

Drinking Water

Drinking water has the highest standards for being clean. If you live in Westport your drinking water probably comes from a private well, and it's up to you to find out if your water is safe for you and your family to drink. Testing your water is easy to do, but it does cost money, so you may want to avoid unnecessary testing.

Do your part and find out if your water is clean. Private water users should test at least yearly for bacteria and other chemicals that may be of interest (lead, iron, nitrates). Even if your water is safe, yearly testing will enable you to have a record of your water's prior history, so that if a change occurs, you will know.

The Town of Westport's, Board of Health office has a special deal with a certified testing lab, which offers discounted prices for anyone who gets their water tested through the office. Please call 508-636-1015 for scheduling and prices. There are also other independent laboratories that offer the same services. A list of these certified labs can be found on the state's Department of Environmental Protection website: www.mass.gov/dep/water/drinking/qalabjp.htm



INSIDE:
2011
Health of
the
Westport
River

CLEAN WATER

Where Does It Come From?
Where Does It Go?
How Clean Does It Need to Be?

The Westport River Watershed Alliance (WRWA) is a 501(c)(3) non-profit organization, formed in 1976 to protect and preserve the natural resources of the Westport River watershed.



WRWA works to increase awareness and understanding among local adults and children of impacts on water resources. WRWA encourages individual and collective responsibility for our environment. We share information on ecological ways of co-existing with nature and educate watershed residents, young and old, about what they can do to protect these natural resources.

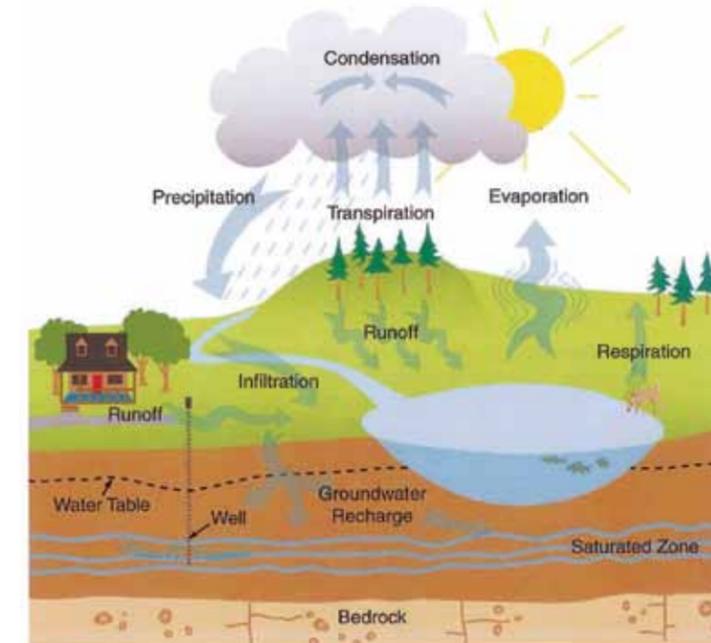
There are many obvious reasons for us to protect our water resources, but the most important point to remember is that water is absolutely essential to all living things. Educate yourself, dedicate yourself and you can make a difference.

Rivers are literally the arteries and veins of our nation. Their waters are critically important to our health and well-being. Most Americans live within a mile of a river or stream, and all of our drinking water comes directly or indirectly from rivers and streams. By protecting and restoring rivers, we are protecting clean drinking water, creating jobs and recreation opportunities that benefit our economy, and revitalizing our natural heritage for future generations.

Water is needed to keep the ecosystem in balance. Clouds need water to make rain. Plants need water to grow. Animals depend on plants for the oxygen they produce and the food they provide. When one element of the chain is compromised, the entire system is thrown out of whack.

Water is used locally for many things. How clean it needs to be depends on what you want to use it for. This report briefly summarizes the current conditions of the Westport River and local waters used for shellfishing, swimming, boating/fishing, and ultimately drinking. For more information on water resources visit www.westportwatershed.org

How Water Moves



Through a constant cycle, water is carried from the oceans, lakes, and streams by evaporation upward into the atmosphere. It is then returned in the form of rain. While the total amount of water on Earth remains relatively constant, where the water is, changes from moment to moment. Water is constantly in motion.

