



Shoreland Mapping in Southeast Minnesota

Whitewater Watershed Project with Cannon
River Watershed Partnership

Ross Hoffmann
Cannon River Watershed Partnership

Project Overview

- Applied for by Whitewater River Watershed Project
- Funded by Minnesota Environment and Natural Resources Trust Fund
- Contracted with Cannon River Watershed Partnership for GIS mapping.





GIS Mapping

- Obtain a better picture of landuse in SE Minnesota's stream and river shoreland areas.
- Use Geographic Information Systems (GIS).
- Using aerial photography and other spatial data, digitally outline landuses within shoreland areas.



Mapping Example

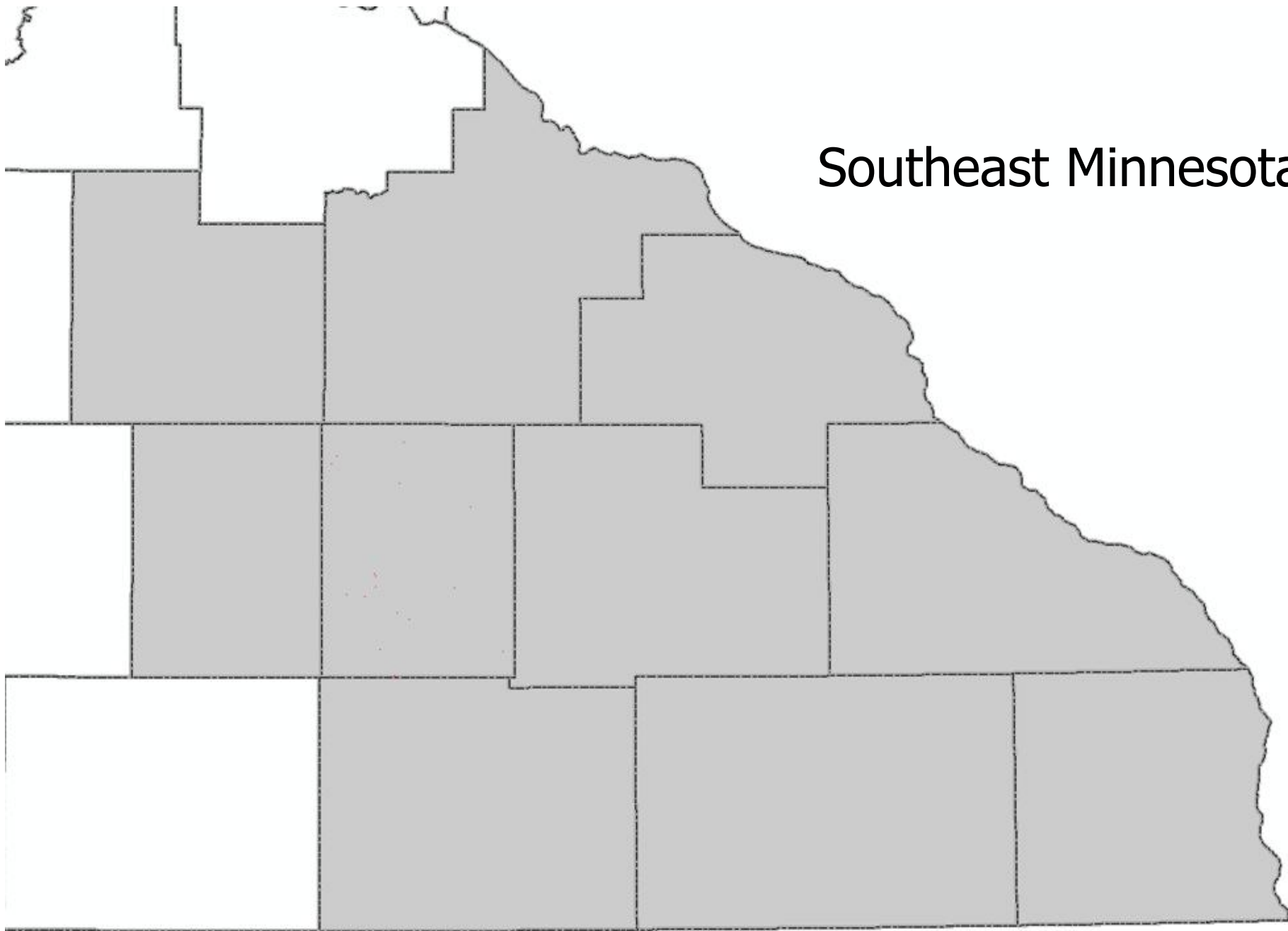


