

Turfgrass Irrigation Management System

THE NEED

Water supply issues are becoming significant economic and social concerns for many states, including North Carolina. Drought conditions in North Carolina during 2007 were the worst since modern weather records began in 1895. Drought is exacerbated by increasing population and increasing demands for water. The population of NC is projected to double in the next 65 years. Long-term weather predictions offer little guidance in what the future holds. This is compelling municipalities to develop long-range water conservation strategies.

SERVING THE NEED

The Turf Irrigation Management System (TIMS) was launched in 2007. The simple website gives everyone, from the dedicated turf professional to the homeowner, help in making irrigation management decisions. TIMS guides the user as they establish their individual account. Users provide their physical address and then answer a few simple questions about the type of grass, soil and irrigation system. TIMS then calculates irrigation needs based on up-to-date weather data. Based on recent weather conditions, including precipitation and evapotranspiration estimates, and known crop irrigation demands, the suggested amount of irrigation is calculated. Results are given in minutes of irrigation needed to keep the user's lawn alive and healthy.

IMPACT

Use of this tool could save millions of gallons of water. Additionally, the amount of over-watering will decrease thereby reducing silt-runoff, which is one of the most tenacious environmental concerns of NC's water systems. TIMS is a proven resource for helping homeowners conserve water. As of March 2011, there are over 1,900 accounts using this climate service. It is available online for North Carolinians to calculate and track irrigation use: <http://www.turffiles.ncsu.edu/tims/>

PARTNERS & SUPPORT

Climatic and other environmental data are used to create this climate service. Sources of data include the NC ECONet, NOAA's NCDC, and the National Weather Service. This product is offered in close collaboration with faculty at NC State University, the Center for Turfgrass Environmental Research & Education, and the NC Cooperative Extension Service.