**Outreach**

Project:Eagle River Wastewater Treatment Plant Headworks Upgrade

Community partner: Anchorage Water and Wastewater Utility (AWWU)

Project Lead: Stephen Nuss, P.E., Capital Program Manager (AWWU)

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Abstract: AWWU owns and operates the ERWWTF. The current headworks of the facility is not able to support current flow rates entering the facility. A new headworks was designed to support the incoming flows for the next 30 years. Several options were considered, including one that does not require the construction of a new building. The final recommended option includes constructing a new building for the headworks equipment.

The recommended headworks equipment is selected based on the estimated future flow rates. The future ADF rate is estimated to be 2.2 MGD. The recommended design has a parshall flume to measure flow after which the channel splits into four 2 ft. wide concrete channels. Three of the channels will be identical with a 3 mm. screen/dewatering unit and a 4 MGD grit chamber. The fourth channel is for future expansion. A single grit dewatering unit services the three grit chambers with room for a second. A side channel with the addition of sluice gates bypasses the system. After the headworks, the channels merge and the influent flows to the primary clarifiers in building 1.

The dewatered solids from the screens are screw conveyed to a dumpster in the loading bay of the new building. The grit from the grit chambers are pumped to the grit dewatering equipment and then screw conveyed to the dumpster in the loading bay. Trucks then transport the solids to the nearby landfill.

The estimated cost of the headworks upgrade is roughly $7 Million.

Seawolf Engineering 2015, having been awarded this project by AWWU, agreed to complete the following deliverables by April 2015:

* Site and Grading Plans
* Building Layout with Section views in 2D
* Geotechnical Considerations, Existing Conditions, Criteria for Building
* Screening Unit Recommendation
* Grit Unit Recommendations
* Solids Handling with Direct Trucking to ARL
* Flow Projections
* Alternative to a new building
* Updated process flow schematic for entire process from influent to outfall

Project Documents:











