

Aaron Thompson, Area Manager

Nebraska Kansas Area Office

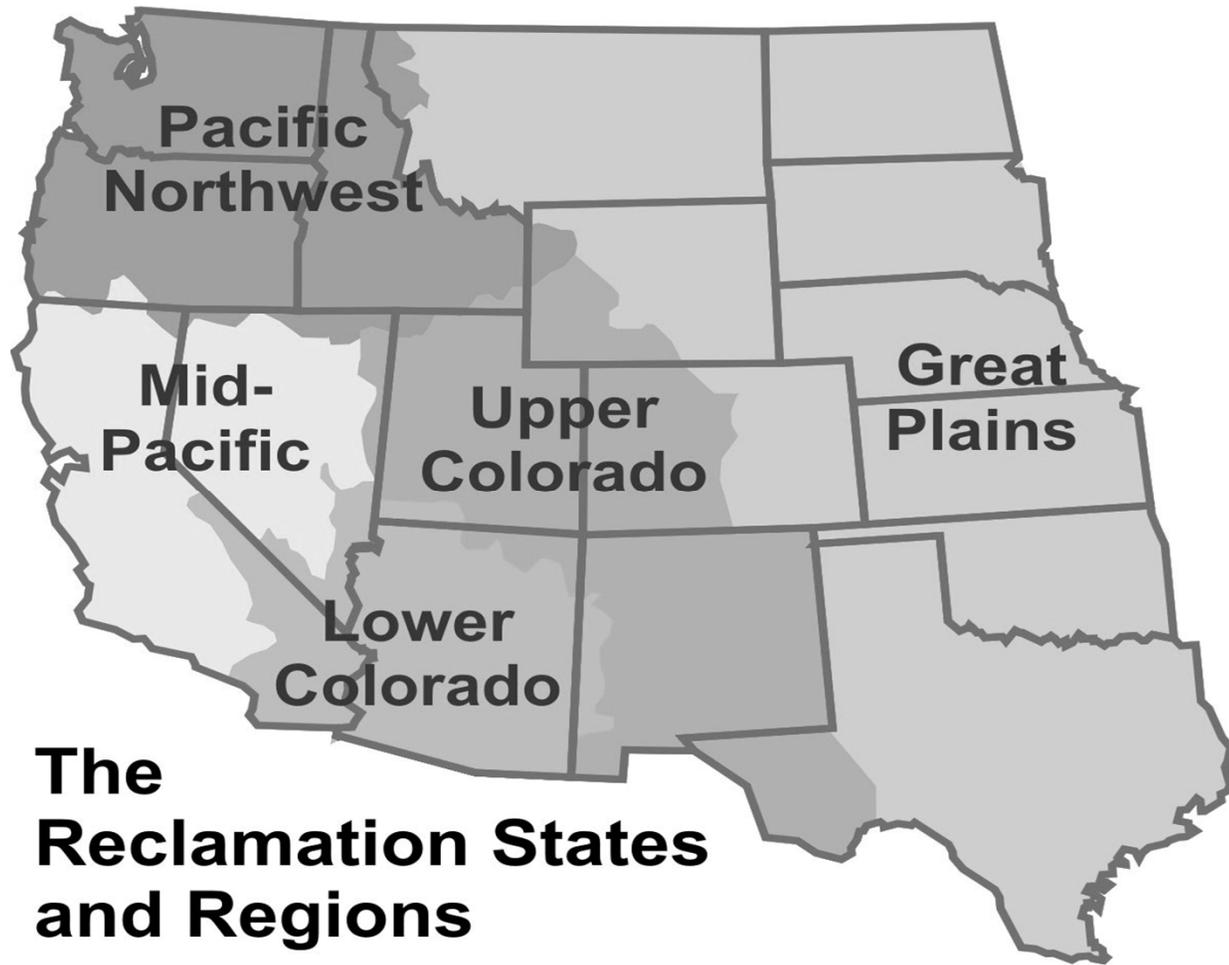
## **Utilizing Reclamation's Federal Reservoirs**

# About Reclamation

- Agency with the Department of the Interior
- The Reclamation Act of June 17, 1902
  - ... “construction and maintenance of irrigation works ...”



