

BERLIN WATER WORKS

Water Commissioners for this report period were Paul W. Poulin, Lucien F. Langlois, Stephen J. Tardiff and Terry Block; Ex-officio member was Mayor Paul R. Grenier. As of June 15, 2011 Commissioner Stephen J. Tardiff resigned from the Board of Water Commissioners representing Ward IV.

The BWW has not increased water rates in thirteen years. Berlin Water Works has been able to maintain water rates because of cross-training employees and elimination of work through planned improvements and the implementation of "force account" construction project. The results of these efforts have been reduced cost through reduced staffing. There have also been continuous improvement efforts in reducing other operating cost. And finally, we have continued "force account" work in order to offset operating cost by performing capital improvement projects with Berlin Water Works resources. Berlin Water Works hired Albert Guay as a "temporary" employee to maintain all of our construction equipment. His mechanical maintenance efforts have significantly reduced our outside costs for vehicle and equipment repairs. The Northern New Hampshire Correctional Facility provided prisoners to hand shovel hydrants this past winter,

Berlin Water Works proposes to improve the layout of the office to be in compliance with Americans with Disabilities Act (ADA). The Board authorized a contract with H. E. Bergeron Engineers for review of the layout. Final design and a bid package were developed to bid and construction in FY2012.

helping to keep our maintenance costs down.

Berlin Water Works is now offering on line bill paying for customers as of the February 2011 Billing Quarter. Customers can pay their bills by going to the City of Berlin Website berlin.nh.gov. Invoice Cloud and Northern Data Systems are providing electronic bill presentment and online payment service. The system allows the office clerks to enter credit card payments for customers here at the office or over the phone. The system also allows customers to choose paperless billing. Approximately 5% of our customers are using the online billing service.

Berlin Water Works is now using "skype" for Board Meetings to allow out of town Commissioners to participate in meetings and it is also used for on going projects with Engineers, State and Federal officials.

Berlin Water Works has continued to install backflow devices at customer's homes, and have changed to new UFR/dual check valve that will improve meter performance at very low flows. Berlin Water Works also purchased 200 radio read units at \$125.00 each with a new hand held unit at no charge.

During the winter of 2010/2011, we had 85 people running water to prevent service line freeze-up. These customers started running the water from January 25, 2011 until shut-off on April 14, 2011. The balance of the 375 running water customers did not have to run the water in winter 2010/2011. We had 10 freeze-ups that required thawing and 16 freeze-ups inside thawed by property owner. Efforts continue to reduce the number of

running water customers, of which there were 1003 of 3500 customers in the winter of 2000-2001.

Our lead and copper water sampling program passed the last five rounds of testing in June of 2006, December of 2006, September 2007, September 2008 and September 2009. The testing results from September 2009 showed all passed for copper and two failed for lead the State of NH Department of Environmental Services has dropped our sample test numbers down to thirty test sites rather than the original 60 sample sites. The overall average lead and copper sample levels have dropped to new low levels. Please note that the water leaving the Water Treatment Plant is free of lead and copper and that the results are attributed to possibly old portions of the distribution system or customer pipe systems and dead end lines. Water sampling will continue to monitor lead and copper levels. The next round of testing is scheduled for 2012. Water Quality Report for calendar year 2010 was distributed to all water customers as a bill stuffer in the May 2011 billing.

Testing is being done by Eastern Analytical, Inc. in Concord, NH who then sends the test results to the State Lab in Concord, NH. The test samples sent to Eastern Analytical, Inc. have delivery costs built into the lab fees; there is no separate charge for delivery.

Melanson, Heath & Co PC was accepted by the Board to perform the Water Works financial report for period ending June 30, 2011 as well as FY 2012, FY 2013 and FY 2014. Our FY 2012 budget of \$4,411,027 as presented at the Commissioners May 25, 2011 budget hearing providing \$3,055,076 for operations and \$1,355,951 for water bond and loan debt, was approved June 15, 2011. The increase in the FY2012 budget is due to the BWW Office and Garage Improvement Project and the continued high level of "force account" work requiring additional equipment, and "temporary staffing" in order to completed the funded work by the agreed to "completion dates".

Berlin Water Works purchased two used Mack Dump Trucks, a used Mack Water Truck, a used Ford L9000 Dump Truck, a new CAT 420 backhoe, a traffic safety solar messaging board, and a used Bobcat

As of April 2011 BWW Compliance

	FISCAL 2010	FISCAL 2011
Total Flow	316,335,791	272,796,506*
Difference from previous year	2.7% decrease	13.76% decrease
Gallons per Day	.867 million gallons*	.747 million gallons*
Running Water Customers	110	85
Running Water Start - early	February 4, 2010	January 25, 2011
Running Water Start - regular	--	--
Running Water Finish	March 22, 2010	April 14, 2011
Frozen Water Calls - outside	5	9
Frozen Water Calls - inside	0	1
Hydrant Flushing	8/19/09 to 10/23/09	8/19/10 to 9/16/10 10/22/10 to 10/23/10
Number of main line breaks	3	5
Number of service line breaks	4	4

220 Wheeled Skid Steer with a grinding attachment. This equipment is used for "force account" water main installation. Another cost saving item is that all employees have been trained in Traffic Control.

IMPROVEMENT PROJECTS:

BWW 11-1 EPA grant #10 for \$436,000 was submitted February 9, 2011. Scope of work for this project is Pleasant Street from Mechanic Street to High Street, Main Street from Eighth Street to Twelfth Street, Twitchell Lane from Riverside Dr to end and Alpine Street from Twelfth Street to Pine Island Avenue. Also included will be Phase II of Brown Farm Well Improvements.

