

Surface Water Partnerships

Purchase & Closure

Six Mile Canal- diverted water since 1894.
Resulted in 130 AF of water to river annually.
Landowners converted to groundwater.

Management Agreements

Cozad Canal (1894)- water rights 16,074 AC land.
Thirty Mile (1927)- water rights 15,000 AC land.
Southside (1898)- water rights 4,326 AC land.

Platte Basin Projects

Enhancement Projects:

- 40%- NE Dept. Natural Resources
- 20%- Nebraska Environmental Trust
- 20%- Central Platte NRD
- 20%- Cozad Ditch/Thirty Mile



Coalition Project:

- 60%- NE Dept. Natural Resources
- 20%- Central Platte NRD
- 20%- Southside Irrigation District

PROJECT	COST	POTENTIAL AF TO RIVER ANNUALLY
Cozad	\$6.5 M	7,000 to 18,000
Thirty Mile	\$5 M	8,000 - 13,000
Southside	\$4.6 M	2,500 - 9,900
TOTAL	\$16.1 M	17,500 - 40,900





Conjunctive Water Management Platte River Basin

- Has made great strides towards accomplishing goals of integrated management in Platte Basin.

Continuation of ongoing projects & development of new projects necessary to maintain goals of integrated water management.

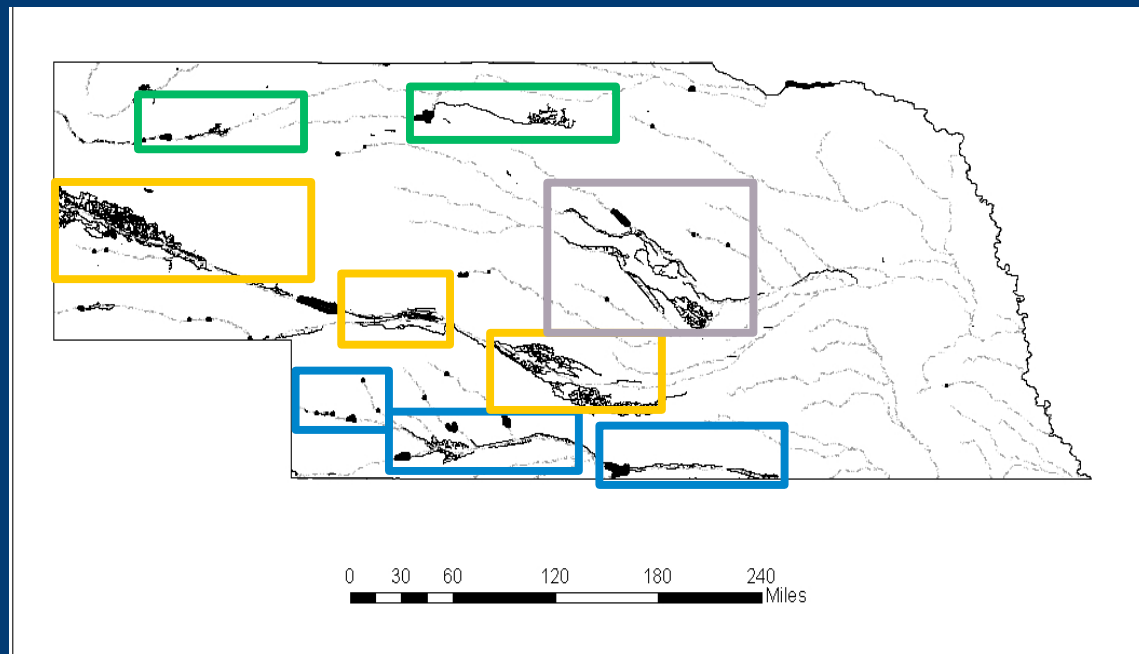
- Coordinated efforts will conserve, enhance & protect Nebraska's water resources for future generations.