Clean Water

What You Can Do

Get informed. For more detailed information on water resources visit:



Westport River
Watershed Alliance:
westportwatershed.org



Westport River Watershed Alliance
1151 Main Road
P.O. Box 3427
Westport, MA 02790-0703
(508) 636-3016 • FAX (508) 636-8884
<http://www.westportwatershed.org>

Make A Difference

- Let your town officials know you support plans to reduce pollution in our waterways.
- Support groups that promote community partnerships like WRWA that work to make our coastal community a better place to live, work and play.
- Pick up and properly dispose of your pet's waste.
- Do not feed waterfowl.
- Upgrade failing septic systems; maintain all systems follow the Town's Septic Maintenance guidelines.
- Reduce stormwater runoff from your own property.
- Construct driveways and paths with gravel or brick rather than asphalt or concrete.
- Redirect roof drains to discharge onto your lawn or garden instead of onto pavement.
- Get your private well water tested.

Return Service Requested

Westport River Watershed Alliance
1151 Main Road
P.O. Box 3427
Westport, MA 02790-0703



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The Ways We Use Water

Water from rain and melting snow either seeps into the ground or "runs off" to lower areas, making its way into streams, rivers and other waterbodies. On its way, runoff can pick up and carry many substances that pollute water. Some—like pesticides, fertilizers, oil and soap—are harmful in any quantity. Others—like sediment from construction, bare soil, animal waste, grass clippings and leaves—can harm creeks, rivers and lakes in sufficient quantities. So what are the conditions of our local waters? The answers depend on what you want to use it for.

Shellfishing can only take place in the cleanest waters that have been tested by the State's Division of Marine Fisheries. These water testing standards are the strictest of all water quality classifications, far exceeding those required for boating and swimming. If the levels of certain kinds of bacteria are too high, they pose a health risk for eating the shellfish that live in the water. The Westport River has many shellfishing areas that are open or closed depending on bacteria levels and rain amounts. In the past ten years, things have improved: many acres of shellfish areas that had been seasonally or permanently closed are now open because of cleaner water.

Swimming—WRWA has been testing bacteria levels in the River for over twenty years. Over the years conditions have greatly improved, especially in the upper East Branch. Ideally, a clean river would be completely swimmable from its headwaters to the mouth.

Making sure our beaches are safe for swimming is done by the state. For the most recent beach test results visit: http://mass.digitalhealthdepartment.com/public_21/index.cfm

Boating—Things are getting cleaner in the River for recreation like boating and fishing. The tests done for shellfishing and swimming can also give answers if the water is clean enough for boating. The table below shows how things have improved over the last decade.

Westport River Zone	Passing Boating Standards 10 years ago	Passing Boating Standards in 2010
Upper East Branch	69%	100%
Inner East Branch	98%	100%
Outer East Branch	100%	100%
Inner West Branch	100%	100%
Westport River Inlet	100%	100%



