

Agency: Commerce, Community and Economic Development**Grants to Named Recipients (AS 37.05.316)****Grant Recipient: Seward****Federal Tax ID: 92-6000086****Project Title:****Project Type: Remodel, Reconstruction and Upgrades****Seward - Alutiq Pride Shellfish Hatchery Upgrade****State Funding Requested: \$250,000****House District: 35 / R**

Future Funding May Be Requested

Brief Project Description:

Upgrading the Alutiq Pride Shellfish Hatchery and Expanding Shellfish Aquaculture in Alaska.

Funding Plan:

Total Project Cost:	\$250,000
Funding Already Secured:	(\$0)
FY2012 State Funding Request:	<u>(\$250,000)</u>
Project Deficit:	\$0

Funding Details:

Half of the project costs will be invested in labor. The equivalent of two summer construction jobs will be involved in different phases of project completion.

Detailed Project Description and Justification:

The Alutiq Pride Shellfish Hatchery (APSH) is requesting a \$250,000 capital budget project to continue facility maintenance and improvements in energy efficiency. This maintenance and infrastructure improvements will allow Alaska's only shellfish hatchery to fulfill its mission of rehabilitating weak shellfish stocks and meeting the needs of the state's shellfish farms. Accomplishing this mission will have a profound impact on shellfish and aquaculture businesses across the State of Alaska.

APSH completed a substantial portion of its hatchery maintenance and upgrade program in 2010. In addition to facility maintenance, APSH focused upon improving energy efficiency. The most significant physical plant improvement was installation of a new marine water intake line. The old line was destroyed during the disastrous 2008 flood. The new intake line was a joint undertaking with the UAF School of Fisheries and Oceans Sciences marine research facility. A small but important addition was the construction of new walls to create contained lab space. The new modules provide scientists with the ability to conduct simultaneous experiments in the Mariculture Technical Center housed in the facility.

The hatchery has installed modular water treatment systems consisting of bag and cartridge filters and UV radiation. In this way, heated water can be recirculated to minimize energy consumption. This also required the installation of electric water heaters to maintain the proper temperature. The prototype was installed and tested in 2009 and each of the six modules should have the system in place by the end of 2011. Despite a dramatic rise in energy costs the hatchery has reduced utility costs (fuel and electric) by 35% in 2010." The hatchery also removed rust on the interior walls, repaired cracks in the floor, installed a new heating system, and conducted a variety of smaller maintenance upgrades.

In addition to tackling some of the maintenance issues at the Alutiq Pride Shellfish Hatchery, \$100,000 will be spent in conjunction with the Alaska Shellfish Growers Association and the Kachemak Shellfish Mariculture Association (KSMA) on

developing reliable oyster seed. The project will induce analyzing the feasibility of developing a regional oyster seed production facility at KMSA's facility on the Homer Spit. The Alutiiq Pride Shellfish Hatchery will deliver a report on the results of the trail facility in Homer and Oyster Seed Security in Alaska to the Senate Finance Committee by February 1, 2012.

Project Timeline:

When funding is secured, supplies will be purchased in August 2011 and construction could begin immediately thereafter. Construction will be completed by December 2011.

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

The Chugach Regional Resources Commission (CRR)

Grant Recipient Contact Information:

Name: Phillip Oates
Title: City Manager City of Seward
Address: 410 Adams Street
Seward, Alaska 99664
Phone Number: (907)224-4047
Email: poates@cityofseward.net

Has this project been through a public review process at the local level and is it a community priority? Yes No

**CITY OF SEWARD, ALASKA
RESOLUTION 2011-006**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SEWARD,
ALASKA, AMENDING THE CITY OF SEWARD'S CALENDAR YEAR
2011 STATE LEGISLATIVE PRIORITIES**

WHEREAS, the City annually compiles a list of projects or issues that are identified as top state legislative priorities; and

WHEREAS, the list of projects is compiled and distributed to the State of Alaska Legislature, Kenai Peninsula Borough, and City of Seward lobbyist; and

