



- 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**
31 Herbaceous rangeland
32 Shrub and brush rangeland
33 Mixed 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
54 Bays and estuaries
- 6 WETLAND**
61 Forested wetland
62 Nonforested wetland
- 7 BARREN LAND**
71 Dry salt flats
72 Beaches
73 Sandy areas other than beaches
74 Bare exposed rocks
75 Strip mines, quarries, and gravel pits
76 Transitional areas
77 Mixed barren land
- 8 TUNDRA**
81 Shrub and brush tundra
82 Herbaceous tundra
83 Bare ground tundra
84 Wet tundra
85 Mixed tundra
- 9 PERENNIAL SNOW OR ICE**
91 Perennial snowfields
92 Glaciers

For definitions of Level I and Level II categories see U.S. Geological Survey Professional Paper 964, *A land use and land cover classification system for use with remote sensor data*, 1976, by J. R. Anderson, E. E. Hardy, J. T. Rouse, and R. E. Winer.

The development of a geographic information system incorporating digital land use data is described in U.S. Geological Survey Professional Paper 1059, *GIRAS: A geographic information retrieval and analysis system for handling land use and land cover data*, 1977, by W. B. Mitchell, S. C. Gupill, K. E. Anderson, R. G. Feagans, and C. A. Hallam.

Land use and land cover information compiled from source materials dated 1972.

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.

For compilation specifications see U.S. Geological Survey Open-File report 77-555, *Specifications for land use and land cover and associated maps*, 1977, by G. L. Loelkes, Jr.

Compilation verified by field check.

