Water Well Rehabilitation and Maintenance
Presented by the New Jersey Water Association and Subsurface Technologies, Inc.

**Description:**
Information about water well problems and effective solutions will be described based upon 35 years of experience. Wells experience loss of production and water quality problems as a normal process of aging. Wells require cleaning in order to minimize loss of production, extend the life of a well and minimize water quality deterioration. One main focus will be a shift away from the “operate to failure” approach, and toward a preventive, time-based maintenance approach to water well asset management.

**Agenda:**

8:00-8:30  Sign-in
The economic advantages of efficient water wells
The components of water wells, (casing screens, pumps) and definition of basic water well terminology
Basic water well hydraulics
Iron Bacterial Problems

9:45-10:00  Break

Summary outline of the mineral, biological and physical reasons for well Blockage
Biofouling of Wells
Understanding problems of wells
How physical well blockage can occur: drilling fluids, fines migration and sand-pumping.

10:45-11:00  Break

Chemical Remediation methods
Well Rehabilitation Equipment
Necessary steps for effective rehabilitation
Outline of principal mechanical techniques available for well rehabilitation
Swab and bail, blasting, wire brushing etc.
Presentation of a selection of well rehabilitation experience to illustrate the process of diagnosing the cause of declining well yield and the importance of matching solution(s) to the problem(s)
Cost-Benefit evaluation of well rehabilitation
Physical methods and Aqua Freed well rehabilitation experience
New concepts in well maintenance
Case studies of effective well maintenance
Private well owner rehabilitation alternatives
Aqua Gard—Very Cost effective well maintenance technology

1:00  Dismissal

**Date and Location:**
November 13, 2018 – Denville Public Works, 140 Morris Avenue, Denville, Morris County

**Instructor:**
Neil Mansuy, M.S., Ground Water Microbiology, V.P. Technical Services, Subsurface Technologies:
Neil has 35 years of extensive, worldwide well troubleshooting and rehabilitation experience. He worked nine years with Layne Geosciences Inc. as an aquifer and well rehabilitation specialist. Neil has become recognized as a leading authority on well rehabilitation. He assesses well problems, recommends cost-effective solutions, and applies his unique multi-disciplinary approach to remediate thousands of wells across the U.S. and around the world. Neil has recommended solutions for hundreds of wells, aquifers and water systems with “unsafe” bacterial results.

**Accreditation:**
4.0 Training Contact Hours for NJ-Licensed Water Operators. TCH Course Number 04-111802-10.
4.0 Technical Hours toward license renewal for NJ-Certified Public Works Managers. Course #DLGS-NJWA-166

The New Jersey Water Association
Pre-Registration is required, and is available at www.njwater.org