WHEREAS, this resolution validates projects, prioritizes needs, and focuses the efforts of City Administration in its lobbying efforts; and

WHEREAS, the passage of this resolution occurs through a public process; and

WHEREAS, all projects on this list are consistent with the City Comprehensive and Strategic Plans; and

WHEREAS, this resolution is an amendment of the City of Seward 2011 State Legislative Priorities established in Resolution 2010-102.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SEWARD, ALASKA, that:

Section 1. The following list of legislative projects is hereby declared to be the official amended legislative priority list of the City of Seward for the 2011 State of Alaska legislative session:

1. STATE FUNDED PROJECTS

A. PUBLIC FACILITIES

- (1) \$125 thousand for kitchen expansion and renovations in the Seward Senior Center (the Senior Center will provide a matching \$90 thousand to complete this project)
- (2) \$2.5 million for constructing a 100' x 80' metal building to replace and relocate our existing public works shop (the City will provide land for the new building)
- (3) \$2 million for expanding the Providence Seward Hospital Medical Clinic, moving the CT scanner into the facility, increasing backup generator capacity, and improving space for primary health care (the City provides \$500 thousand annually for hospital financing of capital improvements)

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RESOLUTION 2011-006**

B. PORT, HARBOR, AND INDUSTRIAL AREA

- (1) \$400 thousand to conduct a preliminary engineering study and economic analysis for building and establishing the home port infrastructure that will support relocation of the fishing fleets owned and operated by the six Community Development Quota Groups (CDQ Groups) from the State of Washington to Alaska
- (2) \$16 million for extending the Seward Marine Industrial Center basin breakwater to improve and increase ship moorage and loading capacity, ship repair capabilities, seafood processing operations, and barge landings
- (3) \$100.5 thousand for engineering and design to replace failing infrastructure in the Seward Small Boat Harbor including A, B, C, and S Floats
- (4) \$800 thousand for the Municipal Harbor Matching Grant Program to support replacing "D" Float in the Seward Small Boat Harbor (the City of Seward will provide an \$800 thousand match to complete this \$1.6 million project)
- (5) \$575 thousand for building a Handicap Accessible Fish Cleaning Station in the Northeast Launch Ramp Area of the Seward Small Boat Harbor
- (6) \$250 thousand for paving and improving drainage in the northeast parking lot of the Seward Small Boat Harbor
- (7) \$1.5 million for storm water discharge infrastructure that includes a security fence around the city vessel storage area at the Seward Marine Industrial Center
- (8) \$1.7 million for doubling the capacity of the ship lift (syncrolift) and improving dock capabilities at the Seward Marine Industrial Center
- (9) \$25 thousand to upgrade the Harbor Security Camera System
- (10) \$4.5 million for completing sheet piling and adding moorage along the north side of the Seward Small Boat Harbor

C. ELECTRIC

- (1) \$4 million for completing the standby generator complex for the Seward Electric Utility as a match for \$6 million in City revenue bond funding (this will allow the City of Seward to contribute power generation remotely to the Alaska Railbelt Cooperative Transmission and Electric Company – ARCTEC – system for emergencies and back-up; this project includes moving 2 each 2.5 MW generators into the newly constructed generator plant building; completing the installation of automated generator controls through a Supervisory Control and Data Acquisition – SCADA – system; and constructing an emergency operations building for immediate response, maintenance, and warehousing)
- (2) \$1.5 million to repair and replace one mile of transmission line into the Fort Raymond Substation with 115kV compatible equipment (this is a project supported by the Alaska Railbelt Cooperative Transmission and Electric Company – ARCTEC – because the current condition of the transmission line exceeds the estimated life expectancy of 50-years)

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- (3) \$17 million for upgrading the transmission line to 115KV in Seward (and upgrading transformers and other equipment for the higher voltage) to reduce line loss while improving efficiency and reliability of power distribution throughout the service area
- (4) \$300 thousand for installing automatic electrical metering equipment to improve customer service, outage management, and load management (the City will provide a 100% match of \$300 thousand to complete the project)
- (5) \$85 thousand for establishing improvements to redundant capabilities for providing electrical power during emergencies, such as a tsunami, to the downtown and hospital area of Seward (the City will provide a 100% match of \$85 thousand for the project)
- (6) \$5 million from the Rail-belt inter-tie funds for upgrading transmission lines between Anchorage and Seward
- (7) \$60 thousand for studying the feasibility of a hydro electric plant to produce renewable energy in Seward

