### 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:
  - A dd 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

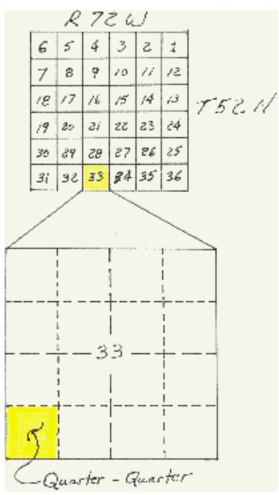
#### Step 2: Group the polygons into service areas

 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 ...



### 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

- A djudicated 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