

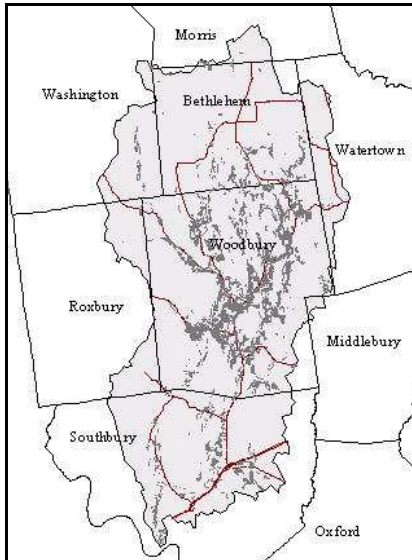


Watershed News

Keeping our water pure and plentiful

Winter 2005

Where Does Your Drinking Water Come From?



Map 1 - Aquifers in the Pomperaug Watershed

When you turn on your faucet or take a shower or flush the toilet have you ever wondered where the water comes from? As you may recall from our fall issue of *Watershed News*, all those living in the Pomperaug River Watershed get their water from the Pomperaug Aquifer (*Map 1*). Your water can come to you directly through a private well in your backyard (or a community system if you live in a condominium or apartment

complex) or from a public water supplier's distribution system. The systems that serve our Watershed are the Heritage Village Water Company and the United Water Company. Even if you live outside the Watershed in Watertown, Middlebury or Oxford you may also be drinking water supplied by the Pomperaug Aquifer. *Map 2* shows the water company service areas in black.

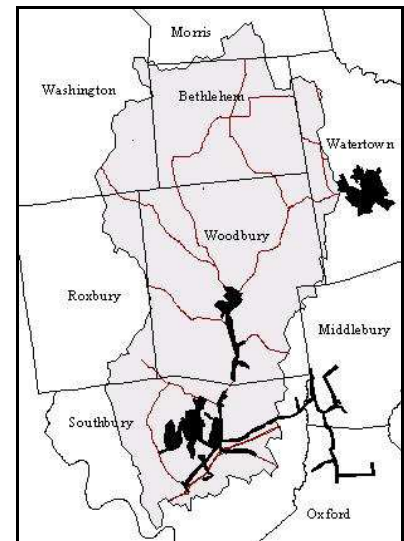
The **Heritage Village Water Company** is supplied by groundwater pumped from five wells located close to the Pomperaug River on the Heritage Village golf course property. This water is delivered to customers in Southbury, Middlebury and Oxford.

The **United Water Company** serves customers in Woodbury from two wells. Well #1 is located on route 47 and Well #2 is located off of South Pomperaug Avenue to the west of the Middle Quarter commercial area.

The **Watertown Fire District** serves customers in Watertown. Water comes from three surface water reservoirs: Lockwood Reservoir in Bethlehem (in the Pomperaug Watershed), the Watertown Reservoir and Judd Pond in Watertown. Additional water comes from nine

wells in the Pomperaug Aquifer located along the Nonnewaug River in Woodbury. So if you live, work, or play in any of the towns mentioned above, you have enjoyed the pure, clean water supplied by the Pomperaug Watershed.

For more information: Visit United Water Company's website: <http://www.unitedwater.com/uwct/whoct.htm>; read Heritage Water Company's Annual Report on line at: <http://asp1.walkontheweb.com/ctwater/data/pdf1/heritage%20village%202004.pdf>; contact the Watertown Fire District at: (860) 274-6332.



Map 2 - Public water supply areas

Coalition Membership Update

In our last newsletter we announced the exciting launch of our membership program and the opportunity to become a Charter Member of the Coalition. Marc Taylor, Board Chair comments: "We are honored with the outpouring of support from the community. It is a confirmation that our

continued on page 2

POMPERAUG PONDERINGS

Q: What is Groundwater?

A: See last page

Contact Information

Phone: 203-267-1700
Fax: 203-264-0222
Email: info@pomperaug.org

If you would like to receive future issues of the *Watershed News* by email, please let us know by phone or email.

PRWC Mission

The Pomperaug River Watershed Coalition will work to protect the quality and quantity of the Pomperaug River's surface and subsurface waters as well as the plants and wildlife that contribute to its natural beauty. This will be done by providing a partnership of local governments and businesses, private interests, environmental organizations and concerned citizens which will interact with the appropriate Regional, State and Federal agencies. We shall periodically report on the status of our efforts to the public and actively seek their views.

Membership

continued from page 1

friends and neighbors believe in the work we are doing to protect and preserve our precious water resources." New member Mary Giampietro said "I am proud to have become a member of the Pomperaug River Watershed Coalition. As a Southbury resident, I use the local water supply and am concerned for its quality. I am happy to support the Coalition's efforts in maintaining fresh, clean water. Working as a Coalition streamwalk volunteer last summer provided me with a wonderful opportunity to experience firsthand the beauty of our local Watershed."

As with many community efforts, our work on your behalf can continue only with your support. If you haven't already become a member, please do so today! For more information on membership visit our website or call the office.

News from the Board

From Chairman Dr. Marc Taylor:

Thanks to the dedicated work of our staff, volunteers, Board of Directors and consultants, the Coalition continues to move ahead on multiple fronts. Our research projects, the Watershed Management Plan, and a general membership campaign are on track. In the coming months we will be helping our town governments deal with new state and federal mandates for protecting the Pomperaug Aquifer and watershed rivers from stormwater runoff and potential contamination. We will also be stepping up our efforts to help our neighbors understand their roles in keeping our drinking water pure. We continue to cooperate and share

information with state, regional, and national colleagues who are intensely interested in our innovative science. Our gifted Executive Director, Laurie Giannotti, coordinates all of the above with great skill.

