

Western North Dakota infrastructure, water opportunities



North Dakota Infrastructure & Key Issues

- Workforce – Need Many and Growing
 - Conducting New Workforce Survey
- Housing – Extremely Difficult & Expensive
- Roads – Planning & Safety is Needed
- Frac Sand is now short



™ 2008 North Dakota Petroleum Council

Oil Can!

Road Safety Campaign



Campaign

- Partners
 - ND Department of Transportation
 - ND Motor Carriers Association
- Elements
 - Billboards
 - Bumper stickers (10,000+)
 - Shared with Industry / Member organizations
 - Distributed at the Williston Basin Petroleum Conference
 - Road safety video - *produced with assistance of NDDOT*



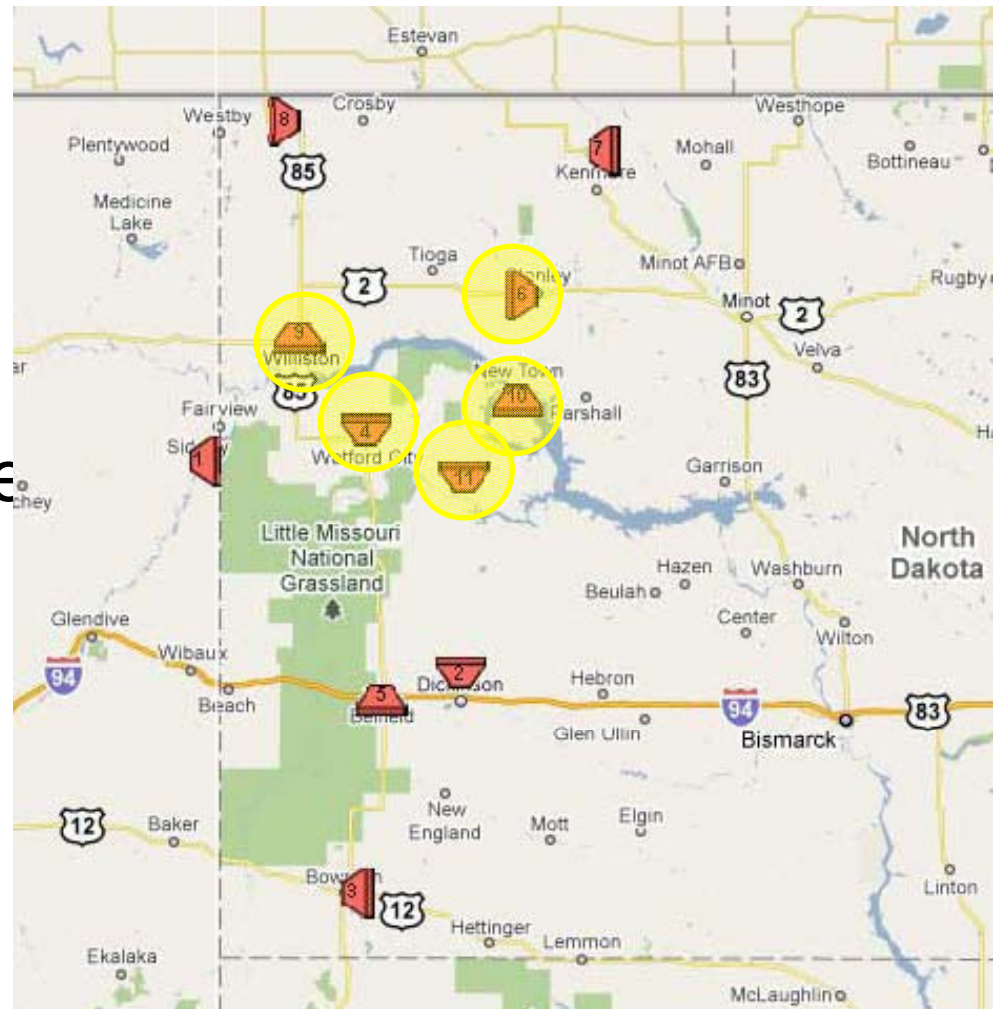
Target Audience

- Similar drivers involved in recent accidents
 - Male
 - 25 – 35 years of age
 - Pick up truck
- Industry employees
- General public



