

Wisconsin Groundwater Guardians

Volunteers Taking Action



Denise Kilkenny-Tittle,
WIGG Coordinator

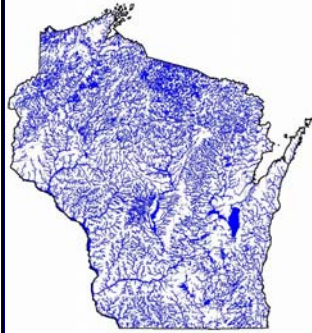
John Allen, WIGG Team
Lead for Chippewa Falls

Overview

- Basic Groundwater Information
- National Groundwater Foundation
- Groundwater Guardian Program
- A Look at Chippewa Falls GG Team

To the Eye, Water is Abundant

Wisconsin hydrology



Importance of Groundwater



WI Drinking Water:
•70% households &
•90% municipalities



WI Industry: 40%



WI Ag Irrigation: 100%

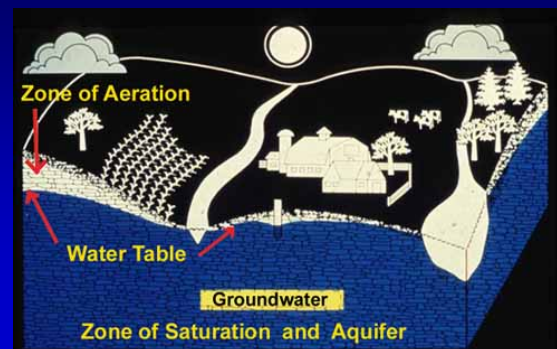


Environment

Importance of Groundwater Nationally

- 50% of America's drinking water
- 95% of rural American's drinking water
- 25% of industrial and mining water
- 34% of agriculture water
- 40% of the average annual stream flow

Groundwater Defined



Wisconsin Groundwater Issues-Quality

- Nitrate
- Pesticides
- Arsenic
- Others



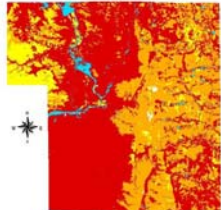
Wisconsin Groundwater Issues-Quantity



Is there enough groundwater to accommodate environmental and human needs?

Possible Reasons for Groundwater Problems

Soil Attenuation of Contaminants
Portage County, Wisconsin



Attenuation Potential
 Least Good
 Marginal Water



- Humans
 - Population
 - Land use
- Natural Conditions
 - Soil type
 - Geology

People Unaware of Connection: Everyday Activities & GW



People Unaware of Connection: Land Use & GW



Actions You Can Take



Personal Level

National Groundwater Foundation

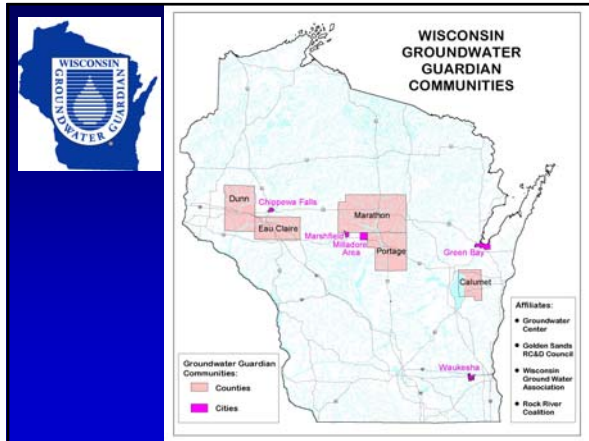
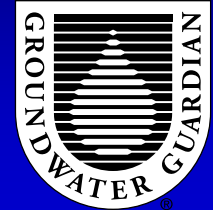


- Founded: 1985 by Susan Seacrest
- Status: non-profit organization
- Purpose: educate and motivate people to care for and about groundwater

Groundwater Guardian (GG) Program

Volunteer teams taking action to help protect groundwater

- Began in 1994 with 8 communities
- Today over 150 communities and 35 affiliates in 34 states and 1 Canadian province



GG Community vs. Affiliate



- **Communities:** broadly defined as a city, county, watershed, school, etc.
- **Affiliates:** term given to a business, agency, or organization

Result Oriented Activity (ROA)

an activity to conserve & protect the groundwater resource through:

- awareness & education
- conservation
- public policy
- pollution prevention
- best management practices

Marshfield Area

Water Festivals,
GW Lessons, &/ Curriculum in Schools



Also Chippewa Falls, Marathon Co.,
Portage Co., & Waukesha



Green Bay

Theatrical Drama



Marathon County

Resource Collection



& Teacher Workshops



Calumet County

Community Water Testing Programs

Attention Calumet County Residents

HAVE YOU TESTED YOUR DRINKING WATER LATELY? NOW IS THE TIME!

2003 Water Testing and Education Program

SPONSORED BY THE CALUMET GROUNDWATER CLUSTER TEAM ALONG WITH THE LAND AND WATER CONSERVATION SERVICE.

