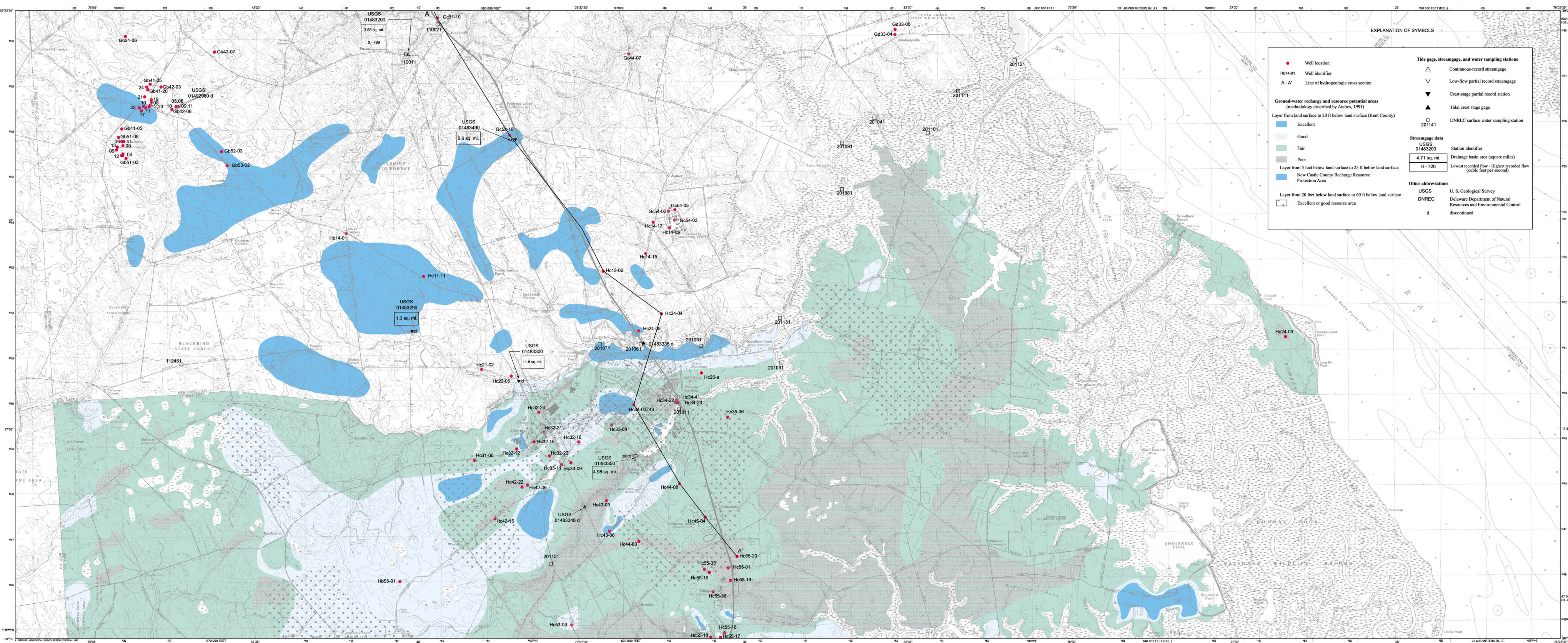
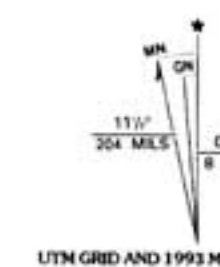




EXPLANATION OF SYMBOLS

● Well location	△ Continuous-record streamgauge
Hb14-01 Well identifier	▽ Low-flow partial record streamgauge
A-A' Line of hydrologic cross section	▼ Crest-stage partial record station
	▲ Tidal crest stage gage
	□ DNREC surface water sampling station
	□ 201141
Ground-water recharge and resource potential areas (methodology described by Andres, 1991)	Streamgauge data
Layer from land surface to 20 ft below land surface (Kent County)	USGS 01483200 Station identifier
Excellent	4.71 sq. mi. Drainage basin area (square miles)
Good	0-720 Lowest recorded flow - Highest recorded flow (cubic feet per second)
Fair	
Poor	
Layer from 5 feet below land surface to 25 ft below land surface	
New Castle County Recharge Resource	
Protection Area	
Layer from 20 feet below land surface to 60 ft below land surface	
Excellent or good resource area	
	Other abbreviations
	USGS U. S. Geological Survey
	DNREC Delaware Department of Natural Resources and Environmental Control
	d discontinued

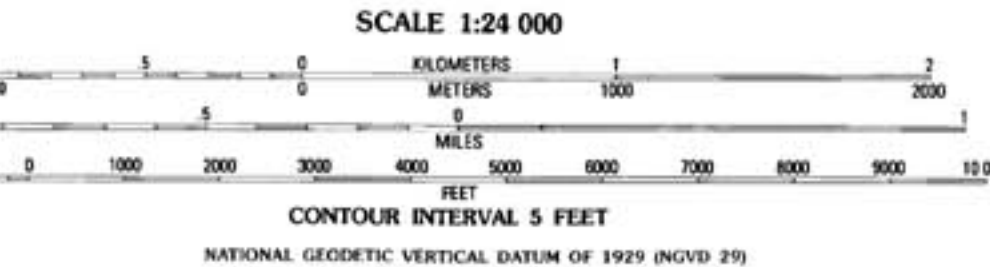
Produced by the United States Geological Survey
Control by USGS and NGS/NOAA
Compiled from aerial photographs taken 1989
Field checked 1991. Map edited 1993
Selected hydrographic data compiled from NOS Chart 12304 (1990)
This information is not intended for navigational purposes
North American Datum of 1983 (NAD 83). Projection and
1 000-meter grid. Universal Transverse Mercator, zone 18
10 000-foot ticks. Delaware Coordinate System of 1983
1927 North American Datum (NAD 27) is shown by dashed corner ticks
The values of the shift between NAD 83 and NAD 27 for 7.5-minute
intersections are given in USGS Bulletin 1875
There may be private inholdings within the boundaries of
the National or State reservations shown on this map
Gray tint indicates area in which only landmark buildings are shown



UTM GRID AND 1983 MAGNETIC NORTH
DECLINATION IN CENTER OF SHEET



QUADRANGLE LOCATION



CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1988 (NGVD 88)
(TO CONVERT ELEVATIONS TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, SUBTRACT 1 FOOT)

GEOHYDROLOGY OF THE SMYRNA-CLAYTON AREA, DELAWARE

by
A. Scott Andres
2001

CARTOGRAPHIC NOTE
Close examination of the recharge potential data will show that there are areas along swamps, marshes, and streams
where the recharge potential information does not exactly match hydrographic features of the base map. This is a result of
the method by which the original map data were collected and digitized in 1990 and 1991 (Howard et al., 1997). The recharge
potential information and the boundaries of streams, ponds, marshes, and swamps were digitized in latitude and longitude
coordinates on a digitizing tablet from maps drawn on drafting film and registered to drafting film-based, 1993 edition
topographic maps. Because the edge lines of swamp and marsh features are not printed on the base maps there was some
generalization in our digitizing of the boundaries between some recharge potential polygons and complex-shaped, hydrographic
features. Conversion of the digital data for use in newer software packages and into the Universal Transverse Mercator
coordinate system introduced additional minor differences in the locations of boundary lines. These differences are within the
error tolerances of the scales of the original maps and the data from which they were derived. Map users needing additional
information should contact the Survey.