Well Re-Development in New England

This course is designed to provide water utility personnel, engineers, hydrogeologists, regulatory officials, and other interested persons an understanding about the sand and gravel and bedrock aquifers in New England, how and why well performance declines over time, and information about available options for rehabilitating these wells.

The course begins with an introduction to the glacial and bedrock geology of New England, including the formation of these geological features, information on why a groundwater well in this geological terrane needs to be re-developed, and tools for assessing when a well needs to be re-developed. The course also provides information on different well types, water well terminology, groundwater flow into well screens, and a discussion of specific capacity as it applies to sand and gravel and bedrock aquifers. Specific capacity is easy to calculate and use as a measure of the performance of your well, but something that is often overlooked. Moving forward, there is a segment on declining well performance and the chemical, physical, and microbiological factors that are the cause for drop in performance in wells. This section is followed by a segment on the variety of techniques, both physical and chemical, that can be used to rehabilitate wells and improve specific capacity. The course finishes with a section on understanding the costs and permitting considerations involved in well rehabilitation.

The course presenters are:

- Raymond Talkington, Ph.D., P.G., C.P.G., Principal Hydrogeologist and President of GEOSPHERE Environmental Management, Inc.
- J. Theodore Morine, P.G., C.P.G., Senior Hydrogeologist and Vice President of Denis L. Maher Company
- Frank Getchell, P.G., C.P.G., Senior Supervising Hydrogeologist at WSP USA formerly Leggette, Brashears & Graham.

Organization:

- American Institute of Professional Geologists

CEUs:

0.50

Link to GOLI Course:

https://www.americangeosciences.org/goli/AIG011