The ground-water recharge potential map of Sussex County, Delaware, is a compilation of 1:24,000-scale maps of the water-transmitting properties of sediments in the interval between land surface and 20 ft below land surface. Water-transmitting properties are a key factor in determining the amount of water that recharges Delaware’s aquifers and the susceptibility of aquifers used as sources of water supply to contamination from near-surface pollutant sources. The mapping methodology was developed by Andres (1991) for the geologic characteristics of the Atlantic Coastal Plain portion of Delaware. Mapping and methods development started in 1990 and the final maps were completed in 2002 (Andres et al., 2002). Additional information about the map and methodology and a list of cited references are presented on the reverse side. The mapping program was funded by the Delaware Department of Natural Resources and Environmental Control and the Delaware Geological Survey.