



PWS ID # 2151001

RESULTS FOR
CALENDAR YEAR
2009

Arthur E. J. Levesque
Chairman

Kevin M. Bergin
Commissioner

Michael L. DellaCava, Sr.
Commissioner

Stanley A. Zagorski
Treasurer

Cynthia A. Garabedian
Clerk

Michael F. Knox
Superintendent

Board of Water
Commissioners
Meetings:

- Every 2nd and 4th Monday of each month at 7:00 P.M.
- Public is welcome
- Meetings are held at 148 Henshaw Street, Leicester

ANNUAL WATER QUALITY REPORT

The Cherry Valley and Rochdale Water District is pleased to report the results of our 2009 water testing. Today's customers are becoming more aware of environmental and health issues and should have detailed information about the quality of their drinking water. Although this report is a federal requirement, it provides us with the opportunity to share with you important facts about the sources, treatment, protection and conservation of our drinking water. The Cherry Valley and Rochdale Water District is committed to delivering the best quality drinking water possible and remains vigilant in meeting the challenges and demands of today's water quality requirements.

WHERE DOES OUR DRINKING WATER COME FROM?

Your drinking water comes mainly from Henshaw Pond (shown below) located on Henshaw Street in Leicester. This source is a naturally occurring "Great Pond," located in the French River Basin. The District began using the Pond as its primary source in 1912. It serves as the sole supply for approximately 40% of Leicester's population. CVRWD's secondary source, the Grindstone Well, was activated in June 2005 and is primarily used to augment the supply from Henshaw Pond. **Water Treatment** throughout 2009 was conducted by withdrawing water from Henshaw Pond through an intake pipe into a screen house. Two raw water pumps transport the water to two slow sand filters. Finished filtered water flows into a ground level clear water storage tank. The filtered water is then disinfected by the addition of chlorine, pH adjusted by the addition of potassium hydroxide and corrosion control provided by the addition of a phosphate. The filtered water is then pumped into the distribution system by two high lift pumps and stored in standpipes located in the Cherry Valley and Rochdale service areas.

Water from the Grindstone Well is pumped and filtered by the Grindstone Treatment Facility for the removal of arsenic, radon and uranium. The filtered water then flows to and is blended in the ground level clear water storage tank. The blended water is further treated and delivered in the same manner as previously described. The District has direct interconnections with the City of Worcester with locations at the Leicester/Worcester town line and on Sargent and Stafford Streets. An additional interconnection with the Leicester Water Supply District is located on Main Street at the District boundary. All three interconnections provide emergency water supply when activated.

From Henshaw Pond



To your home



WATER CONSERVATION PRACTICES

For Residents:

- Install faucet aerators in all sinks.
- Fix or replace faucet and toilet leaks.
- Don't let the water run while brushing your teeth or washing the dishes.
- Don't wait for water to run cold. Instead, store water in the refrigerator.
- Take showers instead of baths, and take shorter showers.
- Install water-saving showerheads.
- Use low-flow toilets and urinals or displace water in tanks with plastic jugs filled with water or pebbles.
- After flushing the toilet, make sure the valve has closed and water is not running.
- Only use washing machines and dishwashers when there is a full load.
- Scrape plates clean instead of rinsing.
- Use low-volume washing machines.
- Wrap water heaters with insulation.
- Limit watering outdoor plants and landscaping.
- Water outdoor plants and landscaping in the evening.
- Use rain barrels to collect rainwater and use for plants and landscaping.
- Incorporate native plants into landscaping. They adapt better to the climate.
- Landscape with no- or low-water consuming plants.
- Use mulch around plants and trees to reduce water

For Communities, governments, and utilities:

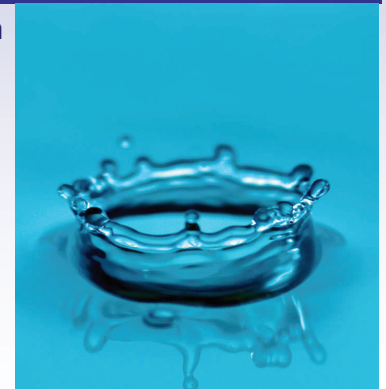
- Test water meters regularly and check for accuracy.
- Locate and fix leaks in water infrastructure.
- Provide incentives for:
 - Low-flow toilets
 - Efficient washing machines
 - Efficient dishwashers
 - Rain barrels
 - Multi-setting sprinkler timers
- Educate customers on where they can get low-interest financing to help purchase conservation equipment.
- Require or encourage retrofitting of toilets and plumbing when building or selling a home.
- Offer home and business water audits for free or at a low cost.
- Educate customers on water conservation and your community's dedication to conservation efforts.
- Use pricing mechanisms that encourage water conservation.