We thank our governmental, business, foundation and especially our individual supporters. With your ongoing help we can continue the important work we are doing to keep our local water supply pure and abundant.

New Board Member:

We are pleased to welcome Mieke Schuyler to our Board. Mieke comes to us from Bethlehem and will serve as one of the Coalition representatives from that Watershed town. As Chairperson of



Mieke Schuyler, new Board member

the Long Meadow Lake Management Committee, Mieke has redirected the focus of the group to a more holistic approach including watershed management. Her experience working with the lake's residents and with lake management programs will strengthen the Coalition's ability to implement its own Watershed Management Plan.

"I am honored to be working with the progressive Pomperaug River Watershed Coalition and am eager to help to ensure fishable, swimmable and drinkable water quantity and quality for our future generations. Our community is immeasurably fortunate to be home to this qualified and dedicated team."

Northeast Instream Habitat Program Update

Over the past summer, Dr. Piotr Parasiewicz of the University of Massachusetts Northeast Instream Habitat Program and his field staff were busy collecting data on the fish that inhabit our rivers and streams. The habitat assessment will be used in conjunction with ground and surface water models being developed by the U.S. Geological Survey for the Coalition to determine the impacts of water withdrawals and land use changes on the health of the Pomperaug, Nonnewaug and Weekepeemee Rivers.

Beginning in early June, Coalition student interns Tom Van Acker of the University of Connecticut and Jennifer Hogue of UMass began sampling fish populations in representative sites through-out the watershed. To determine which habitats various fish prefer, these hearty field researchers spent long hours sampling fish using a method known as electro-grid shocking.



Native brown trout captured and released during summer sampling in the Pomperaug Watershed

Throughout the summer a total of 21 species and 2,908 individual fish were captured, identified and released! The number of species recorded at each of the representative sites varied widely, as did the species

composition. After our interns returned to school in September, Southbury resident and Coalition volunteer Christina Ferloni helped complete the sampling with Hunter Brawley, Project Coordinator.

According to Dr. Parasiewicz, “the research conducted this summer helps us better understand which species occur where, and which habitat characteristics our resident fish find most suitable.” This information will be used to help estimate changes in fish habitat availability at different stream flows. For more information on this project or for information on volunteer opportunities, check our website or contact the NEIHP at piotrp@forwild.umass.edu.

Agricultural Land & Water Quality

The Coalition’s Land Use Committee (LUC) is in the process of identifying Watershed lands that are important to water protection. This analysis is based on the federal Environmental Protection Agency’s National Urban Runoff Program studies conducted in the early 1980s which tell us that less intense land use is more protective of water. For example, open land such as forests and fields allows rain to sink into the ground, thus replenishing an aquifer. Open land also allows storm water runoff to filter through vegetation and soil, cleaning and purifying the water before it enters wetlands, streams, and rivers.

The LUC utilized the Central Naugatuck Valley Council of Government’s Geographic Information System (GIS) to help define what “open land” consists of in the Pomperaug Watershed. The Committee found that the largest open land areas are either forested, agricultural, or wetlands. Further research revealed that agricultural lands are



Farmland such as this in Southbury allows precipitation to replenish the aquifer

most at risk because they are the most vulnerable to development. Agricultural lands typically have easy access to roads, good soils for septic systems, gentle topography, and are clear of trees and brush. The LUC decided to focus on agricultural lands first and then take a similar in-depth look at forested and wetland areas.

The LUC used GIS to identify agricultural lands that are a) available to be developed in the future and thus potentially converted to a more intense land use; 2) adjacent to wetlands, streams, or rivers; 3) over our aquifer; and 4) in close proximity to open land that already enjoys permanent protection through ownership by a land trust, or by the existence of conservation easements.

With help from a generous grant from the Southbury Community Trust Fund, the LUC will produce maps and copies of its associated report “*The Role of Agricultural Land In the Preservation of the Pomperaug Watershed*” for the Watershed towns. These will provide guidance and recommendations for protecting agriculture in the Watershed. The Committee plans to deliver the maps and reports through workshops for targeted audiences such as Southbury, Woodbury and Bethlehem’s land use commissions and land trusts. The report will also be available to read or download from the Coalition’s website, www.pomperaug.org.

P.O. Box 141
Southbury, CT 06488-0141
Email: info@pomperaug.org

Non-Profit Organization
U.S. Postage
PAID
Permit # 133
Southbury, CT 06488

POMPERAUG PONDERINGS

Q: What is groundwater?

A: As precipitation moves down into the ground, it passes between particles of stone and sediments until it reaches a depth where the ground is saturated with water. The area that is filled with water is called the **saturated zone** and the top of this zone is called the **water table**. This **groundwater** is naturally stored underground in **aquifers** (areas which hold a lot of water) or is stored in and flows through the cracks and crevices in the underground soil and rock, supplying springs and wells.

Most groundwater is clean, but when pollutants leak, spill, or are dumped on the ground they can move through the soil and into the groundwater. Sources of such contamination include leaky underground gasoline tanks, landfills, fertilizers and pesticides applied to fields and lawns, and rain water that picks up pollutants and carries them to rivers and streams that in turn recharge the groundwater.

In the Pomperaug Watershed *all* of our drinking and other household water is groundwater (we do not get any of our water directly from reservoirs or other forms of **surface water**). Thus it is extremely important that our groundwater be kept pure, unpolluted, and abundant. Future issues of *Watershed News* will detail ways in which Watershed residents can work together to guarantee this critical resource.

