

# *Palmer Water District # 1*

*10 Walnut Street  
Palmer, Massachusetts 01069*

*413-283-8411*

## **2010 DRINKING WATER QUALITY REPORT**

The Palmer Fire District # 1 and Palmer Water District # 1, P.W.S. ID # 1227000, presents this Consumer Confidence Report to all Customers in the water supply service area of the District. This report is part of the 1996 Safe Drinking Water Act Amendments and is required by the United States, Environmental Protection Agency and Commonwealth of Massachusetts, Department of Environmental Protection. All Public Water Systems in the Commonwealth will be presenting some form of this report to their customers prior to July 1<sup>st</sup>.

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### **PALMER WATER DISTRICT # 1 DISTRIBUTION AND SERVICE AREA**

The Palmer Water District # 1 portion of the Palmer Fire District # 1 and Palmer Water District # 1 is the service area with the Water Distribution System and Fire Hydrant System. The service area in general encompasses the area from the Quaboag River, north to the Massachusetts Turnpike and from Palmer Paving, West to the Turnpike Bridge Overpass at Rt. 181. The District also services Mt. Dumplin Rd. area and the Condominium Complex.

There are approximately 1400 metered accounts, estimated customer base of 4,700, 29 miles of Distribution System ranging in size from 16" Cast Iron Main to 1 1/4" Copper Laterals and approximately 217 Fire Hydrants.

There is a 953,000-gallon Concrete Clearwell which was constructed in 1995 and distributes water to the Downtown sections (Low Pressure System) of the District and is located at the Graves Brook Reservoir Treatment Facility.

The higher elevations (High Pressure System) in the District are supplied by a 750,000-gallon Steel Water Storage Tank located at the top of Breckenridge St. which was constructed in 1963.

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### **BUSINESS HOURS**

The Palmer Water District # 1, business office hours are Monday – Friday: 7:30 a.m. – Noon / 12:30 p.m. – 4:00 p.m., (excluding Holidays). The business office telephone number: 1-413-283-8411.

The Board of Water Commissioners regularly meets at least once per month. Please contact the business office for the exact date and time of the next scheduled meeting, if you wish to address problems or concerns with the Board.

The Superintendent, James Ammann, can be contacted at the Graves Brook Reservoir Treatment Facility at 289-1410 or the business office, if there are any questions regarding this report.

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### **PROTECTION OF YOUR OWN HOME AND YOUR NEIGHBORS FROM CROSS CONNECTIONS CAUSED BY YOUR GARDEN HOSE CONNECTIONS AND LAWN IRRIGATION SYSTEMS**

The Palmer Water District recommends the installation of backflow prevention devices, such as a low cost Hose Bib Vacuum Breaker, for all inside and outside hose connections. You can purchase these devices at a hardware or plumbing retailer.

On Lawn and Yard Irrigation System a properly installed Backflow Preventer must be evaluated and installed to meet Plumbing Code and Massachusetts Cross Connection Control Regulations.

For additional information, on this critical protection step, please contact Superintendent Ammann, 413-283-8411.

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## 1995, 2000, 2004 & 2007 & 2010 SANITARY SURVEY

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In March 2010 DEP conducted its' most recent inspection of the Palmer Water District # 1. DEP found the District to have Adequate Capacity since there have been no violations of the Drinking Water Regulations and there have been no management changes. The District has continued to make ongoing improvements to the System since the previous surveys and continues to:

**Administer its Cross-Connection Program as it deals with Municipal, Industrial and Commercial Accounts.**

**Maintains less than an adequate (or minimum) number of licensed staff to operate Distribution and Treatment Facilities.**

**Attempt to make reductions of Unaccountable Water, with the continuation of the remetering of Residential, Commercial, Industrial and Municipal Accounts and Leak Survey Work with the District's Leak Detection Equipment.**

**Conduct structural inspections of both the Clearwell and Breckenridge Street Water Tank.**

**Continue to update its Emergency Response Plan**

**Regularly update its Sampling Plan**

**Currently working on the implementation of the EPA / DEP Groundwater Rule**

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## PALMER WATER DISTRICT WATER SOURCES AND TREATMENT

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The Palmer Water District # 1 has four sources of water; two of which are Ground Water and the other two are Surface Water Supplies. The Galaxy Wellfield # 1 and Gravel Pack Well # 2 are the two Ground Water Supplies; these are located off Salem Street. The Upper and Lower Graves Brook Reservoir are the two Surface Water Supplies; these are located off Breckenridge Street.

