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RINKING WATER (**) ACKFLOW PREVENTION

DEDICATED TO WATER SYSTEM SAFETY WORLDWIDE

The Importance of Water System Operations and Maintenance to Avoid Waterborne Disease Outbreaks

The City of Santa Clarita
Going Green!

A Pine Float?

Who Approved This Installation?

EPA Testing Plans

Santa Clarita Going Green

By: Bernie Clarke





Due to the variation in pressure, Special Districts has had numerous line breaks, causing collateral damage and gallons of water wasted. Additionally, they were stuck with maintaining an old irrigation system design, which buried almost all of the system's components underground. When the old system inevitably floods and fills with dirt, maintenance personnel spend hours digging up all of the components until they are able to detect which component is malfunctioning.

he focus of this article is centered on a suburban city about 35 miles north of Los Angeles _ the City of Santa Clarita. This valley flourished from dry desert land to a beautiful, growing, and thriving city where thousands of families have come to raise their children.

About 40 years ago, the Newhall family had a dream of slowly building a community, which instead, over the years, has quickly grown into a large suburban city. The City of Santa Clarita has one of the best maintained landscape maintenance districts in Los Angeles County, and the Special Districts Division works hard to preserve this aesthetic beauty. However, like most cities, Santa Clarita realized keeping the City landscape clean, green, and safe is not enough. Special Districts wanted to increase efforts in water management within the landscape maintenance service environment. City planners and designers stepped up to the challenge of "thinking green," with the initiative to undertake a lead-by-example plan in water conservation.

The City of Santa Clarita is in a desert-type environment with 100° temperatures throughout the summer, so water is a precious resource the City desires to maintain. The City is also victim to staggering water pressures throughout the area ranging from 50-200 PSI, which can be difficult to regulate.





In an effort to improve the irrigation system and conserve water, Emilio Blanco, Special Districts Project Development Coordinator, contacted Bernie Clarke, owner of Clarke Sales, to help address the issues. Bernie recommended the City install Clarke's new Watts Regulator BIC-1000 (Backflow Irrigation Control) Station.

The station is preassembled with above-ground components, thereby making maintenance extremely easy. Special Districts will now be able to control and monitor pressure at all times, helping to eliminate line breaks. Furthermore, the station is designed to shut down if the pressure exceeds the set operated pressure. If a line break should occur, the system will shut down automatically, allowing minimal, if any, water loss. As a result, hundreds of gallons of water is saved by minimizing line breaks. The BIC-1000 is also saving the City thousands of gallons of water by monitoring and controlling the system's pressure. At one location in the Santa Clarita Valley, there are three BIC-1000 Stations. Each controller has at least 20 watering stations which water for 15 minutes. three times a week. Bernie Clarke reduced the pressure on the system from 63 to 38 PSI, allowing an adequate amount of water for the landscaping and also saving 5 GPM per minute at each watering station. According to City calculations over a one-year period, on just one controller, staff estimates the following savings:

- 5 GPM X 15 Min. = 75 GPM saved on one watering cycle
- 75 GPM X 20 stations = 1,500 GPM saved in one day
- 1,500 GPM X 3 times a week = 4,500 GPM saved in one week

- 4,500 GPM X 4 = 18,000 GPM saved in one month
- 18,000 GPM X 12 = 216,000 GPM saved in ONE year at just ONE controller.

This is a significant savings for the City, as they have three controllers at this location. At this site, they will save around 648,000 gallons per year. The Special Districts Division has ten BIC-1000 Stations installed throughout the Santa Clarita Valley, and they are required in all new landscape projects. The City of Santa Clarita, Special Districts Division, recognized their water control challenges and took a proactive approach to address them. By installing the BIC-1000 Station and saving the City hundreds of thousands of gallons of water a year, Santa Clarita can now say they are no longer "thinking green," they ARE "green." Special Districts Administrator, Dennis Luppens, stated, "We either act on our own to help conserve this resource, or we will have the water companies mandating change. We prefer to be on the cutting edge of change, and the City of Santa Clarita encourages this type of forward thinking." 🔻

Quote of the Month

"Water is the lifeblood of our bodies, our economy, our nation and our well-being."

Stephen Johnson, EPA Administrator, upon dedicating the new desalination plant at El Paso, TX, 2007