, and transmission facilities; and
3. To provide an orderly process for reducing community-wide water demands during periods of water shortage or emergencies.

Section 11-102. Year-Round Practices.

1. All Orange Water and Sewer Authority (OWASA) customers are encouraged to exercise voluntary water conservation practices at all times during the year, regardless of water shortage or emergency conditions. OWASA shall periodically provide informational guidelines and conservation tips to its customers.
2. All newly installed or substantially improved irrigation systems that are equipped with automatic timers and which use OWASA-supplied potable water shall be equipped with automatic rain or soil moisture sensors that are activated to prevent the operation of those irrigation systems while rain is falling and/or when soil moisture is adequate.

Section 11-103. Determination of Water Shortage or Emergency.

A water shortage or water emergency shall be deemed to exist when OWASA cannot supply its customers with sufficient water to protect the public health and safety without substantial reductions in water demand.

1. Any of the following conditions, as determined by OWASA’s Executive Director, shall constitute a Stage I Water Shortage:

- a) The total volume of water stored in OWASA's Cane Creek/University Lake/Stone Quarry reservoir system is equal to or less than 125 summer days of OWASA customer demand, as determined on the basis of average raw water usage during the months of May through September of the previous calendar year;

[Example: If the average raw water demand during the previous summer was 10.8 million gallons per day (MGD), and the OWASA reservoir system currently contained 2.8 billion gallons of water in storage, the total volume of stored water would be equal to $2.8 \text{ billion} / 10.8 \text{ MGD} = 259 \text{ days of demand}$. This example would not constitute a Stage I Water Shortage];

or

- b) It is otherwise determined that the Cane Creek/University Lake/Stone Quarry system is unable or unlikely to continue meeting the demands of OWASA's customers without a substantial reduction in consumption;

or

- c) The customer demand for water averaged over three successive days, as measured by OWASA production records, exceeds 90 percent of the target three-day peak limit established for that year. Target limits may be established each April by multiplying average finished water demands for the previous 12 months by a peaking factor of 1.65, or may be established by other production constraints – such as water treatment capacity – determined by OWASA's Executive Director.

[Example: If average finished water demand for the previous 12 months was 9.5 MGD, then the target limit for the coming summer would be $9.5 \text{ MGD} \times 1.65 = 15.7 \text{ MGD}$. A water shortage would be declared if the demand, when averaged over three successive days, exceeded 90 percent of that target level; e.g., $0.90 \times 15.7 \text{ MGD} = 14.1 \text{ MGD}$.]

2. Any of the following conditions, as determined by OWASA's Executive Director, shall constitute a Stage II Water Shortage:

- a) The total volume of water stored in OWASA's Cane Creek/University Lake/Stone Quarry reservoir system is equal to or less than 75 summer days of OWASA customer demand, as determined on the basis of average raw water usage during the months of May through September of the previous calendar year;

or

- b) It is otherwise determined that the Cane Creek/University Lake/Stone Quarry system is unable or unlikely to continue meeting the demands of OWASA's customers without a substantial reduction in consumption;

- c) If the customer demand for water averaged over three successive days, as measured by OWASA production records, exceeds 97 percent of the target three-day peak limit established for that year. Target limits may be established each April by multiplying average finished water demands for the previous 12 months by a peaking factor of 1.65, or may be established by other production constraints – such as water treatment capacity – determined by OWASA’s Executive Director.

[Example: If average finished water demand for the previous 12 months was 9.5 MGD, then the target limit for the coming summer would be $9.5 \text{ MGD} \times 1.65 = 15.7 \text{ MGD}$. A water shortage would be declared if the demand, when averaged over three successive days, exceeded 97 percent of that target level; e.g., $0.97 \times 15.7 \text{ MGD} = 15.2 \text{ MGD}$.]

3. Any other circumstances, including service losses caused by equipment failure, human error, weather, or other natural disaster, which constrain OWASA’s water production capacity to less than the current level of customer demand, may constitute a Water Supply Emergency, as determined by OWASA’s Executive Director.

Section 11-104. Proclamation of Water Shortage or Water Supply Emergency.

In the event of a water shortage or water supply emergency as determined in Section 11-103, the Mayor of the Town of Chapel Hill is authorized and directed to issue a public proclamation declaring to all persons the existence of such state and the severity thereof, and in order to more effectively protect the health and safety of the people within Chapel Hill, to place in effect the restrictive provisions hereinafter authorized.

Section 11-105. Mandatory Conservation During Stage I Water Shortage.

In the event the Mayor issues any such proclamation of Stage I Water Shortage described in Section 11-103.1, then and in that event, it shall be unlawful for any person, firm, or corporation to use or permit the use of potable water from the water system within Chapel Hill supplied through the facilities of OWASA for any of the purposes hereinafter set forth until such time as this Ordinance is amended or repealed, or until the Mayor, by public proclamation, has declared certain provisions no longer in effect.

