

WHAT'S ON TAP

The KKW Water District Newsletter

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LOOKING AHEAD

Norm Labbe, Superintendent

Rates Likely to Rise in 2007 - It now looks like an increase in water rates, to become effective by mid-2007, is inevitable. In spite of the apparent "3% economy" we have experienced for the past several years, many of our operating costs have increased dramatically. For example, our cost for electricity (of which we use a lot) over the past year alone has doubled. Insurance and chemical costs have risen considerably faster than inflation. The cost of water main materials, specifically ductile iron pipe, fittings and pipe, have increased by 20% per the past two years. All iron and steel products recently

Did you know.....

The District has only had one rate increase of approximately 14% in the last 22 years while the average rate of inflation has risen over 101% during the same period according to the US Bureau of Labor.

cast iron P V C i n - a b o u t year for years. s t e e l h a v e skyrocketed due to the huge demand for scrap iron and construction materials in China. In addition, you all know what is happening with the price of gasoline, diesel fuel and heating oil. The bottom line is that it appears we will have to increase revenues by about 10 to 15% to meet our operational requirements. As provided for in the MPUC regulations, rate setting is a public process with ample opportunity for you to provide input. We welcome your comments and the public dialog that lies ahead. Additional information concerning the likely rate increase will be provided in our *Winter 2007* newsletter.

Mission Minded:

Our mission is to provide the highest quality drinking water and customer service at a reasonable price.

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Mother's Day Flood shuts down Treatment Plant operations. District crews worked tirelessly around the clock to keep flood waters at bay and limit damage. Normal plant operations were able to resume in under 4 days thanks to a total "team effort".

ATV ABUSE IN WATERSHED CAUSES SOIL EROSION, CONCERN FOR WATER QUALITY

Don Gobeil, Technical Services Director

Periodically, we like to update and inform our customers on our efforts to monitor and protect the Branch Brook watershed area. Ensuring that we do all that we can to protect our source of supply is of utmost importance to us and a vital part of our mission.



The challenge we face is sometimes born of Mother Nature, as evidenced by the recent Mother's Day Flood (see photo above), and sometimes the result of human activity. As noted in the past, the increased popularity of motorized off-road vehicles, including ATV's, has had, and continues to have, a profound negative impact upon the watershed area. Erosion and property damage from unlawful trail development in this sensitive area results in sediment laden runoff, which increases our cost to treat the water and also severely impacts the fishery quality of this Class A stream. When unwise land use is coupled with the effects of significant rainfall events, the results are destructive.

We would like to reaffirm our policy of encouraging public (foot) access on District property while the use of motorized off-road vehicles by the general public anywhere on District property is strictly prohibited. We also recommend that these vehicles not be used anywhere within the Branch Brook watershed. Please call or stop by the office anytime if you would like to learn more about the watershed, the challenges we face and ways you might help protect this vital resource.

2005 Water Quality Report

CONGRATULATIONS! YOUR WATER MEETS OR EXCEEDS ALL FEDERAL AND STATE DRINKING WATER STANDARDS.

Since its incorporation in 1921, the Kennebunk, Kennebunkport & Wells Water District (District) has considered water quality of the utmost importance. The District vigilantly monitors and safeguards its water supplies and is proud to report that it continued to meet or exceed all drinking water quality standards during 2005. Our highly trained and licensed Water System Operators are committed to providing our customers with drinking water that surpasses State and Federal standards for safety and quality. In doing so, we work to conserve and preserve our water sources.

WATER FACTS

The Federal Environmental Protection Agency (EPA) wants you to know.....that sources of drinking water, both tap 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 from human activity.

Contaminants that may be present in source water include:

Microbial contaminants such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;

Inorganic contaminants such as salts and metals, that 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 that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses;

Organic chemical contaminants including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and

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

To ensure that tap water is safe to drink, EPA and the Maine Department of Human Services Drinking Water Program (DWP) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Regulations are also established to limit contaminants in bottled water to ensure the same protection for public health.

WATER SOURCE

The District's primary source of drinking water is Branch Brook. The brook, for the most part, is the town line between Kennebunk and Wells and originates in the town of Sanford.

