DISTRIBUTION RESERVOIR FLOATING COVER

Owner:	Biddeford and Saco Water Company Biddeford, Maine
Contact:	Clifford S. Mansfield, Jr., President 181 Elm Street Biddeford, ME 04005
Telephone:	207-282-1543
Key Personnel:	Richard S. Johnson, P.E.

PROJECT DESCRIPTION

The Biddeford and Saco Water Company operates a large distribution storage reservoir vital to the functioning of both high and low pressure zones of its distribution system. The 7.5 million gallon reservoir was constructed in bedrock and open to weather. While water quality was consistently good, the Company, concerned about leakage and vulnerability of the reservoir to contamination, decided to resolve these concerns either by replacing or covering it.

Amory Engineers was retained to evaluate options and design a liner and floating cover for the existing reservoir, the selected option. Design included a hypalon liner, placed on a layer of sand to protect the liner against the native bedrock, and a floating hypalon cover, both secured to the reservoir perimeter.

The reservoir with new liner and cover, put into service in 1993, was in constant service for 13 years until the cover was replaced in 2006. The original liner remains in service.

