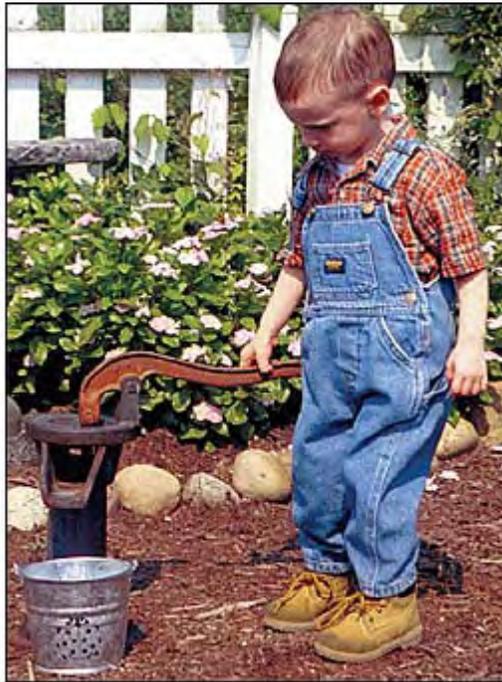


*Education and outreach to well owners
to build an informed community*



Audrey Eldridge

Oregon Department
of Environmental
Quality Protection

Our Challenge – how to get 9,000 rural residents living in a 230 mile² area to do the same things

- ▶ We want people to understand there is a potential risk that their drinking water is contaminated with nitrate
 - ▶ We would like them to sample their well water often
 - ▶ And it would be great if they would help protect their drinking water source
- 

Based on the Southern Willamette Valley Groundwater Management Area work, well owners are:

Learning how to maintain their wells and
property to protect the groundwater resource

Understanding why it is important to test their
wells on a regular basis



How do we try to get them involved?

- Several examples of collaborative efforts
- Targeted outreach for the rural resident about contamination of their water source
- Forums for their involvement

Is it working?

- Survey is currently being conducted to determine how much the rural resident knows about the health of their drinking water supply



What is a GWMA?



A Groundwater Management Area (GWMA)

is a tool used by DEQ to address area-wide groundwater contamination when the contamination likely originates from many sources.



DEQ Regional Groundwater Studies

45 areas investigated since the 1980's

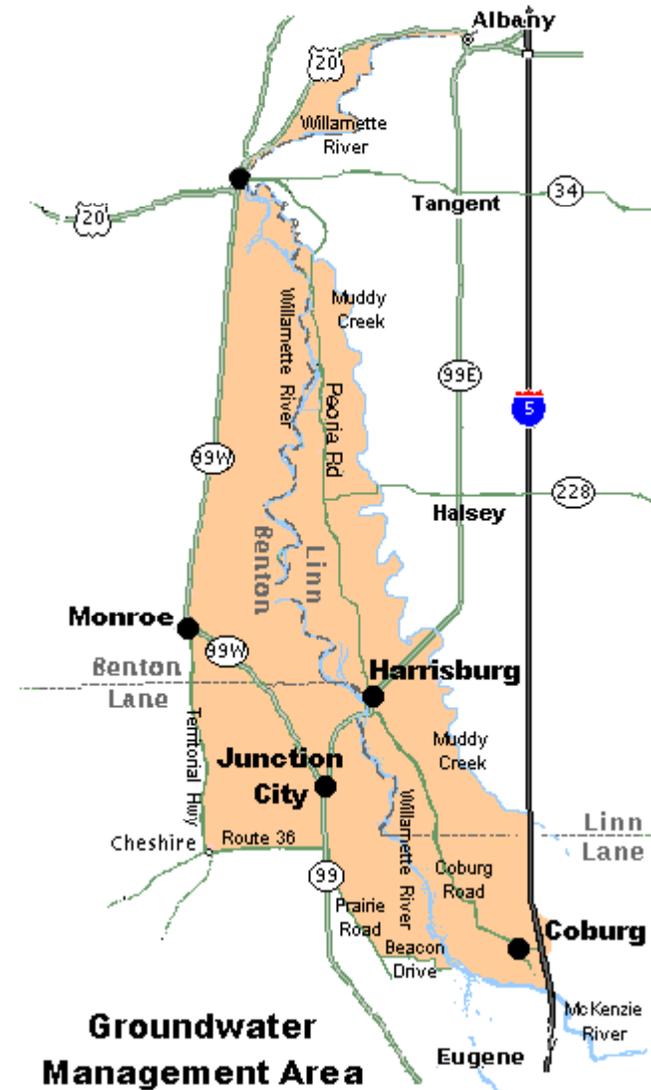
- 26 studies identified areas of contamination
- Contaminants include:
 - ❖ Nitrate
 - ❖ Pesticides
 - ❖ VOCs
 - ❖ Bacteria



