FAQ - Wastewater Treatment Facility Upgrades and Outfall Relocation

Q. What does the upgrade involve?
A. In short the upgrade involves replacing worn and outdated equipment, improving treatment capability and efficiency and relocating the effluent outfall.

Q. How much does this cost?
A. The upgrades to the wastewater treatment facility will cost $8 Million and the outfall will cost $2 Million. The city will receive $2.7 Million dollars in grant money from the WDNR and USDA.

Q. What does "effluent" mean?
A. "Effluent" means treated municipal wastewater.

Q. What does "relocating the effluent outfall" mean?
A. The current outfall discharges to the headwaters of the Springville Branch of the Bad Axe River. It has been determined that 20-30% of the water in the stream makes it to the Springville site. The remaining 70-80% of the flow goes into the fracture bedrock underground. The Wisconsin Department of Natural Resources is requiring the City ensure that the effluent bypasses the water losing area of the fractured bedrock and continues to be surface flow. As such the City is moving the discharge point 2 miles downstream past the losing area.

Q. How much water comes out of the outfall?
A. The current plant peak weekly flow is around 350,000 gallons per day. That is total volume in a 24hr period. This equals about 245 gallons per min or 0.5 cubic feet per second. This translates into less flow than 6 standard 5/8" garden hoses at 40 psi.

Q. What does the relocation mean for effluent quality?
A. Moving the outfall downstream means that the City must meet more stringent effluent requirements. The current limit for Biochemical Oxygen Demand (BOD, i.e. organic load) will be reduced. The City will also have limits for new parameters, temperature and ammonia. Across the State phosphorus effluent limits are decreasing over the next 5 years. As a result of the relocation of the outfall the City will be required to decrease the phosphorus loading even further than required at the current location. The City will continue to have limits for total suspended solids, fecal coliform, pH and dissolved oxygen.

Q. Did the City explore other options to the outfall relocation?
A. Yes, there were three main options explored. 1. No relocation but treating effluent to near drinking water quality standards. 2. Grouting the fractured bedrock zone. 3. Using a pipeline to relocate the outfall. WDNR required strict compliance to drinking water quality standards for option 1, no relocation, making it economically unrealistic. The WDNR deemed option 3, outfall relocation, verses option 2 as the most environmentally sound and viable long term option.