FACING TODAY'S DECLINING ECONOMY

We understand that due to the current economic status, many people are facing difficult decisions and are struggling to make ends meet. We want to inform the CVRWD customers, that if you are having difficulty paying your monthly water bill, we ask that you contact the District office at 508-892-9616 to communicate your situation. We are more than happy to help you in establishing a payment plan or provide you with conservation suggestions that could reduce your future water bills. Again, we understand that everyone is experiencing hardships and we want to express our willingness to assist you.

NATURAL OCCURENCES IN DRINKING WATER

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. Call EPA's Safe Drinking Water Hotline at 1-800-426-4791 for more information about contaminants and potential health effects. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or human activity.



SUBSTANCES EXPECTED TO BE IN SOURCE WATER

Contaminants that may be present in drinking water before treatment include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, can also come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, EPA and MassDEP prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration and MA Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health.



WATER QUALITY TESTING



During 2009, we conducted more than 2,108 tests for over 182 drinking water contaminants, resulting in one test exceeding EPA or State health drinking standards. This report is a snapshot of the quality of the water that we provided last year. Included are details about where your water comes from, what it contains and how it compares to Environmental Protection Agency (EPA) and state standards. For more information about your drinking water and the 2009 Consumer Confidence Report please feel free to call Michael F. Knox at 508-892-9616. The Cherry Valley and Rochdale Water District is committed to providing its customers with high-quality drinking water 24 hours a day, 365 days per year. CVRWD has made significant investments in water treatment facilities, water quality monitoring, water sources, protective lands and distribution systems.

Compliance in 2009

In our October 2009 bacteria testing, three sampling locations showed the presence of total coliform, which triggered a monthly MCL violation. After receiving the test results, the District contacted MassDEP, added disinfection products into the standpipes, collected repeat samples for bacteria and chlorine residual in the system, and posted public notice to customers. No other samples showed total coliform, and we returned to compliance in November. This was the only time during 2009 that we exceeded a Federal or State drinking water standard.

IMPORTANT HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer or undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.



WATER QUALITY DATA

The following tables list all the drinking water contaminants that the CVRWD detected during the 2009 calendar year or during the most recent round of testing for each contaminant group. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The state requires us to monitor certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. For more information on drinking water, click on: www.madwep.org or epa.gov/safewater

Contaminant	Highest # Positive in a month	Date	MCL	MCLG	Violation	Possible Source
-------------	-------------------------------	------	-----	------	-----------	-----------------

Microbiological Contaminants

Total Coliform	3	October 2009	1	0	Yes	Naturally present in the environment
Fecal Coliform or E. coli	0	Bi-monthly	*	0	No	Human and fecal waste

*Compliance with fecal coliform/E. coli MCL is determined upon additional repeat testing.

Regulated Contaminants	Date(s) Collected	Highest Detect or Highest RAA*	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Yes/No)	Likely Source(s) of Contamination
------------------------	-------------------	--------------------------------	----------------	-------------	---------------	--------------------	-----------------------------------

Inorganic Contaminants

Arsenic (ppb)	Quarterly	9	3 - 9	10	n/a	No	Erosion of natural deposits
Barium (ppm)	5-13-09	0.009	-----	2	2	No	Erosion of natural deposits

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans in high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Disinfection Contaminants

Haloacetic Acids	Quarterly	3*	0 - 0.7	60	-----	No	Byproduct of drinking
Total Trihalomethanes (TTHMs) (ppb)	Quarterly	62*	50.8 - 70.1	100	-----	No	Byproduct of drinking water chlorination
Free Chlorine (ppm)	Monthly	0.13*	0 - 1.81	4	4	No	Water additive used to control microbes
Chlorine Dioxide (ppb)	Daily	590	<100 - 590	800	800	No	Water additive used to control microbes
Chlorite (ppm)	Daily	0.92	< 0.1 - 0.92	1	0.8	No	Byproduct of drinking

* Highest running annual average (RAA) is the highest average of four consecutive quarters of data

Regulated Contaminants	Date(s) Collected	Highest Detect or Highest RAA*	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Yes/No)	Likely Source(s) of Contamination
------------------------	-------------------	--------------------------------	----------------	-------------	---------------	--------------------	-----------------------------------

Radioactive Contaminants

Radium 226 & 228 (pCi/l)	Quarterly (2006)	0.5	0 - 0.5	5	0	No	Decay of natural and manmade de-
Uranium (ppb)	Quarterly	1.6	1.3 - 1.6	30	0	No	Erosion of natural deposits
Gross Alpha (pCi/l)	Quarterly	3.2	0.5 - 3.2	15	0	No	Erosion of natural

Unregulated Contaminants	Date Collected	Highest Detect	Average	SMCL	ORSG	Likely Source
Manganese (ppm)	5-13-09	0.01	-----	0.05	-----	Natural Sources
Sodium (ppm)*	5-13-09	19	-----	-----	20	Natural sources; runoff from road salt
Sulfate (ppm)	5-13-09	7.4	-----	250	-----	Erosion of natural deposits
Radon (pCi/l)**	Quarterly	3,100	1582	-----	10,000	Natural Sources

*Sodium-sensitive individuals, such as those experiencing hypertension, kidney failure, or congestive heart failure, should be aware of the levels of sodium in their drinking water where exposures are being carefully controlled.

