

Neighborhood Ground Water Network



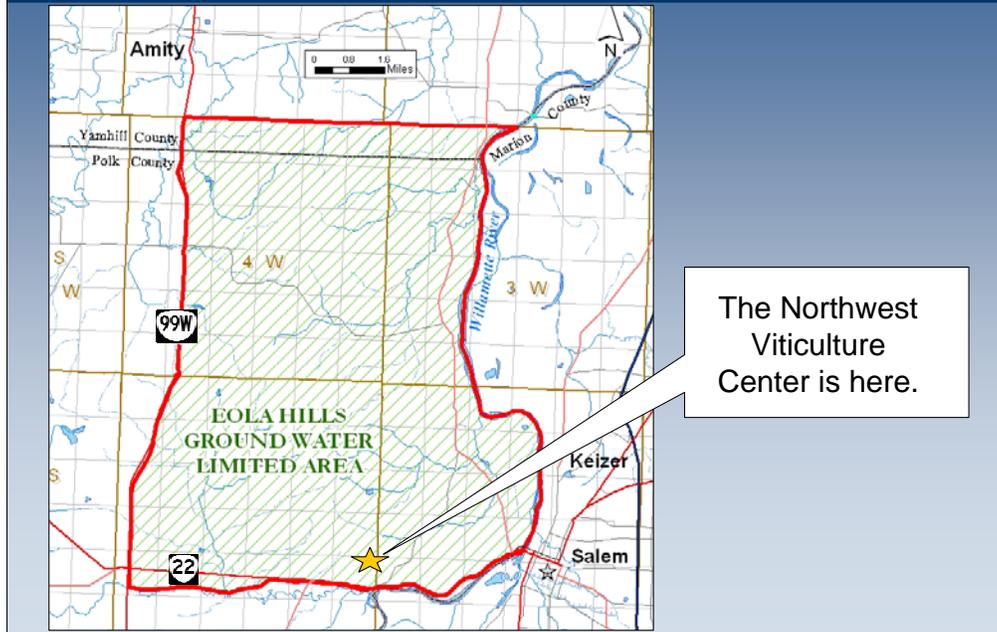
Wells and the Well-Being of Oregon Symposium

Abigail Brown, OSU Sea Grant Fellow

Sarah Deumling, Resident of the Eola Hills



Eola Hills GWLA



-Eola GWLA bounded on the east by Willamette, West by Hwy 99, south by Hwy 22 and Rickreal Cr

and to the north by line TWP line between 5S and 6S

-Show Salem/Keizer, Independence, Amity and Amity GWLA

Program Overview

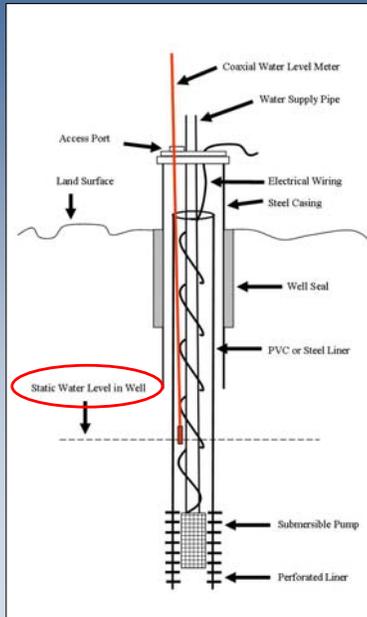
Neighborhood Ground Water Network



- 1.** provide detailed, engaging, and accurate ground water education
- 2.** equip community members with the tools and knowledge necessary to measure and evaluate water levels in their wells

- Program tentatively called 'Neighborhood GW Network.
- Two components: to provide ground water education and outreach to community members, and involving community members in a ground water level monitoring program.
- raise the publics' understanding of ground water systems and teach them how to monitor the static water level in their wells.
- efforts will help to create community 'stewards' of ground water resources ultimately resulting in widespread conservation of ground water supplies, better informed development decisions, greater awareness of ground water quality issues, greater awareness of ground water quantity issues, better well care and maintenance, and provide additional static water level data for evaluation of ground water supplies in Oregon.

Why Measure?



- To better manage and protect ground water resources.



So, you want to participate...

- Live in the Eola Hills area.
- Be willing to collect water level measurements:
 - once / month for one year.
 - once / quarter for two additional years.
- Attend a NGWN Workshop.
- Submit water level measurements to OWRD (**Optional**)



NGWN Workshop

Part A

Ground Water Science Training



- Ground Water Science
- Ground Water Quality
- Ground Water Quantity
- Well Construction
- Well Care and Maintenance

Part B

Water Level Measurement Training



- Well Construction Review
- Accurate Data Collection
- Field Data Collection
- Submit Data on the Web
- Data Interpretation

- provide volunteers with a general overview of important ground water concepts.
- will define basic ground water terminology including: aquifer, bedrock, cone of depression, drawdown, hydraulic head, water table, saturated zone, confined aquifer, unconfined aquifer, hydrologic cycle, to name a few.
- discuss the importance of maintaining healthy ground water quality
- discuss ground water quantity issues (how much water they are able to withdraw – gallons per minute and acre-feet per year), and provide resources regarding flow meter review well construction techniques and methods, general well care and maintenance, and discuss well interference issues.
- training presentation will be supplemented by fact sheets, videos, and other materials, all of which will also be available on the 'Neighborhood Ground Water Network' website