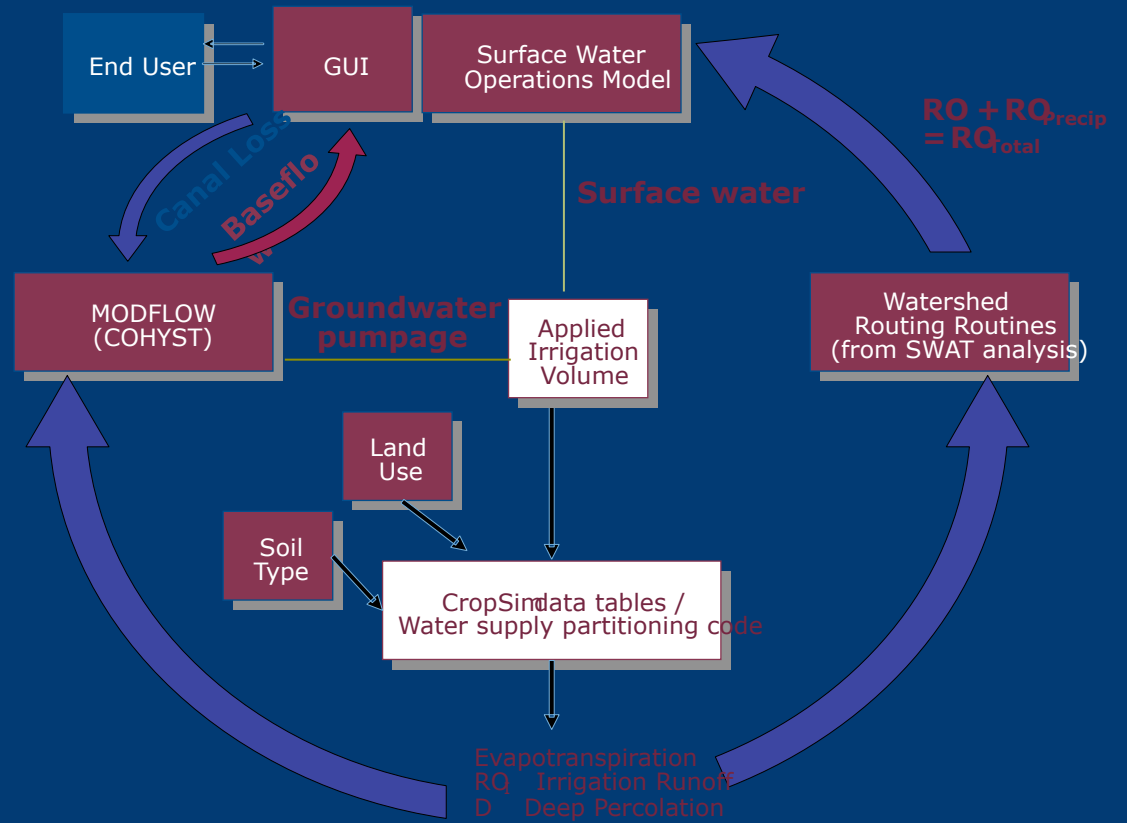
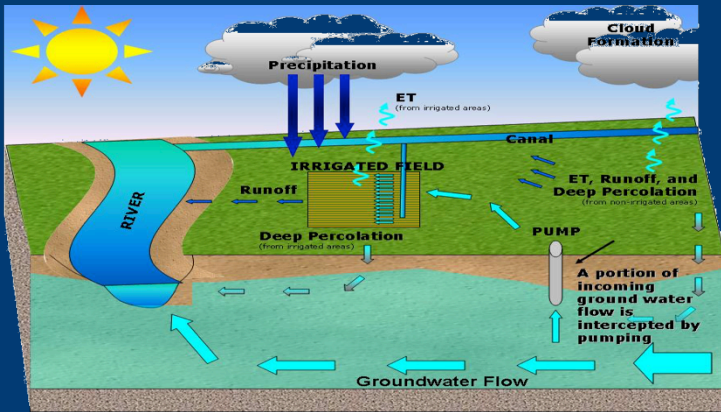
Future Opportunities for Conjunctive Management

Large-scale infrastructure exist to support CWM

CWM opportunities exist in many areas of the state including the Republican River Basin



