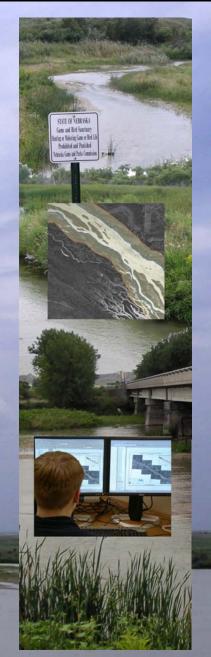




Brian P. Dunnigan, P.E. Head, Floodplain Management Dam Safety/Survey Division Nebraska Department of Natural Resources

February 10, 2005





### **Legislative Bill 826**

was approved

by the Governor

on April 15, 2004

### **Intent of LB826**

a. Preserve the state game refuges along the North Platte River in Garden County; along a portion of the **Platte River generally** between Dodge and **Saunders County**; along a portion of the **Niobrara River** between Boyd and Holt County; along a portion of the North **Platte River near North Platte** 



#### Intent of LB826 (from the Introducer's Statement of Intent)



- b. Clarify the language setting the boundaries of Nebraska game refuges by defining "bank of the river"
- c. Grants the Department of Natural Resources the authority to determine the banks of the river
- d. Directs the Department of Natural Resources to maintain maps designating the banks and the boundaries of the game refuges
- e. Directs the Nebraska Game and Parks Commission to utilize the maps in posting the boundaries of the refuges

## Statutory Definition of "banks of said stream"



means the banks of the river which are the elevation of ground which confines the water at a level not exceeding flood stage

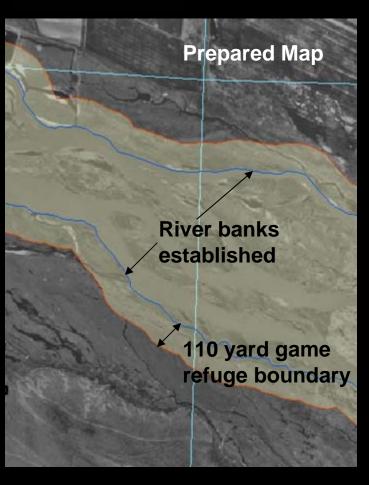
### The NDNR's Charge:



To depict the banks of the river by a line on maps produced by the Nebraska **Department of Natural** Resources using the best available technical information, best available elevation information and past and present observations of the river and adjacent lands



#### A three step process was used by NDNR to establish the state game refuge boundary

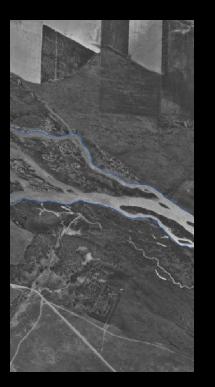


- 1. The left and right banks of the river were established
- 2. Based on the river bank lines that were established, a game refuge boundary was established 110 yards landward of the river bank lines
- 3. A map was prepared that shows the banks of the river and the game refuge boundary

## Step

### Process for establishing the banks of the river

Technical information was evaluated and a determination consistent with the definition of said stream was made. The technical information included:



- 3 surveyed valley cross-sections;
- comparison of aerial photography from 1993, 1999, and 2003;
- review of determinations by experienced field office staff;
- comparison of the determination with Technical Papers from the 1975 Platte River Level B study and information from the National Weather Service.

