

Water Right Attribution

Presentation to
Powder/Tongue and Northeast Wyoming
Basin Advisory Groups

February 28 and March 1, 2001

HKM/Lord Consulting

Introduction

- Previous presentations
 - Irrigated lands mapping
 - State Engineer's Office and water rights
- Presentation for tonight:
Water Rights Attribution
 - **What** is it?
 - **Why** do we do it?
 - **How** do we do it?
 - **What** do we have after were done?

1. What is water right attribution?

“Identification of the water rights attached to irrigated lands”

Water rights are defined by their attributes which include:

Permit Number

Source of Supply

Name of Ditch

Priority Date

Diversion amount (cfs, gpm)

Number of Acres irrigated

Type: OS, SS, AS, Sec

Status: adjudicated, unadjudicated

Use

Headgate location

2. Why do we define water right attributes?

- **For modeling:**
 - Add to what we learned from irrigated lands mapping:
 - location of lands
 - classification of irrigation
 - crop types
 - general understanding of source of supply
 - **Need to confirm source of supply**
- **For General Information**
 - water right attributes
 - presentation in GIS format

3. How are water rights identified and attributed?

Step 1: Map the irrigated lands polygons

- Completed by HKM

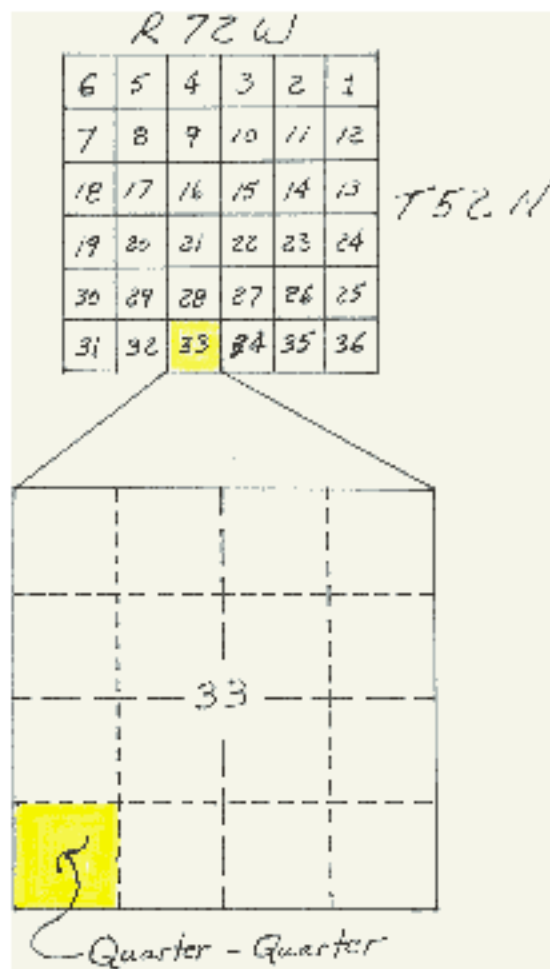
Step 2: Group the polygons into service areas

- Use the maps of irrigated lands showing the polygons and ditch systems

Step 3: Describe each polygon

- by quarter-quarter of a Section

Public Land Survey System



Ready to research records at the State Engineer's Office ...



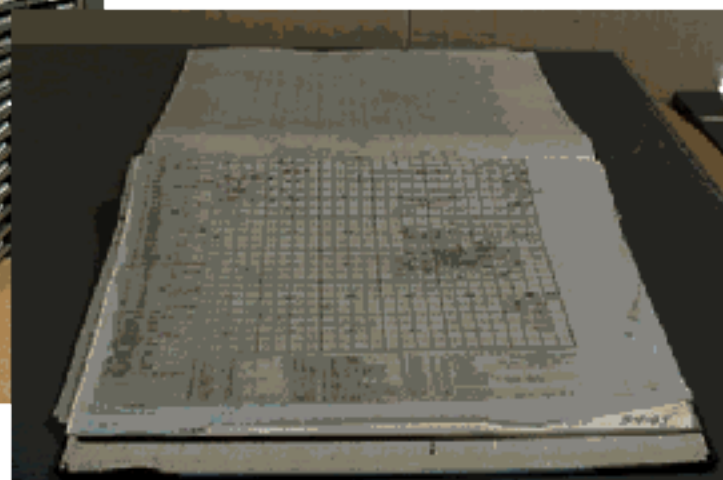
Herschler
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Cheyenne