D. ROADS, STREETS, AND ADA ACCESSIBILITY

- (1) \$100 thousand for improving City ADA accessibility
- (2) \$2.25 million for Seward Community Roads for repaving road surfaces, reconstructing sidewalks, and improving roadway drainage systems
- (3) \$2.496 million for design, engineering, construction, and protection from coastal erosion for the Lowell Point Road in the City of Seward (this road provides the sole land access to critical public infrastructure, state parks, and a Kenai Peninsula Borough residential housing area)

2. CRUISE SHIP HEAD TAX OR CRUISE SHIP GAMBLING TAX

- (1) Reappropriate \$1.992 million from Designated Legislative Grant # 10-DC-024, Dredging Cruise Ship Berthing Basin Approaches, for building a new water storage tank and distribution system that will establish the excess capacity to provide water and improved fire protection to cruise ships (this \$1.992 million of funding is a 44% match for the \$4.5 million water storage project -- the \$2.508 million in additional funding for the project is from low interest loans that will be obtained by the City -- the City has already spent approximately \$130 thousand in a 35% design of the project and \$394 thousand in ARRA stimulus funding on expansion of the water distribution system that will accommodate the new storage tank)
- (2) \$225 thousand to improve public restrooms in the Seward Small Boat Harbor (these restrooms are used extensively by cruise ship crew members and passengers)

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- (3) \$25 thousand to extend the ADA accessible boardwalk from Port Avenue to the Holiday Inn Express (this is a primary pedestrian route for cruise ship members and passengers)
- (4) \$500 thousand for improving the cruise ship pedestrian corridor between the Alaska Railroad Terminal and Cruise Ship Terminal
- (5) \$215 thousand to construct an ADA accessible boardwalk for cruise ship passengers in the new upland area of the Seward Small Boat Harbor (the City will provide \$50 thousand to this project)
- (6) \$1.6 million for dock appurtenances at the Cruise Ship Terminal of the Alaska Railroad (these appurtenances include berthing camels for \$390 thousand, baggage conveyor slot for \$350 thousand, seasonal covered walkway for \$360 thousand, installation of a second mooring bollard to accommodate a second cruise ship for \$100 thousand, extension of dock security lighting for \$200 thousand, repair of piles with severe corrosion for \$100 thousand, and repair of the cathodic protection system for \$100 thousand)
- (7) \$275 thousand to prevent erosion that threatens a U.S. Coast Guard communication tower for transmitting emergency communications to cruise ships and other vessels
- (8) \$2 million for constructing a 100' by 80' metal building to house emergency response equipment and shelter supplies at the Fort Raymond Satellite Fire Station (this location will allow or speed response to emergencies at the Cruise Ship Dock during those periods when other response is prevented by earthquakes or tsunamis)

3. STATEWIDE PROJECTS

- (1) \$2 million for dock improvements and dredging at the Seward Marine Center to prepare for the R/V Sikuliaq
- (2) \$150 thousand to continue renovating the Alutiiq Pride Shellfish Hatchery and expand shellfish aquaculture in Alaska.
- (3) \$265 thousand for a new Fire Alarm Control Panel for the Alaska SeaLife Center
- (4) \$250 thousand for engineering and architectural design of an Arctic marine research and public education habitat at the Alaska SeaLife Center
- (5) \$470 thousand for construction of a new courtyard sail cover at the Alaska SeaLife Center to protect cruise ship passengers and other visitors from inclement weather
- (6) \$155 thousand in the Department of Corrections Operating Budget to add an emergency wastewater bypass (with valves and piping) to keep the Spring Creek Correctional Facility sewage system operational in the event of a system failure
- (7) Full funding of the Governor's Capital Budget for AVTEC that includes \$1 million for deferred maintenance and \$210 thousand for the Maritime Simulator
- (8) Full funding of the Governor's Operating Budget for AVTEC that includes \$250 thousand for deferred maintenance, \$48 thousand for the Maritime Designated Duty Engineer Training Program, and \$226.8 thousand for the RN Program

