

**Agency: Commerce, Community and Economic Development****Grants to Named Recipients (AS 37.05.316)****Grant Recipient: Kodiak Regional Aquaculture Association****Federal Tax ID: 92-0115279****Project Title:****Project Type: Maintenance and Repairs**

# Kodiak Regional Aquaculture Association - Kitoi Bay Hatchery Maintenance and Upgrade

**State Funding Requested: \$2,858,000****House District: 36 / R**

One-Time Need

**Brief Project Description:**

Kitoi Bay Hatchery is a State-owned hatchery built in 1964. This project will fund weatherization and energy efficiency, hydropower, water system and fishway, and boat dock upgrades.

**Funding Plan:**

Total Project Cost:	\$3,419,000
Funding Already Secured:	(\$561,000)
FY2012 State Funding Request:	<u>(\$2,858,000)</u>
Project Deficit:	\$0

*Funding Details:*

*KRAA will provide the administrative costs associated with this project. Dollar value estimated at 10% of total project cost. \$250,000 was appropriated for this project in the FY11 State of Alaska capital budget.*

**Detailed Project Description and Justification:**

Kitoi Bay Hatchery is a State-owned salmon hatchery located remotely on Afognak Island approximately 30 miles north of Kodiak. The facility was rebuilt shortly after being destroyed in the 1964 earthquake and has many deferred maintenance needs. This project will provide for water supply system and fishway improvements, replacement of hydroelectric components, boat dock replacement, and weatherization and energy efficiency upgrades for five buildings (power house, bunkhouse, and three staff housing units).

These upgrades will extend the life of the hatchery facility and reduce the annual operating costs.

**Project Timeline:**

Improvements will be made during the 2011 and 2012 summer construction months.

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

Kodiak Regional Aquaculture Association

**Grant Recipient Contact Information:**

Name:	Kevin Brennan
Title:	Executive Director
Address:	104 Center Ave, Suite 200 Kodiak, Alaska 99615
Phone Number:	(907)486-6555
Email:	kraa@gci.net

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

<i>For use by Co-chair Staff Only:</i>
10:24 AM 5/27/2011

# Kodiak Regional Aquaculture Association

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October 15, 2010

Attached is information regarding needed repairs and improvements to the two State owned hatcheries operated by the Kodiak Regional Aquaculture Association (KRAA), the Kitoi Bay Hatchery and the Pillar Creek Hatchery.

For FY 2011, KRAA was the recipient of a Designated Legislative Grant (per AS 37.05.316), for Deferred Maintenance and Upgrade to Hatchery Facilities. As a part of that Grant, KRAA requested funding for complete site evaluations/reviews and recommendations by qualified professionals. A formal, comprehensive survey of conditions by certified engineers, construction professionals and KRAA staff is currently underway, but is not complete.

Based on preliminary information it is apparent that additional funding is required to bring these facilities up to current standards and requirements. Following is a draft list of needs, followed by budget allocation estimates. This information is summarized from a draft report by Tetra Tech, Inc, an engineering and architectural firm with an office located in Juneau, and KRAA staff.

Please feel free to contact me at any time should additional information be needed.

Sincerely,

Kevin Brennan  
Executive Director

The Kodiak Regional Aquaculture Association (KRAA) operates the State owned Kitoi Bay Hatchery and the Pillar Creek Hatchery under agreements with the State of Alaska, Department of Fish and Game (ADF&G; IHP-94-002 and IHP-94-003). Many of the structures and equipment in these hatcheries have reached or exceeded their useful life, and are in dire need of replacement or major renovation. This repairs/upgrades list is the initial result from an evaluation by Tetra Tech, Inc., an engineering and architectural firm with an office located in Juneau, and KRAA staff. The goal was to identify gross structural and system deficiencies that must be repaired to meet needs for health and safety, code or regulatory compliance, and sustained production.

This list will be modified if further evaluation determines that additional projects should be undertaken and will be prioritized as funds become available. There are more renovations needed than can be funded by the FY2011 Designated Legislative Grant to KRAA.

**TOTAL DEFERRED MAINTENANCE AND UPGRADE TO HATCHERY FACILITIES, KODIAK (KITOI BAY AND PILLAR CREEK): .....\$4,534,000**

Kitoi Bay Hatchery, Structural and System Repairs: Total Estimate \$1,733,000  
Details of the various structures/systems and required work are detailed on following pages.