State of Minnesota

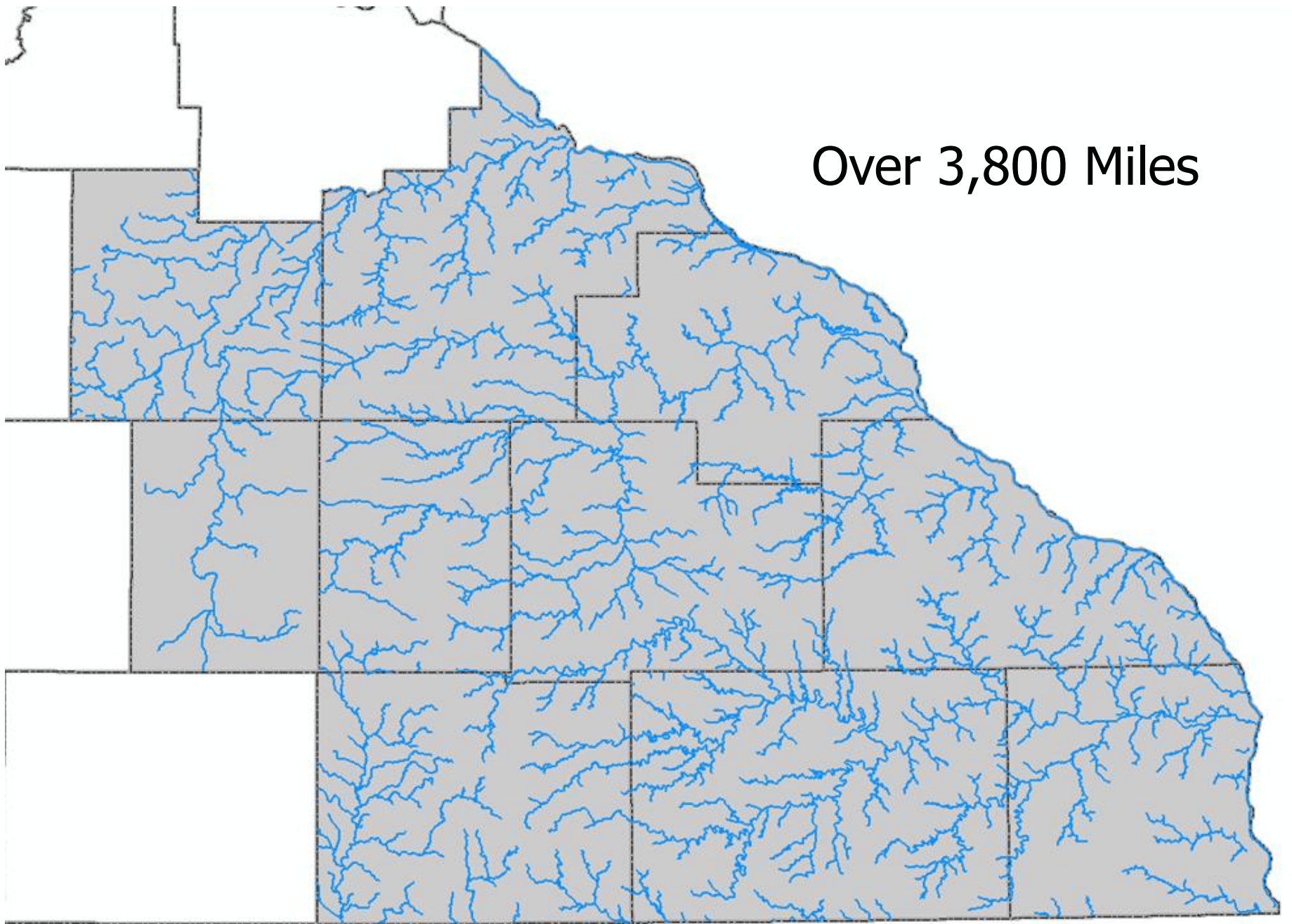


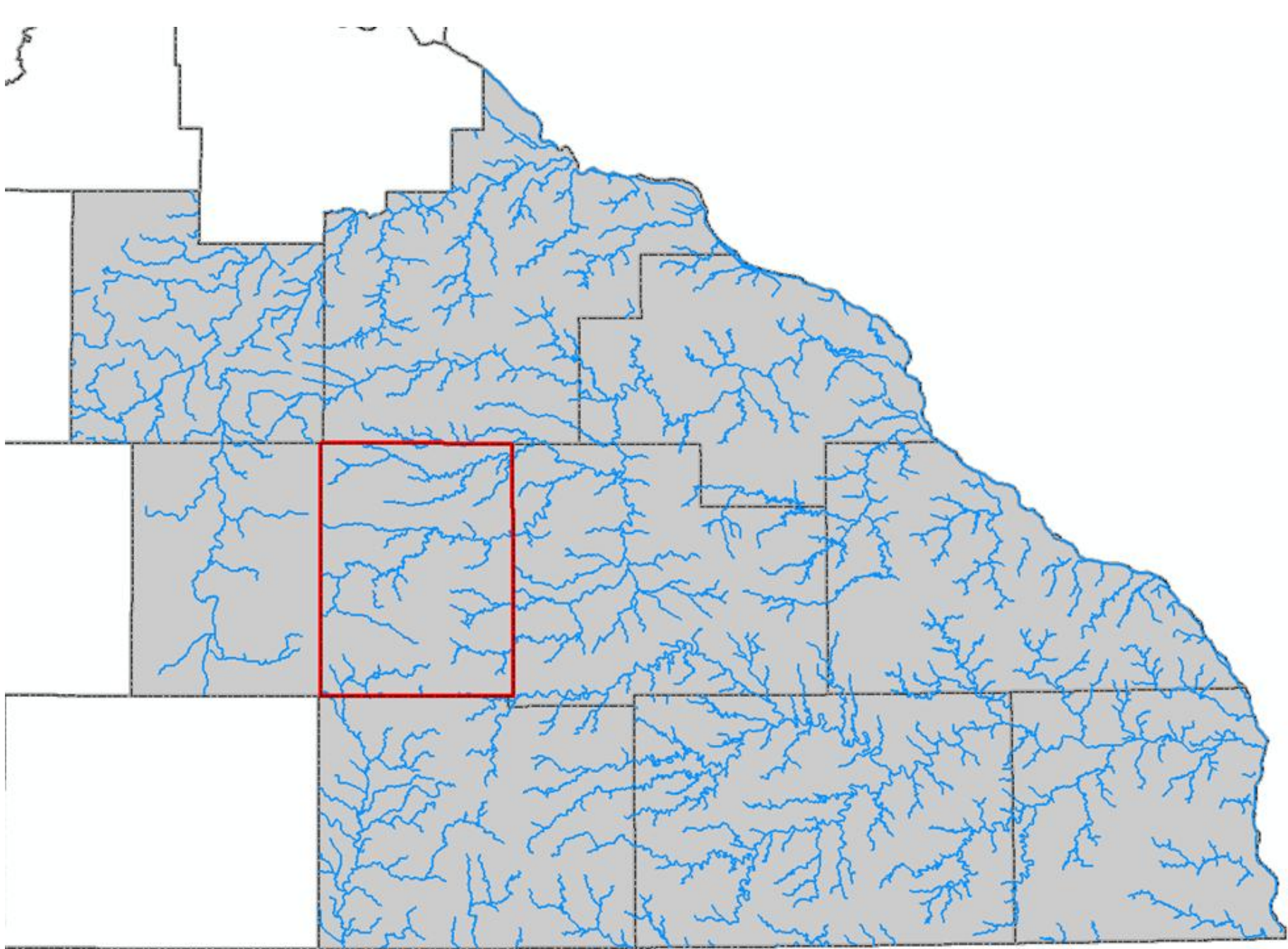
Southeast Minnesota

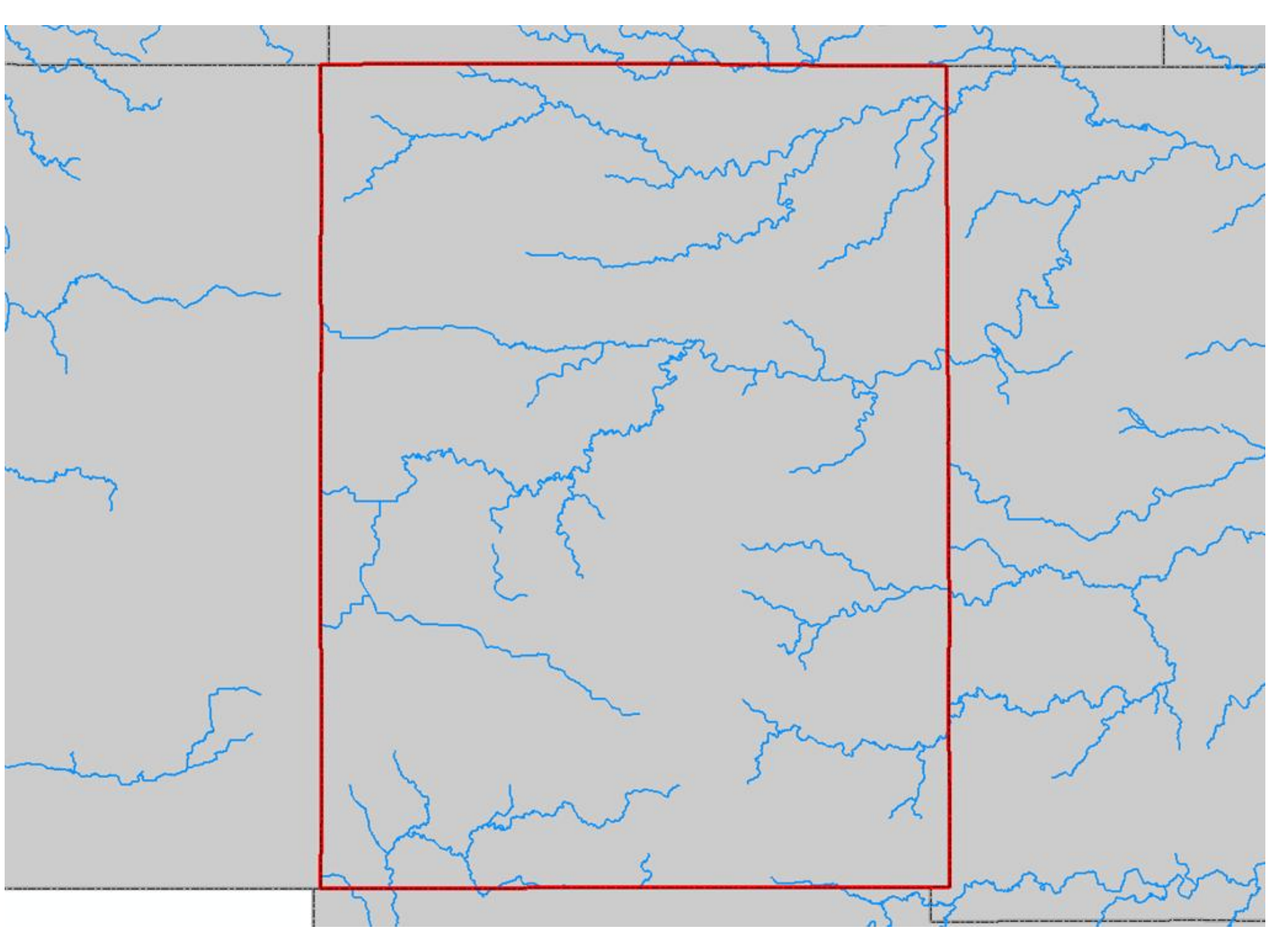
Southeast Minnesota



Over 3,800 Miles







Retrace Streams