4th Floor



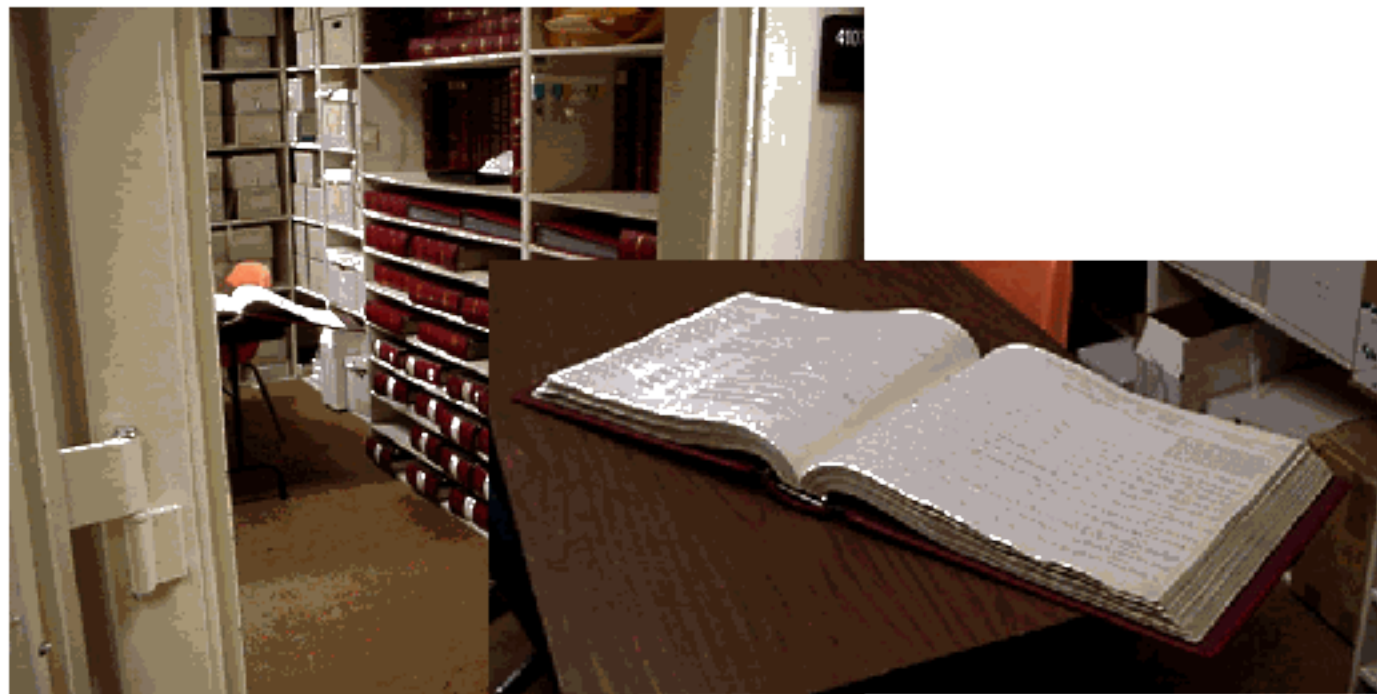
Step 4: Identify the water rights attached to each of the quarter-quarters

- Use the SEO "Township Plats"
- Identify water rights by basic records only



Step 5: Determine the attributes of each of the water rights

- Adjudicated rights: Order Record
- Unadjudicated rights: Permit
- Nonpermitted rights: Application



4. What do we have at the completion of the process?

- **Model input: source of supply**
- **Information on the water rights attached to the irrigated lands**
 - Water right attributes
 - Used in the GIS product
- **Database of the water rights in the basin**
 - Used to answer water right questions
 - Examples