## FY 2019 CBS LEGISLATIVE CAPITAL PROJECT PREQUEST

**Project Title: ALTERNATIVE WATER SOURCE** 

Total Project Cost: \$20,000,000

FY 2016 State Funding Request: \$10,000,000

City and Borough of Sitka Federal Tax ID Number: 92-0041163

The City and Borough of Sitka (CBS) requests \$10,000,000 from the State of Alaska to develop an alternative water source. Currently, CBS utilizes a single pipe to provide water to both the new hydroelectric generation facility and water treatment plant.

In 2013 and 2014, CBS spent approximately \$145,000,000 to raise the height of the Blue Lake Dam from 145 feet to 228 feet and increase power generation by 16 megawatts. To protect this investment in the hydroelectric project, CBS will at 5-year intervals shut down the shared pipe for maintenance and cleaning. During these maintenance periods, CBS will be without a source of raw water.

As Blue Lake is a surface water source, in order for CBS to maintain filtration avoidance, State and Federal water quality regulations must be met. Since the dam elevation was raised, CBS has experienced several high source water turbidity readings during large storm events. Future high turbidity readings may necessitate filtration of Blue Lake drinking water to meet State and Federal drinking water requirements.

CBS has completed an analysis outlining various alternative water source solutions including an alternative water transmission line, a permanent water treatment facility or a groundwater secondary water supply.

Funding for this critical infrastructure project ensures that the citizens of Sitka will have access to water in times of necessary infrastructure maintenance or emergency.

## FY 2019 CBS LEGISLATIVE CAPITAL PROJECT PREQUEST

Project Title: Crescent Harbor Float Replacement Project- Phase I

Total Project Cost: \$13,500,000
FY 2016 State Funding Request: \$5,000,000
City and Borough of Sitka Federal Tax ID Number: 92-0041163

The City and Borough of Sitka (CBS) requests \$5,000,000 from the State of Alaska Municipal Harbor Facility Matching Grant Program for the Crescent Harbor Float Replacement Project – Phase I.

Crescent Harbor was designed and constructed by the State of Alaska, Department of Transportation and Public Facilities (AKDOT/PF) in several phases, beginning in 1965 and completed in 1970.

Crescent Harbor has undergone numerous repair projects in the past 50 years. Supplemental floatation has been added at least three times over the past 27 years to increase freeboard of the floats in an effort to get the structural members and fasteners out of the water. Numerous failing timber piling were replaced over the past several years. Approximately 50 percent of the timber finger floats on floats 1, 2 and 3 were replaced in 2002, and the electrical system was renovated in 2005. In spite of these repair projects, the facility is near the end of its safe and useable life. Float structural stringers are rotten, such that multiple fasteners are required in each deck board in order to secure them down. Harbor staff have been forced to recently switch from deck nails to 6" long screws for this same reason.

Crescent Harbor was evaluated as a part of the Harbor System Master Plan in late 2011 and was included in the Capital Improvement Project (CIP) Plan with a proposed two-phase replacement. The Master Plan concluded that due to the numerous repair and expansion phases that the harbor has undergone during its lifespan, some components are in fair to good condition. However, the majority of the facility, and many critical structural components, has exceeded its life expectancy and is in need of replacement. The Master Plan went on to state that the 1965 harbor facilities (i.e. concrete floats) have a remaining safe and useable service life of approximately 5 years and that the 2002 improvements (i.e. timber floats) have a safe and useable life of approximately 15 years.

The updated cost estimate puts the replacement cost of the entire facility to be approximately \$18,000,000 (2017 dollars). Under the Master Plan, the concrete floats (floats 5, 6 and 7) at Crescent Harbor were to be replaced in 2016 with a second phase consisting of replacement of the timber floats occurring in 2026. However, Harbor Staff has concerns with this plan and feels that it is more critical to replace the timber floats now as opposed to the concrete floats. While supplemental floatation can be added to the concrete floats to extend their service life, once the timbers floats rot, the addition of supplemental floatation can force the floatation up through the rotten timber damaging the float and electrical cable tray. Following that line of thinking, Public Works and Harbor Staff modified the CIP to include a more robust Crescent Harbor project for 2019 to include replacement of the timber floats or as much scope as can be accomplished for \$13,500,000 total project cost. A \$13,500,000 project will maximize the value of the one-time Tier I grant. Since the program covers only up to \$5,000,000 in eligible construction costs, the City and Borough cost of the project would be \$8,500,000 to cover the remainder of construction and design, permitting, management and contingencies. It is assumed that a future Phase II project will replace the remainder of the harbor (i.e. concrete floats) in 2026.

Crescent Harbor is the next grant-eligible Tier I project for the CBS Harbor Department under the Harbor System Master Plan CIP. Staff applied for this grant for FY16-18, however the project scored third (FY16-17) and second place (FY18) respectively, and funding was not provided. Securing grant funding for this project would allow the City and Borough to replace a portion of this aging facility with a significant subsidy from the State.

Funding of the Crescent Harbor Float Replacement Project Phase I will ensure that these critical pieces of harbor infrastructure remain in service to help support a healthy and vibrant commercial fishing and visitor industry in Sitka and Southeast Alaska.

## FY 2019 CBS LEGISLATIVE CAPITAL PROJECT PREQUEST

Project Title: Eliason Harbor Electrical Replacement Project

Total Project Cost: \$3,800,000

FY 2016 State Funding Request: \$1,500,000

City and Borough of Sitka Federal Tax ID Number: 92-0041163

The City and Borough of Sitka (CBS) requests \$1,500,000 from the State of Alaska Municipal Harbor Facility Matching Grant Program for the Eliason Harbor Electrical Replacement Project.

Eliason Harbor, once referred to as New Thomsen Harbor, was designed by the State of Alaska, Department of Transportation and Public Facilities (ADOT/PF) and constructed in two phases. Phase I construction began in 1996 and Phase II construction was completed in 1999.

Eliason Harbor was evaluated as a part of the Harbor System Master Plan in late 2011. While the overall harbor facility was deemed in good condition with a remaining safe and useable life of approximately 20 years, the consultants noted that the electrical system required substantial rehabilitation within the next five years. Significant issues within the Eliason electrical system include feeder cable abrasion/failure and rusting panels and load centers to the point of structural failure. In addition, new electrical code requirements mandate ground fault protection be provided when any significant work is done to the system.

Crescent Harbor is the next grant-eligible project for the CBS Harbor Department under the Harbor System Master Plan CIP originally planned to be completed in 2017. Unfortunately, Crescent Harbor Phase I has not received grant funding in three prior application cycles which has also resulted in a deferral of Eliason Harbor Electrical. Harbor, Electric, and Public Works Staff have worked to develop a scope of work that includes the replacement of the components of the harbor which are in the worst condition: main service equipment, main distribution panelboard and load centers on the floats, and the main cables between these components and the new pedestals. The total estimated cost of this scope is approximately \$3,800,000 to include construction, design, permitting, management and contingencies. The State grant would cover 50% of construction costs not to exceed \$1,500,000.

Securing Tier II grant funding for this project would allow the City and Borough to complete the necessary electrical replacement with State of Alaska cost-sharing thereby reducing the burden on the local rate payers.

Funding of the Eliason Harbor Electrical Replacement Project will ensure that these critical pieces of harbor infrastructure remain in service to help support a healthy and vibrant commercial fishing and visitor industry in Sitka and Southeast Alaska.