



A watershed connects people to one another and to the natural landscape.

WRIA 16's purpose is to manage this shared resource to benefit both people and the environment.

We will listen to every individual in our watershed community who voices their needs, concerns, and ideas.

Our vision is to develop a plan that achieves a broad consensus within this unique community.

"A Debt We Owe to the Future"

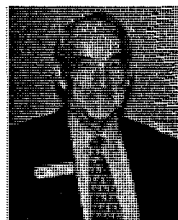
In December, 2002 and January, 2003, the WRIA 16 Planning Unit began to translate the technical assessment data, and responses from the community forums held last Fall, into specific priorities for a watershed plan. In this newsletter, the Planning Unit members share the objectives their constituencies have identified as top priorities for the WRIA 16 watershed management plan.

In the coming months, the Planning Unit will continue to identify priorities for the watershed plan. It will also identify additional technical studies, e.g., aquifer mapping and water quality studies. The goal is a management plan for the effective, economical and equitable management of the water in the Basin to sustain viable and healthy communities, and habitat for native fish.

The insert in this newsletter contains information on aquifers— what they are, how they work, and how to care for them in order to insure sufficient, clean groundwater for current and future needs.

You are always welcome to attend Planning Unit meetings (see p. 4), or to talk with Planning Unit representatives over a cup of coffee. More information on the WRIA 16 Planning Unit's "1,000 Cups of Coffee" initiative can be found on p 3.

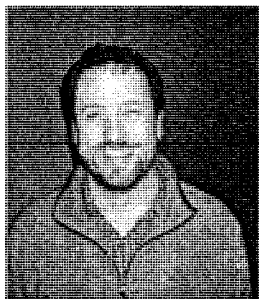
REPRESENTATIVES OF INITIATING GOVERNMENTS



Wes Johnson, Mason Co. Commissioner

- *Evaluating groundwater availability,*
- *Establishing instream flows using Best Available Science, and*
- *Balancing outcomes with regional economic needs.*

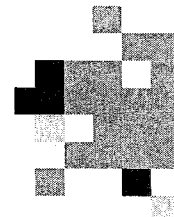
"Evaluating and protecting the water resources that have supported generations of people in Mason County, is a debt we owe to the future."



Dave Christensen, Mgr., Natural Resources, Jefferson County

- *Address the need for a community water system in Brinnon.*
- *Support technical studies to map aquifers, to better determine the connections between shallow aquifers and the Dosewallips and Duckabush rivers.*

“These Jefferson County priorities will assist the Brinnon community to ensure a safe, reliable supply of drinking water, while protecting instream flow needs in the Dosewallips and Duckabush Rivers.”



Keith Dublanica, Natural Resources Director, Skokomish Tribe

- *Protection of Treaty Rights*
- *Restoration of watershed integrity*

In the Treaty of Point No Point, 1855, negotiated with the tribes by territorial governor Isaac Stevens, the tribes ceded to the federal government much of what is now the state of Washington in exchange for the continued "right of taking fish at usual and accustomed grounds.”

Debbie Knipschild, Mason Co., PUD# 1

- *Review existing public water systems and quantify how many are limited by water quantity, or not meeting the needs of existing users, e.g., low pressure during the summer.*
- *Identify water systems that currently have water quantity moratoriums.*

“This knowledge will help PUD# 1 identify the needs of existing water systems in Mason County.”

CITIZENS REPRESENTING INTERESTS ON THE PLANNING UNIT



Warren Dawes, Mason Co. Growth Management

- *Undertake geologic studies to map the groundwater in WRIA 16, so we know where the water is for future water rights.*
- *Do water quality studies wherever possible, so that we have up-to-date information for both surface water and ground water.*

“We need to know what services (in this case, water) are available so that we can better plan for growth, and we must protect and conserve our critical resources.”

George Fisher, Pres. Save The Lakes Coalition (STLC)

- *Summer Lake Levels of 738' at Lake Cushman and 480' at Lake Kokanee*
- *Support of flood control for the Skokomish Valley*

“Members and supporters of STLC are dedicated to preserving a way of life in our community which enhances tourism, assists in the economy while preserving property and property values. We feel a stewardship responsibility for the fish and wildlife in our area.”



Kerry Holm, Port of Hoodspout

- *Water quality and*
- *Habitat*

“The port's primary charge is economic development. A large part of our economy depends on abundant supplies of fish and shellfish. These resources are important to our residents, visitors, and the Skokomish Tribe. The people that need and want these resources support our community economically. Environmentalism aside, we must do everything we can to secure and enrich this resource base.”

are withdrawing too much water. When water levels drop below the levels of the pump intakes, a well will begin to pump air, and will go dry.