Pillar Creek Hatchery, Structural and System Repairs: Total Estimate \$1,651,000  
Details of the various structures/systems and required work are detailed on following pages.

Kitoi Bay Hatchery, Hydroelectric Power Generation: Total Estimate \$1,100,000  
This level of funding is needed to restore hydroelectric power generation at KBH. Additional scoping and engineering is required to provide two turbines on existing penstock, or to provide additional penstock expressly for the purpose of hydropower generation. The system would work in conjunction with current or modified diesel generation system, with appropriate synchronization and switching units. Hydroelectric power was generated at KBH for many years, but the system was decommissioned due to age and improved diesel generation units.

Specific Systems Site Evaluation/Review; Electrical, Seismic, and Wastewater: \$50,000  
At both facilities, lists of needed major repairs, renovations or upgrades must be developed and prioritized. A formal, comprehensive survey of general conditions by qualified professionals is underway, but more specific review, engineering and scoping is needed for:

- Electrical: Site review and analysis by a State certified Electrical Administrator, including, but not limited to, compliance of existing systems with State of Alaska electrical codes;
- Structural: Analysis of existing structures for safety and stability during seismic events;
- Wastewater Treatment: Analysis to assure compliance with State and Federal regulations for wastewater treatment.

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**Repair/Upgrade of Frazer Fish Pass and Diversion Weir \$150,000**

This additional project funding is requested to upgrade and repair the fish pass and diversion weir located below Frazer Lake. Frazer Lake is a major sockeye system on the southend of Kodiak, and the fishpass is currently operated and maintained through cooperative agreement between KRAA and ADF&G. Further details are available on request.

### **Kitoy Bay Hatchery, Structural and System Repair Details**

- **KBH Tank and Piping Systems** **\$230,000**  
This level of funding is needed to upgrade, through repair or replacement, various above and below ground tank and piping systems, including, potable water treatment system, heat recovery system (piping and heat exchangers), main fuel tanks, fuel piping, and domestic wastewater systems.
- **KBH Water Supply System** **\$138,000**  
This level of funding is needed to upgrade hatchery water supply pipelines, PVC supply piping and valves, PVC drain/fry transfer pipes, associated valves, and alarm sensors and panel re-labeling.
- **Hatchery Building** **\$24,000**  
This level of funding is needed to upgrade miscellaneous piping systems including replacement of filters and valves within the old Hatchery Building.
- **Incubation Building** **\$27,000**  
This level of funding is needed to upgrade the water recirculation filter system and replace piping and valves within the newer Incubation Building.
- **Electrical Generator Building** **\$59,000**  
This level of funding is needed to replace roofing and siding, repair or upgrade the foundation, install a new day tank, level the fuel tanks and upgrade fuel oil piping, and complete the upgrade of the cooling/heat recovery system within the Generator Building.
- **Hangar/Warehouse** **\$17,000**  
This level of funding is needed to replace siding and strengthen the former Hangar (now used for storage and rearing).
- **Old Storage Buildings** **\$231,000**  
This level of funding is needed to demolish and replace an old storage building and multiple old container vans.
- **Bunkhouse** **\$556,000**  
This level of funding is needed to replace the roof, siding, and windows, renovate/upgrade the building electrical and plumbing, remodel the kitchen, and provide an integrated fire alarm system within the Bunkhouse.
- **Core Staff Residences (3 Units)** **\$78,000**  
This level of funding is needed to weatherize and increase the energy efficiency of 3 separate residential housing units to include replacement of 17 year old heating boilers, carpet and appliances, and to renovate the electrical systems.
- **Coho Rearing Units (4)** **\$63,000**  
This level of funding is needed to replace decaying timber foundations, review structures for seismic stability and provide additional bracing and support for 4 large rearing units used for coho salmon production.

