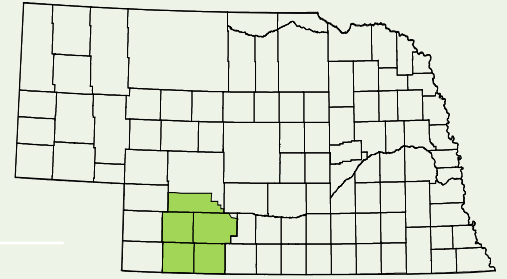


MIDDLE REPUBLICAN NATURAL RESOURCES DISTRICT



TOTAL LAND AREA

3,805 square miles or 2,449,380 acres

ELEVATION

2,500 to 3,100 ft. above sea level

PRECIPITATION

Average annual precipitation ranges from 19 inches in the west to 22 inches in the east. Nearly three fourths of the precipitation falls from April to September with frequent variations between seasons. Drought conditions are not uncommon. Southwest Nebraska has been in a severe drought for the past five years.

CLIMATE

The climate is one of limited precipitation, low humidity, frequent wind shifts, and frequent sharp temperature changes. The Rocky Mountains to the west have a major effect on the district's climate.

SURFACE WATER

Major rivers are the Republican and the Frenchman. Other tributaries are Medicine, Blackwood, Red Willow, Stinking Water, Muddy, Driftwood, and Beaver Creeks. Flood control and irrigation supply dams are located at Swanson Reservoir west of Trenton on the Republican River, Red Willow Lake north of McCook on the Red Willow Creek, and Harry Strunk Lake north of Cambridge on the Medicine Creek. Another dam is at Enders Lake on the Frenchman River west of the district boundary. These dams supply surface water for irrigation to 44,287 acres of crops located in the Middle Republican NRD.

GROUND WATER

Adequate supplies of ground water exist in most areas except south of the Republican River. The base of the underlying sand and gravel layers that contain the water bear-

Located in southwestern Nebraska, the Middle Republican Natural Resources District consists of all of Hayes, Hitchcock, and Red Willow Counties, most of Frontier County, and the southern one-fourth of Lincoln County. The district is bounded by the Kansas state line on the south and is 72 miles wide (from east to west) and 63 miles long (from north to south). The city of McCook is the largest municipality.

The total land area of the district is 3,805 square miles, or 2,449,380 acres. One in eight acres is irrigated. Current property tax for the district is 623.518. The levy rate is .40760. In 2005-06, more than 40% of the district's \$1,370,700 budget has been allocated to Groundwater Management.

In the past, the focus of the MRNRD has been on Water Quantity. The current focus is on Integrated Management. In most respects, Integrated Management will address Water Quantity issues. In November 2004, the Board of Directors adopted Ground Water Management Area Rules and Regulations and Integrated Management Plan, effective January 1, 2005. This process initially began in July of 1996 after the passage of LB 108, legislation that first recognized the relationship between ground water and surface water in Nebraska statutes. Action by the NRD and the Department was delayed when Kansas filed their lawsuit against Nebraska in May of 1998. With the settlement of the lawsuit in December of 2002 and the final determination made by the Department in June of 2003, the Department and the NRD began actively pursuing management concepts that would ensure compliance with the compact settlement without jeopardizing the economic viability, social and environmental health, safety, and welfare of the Republican River Basin.

These rules, which will help Nebraska maintain compliance with the Republican River Compact Settlement, limit pumping to a total of 39 inches over a three-year period beginning in 2005. They also include a moratorium on new wells and no new development of irrigated acres. Reductions resulting from active participation in incentive programs such as CREP and

2005 Groundwater Use by County*

County	Use	Water Usage	Irrigated Acres	# of Meters	Average Use
Frontier	Irrigation	536481.27	67748.8	563	7.92
Hayes	Irrigation	585623.01	67271.8	472	8.71
Hitchcock	Irrigation	296707.10	37607.8	511	7.89
Lincoln	Irrigation	710847.64	75628.7	513	9.40
Red Willow	Irrigation	508751.86	52140.6	810	9.76
Average Usage District-wide					8.78

*All data are provisional and subject to revision.

ing material rest on impervious layers of Niobrara Chalk, Pierre Shale or formations from the White River Group. As of October 2004, 3,549 irrigation wells were registered.

