

WATER AND PEOPLE



An abundant and reliable supply of water is essential to a healthy, thriving, and economically vibrant community. Providing this water at the lowest possible cost to its customers is the mission of water utilities across the country. This responsibility is taken very seriously by the water utilities and all of their employees. "Water and People" is a course which offers the first step in identifying and training future water system operators who can continue to provide high-quality water to the public.

The water utility industry offers many opportunities for building a career. The constant demand for high-quality water provides ample opportunity for candidates who are interested in serving the public. Clean water and ample supply are world-wide concerns; experience and skills in the water industry are useful and applicable here in the United States and throughout the world.

Many utilities around the country are facing a shortage of qualified and capable water system operators. These operators are responsible for supplying potable and palatable water for the foreseeable future.

Water is the key to all living things, so why not choose a career that can make an important contribution to everything on the planet?

Although the "Water and People" curriculum is directed at future water system operators, there are many other careers within the water utility industry. Engineering, accounting and finance, safety, construction and communications are just a few

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Certified Small Water Systems Operator

The goal of "Water and People" is to prepare high school students to pass the state exam to become a State of Connecticut Certified Small Water System Operator. The duties of the System Operator can be found of the following page.

"Water and People" is comprised of units designed to cover the topics covered by the state exam. Each unit touches on specific topics and issues relevant to the water industry and concludes with review questions in preparation for the state exam. Passing the Small Water Systems Operator exam is the first step to a long and rewarding career in the water Industry.

There are many additional career opportunities at a water utility besides a small water system operator. Students with a wide array of interests can find gratifying careers at your local water utility. Some of the diverse career opportunities along with their responsibilities are listed below.

Administrative Assistant

- Answers phones
- Schedules meetings
- Assists people within the department

Customer Service

- Answers phones
- Takes customers complaints
- Schedules work appointments
- Works on account billing

Accountant

- Sets rates
- Reviews budgets
- Handles purchasing

Lab Technician

- Analyzes water samples
- Writes reports

Distribution

- Manage pump stations
- Flush the water mains
- Responsible for getting the water from the treatment plant to the end user

Meter Reading

- Read customer meters
- Responsible for accuracy of meters

Education

- Train new personnel
- Develop water conservation programs
- Educate the community on important issues

Construction

- Installing new water mains
- Repair existing water mains

Watershed Inspector

- Ensure the watershed is not being polluted
- Enforce any regulations within the watershed

Engineering

- Designing new water treatment facilities
- Improving existing infrastructure
- Increase efficiency within the utility

Environmental Scientists

- Map watersheds
- Collect water samples for testing
- Ensure environmentally sustainable practices
- Monitor stream flow and reservoir levels

GIS/ITTechnicians

- Create maps of the distribution area
- Provide system support for all employees
- Create a more efficient work environment



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

DUTIES AND RESPONSIBILITIES OF A PUBLIC WATER SYSTEM'S CERTIFIED SMALL WATER SYSTEM OPERATOR

Public Water System (PWS) TYPE: Community and Non-Transient Non-Community Public Water Systems that serve less than 1000 persons and have no treatment

CATEGORY: Small Water System Operator

The Certified Small Water System Operator shall:

- › *be responsible for the day to day operation of the PWS*
- › *ensure the delivery of safe water at all times by complying with the Public Health Code (PHC) of the State of CT*
- › *maintain a consumer complaint log, including how complaints are resolved*
- › *test, flush, clean and disinfect the water distribution system as needed per AWWA standards*
- › *collect or oversee the collection of water samples as specified by the Department of Public Health (DPH)*
- › *ensure that all samples are tested by a DPH certified lab*
- › *ensure that all samples are delivered to certified labs as to allow sufficient time so that results are received by the DPH within the specified time frames*
- › *notify proper agencies and the PWS's owner regarding specific violations within specified time frames*
- › *review all water quality analyses for completeness prior to submission to DPH*
- › *report all violations to DPH and issue public notices when needed*
- › *oversee and monitor all repairs performed on the public water system*
- › *be responsible, where meters are required, for recording of the quantity and instantaneous flow, where feasible, of water being pumped from each source on a weekly basis as well as testing the water meters as per manufacturers recommendations*
- › *advise the system owner on procedures regarding a preventive maintenance program and a source protection program*
- › *be aware of all changes regarding drinking water regulations*
- › *be available to accompany regulatory officials for on-site inspections when given adequate notice*
- › *keep accurate records of water analyses, repairs, maintenance and correspondence in accordance with any time frames required by the PHC*
- › *investigate water quality and quantity problems and take corrective measures as needed in a timely manner*
- › *attend training programs and workshops to keep current on technical improvements*

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