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4. BENEFICIAL LEGISLATION

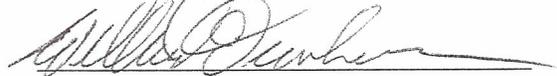
- (1) Extension of the Education Tax Credit to the Alaska SeaLife Center
- (2) Legislative support for increased cash infusion into PERS/TRS retirement system in order to offset unfunded retirement system liabilities, to make future contribution rates more affordable for the State and local governments
- (3) Appropriation for upgrading Seward Highway (MP18-25.5) in the STIP
- (4) Appropriation for upgrading Seward Highway (MP 25.5-36) in the STIP
- (5) Appropriation for upgrading the Sterling Highway (MP 45-60) in the STIP
- (6) Construction of a highway exit off the Seward Highway in the vicinity of MP 6 for better and safer vehicle access to Camelot and Salmon Creek subdivisions
- (7) Support for continuing Medicaid programs and capital cost reimbursement at not less than current year funding levels
- (8) Return of service to Seward by the State Ferry Tustumena
- (9) Alternative Energy Programs that encourage and fund participation by the City and its electrical utility customers
- (10) Support of legislation forming an Alaska Invasive Species Council to help coordinate proactive action that prevents detrimental invasive species from being introduced into Alaska

Section 2. This resolution shall take effect immediately upon its adoption.

**CITY OF SEWARD, ALASKA
RESOLUTION 2011-006**

PASSED AND APPROVED by the City Council of the City of Seward, Alaska, this 25th day of January, 2011.

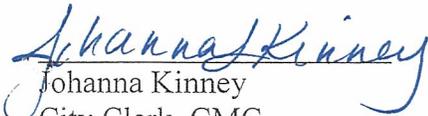
THE CITY OF SEWARD, ALASKA



Willard E. Dunham, Mayor

AYES: Valdatta, Bardarson, Smith, Keil, Shafer, Casagranda, Dunham
NOES: None
ABSENT: None
ABSTAIN: None

ATTEST:



Johanna Kinney
City Clerk, CMC





A new marine water intake line was laid and sunk to 150 feet to avoid glacial influence and biofouling. It replaced APSH's original line which was damaged in the disastrous 2008 Seward flood.

Improvements at the Alutiiq Pride Shellfish Hatchery

The Alutiiq Pride Shellfish Hatchery is requesting \$150,000 to continue upgrading the hatchery complex and expanding shellfish aquaculture in Alaska.

The hatchery has completed a substantial portion of its hatchery maintenance and upgrade program in 2010. In addition to facility maintenance, APSH focused upon improving energy efficiency.

The biggest physical plant improvement was installation of a new marine water intake line. The old line was destroyed during the disastrous 2008 flood. The new intake line was a joint undertaking with the UAF School of Fisheries marine research facility.

A small but important addition was the construction of new walls to create contained lab space. The new modules provide scientists with the ability to conduct simultaneous experiments in the Mariculture Technical Center housed in the facility.

The hatchery has installed modular water treatment systems consisting of bag and cartridge filters and UV radiation. In this way, heated water can be recirculated to minimize energy consumption. This also required the installation of electric water heaters to maintain the proper temperature.

The prototype was installed and tested in 2009 and each of the six modules should have the system in place by the end of 2011. Despite a dramatic rise in energy costs the hatchery has reduced utility costs (fuel and electric) by 35% in 2010."

The hatchery also removed rust on the interior walls, repaired cracks in the floor, installed a new heating system, and conducted a variety of smaller maintenance upgrades.

