

Collection of Water Bodies for 2005

Water bodies were collected for the COHYST 2005 inventory within a specified focus area titled (NewInventoryFocus), and saved in the map document "Combined_Zones6.2.08". Included in this map document are the layers "Combined_Dams" (dam location data for each digitized reservoir), and "NewCombined_Inventory" (digitized water body data). The location for these layers and the map document is **C:\Workspace\Comb.Zone.Backup8.5.08** on pc29095. This collection project is an effort to develop a 2005 baseline reservoir inventory that can be used to quantify subsequent reservoir development and to assess the effects of this development on water depletion through evaporation.

2005 FSA orthophotography, within the NewInventoryFocus area, was reviewed to locate waterbodies in existence at the time the photo was collected. The waterbody footprint was collected from the signature on the 2005 orthophotos or from 1993 orthophotos, depending on which signature occupied the greater area.* 11,698 waterbodies were collected during this process. These waterbodies were classified as reservoirs, sand pits, or lakes based upon the following criteria:

Reservoirs - Water bodies with a visible dam structure. Waterbodies in upland drainages that had a linear edge perpendicular to an incised drain were classified as reservoirs at the discretion of the operator. The location of the dam structure was collected in a separate feature class. Waterbodies classified as reservoirs occupy 45,699 acres within the inventory focus area.

Sand Pits - Man-made water bodies located within a flood plain of rivers or streams. Waterbodies classified as sand pits occupy 7,048 acres within the inventory focus area.

Lakes - Irregular shaped water bodies in floodplains or upland depressions (not in a natural drain). Waterbodies classified as lakes occupy 14,120 acres within the inventory focus area.

Miscellaneous – Visible water bodies on the 2005 DOQ that do not fall into the other categories, including treatment plants, animal waste pits, etc. Waterbodies classified as miscellaneous occupy 6,967 acres within the inventory focus area.

*All water bodies should be visible on the 2005 DOQ. All visible 2005 water bodies were compared to the 1993 DOQ images. When compared, water bodies with the larger area were captured. Irrigation pits were discarded or were not captured. The focus area for this project included portions of 28 counties in UTM zones 13 and 14 in the state of Nebraska. The projected coordinate system is NAD_1983_UTM in units of meters.