**Radon is an odorless and tasteless gas that occurs naturally from the breakdown of uranium in soil. Radon can move up through the ground and into a home through cracks in the foundation. It can also get into indoor air when released from tap water. Activities such as showering may release radon into the air and may account for a small amount of exposure to the public. Breathing in radon gas over a long period of time can increase your risk of getting lung cancer. Drinking tap water containing high amounts of radon may increase your chances of developing stomach cancer. The current guidance for radon in drinking water in Massachusetts is 10,000 picocuries of radon per liter of water. Typically this would result in an increase of 1 picocurie per liter (1 pCi/l) to the air inside the home. US EPA currently advises consumers to take action if the total household air level is above 4 pCi/l. For more information, contact EPA's Radon Hotline at 1-800-SOS-RADON.

Turbidity*	TT	Lowest Monthly % of Samples	Highest Daily Value	Violation (Yes/No)	Likely Source
Daily Compliance (NTU)	5	-----	1.40	No	Soil Runoff
Monthly Compliance**	At least 95% of monthly samples at or below 1 NTU	100%	-----	No	

* Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality.

** Monthly compliance is related to the specific treatment technique (TT). CVRWD uses slow sand filtration, so at least 95% of our samples each month must be below the turbidity limits specified in the regulations.

LEAD UPDATE

The District analyzed water at 20 residential sites for lead and copper during September 2008 as required by MassDEP. The results below indicate that no homes exceeded the action level of 15 parts per billion. It is possible that lead levels at some homes may be higher than other homes in the District as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your drinking water, you can have your water tested by a state certified laboratory and flush your tap for 30 seconds to 2 minutes before using tap water. Another round of lead and copper sampling will be conducted in September 2011.

Lead & Copper	Date Collected	CVRWD 90th Percentile*	Action Level (AL)	MCLG	# of Sites Sampled	# of Sites above AL	Exceeds AL (Yes/No)	Likely Source
Lead (ppb)*	9-17-08	8	15	0	20	0	No	Corrosion of household plumbing
Copper	9-17-08	0.3	1.3	1.3	20	0	No	Corrosion of household plumbing

* Lead & Copper compliance is based on the 90th percentile value, which is the highest level found in 9 out of every 10 homes sampled.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Cherry Valley & Rochdale Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

DEFINITIONS

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Action Level (AL): The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants (ex. chlorine, chloramines, chlorine dioxide).

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Unregulated Contaminant: These contaminants are substances without MCLs for which EPA requires monitoring.

Office of Research and Standards Guideline (ORSG): This is the concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.

Secondary Maximum Contaminant Level (SMCL): These standards are developed to protect the aesthetic qualities of drinking water & are not health based.

NTU: Nephelometric turbidity unit; **pCi/l:** Picocuries per liter (a measure of radioactivity).

ppm: Parts per million, or milligrams per liter (mg/l), **ppb:** Parts per billion, or micrograms per liter (ug/l)

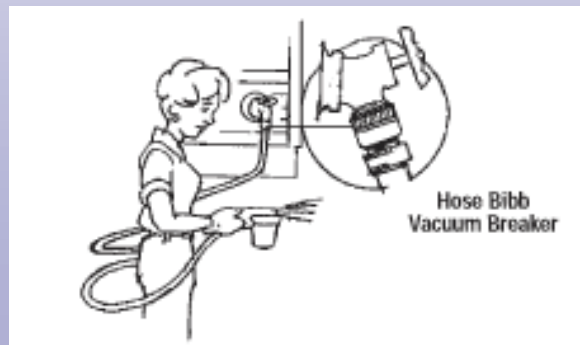
CROSS CONNECTIONS

Fluctuation in water pressure can cause water to be siphoned or sucked backwards through pipes and hoses. A cross connection occurs whenever a potable drinking water line is directly or indirectly linked to a piece of equipment or piping containing non-potable water. Hoses are the most common extension of a plumbing system and the item most likely to cause an accidental poisoning of your water. Hoses are often connected to swimming pools, laundry sinks and lawn chemical sprayers. Water flowing backwards into your home will bring contaminants or poisons with it. To prevent this from happening, every hose faucet connection should have a device called a **Hose Bibb Vacuum Breaker**. These are inexpensive and are available from your local plumbing contractor or supplier.

