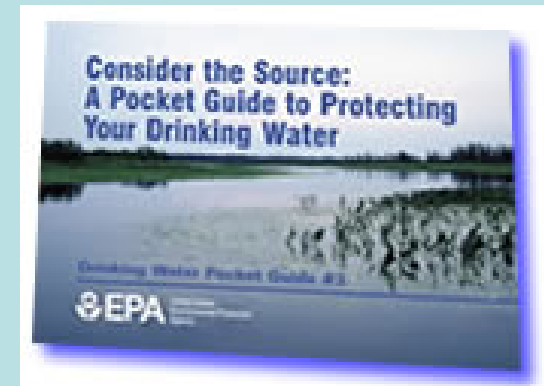


Source Water Quality Impacts in WNC



Ray McCall

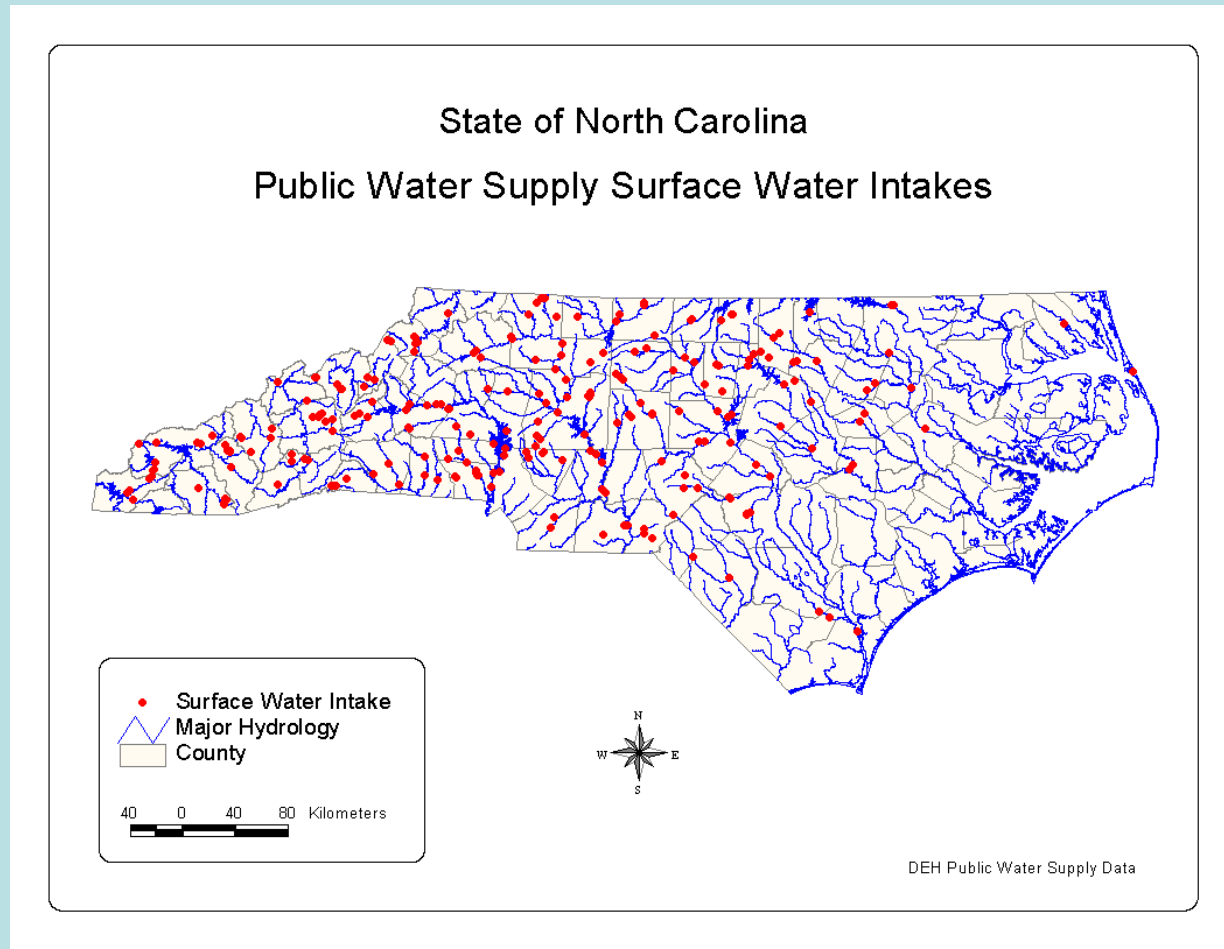
N.C. Public Water Supply Section

February 11, 2009

Source Water Details-Asheville Region

- 37 Municipal Surface Intakes in Asheville Region
- 60 Total Surface Systems
- Population Served of 425,000 people.
- 26 Run of River Intakes
- 14 Reservoirs (Lake Intakes)
- 16 WS1 Protected Water Sources (10 Municipalities)

Surface Water Intakes



Source Water Impacts

- Erosion
- Flooding
- Spills
- UST-Leaking
- Straight Pipes
- Dumping
- Agricultural Runoff
- Golf Courses/Sod Farms
- WWTP/Sewage Spills
- Drought
- Winter Weather
- Hazmat Storage

Erosion Impacts Turbidity



Flooding



Spills in Watersheds



Leaking-Underground Storage Tanks



Straight Piping



Agricultural Impacts



Sewage Spills/Trash



Drought



Hazmat Storage/Improper Disposal



Improper Disposal/Illegal Dumping



Other Impacts

- Golf Courses
- Sod Farming
- Winter Weather-Road De-icing
- Mining
- Storm Water-Parking Lots/Paved Areas
- Train Wrecks
- Vandalism/Terrorism ?



WATER SUPPLY
AREA
NEXT 2½ MILES
SPILL RESPONSE
911



Protection Measures?

- Community Action
- Warning/Watch
- Alert Signs
- Surveys
- Partnerships
- Government Over-site
- Education
- Stewardship
- Funding
- Volunteerism
- Responsible Use
- Land Management
- Monitoring Stations
- Emergency Response
- Buffers/Setbacks
- Alternate Sources

Think Vulnerability !!!



Questions



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