Protection of the Branch Brook watershed remains a top priority (see ATV article on page 1). We continue to purchase property and acquire conservation easements within the watershed as opportunities arise. You can help too. Please be careful as you live, work and play to limit what goes into storm drains, tributaries and surface waters to help preserve the water quality and the diverse ecosystems it supports. If you witness suspicious activity within the Branch Brook watershed, please report it immediately by calling the District at 985-2362 or notifying the appropriate Police Department (Kennebunk - 985-6121, Wells - 646-9354, Sanford - 324-9170).

SOURCE WATER ASSESSMENT

The Source Water Assessment Program (SWAP) is an initiative started by the 1996 Safe Drinking Water Act Amendments. The underlying intent of SWAP is to characterize a source of supply watershed and generate awareness of potential contamination threats. The overall risk rating assigned to the Branch Brook supply was low. Future development and soil erosion were identified as potential low to moderate risks. Assessment results are available at public water suppliers, town offices and the DWP. For more SWAP information, you may contact the DWP at (207) 287-2070.

WATER QUALITY MONITORING/REPORTING

To comply with State and Federal drinking water regulations, we annually perform over 10,000 tests on your drinking water. Although not required, we conduct an additional 15,000 tests to ensure that the highest quality water is produced and distributed. We also constantly monitor the Filtration Plant, booster stations and water reservoirs with continuous on-line instruments. If you would like more information relating to water quality tests, please give us a call at 985-2362. The chart on page 3, indicating 2005 test results, excludes 72 individual parameters that tested below detectable levels. The definitions and abbreviations that follow the chart are provided to give a clearer understanding of the results.

TREATMENT PROCESS

Water from Branch Brook flows into our Filtration Plant where multiple processes are used to remove particles and microorganisms. The first process is COAGULATION, where chemicals (primarily food-grade alum) are added causing particles to destabilize and attract to each other. Then FLOCCULATION occurs in mixing chambers where the small particles combine into larger particles called floc. After this, CLARIFICATION occurs in the settling basins where the heavier floc particles settled out. Chlorine is then introduced for PRIMARY DISINFECTION. The FILTRATION process follows where clarified water passes through sand filters to remove any remaining floc particles. Finished water chemistry is then optimized for CORROSION CONTROL, FLUORIDATION, and SECONDARY DISINFECTION prior to being pumped into our distribution system where over 205 miles of main and 7 storage tanks distribute water to the District's customers.

HEALTH INFORMATION

Drinking water, including bottled water, may reasonably be expected to contain trace amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. 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 infants can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects and EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants, contact EPA Safe Drinking Water Hotline (1-800-426-4791) or the ME DWP (287-2070).

BOARD OF TRUSTEES MEETINGS

The Board of Trustees typically meets at 3 PM on the 4th Wednesday (January—October) and the 3rd Wednesday (November & December) at the District's 92 Main Street Office in Kennebunk.

2005 Test Summary

Primary Drinking Water Standards	Monitored Parameter	Major Source(s)	MCLG	MCL	District Results
	Distribution System	Total Coliform Bacteria	Naturally present in the environment.	0 pos / month	1 positive sample/month
Trihalomethanes (RAA)		By-product of drinking water chlorination.	0 ppb	80 ppb	19.41 ppb
Haloacetic Acids (RAA)		By-product of drinking water chlorination.	0 ppb	60 ppb	23.16 ppb
Lead (90th % Value)		Corrosion of household plumbing.	0 ppb	Action Level = 15 ppb	12 ppb on 12/31/03
Copper (90th % Value)		Corrosion of household plumbing.	1.3 ppm	Action Level = 1.3 ppm	0.07 ppm on 12/31/03
Fluoride		Natural occurrence from deposits. Water additive which promotes dental health. Optimal dose per State DWP Guidelines is 1.20 mg/L.(see Note 4)	4 ppm	4 ppm	1.31 ppm Max. (5/24/2005)
Treated Source Water	Barium	Drilling wastes, metal refineries, natural deposits.	2 ppm	2 ppm	0.005 ppm
	Mercury	Air deposits from industry, runoff, crops	2 ppb	2 ppb	<0.2 ppb
	Nitrite	Fertilizer, septic leaching, natural deposits.	1 ppm	1 ppm	<0.01 ppm
	Nitrate	Fertilizer, septic leaching, natural deposits.	10 ppm	10 ppm	0.1 ppm
	Turbidity	Soil and organic matter runoff.	n/a	<0.3 NTU in 95% of samples	0% Above 0.2
	VOCs	Contact District for information. Testing conducted in 2003.			None Detected
	Herbicides	Testing waiver to all of the contaminants by Maine Drinking Water Program.			Waiver
	Pesticides	UCMR screening performed in 2005 (see Note 3).	6 ppb	6 ppb	None Detected

