



WATER CONSERVATION PLAN

I. PURPOSE

The purpose of this Plan 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. This plan shall serve as a comprehensive document that predetermines water conservation measures that should be taken by all Vance County Departments and employees by reviewing normal water use for the types and number of facilities operated to identify options to reduce water use and maximize water use efficiency during water shortage emergencies, including possible changes to normal operating procedures.

II. SCOPE

This plan shall pertain to all Vance County Departments and employees under the direction and control of the County Manager.

III. SITUATION

The North Carolina State Climate Office advises that Vance County is in the worse drought condition ever recorded since 1895. Most rivers and streams are experiencing very low flows below the 25 percentile and many are setting new record lows for early October. With a winter forecast of drier than normal conditions, citizens must save water in every way possible to avoid a water crisis that could lead to rationing. The federal drought map released in October 2007 last week showed 56 Counties in the mountains and Piedmont, with Vance County being included, are experiencing ***Exceptional Drought***, the worst level. The remaining 44 counties are experiencing extreme, severe or moderate drought. Currently, 118 public water systems have enacted voluntary water use restrictions and another 106 systems have put mandatory restrictions in place. About 4.81 million people (or 71 percent of the people served by water systems the State tracks) are subject to water use restrictions.

IV. ASSUMPTIONS

The probability of experiencing a winter with below normal precipitation is as high as 60 percent whereas the chances of seeing above normal precipitation this winter may be as low as 8 percent. These are not good numbers at all given the severity of the drought and up to 25 inches of rain needed to bring relief over the next six (6) months.

The normal water level at Kerr Lake is usually close to a depth of 299 feet. It was reported at 292.97 feet on Monday, October 22, 2007. It is believed that lake levels will continue to drop with the continued dim forecast of rain and the continued consumption of water by area residents. According to Kerr Lake Regional Water System's Drought Plan, once the lake level reaches 290.0, mandatory restrictions will be imposed.

V. DEFINITIONS

The following definitions shall apply for the purposes of this Plan,

- (1) "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.
- (2) "Person" means any individual, corporation, company, association, partnership, unit of local government or other legal entity.
- (3) "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.
- (4) "Non-essential water use" means categories of water use, other than essential water use, that may be curtailed during droughts and water emergencies.
- (5) "Council" and "NCDMAC" means the North Carolina Drought Management Advisory Council.
- (6) "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.

VI. EMERGENCY PROTECTIVE MEASURES OR RECOMMENDATIONS

When the NCDMC designates Vance County as suffering from *Extreme Drought*, the following water use reduction standards shall apply to all Vance County Employees:

- (1) All employees shall reduce departmental water use by at least 25%.
- (2) All employees shall minimize non-essential use of water in County Departments.
- (3) Outdoor irrigation of lawns, athletic fields and ornamental plants is prohibited, except for:
 - (a) Maintaining athletic fields and 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) 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;
- (4) The use of water for washing or cleaning of all county mobile equipment including automobiles, trucks, boats and fleet vehicles is prohibited, except for:
 - (a) Health and safety reasons.
 - (b) Cleaning of construction, emergency, transport or public transportation vehicles if necessary to preserve the proper functioning and safe operation of the vehicle.
 - (5) Washing or pressure washing of streets, sidewalks, parking lots and other paved areas or building exteriors 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 hoses for clean up (i.e., do not use hose as a broom), unless required by health code.
 - (7) Operating ornamental fountains and pools.
 - (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 only as necessary to protect public safety and advance approval of the Chief.
 - (c) Flushing of potable water lines to protect the public health.
 - (10) Supplying tap water at eating establishments unless requested.
 - (11) Running partial loads in washing machines and dishwashers.
 - (12) Operating non-essential ice machines.
 - (13) Maintenance of recreational swimming pools (revenue-generating pools are exempt).
 - (14) All County Volunteer Fire Departments to locate and identify watering points.
 - (15) Maintenance personnel shall check for leaks in toilets and faucets and repair them immediately.
 - (16) All Departments Heads shall review operational plans and implement all feasible water conservation measures immediately.

When the NCDMAC designates Vance County as suffering from ***Exceptional Drought***, the following water use reduction standards shall apply to all Vance County Employees:

- (1) All employees shall reduce departmental water use by at least 50%.
- (2) All employees shall minimize non-essential use of water to the maximum extent possible.

- (3) Outdoor irrigation of lawns, athletic fields and ornamental plants is prohibited, except for:
 - (a) Watering athletic fields and lawns less than one-half 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 28 days following installation, by means designated and operated to maximize water use efficiency and to prevent run-off and excessive watering, and
 - (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;
- (4) The use of water for washing or cleaning of all county mobile equipment including automobiles, trucks, boats and fleet vehicles is prohibited, except for:
 - (a) Health and safety reasons.
 - (b) Cleaning of construction, emergency, transport or public transportation vehicles, if necessary to preserve the proper functioning and safe operation of the vehicle.
- (5) Washing or pressure washing of streets, sidewalks, parking lots and other paved areas or building exteriors 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 hoses for clean up (i.e., do not use hose as a broom), unless required by health code.
- (7) Operating ornamental fountains and pools.
- (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; and
 - (b) Flushing of potable water lines to protect public health and safety.
- (10) Supplying tap water at eating establishments unless requested.
- (11) Running partial loads in washing machines and dishwashers.
- (12) Operating non-essential ice machines.
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- (14) All County Volunteer Fire Departments to locate and identify watering points.
- (15) Maintenance personnel shall check for leaks in toilets and faucets and repair them immediately.
- (16) All Department Heads shall review operational plans and implement all feasible water conservation measures immediately.

VII. PLAN DEVELOPMENT AND MAINTENANCE

The County Manager will insure development, annual review, and revisions, of this plan, are conducted by all officials involved. This shall include review of those portions of the plan actually implemented.

November 5, 2007