Billboards

- 5 Locations
 - 4, 6, 9, 10, 11
- 3 Years
- Consistent message





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Billboard Mockup



NEWMAN

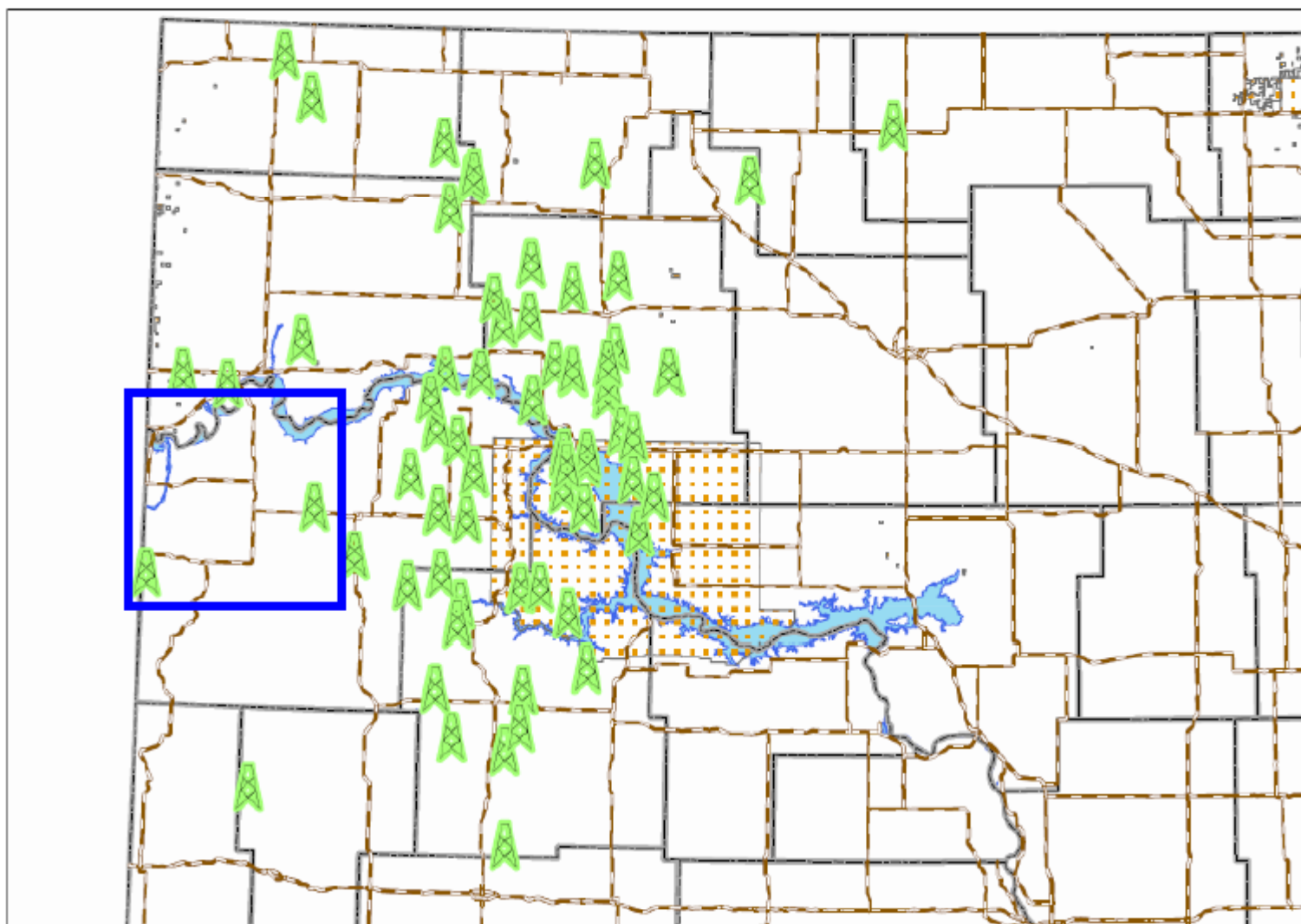
Frac Water Use for the Bakken

- Up to 1.500 million gallons water per frac.
- For comparison:
 - In ND, the approximate volume of water used to irrigate $\frac{1}{4}$ section of land using center pivot is 1,380,000 gallons per day.
 - Typical daily water use for a 50,000-person Midwestern city is 10,000,000 gallons.

