NORTH DAKOTA'S GLACIAL DRIFT AQUIFERS

FOR MORE INFORMATION
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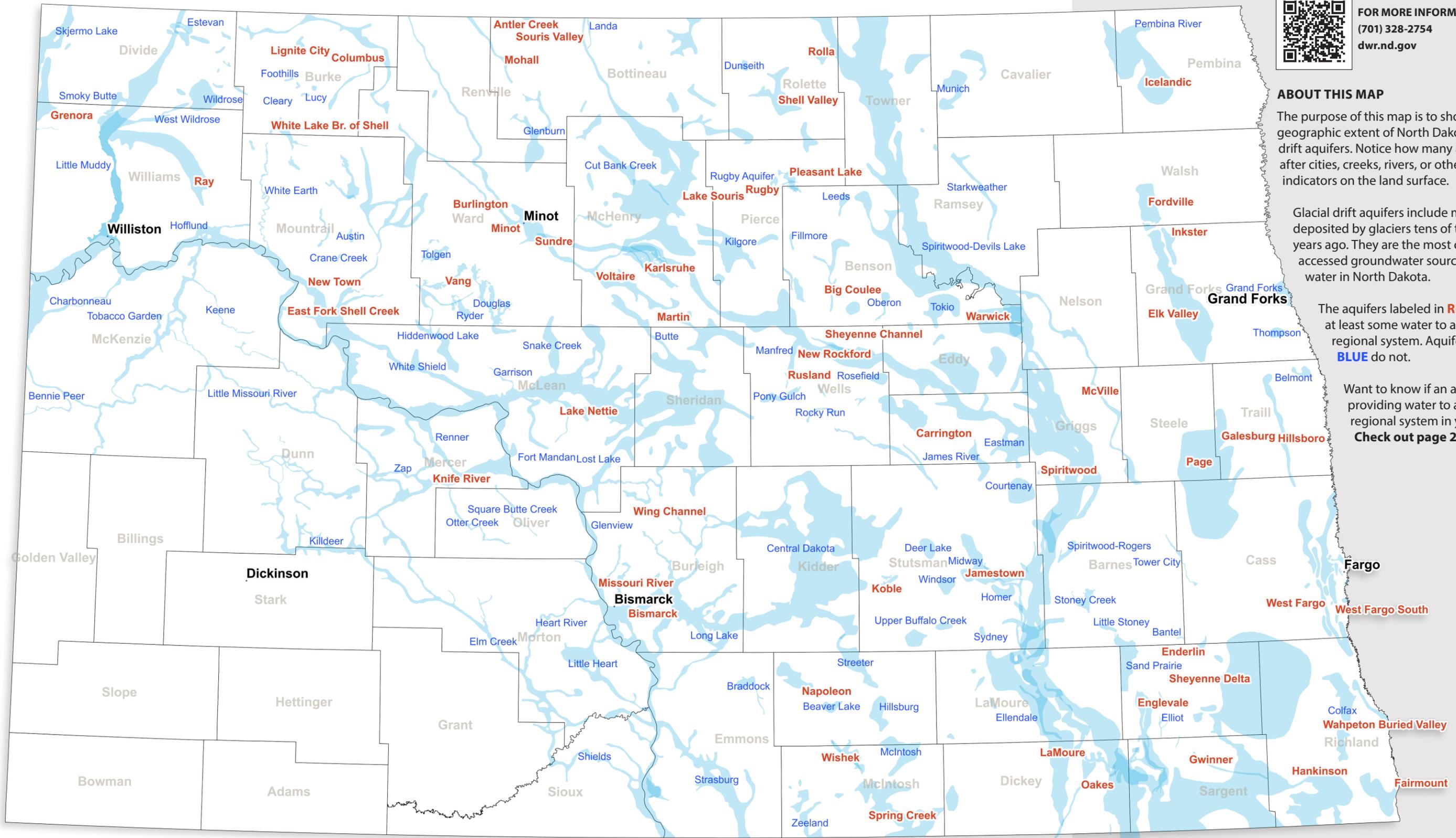
ABOUT THIS MAP

The purpose of this map is to show the general geographic extent of North Dakota's glacial drift aquifers. Notice how many are named after cities, creeks, rivers, or other geographic indicators on the land surface.

Glacial drift aquifers include materials deposited by glaciers tens of thousands of years ago. They are the most commonly accessed groundwater source for drinking water in North Dakota.

