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DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

LAND USE SERIES
MAP L–164

LAND USE AND LAND COVER, 1976–77
SAN FRANCISCO, CALIFORNIA

NE¼ San Francisco 1:250,000-scale topographic map

Base from U.S. Geological Survey, 1978
10,000-meter Universal Transverse
Mercator grid, zone 3

SCALE 1:100 000
5 0 5 MILES
5 0 5 10 KILOMETERS

INTERIOR—GEOLOGICAL SURVEY, RESTON, VA.—1981—L81190

EXPLANATION

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. Roach, and R. E. Witmer.

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. Guptill, K. E. Anderson, R. G. Fegeas, and C. A. Hallam.

Land use and land cover information compiled from source materials dated 1976–77.

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.*

4 SQUARE MILES
4 SQUARE KILOMETERS

For sale by Branch of Distribution, U.S. Geological Survey, Box 25286, Federal Center, Denver, CO 80225