



## O'Brien WRP's Goals and Objectives for 2017-2022

### **Goal – Prevent Release of Sludge into the Environment and Increase the Reliability of the West Side Sludge Line to the Stickney WRP**

#### Objective

Prevent release of sludge into the environment and increase the reliability of the West Side Sludge Line to Stickney WRP.

#### Description

The first third of the West Side Sludge line was built in the 1960's. It has experienced numerous breaks in the line since the late 1990's. Most recently, there were 3 sludge line breaks in 2016. When there is a sludge line break there is discharge of some sludge to the environment including parkway, roadway, and North Shore Channel. Additionally, the O'Brien WRP currently operates the sludge pipeline at a reduced operating pressure to minimize potential for line breaks. This reduced operating pressure often limits the amount of solids that can be transported to Stickney WRP causing a backup of solids in the O'Brien WRP.

Replacement of the problematic first third of the West Side Sludge Line would mitigate the potential for sludge releases to the environments as well as improve the ability for the O'Brien WRP to waste sludge to Stickney WRP.

#### Measurability

Reduction of sludge line breaks to zero occurrences per year. This would reduce the occurrences of sludge releases to the environment due to sludge line breaks to zero per year. Improvements will be measurable as indicated by zero breaks/sludge releases.

Improvement in volume/amount of solids sent to the Stickney WRP for further processing. Elimination of sludge line breaks would increase the number of days the sludge line transports solids to Stickney WRP which is in-turn an improvement due to zero out-of-service days due to sludge line breaks. Additionally, the new sludge line is anticipated to improve the capacity of the line. Improvements can be measured by the reduction to zero of sludge recirculation events due to sludge line capacity limitation, and reduction to zero of sludge discharges to TARP due to sludge line capacity limitations.

Sludge flow volume and Dry Tons of solids sent to Stickney WRP are tracked, increases in annual flow volumes and dry tons of solids will be monitored.

Post Construction: Observe the number occurrences of sludge line breaks, the number of occurrences of recirculation of sludge due to sludge line capacity limitation, and the number of occurrences of sludge discharges to TARP due to sludge line capacity limitations. Compare annual sludge flow volumes and dry tons of solids sent to Stickney WRP with historical annual averages.

#### Affect to Biosolids Production

Increased dry tons of sludge to Stickney WRP for further processing.

#### Relevant EMS Outcomes



Elimination of sludge spills to the environment.

Action Plan

2017-2020: Complete design of the replacement section of the West Side Sludge Line, Contract 07-027-3S. Bid and award the Contract.

2020-2022: Construction and commissioning of the new sludge line section.

Tracking Progress

The project is currently under design by Engineering.

Track measurability factors on a yearly basis and submit in progress report.

Responsible Person(s)

Section 731 – Principal Engineer

Section 515 – Principal Civil Engineer

Funds/Resources

Funds for the project have been budgeted in the Engineering Department.

Target Date

12/31/2021