

# NEBRASKA WATER FACTS

from the  
NEBRASKA WATER CENTER

Nebraska means “flat water” from the Omaha Sioux “ni braska” and Oto “ni brathge” describing the Platte River. The Platte River was named by early French explorers, also meaning “flat.”

## SURFACE WATER

- Nearly 80,000 miles of rivers and streams drain to the Missouri River in the East.
  - Along the Niobrara and Missouri Rivers, 197 miles are designated as National Wild and Scenic.
- Tallest waterfall is Smith Falls, spilling 63 feet into the Niobrara River.
- Largest storage reservoir: Lake McConaughy
  - When full is 1.74 million acre-feet of storage
  - Covers 30,500 acres
  - Created by the state’s largest dam, Kingsley Dam
  - Supplies irrigation directly & indirectly for 530,000 ac
- More than 2,900 dams, >25 ft tall or 50 ac-ft storage

## GROUNDWATER

Total groundwater state **#1**

- Mostly from the Ogallala Aquifer, part of the High Plains Aquifer.
  - Water among mostly sand and gravel.
  - From 1 to 1000+ feet thick.
  - Poured over the surface of the state, the water would be 38 feet deep.
- Groundwater and surface water are connected. For example:
  - More than 90% of the Loup Rivers’ streamflow started as groundwater.
- Nebraska has more than 192,000 registered groundwater wells.

**#1**

Irrigated acres: 9.1 million

## WATER USE

- Annual average additional crop value of \$1.5 billion statewide. Added property valuation of \$13-24 billion.
- Agriculture irrigation is 91% of Nebraska’s total consumptive water use.
- From 1990 to 2014, Nebraska now grows 1.7 times more corn and 1.8 times more soybeans per gallon of water.
- From 1960 to 2016, Nebraska raises 1.8 times the amount of beef per gallon of water and 5.1 times more milk.
- Other uses of Nebraska’s water:
  - home 5%; industrial 1%; thermoelectric 1%; livestock 1%
- 85% of Nebraskans get their home water from groundwater.
- 594 public water supply systems serve 1.69 million residents. EPA requires testing for 90 contaminants.
- More than 360,000 residents use private wells. Exempt from testing.
- Each person uses an average of 122 gallons of water each day.
  - Home water use has dropped by 1/3 in the last 20 years.



Center pivot irrigating soybeans. Photo: UNL

13 inches precipitation  
5,424 feet above sea level

2.5 times more precipitation

More than 4,500 feet  
drop in elevation

Changes  
West to East

33 inches precipitation  
840 feet above sea level

Smith Falls. Photo: Nebraskaland Magazine.



## RECREATION

Lake McConaughy with >2 million visitors

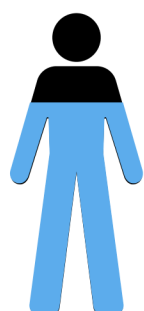


- 7 out of top 10 Nebraska attractions involve water.
- Crane migration annual visitors' impact: \$17.2 mill.

## LAND USE

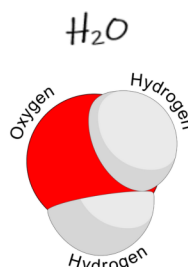
- Nebraska's farms and ranches utilize 44.8 million acres, 92% of the state's total land area.
- 22 million acres of rangeland and pastureland in Nebraska, half of which are in the Sandhills.
- 1/3 of Nebraska land is annual crops.
- Nebraska's cities and town cover about 1% of the land, less than wetlands and forest.

## WATER SCIENCE



A person's body is  
66% water

A corn plant is  
80% water



Only substance  
found naturally as

liquid, solid, and gas

Author: Crystal A. Powers | Reviewers: Katie Pekarek, Gary Stone | Sources:

