

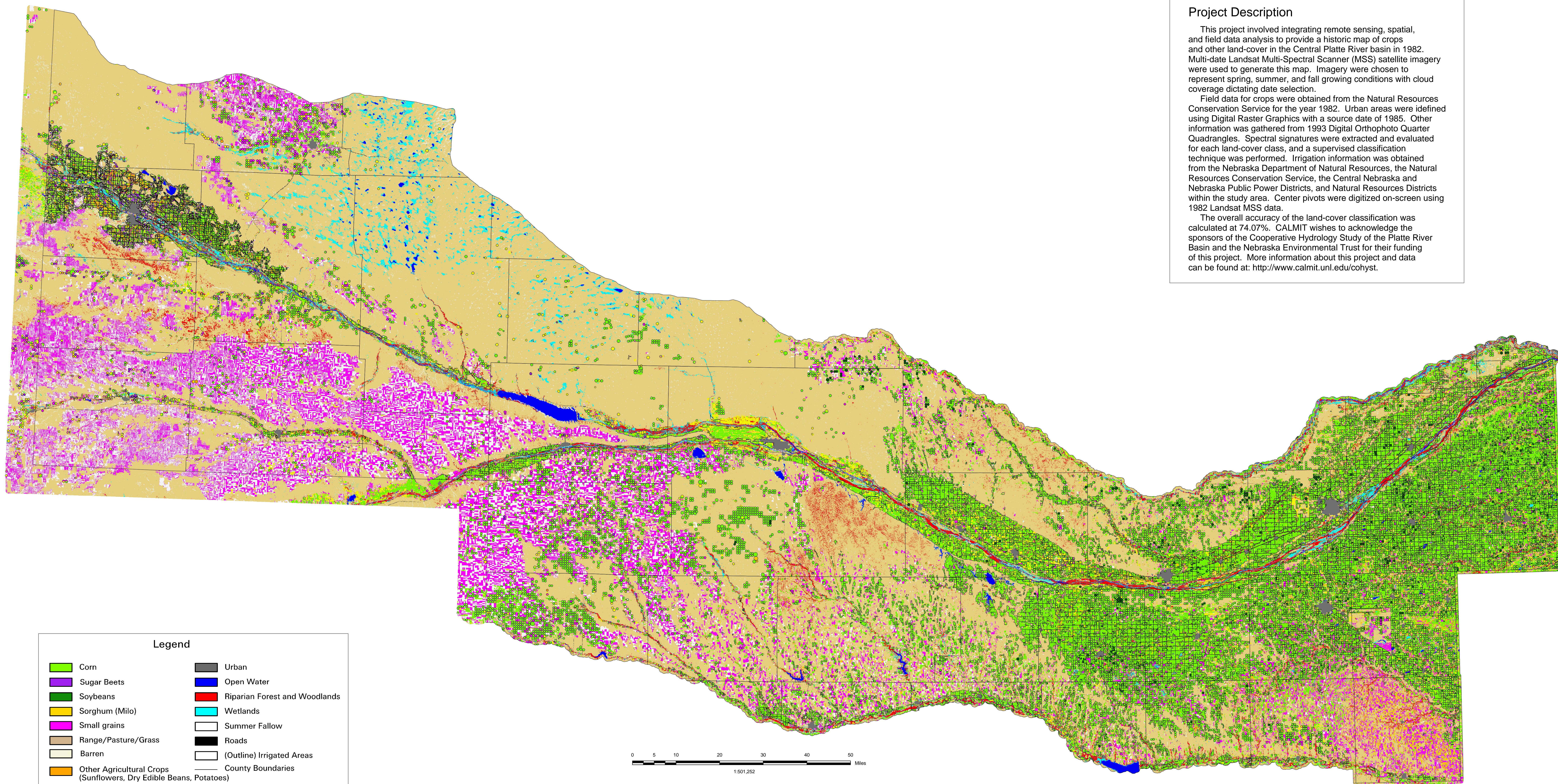
Delineation of 1982 Land Use Patterns for The Cooperative Hydrology Study in The Central Platte River Basin

Project Description

This project involved integrating remote sensing, spatial, and field data analysis to provide a historic map of crops and other land-cover in the Central Platte River basin in 1982. Multi-date Landsat Multi-Spectral Scanner (MSS) satellite imagery were used to generate this map. Imagery were chosen to represent spring, summer, and fall growing conditions with cloud coverage dictating date selection.