Bottle Pick-up Information

LOCATION	DATE	TIME
Bellevue Town Hall 3000 Highway 144	Tuesday, June 17 th	8:00AM-8:00PM
Bellevue Town Hall Bellevue 501	Wednesday, June 18 th	8:00AM-8:00PM
Madison Local Ordinance 100-102 200 Court Street Madison	May 27 th - June 20 th	8:00AM-4:00PM

COST

ALL SAMPLES ARE TO BE TAKEN AND RETURNED ON JUNE 23RD***

THE DETAILS

*****All samples are to be taken and returned on June 23rd*****

Water samples are only tested for nitrate and lead.

All tests are performed by a state certified lab.

Results are available by the time testing starts all for details.

For more details call the Land and Water Conservation Office at 810-1414.



- Float in Parades
- Exhibit Booth at Fairs

Portage County

- Slide Presentation
- Education Program



- Website
www.uwsp.edu/water/portage



Dunn County

- Newspaper Articles
- Groundwater Level Data Base
- Map Recharge Areas and their proximity to developments that may potentially contaminate groundwater



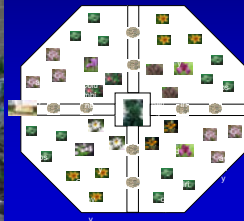
Milladore Area

Well Abandonment



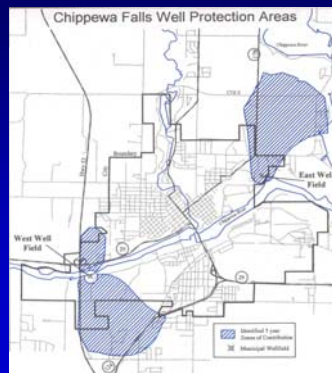
Rock River Coalition & Marshfield Area

Rain Garden Workshops &/ Construction



Chippewa Falls & Eau Claire

Wellhead Protection Plans & Ordinances



Chippewa Falls



Nitrate Removal Facility

- Constructed 1998



ISEP Unit



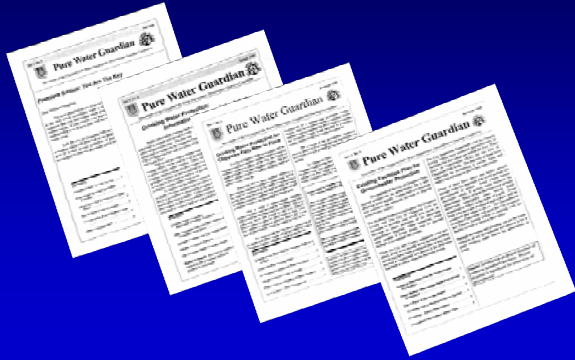
Nitrate System Control

Nitrate Analyzer

Computer Control



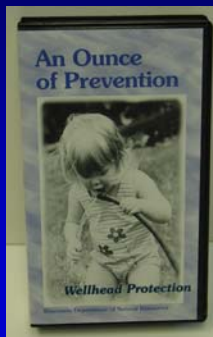
Pure Water Guardian



Pure Water Days



An Ounce of Prevention



ACTT



GPS



ArcView

ACTT - Report

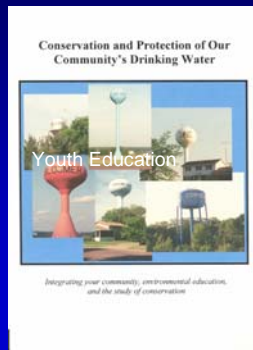


ACTT - Results



Updated Maps

Youth Education



Wisconsin Water Association



American Water Works Association



Exemplary Source Water Protection Award

Steps to Form a GG Community

- Form a GG advisory team & action plan
- Prepare & submit annual entry forms
- Seek funding & implement action plan
- Prepare and submit annual report

Benefits of Being a GG Community

- Can take positive community action
- Share ideas and network with other GG teams
- Receive recognition for your efforts
- Receive assistance with planning
- Membership is FREE!

Resources Received from National Groundwater Office

- Groundwater Assistance Kit
- Aquifer Newsletter & Recharge E-Newsletter
- Groundwater Resource Catalog
- Groundwater Foundation Website
- Helping hands hotline
- Invitation to Annual Fall Conference

Resources Received from Wisconsin GG Program

- Welcome Binder with WI information
- "Water Rich Water Poor" video
- Access to a lending resource library
- Wisconsin GG website
- Invitation to Annual WIGG State Meeting
- Invitation to Annual Groundwater Festival
- Assistance & updates from WIGG coordinator

It is because of people that we need to protect groundwater.

And it is only through people that we can do this.

So take action...become a Groundwater Guardian Community!



For More Information



- Denise Kilkenny-Tittle, WI Coordinator,
715-346-2722 or gwwardian@uwsp.edu
- John Allen, Chippewa Falls GG Team Lead,
715-726-2741 or jallen@ci.chippewa-falls.wi.us
- Wisconsin Groundwater Guardian Website
www.uwsp.edu/cnr/gwwardian
- National Groundwater Foundation Website
www.groundwater.org