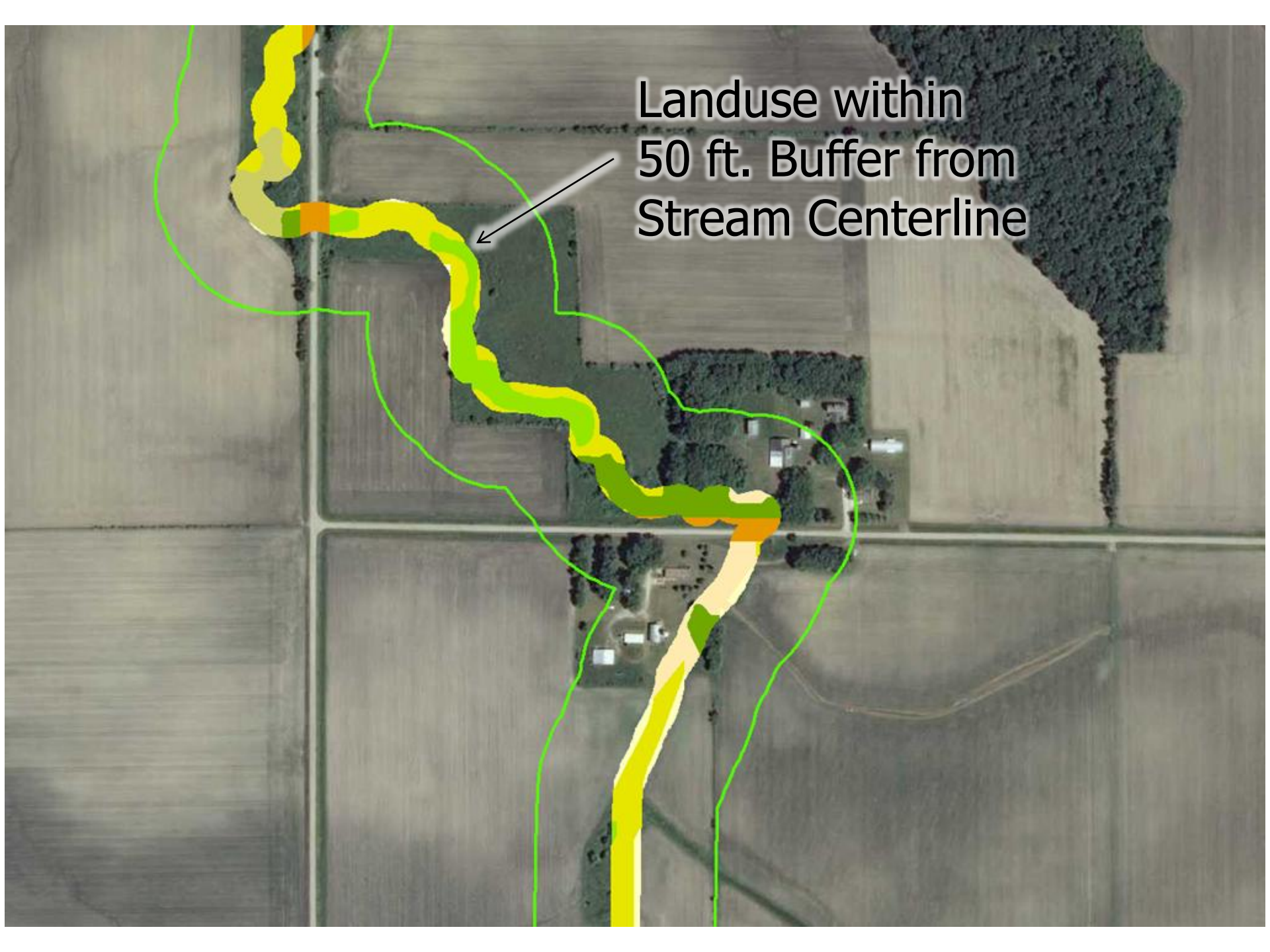


300 ft. Buffer from
Stream Centerline





Landuse within
50 ft. Buffer from
Stream Centerline









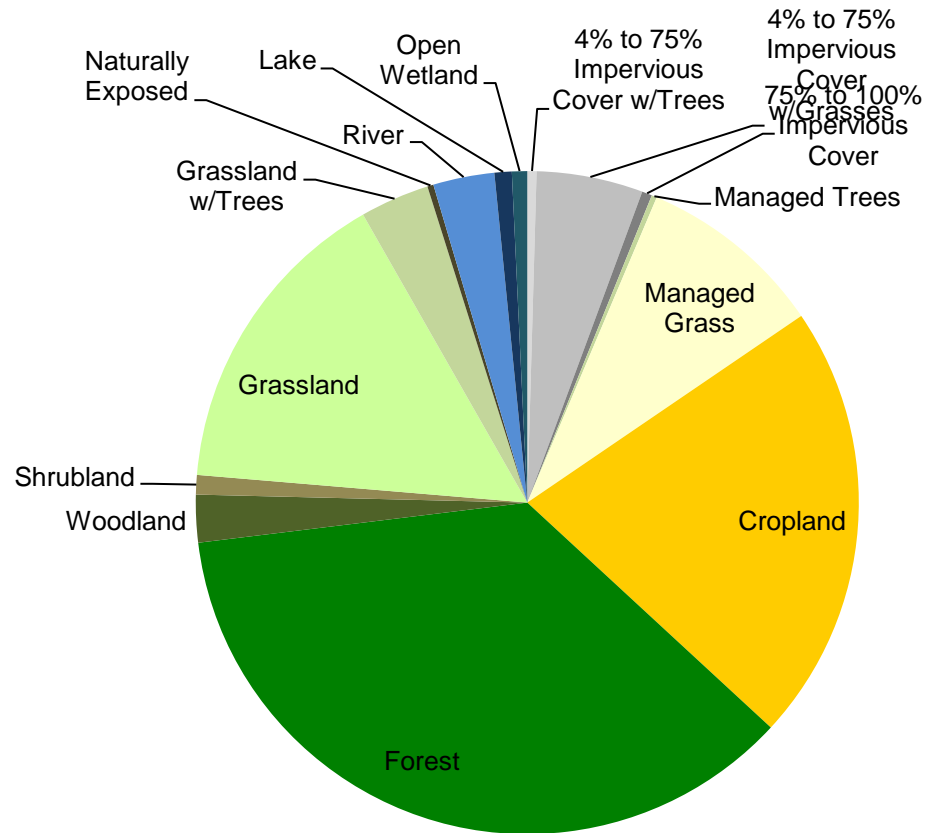
Mission Accomplished

- At the end of May 2010, mapping concluded.
- All totaled, 60,000 individual polygons traced, representing 40 unique landuses.



Region-wide Results (300ft)

- 36% Forest
- 21% Cropland
- 15% Grassland
- 9% Managed Grassland
- 5% Impervious Cover w/Grasses



