

## SUPERINTENDENT'S REPORT FOR 2011

### Kittery Water District (KWD) Consumers:

The 2011 construction season was a productive one for our construction crew. The District is adhering to our 10 year comprehensive plan. We began a three year project on Brave Boat Harbor Road, Kittery Point replacing unlined 6 inch cast iron pipe with 8 inch ductile iron pipe with a cement lining. The completion of this project is necessary to correct both water color issues and deficient fire flows from the hydrants on this dead end water main.

In addition, we are continuing to install 1,000 feet of 16 inch ductile iron pipe from York to Kittery, currently working on Betty Welch Road, Kittery. When completed, this water main will act as an emergency back-up water main for our existing cross country 20 inch water main.

A total of 7,524 feet of new ductile iron water mains were installed, while 3,449 feet of older water mains were abandoned in place.

The following is a list of the improvements that were made to the District's system in 2011:

### Improvements / Additions to the Distribution System:

### Asset Value

Haley Road, Kittery Point KWD installed individual 1 1/4" CTS plastic water service lines to supply houses 581, 585, 587 and 589 Haley Road (Abandoned 172 feet of 1 1/2" iron pipe)	\$ 18,000.00
Emery Lane, Kittery KWD installed 385 feet of 6" D.I.P., renewed the blow off, installed two 6" inline valves for Old Dennett Road and renewed 7 water services (Abandoned 375 feet of 6" old pipe)	\$ 34,000.00
Betty Welch Road, Kittery KWD and William Shapleigh and Sons Construction installed 1,000 feet of 16" D.I.P. and 1 fire hydrant, 237-K.	\$ 73,600.00
Brave Boat Harbor Road, Kittery Point KWD, Andrews Construction and William Shapleigh and Sons Construction installed 1,700 feet of 8" D.I.P. and replaced fire hydrant numbers 168-K, 169-K and 171-K, renewed 24 water services (Abandoned 1,700 feet of 6" C.I.P.)	\$ 333,000.00
Route One North, Kittery KWD and William Shapleigh and Sons Construction installed 780 feet of 12" D.I.P. (Abandoned 780 feet of 6" C.I.P.)	\$ 60,200.00
Clover Landing, Kittery Severino Trucking installed 2,014 feet of 8" D.I.P. and two private fire hydrants, 212-K and 310-K	\$ 111,350.00
Ciampa Drive, York Roger Pratt Construction installed 278 feet of 4" D.I.P.	\$ 13,000.00
Cottages at Spruce Creek, Kittery North Hampton Excavation installed 825 feet of 8" D.I.P. and one fire hydrant, 309-K	\$ 37,125.00
State Road, Kittery Brex Corp. installed 447 feet of 8" D.I.P. (Abandoned 422 feet of 6" C.I.P.)	\$ 30,000.00
Bayview Lane, Kittery KWD installed 95 feet of 6" D.I.P. crossing South Eliot Road. The tie-in to Bayview Lane	

will be completed in 2012

	\$	12,000.00
Ranger Drive, Kittery		
Foglio Construction installed an 8" D.I.P. for the fire protection service for the Kittery Truck Wash	\$	9,000.00
Intersection of State Road and Walker Street, Kittery		
Brex Corp., installed an 8" D.I.P. for the York Hospital medical office building fire protection system	\$	7,000.00
Town of Kittery		
KWD replaced fire hydrant 77-K with a 3 way model		
KWD replaced fire hydrant 173-K due to an automobile accident		
KWD replaced fire hydrant 264-K due to excessive corrosion of the shoe	\$	10,500.00
Town of Eliot		
KWD replaced fire hydrants 56-E and 66-E with 3 way models.	\$	7,000.00
Services - 27 new, 42 renewals, 1 discontinued	\$	26,567.71
Meters - 9 new	\$	5,428.11

**Miscellaneous Improvements:**

Meter Replacement and Meter Reading Technology Upgrade		
Due to the age of our water meters, we have begun a meter replacement program striving to replace 500 meters per year. In addition, the new meters are being installed with a radio receiver and transmitter that allows the meters to be read by a radio signal directly from the meter reading vehicle.	\$	70,000.00
SCADA System Upgrade		
Electrical Installations, Inc. updated the District's SCADA system to improve the reliability and functionality of a critical component of our operation.	\$	51,000.00
Safe Yield Analysis		
Wright-Pierce Engineers were contracted to conduct a bathymetric survey to determine the actual volume of each reservoir to assist the District with a regulatory issue being sanctioned by the Maine Department of Environmental Protection.	\$	35,000.00
		<hr/>
	Total	<u>\$ 943,770.82</u>