# Reclamation's Five Regions



# Great Plains Region

Administrative  
Areas



# Republican River History

- 1930's Drought
- 1935 Flood
- Peak flow at Cambridge 280,000 cfs
- Republican Valley Conservation Association

# Federal Studies

- Bureau of Reclamation Studies
- Corps of Engineers Studies
- Department of Agriculture Study

# Republican River Compact

Fed's needed Compact to continue

1<sup>st</sup> try not approved by US

2<sup>nd</sup> try approved after participation by US

Approved and Signed 12-31-42

Ratified by States

Approved by Congress and made effective

May 26, 1943

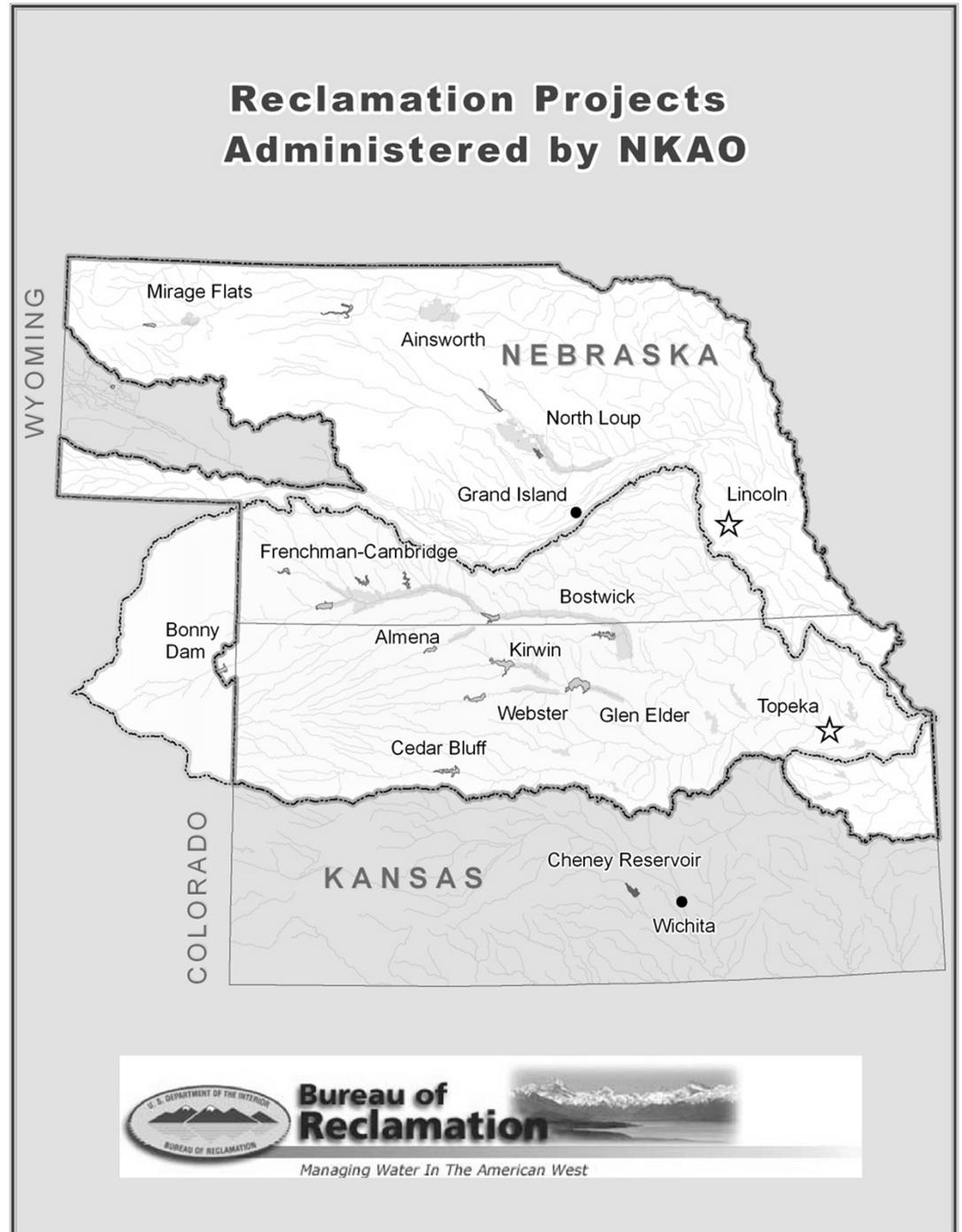
# Reclamation Projects administered by NKAO

