

## BACKGROUND

The “***designated uses***” of water resources are established by the NC Department of Environment and Natural Resources (NCDENR) and include water supply, aquatic habitat, and recreation. If it is determined that a water body can not support a designated use, NCDENR characterizes the water body as “***impaired***” and establishes a process to develop a water resource improvement plan to restore the designated use of the water body.

For example, in 2008, the North Carolina Division of Water Quality (DWQ) found that the chlorophyll-a concentrations at certain locations in Falls Lake exceeded the water quality standard. DWQ included Falls Lake on its draft 2008 list of ***impaired*** waters, submitted to the US Environmental Protection Agency. This list of impaired waters is called the 303(d) list in reference to Section 303(d) of the US Clean Water Act referring to waters of the state with water quality violations resulting in the failure to meet the designated and protected uses.

## GOAL STATEMENTS

1. Provide clean water resources for current and future generations at reasonable and predictable costs.
2. Reduce the impact and concern for drought events.
3. Develop non-potable sources of water for non-potable water uses.
4. Preserve and protect the quality and quantity of groundwater resources.
5. Improve regional planning, coordination, and collaboration for water resource management.
6. Provide clean water resources to support quality economic development, a healthy population, participation in outdoor recreation, productive wildlife habitats, and agricultural production.
7. Citizens have the information and tools to understand the need to protect and promote healthy water resources.

1. Conduct full benefit-cost comparative analyses to define the full costs and benefits of water resources, including drinking water, wastewater, and stormwater. Analyses and products should include but not be limited to:
  - a. Water supply, treatment, and distribution facilities and programs that includes full costs for rehabilitation and replacement of infrastructure and full costs for developing future water supply sources.
  - b. Stormwater and wastewater management facilities and programs, that includes full benefits and costs for rehabilitation and replacement of infrastructure, and for restoring and maintaining the designated uses of water resources in Wake County.
  - c. Developing of pricing models that recover full cost of water resources.
  - d. Identify alternative funding methods and models to recover the full cost of water resources, and assign costs proportionate to the impacts that individual parties impose on water resources (such as a stormwater utility).
2. Evaluate existing building codes, development ordinances, and other policies to identify limitations to, and opportunities for allowing water reuse, efficiency, conservation, and reclamation (including stormwater, rainwater, wastewater, and grey water.)
  - a. Work with the state Department of Insurance to develop and lobby for these changes as it develops new statewide building codes.
  - b. Work with the appropriate health agencies to identify contradictions to public health laws.
  - c. Identify local and state government case studies that highlight opportunities to help Wake County and NC to amend local and state codes , ordinances and other policies
3. Expand regional water supply partnerships to conduct collaborative assessments of water supply availability in the region. Regional partners can work cooperatively to optimize existing water supply availability and realize financial savings on the development of new or expanded water supply sources.
4. Gather and analyze existing data on surface and groundwater to create inventory of watershed impacts, identify data gaps, and collect additional data as needed to understand conditions.
  - a. Improve coordination with organizations that are monitoring water resources to increase surface and ground water monitoring and assessments, and to better organize and publicize the results.

5. Collaborate with municipalities and stakeholders to review data, set goals, identify, prioritize and implement management and protection strategies that restore and protect designated uses of water resources and protect private property.
6. Reduce the volume and velocity of stormwater runoff for new and existing development to:
  - a. Restore and maintain the designated uses of water resources in Wake County
  - b. Protect public health and safety from flood hazards
  - c. Protect downstream property owners from property damage resulting from flooding
  - d. Implement the Jordan Lake and Falls Lake rules
7. Identify, prioritize, and conserve land that serves as headwater and groundwater recharge sources through voluntary actions and incentives.
8. Evaluate development ordinances, building codes, and other policies to identify limitations to, and opportunities for allowing conservation development design and low impact development design to protect watersheds and groundwater recharge areas.
9. Support youth and adult science-based education programs about the hydrologic cycle; land use impacts on water; efficiency; conservation; pricing; and economic principles of water protection, supply and management