1. Irrigation of lawns, gardens, trees, or shrubs with OWASA-supplied potable water applied through any system or device other than a hand-held hose or watering can shall be allowed only three days out of each week. Properties with odd-numbered street addresses shall be allowed to irrigate only on Mondays, Wednesdays, and/or Fridays; properties with even-numbered addresses shall be allowed to irrigate only on Tuesdays, Thursday, and/or Saturdays. A total of no more than one inch of water (as measured in a shallow container, such as an empty tuna fish can) should be applied during any given week. The restrictions of this section shall not apply to any persons regularly engaged in the sale of plants, who shall be allowed to irrigate their commercial stock in trade.

2. Irrigation of lawns, gardens, trees, or shrubs with OWASA-supplied potable water that is sprayed through the air via any system or device other than a hand-held hose or watering can shall occur only after dusk or during pre-dawn hours.
3. No OWASA-supplied potable water shall be used on sidewalks, driveways, patios, cars, buildings, or other impervious surfaces of a similar nature.
4. No OWASA-supplied potable water shall be served in public restaurants except on request.
5. Institutional customers, including the University of North Carolina at Chapel Hill (UNC), shall:
 - a) Cease the use of OWASA-supplied potable water for outdoor purposes, except as provided in items 1 and 2 above. UNC shall develop a three-day irrigation schedule for campus facilities in consultation with OWASA.
 - b) Curtail the use of OWASA-supplied potable water for the cleaning of facilities such as window air conditioning units, chilled water coils, closed loop heating systems, and government-owned vehicles.
 - c) Reduce the heating/cooling load demand from lower priority facilities to the extent allowable with regard to indoor air quality standards and employee health and safety requirements.

Section 11-106. Mandatory Conservation During Stage II Water Shortage.

In the event that the Mayor issues any such proclamation of Stage II Water Shortage described in Section 11-103.2, then and in that event, it shall be unlawful for any person, firm, or corporation to use or permit the use of potable water from the water system within Chapel Hill supplied through the facilities of OWASA for any of the purposes hereinafter set forth until such time as this Ordinance is amended or repealed, or until the Mayor, by public proclamation, has declared certain provisions no longer in effect.

1. All the mandatory provisions of a Stage I Water Shortage, as described in Section V, shall remain in effect, except that the irrigation of lawns, gardens, trees, or shrubs with OWASA-supplied potable water applied through any system or device other than a hand-held hose or watering can shall be allowed only one day out of each week. Unless otherwise recommended by the OWASA Executive Director, properties with odd-numbered street addresses shall be allowed to irrigate only on Mondays; and properties with even-numbered addresses shall be allowed to irrigate only on Thursdays. No more than one-half inch of water (as measured in a shallow container, such as an empty tuna fish can) should be applied during any given week. UNC shall develop a one day a week irrigation schedule for campus facilities in consultation with OWASA. The restrictions of this section shall not apply to any persons regularly engaged in the sale of plants, who shall be allowed to irrigate their commercial stock in trade.

2. No OWASA-supplied potable water shall be introduced into any decorative fountain, pool, or pond; or to fill any swimming pool; or to replenish any filled swimming pool, except to the minimum essential for operation.

Section 11-107. Mandatory Conservation During Water Supply Emergency.

In the event the Mayor issues any such proclamation of Water Supply Emergency described in Section 11-103.3, then and in that event, it shall be unlawful for any person, firm, or corporation to use or permit the use of potable water from the water system within Chapel Hill supplied through the facilities of OWASA for any of the purposes hereinafter set forth until such time as this Ordinance is amended or repealed, or until the Mayor, by public proclamation, has declared certain provisions no longer in effect:

1. No OWASA-supplied potable water shall be used for any outdoor purposes other than emergency fire suppression.
2. Water service may be discontinued or reduced, as determined by OWASA's Executive Director, in designated portions of the OWASA service area through the manipulation of valves, pumps, and other appurtenances in order to preserve the availability of water for public health and safety facilities, such as hospitals, medical clinics, etc., fire protection, and other critical community needs.
3. UNC and any other customers that use OWASA-supplied potable drinking water for heating/cooling systems shall reduce the heating/cooling demand in all but the most essential facilities to the extent allowable with regard to indoor air quality standards and employee health and safety requirements.

Section 11-108. – Penalties.

Any violations of the provisions of this Article shall constitute a misdemeanor punishable upon conviction by a fine not exceeding fifty dollars (\$50.00) or imprisonment not exceeding thirty (30) days as provided by General Statute Section 14-4, and in addition thereto, such violation may be enjoined and restrained as provided in General Statute Section 160A-175

Section 11-109. Injunctive remedies.

Pursuant to the provisions of General Statute Section 160A-193, the injunctive remedies therein provided shall be applicable for the summary abatement or remedying of appropriate conditions dangerous or prejudicial to the public health both within the town limits and within one mile thereof, and the expenses thereof shall be assessed as provided therein.

Section 11-110. Severability.

If any section, subdivision, clause, or provision of this Article shall be adjudged invalid, such adjudication shall apply only to such section, subdivision, clause, or provision so adjudged, and the remainder of this Article shall remain fully valid and effective.”

Section 2. This ordinance shall become effective April 1, 2002.

This the 25th day of March, 2002.