Municipal, Industrial, and Domestic Water Use Database

## Appendix 4-S.

## The COHYST Municipal and Industrial Database

The data were combined into a single database located in the "Combined" worksheet in the workbook "MandIdata through 2010.xlsm". The data base consists of 128986 yearly data row vectors containing 17 pieces of information each and is available on the COHYST Website.

The second column is a dummy variable describing the source and type of information contained in the vector. There are five types of data included in the data set:

- Industrial Municipal A combination of all industries that obtain their water from a municipal source
- 2. Domestic Municipal The municipal withdrawals minus any industrial municipal withdrawals.
- 3. Self-Supplied Industrial An industrial water user that obtains their withdrawals from privately owned wells
- 4. Self-Supplied Domestic Domestic withdrawals from private wells
- 5. Discharges Wastewater discharges into a stream at a known location

The first column describes the entity that is represented by the withdrawal or discharge data. The form of the description depends upon the type of source:

- 1. The city supplying the water to the industry and a list of the companies receiving the water.
- 2. The city that is withdrawing the water
- 3. The well owner or company, the city closest to the well, and the county in which the well is located
- 4. The county and the COHYST cell in which the cell is located.
- 5. The name of the company (only for Industrial dischargers), city, and county

The third column of the database describes the withdrawal or discharge location. The location description is dependent upon the type of source.

- 1. The location describes the city from which the industries receive water.
- 2. The location describes the city that is withdrawing water.
- 3. The Well ID number which corresponds to the DNR well database.
- 4. The county in which the wells are located.
- 5. The legal description of the stream discharge point.

The fourth column in the database represents the COHYST cell number. This is the spatial location at which the withdrawal or discharge values are applied. The COHYST cell corresponds to the

location described in column three. The fifth column contains the year to which match the corresponding monthly values. Each entity has 26 years of monthly data from 1985 to 2010. The final 12 columns represent the monthly values for the given year. These values are reported in acre-feet.

## Sites contributing to the database

#### **Industrial Municipal**

#### Cozad

Archer Daniels Midland Co. Island Dehy Co Inc. Monroe Auto Equipment Co.

## Gothenburg

Baldwin Filters, Inc.
G Tech, Inc.

 ${\hbox{\bf Gothenburg Feed Products Co.}}$ 

#### **Grand Island**

Chief Automotive Systems Inc.
Chief Buildings, Chief Custom Products
Chief Fabrication
Consolidated Concrete, Co
Diamond Plastics Corp
Electronic Displays Systems
Hornady Manufacturing Company

## Hastings

Consolidated Blenders Inc.

## Kearney

Baldwin Filters
Big Flag Farm Supply Inc.
Chief Agri Industrial
Dy-NA Tool & Mold, Inc
L & S Industries, Inc
West Company Inc.

## Lexington

Eilers Machine and Welding Orthman Manufacturing, Inc

Tyson Fresh Meats, Inc. Veetronix, Inc.

North Platte

Masonite International Corp

Sutherland

**Sutherland Industries** 

# **Domestic Municipal**

Amherst, Buffalo County Elm Creek, Buffalo County Gibbon, Buffalo County Kearney, Buffalo County Miller, Buffalo County Riverdale, Buffalo County Shelton, Buffalo County Cozad, Dawson County Farnam, Dawson County Gothenburg, Dawson County Lexington, Dawson County Overton, Dawson County Sumner, Dawson County Eustis, Frontier County Elwood, Gosper County Smithfield, Gosper County Alda, Hall County Cairo, Hall County Doniphan, Hall County Grand Island, Hall County Wood River, Hall County Axtell, Kearney County Brule, Keith County Ogallala, Keith County Paxton, Keith County Brady, Lincoln County Hershey, Lincoln County Maxwell, Lincoln County

North Platte, Lincoln County Sutherland, Lincoln County Central City, Merrick County Clarks, Merrick County Bertrand, Phelps County Funk, Phelps County Loomis, Phelps County Duncan, Platte County Hastings, Adams County Holdrege, Phelps County Minden, Kearney County McCook, Red Willow County Aurora, Hamilton County York, York County Superior, Nuckolls County Imperial, Chase County Sutton, Clay County Stromsburg, Polk County Grant, Perkins County Alma, Harlan

## **Self-Supplied Industrial**

Werner Construction, Nuckolls County Wood Drive Dairy, Nuckolls County Werner Construction, Adams County US 30 Speedway, Platte County KCC Feeding, Kearney County Alma Golf Course, Harlan County AGP Corn Processing, Adams County Van Housen Feed Yards, Polk County Procter & Gamble, Hamilton County Nebraska Public Power, Buffalo County Pleasanton Golf Course, Buffalo County Hamilage Farms, Kearney County Nebraska Energy LLC, Hamilton County Agricultural Services, Hall County Peterson Supermarket, Dawson County Nitro Construction, Hall County Abengoa BioFuels, York County Gibbon Packing, Buffalo County Island Handlers, Hall County Nutra-Flo, Buffalo County Miscellaneous Industry Department of Roads Rest Areas:

- (2) Sutherland, Lincoln County
- (2) Brady, Lincoln County

- (2) Cozad, Dawson County
- (2) Kearney, Buffalo County
- (2) Grand Island, Hall County
- (2) Ogallala, Keith County
- (2) York, York County

Partial and Full	y included	<b>Counties for</b>	· Self-Sup	plied Domestic

Adams

Arthur

Buffalo

Chase

Clay

Custer

Dawson

Franklin

Frontier

**Furnas** 

Gosper

Hall

Hamilton

Harlan

Hayes

Hitchcock

Howard

Kearney

Keith

Lincoln

Logan

McPherson

Merrick

Nance

**Nuckolls** 

**Perkins** 

Phelps

Platte

Polk

**Red Willow** 

Webster

York

# **Wastewater Discharging Entities**

Chief Fabrication, Hall County

Chief Buildings, Hall County

Chief Agri Industrial, Buffalo

Chief Custom Products, Hall County

Tyson Fresh Meats, Dawson County

Monroe Auto Equipment, Dawson County

Hornady Manufacturing, Hall County

Brule, Keith County

Nebraska Public Power – Kearney, Buffalo County

Gibbon Packing, Buffalo County

Ogallala, Keith County

North Platte, Lincoln County

Alda, Hall County

Cozad, Dawson County

Gibbon, Buffalo County

Gothenburg, Dawson County

Kearney, Buffalo County

Lexington, Dawson County

Wood River, Dawson County

Minden, Kearney County

York, York County

Hastings, Adams County

Holdrege, Phelps County

Aurora, Hamilton County

McCook, Red Willow County

Stromsburg, Polk County

Superior, Nuckolls County

Grand Island, Hall County