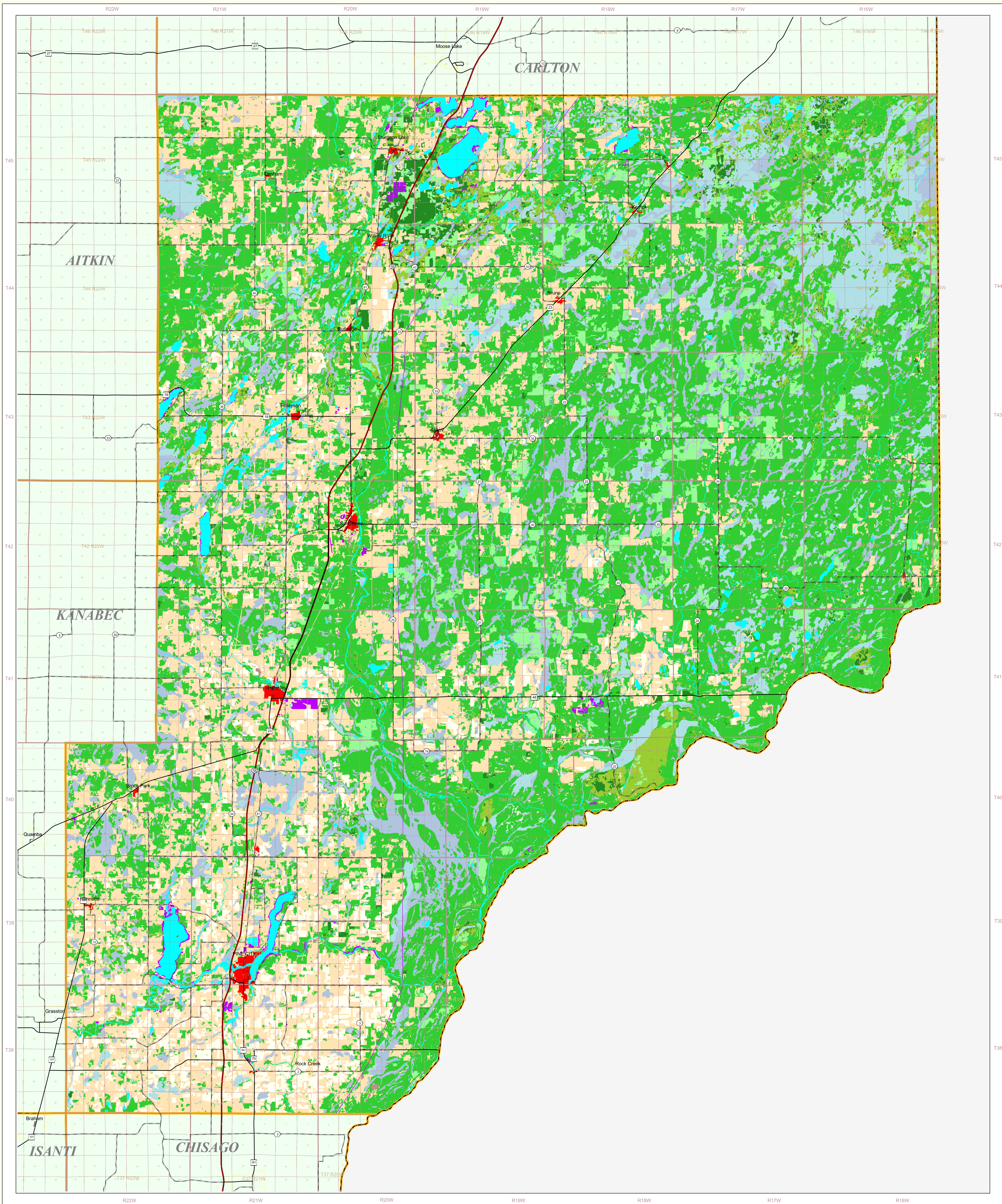


Pine County Land Use and Cover

State of Minnesota

June 13, 1996



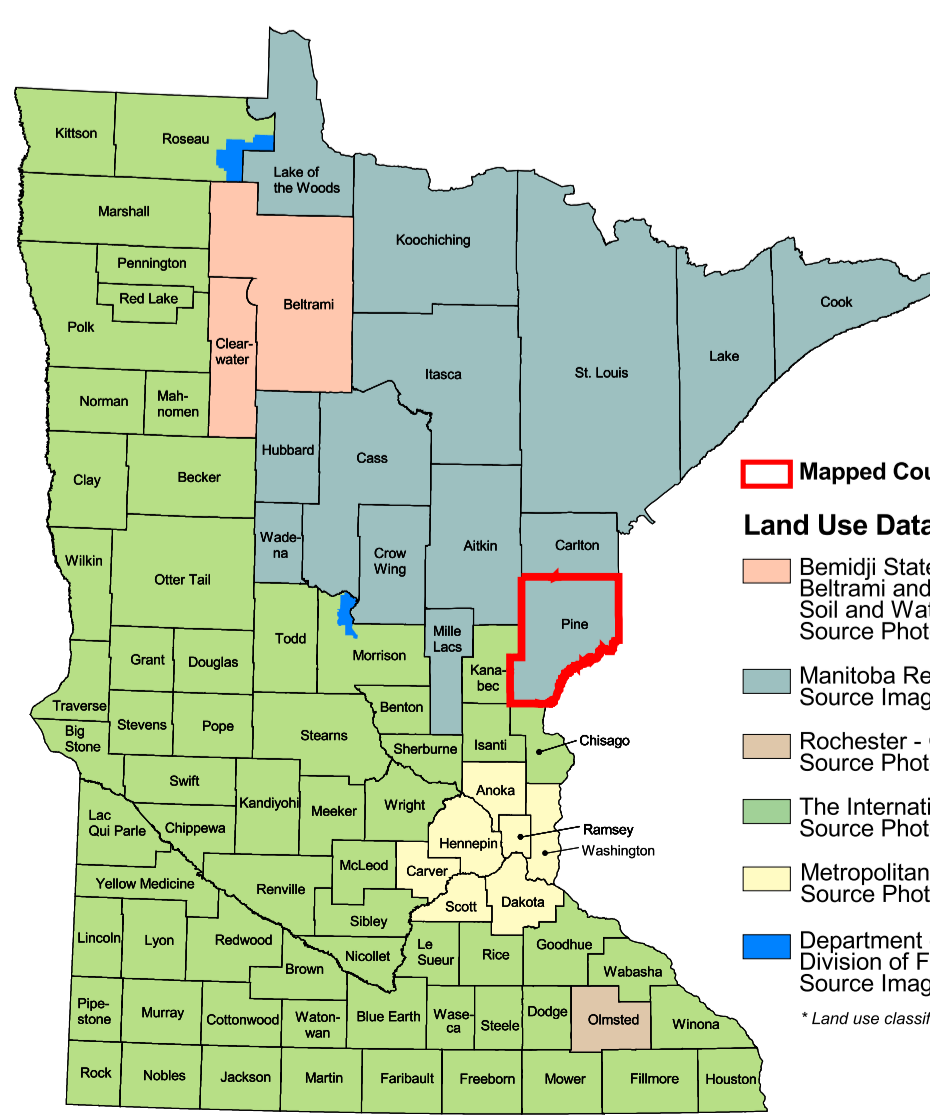
MAP FEATURES

- Land Use**
 - Urban/Industrial
 - Farmsteads and Rural Residences
 - Other Rural Developments
 - Cultivated Land
 - Grassland
 - Shrubby Grassland
 - Regeneration/Young Forest
 - Mixed Forest
 - Deciduous Forest
 - Coniferous Forest
 - Wetlands: Bogs
 - Wetlands: Marsh and Fens
 - Water
 - Gravel Pits and Open Mines
 - Bare Rock
- Cities**
 - COUNTY SEAT
 - Other Cities
- Highways**
 - Interstate Highway
 - U.S. Trunk Highway
 - State Trunk Highway
 - County State-Aid Highway (CSAH)
- Public Land Survey**
 - State Boundary
 - County Boundary
 - Township & Range Section
 - T34 Township
 - R25W Range & Direction

