

Introducing the NCDENR Division of Water Resources Drought Response Measures Toolbox

Duane Verner
Senior Planner, URS Corporation, duane_verner@urscorp.com

In early 2008, as much of the State of North Carolina was experiencing persistent and worsening drought conditions, the North Carolina Department of Environment and Natural Resources (DENR), Division of Water Resources undertook a project to assist local water systems in their drought response planning. Major components of this project included developing and conducting an interagency tabletop exercise in the Neuse River basin to assess the adequacy of drought response plans, conducting a follow-up workshop, and developing a Catastrophic Drought Response Measures Toolbox (Toolbox). This proposed presentation will provide a review of the Toolbox and how local governments can use the tools during a catastrophic drought. The Table Top Exercise (exercise) was conducted in the North Carolina Division of Emergency Management Emergency Operations Center (EOC) on May 9, 2008. The exercise included an introductory seminar and three sessions designed to assess the adequacy of Research Triangle area water shortage response plans. The seminar provided a review of the drought in North Carolina over the last year and discussed the current state of the drought as well as the outlook for the future. The purpose of the Toolbox is to identify a range of effective options for local governments to respond to a catastrophic drought. In particular, the toolbox is intended to: 1) Avoid the depletion of a water supply to ensure that adequate water is available to protect the health and safety of all water customers. 2) Provide for the equitable distribution of water during an emergency. The tools and resources identified are aimed at emergency water reduction and emergency water sources. During drought circumstances a community should consider measures that can be taken to reduce water consumption. The water use reduction tools are meant to assist communities with reducing the demand for water, and to inevitably prolong the life of the existing water supply. The tools may or may not be appropriate in all communities, and some may be most effective when combined with other tools. This Toolbox is intended to supplement, but not replace drought response planning. Basic on-going water conservation tools are not included in the Toolbox. This Toolbox may also be of use to water systems not directly impacted by the most serious drought conditions as these less impacted systems may be asked to assist the other more seriously impacted systems. Where possible, the Toolbox presents potential percentage of demand reduction, based upon reductions reported by other communities or assumptions and rough projections.