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- Relatively small amount of water for a very high value use.
- Utilize Lake Sakakawea Resource

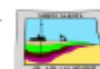
Alexander Area



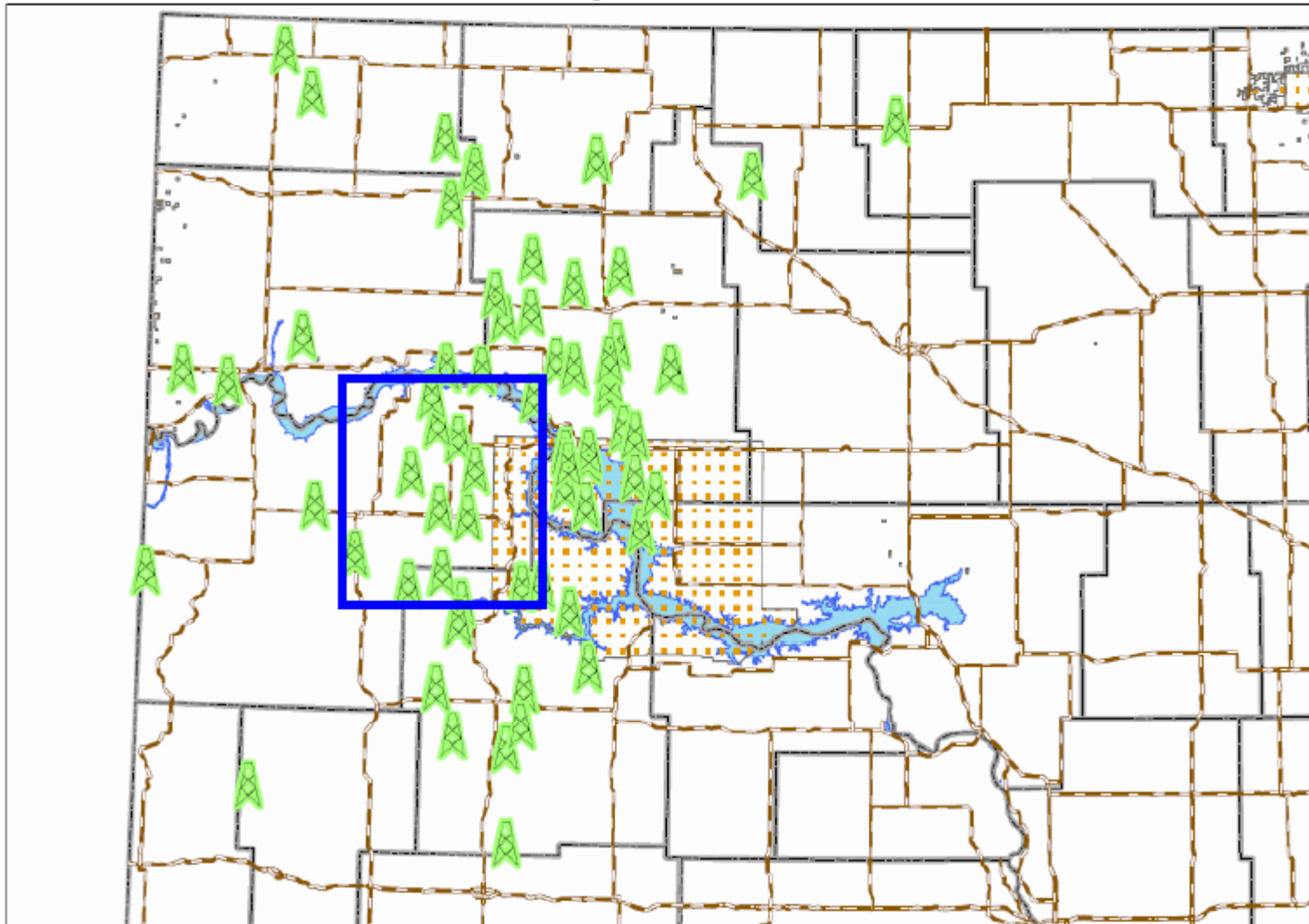
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0 15 30 60 Miles

