

Improvements Near Completion at Norwich Pump Station

On August 6, 2013, the pump station that supplies water to the Norwich Fire District in Norwich, VT was compromised by fire. The fire left the station with over \$500,000 in damage including burned out equipment, no roof, and most importantly no water supply to the water system customers for 3 days. Dufresne Group assisted the Fire District in developing temporary measures to ensure continued operation at the pump station while permanent solutions and improvements were developed.

Over the next several months, Dufresne Group worked with the Norwich Fire District officials to develop construction documents for permanent improvements at the pump station. The improvements include:

- Improved piping layout to include surge anticipation and pressure relief, and capabilities for flushing one well while maintaining service in the other.
- Demolition of a “doghouse” addition at the rear of the pump station and relocation of piping into the main building.
- Addition of variable frequency drive (VFD) control on both wells, which allowed for removal of the existing PARCO valve.
- New electrical and lighting throughout the building.
- New propane powered backup generator located outside building.
- New roof structure with pump manway over well #1.
- Mechanical components including heaters and ventilation.
- New fire proof structure components including metal siding; door replacement with added security; and new wall, ceiling, and floor finishes.

Bids for the pump station improvements were received in May 2014. All Seasons Construction, Inc. of Springfield, Vermont was the low bidder. Construction at the pump station began in early September 2014 and final completion is anticipated in spring 2015.



Pump station during fire in 2013

Project Planning for Water, Sewer and Stormwater Projects

Municipal managers recognize the importance of planning studies to the overall success of a utility project. The challenge is allocating funds to prepare Reports and Studies for utility systems. Selectboard officials and voters are challenged with balancing the budget and tax increases. Developing a long term master plan for a utility is an easy target for budget cuts.

The State of Vermont has long recognized the importance of planning by providing low and zero interest rate loans for water, sewer, and stormwater studies. The State has several loan programs through the Drinking Water State Revolving Fund (DWSRF) and Clean Water State Revolving Fund (CWSRF) to provide the financial backing necessary to protect our water supplies. Loans from the DWSRF program can have interest rates from -3% to 3%. The DWSRF also has a planning loan program with a 0% interest rate of which \$50,000 may be forgiven when the project proceeds to construction. The CWSRF offers a 0% interest rate for planning loans and 2% interest rate for construction loans.

In addition to the State programs there are several loan and grant programs through the US Department of Agriculture, Rural Development that can include 75% to 100% grants up to \$30,000 depending on the median home income of the community.

If your community is in need of infrastructure improvements, give us a call and we can review these programs in more detail with you to determine what loan or grant program best fits your needs.



Dufresne Group Gives Back to the Communities We Serve



Adam Kane (right) of the Fairbanks Museum accepting a donation from DG's Chad Whitehead, PE (left)

Dufresne Group donates a percentage of profit back to non-profit groups on an annual basis. We donate to organizations that provide crucial services to the people of our state or that provide key educational roles in our communities. Dufresne Group has donated to the following organizations:

- Math Counts competition sponsored by the Vermont Society of Professional Engineers
- Vermont State Science and Math Fair
- American Precision Museum
- Fairbanks Museum
- Norwich University
- St. Johnsbury First Night
- Springfield Hospital
- Neighbor to Neighbor
- HOPE
- The Help Fund
- The Girl Scouts
- Good News Garage
- St. Johnsbury Chamber of Commerce

Randy Goodwin Published in Estimating Today

Randy Goodwin, CPE authored a technical paper as part of his CPE (Certified Professional Estimator) certification process. The article was published in the October 2014 issue of *Estimating Today*. Randy's paper is titled *How to Estimate the Cost of ... A Spillway Improvement Project*.

President's Notes



On February 25, 2015 I provided testimony to the House Fish & Wildlife and Water Resources Committee regarding House Bill H.33. This proposed legislation provides authority for Vermont Communities to establish their own measures to protect their surface water sources of water supply. The motivation for this bill arises from the loss of State enabling authority for such protection. This authority was lost when the Health Department was merged with the former Water Supply Section of the Agency of Natural Resources Department of Environmental Conservation. This left surface water sources for drinking water totally unprotected. Under current Vermont Law, frozen ponds are open to unrestricted access including vehicle travel, ice shanties, and general fishing. The issue became heated during litigation when sportsmen sought unrestricted use of Berlin Pond which, for the past century, was controlled by the City of Montpelier. In an outcome that counters Vermont's protection of natural resources, the City lost, which opened up Berlin Pond to anyone. Even more surprisingly, follow up petitions to the State of Vermont failed to restrict ice shanties in and around the intake or totally restrict gasoline powered equipment from use on the water supply.

House Bill H.33 seeks to allow Vermont municipalities to protect their surface water supplies as they see fit. Testimony was also delivered by representatives of the Vermont Coalition for Clean Water, New England Water Works Association (NEWWA) and other interested parties in an attempt to bring source water protection up to similar measures used in other New England states. As the former Vermont Director for NEWWA, I testified that without an isolation distance around the intake, the susceptibility of the source to willful contamination is completely breached as there are no warning systems for many types of contaminants that could be used to maximize loss of life. I made the point that even if such a willful contamination event would appear fanatical, so would pressure cooker bombs going off at the Boston marathon finish line. Vermont's high environmental standards appear to be falling way behind other states on source water protection. To provide your support for House Bill H.33, please contact your local representative.

Robert "Red" Dufresne, PE
President, Dufresne Group

We plan to distribute the next issue of this newsletter electronically.

*If you have any comments or questions, feel free to contact us at
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