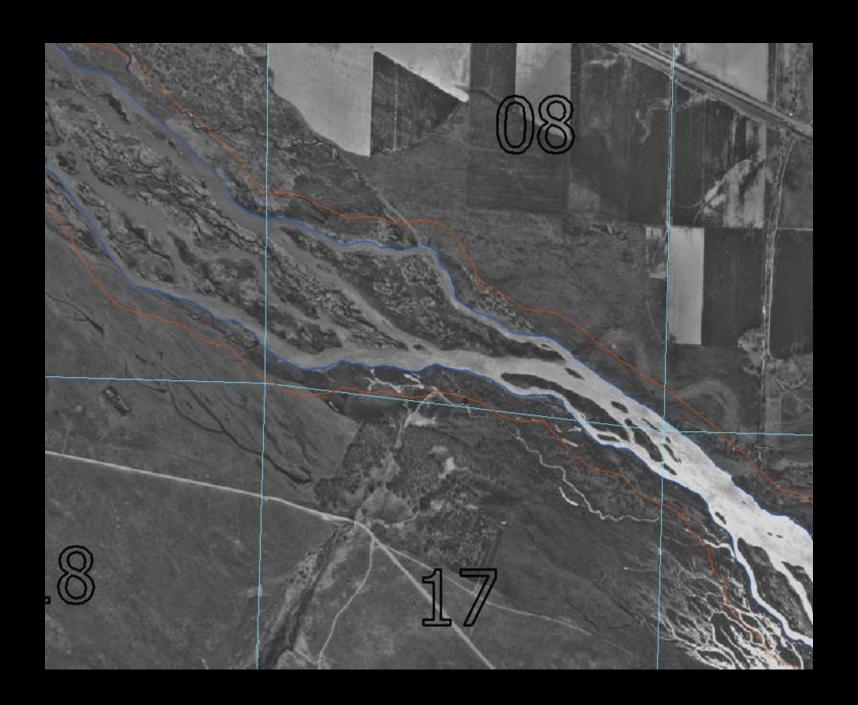
# Step 2

## Establishing the State Game Refuge Boundary



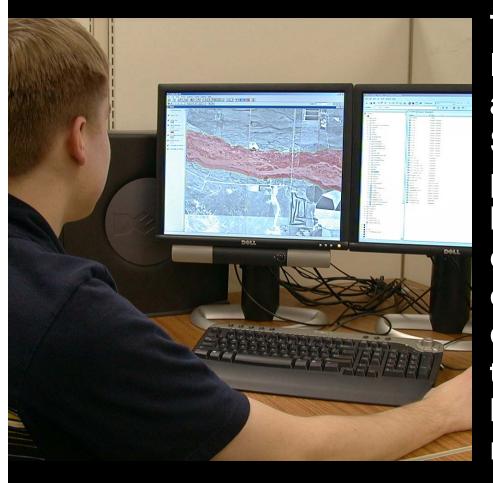
Once the banks of the river were established, they were digitized (a digital line)

The NDNR
Photogrammetry Section
used 1999 USGS Digital
Orthophoto Quarter
Quadrangles (DOQQs) to
digitize the banks of the
river