Prepared by N.D.L.G.
Oil and Gas Division
DATE : 12/5/2008
Time : 9:00:01 AM



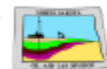
Watford City - Keene Area



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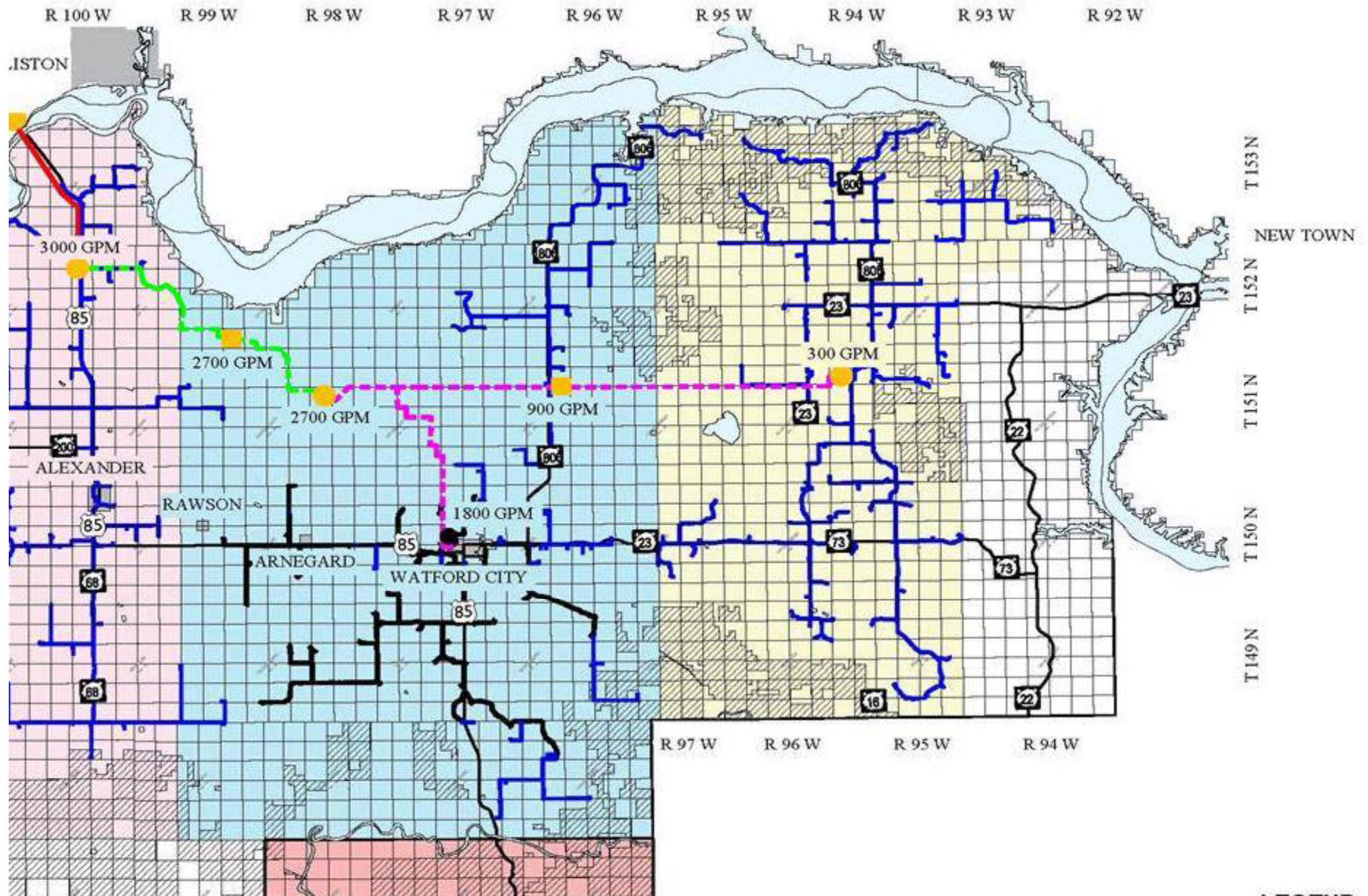
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Oil and Gas Division
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Time : 9:00:01 AM

