Project Identifier:	**SS-1e**	**CIP Budget:**	**$3,190,000**
Project Name:	**Retrofit and Upgrade Existing Primary Permanent Surface Water Intake (Site C)**	**Funding Source:**	**Debt**

PROJECT DESCRIPTION: This project is to rehabilitate an existing surface water intake on the Clearwater River that was constructed in 1976-78 and utilized by the City for approximately 1 year prior to being abandoned. The proposed project is to modify the original USACE screen design and install new cylindrical intake screens with static or dynamic cleaning, new intake piping, line-shaft turbine pumps and motors, standby power generation. Listed below are the general modifications to be made to the existing intake and associated major project elements:

1. New stainless-steel intake piping system.
2. The existing primary intake pump house, wet well structure, and pump discharge piping and valving systems can be reused.
3. Either two (2) or three (3) new vertical line-shaft turbine pumps will be furnished likely along with new variable frequency drives (VFDs).
4. All pumps will be furnished with new 480 VAC, 3-phase inverter duty motors.
5. Pump control will be achieved by use of the fairly new 30-inch Siemens mag-meter installed at the WTP in 2014.
6. It is assumed that a new 125 kW DEG unit and a new ATS switchgear will be furnished to the primary intake facilities to run one (1) of the new 12 mgd pumps and miscellaneous power loads at the intake in case of loss of utility power.
7. A new cofferdam system will be constructed by the Contractor for installation of new screens and inlet piping, likely in the fall/winter timeframe, when water levels are the lowest in the river.
8. Permitting and coordination with USACE

NEED OR JUSTIFICATION: To date, the City and USACE have never developed a long-term solution to resolve the failures of the permanent surface water intake as constructed in 1978. Therefore, the City has been operating a temporary intake that does not meet current design or operating standards and requires dredging to remain operational. The City is now moving forward with substantial modifications to its WTP and will construct a viable surface water intake to ensure sufficient water supply to the proposed membrane retrofit WTP. Retrofitting the existing primary surface water intake is needed to guarantee continuous water supply to the rehabilitated WTP and the City of Lewiston's public drinking water system.