DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

MISCELLANEOUS FIELD STUDIES
MAP MF-1208

Land use refers to man's activities that relate directly to the land. *Land cover* describes the land surface—vegetation, water, naturally-occurring soil and rock, and artificial constructions.

In showing land use and land cover in the Culpeper Basin, this map features a consistent level of detail and standardization of categories. The use of the 1:125,000 compilation scale is appropriate, because this type of data is used frequently for different purposes by people representing several disciplines—land use planners, land managers, resource management planners, and others. For example, maps and data similar to this publication have been used for river basin planning, for analysis of land use and land cover changes relative to recreation, for river quality assessments, for preparation of environmental impact statements, and for studies on urbanization. These efforts have been made at the multicounty regional, State, and Federal levels.

The land-use distributions shown on this map are not sufficiently detailed for direct application to local planning. Designations such as "residential" or "transitional" include a range of more precise categories that require site assessment if one is considering a specific local application. One could assess a site by making ground checks and by using larger-scale topographic maps, up-to-date low-altitude aerial photographs, and zoning and parcel maps.

REFERENCES

Anderson, J. R., Hardy, E. E., Roach, J. T., and Witmer, R. E., 1976, A land use and land cover classification system for use with remote sensor data: U.S. Geological Survey Professional Paper 964, 28 p.

Spangle, William, and Associates, Leighton, F. B., and Associates, and Baxter, McDonald and Company, 1976, Earth-science information in land-use planning—guidelines for earth scientists and planners: U.S. Geological Survey Circular 721, 28 p.

EXPLANATION

The headings in the boxes below (for example, *1 Urban or Built-Up Land)* are Level I classification categories; the entries in smaller type (for example, *13 Industrial)* are Level II categories. For a thorough explanation of the multilevel land use and land cover classification system see Anderson and others (1976).

Landsat (formerly ERTS) type of data is employed to classify land use at the Level I degree of detail. Classifying land use in the greater detail of Level II requires high-altitude aerial photography from 12,400 m (40,000 ft) or above; this data is best portrayed at a scale smaller than 1:80,000.

In this publication the minimum mapping units are 4 hectares (10 acres) for Level II categories 11-17, 23-24, 51-54, 75, and urban occurrences of 76; and 16 hectares (40 acres) for all other Level II categories.

Approximate limit of the Culpeper Basin

1 URBAN OR BUILT-UP LAND

- 11 Residential
- 12 Commercial and Services
- 13 Industrial
- 14 Transportation, Communications and Utilities
- 15 Industrial and Commercial Complexes
- 16 Mixed Urban or Built-up Land
- 17 Other Urban or Built-up Land

2 AGRICULTURAL LAND

- 21 Cropland and Pasture
- 22 Orchards, Groves, Vineyards, Nurseries, and Ornamental Horticultural Areas
- 23 Confined Feeding Operations
- 24 Other Agricultural Land

3 RANGELAND

- 32 Shrub and Brush Rangeland

4 FOREST LAND

- 41 Deciduous Forest Land
- 42 Evergreen Forest Land
- 43 Mixed Forest Land

5 WATER

- 51 Streams and Canals
- 52 Lakes
- 53 Reservoirs

6 WETLAND

- 61 Forested Wetland
- 62 Nonforested Wetland

7 BARREN LAND

- 75 Strip Mines, Quarries, and Gravel Pits
- 76 Transitional Areas

Location diagram showing the Culpeper Basin outlined and its relation to the three U.S. Geological Survey 1:250,000 sheets covering the region.

This map was enlarged from U.S. Geological Survey 1:250,000 scale topographic maps Charlottesville (NJ 17-6), Baltimore (NJ 18-1), and Washington (NJ 18-4), as shown on the location diagram. Land-use and land-cover information were compiled from source materials dated as indicated on the diagram.

LAND USE AND LAND COVER, 1972-77
CULPEPER BASIN, VIRGINIA-MARYLAND

By
U.S. Geological Survey
1980

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SCALE 1:125,000
1 inch equals approximately 2 miles

2.5 0 2.5 5 7.5 10 Miles
2.5 0 2.5 5 7.5 10 12.5 Kilometers

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