The aquifers labeled in **RED** provide at least some water to a city or rural/regional system. Aquifers labeled in **BLUE** do not.

Want to know if an aquifer is providing water to a city or rural/regional system in your region? **Check out page 2**!

Counties / place labels (gray): Divide, Burke, Renville, Bottineau, Rolette, Towner, Cavalier, Pembina, Williams, Mountrail, Ward, McHenry, Pierce, Ramsey, Benson, Nelson, Walsh, Grand Forks, McKenzie, Dunn, Mercer, McLean, Sheridan, Wells, Eddy, Griggs, Steele, Traill, Golden Valley, Billings, Oliver, Burleigh, Kidder, Stutsman, Barnes, Cass, Stark, Morton, Grant, Emmons, Logan, LaMoure, Dickey, Ransom, Sargent, Richland, Slope, Hettinger, Bowman, Adams, Sioux, McIntosh

Aquifer labels:

Skjermo Lake, Estevan, Antler Creek, Souris Valley, Landa, Pembina River, Lignite City, Columbus, Mohall, Rolla, Foothills, Dunseith, Munich, Icelandic, Cleary, Lucy, Wildrose, Smoky Butte, West Wildrose, Shell Valley, Rolette, Grenora, White Lake Br. of Shell, Glenburn, Cut Bank Creek, Rugby Aquifer, Pleasant Lake, Starkweather, Little Muddy, White Earth, Ray, Lake Souris, Rugby, Leeds, Fordville, Williston, Hofflund, Burlington, Ward, Minot, Sundre, Kilgore, Fillmore, Spiritwood-Devils Lake, Inkster, Austin, Crane Creek, Tolgen, Voltaire, Karlsruhe, Big Coulee, Oberon, Tokio, Warwick, Elk Valley, Thompson, New Town, Vang, Douglas, Ryder, Martin, Charbonneau, Tobacco Garden, Keene, East Fork Shell Creek, Hiddenwood Lake, Butte, Sheyenne Channel, Manfred, New Rockford, Bennie Peer, Little Missouri River, Snake Creek, Rusland, Rosefield, McVille, Belmont, White Shield, Pony Gulch, Rocky Run, Lake Nettie, Carrington, Eastman, Galesburg, Hillsboro, Renner, Fort Mandan, Lost Lake, James River, Page, Zap, Knife River, Spiritwood, Square Butte Creek, Otter Creek, Glenview, Wing Channel, Courtenay, Killdeer, Central Dakota, Deer Lake, Spiritwood-Rogers, Tower City, Fargo, Missouri River, Midway, Jamestown, Bismarck, Koble, Windsor, Homer, West Fargo, West Fargo South, Heart River, Long Lake, Upper Buffalo Creek, Stoney Creek, Elm Creek, Sydney, Little Stoney, Bantel, Little Heart, Streeter, Enderlin, Sand Prairie, Sheyenne Delta, Braddock, Napoleon, Hillsburg, Englevale, Elliot, Colfax, Beaver Lake, Ellendale, Wahpeton Buried Valley, Shields, LaMoure, Gwinner, Hankinson, Wishek, McIntosh, Strasburg, Oakes, Fairmount, Zeeland, Spring Creek, Williston, Dickinson, Minot, Grand Forks

GLACIAL DRIFT AQUIFER

NORTH DWR Dakota | Water Resources
Be Legendary.

AQUIFERS PROVIDING WATER TO CITIES, RURAL, OR REGIONAL SYSTEMS

Aquifer	City/Rural/Regional System(s) Served
A	
Antler Creek	All Seasons Water Users Dist.
B	
Big Coulee	Maddock, City Of
Bismarck	Lincoln, City Of
Burlington	Burlington, City Of
C	
Carrington	Carrington, City Of
Columbus	Upper Souris Water Dist.
E	
Elk Valley	East Central Regional Water Dist.
Elk Valley	Larimore, City Of
Elk Valley	Northwood, City Of
Elk Valley	Tri-County Water Dist.
Enderlin	Enderlin, City Of
Englevale	Ransom County Water Resource Dist.
F	
Fairmount	Fairmount, City Of
Fordville	Minto, City Of
Fordville	Park River, City Of
Fordville	Walsh Rural Water Dist.
Fort Union*	Flaxton, City Of
Fox Hills*	Alexander, City Of
Fox Hills*	Beach, City Of
Fox Hills*	Belfield, City Of
Fox Hills*	Bowman, City Of
Fox Hills*	Goodrich, City Of
Fox Hills*	Halliday, City Of
Fox Hills*	Hazelton, City Of
Fox Hills*	Hettinger, City Of
Fox Hills*	International Peace Garden
Fox Hills*	Medora, City Of
Fox Hills*	Rhame, City Of
Fox Hills*	Scranton, City Of
Fox Hills*	Sentinel Butte, City Of
Fox Hills*	Steele, City Of
Fox Hills*	Streeter, City Of
Fox Hills*	Theodore Roosevelt Medora Found.
Fox Hills*	Tuttle, City Of
G	
Galesburg	East Central Regional Water Dist.
Grenora	Grenora, City Of
Gwinner	Gwinner, City Of
H	
Hankinson	Southeast Water Users Dist.
Hillsboro	Hillsboro, City Of