Notes

- 1) Total Coliform Bacteria: Reported as the highest monthly number of positive samples, for water systems that take <40 samples per month.
- 2) Lead/Copper: Action levels are measured at consumer's faucet. 90% of the tests must be equal to or below the respective action levels of 15 ppb for lead and 1.3 ppm for copper.
- 3) A water sample collected on July 19, 2005 showed the presence of Di (2-ethylhexyl) phthalate at 14ppb which is higher than the Maximum Contaminant Level (MCL) of 6 ppb. Phthalates are given off from plastics and are easily picked up from the air and plastic components in the plumbing when water samples are collected. All follow-up testing has shown the levels of phthalates to be barely detectable (0.12 ppb and 0.20 ppb) indicating the initial high sample very likely was not due to water contamination. Testing will continue on a quarterly basis.
- 4) Fluoride levels must be maintained between 1-2 ppm for those water systems that fluoridate.

Definitions

AL - Action level - the concentration of a contaminant which, if exceeded, triggers treatment and other requirements which a water system must follow (e.g., lead, copper action levels).

MCL - Maximum contaminant level - 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.

MCLG - Maximum contamination level goal - 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.

cfu - colony forming units

ntu - nephelometric turbidity units

pos - positive samples

ppm - parts per million

ppb - parts per billion

RAA - Running Annual Average - the average of all monthly or quarterly samples for the last year at all sample locations.

Treatment technique - A required process intended to reduce the level of a contaminant in drinking water.

Turbidity - This is a measurement of water clarity. It is a good indicator of the effectiveness of our filtration process. Excessive turbidity levels can cause problems with water disinfection. 0.2 ntu was the highest measure of turbidity for the calendar year. Average finished water turbidity was less than 0.1 ntu. 100% of the samples taken were below the maximum level (0.3 ntu) for the treatment technique used. Therefore, your finished water is clear and safe to drink.

Variance or Waiver - Statement of U.S. EPA permission not to meet an MCL, testing requirement or a treatment technique under certain conditions (e.g. waiver for Phase II/V testing).

Synthetic Organics Waiver - The State of Maine Drinking Water Program granted the District a partial waiver for water testing for synthetic organic compounds for the period 1/1/2005 through 12/31/2007. Waivers are issued based on the land use activities in the vicinity of the water supply sources.

MOVING FORWARD

Scott Minor, Assistant Superintendent

New Project at the Plant - You may have noticed the recent construction activity at our Filtration Plant. The new building is housing an innovative pumping, treatment and recycling facility (PTR for short) that is designed to increase water production and eventually lower operating costs. It will also allow us to place back into full-time service our highly efficient rapid sand filters, which have been utilized for back-up service over the past 25 years. For more information regarding this somewhat unique project, please contact me or Norm Labbe directly or visit our website for additional construction photos and project details at www.kkw.org.



The PTR facility's roof shingles and brick facing are designed to complement the District's adjacent treatment plant buildings along Rte. 1 at the Kennebunk-Wells line. A private contractor was hired to construct the building shell while District crews are responsible for all plumbing, electrical, HVAC, controls, finish work in addition to installing all exterior piping and site work.



The 16" rapid sand filter backwash drain line is now connected to the PTR facility where all backwash water is captured and recycled. This is not only better for the environment, but allows the District to utilize its more efficient rapid sand filters on a continuous basis. Recycling operations began on April 24th, only seven weeks after the start of construction.