BWW 10-1 EPA FY 2010 Grant #9 in the amount of \$400,000 was approved and Provan & Lorber signed a contract with Berlin Water Works to develop an improvement plan for the Brown Farm Well.

Water Main Project BWW 06-1 with \$599,067 of EPA Grant #7 Funding is nearly fully expended and will be closed before December 2011. The scope of Water Main Project BWW #06-1 included Water main improvement work on Abenaki Lane, Jolbert Street, Hinchey Street, Twelfth Street, School Street, Westcott Street and Main Street.

Water Main Project BWW 07-1 with \$492,900 of EPA Grant #8 Funding has had no spending to-date. The scope of this project includes the elimination of a 6" cast iron main on Riverside Drive from Eleventh St to Morning Lane; it also includes the replacement of 6" cast iron mains with 8" mains on Hillside, Cedar, Willard, State and High Streets.

Provan & Lorber has the engineering service contract for the RUD Project BWW 09-1. To date, State Street from High Street to Willard Street has been completed. Work is progressing on High Street from Main Street to Hillside Avenue and Main Street from Viking Street to Eighth Street. Other streets in the project include Main Street from Peavey Lane to Viking Street, and several other streets on the East Side as well as the West Side.

Water Main Project BWW 09-2 Berlin Water Works completed Champlain Street, Willard Street, High Street, Guilmette Street, Spring Street, Summer Street work was completed with Berlin Water Works Staff and part time employees through "force account" work. Streets around the schools were completed and paved in time for School opening in September. Work in this project will be continued through BWW 11-2 another New Hampshire State Revolving Loan in the amount of \$3,000,000. Provan & Lorber will move the remaining dollars for Engineering and supervision from the BWW 09-2 project to this project.

Berlin Water Works Project BWW 09-3 Godfrey Dam is nearing completion. We received an extension permit from US Dept. of Agriculture for improvements and repairs to be completed on or before 12/31/10. AR Couture Construction was the successful bidder for the project in the amount \$459,700. Construction work finished in December with punch list items to be taken care of in the summer of 2011.

Berlin Water Works applied and was approved by the New Hampshire Department of Environmental Services

for a New Hampshire State Revolving Fund in the amount of \$1,000,000 for project BWW 11-3 for "Green" Energy Project. The Project will include energy improvements for the office and garage facility at 55 Willow Street. It will also include installing wind and solar systems at several of the Berlin Water Works facilities.

Laidlaw representative Carl Belanger contacted the Berlin Water Works in reference to a water connection to supply the proposed bio mass boiler on August 30, 2010. The Board agreed to meet with the Laidlaw representatives to discuss options regarding water rates for high usage. Laidlaw was proposing a 20 year agreement for water supply to the bio mass boiler at a cost of approximately \$750,000.00 annual as mentioned in a work session meeting with George Sansoucy. The Board authorized review by the Berlin Water Works Attorney Paul Desjardins. Several discussions are being held with the Board of Water Commissioners and representatives from Laidlaw to discuss future water supply at the proposed Bio Mass facility at the former Fraser Paper Company boiler.

As of July 2, 2010 the water account at the Federal Bureau of Prisons has transferred from the contractor to the Bureau. A

contract amendment with the Federal Bureau of Prisons was signed July 12, 2010 to install SCADA system in the amount of \$38,000. The installation of the SCADA system was completed and the Federal Bureau of Prisons was invoiced in December 2010 for the completion of the work. The Board of Water Commissioners voted to bill the Federal Bureau of Prisons on a monthly basis starting with August 30, 2010; it was later voted by the Board of Water Commissioners to make an adjustment at the end of each quarter to allow for the water rates that are structured for quarterly billing. The sewer line was connected in August 26, 2010.

Berlin Water Works helped the White Mountain Ridge Runners club with work in connection to the water main project crossing the Dead River. A thank you note was received from the club.

Berlin Water Works extended the 6" water main on Grandview Drive at the request of a water customer on Grandview Drive. The customer was responsible for payment of the work in the amount of \$5,000.

	Total to Fiscal 2011	FY 2010	FY 2011
Curb-to-curb street paving (includes overlay)	10.28	.04	0
Number of New Meters	3584 total in system	37	23
Number of New hydrants	409 total in system	0	1
Number of Replaced services	3500 total in system	67	91
New water main installed – since 1990	22.74 miles	1.31	1.61

Improvements to the water distribution in the City of Berlin continue with planned replacement of small diameter galvanized mains (980 feet remaining as of June 2011) and 1890 thru 1930's vintage unlined cast iron mains (35,964 feet remaining as of June 2011) with the highest frequency problems corrected first. Also the replacement of water mains are selected and then designed to improve fire protection flow capabilities. The Berlin Water Works purchased a significant number of pieces of construction equipment in FY2011 to supported Berlin Water Works increase level of "force account" construction work. The temporary staff was also increased to support increased work

levels. The results of these increased efforts will be a much improved distribution system.

Thanks to all Berlin Water Works employees, Water Works Commissioners, the Honorable Mayor Paul Grenier, and the City of Berlin for their continued support for the past year. The Berlin Water Works has completed and is continuing work on significant improvements that will improve our water system and reduce our operating cost for many years into the future.

Respectfully Submitted,
Roland Viens
Water Works Superintendent