Aquifer	City/Rural/Regional System(s) Served
I	
Icelandic	North Valley Water Dist.
Inkster	Agassiz Water Users
J	
Jamestown	Jamestown, City Of
K	
Karlsruhe	Karlsruhe, City Of
Knife River	Beulah, City Of
Koble	Medina, City Of
L	
Lake Nettie	Mclean-Sheridan Joint Water Board
Lake Nettie	Mercer, City Of
Lake Souris	Towner, City Of
LaMoure	Southeast Water Users Dist.
Lignite City	Lignite, City Of
M	
Martin	Drake, City Of
McVille	Cooperstown, City Of
McVille	Dakota Rural Water Dist.
McVille	Lakota, City Of
McVille	Mcville, City Of
Minot	Minot, City Of
Missouri River	Bismarck, City Of
Missouri River	South Central Regional Water Dist.
Mohall	Mohall, City Of
N	
Napoleon	Napoleon, City Of
New Rockford	Harvey, City Of
New Rockford	New Rockford, City Of
New Town	New Town, City Of
O	
Oakes	Oakes, City Of
P	
Page	Cass Rural Water Dist.
Page	East Central Regional Water Dist.
Page	Page, City Of
Pleasant Lake	Leeds, City Of
Pleasant Lake	Rugby, City Of
R	
Ray	R & T Water Dist.
Rolla	Rolla, City Of
Rugby	Rugby, City Of
Rusland	Central Plains Water Dist.

Aquifer	City/Rural/Regional System(s) Served
S	
Sentinel Butte-Tongue River*	Richardton, City Of
Shell Valley	All Seasons Water Users Dist.
Shell Valley	Rolette, City Of
Shell Valley	Turtle Mountain Band Of Chippewa Indians
Sheyenne Channel	Sheyenne, City Of
Sheyenne Delta	Cass Rural Water Dist.
Sheyenne Delta	Southeast Water Users Dist.
Souris Valley	Westhope, City Of
Spiritwood	Barnes Rural Water Dist.
Spiritwood	Dakota Rural Water Dist.
Spiritwood	Devils Lake, City Of
Spiritwood	Forman, City Of
Spiritwood	Greater Ramsey Water Dist.
Spiritwood	Hannaford, City Of
Spiritwood	Minnewaukan, City Of
Spiritwood	Rutland, City Of
Spiritwood	Stutsman Rural Water Dist.
Spring Creek	Ashley, City Of
Sundre	Minot, City Of
Sundre	North Prairie Rural Water Association
T	
Tongue River*	Bowbells, City Of
Tongue River*	Carson, City Of
Tongue River*	Elgin, City Of
Tongue River*	Gladstone, City Of
Tongue River*	Hebron, City Of
Tongue River*	Mott, City Of
Tongue River-Ludlow*	Beach, City Of
V	
Vang	Makoti, City Of
Voltaire	North Prairie Rural Water Association
Voltaire	Velva, City Of
W	
Wahpeton Buried Valley	Wahpeton, City Of
Warwick	Warwick, City Of
West Fargo	Harwood, City Of
West Fargo	Horace, City Of
West Fargo South	Cass Rural Water Dist.
White Lake Branch of Shell Creek	Powers Lake, City Of
Wing Channel	Wing, City Of
Wishek	Wishek, City Of

*Bedrock Aquifer (An aquifer composed of consolidated materials such as limestone, dolomite, sandstone, siltstone, shale, or fractured crystalline rock.)

Note: The cities, rural, and regional systems identified above are those that have reported water use from the respective aquifers of more than zero acre-feet in recent years. Water use is reported to DWR on an annual basis.