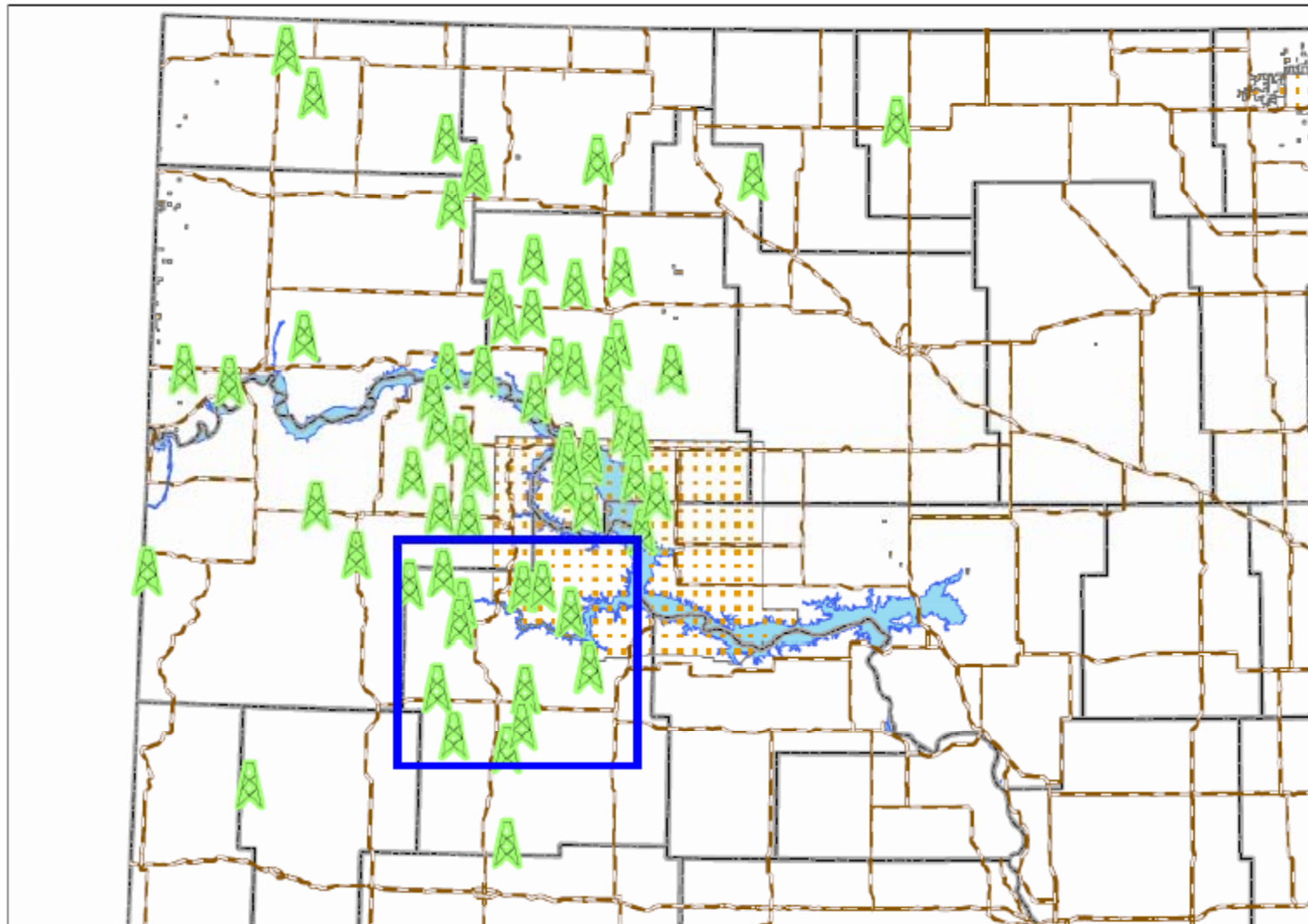


McKENZIE COUNTY WATER RESOURCE DISTRICT

WATER DEVELOPMENT & MANAGEMENT PLAN - DECEMBER 2009