Once an aquifer runs dry, it may be impossible to get more water from it. Natural processes are unlikely to replenish it. Occasional efforts have been made to artificially refill aquifers, but this process is very expensive, and its success is not ensured. Your best chance of having a supply of water that meets your needs in the future, is to care for the aquifer that provides the water you need.

Water Quality and Aquifers

Precipitation that falls on permeable soil soaks into an aquifer that lies beneath the soil, and so do toxic substances. If you dump excess fertilizer, antifreeze, or used oil on the ground, the quality of the ground water is seriously impacted. Since aquifers are contained within rock, it is extremely difficult if not impossible, to clean up the water once it has been fouled.

Aquifers and Hydraulic Continuity

Some aquifers are connected to the surface water in rivers and streams. This situation is known as *hydraulic continuity*. For watershed planning, it is important to know where there is hydraulic continuity, because new wells may impact the streamflow. *Hydrogeology* studies can identify hydraulic continuity, and other aquifer characteristics.

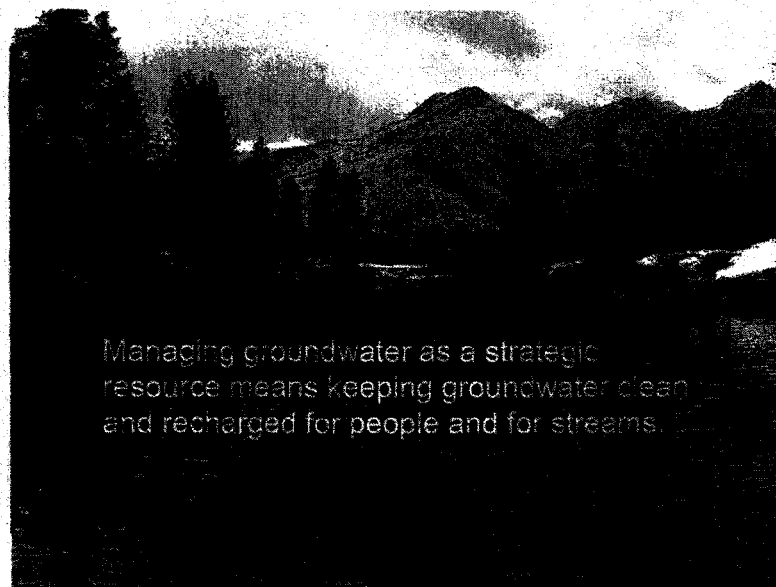
Information excerpted and adapted from:

Waller, Roger. Ground Water and the Rural Homeowner. Pamphlet. U.S Geological Survey, 1982.

Resources

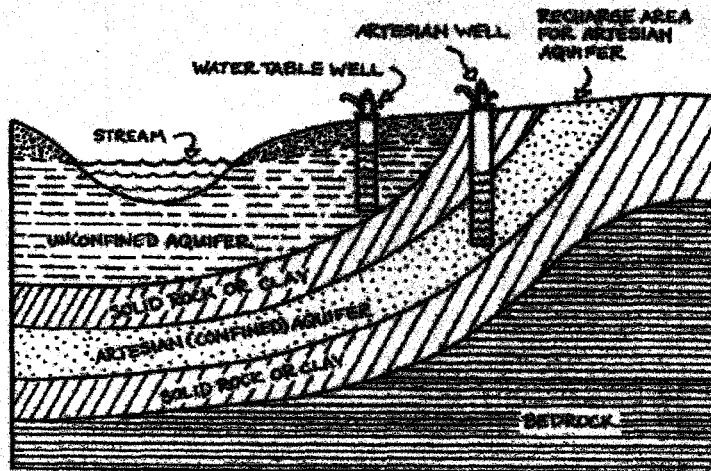
"USGS Ground Water Resources" <http://water.usgs.gov/ogw/GWRP.html>

"Principal Aquifers of the 48 Conterminous United States"
<http://www.nationalatlas.gov/aquifersm.html>



WHAT ARE AQUIFERS?

Aquifers are water-bearing rock that transmit water to wells and springs. The diagram below shows both unconfined aquifers, and confined aquifers. Confined aquifers are also known as *artesian* aquifers. Artesian aquifers are formed when there is a layer of less porous rock both above and below the porous layer. These rocks surrounding the aquifer form a container, pressure is created by the water in the porous rock layer. If a well is drilled into this contained aquifer, the internal pressure can be enough to push the water up the well, and up to the surface, without a pump. The pressure of water from an artesian well can be quite dramatic.



from "Aquifer Adventure," author unknown

Aquifer Recharge and Water Quantity

Precipitation that seeps into the earth *recharges* the porous rock of the aquifer. If the ground is covered by asphalt, or other *impermeable surfaces*, the precipitation will run off without recharging the aquifer. If the aquifer is not recharged, the amount of water available may be reduced, so less water is available for wells and human use.

