



Project Description:

New England's *first* Municipal Desalination facility has been completed by Waterline Industries in Swansea, Massachusetts — only the fourth on the East Coast. The desalination plant aims to alleviate the town's water shortages by transforming salt water from the Palmer River.

Water Intake:

The Palmer River average daily intake is 1.3 MGD with about 700,000 gallons of drinking water produced (*numbers are average flows*). The plant is comprised of 2 filtration plants with an additional 1 MGD coming from the Town's existing wells. The plant will take in 650,000 gallons of water during the 6 hour window at low tide twice a day. A large storage tank was installed near the intake to store enough water to allow the plant to operate during the high tide cycle. The plant discharges the concentrate during the 6 hour window river at high tide. A second tank was provided to allow the plant to operate

continuously and to hold the concentrate until the discharge valve opens at the specified time. The desalination part of the plant needs to have steady-state operation in order to run efficiently. The maximum amount of water that can be withdrawn from the Palmer River is 4,000,000 gallons per day. Of that, 2,800,000 will be returned to the river as concentrate discharge. The intake and discharge events occur twice a day with the tides.

About Desalination:

Desalination or desalinization refers to any of several processes that remove excess salt and other minerals from water. More generally, desalination may also refer to the removal of salts and minerals, as in soil desalination. Water is desalinated in order to be converted to fresh water suitable for human consumption or irrigation. Desalination plants now operate in more than 120 countries, and global capacity, by some estimates, stands at 4 billion gallons per day.

For more information regarding this project contact Waterline Industries Corporation:
Call: Ralph Dumke at (603)474-7477 or email: rdumke@waterlineind.com

ABOUT

About Waterline Industries Corporation:

Waterline Industries Corporation is an innovative, dynamic company specializing in water and wastewater construction facilities. Established in 1987, it continually exceeds the performance of competitors through dynamic teamwork and experience. We complete the majority of the work with a dedicated staff that ensures the build of realistic schedules and guarantees a successful project deployment. As Waterline Industries enters our third decade of service, we welcome new challenges and will continue to provide clients with the quality and professionalism they have come to expect.

Other Waterline Companies include:

Waterline Alternative Energies:

Waterline Alternative Energies was formed to serve the demands for renewable energy sources generated from our customers and prospects. We are committed to providing green energy that is proven and cost effective. We can also assist you in developing a green strategy that addresses your demand for energy as well as make your current use of traditional energy sources more efficient. We see the adoption of clean energy a WIN, WIN for you and our environment.

Waterline Services LLC:

Waterline Services was created out of the need for existing water and wastewater facilities to be maintained, operated and upgraded. Waterline Services has quickly become a leader in the water and wastewater maintenance throughout New England. Our focus is on equipment and piping installations, filter media replacement and service-related issues. In addition, we have completed larger projects such as a 30,000 gallon water storage tank installation, clarifier drive replacements, complete pump station installations, and supervisory control and data acquisition (SCADA) equipment installations.



7 London Lane, Seabrook, NH 03874

Phone: (603) 474.7477 **Fax:** (603) 474.8578

Web: www.waterlinecompanies.com