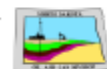
Killdeer Area

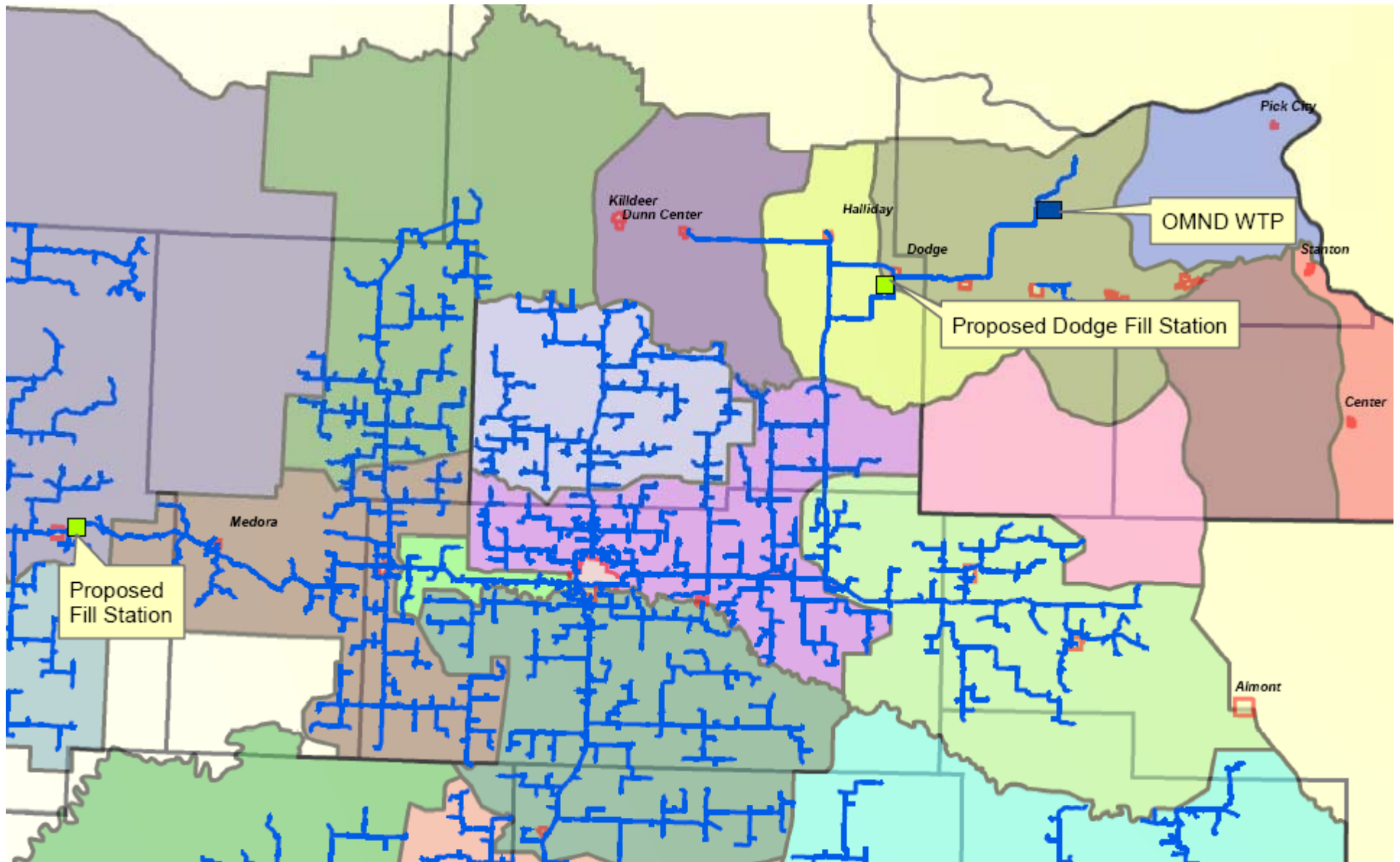


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