

\*Detailed instructions for each section below are given in Section II. Quarterly Project Reports in the Reporting Policy on the website, <a href="https://evostc.state.ak.us/policies-procedures/">https://evostc.state.ak.us/policies-procedures/</a>

**Project Number:** 21210131 (Includes 21210131)

Project Title: Alaska SeaLife Center Facilities Project \$2,000,000/\$500,000

Principal Investigator(s): Chip Arnold, Ben Smith

## **Reporting Periods and Due Dates:**

Reporting Period	Due Date		
February, March, April	June 1		
May, June, July	e, July September 1		
August, September, October	ember, October December 1		
November, December, January	March 1		

Submission Date: March 1, 2024

**Project Website:** N/A

 $\square$  Personnel changes.

Please check <u>all</u> the boxes that apply to the current reporting period.

☑ Project progress is on schedule.☐ Project progress is delayed☐ Budget reallocation request.



## 1. Summary of Work Performed:

## **Building Infrastructure:**

Replacement of AHU exhaust fan motors is currently on hold due to inclement weather and ice buildup on the roof around these fans. All replacement parts needed to restore AHU-2 exhaust fans to service have been obtained, and ASLC crews will look at replacing them as soon as ice levels on the roof are manageable.

Sheet Metal Inc. successfully completed the replacement of AHU-6 relief dampers, measurable improvement in the conditioned air quality in the spaces served by that system and reduction of outside heat loss. The work was able to be completed in two days, one day for demolition and installation and another day to repair the insulation on the duct work.



Image 1. New AHU-6 relief dampers (right) replacing failed dampers (left)

Additional issues and bugs with the Trane Tracer BAS system have continued to reveal themselves. Several VAV controllers were replaced by Trane under the BAS system warranty. Additional issues that have developed due to the discovery of existing defects or in the programming have been corrected under the Trane preventative maintenance agreement for the BAS. It is anticipated that the problems will continue to be found or developed in part due to the significantly improved data set available that is helping to reveal previously unknown issues. While the extra workload on ASLC operations staff because of this is noticeable, they also appreciate these findings as every chance to correct a deficiency is helping to improve building comfort and efficiency.



The Lutron lighting system server and Quantum Vue software were updated by Lutron as part of the warranty service. The system continues to function efficiently and save energy.

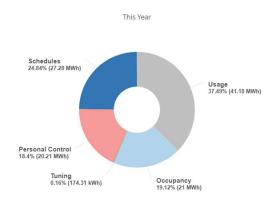


Figure 1. Lutron system energy savings based on control methods, shown for Jan 1 to Feb. 15, 2024

### **Seawater Life Support System:**

PND Engineering is continuing to draft west intake line repair and modification plans. They have successfully procured the permitting required to perform west intake well cleaning and are coordinating with American Marine divers to perform this work. In addition to the cleanout efforts an additional access hatch is also planned to be installed to further aid these efforts. A full years' worth of temperature data has been obtained, and with additional data yet to be recovered from the seawater side temperature logs ASLC staff and PND will be able to formulate a final requirement for water temperature and salinity, which will be needed for finalizing intake line repair options.



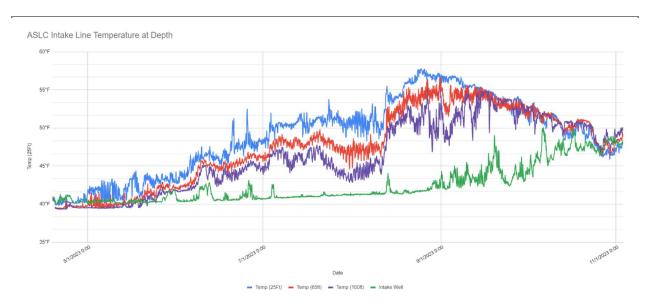


Figure 2: Further results from deployed temperature data loggers showing significantly warmer temperatures with a temperature inversion in process (green line, bottom, versus shallower depths).

A PND Engineering coordination meeting was held to discuss the US Army Corps permit status, the condition of existing chamber wall separations, and the strategy for maintaining flows. Contingency plans for seawater supply for planned dredging are being worked on. Additional sensors were required to determine water level differentials during the well cleanout and pigging operations, which were ordered from Automation Direct and will be installed by ASLC.

### **SeaWater Pump Replacements:**

Seawater supply pumps LSS-6 and LSS-7 along with waste pump LSS-13 were received and installed by Industrial Pumps of Alaska. The installation of LSS-13 greatly improved the reliability of the waste handling system. The two supply pumps will enable intake well cleanout operations without necessitating the use of a temporary diesel pump. This will reduce the cost of well cleanout, but also reduce the induction of outside organisms through a shallow temporary intake line and is a major step forward to having the intake system complete again.