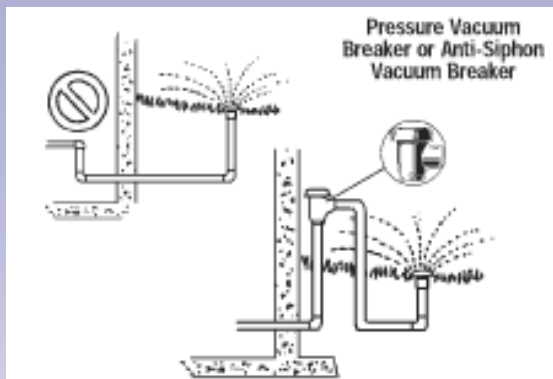
As required by Massachusetts Drinking Water Regulations, 310 CMR 22.22 (3) (b), the Cherry Valley and Rochdale Water District has an approved Cross Connection Program Plan. This means that all cross connections in Cherry Valley and Rochdale Water District's businesses that are supplied by public water are surveyed by a certified backflow tester on an annual basis. Below are some examples of cross connections:

Outdoor Faucet

The ordinary garden hose is the most common way to contaminate the water supply. This can happen when one end of the hose is attached to an outdoor faucet (sill cock), and the other end is connected to an aspirator type bottle, insecticides or other chemicals in the aspirator bottle can be siphoned back into the drinking water supply. You can easily prevent the possibility of this type of contamination by installing a hose bibb vacuum breaker. This is a small, inexpensive device that simply attaches to a threaded water faucet.



Lawn Irrigation System



Lawn irrigation systems need a vacuum breaker backflow preventer to protect against lawn and pesticide chemicals being drawn in from the lawn and back into the drinking water supply.

LEAKS COST YOU MONEY \$\$\$

Hole Diameter in Inches	Water wasted per month (gallons)	Water wasted per month (cubic feet)	Added cost to homeowner per month *
○ 1/4	393,833	52,651	\$3,806.18
○ 1/8	98,666	13,190	\$945.26
○ 1/16	24,666	3,297	\$228.05
○ 1/32	6,166	824	\$58.87

* Based on CVRWD current rates.

**CHERRY VALLEY AND ROCHDALE WATER DISTRICT
P.O. BOX 138
ROCHDALE, MA 01542**

1ST CLASS MAIL
U.S. POSTAGE
P A I D
ROCHDALE, MA
01542
PERMIT #12

Source Water Assessment Program (SWAP)

The SWAP Report assesses the susceptibility of public water supplies and provides information to improve and protect the District's water supply from potential contaminants. MassDEP recommends that CVRWD monitor land use within the Zone A (area 400 feet from the reservoir and 200 feet from the tributaries), control storm water and aquatic life within Zone A, discourage and control aquatic life, inspect watersheds and catch basins and work with the Town and State to establish regular maintenance of catch basins and streets to reduce the amount of potential contaminants in runoff.

What is my system's ranking? The overall ranking of susceptibility to contamination for the system is "high," based on the presence of at least one high threat land use within the water supply protection areas. The CVRWD has four (4) "high" threat classifications: **1. Aquatic Wildlife, 2. Stormwater Drains/Retention Basins, 3. Transmission Line Rights-of-Way (Electric), 4. Transportation Corridors (Rte 9 & Henshaw St).**

How is the CVRWD addressing the SWAP? The District regularly submits written comments and participates in all Planning Board and Zoning Board of Appeals processes relating to land use within the watershed. In November of 1997, the District developed a comprehensive Surface Water Supply Protection Plan for Henshaw Pond that has been used as a model for other communities state-wide. The District further participated in the development of the Town of Leicester's Zoning By-laws called the Water Resources Protection Overlay District. The District regularly conducts on-site inspections of land use within the watershed and communicates such activities with the Town of Leicester Code Enforcement Officer to implement corrective action as warranted.

What can I do to help? Please do not underestimate your impact on your water supply. You can help protect water supplies by supporting local protection plans and initiatives implemented by the Town of Leicester Zoning Board of Appeals, the Planning Board and the CV&R Water District. Also, practicing good septic system maintenance, taking hazardous household chemicals to designated collection sites and limiting pesticide and fertilizer use will help ensure a clean water supply.

Where can I see the SWAP report? The complete SWAP report is available by contacting Michael Knox, Cherry Valley & Rochdale Water District at 508-892-9616. It is also available online at www.mass.gov/dep/water/drinking/2151001.pdf