Climate change, economic growth and new water use regulations are increasing competition among municipal, agricultural and industrial users for groundwater resources. Maintaining well efficiency to maximize yield potential and securing long-term supply sustainability is a key objective for all groundwater-based supplies. To minimize O & M pumping costs for municipal supply and achieve maximum water yield with limited water resources, pump owners must optimize well performance and follow state of the art technology in well design, construction and operation. This webinar provides a great learning opportunity for water well owners, water operators, utility managers, water management consultants, hydrogeologists, irrigators and well and pump contractors on the latest practical, cost-effective solutions. The webinar will explain how to maximize the economic return on pumped groundwater by correct pump selection, well operation and the use of real-time data to effectively match well pumping to aquifer conditions and water demands.
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<th>Time</th>
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<td>8:55</td>
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| 9:00am–11:45am | Webinar morning session                                                       | **TECHNICAL AND ECONOMIC ISSUES RELATED TO WATER WELL PERFORMANCE**  
Andrew Stone, Executive Director, American Ground Water Trust, Concord, NH | Concord, NH | The combined effects of well design & construction, pumping efficiency and aquifer characteristics influence the data used to decide on management strategies for sustainability. There is no one-size-fits-all when it comes to water wells and pumping operations. In the US, 80 billion gallons of water a day is withdrawn from aquifers via pumps from 16 million active water wells at a daily cost in excess of ten million dollars. |
| 9:00am–11:45am | Webinar morning session                                                       | **WELL HYDRAULICS – ESSENTIAL BACKGROUND TO OPTIMIZE WELL AND PUMP EFFICIENCY**  
David Kill, P.E. Training Consultant, Xylem Goulds Water Technology, St. Paul, MN | St. Paul, MN | Because water pumping is a major cost for irrigators and municipalities, maintaining efficiency in water systems is key to profitability and cost reduction. The presentation will explain and define the key hydraulic terms that are used in well efficiency calculations. The flow dynamics through rock fractures or screens into well bores and into pump intakes is an important basis for well design. |
| 10:15–10:20 | 5-minute break                                                                 |                                                |                   |                                                                                                                                                                                                              |
| 10:20–12:15 | Webinar afternoon session                                                      | **DECLINING WELL YIELD PROBLEMS – CAUSES, DIAGNOSIS AND REHABILITATION SOLUTIONS**  
Neil Mansuy, Vice President, Technical Services, Subsurface Technologies Inc., Kansas City, MO | Kansas City, MO | Well rehabilitation and maintenance guidelines for maintaining water quantity and quality. Biological growth combined with mineral build-up combine to restrict flow from aquifer to well. Why, when and where does encrustation restrict flow from aquifer to well? How are problems best diagnosed and remediated? What are the economic benefits of routing preventive maintenance to maximize yield and longevity of high yield wells? |
| 12:10–12:15 | Log-in available for afternoon session – code provided via email to registered participants |                                                |                   |                                                                                                                                                                                                              |
| 12:15–4:00  | Webinar afternoon session                                                      | **PRINCIPLES OF EFFICIENT WELL DESIGN**  
Kevin McGillicuddy, PG, Chief Hydrogeologist, Roscoe Moss Company, Los Angeles, CA | Los Angeles, CA | The aim of efficient well design is to construct a well capable of producing the maximum rate with the least amount of drawdown and at the lowest energy cost. Stainless steel for your well? What are the economics of the selection of casing and screen materials? What criteria from the driller’s log or down-hole geophysics are used to determine screen position, length, slot size and diameter to optimize performance and ensure well longevity? |
| 12:15–4:00  | Webinar afternoon session                                                      | **HYDRAULIC EFFICIENCY AND ECONOMIC BENEFITS OF FLEXIBLE PIPE FOR WATER WELL & IRRIGATION APPLICATIONS**  
Nicolas Steverlynck, President, Hose Solutions, Phoenix, AZ | Phoenix, AZ | Well owners should calculate life-cycle costs of operating a well flexible drop pipe for submersible pumps and lay-flat hose for surface applications can provide economic benefits for groundwater end users because of the simplicity of installation. Flexible pipe also has properties that make for greater hydraulic efficiency over rigid pipes. |
| 12:15–4:00  | Webinar afternoon session                                                      | **THE USES OF CHEMICALS FOR RESTORING AND MAINTAINING PERFORMANCE OF WATER WELLS**  
Kevin McGinnis, President, Cotey Chemicals, Lubbock, TX | Lubbock, TX | There is a world of confusion about the use of chemicals for restoring and maintaining the performance of a water well. The key is correct diagnosis of the problem and in customizing the selection of chemicals with the right combination of mechanical treatments. The presentation will describe the different chemicals typically used and will discuss the need for and methods for well chlorination. |
| 4:00       | End of Webinar – Complete Continuing Education Documents & Evaluation Form      |                                                |                   |                                                                                                                                                                                                              |
New England Well & Pump Technology
Webinar
Thursday, September 10, 2020
Registration Form

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AMERICAN GROUND WATER TRUST
The AGWT was formed in 1986 as a non-profit education organization with the mission of promoting interest and awareness in groundwater issues. The AGWT’s conference, workshop and webinar programs and educational materials:
  ♦ Communicate the environmental and economic value of groundwater
  ♦ Showcase groundwater science and technology solutions
  ♦ Increase citizen, community and decision-maker awareness
  ♦ Facilitate stakeholder participation in water resource decisions
  ♦ Promote efficient and effective groundwater management