

Town of Somersworth

The Somersworth Water Treatment Plant, which is located on the bank of the Salmon Falls River, was significantly damaged by floods in May 2006 and April 2007. Both floods exceeded the 500-year flood. During the May 2006 flood, the system was down and the Town was able to interconnect with the City of Dover. The plant was reopened within four days. The April 2007 flood resulted in even higher floodwaters at the plant. At this time, the plant was undergoing construction in response to the 2006 flood. There were open construction pits, the garage door had been removed, and there was debris and materials on site and throughout the entire facility. Pumps, blowers, PLC, a generator and the HVAC equipment were damaged beyond repair.

The Town was forced to undertake major repairs to their Plant. As part of their project, major steps were taken to reduce the impacts of flooding on their plant, including:

- Elevated and sealed equipment;
- Switched to LPG for building heat (eliminated need for larger oil tank);
- Installed a new, self-contained generator. The generator was elevated approximately 5 feet. The fuel storage tank was raised;
- Installed protection for storm windows & doors to prevent water flow into building;
- Relocated or sealed HVAC systems, louvers, and pipework; and
- Strapped propane tanks to a concrete cement pad to resist buoyancy.

The cost to implement this project was approximately \$7,000,000. Funding sources were: FEMA mitigation grants, insurance pay-outs and Town budget for upgrades. There have been no flood damages since these upgrades were made. (Note that floods experienced since 2007 have not been as severe.)

Somersworth lists its "lessons learned" as:

- Review Emergency Response Plan yearly or after any process changes;
- Develop protocols for notification, defense & when to abandon;
- Maintain customer confidence;
- Foster and cultivate cooperation with neighbors & vendors; and
- Simple solutions can solve big problems.