The District currently operates two Water Treatment Plants, one at each type of source. The Graves Brook Reservoir Treatment Facility operates at the Surface Water Sources. The Granular Activated Carbon Treatment Plant operates at the Ground Water Sources.

The Graves Brook Reservoir Treatment Facility was placed on line in May 1995. The Facility is a packaged plant and treats the reservoir water with two Micro Floc Up-Flow Clarifiers and Granular Activated Carbon Media Filters. The finished water is treated with Disinfectant, (Chlorine) and Corrosion Control, (pH adjustment and Tri-Metallic Phosphate Injection). The Facility also removes particulate matter (Turbidity) from the water along with Microbial Contaminants, Organic Contaminants, Taste, and Odor. Along with the Treatment Facility at Graves Brook Reservoir is the Operation Headquarters for the District. The business office still remains on Walnut Street next to the Fire Station.

The Granular Activated Carbon Treatment Plant was placed on line in 1989, through the Chapter 286 Grants Program. The Plant has two - 20,000 pound Granular Activated Carbon Pressure Vessels, which treat both well supplies for possible Volatile Organic (VOC), Pesticide and Herbicide, MTBE Contamination. The finished water is treated with Disinfectant (Chlorine) and Corrosion Control, (pH adjustment and Tri-Metallic Phosphate Injection). The Treatment Plant consistently treats all VOC Contaminants to Non-Detect Levels.

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## SOURCE WATER ASSESSMENT PROGRAM REPORT

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The Department of Environmental Protection has prepared a Source Water Assessment Report (SWAP) for the water supply sources serving the Palmer Water District # 1 water system.

The SWAP Report notes key issues of Environmental Concerns in the Watershed and Zone A of the Graves Brook Reservoir and the Zone I and II of the Well Supply located off Salem Street. The report recommends continued vigilance in these areas to protect the Ground Water Quality of these municipal sources. The report recommends coordination of efforts with other area Water Departments, Board of Health, Planning Board to implement a uniform protect plan for area.

A full copy of this report is available at <http://www.mass.gov/dep/water/drinking/swapreps.htm> or by contacting Superintendent Ammann.

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## PROJECTS & STUDIES IN 2010

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The District has received a Capital Improvement Planning Grant from the Commonwealth of Massachusetts, Department of Environmental Protection for updating of specific items within its' 1987 Master Plan Study as it relates to its' Infrastructure.

The District is investigating Alternative Energy Options in an attempt to reduce its' energy costs and carbon footprint.

The District is continuing to evaluate the potential impacts to the District's Water System from the potential of the sighting of a Destination Resort Casino within the District.

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## SUBSTANCES FOUND IN TAP WATER

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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 mineral and, in some cases, radioactive material, and can pick up substances resulting from the presence of animal or from human activity. Contaminants that may be present in source water 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 stormwater 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 agricultural, urban stormwater runoff, and residential uses.

Organic chemical contaminants -including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants -which can be naturally occurring or be the result of oil and gas production and mining activities.

Turbidity - which is a measure of the cloudiness of the water. It is monitor because it is a good indicator of water quality.

Lead and Copper -In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same. 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. Palmer Water District # 1is 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>.

The protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contamination. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791.)

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at 800-426-4791.

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## IMPORTANT DEFINITIONS

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**Maximum Contaminant Level (MCL)** – The highest level of a contaminant that is allowed in drinking water.

**Maximum Contaminant Level Goal (MCLG)** – The level of a contaminant in drinking water below which there should be no known or expected risk to health.

**Maximum Residual Disinfectant Level (MRDL)** – The highest level of a disinfectant allowed in drinking water.

**Maximum Residual Disinfectant Level Goal (MRDLG)** – The level of a drinking water disinfectant below which there is no known or expected risk to health

**Non Detectable Level (N/D)** – The level of the specific substance that is either non-existent or lower than the detection level (accuracy of the testing apparatus).

**Action Level (AL)** – The concentration of a contaminant which, if 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.

**Parts per Million (ppm)** – Parts per Million or Milligrams per Liter (mg/l). A concentration of a substance in the water.

**Parts per Billion (ppb)** - Parts per Billion or Micrograms per Liter (ug/l). A concentration of a substance in the water

**90<sup>th</sup> Percentile Level** – This value is the 90 % of the values taken from the 2009 Sampling Round.

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

**Suggested Maximum Contaminant Level (SMCL)** – These values do not have a regulated maximum and are only suggestive.