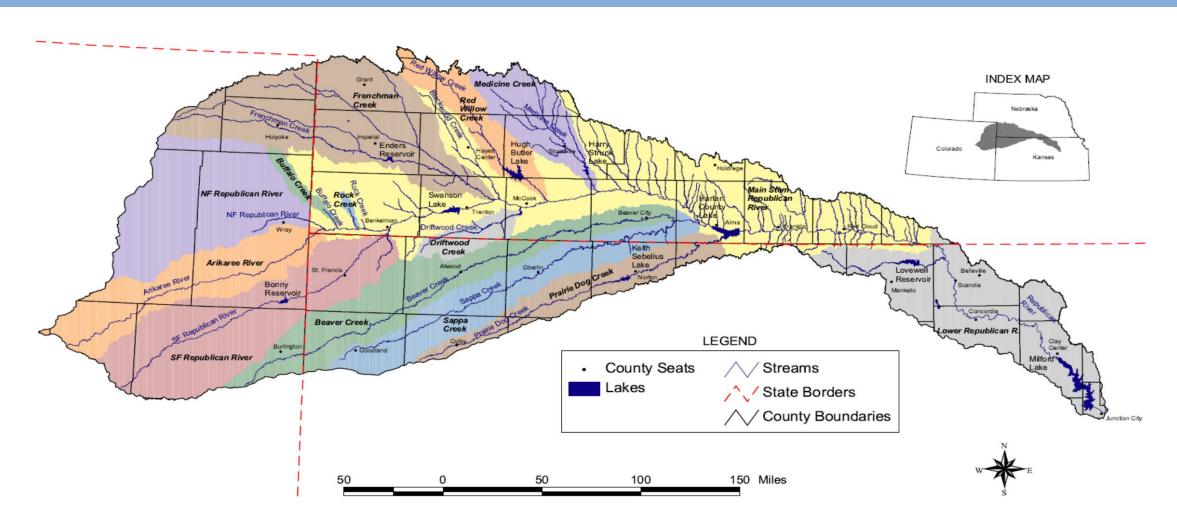
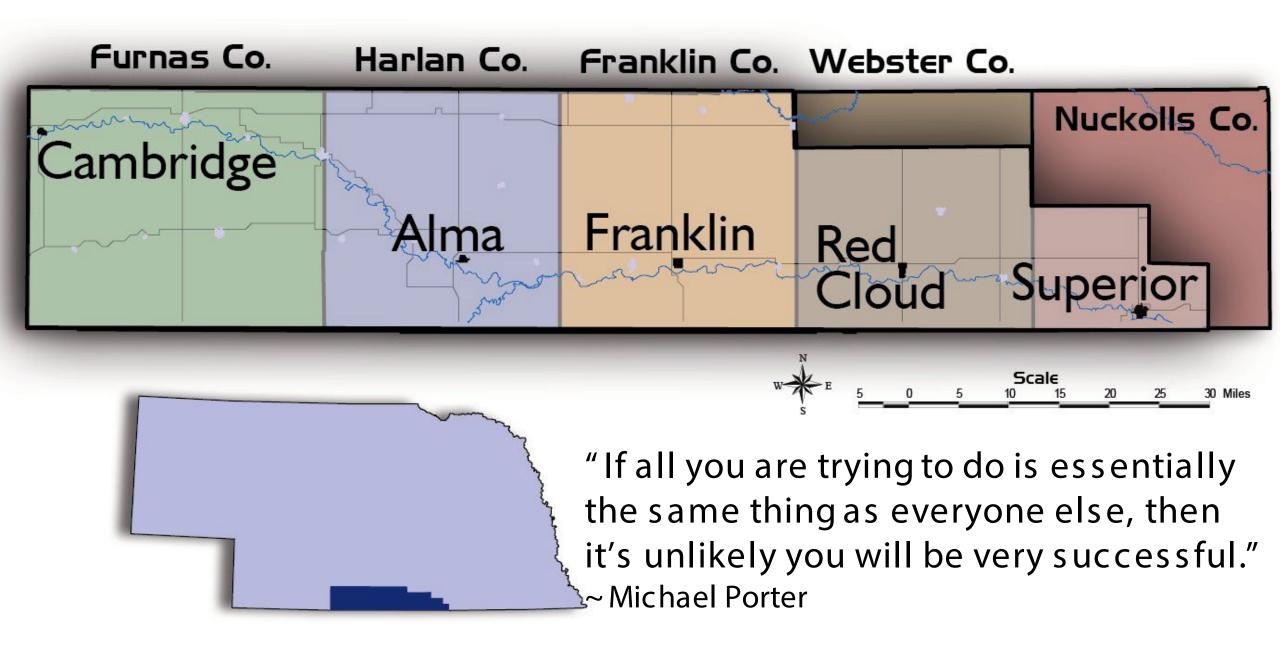
# South Central Water Conference