KWD (Kittery Water District)  
D.I.P. (Ductile Iron Pipe)  
C.I.P. (Cast Iron Pipe)

Cost of electricity to pump 1,005,276,000 gallons of water

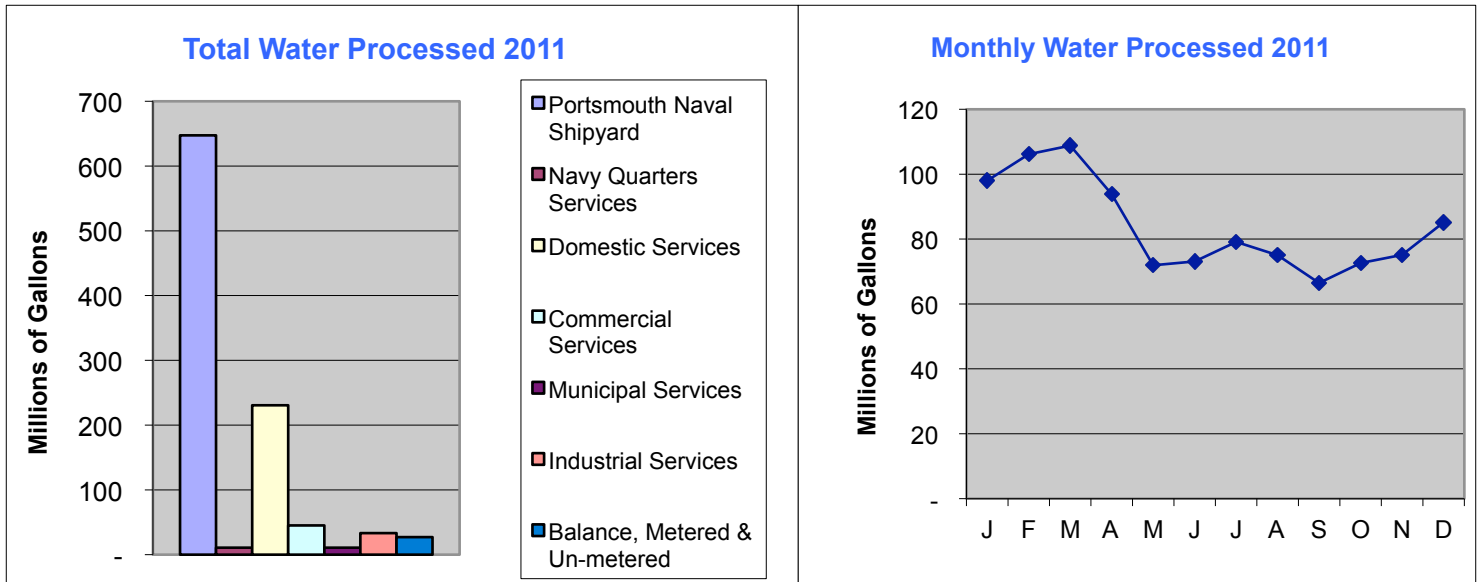
\$77,131.66

**Water Processed in Gallons for the Year 2011**

Navy Base	647,396,655
Navy Quarters-metered services	10,674,708
Metered domestic services	230,655,524
Metered commercial services	45,137,312
Metered municipal services	10,851,236
Metered industrial services	33,368,280
Balance, Metered & Un-metered	<u>27,192,285</u>
<b>Total Water Processed</b>	<b><u>1,005,276,000</u></b>
Average Daily Water Processed	2,754,181

**Monthly Water Processed (gallons)**

Jan	98,022,000
Feb	106,150,000
Mar	108,794,000
Apr	93,799,000
May	71,903,000
Jun	73,103,000
Jul	79,123,000
Aug	75,018,000
Sep	66,466,000
Oct	72,599,000
Nov	75,135,000
Dec	<u>85,164,000</u>
<b>Total Water Processed</b>	<b>1,005,276,000</b>



Respectfully submitted,

*Michael S. Rogers*

Michael S. Rogers  
 Superintendent  
 Kittery Water District

	J	98.02
	F	106.15
	M	108.79
	A	93.80
Portsmouth Naval Shipyard	M	71.90
Navy Quarters Services	J	73.10
Domestic Services	J	79.12
Commercial Services	A	75.02
Municipal Services	S	66.47
Industrial Services	O	72.60
Balance, Metered & Un-metered	N	75.14
	D	85.16
647.40		
10.67		
230.66		
45.14		
10.85		
33.37		
27.19		