Pine County Land Use Statistics

Source: The Land Management Information Center (LMIC)

DESCRIPTION	ACRES	% ACRES
Urban/Industrial	2191.9	0.2
Farmsteads and Rural Residences	1997.6	0.2
Other Rural Developments	3221.9	0.4
Cultivated Land	38232.2	4.2
Grassland	227792.1	24.8
Shrubby Grassland	862.6	<0.1
Regeneration/Young Forest	31423	3.4
Mixed Forest	33437.9	3.3
Deciduous Forest	385701.9	42.1
Coniferous Forest	15178.4	1.7
Wetlands: Bogs	65666.3	7.1
Wetlands: Marsh and Fens	93131.9	10.2
Water	21296.1	2.3
Gravel Pits and Open Mines	706.4	<0.1
Bare Rock	4	<0.1
TOTAL	917,147	100%



- Land Use Data Sources***
 - Remote State University - Department of Geography, Beltrami and Clearwater County Soil and Water Conservation Districts, Source Imagery Date: 1986
 - Manitoba Remote Sensing Centre, Source Imagery Dates: 1991-1996
 - Rochester - Olmsted Planning Department, Source Imagery Date: 1992
 - The International Coalition, Source Imagery Dates: 1988-1990
 - Metroplitan Council, Source Imagery Date: 1990
 - Department of Natural Resources, Division of Forestry - Resource Assessment, Source Imagery Dates: 1992, 1993 and 1996

ABOUT THIS MAP

Data Sources: With the exception of roads, the land use / land cover categories displayed on this map were derived from 30 meter resolution Landsat Thematic Mapper satellite imagery bands 1, 4 and 5. Satellite imagery dates ranged from September, 1991 to August, 1996. The road category was created from road layers found in the Minnesota Department of Transportation's 1:24,000-scale BaseMap® data set. Classifications were verified using 1:62,500 color and black-and-white infrared National High Altitude Photographic (NHAP) U.S. Forest Service plot data were used to check the forest classification for Lake County.

Data Interpretation and Generalization: The Manitoba Remote Sensing Centre (MRSC) processed the Landsat imagery using a supervised maximum likelihood classification. These classification iterations were typically performed prior to an extensive manual verification/editing process using the NHAP photography. Transitional feature types (e.g. coniferous, mixed, deciduous forest classes) were processed by first developing a classification using relatively pure samples of individual types and then by performing a limited classification around a tightly controlled confidence interval. Mixed classes falling outside of the pure class confidence interval were then assigned to a mixed forest class.

MRSC used the USFS plot data to reclassify some Lake County coniferous areas to mixed forest. The "regeneration/young forest" category was specifically checked by Minnesota Department of Natural Resources, Forestry Division personnel, after which they provided the category definition to include some older trees on poorer sites.

This data exhibits a per class and overall classification accuracy of not less than 95 percent.

On-line documentation: <http://lucy.lmc.state.mn.us/landusedata.html>

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Linnet Geosystems, Winnipeg
The Manitoba Remote Sensing Centre, Winnipeg
Minnesota Department of Natural Resources
University of Minnesota - Department of Forest Resources
Wildsch, Smith and Nolting

Map Projection: UTM, Extended Zone 15
Datum: NAD83

Liability statement
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Distribution information
This map was prepared in April, 1996. Both the map and the data used to create it are available from the Land Management Information Center at Minnesota Planning.

You may also view a generalized, interactive land use map of Minnesota, along with detailed information about land use data at:
<http://mapserver.lmic.state.mn.us/landuse>

For further assistance, or to order copies of this map, contact:
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1. Manitoba Remote Sensing Centre, Source Imagery Dates: 1991-1996
2. USFS National High Altitude Photographic (NHAP) U.S. Forest Service, 1992
3. Minnesota Department of Transportation, 1997-98