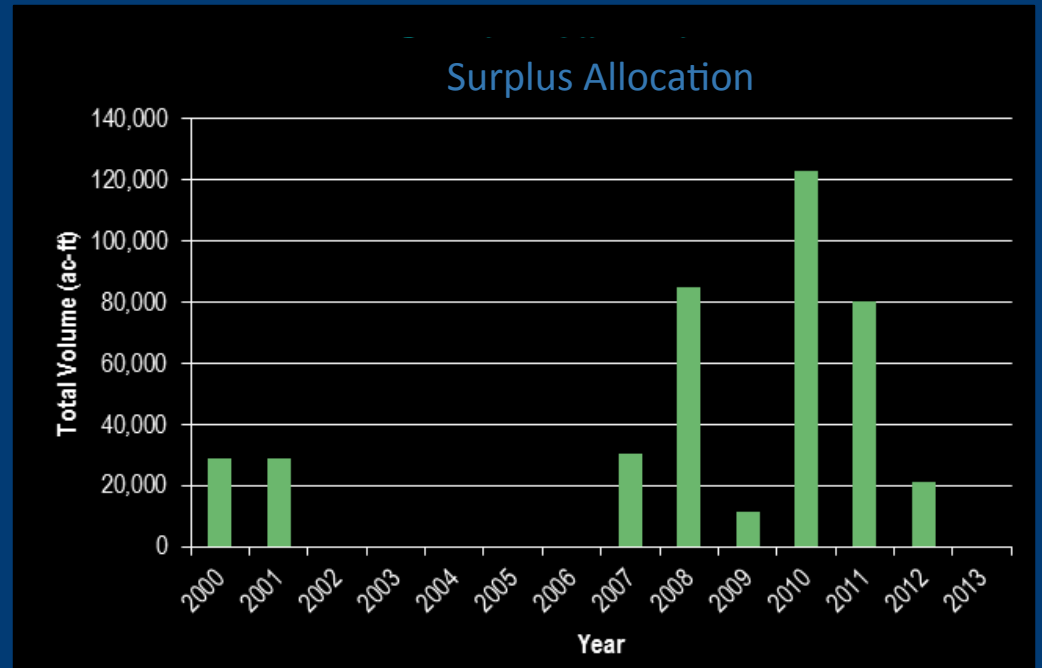
CWM Modeling Tools



Republican River Basin CWM Opportunities

- Determined by the Republican River Compact
- The total basin water supply is generally between 500,000 and 700,000 ac-ft Nebraska receives roughly half under the Compact
- During some dry years Nebraska fully utilizes its Compact allocations
- Many years Nebraska significantly underuses its Compact allocations

Approximately 400,000 ac-ft since 2000

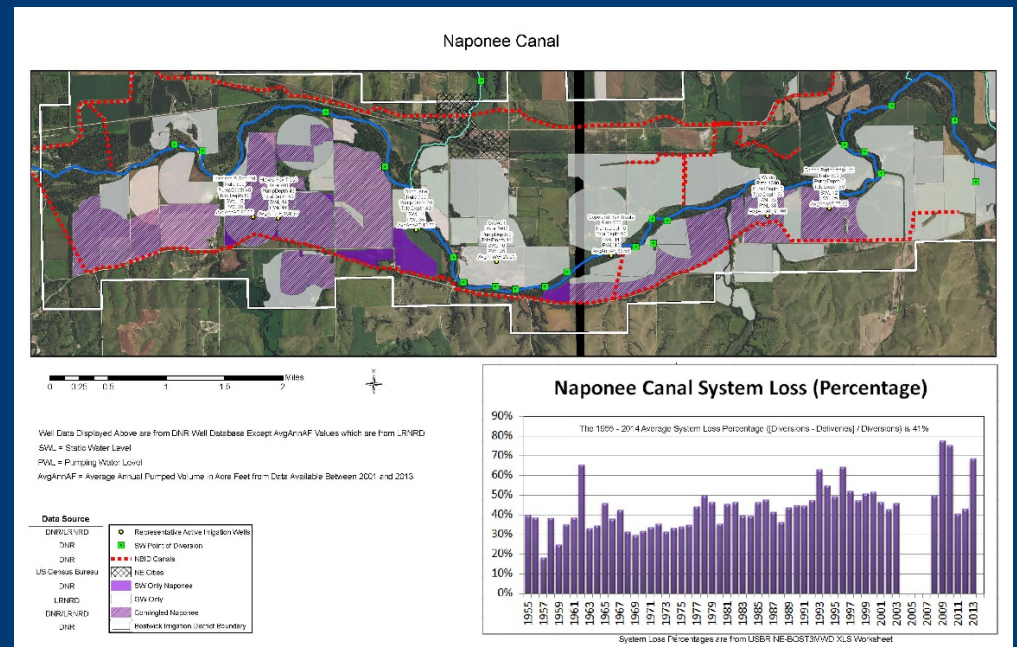


Republican River Basin CWM Opportunities

- D Create opportunities for “new” supplies
 - Wells with mitigation
 - Groundwater recharge
 - Expanded storage opportunities

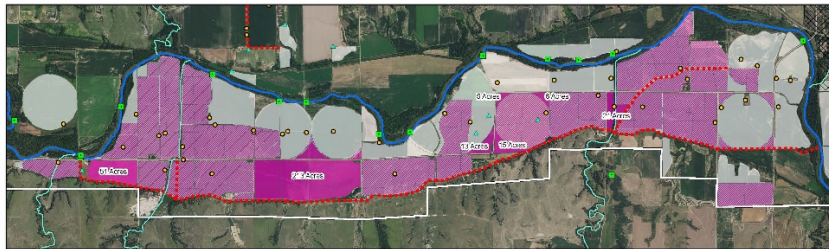
- D Manage current supplies with greater efficiency
 - Canal infrastructure improvements
 - New points of diversion
 - Alternative operations

- D Find creative new opportunities
 - Water exchanges
 - Water imports
 - Water use incentives