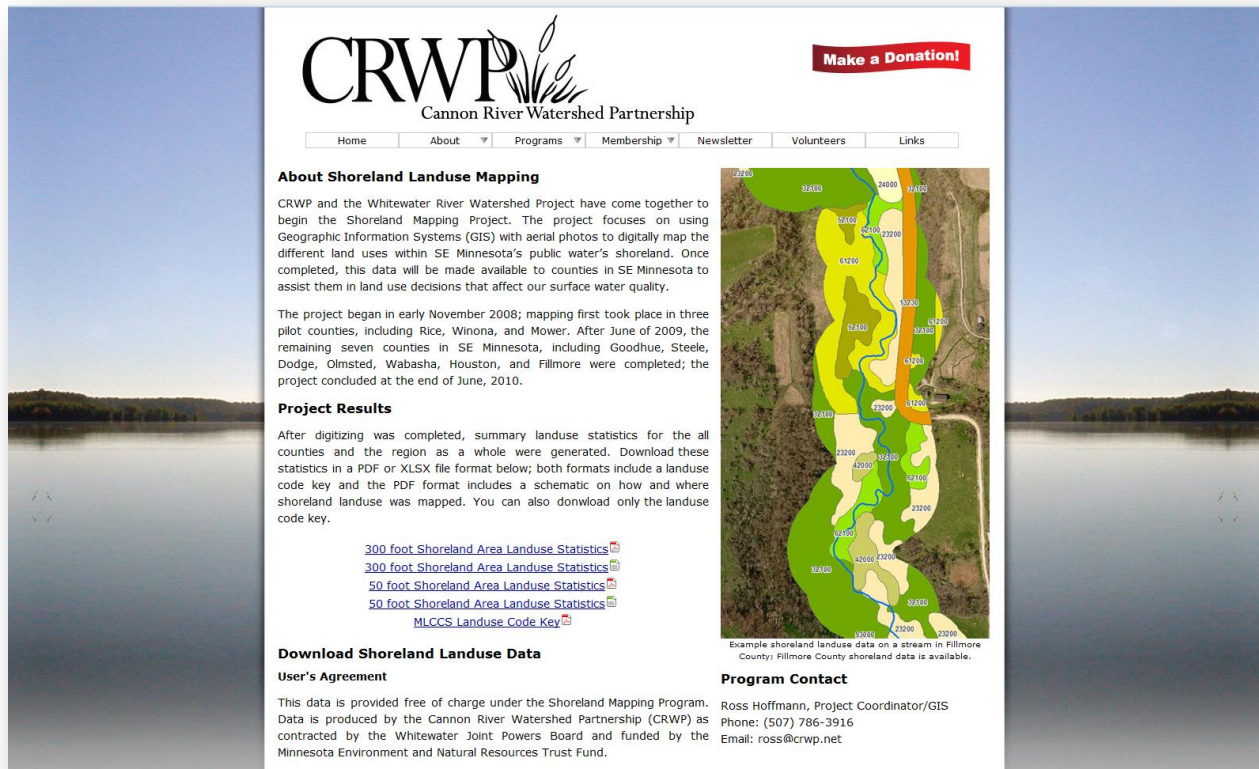


Data Available for Download

- Data is public, available to anyone; requires GIS.
- Data is not 100% accurate; not field verified.
- Landuse codes, high degree of accuracy at level one or two.
- Read user's agreement before downloading.

[http://www.crwp.net/Programs/Conservation/
ShorelandMapping/ShorelandMapping.html](http://www.crwp.net/Programs/Conservation/ShorelandMapping/ShorelandMapping.html)

Data Available for Download



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About Shoreland Landuse Mapping

CRWP and the Whitewater River Watershed Project have come together to begin the Shoreland Mapping Project. The project focuses on using Geographic Information Systems (GIS) with aerial photos to digitally map the different land uses within SE Minnesota's public water's shoreland. Once completed, this data will be made available to counties in SE Minnesota to assist them in land use decisions that affect our surface water quality.

The project began in early November 2008; mapping first took place in three pilot counties, including Rice, Winona, and Mower. After June of 2009, the remaining seven counties in SE Minnesota, including Goodhue, Steele, Dodge, Olmsted, Wabasha, Houston, and Fillmore were completed; the project concluded at the end of June, 2010.

Project Results

After digitizing was completed, summary landuse statistics for the all counties and the region as a whole were generated. Download these statistics in a PDF or XLSX file format below; both formats include a landuse code key and the PDF format includes a schematic on how and where shoreland landuse was mapped. You can also download only the landuse code key.

- [300 foot Shoreland Area Landuse Statistics](#)
- [300 foot Shoreland Area Landuse Statistics](#)
- [50 foot Shoreland Area Landuse Statistics](#)
- [50 foot Shoreland Area Landuse Statistics](#)
- [MLCCS Landuse Code Key](#)

Download Shoreland Landuse Data

User's Agreement

This data is provided free of charge under the Shoreland Mapping Program. Data is produced by the Cannon River Watershed Partnership (CRWP) as contracted by the Whitewater Joint Powers Board and funded by the Minnesota Environment and Natural Resources Trust Fund.

Program Contact

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Example shoreland landuse data on a stream in Fillmore County; Fillmore County shoreland data is available.

<http://www.crwp.net/Programs/Conservation/ShorelandMapping/ShorelandMapping.html>



Questions?

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