

# \$96,000 In Leaks Found In System

Utilizing a finely-tuned ear and sophisticated sonar equipment, 90 water leaks — representing a savings in water of \$96,000 — have been discovered throughout the city of Santa Cruz water system in just one year.

The trial leak detection program has been successful beyond what was anticipated, according to Water Director Morris Allen.

Consider the fact, for example, that 149 miles of water mains have been surveyed. The 90 leaks detected on mains, services and meter boxes averaged out to 1½ leaks per mile.

"In combing the total leaks found and repaired, 258 gallons of water per-minute were saved," explained Water Distribution Superintendent James Edwards. "In one case, a non-surfacing service leak was located losing 15 gallons per minute."

By pinpointing minor and major leaks, between 85 and 90 percent of repairs can be made with only one excavation hole in the streets, added Edwards, representing even greater cost savings.

"We not only saved a lot of money in terms of processing costs of water," said Allen, "but also have made water available for new connections that we otherwise would

not have had."

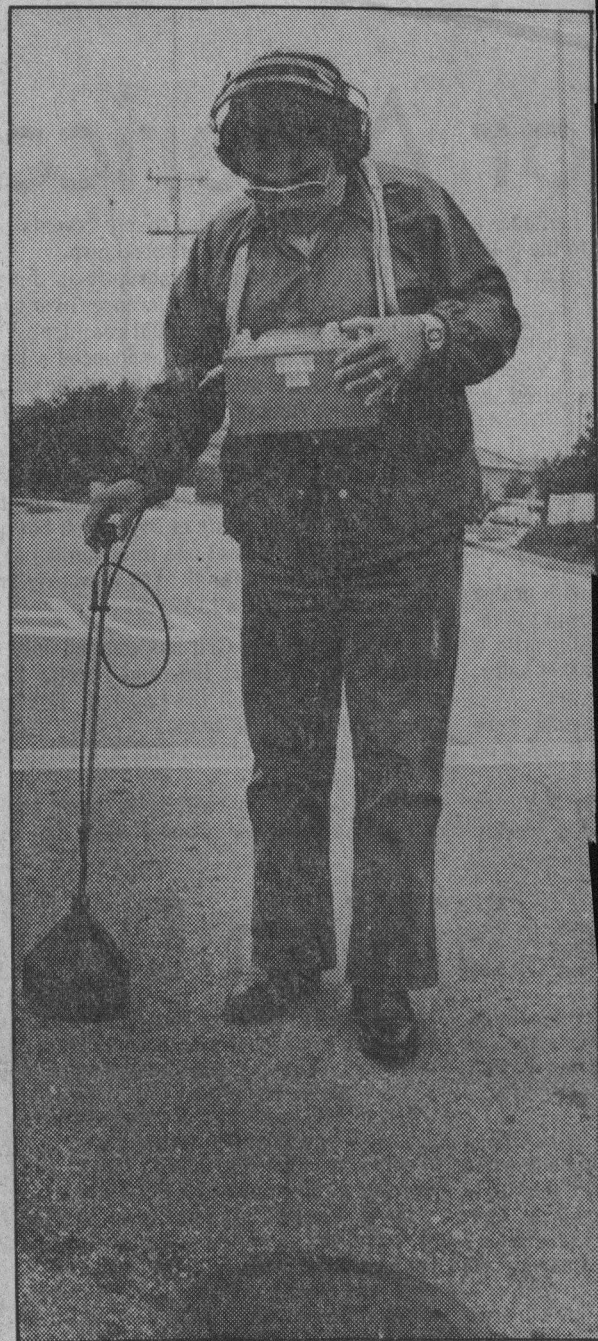
The first year costs of the trial program amounted to just under \$22,000, including the salary of the full-time operator of the "soni-kit leak detector," as well as the \$3,131 costs of the detector equipment. The \$96,000 in water savings represents cost efficiency at its best.

The "soni-kit leak detector" is operated by maintenance worker Richard Jue. He literally listens for water escaping from pipes.

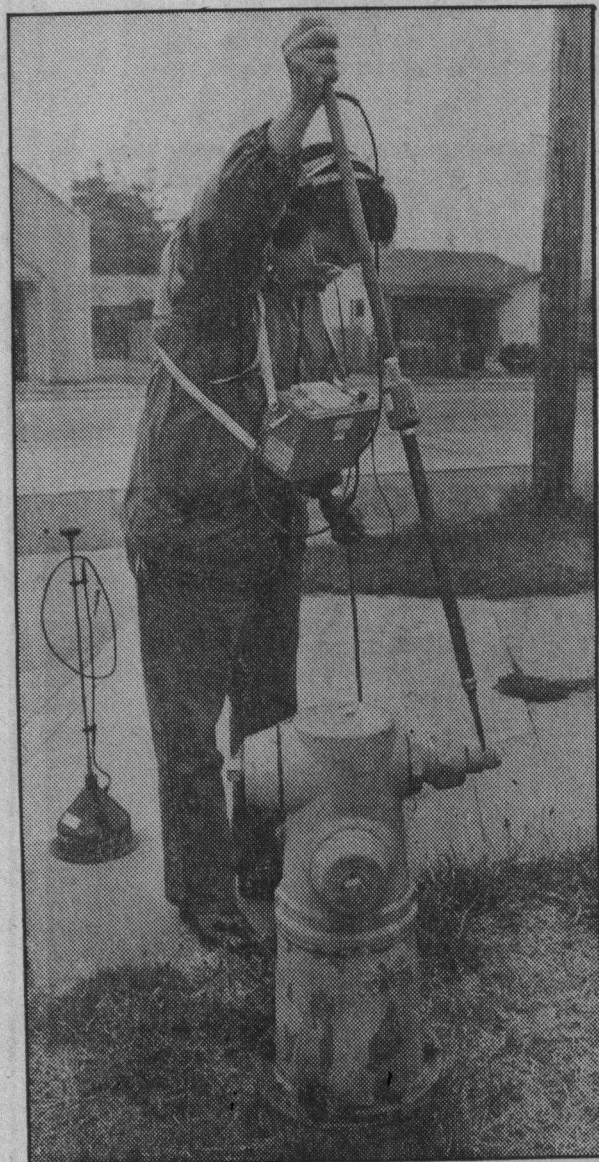
The sophisticated micro-processors screen out sounds that are not leaks. All detection work is also done from the surface, saving even more time.

The program will continue in operation this year, as well, said Allen, although in a more limited capacity. This past year all the city's main water lines have been tested. Only suspected leaks will be investigated and pinpointed with the equipment this year.

The Santa Cruz Water Department is the first local department to make use of the new program. Some \$3 million in state grants are expected to be made available this year for similar programs, said Water Conservation Coordinator Bill Lovvorn.



Detector penetrates street surfaces.



Richard Jue checks fire hydrant.



A leak could be discovered at a water meter.