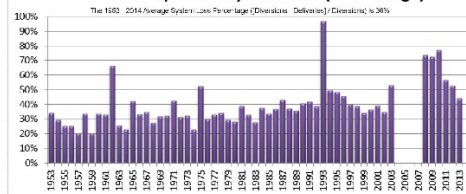


Republican River Basin CWM Opportunities

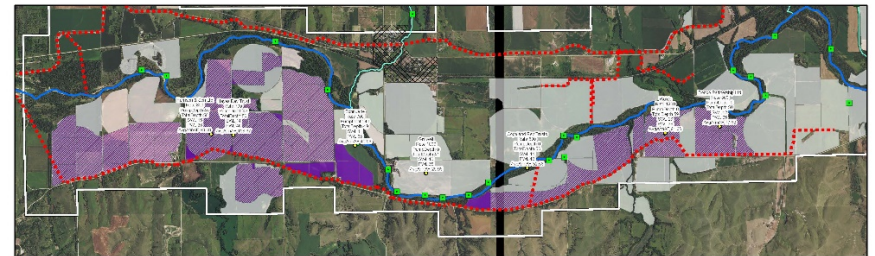
Franklin Pump Canal



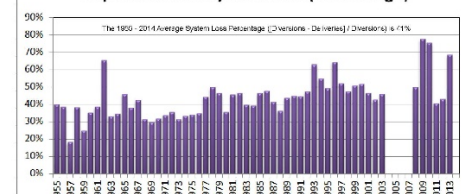
Franklin Pump Canal System Loss (Percentage)



Naponee Canal

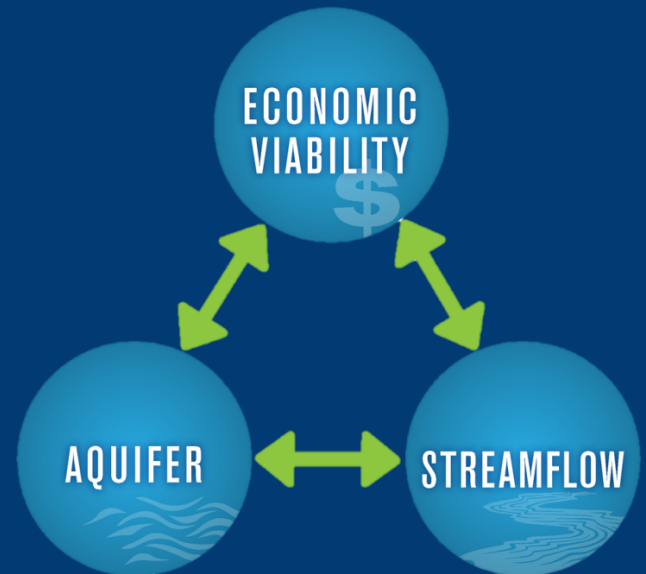


Naponee Canal System Loss (Percentage)



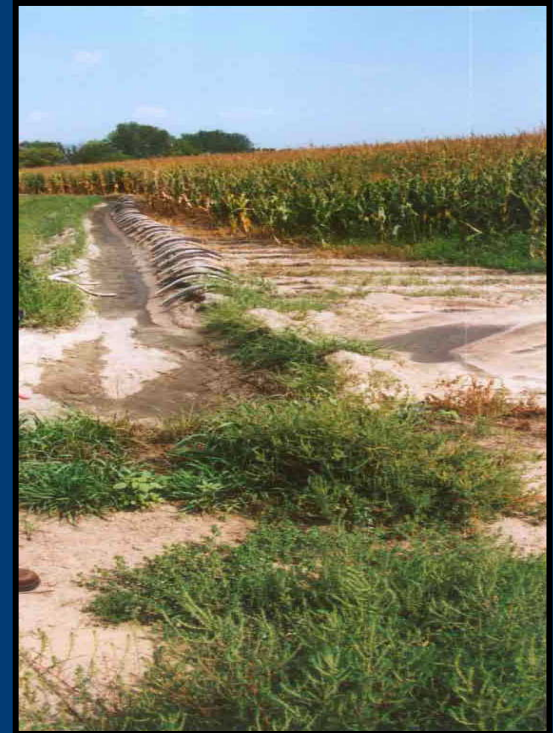
Republican River Basin CWM Opportunities

- Constructing new groundwater wells to provide a substitute supply for acres, following appropriate guidelines in the Compact and FSS
- Constructing new Republican River diversions (likely involving pumps and pipelines) located closer to specific tracts, to improve canal delivery efficiency
- Diverting water for off-season canal recharge, for retiming benefits to the river
- Developing dry-year lease option arrangements whereby land fallowing could occur on a rotating basis
- Using other water transfer/water banking systems
- Constructing new small reservoirs on Republican River tributaries
- Pursuing surface water and groundwater import opportunities from adjacent watersheds



Summary

- CWM is the coordinated and combined use of surface water and groundwater to increase the overall water supply of a region and/or improve the reliability of that supply.
- CWM can play a key role in meeting goals and objectives of integrated management.
- CWM opportunities exist in many areas of the state including the Republican River Basin



Summary

With close *collaboration* between water users and water managers, CWM can provide basin-wide benefits to *all water users*.

Questions

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