## Pick-Sloan Missouri River Basin Units

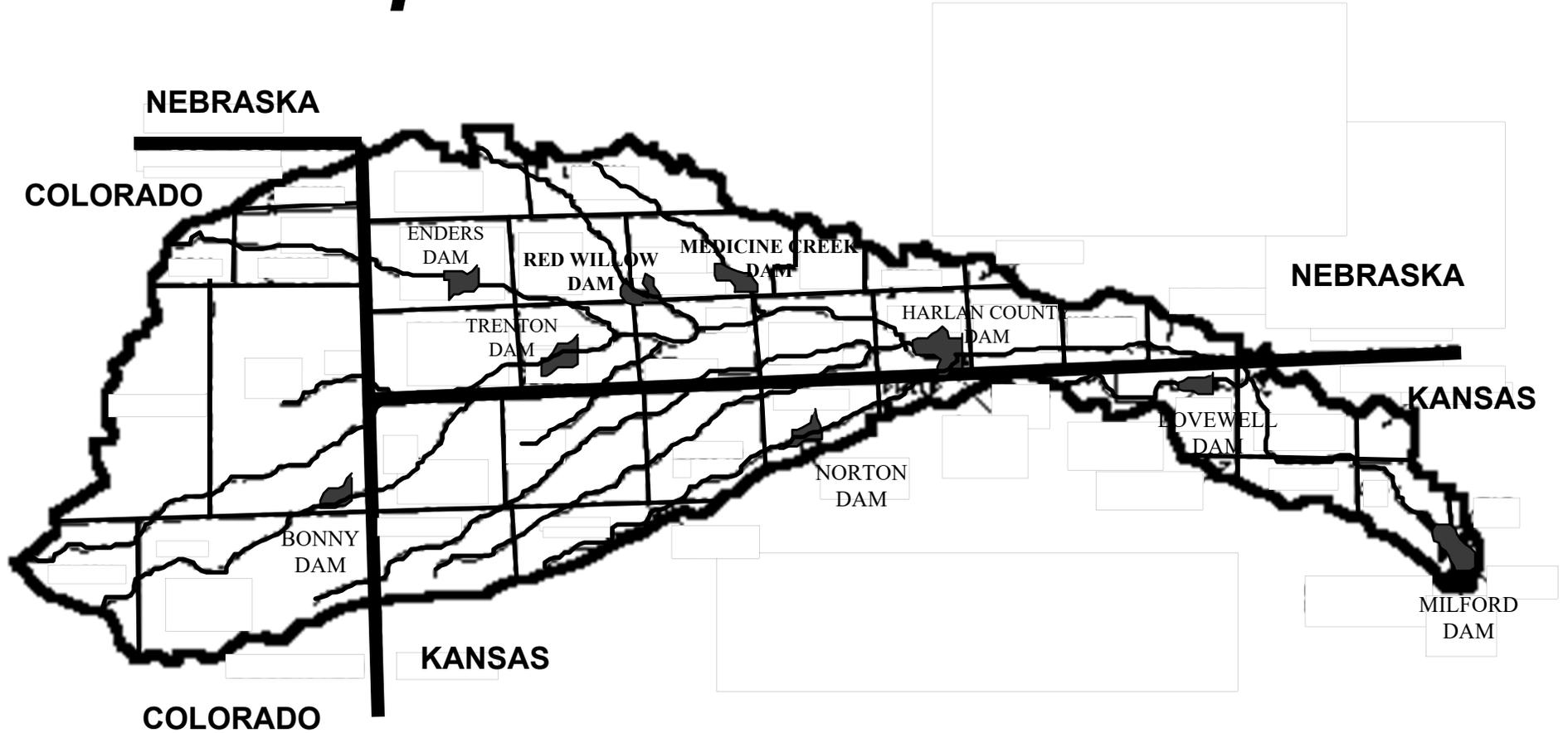
- Frenchman Cambridge Division
- Bostwick Division
- Glen Elder Unit
- Cedar Bluff Unit
- Webster Unit
- Kirwin Unit
- Almena Unit
- Arnel Unit (Bonny Dam)
- Ainsworth Unit
- North Loup Division