Image 2. New seawater LSS pumps arriving from factory 12/27/2023.

### **Ozone Water Treatment System:**

A replacement embedded controller and desktop PC for the RCK control system components that control the ozone, filtration, and pumps has been delivered by Ozone Water systems. Additionally, a high voltage transformer and ozone generator inverter boards also required replacement which were all ordered from Ozone Water Systems and will be installed by ASLC staff.

#### **Pump House Barrier:**

The pump house barrier plans remain on hold until the Lowell Creek diversion tunnel project has been designed to at least the 35% level. Currently the latest revision from USACE no longer has an embankment encapsulating the freshwater pumphouse. This may result in a renewed need for construction of a formal barrier however any immediate efforts could further complicate USACE work.

#### **Cast Iron Drain Pipe Assessment:**

Operations staff are monitoring underwater viewing area leaks. A slight increase in water leaking around the southernmost viewing deck was noticed during the rainier fall months. Guidance from the RESPEC engineering memo has been received by operations staff and will be acted on if further leakage is detected. ASLC staff will also begin camera inspections of various drains.

#### 2. Abstract:

Recent work has been performed at ASLC across multiple infrastructure and system improvement projects. Progress in building infrastructure includes successfully replacing AHU-6 relief dampers, contributing to enhanced air quality and reduced heat loss. Challenges persist



with the Trane Tracer BAS system, necessitating ongoing maintenance and corrective actions. The Lutron lighting system continues to operate efficiently following updates. Regarding the seawater life support system, plans for repairing and modifying the west intake line are underway, with efforts focused on cleaning and temperature data collection. Seawater pump replacements have been completed, enhancing reliability and reducing operational costs. Upgrades to the ozone water treatment system are in progress. However, plans for the pump house barrier are on hold pending developments in the Lowell Creek diversion tunnel project. Lastly, ongoing cast iron drain pipe assessments are being conducted to address leaks detected in underwater viewing areas.

underwater viewing areas.
3. Coordination and Collaboration:
N/A
4. Response to EVOSTC Review, Recommendations and Comments:
N/A
5. Budget:
Please see next page.



## Exxon Valdez Oil Spill Trustee Council

## **General Restoration, Habitat Enhancement, Habitat Protection, and Facilities Projects**

#### **Quarterly Project Reporting Form**

Budget Category:	Proposed	Proposed	Proposed	Proposed	Proposed	5-YR TOTAL	ACTUAL
	FY 22	FY 23	FY 24	FY 25	FY 26	PROPOSED	CUMULATIVE
Personnel	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$1,231
Contractual	\$126,095	\$0	\$0	\$0	\$0	\$126,095	\$155,654
Commodities	\$0	\$0	\$0	\$0	\$0	\$0	\$222,284
Equipment	\$2,373,905	\$0	\$0	\$0	\$0	\$2,373,905	\$658,204
Indirect Costs (10%)	\$0	\$0	\$0	\$0	\$0	\$0	\$103,737
SUBTOTAL	\$2,500,000	\$0	\$0	\$0	\$0	\$2,500,000	\$1,141,110
General Administration (9% of subtotal)							
ocheral Administration (5 % of Subtotal)	\$225,000	\$0	\$0	\$0	\$0	\$225,000	N/A
PROJECT TOTAL	\$2,725,000	\$0	\$0	\$0	\$0	\$2,725,000	
Other Resources (In-Kind Funds)	\$580,897	\$0	\$0	\$0	\$0	\$580,897	\$492,490

INSTRUCTIONS: This summary page provides a five-year overview (FY 22-26) of proposed funding and actual cumulative spending which includes the non-trustee agency and trustee agency worksheets. This Summary Page should automatically populate as the formulas reference the cells in the non-trustee agency and trustee agency worksheets. Please make sure the totals given are correct. The column titled 'Actual Cumulative' will be updated each fiscal year and included in the annual report (include information on the total amount actually spent for all completed years of the project). On the Project Annual Report Form, if any line item exceeds a 10% deviation from the originally-proposed amount; provide detail regarding the reason for the deviation.

COMMENTS: Expenses through January 2024. The expense summary presented here includes two expenses that posted to our January 2024 books after our January invoice was generated. Their associated admin fee/indirect of 10% is also included here. One expenses is in the Contractual category for \$2,200.00 and one expense is in the Commodities category for \$7,437.90. These two expenses will be included in our next invoice.

	Project Number: 21210131			
	Project Title: Alaska SeaLife Center			
FY22-26	Facilities Project \$2,000,000/\$500,000	SUMMARY TABLE		
	PM(s): Arnold, Smith			