

## EQUIPMENT NEEDS ASSESSMENT APPLICATION

Name of Person Submitting Request:	<b>Todd Heibel</b>
Program or Service Area:	<b>Water Supply Technology (WST)</b>
Division:	<b>Science</b>
Date of Last Program Efficacy:	<b>Fall 2011</b>
What rating was given?	<b>Continuation</b>
Equipment Requested	<b>Ten (10) Valve Stations</b>
Amount Requested:	<b>\$20,000 (\$2,000 per valve station)</b>
Strategic Initiatives Addressed:	Student Success, Access, and Institutional Effectiveness

Replacement  Growth

1. Provide a rationale for your request.

Specifically, the WST Department needs to purchase copper pipe, sheet metal trays, and valve assemblies for ten valve stations within the T 101 backflow-cross-connection laboratory. Currently, only six, aging valve stations are available for hands-on student use. In their current condition and configuration, students cannot receive proper training. This means that students are unprepared for state examinations and licensure, as well as an evolving industry landscape.

In its current configuration, up to four students must share each station. This diminishes the hands-on learning opportunity provided within a laboratory environment. In addition to replacing the existing six stations, an additional four stations are necessary. The updated, modern copper pipe, valve assembly, and sheet metal tray installation would allow for ten valve stations to be deployed and used within the T 101 laboratory. With this greater number of stations, only two to three students would need to share each valve setup, thereby improving student contact, comprehension, and learning.

2. Indicate how the content of the latest Program Efficacy Report and current EMP data support this request. How is the request tied to program planning? (*Reference the page number(s) where the information can be found on Program Efficacy.*)

As stated within the Efficacy Report (p. 17), the current cross-connection control and backflow lab must be updated and expanded so that students can meet new regulatory requirements and better prepare for rewarding careers within the water industry. In addition, updated equipment will better align with updated curricular and SLO demands (Efficacy Report, p. 11).

This equipment request also aligns with the program goals and action plan, as delineated within the EMP document. Improving the cross-connection control and backflow laboratory environment also has the potential to increase student success, student retention, and degree and certificate completion.

3. Indicate if there is additional information you wish the committee to consider (*for example: regulatory information, compliance, updated efficiency, student success data, or planning, etc.*).

According to the Efficacy Report (p. 17), student preparation for the written and hands-on cross-connection and backflow examinations requires a modern, accessible laboratory environment. In its current condition, too many students crowd around a handful (6) of stations. This limits the total time that each student can spend on the apparatus. In its current state, the stations are outdated and must be replaced so that students can receive the most up-to-date information possible.

4. Evaluation of initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (for example Department Budget or Perkins)

Although the total cost to replace and expand the pipe, valve, and collection tray (drain) stations is \$20,000 (\$2,000 apiece for ten stations), it will greatly enhance student training and knowledge, such that students are well prepared for licensure examinations and lucrative careers within the water industry. It will also enhance the stature of the SBVC WST program and increase the likelihood that the water industry will further invest in the WST Department.

It is estimated that ongoing maintenance costs will total \$1,000 annually (\$100 per station per year). This maintenance will not only include replacement of worn out components but also updating components to meet evolving industry and licensure standards.

At present, the WST Department lacks a stable, college-funded budget. It is currently relying on steadily dwindling grant funds for all expenses. Therefore, it will continue to be necessary to apply for other public and private funding sources, including Perkins grants, unless the college prioritizes and funds a WST budget.

5. What are the consequences of not funding this equipment?

Very few community colleges offer courses in Water Technology. In fact, Mount San Antonio and Citrus College shut down their water programs as a result of budget cuts. Students currently enrolled in the SBVC WST program commute from as far away as Palm Springs, Whittier, and Victorville (Efficacy Report, p. 8). If the cross-connection and backflow laboratory is not updated with the most modern, reliable equipment, then opportunities for solid training and careers are further limited. As college budgets improve and additional students enroll in WST courses, the demand on hands-on training equipment increases. If equipment is not expanded, then fewer students will be able to participate in crucial hands-on training. In addition, outdated equipment provides a less than optimal training environment for students. Coupled with fewer hands-on opportunities, outdated equipment does not sufficiently prepare students for licensure examination and career success.