## Works Project Administration Program

- Mirage Flats Project



# *Republican River Basin*



# Reserved vs Transferred Works

- 11 - Reserved (multipurpose) Facilities
  - Reclamation is responsible for O&M of Dam
  - Beneficiaries (ie: Districts, M&I, State) pay percentage of O&M
- 4 - Transferred (single purpose)
  - O&M responsibility is transferred to Irrigation Districts
  - O&M Cost is 100% covered by the District
- Bostwick Division Districts also pay a percentage of Harlan County Lake O&M cost

# Reclamation Water Rights

- Section 8 of 1902 Reclamation Act
  - Reclamation is required to conform with state law and ensure that water rights are acquired for each of its projects
- Storage Rights
  - Entitles Reclamation to store water from specific streams
- Storage Use Rights
  - Provides the right to apply storage water on project lands to supplement natural flow rights

# Reclamation Water Rights

- Water must be physically and legally available
- Use will not adversely affect prior existing water rights
- In order to receive Reclamation Project water, a contract with Reclamation must be in place.

# Reclamation Water Contracts

- NE Irrigation Districts
  - Mirage Flats
  - Ainsworth
  - Twin Loups
  - Frenchman- Cambridge
  - Frenchman Valley
  - H&RW
  - Bostwick in NE
- KS Irrigation Districts
  - KS Bostwick
  - Alma
  - Kirwin
  - Webster
  - Glen Elder
- Others
  - Municipal - Norton, Beloit, Russell, Mitchell County Co. RWD
  - State of KS
  - State of CO

# Using Reclamation's Reservoirs to Ensure Basin Sustainability

- Reservoir provide improved management and flexibility of Basin's water supplies
  - Water Supplies for Irrigation Districts
  - Compact Compliance
- Excess Capacity
  - Space Available for temporary storage of Compact Water

# CURRENT RESERVOIR STORAGE

As of November 30, 2015

	<b>FULL POOL STORAGE <u>CONTENT (AF)</u></b>	<b>CURRENT STORAGE <u>CONTENT (AF)</u></b>	<b>PERCENT OF <u>FULL</u></b>
		0	0
SWANSON	110,175	41,260	37
ENDERS	42,910	9,979	23
HUGH BUTLER	36,224	12,541	35
HARRY STRUNK	34,647	34,267	99*
HARLAN COUNTY	314,111	156,122	50

\* Currently Releasing 118 cfs to the river.

# Republican River Basin Study

- **Nebraska, Kansas, Colorado, and Reclamation**
- **Developed Hydrologic Modeling**
  - **Integrated GW and SW models**
- **Sub-basin models will work in conjunction to model the Republican River Basin**
- **Future Tool for evaluating alternatives**

