

\*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

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	<mark>June 1</mark>		
May, June, July	September 1		
August, September, October	December 1		
November, December, January	March 1		

Submission Date: July 31, 2025

**Project Website:** N/A

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.
☐ Personnel changes.



#### 1. Summary of Work Performed:

#### **Building Infrastructure:**

The siphon system to enhance seawater flow during low tides is currently under construction in accordance with PND Engineers' design. Installation is planned for late summer 2025. The Trane BAS and Lutron lighting systems continue to perform well.

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

In August 2024, flooding from Lowell Canyon caused significant damage to the Alaska SeaLife Center's (ASLC) pumps due to a high sediment load. ASLC staff responded by removing a recently rebuilt but seized and damaged pump (LSS-2) and sending it to GLM Turbines for repair. When attempting to remove a new pump (LSS-6) that was vibrating excessively, staff discovered that the overhead crane was defective and also required replacement. A new crane and trolley were subsequently ordered and installed by Washington Crane and Hoist. Due to these setbacks, ASLC staff continue working diligently to complete outstanding repairs.

Conversations with the U.S. Army Corps of Engineers and PND Engineers prompted ASLC to direct PND to reallocate \$40,000 from the engineering support and repair budget toward preliminary design and scoping for a new intake line project. Recent operational challenges have made it clear that the current intake lines are at risk of being completely buried by sediment from the tunnel discharge. A new intake line, located farther from the tunnel, appears to be the only viable long-term solution. ASLC is actively seeking additional funding for this critical project, as it is expected to exceed the remaining EVOSTC funds.

Due to the failure of three pumps, no remotely operated vehicle (ROV) or dive work could be completed as originally planned. Continuous pumping from the intake well is required, and shutting down one side for diving or maintenance depends on the other being fully operational. Once a sufficient number of pumps are repaired and restored to service, ASLC will notify American Marine to reschedule the dive for cleaning the intake line strainer and inspecting the pipe interiors.

Meanwhile, the seawater intake wells have been cleaned, and PND Engineers have submitted the final design for the siphon system that will improve clean seawater delivery during low tide cycles. American Marine has been contracted to construct and install the new siphon.

#### **Seawater Pump Replacements:**

The Alaska SeaLife Center (ASLC) has been working with pump and electrical contractors to design a comprehensive upgrade to its seawater supply system. Implementation is scheduled for summer 2025 and will include new leveled pump bases and the installation of pumps and motors

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with higher tolerance specifications to increase performance and durability. These improvements are part of ASLC's ongoing efforts to strengthen its life support infrastructure and reduce the impacts of sedimentation on critical systems.

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

Additional Ozone system components have been identified as requiring replacement. ASLC Operations staff is working on a corrective action plan. ASLC recently placed an order for more cells and is working with Ozone Water Systems for a return site visit, staff training and commissioning of replacement parts. ASLC has ordered replacement boards and cells to repair one of the three Ozone generators supplying clean water to our animal habitats.

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

No changes to plans for pump house barrier projects are present at this time, however ASLC continues to monitor Army Corps of Engineering plans for the discharge tunnel.

#### **Cast Iron Drainpipe Assessment:**

No additional work has been done on drainage systems, however, ASLC staff continues to monitor drainpipes and has discovered several areas of concern.

#### 2. Abstract:

The Alaska SeaLife Center (ASLC) has been working with pump and electrical contractors to design and implement a comprehensive upgrade to its seawater supply system, scheduled for summer 2025. The project will include new leveled pump bases and the installation of pumps and motors with higher tolerance specifications to enhance performance and durability. These improvements are part of ASLC's broader effort to strengthen life support infrastructure and mitigate the impacts of sedimentation on critical systems. Concurrently, ASLC continues to address operational challenges caused by sediment from the Lowell Canyon diversion, which has disrupted seawater infrastructure and delayed ROV and dive operations. In response, ASLC reallocated \$40,000 from its engineering budget to begin scoping a new intake line and is actively seeking additional funding to advance this work. Key efforts during this period include cleaning intake wells, coordinating with PND Engineers and American Marine on a new siphon system to improve low-tide water delivery, and hiring an outside specialist to upgrade the ozone system that supports large animal habitats.



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	_
Travel		\$0	\$0	\$0	\$0	\$0	\$0	1,231
Contractual		\$126,095	\$0	\$0	\$0	\$0	\$126,095	329,725
Commodities		\$0	\$0	\$0	\$0	\$0	\$0	114,974
Equipment		\$2,373,905	\$0	\$0	\$0	\$0	\$2,373,905	921,178
Indirect Costs (10%)		\$0	\$0	\$0	\$0	\$0	\$0	115,267
	SUBTOTAL	\$2,500,000	\$0	\$0	\$0	\$0	\$2,500,000	\$1,482,374
General Administration (9% 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	\$706,204
FY22-26		Project Number: 21210131 Project Title: Alaska SeaLife Center Facilities Project \$2,000,000/\$500,000 PM(s): Arnold, Smith					SUMMAR	Y TABLE