BENEATH THE SURFACE—PROJECT UPDATE

Don Gobeil, Technical Services Director

As we approach the mid point of 2006, it is apparent that this year will not be a 'typical' year in terms of District water main installations and replacements. As is well chronicled elsewhere in this newsletter, much of our focus this year has centered on building our new Pumping, Treatment and Recycling facility at our filtration plant site. The new building you see as you drive by is only the most visible part of the overall project. What lies '*Beneath the Surface*', in terms of piping systems, is truly an accomplishment. The network of new piping needed to make this type of facility operable results from careful design and skillful installation. If you could see the maze of pipes installed in such a confined area, you would certainly agree with us when we refer to the sight as a 'spaghetti' pile.

With only the interior of the PTR project left to complete, the attention of the Distribution Department will return to water main replacements in other areas of our system.

Some upcoming projects that have been designated in our capital improvement budget include:

Arundel Road – Kennebunkport: This project will involve replacing approximately 1,120 feet of undersized 4-inch main with a 16-inch main. This project will significantly improve fire suppression capability in the Townhouse Square area.

First Street – Biddeford Pool: This project will install 320 feet of new 8-inch main connecting to the intersection of Lester Orcutt Boulevard. This is also a project designed to improve fire suppression capability within the area.

Ogunquit River Crossing – Ogunquit: This project is designed to replace 650 feet of existing 10-inch main that crosses the Ogunquit River. This will upgrade one of the last major river crossings that we have in the distribution system.

Additionally, the District will undertake a number of smaller projects addressing specific needs in several other areas of our system. If you would like to learn more about our construction budget and construction activities, or need information about how a particular project may affect you, please visit our website, www.kkw.org or call us at 985-3385.

REGULATORY BRIEF

Norm Labbe, Superintendent

Conservation and Metering: an important victory – As part of an important, yet time consuming, process that began over a year ago, the Maine Public Utilities Commission (MPUC) recently concluded that the District's 16-year-old individual metering policy is "not unreasonable" and should apply to all seasonal cottage and condominium units. We are very pleased with the MPUC's decision in this matter (MPUC Docket No. 2005-220) as we believe that individual meters is the best way to encourage water conservation by making water users, both residents and non-residents, directly responsible for the cost of their own water consumption.

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Did you know That 85 years ago the KKW was established as a quasi-municipal water utility in 1921 by the Maine State Legislature, acquiring the assets of the York County Water Company with approximately 72 miles of mains and an average daily customer demand of 1 mgd (million gallons per day).

Today The District maintains a distribution network of over 205 miles of mains and supplies an average daily demand of around 3 mgd to meet the needs of its nearly 12,000 customers. The District's service territory extends 25 miles along the York County coastline, the longest in Maine, and includes the towns of Kennebunk, Kennebunkport, Wells, Ogunquit, Arundel and portions of Biddeford and York.

OLD FRIENDS & NEW FACES—TREATMENT PLANT CELEBRATES STAFF CHANGES

Bill Snyder, Plant Manager

On April 27th, Mel Leedberg, the District's Water Quality Director, retired after more than 22 years of service. Mel was an extremely talented and educated professional who was always concerned with improving water treatment operations. In fact, it's been said by many that Mel brought us into the 21st century. His focus was on positive customer relations and ensuring compliance with State and Federal rules and regulations. The District will clearly miss his dedication and dependability. Mel was the ultimate mentor to many individuals at the Plant. We wish Mel all the best, especially with the 'Honey Do' list his wife Gail has been developing over the years.



Mel Leedberg's ever present smile, vast knowledge and "can do" approach will be sorely missed. Family, friends and co-workers recently got together to celebrate Mel's prominent career with the KKW.



New Chief Operator Greg Pargellis (l) and recent hire Brad Spencer (r) are part of KKW's highly skilled and experienced treatment plant operations team dedicated to providing you with safe drinking water.

With Mel's departure, an opportunity for continued career development was offered to Greg Pargellis, a 13 year veteran at the Filtration Plant, who was promoted to the position of Chief Operator. We are confident that Greg's prolific abilities and his passion for excellence will be invaluable in his new position. Congratulations Greg!

The District is also proud to welcome a new employee, Brad Spencer, a recent University of New England graduate, who resides in Biddeford with his wife Anne. Since Brad's father has worked for the Bangor Water District for many years, Brad knows firsthand how fulfilling a career in the water industry can be. Welcome aboard Brad.