- **Fish Ladders and Weirs** **\$48,000**  
This level of funding is needed to repair two fish ladders and weir structures located on Big and Little Kitoi Creeks, necessary for collecting and securing hatchery brood stock, including replacement of baffles and pickets.
- **Main Dock** **\$127,000**  
This level of funding is needed to replace at least 6 pilings, bracing and decking to repair and improve safety and structural integrity of the KBH dock.
- **Small Vessel Float and Ramp** **\$87,000**  
This level of funding is needed to repair and upgrade rock anchors and replace the floats in the KBH boat dock and the access ramp.
- **Site Electrical Distribution** **\$48,000**  
This level of funding is needed to upgrade the existing electrical distribution system throughout the facility, in locations other than specifically mentioned previously.
- **Egg Take Building, Net Building, Barn, and Raceways** **\$0**  
No funding is requested for additional upgrades or repairs of these KBH structures. Hydroelectric power was generated at KBH for many years but, as power demand increased, a diesel generator system was installed and the hydroelectric system was decommissioned.

#### **Pillar Creek Hatchery, Structural and System Repair Details**

- **PCH Water Supply Systems** **\$601,000**  
This level of funding is needed to upgrade, through repair or replacement, the current PCH water supply systems, including existing wells, dam, pipeline, water conditioning and water supply alarm systems.
- **PCH Piping Systems** **\$17,000**  
This level of funding is needed to upgrade domestic water and other delivery piping systems.
- **Hatchery Building** **\$281,000**  
This level of funding is needed to upgrade the main hatchery building including replacement of the roof, corrosion repairs, and upgrade to the HVAC system.
- **Oxygen Generation/Lab Building** **\$224,000**  
This level of funding is needed to upgrade and provide needed space for the oxygen generation system and laboratory, including replacement or repair of compressors and air separation units.
- **Haz Mat Building** **\$15,000**  
This level of funding is needed to upgrade the building used for storage of paints and other potentially hazardous chemicals.
- **Old Storage Buildings** **\$338,000**  
This level of funding is needed to demolish and replace old storage buildings and multiple old container vans.

- **Office** **\$152,000**  
This level of funding is needed to upgrade the office space including construction in conjunction with the above project to move the office and data storage to new space located above the floodplain (significant damage was incurred during the floods of October 2009).
- **Raceways** **\$15,000**  
This level of funding is needed to upgrade existing Sportfish project raceways for optimal use and proper species segregation.
- **Site Electrical Distribution** **\$8,000**  
This level of funding is needed to upgrade the existing electrical distribution system throughout the facility, in locations other than specifically mentioned previously.

Contact:

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# UNITED FISHERMEN OF ALASKA

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## Resolution 2010-1

### A RESOLUTION OF THE UNITED FISHERMEN OF ALASKA SUPPORT FUNDING THE DEFERRED MAINTENANCE PROJECTS AT THE STATE-OWNED SALMON HATCHERIES

WHEREAS, the Alaska Department of Fish and Game Division of Fisheries Rehabilitation, Enhancement, and Development was formed in the 1970's to develop policies, regulations, and hatchery practices to responsibly rebuild and utilize Alaska's renewable and sustainable salmon natural resources; and

WHEREAS, the State of Alaska currently owns 11 salmon enhancement hatcheries operated by regional and non-regional private non-profit aquaculture associations via professional services agreements at no cost to the state; and

WHEREAS, these state-owned salmon hatcheries are 30 to 40 years old and are need of significant deferred maintenance to address basic infrastructure problems beyond the normal annual maintenance provided by the private non-profit aquaculture associations at no cost to the state; and

WHEREAS, these diverse salmon enhancement programs contribute significantly to the Alaska common property fisheries (commercial, sport, subsistence, and personal use) in many areas of the state and are helping to sustain the Alaska salmon fisheries and domestic and international Alaska salmon markets; and

WHEREAS, salmon produced by the Alaska salmon enhancement program have fetched hundreds of millions of dollars in ex-vessel value and billions of dollars in total economic output; and

WHEREAS, the economic impact from the Alaska salmon enhancement program is significant and vital to the Alaska salmon industry in creating jobs and wealth within the rural and urban communities that would not otherwise be present;

THEREFORE BE IT RESOLVED, that the United Fishermen of Alaska support funding for the deferred maintenance projects at the state-owned salmon hatcheries throughout Alaska.

By UFA Board of Directors, September 29, 2010:

  
Arni Thomson, UFA President

  
Attest: Mark D. Vinsel, UFA Executive Director