2nd Meters

This year 2nd meters were allowed for homeowners. Most were installed by licensed plumbers and then checked and sealed by water personnel.

New Personal

I would like to welcome Bill Lundgren, Water Maintenance Craftsman to the Division.

I would also like to thank all personnel for a job well done.

Respectfully submitted,

Patrick L. Mustoe
Assistant Superintendent
Water and Sewer Division

TREATMENT PLANT

The year 2000 was a very busy and exciting year for the Water production section of the Water and Sewer Division. There were a number of projects completed and others started during this calendar year. Some of the projects completed were:

1. The Greenleaf Mountain storage tank interior repairs and painting was completed, improving the tank structural integrity and system water quality. The exterior of this tank will be addressed during FY2001 or 2002.
2. Plans for the rehabilitation work at the MillPond Water Treatment facility were completed and sent out to bid. The work is to be started in 2001 and will be completed in 5 months. The work will include the partitioning of the clearwell and completion of an Ammonia system that will reduce or eliminate the chlorine odor plus reduce the THM's (Trihalomethane) formed in the distribution system. Installation of a SCADA system that will record key plant performance figures. There will also be other piping and monitoring equipment installations that will give the operators a better view of the plant activity.
3. Installation of a pre pH adjustment system at the Vine Brook Ground Water Treatment Facility was completed allowing the plant process to react better in the filtration step.
4. Repairs to well #2 pump were completed, keeping the GWTP at maximum output during peak summer months.
5. Installation of check valves on pump #10 and #11 helped in stabilizing the water quality from these two wells.
6. The purchase of a new flow meter for P.S. #3 with the installation to be completed in the early spring of 2001.
7. The water distribution improvements continued with the completion of the Skelton Road pipe replacement. This project will improve pressure in the Fox Hill Road area. This project will be discussed further in the Engineering report as well as other system improvements.
8. The state mandated Lead & Copper testing was completed in 2000 with excellent results. Testing showed below Maximum Contaminant Levels (MCL) for 98% of all sites tested, with the latest results showing no MCL excedence. I expect a reduction in testing due to these results, therefore savings in the cost of these tests.

The year 2000 saw a minor increase in the production of water. I do not feel at this time that this is any reflection on the construction that has been going on around the town, but reflects the increased use of unmanned irrigation systems. The town water system like all water systems is not designed to supply irrigation systems. This trend will need to be watched closely, as well as the abandonment of irrigation wells by private industry. The following chart shows how water production has developed over the past 20 years.

YEARLY WATER PRODUCTION	
Years	**Millions of Gallons**
1979	1166.044
1980	1128.348
1981	1178.321
1982	1171.048
1983	1222.816
1984	1327.238
1985	1254.282
1986	1207.764
1987	1277.14
1988	1307.856
1989	1287.501
1990	1183.131
1991	1115.001
1992	1112.174
1993	1049.852
1994	1134.263
1995	1167.127
1996	1172.177
1997	1194.01
1998	1261.62
1999	1177.655

Below is a chart of monthly water production figures:

FINISHED WATER PRODUCTION Town of Burlington 2000	
Months	**Millions of Gallons**
Jan	82
Feb	80
Mar	86
Apr	85
May	105
Jun	114
Jul	126
Aug	126
Sep	122
Oct	104
Nov	94
Dec	86

Below is a chart showing the inorganic test results from water production in the year 2000:

Test	results	**RMCL
Turbidity	0.06 - 0.15NTU	none
Color	0 - 1 SU	15 APH units
PH	7.4 - 7.6 SU	6.5 - 8.5
Magnesium (Mg)	ND * none detected	none
Calcium (Ca)	30 mg/L	none
Alkalinity	25 - 84 mg/L	none
Hardness (total CaCO3)	50 - 110	none
Aluminum (Al)	ND * none detected	0.05 - 0.2
Potassium (K)	8 - 32 mg/L	none
Iron (Fe)	0 - 0.1 mg/L	0.3
Manganese (Mn)	0 - 0.24 mg/L	0.05
Trihalomethanes (THM's)	35 - 55PPB	100.0 PPB
Bacteriological testing	ND in Distribution	

All tests results showed below State **Recommended Maximum Contaminant Levels.

In the year 2001, Burlington is planning on conducting a Town wide flushing program to improve the system water quality. This will flush out the deposits from years of untreated water. The corrosion program has worked very well in removing inorganics and stabilizing the water corrosivity problem that has plagued Burlington piping for years, but if we do not complete the flushing of the system it will be hard for the consumer to see any improvement.

The Water Production group of the Water and Sewer Utilities Division is expecting a busy and exciting year in 2001. The construction and process improvements should result in high quality water without the black and brown water problems of the past.

If any consumer has any questions please call either the MillPond Water Treatment Plant at 270-1680 or the Vine Brook facility at 270-1648, or you can e-mail Bill Keene at wkeene@Burlmass.org.

Respectively submitted,

William D. Keene
Water Treatment Plant Manager