City Administrators Report

November 5th 2012

Waste Water Treatment Plant

As you know this last spring and early summer was very wet. The high flows from the Kootenai River along with all the rain made operations at the plant very stressful for the operators. Now that we have not had any really significant rainfall since early July and coupled with the flows from the Kootenai being very low, the plant operator took this opportunity to take one of the clarifiers off line for cleaning.

The two clarifiers are about 13 feet deep and can handle about 130,000 gallons of waste material. This material is flowing in and through the clarifiers constantly. This spring when we had all the rain and the Kootenai River was close to flood stage, 2 million gallons of water traveled through the clarifiers in a 24 hour period. This was on the extreme end of the spectrum of normal operations of the plant.

The plant was designed to handle an average inflow of 511,000 gallons a day, with a peak flow of 1.15 million gallons. So you can see by these numbers with the inflows to the plant during the wet season, when the ground water table is high, that we have a huge issue with infiltration in the sewer transmission mains.

Water Leaks

The last couple of weeks we have had a rash of new water leaks in our system. A few were pretty minor but there also were a couple larger ones that required some call out overtime. A small leak on Second Street, near the funeral home, was an easy one, so we thought. Once the leak was exposed it turned out to be a service line from the main to the curb stop.

The service line ran to a house that was vacant and for sale. Being late in the day and needing parts, the crew secured the dig area until the next day. About 7:30 pm I received a call from a lady on 211 Nevada that she came home from work and had no water. I called Charles to check on the problem. Charles called back and the lady said she was fine until the next day. The crew found out the service line to the vacant property, split and supplied water to 211 Nevada. This service line ran around the back of the vacant home and is about 150 feet long. Water was restored the next morning.

Another leak that caused some problems was on Highway 2 west by Harlow’s bus barn. The leak is in an area that has had problems in the past. Plus we found out that the new management at MDOT (Montana Department of Transportation) has an eleven page encroachment permit that has to be filed before you start to dig in the highway. This took a few days to completed and be approved. The leak was dug early Monday the 22nd and everything went well. They had the repair done and back filled by 1:00 pm. Less time than the encroachment permit.

Whitefish Hydro Plant

While at the MLCT conference in Kalispell, I was able to take a tour of the small hydro plant at the City of Whitefish’s water treatment facility. I was surprised at how small of an operation it is. The whole unit sits in a 12 X 16 foot building above the plant. Water is funneled down a series of pipes into the plant. The pressure when it reaches the hydro turbine is near 275 PSI. This is a lot of pressure for such a small system.

This plant was first developed back in the early 80’s. After lighting struck the unit and took it off line, the city never repaired the hydro plant because of the cost and return on investment. Now that the cost of power has increased, Whitefish worked with Flathead Electric Coop to help finance the repairs. Flathead contributed over $400,000 towards the project.

The plant became operational again in September of this year, and early estimates are that they should have the hydro paid back in eight years. All the power that is produced goes to Flathead Electric which they sell to their customers. The small hydro is predicted to bring in between $50 and $60 thousand a year. Once the loan from Flathead is paid back, then the city can renegotiate the power sales.

After the council had voted on the planning grant from Paul Rumelhart, I contacted Flathead Electric about the city moving forward and getting a second opinion on the Flower Creek dam. Flathead Electric was very excited and they still would like to be involved in a hydro project here. They would do a similar financing proposal as the one in Whitefish.

Departments

Besides the water leaks, and the day to day operations, the street crew has been working on the plows and other equipment getting ready for winter. The sideboards have been placed on the trucks, and the tire chains have been gone through.

The crews also have been working on fixing a few things at the dam and the gauging station. The small building that houses the batteries and instruments had been leaking and a new roof was put on. Also a larger solar panel was put up and wired into the station. The high water gauge at the dam has not been working properly and the alarm keeps going off at dispatch. There has also been a problem with the camera and power issues.

The problems with the high water alarm downstream were solved. Turned out it was installed upside down. Go figure. The issues with the camera and power dropping is still unclear. We have been in touch with Sutron to get this problem resolved.

Water treatment has had a few glitches with the chemicals in the water. This has been an ongoing issue since early June. They had a new chemical change that was recommended by Rural Water and it seems to be helping. Also they will be changing out one of the filters, adding more charcoal to the medium.

Jim Hammons