Resource Materials

How to Measure the Water Level in a Well

(using an electric sounding device)

Neighborhood Ground Water Network



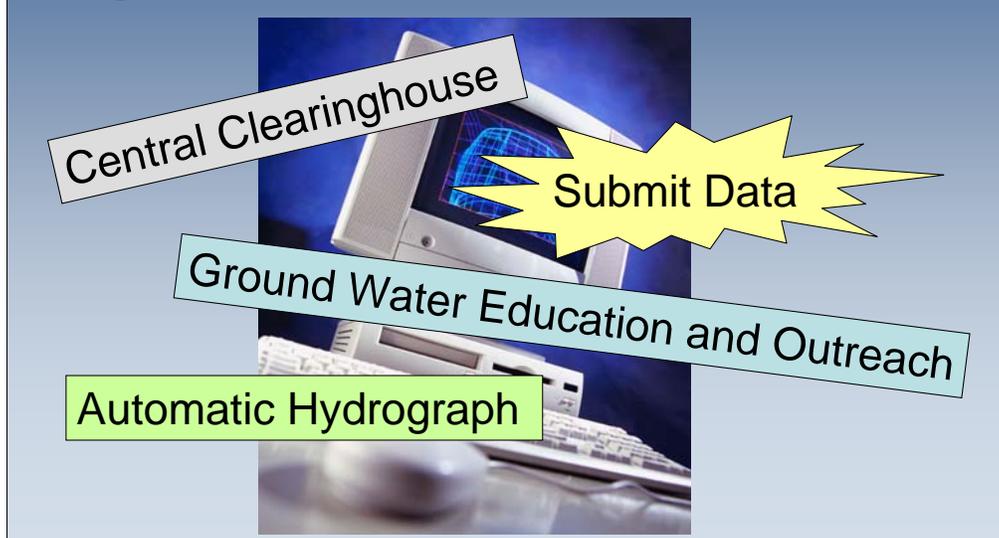
Oregon Water Resources Department
in collaboration with the
Oregon State University Sea Grant Extension

- Ground Water Fact Sheets
- Ground Water Science Presentation
- Ground Water Level Measurement Presentation
- Ground Water Videos
- Ground Water Resource Lists
- Water Level Data Sheets
- Water Level Measurement Directions

Here is the first page of the 'step-by-step' instructions teaching the volunteers how to collect water level measurements in their ground water wells. This is a multi-page documents that closes with a small section on data interpretation.

Program Webpage

Neighborhood Ground Water Network



- Webpage important aspect of this program
- Make available ground water education and outreach to people in Oregon and across the world
- Individuals do not have to be a volunteer to learn about ground water
- Data submittal function on the webpage
- Submit data and receive a hydrograph

Water Level Meters

Participants may either:

Purchase
(or rent)

OR

Check-Out

OSU
Oregon State
UNIVERSITY
Extension Service

a water level meter.



If a volunteer is interested in measuring the water level in their well through the 'Neighborhood Ground Water Network', they may either purchase their own water level meter or check-out a water level meter through a local OSU County Extension Office.

PURCHASE

If a volunteer is interested in purchasing a water level meter, the OWRD and Oregon Sea Grant Program will connect groups of interested participants within geographic areas. Participants may each contribute a small amount of money within their volunteer group to purchase a water level meter. Volunteer groups should be sure to calibrate their water level meters at a minimum annually (or periodically after stretching may occur).

CHECK-OUT

Volunteers may also choose to check-out a water level meter kit from their local Extension office. A volunteer should follow all protocol as required by the Extension office while they are in possession of the water level meter. Volunteers should contact the Extension office if there is an equipment problem. For this pilot program, OSU Extension Service will purchase one water level meter, which will be housed at the Marion County Extension Office.

Program Timeline

July - August	August - September	September - October	October - November	November - Future	March - June
Program research.	Develop program components.	Program outreach.	Train participants.	Participants collect water level measurements. Additional Trainings	Program wrap-up and transition.
and beyond...					
July 9, 2008 until June 30, 2009					

Brief timeline of the program highlights for the upcoming year. While we hope to have this program developed by the end of the year. It will be a program that can be updated and adapted as appropriate.

Recent NGWN Outreach

NGWN Program Presentation with Yamhill Basin Council and OSU Extension Service

Newberg, Oregon on 9-22-2008



Amity, Oregon on 10-16-2008



Recent NGWN Workshops

NGWN Workshops at the 4-H Camp in the Eola Hills



Saturday, October 18, 2008



Saturday, October 25, 2008



Stay Tuned...

NGWN Outreach Presentation in
Turner, Oregon in January

NGWN Webpage goes live
in January

NGWN Workshop in the Eola Hills
in March

Questions?

**Abigail Brown – OSU Sea Grant Fellow
Oregon Water Resources Department
725 Summer Street NE, Suite A – Salem, OR 97301
Phone: 503-986-0836 – Fax: 503-986-0902**



Oregon Water Resources Department
in collaboration with the
Oregon State University Sea Grant Extension Office

Questions?

Adopted Action Items

1. Special Area Well Construction Standard (Rule)
 - Case and seal wells within 100 ft of well bottom
2. Special Area Well Construction Standard (Rule)
 - Measuring tubes in all wells
3. Voluntary Measurement Program
 - Data collection by users
4. OWRD Continued Monitoring of EHGWLA
 - Ongoing data collection and analysis