SOIL TYPES

Soils range from sandy in the north and west to silt in the south and east.

LAND USE

Land use ranges from ranching in the north and west to farming in the south and east. Nearly 52% of the land consists of grazed pasture and rangeland, while 46% is considered cropland. The remaining 2% are in urban areas, trees, water, roads and farmsteads. 1 acre in 8 is irrigated.

CROPS

The major crops are corn, wheat, sorghum, and soybeans, all grown under dryland and irrigated conditions. Corn is the primary crop. Grain and forage are grown as live-stock feed.

LIVESTOCK

Beef cattle are the most common livestock with some dairy cattle and hog production.

POPULATION

The 2000 census reported 19,302 people. There are no major changes anticipated in population in the near future. Population numbers have seen major declines in the district in the previous 50 years. The average age of residents exceeds the national average.

ECONOMY

Most occupations are related to or are dependant on agriculture. There is some light industrial development in and around McCook. Hitchcock and Red Willow Counties are state leaders in crude oil production. One ethanol plant is in production, with others proposed.

EQIP that will permanently or temporarily retire irrigated acres will be necessary to maintain compliance with the Republican River Compact settlement. The Department of Natural Resources and the Middle Republican NRD will work toward developing and funding water conservation incentive programs to achieve these reductions. Additional revisions, based on annual review of Compact compliance, will be considered in the future.

The Rules and Regulations for the Ground Water Management Area will continue the management actions of the NRD first started with metering of wells in 1998 and certification of access in 2003. The Integrated Management Plan was the first such plan approved in Nebraska.

As of January 1, 2005, all regulated wells (wells that pump more than 50 gallons per minute) in the District were required to be metered. There are currently 3,255 regulated wells in the district watering a total of 313,605.25 certified acres. The Average water use for irrigation district-wide was 14.85 acre inches in 2004. In 2005, producers self-regulated an additional 30%, pumping an average of 8.78 acre inches.

2005 Certified Acres

County	Total Certified Acres	Number of Wells	Quick Response Area Acres	Quick Response Area Wells	Platte Area Acres	Platte Area Wells
Frontier	74,056.30	668	24,455.20	271	864.20	4
Hayes	68,328.30	506	16,126.30	166	0	0
Hitchcock	39,037.35	553	24,213.20	397	0	0
Lincoln	76,467.80	531	7,703.00	60	2,549.50	14
Red Willow	55,720.50	997	35,897.80	672	0	0
TOTAL	313,605.25	3,255	108,395.50	1,566	3,413.70	18

2005 CREP

At the end of 2005, CREP applications submitted for the Republican Basin totaled 40,887.67 acres, nearly 75% of the acres allocated to the Basin.

2005 EQIP Contracts (approved)

NRD	# Contracts	Total Acres	Ground Water Acres	Surface Water Acres
Upper Republican NRD	6	527.90	527.90	-
Middle Republican NRD	38	2,781.12	2,524.02	257.10
Lower Republican NRD	90	5,870.54	3,297.87	2,572.67
Tri-Basin NRD	2	109.72	109.72	-
TOTAL	136	9,289.28	6,459.51	2,829.77

Board of Directors: Joseph Anderjaska, *Hayes Center*; Duane Dodson, *Maywood*; Kevin Fornoff, *Hayes Center*; Gayle Haag, *Bartley*; Dennis Hoyt, *Culbertson*; Stanley Moore, *Bartley*; Jerry Mustion, *Culbertson*; Michael Peters, *McCook*; and Donald Roberts, *McCook*

MRNRD Office: General Manager, *Daniel Smith*; Assistant Manager, *Robert Merrigan*; Office Supervisor, *Christy Peterson*; Secretary / Receptionist, *Mary Tidyman*; Information & Education Coordinator, *Kara Gall*; Technical Supervisor, *Rich Karre*; Technicians, *Tom Hansen and Dennis Peterson*

NRCS Field Office Clerks: Frontier County, *Kim Smith*; Hayes County, *Kathy Barger*; Hitchcock County, *Carol Lashley*; Lincoln County, *Kathy Clark*; Red Willow County, *Betty Fritsch*

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