2025 Producer Update and Basin Outlook Lower Republican NRD



## LOWER REPUBLICAN NRD

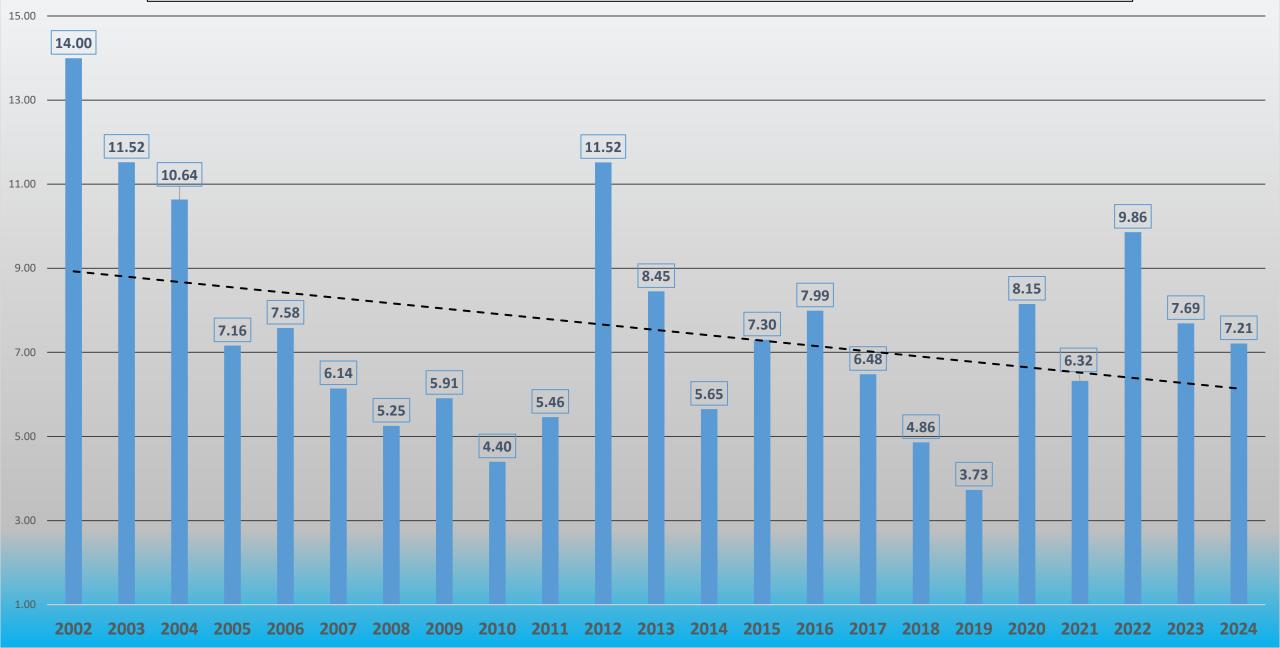


# Lower Republican NRD

## LRNRD: DISTRICTWIDE WATER USAGE 2003 - 2022

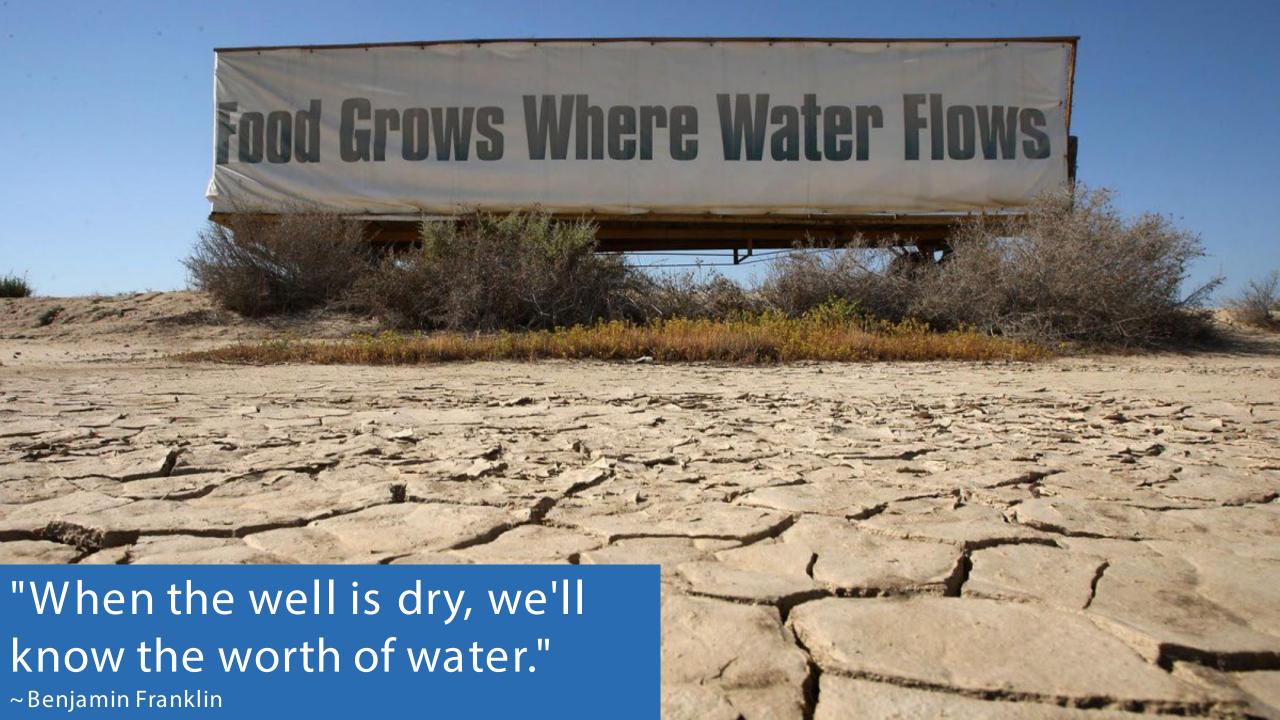
ERITAD. DISTRICT WIDE WATER OSAGE 2003 2022				
2003 = 13.03 inches per acre	2014 = 5.65 inches per acre			
2004 = 11.24 inches per acre	2015 = 7.30 inches per acre			
2005 = 7.17 inches per acre	2016 = 7.99 inches per acre			
2006 = 7.58 inches per acre	2017 = 6.46 inches per acre			
2007 = 6.11 inches per acre	2018 = 4.86 inches per acre			
2008 = 5.25 inches per acre	2019 = 3.73 inches per acre			
2009 = 5.92 inches per acre	2020 = 8.15 inches per acre			
2010 = 4.44 inches per acre	2021 = 6.32 inches per acre			
2011 = 5.46 inches per acre	2022 = 9.86 inches per acre			
2012 = 11.52 inches per acre	2023 = 7.69 inches per acre			
2013 = 8.45 inches per acre	2024 = 7.21 inches per acre			

