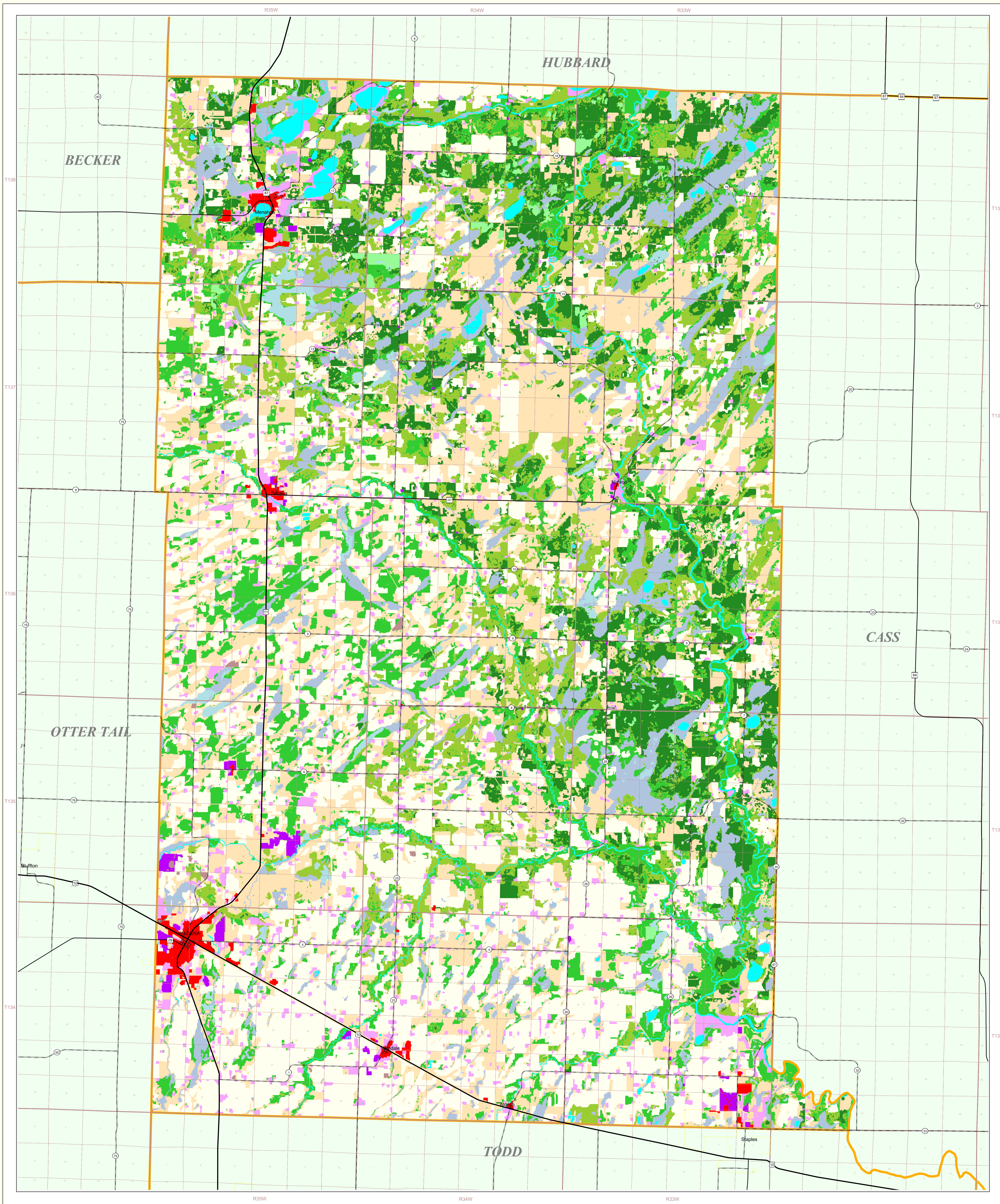


Wadena County Land Use and Cover

State of Minnesota

June 18, 1995



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

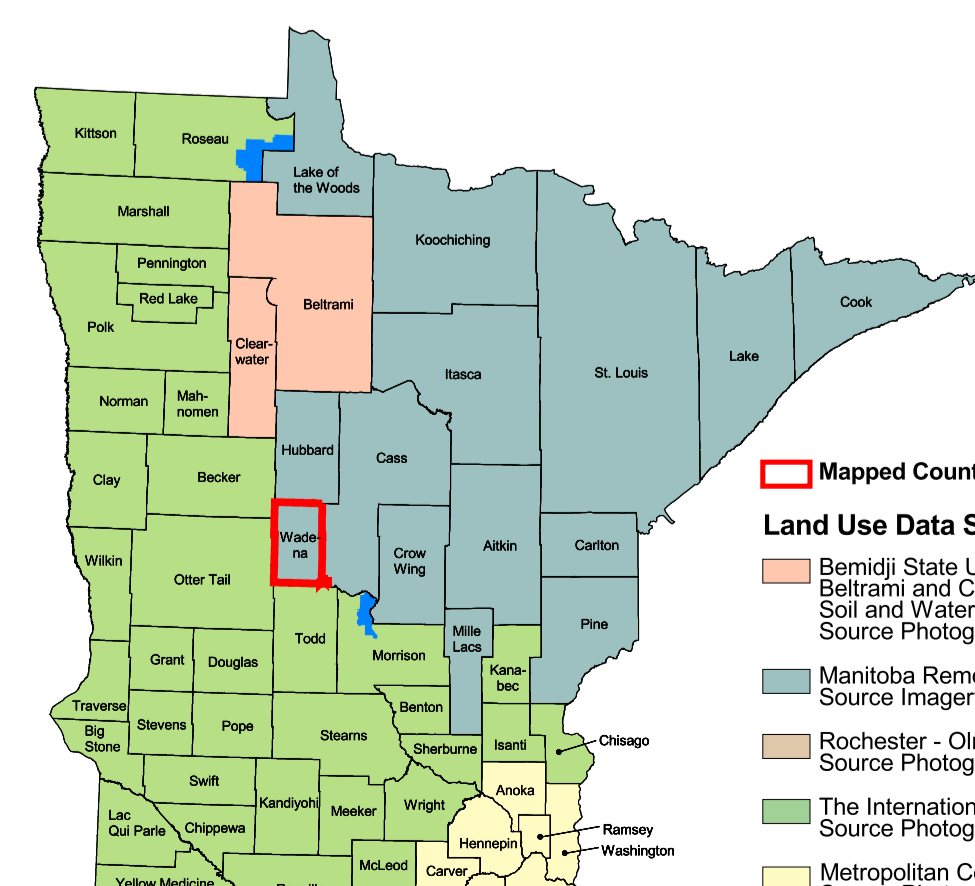
Data Sources

- 1. Manitoba Remote Sensing Centre, Source Imagery Dates: 1991-1996
- 2. Topographic Census Data, U.S. Bureau of the Census, 1996
- 3. Minnesota Department of Transportation, 1997-98

Wadena County Land Use Statistics

Source: The Land Management Information Center (LMIC)

DESCRIPTION	ACRES	% ACRES
Urban/Industrial	1714.4	0.6
Farmsteads and Rural Residences	15975.3	3.7
Other Rural Developments	1306	0.4
Cultivated Land	9814.3	28.7
Grassland	77761.1	22.4
Shrubby Grassland	17.7	<0.1
Regeneration/Young Forest	1284.2	3.4
Mixed Forest	38919.3	11.2
Deciduous Forest	41984.8	12.1
Coniferous Forest	33931.8	9.5
Wetlands: Bogs	3685.1	1.1
Wetlands: Marsh and Fens	28671.9	8.3
Water	5373.8	1.5
Gravel Pits and Open Mines	305.4	<0.1
Bare Rock	0	0
TOTAL	347,661	100%



Land Use Data Sources

- 1. Bemidji State University - Department of Geography, Source Imagery Dates: 1991-1996
- 2. Manitoba Remote Sensing Centre, Source Imagery Dates: 1991-1996
- 3. Rochester - Olmsted Planning Department, Source Imagery Dates: 1992
- 4. The International Coalition, Source Imagery Dates: 1988-1990
- 5. Metropolitan Council, Source Imagery Date: 1990
- 6. Department of Natural Resources, Division of Forestry - Resource Assessment, Source Imagery Dates: 1992, 1993 and 1996

* Land use classifications vary slightly between data sources.

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 2, 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 1:25,000 scale State Highway data set. Classifications were verified using 1:80,000 color and black and white infrared National High Altitude Photography (NHAP) U.S. Forest Service plot data were used to check the forest classifications for Lake County.

Data Interpretation and Computerization: The Manitoba Remote Sensing Centre (MRSC) interpreted the Landsat imagery using a supervised maximum likelihood classification. These classification iterations were typically performed prior to an exhaustive 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 positive 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 single mixed class.

MRSC: used the USFS plot data to reclassify some Lake County coniferous areas to mixed forest. The "regeneration/young forest" category was spot field checked by Minnesota Department of Natural Resources, Forestry Division personnel, after which they revised 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/realdata/lucy.html>

Credits and Acknowledgements

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The following groups also participated over an extended period:

- Linnet Geosystems, Winnipeg
- The Manitoba Remote Sensing Centre, Winnipeg
- Minnesota Department of Natural Resources
- University of Minnesota - Department of Forest Resources
- Widshelm, 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, 1995. 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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