R & E Grant Application
09-11 Biennium

**Astoria High School Fisheries Technology Program**

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**Project Information**

- **Project #:** 09-054
- **Project Biennium:** 09-11
- **Organization:** Astoria High School
- **Project Email:** lcain@astoria.k12.or.us

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**Fiscal Officer**

- **Name:** Louise Kallstrom
- **Address:** 785 Alameda
  Astoria, OR  97103
- **Telephone:** 503-325-6441
- **Email:** lkallstrom@astoria.k12.or.us

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**Applicant Information**

- **Name:** Lee Cain
- **Address:** 1001 W. Marine Dr.
  Astoria, OR  97103
- **Telephone:** 503-325-3911 x301
- **Telephone 2:** 503-298-9776
- **Fax:** 503-325-2891
- **Email:** lcain@astoria.k12.or.us

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**Past Recommended or Completed Projects**

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Status</th>
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</thead>
<tbody>
<tr>
<td>23-004</td>
<td>Astoria High School Hatchery Upgrade</td>
<td>Approved</td>
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**Project Summary**

This project is NOT part of ODFW’s 25 Year Angling Plan.

**Activity Type:** Education

**Summary:**
Astoria High School (AHS) Fisheries Technology is a year-long advanced course in aquaculture and fisheries science providing hands-on experience in fish propagation, invertebrate sampling, stream surveying, water quality testing, experimental research design, and other fisheries techniques. Training occurs in the AHS hatchery and at off-campus sites. Students also
assist local projects involving fisheries and habitat research and restoration, including the Clatsop County Fisheries Project, Columbia River Estuary Study Task Force, National Park Service (Lewis and Clark National Historic Park), and various habitat enhancement projects of the Young's Bay Watershed Council. Students receive a Certificate of Fisheries Skills at the end of the year for addition to their portfolio. Due to a recent statewide decrease in school district funding, the program is scheduled for cancellation. This proposal requests funding to maintain the program during the 2009-10 and 2010-2011 school years.

**Objectives:**
The objective of this project is to acquire temporary funding needed to maintain the AHS Fisheries Technology Program in order to provide hands-on education for local students interested in Fisheries Science.

**Fishery Benefits:**
The benefits of the project include 1) providing a program to educate youth about fisheries science, aquaculture, and water quality monitoring, 2) releases of juvenile salmonids into Youngs Bay which contribute to recreational and commercial harvest in the Columbia River and Youngs Bay, 3) assisting the Clatsop County Fisheries Project (CCF) staff with fish production which in turn contributes significantly to regional fisheries, both sport and commercial, and 4) assisting Columbia River Estuary Study Task Force (CREST) and the Youngs Bay Watershed Council (YBWC) with habitat projects.

**Watershed Benefits:**
By providing assistance to the Youngs Bay Watershed Council, the project directly benefits habitat in the local watershed. Indirectly, the project provides opportunity for youth to become aware of issues that affect watershed health and involved as citizens in relevant projects.

**Current Situation:**
AHS Fisheries Technology is based out of the AHS Applied Science Center, a ~5000 square foot wetlab, classroom and hatchery facility located on a spring-fed stream immediately adjacent to the school.

**Alternatives:**
The only viable alternative at this point is cancellation of the AHS Fisheries Technology Program. School administrators are currently seeking alternative funding to maintain the program but it does not appear that will be available for another year or two. If alternative funds become available before the 2010-2011 academic year, then unused R&E funds could be returned.

**Designer:**
Lee Cain

**Methods:**
As teacher, Lee Cain will continue to teach the existing curriculum for Fisheries Technology, which is built around the 4 elements of Experimental Research, Hatchery Maintenance, Work Experience, and Peer Tutoring. He will also be adding to the curriculum the new design element of Commercial Fisheries Harvest and Processing Techniques, which will include student exposure to harvest and processing methods and facilities.
Inspector:

Funding Elements: The current state budget situation forces the reduction in the size of the AHS Science Department from five to four science teachers. This meant that the Fisheries Technology program would be cut to accommodate the need for a single section of Biology to be taught. If awarded, R&E funds will be used to backfill one science teacher position for one class period/day thereby allowing Lee Cain to continue the Fisheries Technology course throughout the academic years of 2009-2010 and 2010-2011.