APSH has requested a \$150,000 capital budget project to continue facility maintenance and improvements in energy efficiency, and to provide Alaska's only shellfish hatchery with the ability to fulfill its mission of helping rehabilitate weak shellfish stocks and meeting the needs of the state's shellfish farms.

Hatchery Activities

The adult sea cucumbers (left below) will be used as broodstock for APSH's ongoing research into production of juveniles to support enhancement of wild sea cucumber beds. The research is being conducted in cooperation with wild harvest divers. APSH also is cooperating with ADF&G in a littleneck clam research project, and is experimenting with razor clams and cockles for potential enhancement activities. More than 100,000 juveniles king crab were produced to support enhancement research by UA and NOAA scientists in Seward, Kodiak, Juneau and Newport, Oregon. The hatchery continues to ramp up its production of juvenile geoduck clams to meet rising demand from Alaska shellfish farmers. Geoduck larvae are shown at bottom right. APSH also produces juvenile oysters for Alaska nurseries and export.



Amend \$150,000 capital project for the Alutiiq Pride Shellfish Hatchery by adding \$100,000 and the following language:

Alaska Oyster Seed Security - \$100,000

Pacific Coast shellfish hatcheries have run into major problems in recent years, including major mortalities related to ocean acidification in Washington and Oregon, and the closure of single-seed production from a major facility in Kona. These events have created seed shortages to Alaska shellfish growers from Ketchikan to Kachemak Bay, and renewed industry concerns about long-range seed security.

The Alutiiq Pride Shellfish Hatchery shall work with the Alaskan Shellfish Growers Association and the Kachemak Shellfish Mariculture Association (KSMA) to develop reliable sources of oyster seed. In addition to producing the report described in following paragraphs, the project will test the ability of KSMA's facility on the Homer Spit to produce oyster seed from larvae with a small scale demonstration project during FY 2012.

The report will project oyster seed needs by regions over the next 10 years, and will examine interest and ability of West Coast hatcheries and nurseries to meet this projected demand.

This study will include the feasibility of developing a regional oyster seed production facility at KSMA's facility on the Homer Spit, including cost of construction and operation of a facility producing 5 million seed per year. The study also will examine the feasibility of establishing regional oyster seed production facilities in Prince William Sound and Southeast. The study will identify potential development and operational costs of these regional facilities.

The study also should examine the ability of APSH to produce larvae from Molluscan Broodstock Program broodstock for use at remote setting facilities, including calculation of price of the larvae and industry interest.

APSH shall deliver a report on Alaska Oyster Seed Security to the Alaska Senate Finance Committee by February 1, 2012.



Kachemak Shellfish Mariculture Association

3851 Homer Spit Road, Homer, Alaska 99603 (907)-235-1935 AlaskaOyster.org

Kachemak Bay oyster farmers are being **disastrously impacted by a global shortage of oyster seed**. We currently rely on out-of-state hatcheries for quality seed, and because they cannot meet current global demand, we were **notified on March 30, 2011, that we will be receiving drastically rationed quantities** this year.

The fourteen farms comprising the Kachemak Shellfish Growers Cooperative (KSGC) **need 3 million seed for 2011**. Without high quality and reliable seed production, losses in the Kachemak Bay oyster mariculture industry are anticipated to exceed \$1,000,000 in the next five years. The Kachemak Bay industry currently supports 14 farms and approximately 30 jobs.

The current Mariculture facility on the Homer Spit has several advantages for hosting a hatchery, including space to dedicate to a hatchery and existing clean salt water well. The facility's well water quality is high and will not have to go through costly sterilization before being used for algae production to feed the young oysters.

Control over our own hatchery will provide farmers much needed assurances of this vital aspect of our industry's future.

Cost estimate to get Hatchery System running.

New pumps and well housing expansion	8k
Building modifications	24k
Electric systems upgrades	13k
Heating system	12k
Algae grow lights	4k
Filtration water flow and disposal	5k
Water holding tanks	2k
Oyster holding tanks	6k
Design consultation	7k
Startup and post occupancy training	4k
First year power consumption	15k
Total	100k

Sean Ruddy
 swruddy@gmail.com
 907-399-1595