

Wastewater Video Inspections

By Mike Lucas, Wastewater Technician

One of the services that the Nebraska Rural Water Association is able to provide is video inspections of the wastewater collection systems across the state. Many of you have taken advantage of this opportunity to inspect specific locations where frequent backups have occurred. Through your donations to NeRWA's equipment fund this service is still available at no cost. I often times have the camera with me in my travels anticipating the frequent requests for assistance. The images produced during the video inspection are available to you as a movie or as a snapshot. We can burn them to a disc or download them directly to your computer. Date, time and footage are recorded.

Through the vigilance and dedication of one system operator we recently worked through a noon hour and were able to save the system \$10,800.00 in construction change order costs by inspecting a drain line crossing beneath a road and determining that it did not need to be replaced. That operator certainly earned his wages that day!

It is often helpful if the sewer main has been cleaned prior to the video inspection. In the one photo you can see a large root blockage from what is believed to be two taps immediately across from each other. Efforts had been made to clear the line but they were experiencing difficulty in retrieving their jetter so I was asked to camera the line to see what they were dealing with. In this case due to restricted flow, sludge had settled out and built up in the line creating a challenge for us to have visibility. If water is backed up or during high flow situations visibility can also be difficult or impossible. Follow-up inspections after cleaning can also be very helpful. The second picture shows a line where the integrity of the main has been completely destroyed due to a tap. When it was first inspected the main was completely blocked with roots. It was only after extensive jetting and root cutting that we were able to determine the damage to the main.

One particularly astute operator with a focus on serving the system's customer/owners coordinates and schedules several service lines for me to inspect on two days a year. These are lines where the customer has had problems or is just concerned about the condition of his service line. In several instances new construction is planned and a determination of whether or not to install a new service line and/or tap prudently needs to be made. These inspections may also help to provide evidence if past problems might potentially have been due to private service line issues as opposed to those of the city main. I am available to video inspect service lines if access is available and only upon the request of the system.

We are all challenged to responsibly adhere to a regular inspection/maintenance program. One proactive Utility Superintendent recently told me that they visually inspect the flow in every manhole monthly. Many systems have a schedule to jet clean all of their mains in a set number of years. Waiting for a phone call from an irate customer and then responding is no longer acceptable. Litigation due to

sewer collection system backups has increased in numbers and has taken new approaches. At the time of this writing it is my understanding that a case to determine liability for sewer backup damage is before the State Supreme Court. Updates and further discussion of these cases and the potential impact on your systems will be included in our wastewater classes in 2012. I hope to see you there.