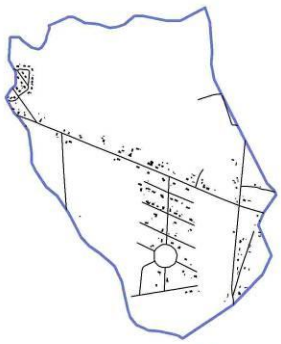
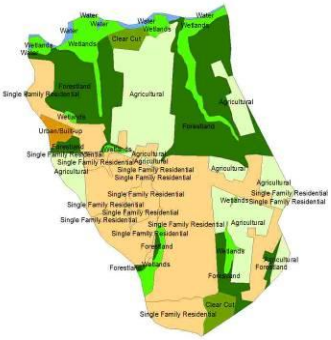
Impervious Surface Analysis Sussex County, Delaware

Coastal Communities Enhancement Initiative



Research completed over the last 20 years shows an increasingly significant correlation between percent impervious surface coverage in a watershed and stream water quality. Streams with increasing imperviousness exhibit many of the following conditions: increased flood peaks, lower stream flow during dry weather periods, degradation in stream habitat structure, increased stream bank and channel erosion, fragmentation of riparian forest corridor, and a decline in fish habitat quality (Pelley, 1997).



This CommunityViz analysis estimates the impervious surface for an area southeast of Milton, Delaware. The project is in the Broadkill watershed in Sussex County. At 10 percent imperviousness, a large drop-in stream water quality occurs.

The land use based impervious surface analysis uses the State 1992 and 2002 Land Use layers. The feature analysis uses building footprints and roads. The 2010 scenarios include building a PLUS project (2006-10-03) into Milton on Cave Neck for 370 units on 71 acres. The build-out includes Current Zoning and Ag10Ac assumes agricultural areas use 10 acre lots (not .5 acres).