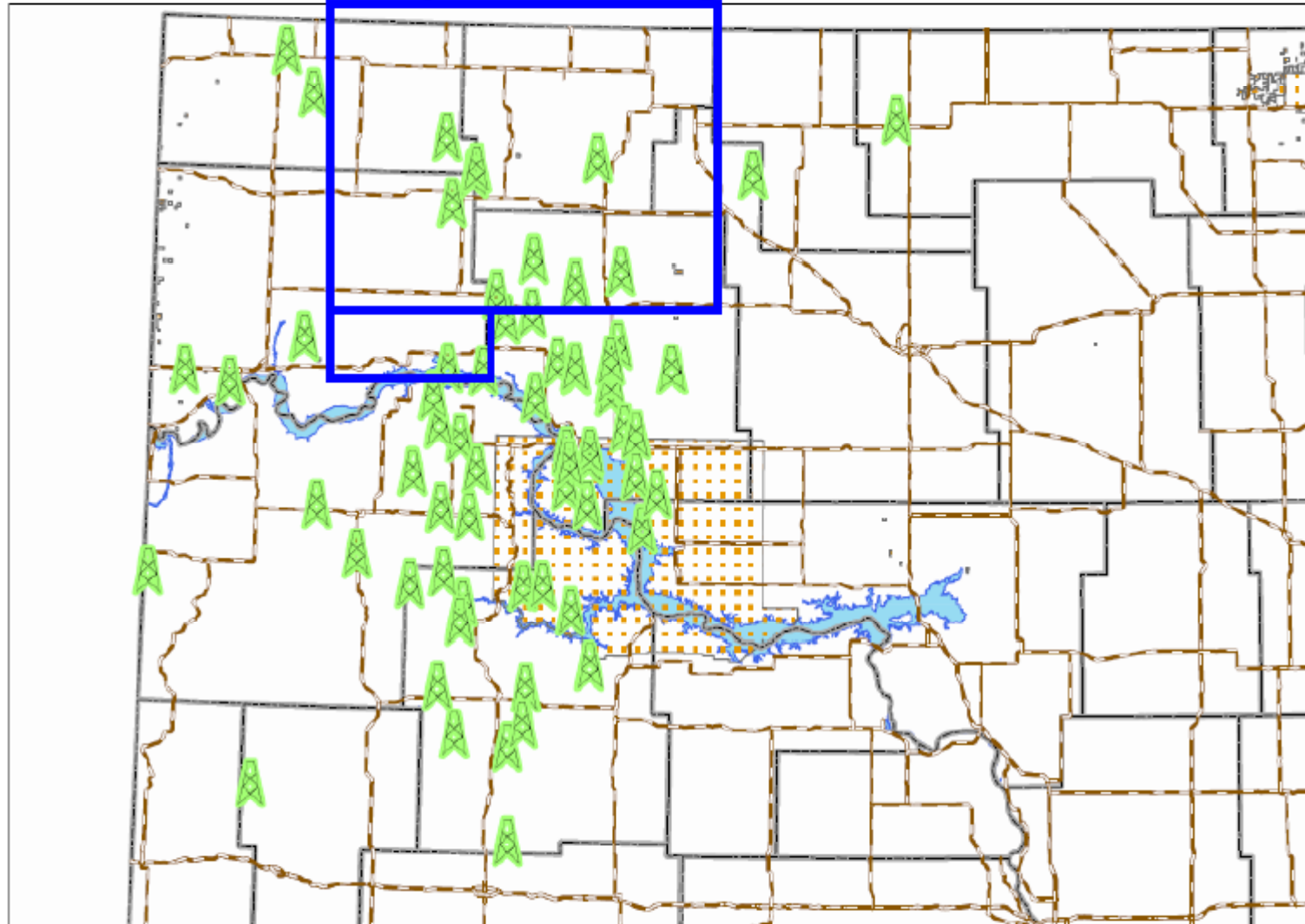
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Time : 9:00:01 AM





