Appendix 4-D

Datasets Used to Create Land Use Information

## Datasets Used to Create Land Use Information

The data sources used to create the COHYST 2010 updated land use dataset are listed in **Table 4-D-1**. The table also includes information about the associated agency, year(s) represented, format, scale and purpose of the data with regard to the creation of the new land use dataset.

| Dataset                                 | Source  | Year(s)   | Format                            | Scale  | Purpose  |
|---|---|---|-----------------------------------|--|--|
| Census of<br>Agriculture                | USDA National<br>Agricultural<br>Statistics Service | 1950, 1954, 1959,<br>1964, 1969, 1974,<br>1978, 1982, 1987,<br>1992, 1997, 2002, 2007 | Tabular                           | County   | Crop type proportions,<br>adjustment of<br>dryland/irrigated acres   |
| Land Cover<br>Datasets                  | CALMIT  | 1982, 1997, 2001, 2005  | Raster<br>&<br>vector,<br>polygon | 1:100,000;<br>28.5 meter<br>ground<br>resolution | Delineation of dryland<br>acres; adjustment of<br>dryland/irrigated acres  |
| CPNRD<br>Certified<br>Acres             | Central Platte<br>NRD                               | 2010  | Vector,<br>polygon                | 1:4,800  | Spatial representation of<br>irrigated land  |
| TPNRD<br>Certified<br>Acres             | Twin Platte NRD                                     | 2010  | Vector,<br>polygon                | 1:5,000  | Spatial representation of<br>irrigated land and<br>related well information  |
| Assessor<br>Land Use<br>Data            | Kearney and<br>Phelps County                        | 2010  | Vector,<br>polygon                | 1:4,800  | Spatial representation of<br>irrigated lands   |
| Points of<br>Diversion                  | NDNR  | 2011  | Vector,<br>point                  | Varied   | Acquire priority date for<br>surface water irrigated<br>lands  |
| Surface<br>Water<br>Rights<br>Fields    | NDNR  | 2011  | Vector,<br>polygon                | 1:12,000   | Spatial representation of<br>surface water irrigated<br>lands including some<br>irrigation districts<br>(incomplete dataset) |
| Registered<br>and<br>Abandoned<br>Wells | NDNR  | 2011  | Vector,<br>point                  | Varied   | Spatial representation of wells; completion date of wells  |
| Irrigation<br>District<br>Boundaries    | NDNR - Nebraska<br>Department of<br>Water Resources | Paper map from 1978<br>(last update in 1992)<br>was digitized in 2005                 | Vector,<br>polygon                | Unknown  | Used to fill irrigation<br>district gaps in the NDNR<br>surface water rights<br>fields layer                                 |

The data sources can be accessed via the following links:

Center for Advanced Land Management and Information Technologies Census of Agriculture, Central Platte Natural Resources District Twin Platte Natural Resources District Phelps County Kearney County Nebraska Department of Natural Resources

**Figure 4-D-1** shows the 1982, 1997, 2001 and 2005 CALMIT land cover datasets within the COHYST area. These datasets were an important component of the new land use dataset, as irrigable/dryland acres were adjusted to correspond with the CALMIT data, which was considered to represent the most accurate irrigated and dryland acreage for the years it was available. The CALMIT data was also used to create the spatial distribution of dryland acres, as there was no other data source that showed the spatial extent of dryland acres.

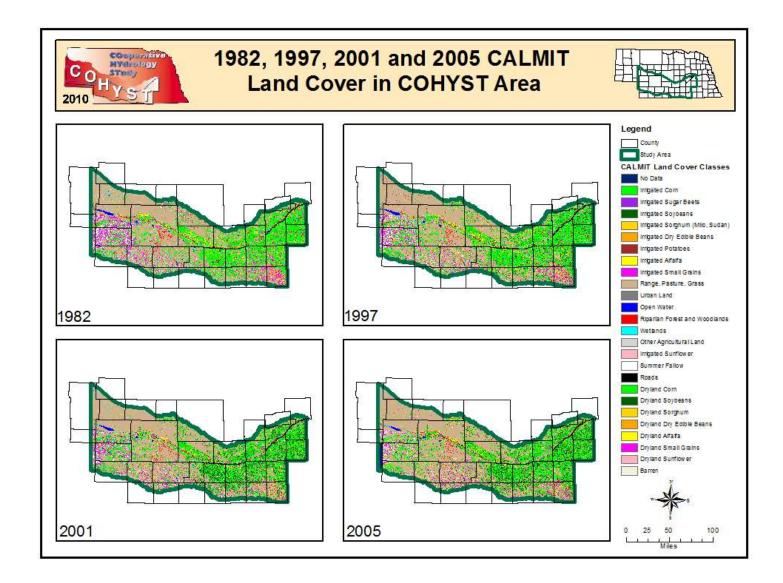


Figure 4-D-1: A four panel map showing the 1982, 1997, 2001 and 2007 CALMIT land cover distribution within the COHYST area.