Partners: No

Existing Plan: Yes

The project is included in Hatchery Genetic Management Plans for Big Creek Hatchery and Clatsop County Fisheries who both provide eggs and/or juvenile salmonids for rearing and/or marking studies.

Affected Contacted: Yes

Affected Supportive: Yes

Affected Comments: The Clatsop County Fisheries Project (CCFP), Columbia River Estuary Study Taskforce (CREST), ODFW, and Youngs Bay Watershed Council (YBWC) are all fully supportive of the AHS Fisheries Technology course. Students from the program assist CCFP staff and the YBWC throughout the year to acquire hands-on training in fish culture activities and habitat improvement projects.

Project Schedule/Participants/Funding

This project has no Schedule/Participants/Funding.

Affected Species:

- Chinook Salmon
- Chum Salmon
- Coho Salmon
- indoor warmwater culture species
- Rainbow Trout
- Steelhead
- Warmwater

Project Permits

<table>
<thead>
<tr>
<th>Name</th>
<th>Issued By</th>
<th>Secured?</th>
<th>Date Secured</th>
<th>Date Expected</th>
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<tr>
<td>Presence/Absence Surveys (#13913)</td>
<td>NOAA FISHERIES</td>
<td>Yes</td>
<td>3/18/2009</td>
<td>1/1/0001</td>
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<td>Classroom Egg Incubation Project</td>
<td>ODFW</td>
<td>No</td>
<td>1/1/0001</td>
<td>9/1/2009</td>
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Project Monitoring

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<tr>
<th>Organization</th>
<th>Address</th>
<th>Activity</th>
<th>Frequency</th>
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Project #: 09-054
Last Modified/Revised: 9/21/2009 9:47:49 AM
Astoria High School Fisheries Technology Program
## Project Maintenance

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<th>Frequency</th>
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<td>Astoria High School</td>
<td>1001 W Marine Drive Astoria, OR 97103</td>
<td>staffing and administration</td>
<td>annually for two years</td>
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Astoria High School
1001 W Marine Drive Astoria, OR
97103
## Project Match Funding

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<th>Funding Source</th>
<th>Cash</th>
<th>In-Kind</th>
<th>Other</th>
<th>Description</th>
<th>Total</th>
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<th>Conditions?</th>
<th>Comments</th>
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<td>$0.00</td>
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<td>$20,400</td>
<td>No</td>
<td>Yes</td>
<td>If alternative funds become available before the 2010-2011 academic year, then the unused R&amp;E funds would be returned.</td>
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<td>Marine Biology teacher</td>
<td>$0.00</td>
<td>$20,000</td>
<td>$0.00</td>
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<td>$20,000</td>
<td>Yes</td>
<td>No</td>
<td>two years match -- Marine Biol students feed into the Fisheries Technology class</td>
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<tr>
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<td>$0.00</td>
<td>$20,000</td>
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<td>$20,000</td>
<td>Yes</td>
<td>No</td>
<td>two years match -- Fisheries Biol students feed into the Fisheries Technology class</td>
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<tr>
<td>Use of Applied Science Center by researchers</td>
<td>$0.00</td>
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<td>$2,000</td>
<td>Yes</td>
<td>No</td>
<td>estimated value of rental of lab space for 2 yrs</td>
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<tr>
<td>Fish Presence/AbSENce Surveys and Habitat Work</td>
<td>$0.00</td>
<td>$2,999</td>
<td>$0.00</td>
<td>352 hrs/yr of student labor on surveys and related projects at minimum wage (typical class size = 11)</td>
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<td><strong>Total Match Funding</strong></td>
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## Project Budget

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<th>Match Funds</th>
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**Total Budget:** $65,399.04