

Dunn County, WI nitrate well-water data used in mapping individual point and township (polygon) trends of the county

Map Interpretation: (See Map)

Townships that exceed 20% of their wells being elevated with NO₃ are predominantly agricultural areas in the hay river, red cedar river, and chippewa river watersheds. In most cases the soils in these areas are permeable soils (sandy or sandy loam) with moderate to heavy irrigation.

Urban sprawl areas noted in the southern part of Menomonie township, east part of Sheridan township, and west part of Tainter township (along red cedar channel between Lake Tainter and Lake Menomin) show little indication of elevated NO₃ in well-water due to the contamination potential of wells and waste water systems on parcels less than 5 acres in size.

Conclusion:

It appears from our data that agricultural activities on the land have a greater potential of contaminating well-water with nitrates than the effluent of private waste-water systems in areas of urban sprawl.

Township	Total Samples	Total Elevated	Mean	Average	%Elevated
Otter Creek	28.00	0.00	6.00	7.08	0.00%
Wilson	5.00	0.00	6.00	5.96	0.00%
New Haven	62.00	2.00	11.00	8.76	3.23%
Colfax	26.00	1.00	9.00	5.85	3.85%
Menomonie	175.00	13.00	5.00	14.28	7.43%
Weston	35.00	3.00	6.00	8.28	8.57%
Sherman	66.00	6.00	9.00	9.47	9.09%
Sheridan	8.00	1.00	6.75	10.44	12.50%
Stanton	37.00	6.00	6.75	7.77	16.22%
Tainter	211.00	45.00	5.00	12.94	21.33%
Lucas	39.00	9.00	7.50	8.24	23.08%
Red Cedar	63.00	15.00	10.00	9.33	23.81%
Dunn	101.00	25.00	4.00	18.33	24.75%
Eau Galle	45.00	13.00	13.00	18.36	28.89%
Elk Mound	47.00	16.00	12.50	8.30	28.89%
Sand Creek	29.00	11.00	6.00	7.73	28.89%
Tiffany	69.00	12.00	9.50	9.08	28.89%
Hay River	76.00	23.00	5.00	21.28	30.26%
Grant	9.00	3.00	0.00	3.59	33.33%
Rock Creek	60.00	20.00	12.00	9.25	33.33%
Spring Brook	155.00	52.00	6.00	14.82	33.55%
Peru	5.00	3.00	5.00	11.96	60.00%
TOTAL	1,351.00	279.00			59.09%

