Water is essential for everyday life, playing a major role in a community’s ability to live, function and grow, while often dominating a society’s economic and political sphere.

But with California in the midst of a three-year drought, the state’s water picture is drastically changing as discussions continue about the increased use of reclaimed and recycled water, the introduction of desalination plants and efforts to implement statewide water and energy conservation mandates.

For students and working industry professionals looking for a way to help contribute to that change, the Water Systems Technology (WST) program at College of the Canyons is the perfect place to start.

“The Water Systems Technology program is a great venue for students seeking a career in a high-demand field,” said Dr. Dena Maloney, vice president, Canyon Country campus. “Offering this program in Canyon Country has boosted enrollment and raised the visibility of this important career-technical education program. I am pleased that so many of our students have chosen to pursue this educational opportunity.”

The COC WST program is one of just 16 such water programs in the 110-member California Community College System.

Housed at the college’s Canyon Country campus, the program is designed to prepare students for careers in the fields of drinking water treatment and distribution processes.

Students who complete the college’s WST program are often employed as water distribution operators, treatment plant operators, service representatives, wastewater collection workers and/or wastewater treatment operators.

Both types of operators control equipment and processes that remove or destroy harmful materials, chemicals and microorganisms from the water. Operators also control pumps, valves and other equipment that move water and/or wastewater through the various treatment processes.

“Water technology is one of those potential career fields that people just don’t think about,” said Regina Blasberg, chair of the college’s engineering technology department. “But as baby boomers begin to retire, many of the state’s water agencies are facing the potential loss of between 20 and 60 percent of their current staff in the next five to 10 years. So employment opportunities should remain high.”

According to the United States Department of Labor, employment of water and wastewater treatment plant and system operators is expected to grow by 14 percent between the years 2006 and 2016 — faster than the average for all occupations.

An increasing population is expected to boost demand for water and wastewater treatment services, and as new plants are constructed to meet this demand, new water and wastewater treatment system operator jobs are expected to increase.

Upon completion of the WST program at COC, students will acquire skills and knowledge in areas including water treatment, distribution and quality concepts, chemical dosage techniques, water chemistry and water-based mathematical calculations.

Another key component of the college’s WST program is to provide instruction for water personnel interested in career advancement through continuing education and certification renewal opportunities.

WST coursework is also designed to help prepare students for various certification examinations given by the