Clean Water
State Revolving Fund

SCOW BAY PUMP STATION 1 UPGRADE

STATE PROGRAM: Alaska Department of Environmental Conservation

ASSISTANCE RECIPIENT: Petersburg Borough

ASSISTANCE AMOUNT: $550,000

PROJECT DESCRIPTION

The Scow Bay 1 station pumps continuously during storm events due to inadequate wet weather storage capacity and worn pumps. The existing suction lift pumps were installed in 1990 and are estimated to operate at only 25% of their original efficiency, and often both pumps must run to keep up with system flows. Sometimes, in heavy storm events, the pump station reaches maximum capacity and needs to bypass flow out of the collection system to protect electrical components from flooding. To address this, the Borough will use a CWSRF loan to replace the pump station with new high efficiency submersible pumps and an intelligent electronic control system featuring variable frequency drives that will provide energy savings and help optimize system efficiency. The Borough anticipates power usage to decrease sharply with energy costs decreasing 52% overall, making this an excellent energy efficiency capital improvement project. Further efficiencies are anticipated through component standardization providing significant reduction in overall operations and maintenance costs in addition to increased reliability.

To read more about this case study, please visit https://www.epa.gov/sites/default/files/2019-11/documents/pisces_2019_compendium.pdf.