The Southern Willamette Valley Groundwater Management Area

3 Counties – Linn, Lane & Benton

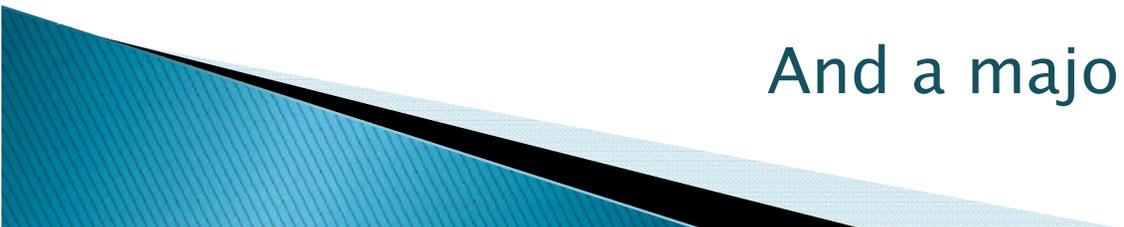
4+ Cities – all of Coburg, Harrisburg, Junction City and Monroe, a little bit of Corvallis



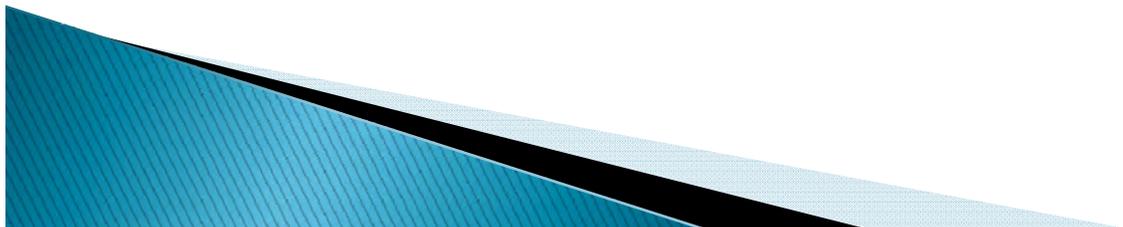
Reasons why we should all be concerned about the groundwater quality in this area:

- ◆ SWV is becoming one of the fastest growing parts of the state
- ◆ While the Department of Human Services monitors the quality of public water supplies, there are no water quality regulations for private wells
- ◆ Nitrate presents health risks especially for the very vulnerable

And a major reason is



**Nearly 100 percent of GWMA residents
rely on groundwater for their
drinking water**



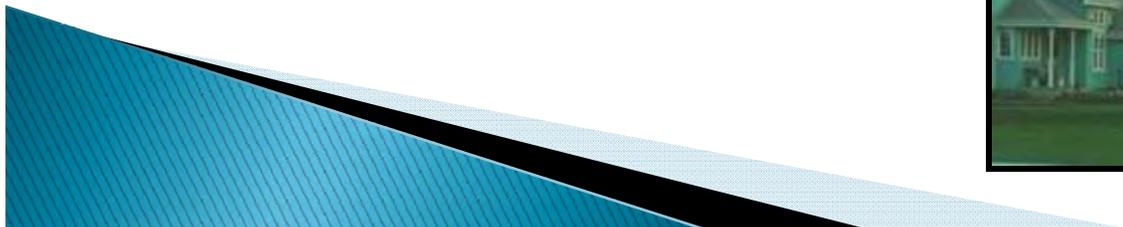
Nitrate

- ◎ Sources:
 - Fertilizers
 - Septic systems
 - Animal waste
- ◎ Very water soluble (leachable); good indicator of risk to groundwater



Nitrate Standards

- The public drinking water standard is 10 mg/L
- “Action Level” for GWMA declaration is 7 mg/L



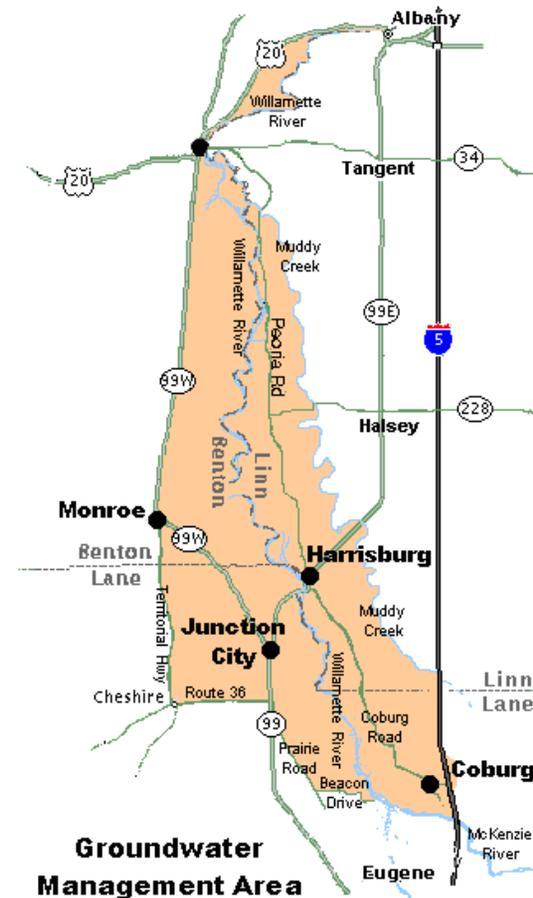
Where Are We Now?

- GWMA declared in 2004, and a 16 member citizens committee was appointed to develop a voluntary proposal
- A final Action Plan was accepted by DEQ in Dec 2006



Monitoring Program

- DEQ is sampling 24 monitoring wells and 17 domestic wells to determine baseline groundwater quality. These wells are analyzed four times a year for nitrate, dissolved oxygen, conductance, pH and sulfate (2x/year). The depth to water measurement is also collected from each monitoring well.



Get involved in the Community

Gather 'their' input

- Workshops to help define the message
- Open meetings to hear their thoughts

Become familiar with the Community Leaders

- Go to their meetings
- Invite them to be on the GWMAC

Understand the communities concerns

- Coburg as an example



You can't do it alone

- ▶ Recognizing that every agency has strengths and weaknesses – and a different *Client Base*
- ▶ You need real partners
- ▶ In order to get the homeowners attention the program must be seen as being:

Popular or Fun

Convenient

Priced Right

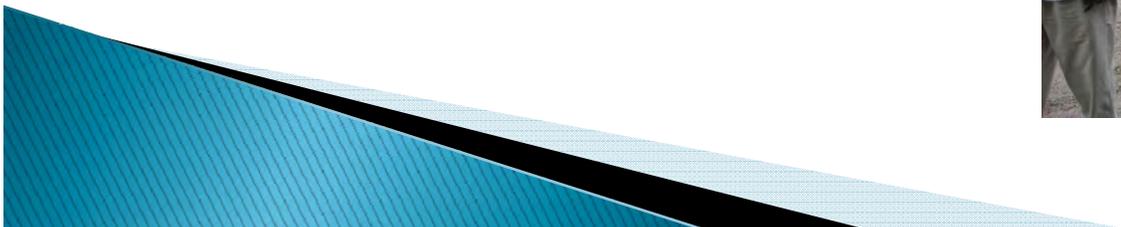


Not everyone will respond the same way to a given message or activity or a specific messenger!

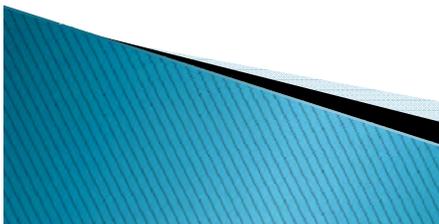
- ▶ Make testing fun or popular
- ▶ Hold workshops and trainings in convenient locations
- ▶ Keep costs down to a minimum (free is best!)



Daffodil Festival



Volunteer Monitors



Look for opportunities

Get information that helps them understand the issue

Share this with those who are involved with rural residents

County Sanitarians

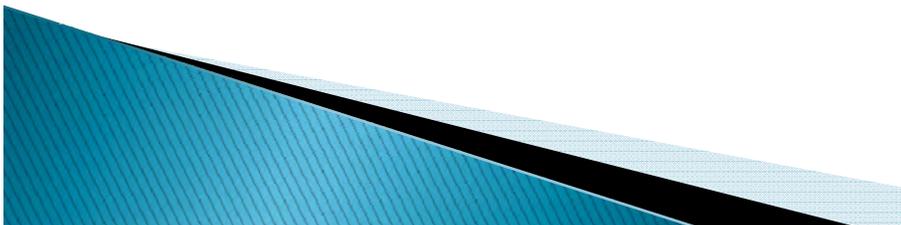
Realtors

Health Care Providers



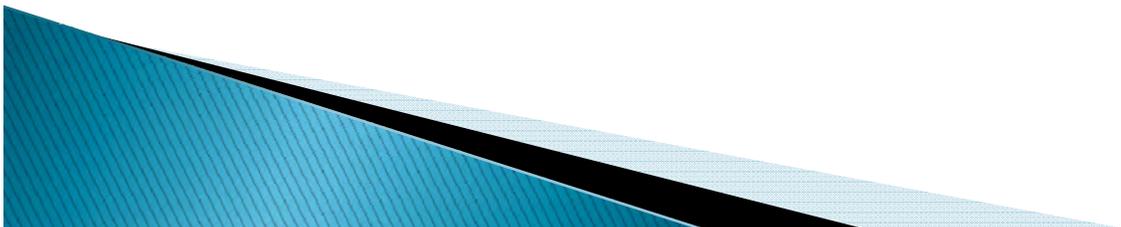
Workshops and Trainings for Residents

- ▶ Living on the Land
- ▶ Home Assessments
- ▶ Sustainable Landscaping
- ▶ Rural Living Basics



Forums for Involvement

- ▶ K–12 Education
- ▶ Public Water Suppliers
- ▶ Tours of the GWMA
- ▶ Long–Term Domestic Well Monitoring
- ▶ Synoptic Domestic Well Monitoring
- ▶ On–Site Technical Team
- ▶ Legacy Pesticide Collection Events





**Are we
having an
adequate
effect?**

Southern Willamette Valley GWMA
<http://gwma.oregonstate.edu/>

OSU Extension Well Water Program
<http://wellwater.oregonstate.edu/>