# LRNRD Groundwater Pumping 2002-2024

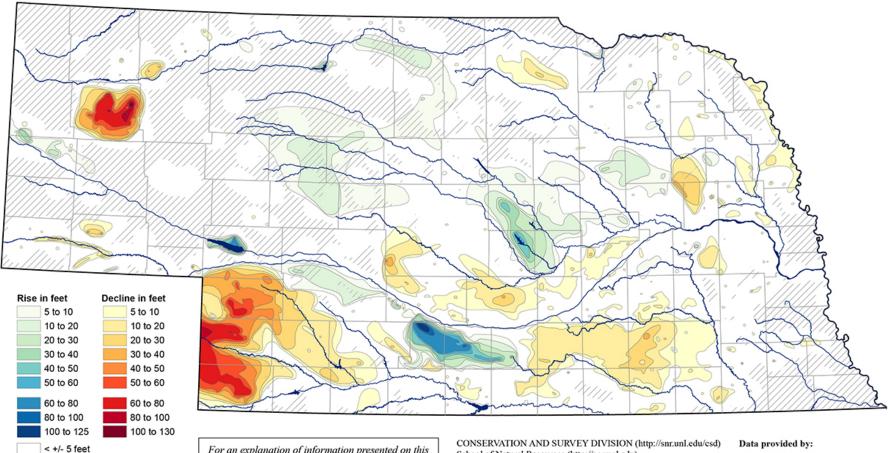


# Lower Republican NRD GROUNDWATER IRRIGATION ALLOCATIONS, 2023-2027

Total Allocation	45 Inches/Acre/5 Years
Annual or Base Allocation	9 Inches/Acre/Year
Maximum Annual Use	45 Inches/Acre (13 Inches/Acre in a Compact Call Year)
Carry over amount that can be used in the following allocation period	9 Inches/Acre (Max)
Hard Cap	13 Inches/Acre/Year (in a Compact Call Year)
Pooling allowed?	Yes
How are the allocations affected by surface water use?	Allocations are not affected by surface water use. Irrigators may use their full groundwater allocation, regardless of any surface water use.



## **Groundwater-Level Changes in Nebraska - Predevelopment to Spring 2023**



For an explanation of information presented on this map, see the 2023 Nebraska Statewide Groundwater-Level Monitoring Report, available for download at go.unl.edu/groundwater

CONSERVATION AND SURVEY DIVISION (http://snr.unl.edu/csd) School of Natural Resources (http://snr.unl.edu) Institute of Agriculture and Natural Resources University of Nebraska-Lincoln

Aaron Young, Survey Geologist, CSD Mark Burbach, Water Levels Program Supervisor, CSD

#### Data provided by:

Nebraska Natural Resources Districts Central Nebraska Public Power and Irrigation District

U.S. Geological Survey Nebraska Water Science Center

U.S. Bureau of Reclamation Kansas-Nebraska Area Office

Conservation and Survey Division, University of Nebraska - Lincoln



Sparse data

Surface water

(1 foot = .3048 meters)

#### February 2024

# **Current and Future Projects**

NCORPE Augmentation Project

HydroData/Producer Connect (Nitrogen Dashboard)

Rural Water District – Riverton Extension

Platte-to-Republican Diversion Project

Flag Creek Augmentation Project

WaterSMART grant for Telemetry Flowmeters – Phase I

Weather Stations for Rubicon Gates on Irrigation District Canals

WaterSMART grant for Telemetry Flowmeters – Phase II

Tract

Wells

Flowmeters

A Chemigation

Soil Samples

Crops & Management

Nitrogen

Settings

Total Tract Acres

233.5

Reported Corn Yield

225 bu / ac

7% ↑ than last year

**Total Pumping** 

1913.56

66% nthan last year



### Messages

DATE MESSAGE TITLE TYPE ACTIONS

## Flowmeter and Usage Overview

Total Water Usage

2844.21 ac-in

2179.52% ↑ than last year



Water Use per Acre

4.71 in / ac

3.61% ↑ than last year



Flowmeter Count

7



## Flowmeter Info

FLOWMETER ID	METER LOCATION	SERIAL NO	FACTOR	ALIAS
6537		23-08588	0.01	Ø
2018		00-10-1104N	1000	Z
2533	submers west of creek south	02-6-1338N	100	Ø
6464	Well	23-04873	0.01	Z
6492		23-08555	0.01	



# **PARTNERSHIPS**

- ▶ USDA-NRCS
- **► NARD**
- ▶ NACD
- ► DEPT OF NATURAL RESOURCES
- ▶ US ARMY CORPS OF ENGINEERS
- **▶ US BUREAU OF RECLAMATION**
- ► TRAILBLAZER RC&D
- TWIN VALLEY WMA
- SOUTHWEST WMA
- ▶ FRENCHMAN-CAMBRIDGE ID
- ► NEBRASKA BOSTWICK ID
- ► NE WATER RESOURCES ASSOCIATION
- DISTRICT SCHOOLS & FFA PROGRAMS
- **▶ PRD**
- ► CENTRAL NE PP&ID

- **► COUNTY GOVERNMENTS**
- **► MUNICIPALITIES**
- ► USDA-FOREST SERVICE
- ► NE-FOREST SERVICE
- **▶ NCORPE**
- ▶ NDEE
- ▶ UNIVERSITY OF NEBRASKA
- **▶ USGS**
- ► NEBRASKA GAME & PARKS
- ► REPUBLICAN RIVER COMPACT KS & CO
- ► SUPERIOR HARDY SPA Little Blue
- ► NEBRASKA ENVIRONMENTAL TRUST
- ► MCCROMETER
- ► NEBRASKA LEAD PROGRAM

