Balancing Well Water Supplies to Mitigate Drought Impacts

Communities that rely on surface water resources via sand and gravel wells are vulnerable to the impacts of drought on water supplies. In 2020, much of New England experienced an extreme drought due to lack of sufficient precipitation from May through September, which resulted in water restrictions across Connecticut, Maine, and Rhode Island.1 Communities that have both bedrock wells and sand and gravel wells are more resilient during drought because they are able to switch between surface water and groundwater resources as needed in order to mitigate water resource limitations. However, switching between water supply sources comes with its own share of issues that need to be considered.

This course provides an in-depth look at how municipalities have mitigated water shortages by balancing the use of bedrock wells and sand and gravel wells. It delves into the potential issues that must be considered when having to switch between groundwater and surface water supplies, including pH, precipitation, and other issues.

This course is designed for those involved with well infrastructure, planning and policy decision making, but will be of interest to a wide array of stakeholders.


About the Instructor

Raymond Talkington, Ph.D., PG, CPG is the Principal Hydrogeologist and President of GEOSPHERE Environmental Management, Inc. He has over 30 years of experience providing direction to GEOSPHERE’s hydrogeological and geological projects. Typical projects involve groundwater supply exploration and development in sand and gravel and fractured bedrock systems. For over 20 years Dr. Talkington has been a regular instructor for courses on well redevelopment and maintenance, bedrock wells, and helping people understand the ABCs of groundwater, wells, and aquifers. Dr. Talkington was the 2014 President of the American Institute of Professional Geologists (AIPG) and a past Editor of the professional journal “The Professional Geologist,” and the recipient of the Ben H. Parker Memorial Distinguished Service Medal from AIPG and the David M. Erickson Groundwater Award from the NEWWA. He has 50 professional publications including books and chapters in geology laboratory manuals.

Organization:

- American Institute of Professional Geologists

CEUs:

0.10
Link to GOLI Course:

https://www.americangeosciences.org/goli/AIPG014