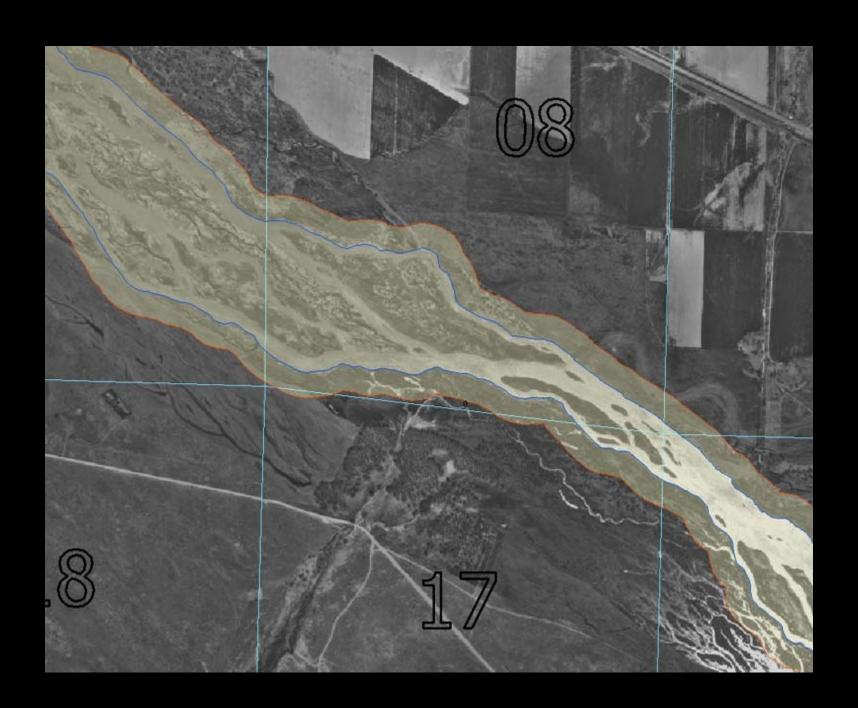


# Step 2

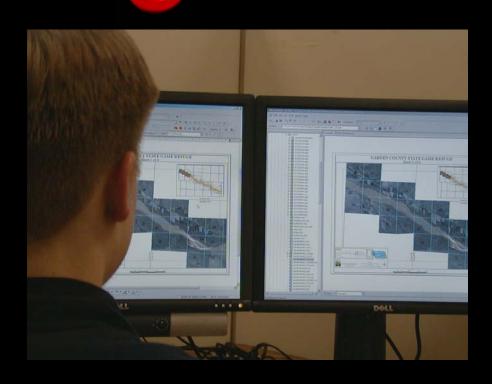
### Establishing the State Game Refuge Boundary (continued)



These digitized river bank lines were then imported into a Geographic Information System (GIS). Using tools provided in the GIS, 110 yard buffer was added landward of the lines. The outer edges of the buffers were then converted to digital lines and these lines became the boundaries of the state game refuge.



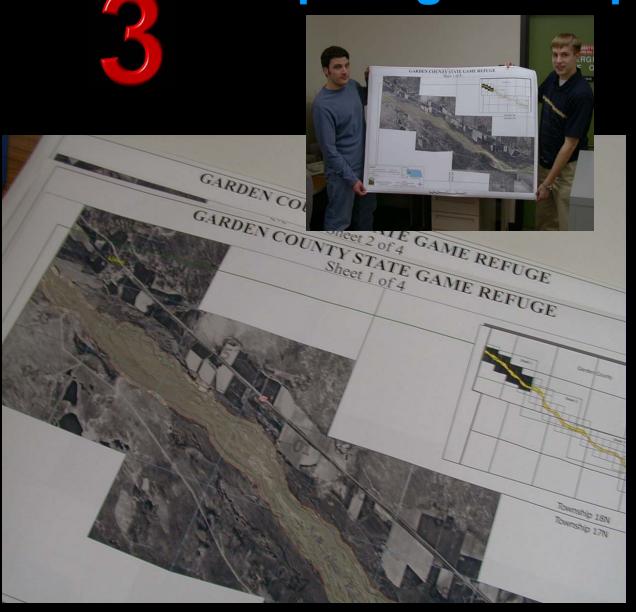
### **Step** Preparing the Map



Maps depicting the game refuge boundaries were prepared by the department using GIS technology.

The 1999 DOQQs are used as the base map layer and the state game refuge boundaries that were established were overlaid on the DOQQs.

### Step Preparing the Map (continued)



These maps were then printed at a suitable scale.

#### **Update** of the boundary



The Department shall update the boundary determination whenever it determines that there has been a substantial change in the location of the banks of the stream used for locating such boundary

Substantial change in the location of the banks of the river will be deemed to have occurred if a horizontal movement of greater than 15 yards has occurred from the current river bank line, and such change in the river bank line has been maintained for at least 2 years

#### Update of the boundary (continued)



The Department may review its boundary determination on its own

The Department shall not be required to update the boundary determination more often than once every 5 years

#### Update of the boundary (continued)

Any member of the public may request the department to review its boundary determination by submitting a petition requesting such review



- Every petition must be accompanied by evidence that the boundary has undergone a substantial change

### Thank You

For additional information visit

http://www.dnr.state.ne.us/GardenCounty/GardenCounty.html