SHELLFISHING

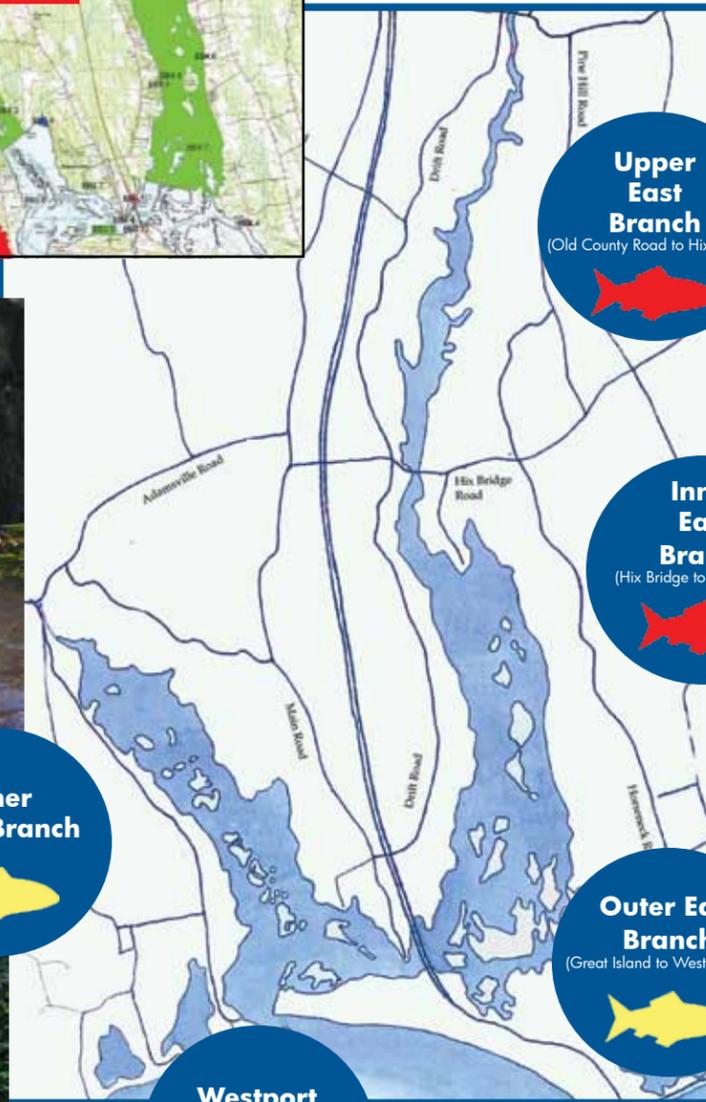


SWIMMING



Boating

How Healthy is the Westport River?



Keeping track of the water quality of the river on a yearly basis allows us to notice if and when conditions improve or worsen. If they get worse over time, which they have in recent years due to nitrogen pollution, it's an indication that the health of the river is declining. Monitoring different areas of the river and measuring a number of water properties provides a more complete picture of what's going on, which helps when trying to find solutions to the pollution problem. In the Westport River we are seeing nutrient pollution getting worse as bacteria pollution improves. Rapid population growth over several decades has created an abundance of nutrients that is over-fertilizing local waters.



Each summer, volunteers called Baywatchers test different spots on the river to measure oxygen, clarity, and salinity. This data is combined with results from river samples taken by WRWA as part of the Buzzards Bay Coalition's program to measure nitrogen and phosphorous, another potential pollutant in our waters. In the same way a doctor can monitor a patient's health by analyzing their blood chemistry, scientists can assess the "health" of a river watershed by studying the chemical composition and other properties of the water. What we as humans do to our landscape affects how clean our waters are. Polluted runoff from storms flows down into our rivers and streams and changes the conditions in the water, sometimes making it too dirty for the creatures that live there to survive.

Here's what the numbers mean: Central Buzzards Bay—which has extremely clean water—would score close to 100. The number provides a simple way to compare ecological conditions throughout Buzzards Bay. The most recent scores for the Westport River are below.

The results this year show a bit of improvement compared to the last few years of decline in scores. The good news is there are improvements in the Upper East Branch. When compared to trends from ten years ago, the scores for sections of the East Branch are improving even though nitrogen inputs to the River exceed critical limits. The bad news is that the entire River system ranks only in the Fair to Poor range of scores. We will need to work together as a community connected by water to determine how to limit nitrogen inputs to the River.



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Upper East Branch (Old County Road to Hix Bridge)	18.1	21.2	20.3	20.1	25.2	26.1	26.9	28.6	25.0	25.6
Inner East Branch (Hix Bridge to Great Island)	30.6	28.8	30.4	31.9	34.1	36.1	36.5	37.0	32.4	32.4
Outer East Branch (Great Island to Westport Point)	63.4	57.5	54.8	54.7	52.7	50.5	50.1	49.8	45.3	45.1
Inner West Branch (Canoe Rock to Irish Island)	56.1	53.1	52.8	51.8	56.9	55.0	56.9	56.2	52.7	49.2
Westport River Inlet (Mouth of the River)	80.4	79.8	79.9	77.6	75.6	70.5	71.2	68.0	63.7	60.2

Many thanks to the Buzzards Bay Coalition for providing the data and resources used to determine the health index for the Westport River. The scores shown are the mean of 5 most recent years health index of the Westport River.

What Will Make the River Healthy Again?

There are solutions. Both short term and long term goals must be established with the eventual result that nitrogen inputs from future growth must be limited, and existing inputs must be reduced. Once the main sources are identified and the targeted nitrogen levels for the various parts of the River are established, the next step will be to evaluate the range of measures and technologies that would bring projected nitrogen levels down to the projected targets.

The State requires that this be done through preparation of a Comprehensive Water Resource Management Plan (CWRMP). Such a plan, usually prepared by a qualified engineering firm, matches up the sources of nitrogen with the various nitrogen-reducing alternatives. The analysis takes into consideration the relative costs of those alternatives in relation to the amount of nitrogen reduction. Only by this planning process can we scientifically determine how to clean up the River and make it healthy.

Let's get the answer to the question "How clean is clean enough?"

Use Your SMART Phone HERE



for MORE info on sources of pollution