

Why repair, replace or line sewer mains, manholes and sewer trunk mains?

- Collapse or near structural failure
 - Leads to Sewer Backups
- Offset and leaking joints that allow I&I
- Poor lateral taps and piping connections allow I&I
- Inflow and Infiltration (I&I) is year round in O'Fallon due to high water table and especially during intense storms
 - Estimated cost of transporting and treating Inflow and Infiltration (I&I) is \$500,000 for O'Fallon each year based recent rate evaluation process
- Groundwater contamination can occur during extremely dry periods
- Poor vertical alignment, poor slope can cause Sewer Backups
- ~~Undersized mains (can cause sewer back ups)~~ and oversized (doesn't allow flushing of acid forming materials which lead to early failure of piping)
- Insufficient vertical separation of a building's lowest floor and sewer main which lead Sewer Backups.
 - Cost of sewer backups ?

Why Upgrade the WWTP?

- Do you want clean water in rivers, streams and lakes? Congress thinks so, and the USEPA is tightening regulations making improvements to the treatment process necessary.
 - Our existing headworks is ineffective in removing grit and rag-like materials causing increased maintenance and repair costs in rest of plant.
 - Our existing clarifiers are at or near capacity, unable to remove one of them for extended maintenance
 - West clarifier has delaminated floor interfering with proper operation.
 - Our Terminal Lift Station worn out after 10 years, unable to bypass pump to lagoons without shutting down pumping to WWTP, and parts for electronic equipment cooling becoming hard to get.
 - Zinc & Phosphorous removal requirement coming for sure!
 - Ultraviolet disinfection will save money and is a less manpower intense method. It is much safer than chemical disinfection, environmentally more friendly, and will reduce water bill to WWTP by \$3,000 per year
 - Oxidation ditch improvements will save on maintenance of failing rotary aerating disks and increase plant capacity.
 - Digester improvements will provide better treatment of sludge meeting ever increasing requirements for safe land application
 - Sludge handling facilities will be needed to reduce land application that is becoming more limited!

Why repair, replace or line sewer mains, manholes and sewer trunk mains?

- Collapse or near structural failure
 - Leads to Sewer Backups
- Offset and leaking joints that allow I&I
- Poor lateral taps and piping connections allow I&I
- Inflow and Infiltration (I&I) is year round in O'Fallon due to high water table and especially during intense storms
 - Estimated cost of transporting and treating Inflow and Infiltration (I&I) is \$500,000 for O'Fallon each year based recent rate evaluation process
- Groundwater contamination can occur during extremely dry periods
- Poor vertical alignment, poor slope can cause Sewer Backups
- Undersized mains (can cause sewer back ups) and oversized (doesn't allow flushing of acid forming materials which lead to early failure of piping)
- Insufficient vertical separation of a building's lowest floor and sewer main which lead Sewer Backups.
 - Cost of sewer backups ?

Why Upgrade the WWTP?

- Do you want clean water in rivers, streams and lakes?
Congress thinks so, and the USEPA is tightening regulations making improvements to the treatment process necessary.
 - Our existing headworks is ineffective in removing grit and rag-like materials causing increased maintenance and repair costs in rest of plant.
 - Our existing clarifiers are at or near capacity, unable to remove one of them for extended maintenance
 - West clarifier has delaminated floor interfering with proper operation.
 - Our Terminal Lift Station worn out after 10 years, unable to bypass pump to lagoons without shutting down pumping to WWTP, and parts for electronic equipment cooling becoming hard to get.
 - Zinc & Phosphorous removal requirement coming for sure!
 - Ultraviolet disinfection will save money and is a less manpower intense method. It is much safer than chemical disinfection, environmentally more friendly, and will reduce water bill to WWTP by \$3,000 per year
 - Oxidation ditch improvements will save on maintenance of failing rotary aerating disks and increase plant capacity.
 - Digester improvements will provide better treatment of sludge meeting ever increasing requirements for safe land application
 - Sludge handling facilities will be needed to reduce land application that is becoming more limited!
 - Additional sludge pond to handle increasing solid collection, two ponds do not have adequate capacity.