(residential, commercial, industrial, and normal and excessive infiltration/inflow).

- a summary statement of the adequacy of the existing system, what problems need to be addressed ,and when they need to be addressed.

More detailed guidance is provided by the Division of Water Quality. This study should also indicate areas best suited for expansion of service.

Figure 4-7

Existing Infrastructure Needs
(Adapted from Currituck County Plan)

The analysis of future population and economic activity to be accommodated in the plan, and the accompanying land needs assessment, can be used to estimate the needs for public services. For example, the table below indicates that water consumption will increase over 45%, from 2.2 to 3.32 million gallons per day, under an assumption of future buildout of the urban transition area. Water consumption units (WCUs) represent a fixed quantity of water (400 gallons per day) used as a standard to establish the daily water consumption of various uses.

ADDITIONAL WATER CONSUMPTION AT BUILDOUT DEVELOPMENT

Land Use Category	Additional Projected Development	WCUs
Single family	2,669 DUs	2669
Duplex units	180 DUs	180
Multi-family	42 DUs	42
Commercial		429
Hotel	621 DUs	311
Total		3,631

Stormwater and Floodplain Management Systems. This element should identify flood prone areas and stormwater management facilities, policies, and plans. At a minimum, floodplains delineated for purposes of the National Flood Insurance Program should be shown on maps. Properties at risk within these areas should be identified and summarized to estimate community vulnerability. Other areas where stormwater runoff is known to cause localized flooding should be identified. Stormwater management policies should be identified by reference to appropriate documents.

Transportation Systems . This element should identify the existing and planned transportation systems in the planning jurisdiction. These include thoroughfares, greenways, bikeways, transit routes and stations. This element should also assess the problems in the existing system and whether the future system will serve future land use patterns. Many transportation plans are based on projections of existing patterns of land use rather than on the future land use plan.

Other Public Facilities. Additional community facilities may be inventoried where appropriate. These include solid waste storage and treatment sites, schools, parks and recreation facilities, libraries and auditoriums, public safety and emergency medical facilities, hospitals and public health facilities, general government buildings, public utilities, and telecommunications facilities.
Such studies might include the locations of the facilities and need for expansion, based on projected and planned population, economic activity, and land development. On the supply side, the study might indicate the potential location and timing of planned facility expansions, including changes in service areas and levels of service. Otherwise, these features should become part of the community facilities element of the plan if there is one.

Information Base Sub-Element 4: Environmental Resources

Environmental resources affect development plans in at least two ways. First, they limit the feasibility of using lands in particular locations for particular purposes. Lands may be unsuitable for development due to flooding, steep slopes, highly erodable or poorly drained soils, unstable soils for foundations, and other characteristics of