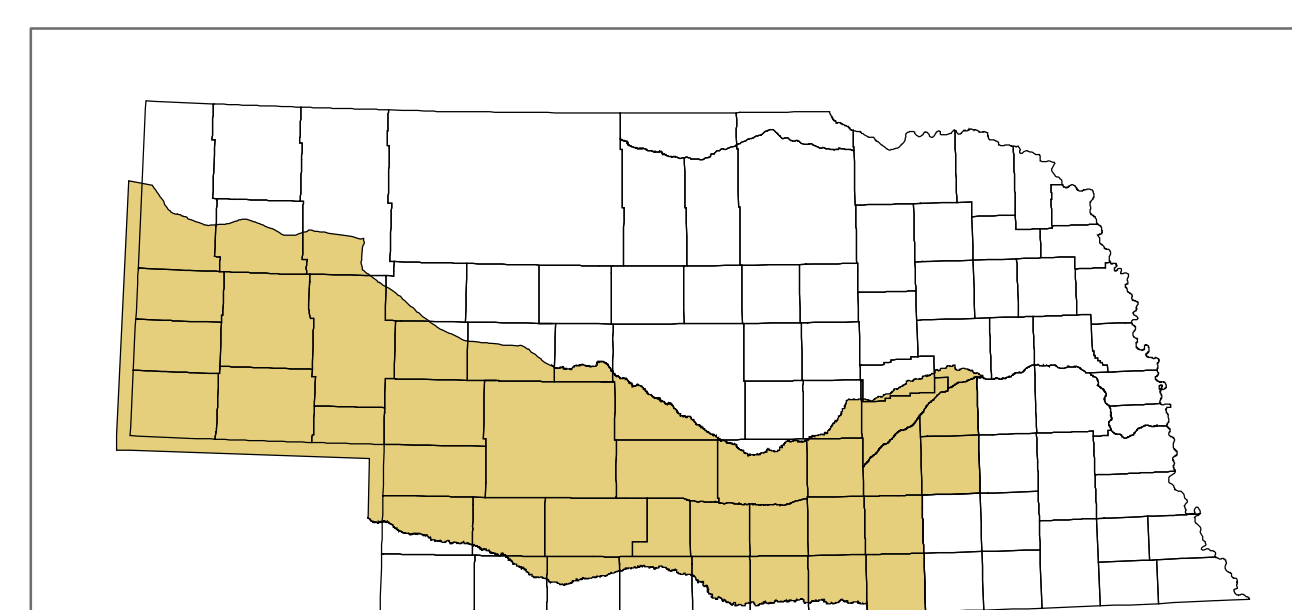
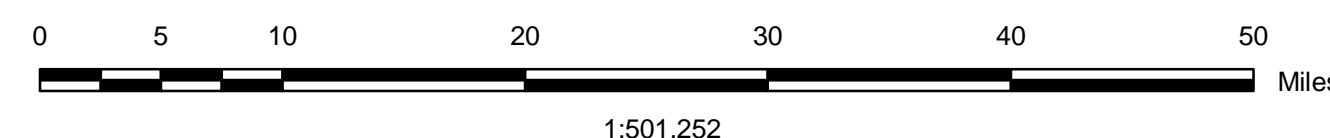
Field data for crops were obtained from the Natural Resources Conservation Service for the year 1982. Urban areas were defined using Digital Raster Graphics with a source date of 1985. Other information was gathered from 1993 Digital Orthophoto Quarter Quadrangles. Spectral signatures were extracted and evaluated for each land-cover class, and a supervised classification technique was performed. Irrigation information was obtained from the Nebraska Department of Natural Resources, the Natural Resources Conservation Service, the Central Nebraska and Nebraska Public Power Districts, and Natural Resources Districts within the study area. Center pivots were digitized on-screen using 1982 Landsat MSS data.

The overall accuracy of the land-cover classification was calculated at 74.07%. CALMIT wishes to acknowledge the sponsors of the Cooperative Hydrology Study of the Platte River Basin and the Nebraska Environmental Trust for their funding of this project. More information about this project and data can be found at: <http://www.calmit.unl.edu/cohyst>.



Legend

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|---|-------------------------------|
| Corn | Urban |
| Sugar Beets | Open Water |
| Soybeans | Riparian Forest and Woodlands |
| Sorghum (Milo) | Wetlands |
| Small grains | Summer Fallow |
| Range/Pasture/Grass | Roads |
| Barren | (Outline) Irrigated Areas |
| Other Agricultural Crops (Sunflowers, Dry Edible Beans, Potatoes) | County Boundaries |



Locator Map

