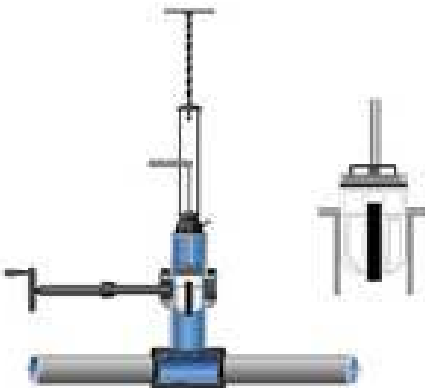


Insertable Valve System Simplifies Line Replacement, Rehab

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Tucked away in the foothills of Reedley and Dinuba, about 30 minutes north of Visalia, is the City of Orange Cove, CA, with just under 10,000 people, an aging water system, and a City Manager dedicated to minimizing water loss in his community. Bill Little formerly owned four private water companies in Arizona and was a previous City Manager for Orange Cove. He left Arizona and returned to Orange Cove as the new City Manager to address the community's growing water problems.

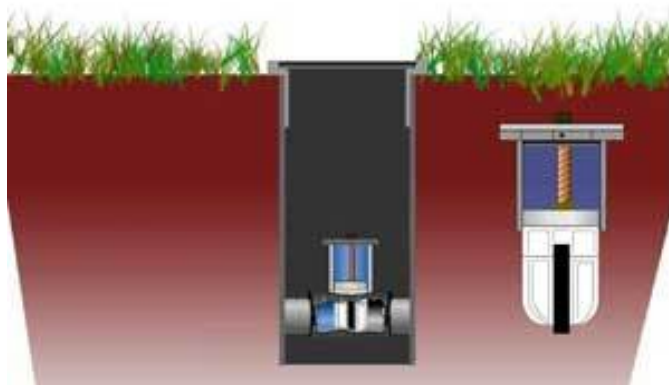
As the only city in Fresno County that is completely dependent on surface water, Orange Cove had 40% unaccounted for water loss when Little returned.



"Our goal is to reduce unaccounted for water loss in Orange Cove down to 3% - 5%," Little said. "In a city with an old system and a high turnover there are no records or documentation to facilitate the management of the system. If we had a leak in a water main, we had to shut the whole town down. We needed a solution that would allow us to make line replacements while the system is hot, rather than shutting it down."

The Plan

The Department of Water Resources provided the city with a grant based on the benefit to be gained from replacing and retrofitting lines and reducing water loss. Determined to update the system without interruption of service to the residents of his community, Little discussed his requirements with Ron Yamabe of Yamabe & Horn, the City Engineer for Orange Cove.



Yamabe identified the Hydra-Stop® Insta-Valve® system as a solution. Insta-Valve is an insertable valve that can be installed without service disruptions. Field crews install a fitting on the pipe, make a tap and then install the valve. Once installed it operates with a standard valve key.



Field crews will be installing 113 Insta-Valve® insertable valves at Orange Cove.

Repairing the 60-year-old system included replacing all existing lines in the city's alleys, which would require about 60-70 tie-ins. Hydra-Stop was specified into the project and Halopoff & Sons Inc. was selected as the contractor for this first phase of a \$2.9 million project that will eventually replace one-third of the city's water lines and retrofit the remainder with polyethylene.

Halopoff is installing 113 Insta-Valves in strategic locations to make the tie-ins with no shutdowns to residents. To date the company has installed 90 valves and has made 15 successful tie-ins without any shutdowns. During this process the crew has had a couple breaks on the mains due to the age of the line. In these situations they used the new valves that were already installed to isolate the line and fix the leaks.

Orange Cove will keep the valve installation system after the first phase of the project is complete. Under the current contract with Halopoff, the city purchased both the Hydra-Tapping™ and Insta-Valve installation machines.

The 113 valves being installed in the first phase will complete about 40% of the total line replacements. The city will use the valving machines as it moves into subsequent phases of the project.

After all line replacements are completed and services are restored, plans will be made to begin the retrofitting phase of the project. With the old galvanized system in Orange Cove there is going to be some breakage when retrofitting. The new network of valves will allow those breakages to be contained. Other plans for the city include removing the Insta-Valves from the lines that have been replaced and salvaging them so they can be used elsewhere in the system at a later date.

"The Insta-Valves are really easy to install," said David Halopoff, Secretary for Halopoff & Sons and Project Manager for the City of Orange Cove. "After one day of training with Hydra-Stop the crews were averaging 4-5 valve installations in an 8-hour shift."

Without this solution, the shutdown time to residents would have been considerable. Instead, there was no inconvenience for residents and both the city and the contractor now have the tools, and the ability, to repair and maintain the system. [WW](#)

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