Waters at Risk: Citizen Action, Public Health, and Science combine to confront the glacial pace of meaningful changes in a Central Sands County

# My well, My water

Can citizens become stewards of groundwater?

Anne Abbott Pete Arntsen Ray Reser

Midwest Environmental Advocates

### UNDERCURRENTS THE HIDDEN KNOWLEDGE OF GROUNDWATER





Do You Need a Groundwater Protection Plan???

> California will no longer be the only Western state that does not manage its groundwater. The cost of doing nothing is the biggest economic gamble.

Senator Fran Pavley

# Nitrate in drinking water around Wisconsin

Nitrate levels are too high in wells used by an estimated 94,000 Wisconsin households that have private water wells. Agricultural areas and those with porous bedrock or sandy soil are most susceptible to nitrate contamination. It comes from fertilizers, including manure, and other sources.

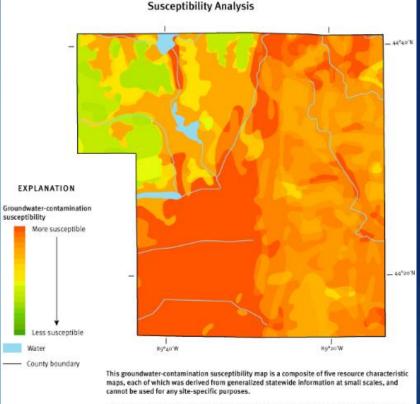
> Average amount of nitrate detected by township (in milligrams per liter). The maximum amount allowed by health standards is 10 mg/l.

0 - 2.0 2.1 - 5.0 5.1 - 10.0 10.1 - 20.0

No Data Available

5 MILES

**5 KILOMETERS** 



Portage County - Groundwater-Contamination

Map source: Schmidt, R.R., 1987, Groundwater contamination susceptibility map and evaluation: Wisconsin Department of Natural Resources, Wisconsin's Groundwater Management Plan Report 5, PUBL/WR-177-87, 27 p.

Figure created for the "Protecting Wisconsin's Groundwater Through Comprehensive Planning" web site, 2007, http://wi.water.usgs.gov/avcomp/

GUEDIT: Katk Kowalsky/Wisconsin Conter for Investigative Journalism

SOUNCE: Well Water Queiny Viewer, University of Wisconsin-Stevens Point's Center for Watershep Science and Education. Private Dir Ving Water Octainty in Rural Wisconsin, Journal of Environmental Health, 2013.

#### Public Health and Groundwater Protection Ordinance Timeline: How we got roped in....

Spring 2016: Neighbors ask Ray about land spreading of municipal biosolids on nearby ag fields

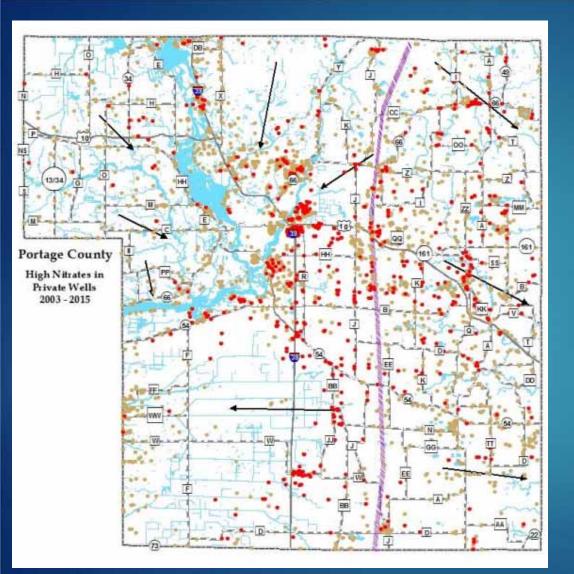
- Ray researches influencing conditions
- Ray and Bryon join forces to evaluate situation
- Anne expresses concern about impacts to Lakes
- Water Presentation at CWES
- GCAC
- Byron RIP

#### Spring 2017: GW Meeting

- Meet with County Executive RE: Ordinance Follow Up Visit to City of Appleton Municipal Waste Facility
- Pete attends Citizen's Water Lobby Day
- Meeting with Ordinance Group New Hope Group-
- Meeting with Ordinance Group New Hope Group-
- GCAC meetings monthly
- Meeting with Ordinance Group New Hope Group-
- GCAC Subcommittee
- Anne organizes neighbor to neighbor meeting
- GCAC Subcommittee

#### Spring 2018: Meeting with Ordinance Group - New Hope Group-

- Meeting with Ordinance Group New Hope Group-
- GCAC Subcommittee
- Ordinance Group meet with Waupaca Co.
- GCAC meetings monthly
- Present Ordinance info to Portage Co Farm Bureau
- Presentation to Health and Human Services
- Present Ordinance to multiple Town Boards
- County Board Meeting Present Groundwater Testing Results
- Meeting with Ordinance Group New Hope Group-
- Joint County Committees meeting RE: Ordinance



EVERY WATER SAMPLE REPRESENTS THE CONTRIBUTION OF A CITIZEN SCIENTIST:

CREATING THE PORTAGE COUNTY GROUNDWATER PLAN AND CITIZEN INPUT Chapter 92: SOIL AND WATER CONSERVATION AND ANIMAL WASTE MANAGEMENT

92.02 Legislative intent.

(1) The legislature finds that the soil resources of this state are being depleted by wind and water erosion and that the waters of this state are being polluted by nonpoint sources of pollution. The legislature further finds that these are statewide problems endangering the health and welfare of the state's citizens, its recreational resources, agricultural productivity and industrial base.

(2) The legislature declares it to be the policy of this state to halt and reverse the depletion of the state's soil resources and pollution of its waters.

(3) It is the intent of the legislature to implement this policy by enacting this soil and water conservation law to:

(a) Establish goals and standards for conservation of soil and water resources;

(b) Provide for cost sharing, technical assistance, educational programs and other programs to conserve soil and water resources;

(c) Encourage coordinated soil and water conservation planning and program implementation; and

(d) Enable the regulation of harmful land use and land management practices by county ordinance where necessary to achieve the purposes of this chapter. History: 1981 c. 346; 1983 a. 410 s. 2200 (2); 1985 a. 332 s. 251 (8). 92.11 Regulation of local soil and water resource management practices.
(1) PROPOSED ORDINANCES. To promote soil and water conservation or nonpoint source water pollution abatement, a county, city, village or town may enact ordinances for the regulation of land use, land management and pollutant management practices.

### (2) APPLICABILITY; CONTENTS.

(a) An ordinance enacted under this section may be applicable throughout the county or to any part of the county, including both incorporated and unincorporated areas.
(b) An ordinance enacted under this section may prohibit land uses and land management practices which cause excessive soil erosion, sedimentation, nonpoint source water pollution or storm water runoff.

(3) PRESENTATION; NOTICE; HEARING; COUNTY BOARD ADOPTION. Any ordinance proposed by the land conservation committee under this section shall be presented to the county board together with a report on the need for the ordinance and its expected economic and environmental impact. Within 2 weeks after its receipt, the county board shall publish the proposed ordinance as a class 2 notice, under ch. <u>985</u>, in a newspaper having general circulation throughout the county and make the report available for public inspection. The county board shall hold one or more public hearings on the proposed ordinance before taking final action. The county board shall adopt, adopt with revisions or disapprove the ordinance.