

Water Resource Recommendations

Goals:

- A. Clean water resources are available for current and future generations at reasonable and predictable costs.
- B. Impact and concern for drought events is reduced.
- C. The use of drinking water for non-potable applications is reduced.
- D. Regional planning, coordination, and collaboration for water resource management are improved.
- E. Clean water resources support quality economic development, a healthy population, participation in outdoor recreation, productive wildlife habitats, and agricultural production.
- F. The quality and quantity of groundwater resources are protected.
- G. Citizens have the information and tools to understand the need to protect and promote healthy water resources.

	Goals						
<i>Strategies</i>	A	B	C	D	E	F	G
1	X	X	X		X	X	X
2	X	X	X		X		
3					X	X	
4	X	X		X	X		
5		X		X	X	X	X
6				X	X		X
7	X			X	X	X	
8				X	X	X	
9	X	X	X	X	X	X	X

NOTE: 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 cannot 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.

Water Recommendations

1. Conduct a full benefit-cost analysis of water resource facilities and programs (*water, wastewater, and stormwater*), including the protection and restoration of the designated uses of water resources in the County. Analyses and products should include, but not be limited to, the following:
 - a) Life-cycle cost analysis of the capital, operations, maintenance, rehabilitation, and replacement required for wastewater facilities.
 - b) Life-cycle cost analysis of the capital, operations, maintenance, rehabilitation, and replacement required for potable water facilities, including the development of future water supply sources.
 - c) Life-cycle cost analysis of the capital, operations, maintenance, rehabilitation, and replacement required for stormwater facilities, including the acquisition of land through voluntary sale and donation to restore and protect the designated uses of water resources.
 - d) Develop and implement dynamic water resource pricing policies that recover all costs, promote efficient use of water resources, and equitably allocate costs to individuals based upon the benefits received from, and the impacts placed on, water resource facilities and programs.
2. Evaluate existing policies and regulations (*building codes, development ordinances, public health laws, etc.*) to identify limitations to, and opportunities for, increasing voluntary implementation of water efficiency, water conservation, and water reclamation/reuse (*including stormwater, rainwater, wastewater, and grey water*).
 - a) Work with the state Department of Insurance to develop recommendations and promote changes during the building code adoption process.
 - b) Work with the appropriate health agencies to identify limitations in public health laws.
 - c) Identify local and state government case studies and best practices to aid Wake County and North Carolina to amend local and state codes , ordinances and other policies
3. Evaluate existing policies and regulations (*development ordinances, etc.*) to identify limitations to, and opportunities for, increasing the voluntary implementation of conservation development design and low-impact development design to protect water resources and groundwater recharge areas.
4. Expand regional water supply partnerships in the Cape Fear River Basin and the Neuse River Basin to conduct collaborative assessments of water supply availability in the region. Encourage local governments in the region to work cooperatively to protect the quality of current water resources,

maximize the efficient use of current water resources, and identify opportunities to expand existing, or develop new, water supply sources.

5. Implement surface water and ground water monitoring and reporting programs to continuously assess and report the quality and quantity of water resources in Wake County. The focus will be to:
 - a) Provide easily understood information for both the technical reader and the non-technical reader regarding water resource conditions in Wake County.
 - b) Provide a framework for coordinating future data collection and reporting efforts with other government agencies regarding water resource conditions in Wake County.
 - c) Identify water quality issues of concern that should be targeted for additional investigation and corrective action.
 - d) Monitor the effectiveness of water quality improvement policies and projects implemented in Wake County to mitigate water resource degradation (*impairment*).
6. Implement a collaborative process involving local government interests, economic development interests, environmental protection interests, and other interested and impacted parties to review water resource data; establish goals; and identify, prioritize and implement water quality improvement policies and projects to restore and protect the designated uses of water resources in Wake County.
7. Reduce the volume and velocity of stormwater runoff generated by new and existing development , where needed, to:
 1. Restore and maintain the designated uses of water resources in Wake County
 2. Protect public health and safety from flood hazards
 3. Protect downstream property owners from property damage resulting from flooding
 4. Comply with the requirements of the Falls Lake Rules and the Jordan Lake Rules
8. Identify, prioritize, and conserve land that serves as headwaters, groundwater recharge areas, and stream buffers through voluntary actions and incentives.
9. Support and implement a collaborative water resources education, marketing and promotions campaign that emphasizes the necessity, value, and benefit of water as a basic requirement of life. The campaign will be science-based and include information about the hydrologic cycle, land use impacts on water resources, water efficiency, water conservation, and the costs associated with providing water resource facilities and programs.