The recharge rate must be considered when pumping water from a well, and when issuing new *ground water rights*. Pumping too much water too fast, draws down the water in the aquifer. The well yields less and less water, and can eventually run dry. In fact, pumping your well too fast can cause your neighbor's well to run dry if you both are pumping from the same aquifer.

It would be easier for ground water users if the water level in the aquifer that supplied their well always stayed the same. This rarely happens. Seasonal variations in rainfall and droughts affect the underground water level. If a well is pumped at a faster rate than the aquifer around it is recharged by precipitation or other underground flow, then water levels around the well can be lowered. The water level in a well can also be lowered if other wells near it

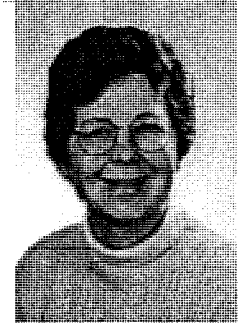
WRIA 16 Planning Unit Members Share Their Priorities for a Watershed Plan



Constance Ibsen, Lower Hood Canal Watershed Implementation Committee

- Evaluate and mitigate the impact of surface water on near shore marine waters, &
- Identify and protect aquifers for existing and future populations.

“State water sampling has confirmed citizen observations that the canal is sick. We want to identify and modify human activities that contribute to the degradation of these waters. We also want to ensure enough clean drinking water for existing residents and an expanding population. We need to locate existing aquifers so we can conserve and protect our drinking water.”



Carol Murray, West Realty, realtors & developers

- Aquifer recharge & groundwater protection

“If we plan ahead, we can maintain the aquifer and avoid problems experienced in more populated areas, such as the implementation of strict building codes to try to mitigate aquifer damage.”

- Estimate the future needs of the existing property owners.

“Property owners on site now expect to continue to have a good source of water, and those planning for their retirement expect to be able to have water available. Property values, and the local economy, depend on the above expectations being met.”



George Sickel, Citizen-at-Large, Jefferson Co., Duckabush & Dosewallips Rivers

- Process the 11 outstanding water rights applications for Brinnon
- Approve the Olympic Canal Tracts application so they might put their new \$20,000 well on line and get off the DOE ding list.
- Fast Track the soon-to-be-submitted application for the downtown Brinnon community water system

“Accomplishing these things will enable the Brinnon community to continue with its activities.”

Resources

- Updates on Watershed Planning: Watershed Planning Act (RCW 90.82) <http://www.ecy.wa.gov/watershed/index.html>
- Draft Guide to Watershed Planning and Management <http://www.ecy.wa.gov/biblio/99106.html>
- Full Text of Point No Point Treaty http://www.pnptc.org/treaty_of_point_no_point.htm

1,000 Cups of Coffee...Conversations about the watershed

Successful watershed planning efforts create opportunities for citizens to talk *and listen* to each other. People come together in small groups, and one-on-one over coffee. The stakeholders, representing varied, and potentially conflicting, interests share their experiences and their vision for the watershed with each other.

In March, the Planning Unit will launch “1,000 Cups of Coffee.” Several members of the Planning Unit and I will be available before the monthly Planning Unit meeting, to talk with you about the watershed. We welcome you to join us for a cup of coffee and conversation. We’ll listen to what you have to say.

1,000 Cups of Coffee:

Please join us for conversation & coffee

March 13	Hoodsport Inn	1:45-2:45
April 10	Halfway House Restaurant, Brinnon	1:00-2:00

RIVERS FOR LIFE—
WRIA 16 WATERSHED PLANNING
 411 N. Fifth , PO Box 279
 Shelton, WA 98584

For more information, contact:
 Jason Manassee, Sr. Planner
 (360) 427-9670, ext.. 294



To get a copy of the
 Level 1 Technical Assessment of WRIA 16
 on CD-ROM, send a request to
 Jason Manassee at the address above.

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RIVERS FOR LIFE is designed and edited by
 Barbara Bowen, Natural Resources, Jefferson Co.
 If you have ideas for future issues, you can contact
 Barbara at (360) 379-4498 or bbowen@co.jefferson.wa.us

FUTURE PLANNING UNIT MEETINGS

Thursday, March 13, 2003 3:00-5:00
 Watershed plan priorities

Thursday, April 10, 2003 3:00-5:00
 Water Rights Application Processing

PUD # 1 Board Room Potlatch, WA 98584

Thursday, May 8 9:30-5:00
 Planning Unit Tour of Simpson Timber lands

There are a few spaces for non-Planning Unit members. If
 you're interested, contact Jason Manassee: (360) 427-9670,
 ext. 294.