

# CENTRAL SANDS PRIVATE WELL NETWORK 2012 RESULTS

Concerns about high nitrate concentrations in private drinking water wells led the development of the Central Sands Private Well Network.

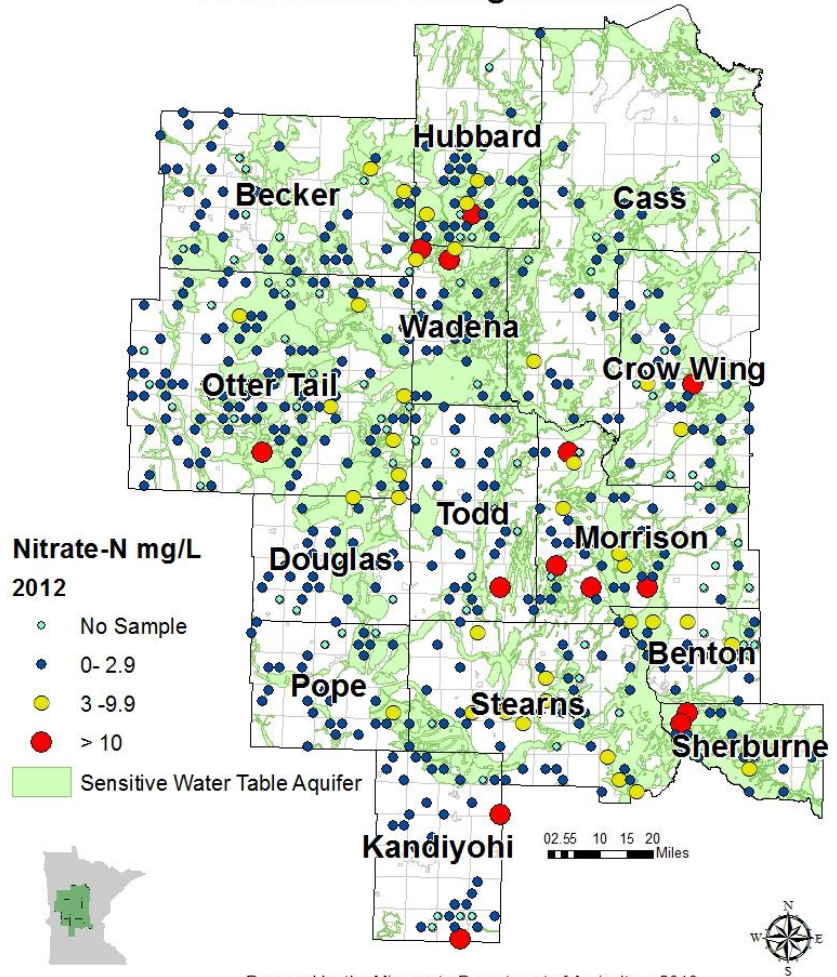
- **Phase 1.** The short-term goal is to determine current nitrate-N concentrations in private wells
- **Phase 2.** The long-term goal is to determine nitrate-N trends.

In the spring of 2011, a total of 1555 private drinking water wells were sampled for nitrate concentrations

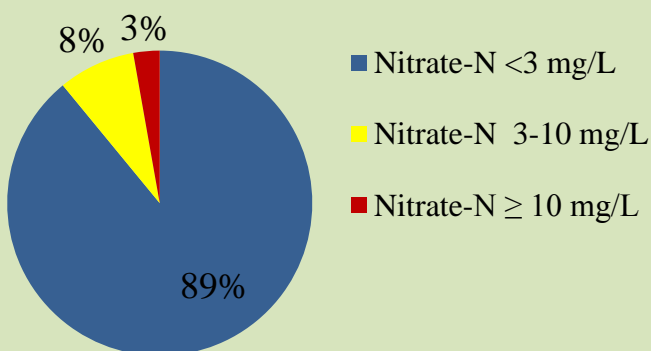
## 2011 Results

- 89% of results were < 3 mg/L
- 7% of results were 3 - 9.9 mg/L
- 5% of results were  $\geq$  10 mg/L

## Central Sands Private Well Network 2012 Nitrate-Nitrogen Results



## Central Sands Private Well Network 2012 Nitrate-N Results



In 2012, 502 private drinking water wells were sampled for nitrate concentrations. This could not have been done without the help of homeowner volunteers!

## 2012 Results

- 89% of results were < 3 mg/L
- 8% of results were 3 - 9.9 mg/L
- 3% of results were  $\geq$  10 mg/L

# NITRATE-NITROGEN RESULTS

## COUNTY SUMMARY

County	Samples Returned	Nitrate-N mg/L		
		< 3	3 to 10	> 10
Becker	41	95 %	5 %	0 %
Benton	21	76 %	24 %	0 %
Cass	24	96 %	4 %	0 %
Crow Wing	39	87 %	10 %	3 %
Douglas	24	96 %	4 %	0 %
Hubbard	37	86 %	11 %	3 %
Kandiyohi	29	93 %	0 %	7 %
Morrison	37	78 %	11 %	11 %
Otter Tail	105	93 %	6 %	1 %
Pope	26	96 %	4 %	0 %
Sherburne	15	80 %	7 %	13 %
Stearns	47	79 %	21 %	0 %
Todd	33	97 %	0 %	3 %
Wadena	24	83 %	8 %	8 %
<b>All Counties</b>	<b>502</b>	<b>89 %</b>	<b>8 %</b>	<b>3 %</b>

Nitrate-N concentrations varied from county to county. Sherburne County had the highest percentage of wells (13 percent) with nitrate-N concentrations over 10 mg/L. Morrison County had approximately 11 percent of wells over 10 mg/L. Benton and Stearns Counties both had over 20% of their samples in the 3 to 10 mg/L which means these wells are being impacted by land use or activities near the surface.

Results are closely proportional to the 2011 results. However, it is likely that well owners with results less than 3 mg/L dropped out of sampling because their results were low and didn't feel the urgency to continue sampling. Additionally, well owners with high nitrate results may have dropped out because their results were above the health limit of 10 mg/L and either found a different source of drinking water or replaced their well.

