

## SECTION 7. DATA SOURCES

### 7.1 Local Water Supply Plans

This version of the State Water Supply Plan (SWSP) is based on information submitted mostly by local government water systems in their 1997 Local Water Supply Plan updates. Units of local government that supply or plan to supply drinking water to the public are required to prepare a LWSP. Numerous private water systems also prepared LWSPs and the data from these plans are included in the SWSP as well. The LWSPs are currently available on-line at the Division of Water Resources web site at [www.ncwater.org](http://www.ncwater.org). This information was reviewed for consistency and reasonableness by staff engineers, but the LWSP information was not verified by site visits. The LWSP information includes:

- \$ population served and water use projections (1997, 2000, 2010, 2020);
- \$ breakdown of water use by type (residential, nonresidential, sales, unaccounted-for water);
- \$ average daily water use by month;
- \$ surface water source data (name and location of water source, average daily withdrawal, safe yield, on-stream storage);
- \$ ground water source data (well, casing, and screen depths, location, average daily withdrawals, 12-hour supply);
- \$ interconnections with other systems (supplier and receiver names, average daily purchase or sale, contract amount);
- \$ future source data (source name, type of source, location, proposed average daily withdrawal, proposed operational date);
- \$ wastewater discharge information (discharge amounts, capacity, and location);
- \$ water conservation program information;
- \$ technical assistance needs.

Since much of the relevant data for a water system has a geographic component, systems were asked to provide the locations of key system features on maps supplied by the division. The information on the system maps was digitized into a Geographic Information System (GIS) to merge the individual system data into a consolidated geographic database and mapping program. Having the information in a GIS simplifies the regional analyses presented in the SWSP and facilitates planning by providing a visual representation of water system features in relation to neighboring systems.

The GIS system contains the 1997 locations of existing facilities and the planned locations of anticipated future facilities. The features mapped from the 1997 LWSPs include wells, surface

water intakes, wastewater discharges, water and wastewater connections with other systems, and service area boundaries.

## **7.2 Water Withdrawal Registrations**

The LWSP information is supplemented by data submitted by persons registering their 1999 water withdrawals under General Statute 143-215.22H. Anyone using 100,000 gallons per day or more in 1999 for all water uses except agriculture were required to register those withdrawals by March 1, 2000. For agricultural water users, anyone using 1.0 million gallons per day or more in 1999 was required to register. The information submitted for water withdrawals are stored in electronic databases and will be available online in early 2001. The registration data have been reviewed for completeness and reasonableness, but have not been field verified.