Ray - Tioga Area

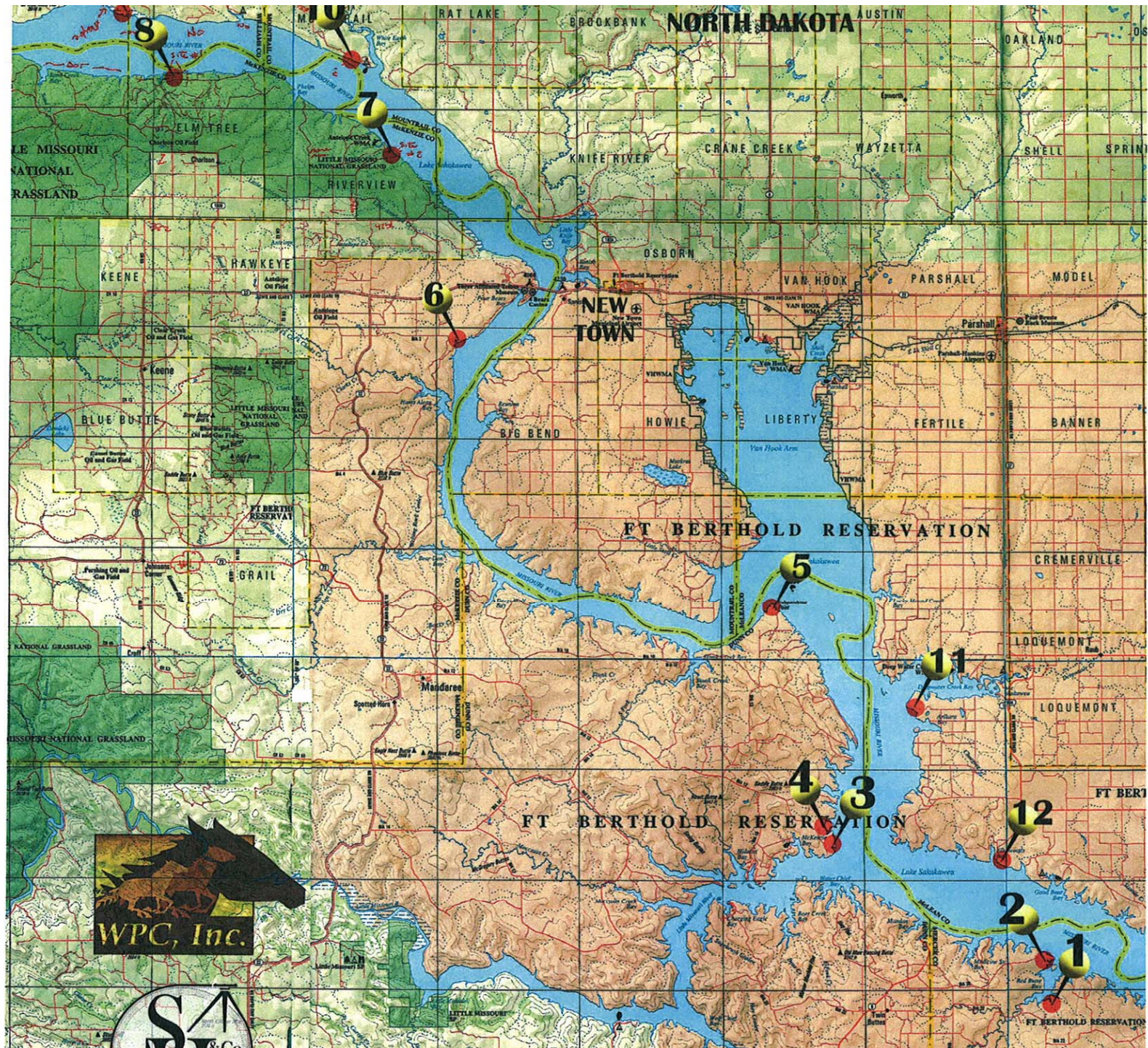


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**distribute
water from Lake Sakakawea**



Temporary lines take water to well site

Thank you – I would be happy to answer any questions



Bakken Rocks CookFest

July 27 – Tioga

July 29 – New Town

Aug 26 Legislative Tour
Stanley



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Please Join Us for the Bakken Rocks
COOK FEST
We cook it, you eat it.



Everyone Welcome
Come be the judge of the oil industry's best BBQ
& enjoy music by local entertainers.

July 29 Killdeer Area
5:00-8:00 pm MT
Lions Park - Killdeer, ND

July 30 Stanley/Parshall Area
5:00-8:00 pm CT
Doug Kinnoin's Farm - 12 miles south of Stanley
& 1 mile east on Belden Rd (51st St NW)

Learn a little - Eat a lot

- Bakken/Three Forks Geology - Kathy Neset
- Legislative Changes - Vicky Steiner
- What's new in the Oil Patch - Ron Ness & Lynn Helms
- Pipeline Information - Justin Kringstad

For planning purposes, please RSVP by
www.ndoil.org
or call 701-223-XXXX



