

---

---

**MEMORANDUM**

---

---

**TO:** STEVE GIESBRECHT, BOROUGH MANAGER  
**FROM:** KARL HAGERMAN, UTILITY DIRECTOR *KH*  
**SUBJECT:** WATER AND WASTEWATER DEBT AUTHORIZATION ORDINANCE  
**DATE:** 7/30/2024  
**CC:** DEBBIE THOMPSON, BOROUGH CLERK

An ordinance that authorizes new debt in the water and wastewater departments has been drafted for the July 1<sup>st</sup> Assembly agenda. Please accept this backup information for your benefit and the benefit of the Assembly and public.

In 2019, the water and wastewater departments went through a process to seek authorization from the Assembly and our local voters, to incur debt by way of low-interest loans from the Alaska Department of Environmental Conservation. That authorization will expire on December 31, 2024 and there is a need for the departments to continue to plan and complete capital projects for the benefit of our residents and customers.

As stated, the debt to be incurred is proposed to be funded from the ADEC revolving loan fund. Terms on these loans are very favorable at 20-year repayment at 1.5%. Additionally, the ADEC grant program often includes “principal forgiveness” provisions that are made at the discretion of ADEC and depending on funds available for this purpose. As there is no exact formula for forgiveness, we must apply for a loan before we can find out if any of the loan’s principal will be forgiven.

The projects in both departments to be funded follow trends of imposed regulation and a nationwide trend toward needed replacements and refurbishments of water and wastewater infrastructure. Below is a rundown of each project on the CIP list that could be funded and completed if the debt authorization is approved by the Assembly and voters. Many of these projects were on the list in 2019 and unfortunately were not completed within the 5-year debt authorization due in main part to the pandemic and other related issues.

The total debt authorization requested comes to \$19.3 million, with \$2.5 million going toward water department projects and \$16.8 million for wastewater projects. See below for project details.

Water Department:

- A project to build out the Scow Bay Haulout and washdown pad received some federal funding in FY24 but the entire funding picture of the project is incomplete. A loan to extend a water main to the site will help to achieve the funding stack required and this debt is proposed to ultimately be repaid from the Economic Development Fund on an annual basis. This project cost is estimated to be \$100,000.
- The water main under the Rasmus Enge Bridge was installed on the beach many years ago. The Borough needs to move this main to be supported under the bridge and out of influences of salt water. Additionally, the main will be extended to the South Harbor crane dock entrance to provide another loop in the water distribution system – a feature that provides supply redundancy for customers in this area and improves water quality. The estimated cost of this project is \$575,000.

- Water main replacements of aging transite (asbestos cement) pipe are planned for Lake Street, Aaslaug Street, Valkyrie Street and Fram Street. Estimated cost is \$1.32 million.
- The department has a 6” transite (asbestos cement) water main that crosses Hammer Slough at the end of Kisenon Street. This older pipe material is a worry for the department and any leaks would be hard to detect and repair. The goal of this work would be to replace the line with an HDPE pipe and abandon the existing main in place. Estimated cost to replace is \$480,000.
- Cabin Creek Dam requires some rehabilitation to the two large diameter Low Level Outlet pipes. Corrosion and pitting of these corrugated metal culverts can eventually lead to failure and needs to be addressed. Estimated cost is \$350,000.

#### Wastewater Department

- Pump station 3 is a major pump station that is tucked in between OBI Seafoods and Nordic Drive. It accepts all wastewater flow from Main Street and points south and pumps it to the top of PFI Hill. The station requires the same upgrades as completed on Pump Station 5 a few years ago – a full replacement with a submersible style pump station to improve efficiency and reliability. Estimated cost of this project is \$1,000,000.
- Scow Bay Waterfront Pre-treatment project is part of the build out of the Scow Bay Haulout and Washdown Pad work. The larger project received federal funding in FY24 but an ADEC loan will help to complete the funding stack. This project seeks to extend sewer mains into the Scow Bay Turnaround property and install a pump station and pre-treatment system to collect, treat and pump all water from the washdown pad. This debt is proposed to ultimately be repaid from the Economic Development Fund on an annual basis. Estimated cost for the wastewater portion of the overall project is \$3.2 million.
- With additional sampling and testing of our WWTP effluent and the receiving waters in Frederick Sound, the wastewater treatment plant’s laboratory will be inadequate when our new discharge permit is in place. The department is planning to add an additional small building at the site on 14<sup>th</sup> Street to act as a standalone laboratory that is capable of handling the increased in-house testing that will be required of the department. The estimated cost is \$300,000.
- Various streets across the community require improvements to their wastewater collection mains to ensure efficient collection, reduce maintenance issues and maintain uninterrupted service to our customers. Valkyrie St, Lake St, Fram St, Excel St, Gjoa St and 3<sup>rd</sup> Streets will all be part of a larger project to replace aging sewer mains and manholes. Estimated cost is \$1,080,000.
- Skylark Pump Station is about ½ mile south of the ferry terminal and accepts flow from the Scow Bay area and is approaching the end of its service life. Replacement with more efficient, higher capacity pumps will be the goal once we start on this project. Estimated cost of this project is \$575,000.
- In the small neighborhoods off of Lumber Street, there are three smaller pump stations that service a limited amount of homes. While the department has replaced major components of these stations over the years, there are concerns over the galvanized steel wetwells that accept the wastewater and contain the submersible pumps. This project would seek to replace the wetwells with HDPE basins that would resist corrosion indefinitely. Estimated cost of this project is \$350,000.

- By far the largest project in site for Petersburg’s wastewater utility is the Effluent Disinfection project. This project is being mandated by requirements of the 2024 NPDES discharge permit and State of Alaska receiving water quality regulations. The project will disinfect the treatment plant’s discharge to reduce pathogens to compliant levels. Despite the best efforts of Borough management, at present there are no grant funds available to meet this mandate. Therefore, the best option is to plan to borrow the money from the State of Alaska within their revolving loan program. This project is estimated to cost \$10.3 million and will likely be required to be in place in FY2030.
- The WWTP Headworks Refurbishment project will address an update to the front line piping and equipment at the treatment plant. This infrastructure has been in place since 1976 and has been maintained as best as possible for 50 years. New piping and valving will be replaced at an estimated cost of \$250,000.

I recommend passage of the ordinance and will be requesting voter approval of the ballot measure this fall. This is one of the only ways that these departments can fund large capital projects and repaying the State for the work over 20 years spreads out the impact to rate payers. It is important to note that although this ordinance and ballot measure will provide authority to incur debt, the decision to move forward with a project is always contingent upon Assembly approval of a proposed loan as well as the Assembly’s approval of a contract award.

Lastly, the utilities will be commissioning a rate study in this fiscal year to provide information regarding any impacts to rates if the CIP is followed. Presently, revenues produced by the utilities are not sufficient to keep up with inflation and build reserves for capital needs. Rate increases are sure to be recommended by the studies, but it will be an Assembly decision to move forward with the CIP for each department as the projects move forward in the queue. Holding off on projects however will likely lead to increasing O&M budgets to cover increased maintenance and emergency repair costs associated with aging infrastructure.

Please let me know if there are any questions. Thank you.