[school district and community partner logos]

**Industry Recognized Credential (IRC): Introduction to Aquaculture and Fisheries**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ completed 180 hours of advanced aquaculture and fisheries course activities This program was offered by [school district], Pacific Education Institute, and [community partner name].

**Supervisor Contact Information**

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| **School District Teacher** | **Community Partner Lead** |
| Name: | Name: |
| Title: | Title: |
| Organization: | Organization: |
| Email: | Email: |

**Summary of Projects**

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| **Site** | **Project Sponsor** | | **Description** | |
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**Agency Support**

This document was created in [year] in collaboration with: [partner organizations].

**Funding Acknowledgment**

This program is funded through a collaboration that includes Career Connect Washington, The Office of the Superintendent of Public Instruction, Pacific Education Institute, [the school district, community partner name(s), other funding] organizations.

**Validation of Competency**

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| **Methods of Instruction** | **Methods of Evaluation** | **Grading Scale** |
| **E =** Education Session  **D =** Demonstration | **O =** Observation  **V =** Verbal review  **T =** Written test | **E =** Excellent **N =** Needs Improvement  **S =** Satisfactory **U =** Unsatisfactory |

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| **Topics and Competencies** |  | **Instruction Method(s)** | **Evaluation Method(s)** | **Grade** | **Hours** |
| 1. **Safety and Well-Being** | |  |  |  |  |
| Practice basic first aid through role play activities. | |  |  |  |  |
| Adhere to community partner’s safety plans and protocols. | |  |  |  |  |
| Use Leave No Trace and low ecological impact practices in the field and/or Environmental Code of Practice standard | |  |  |  |  |
| Demonstrate safe crew practices (includes skills in listening, following directions, keeping other crew members safe). | |  |  |  |  |
| Role play how to prevent slipping, trips, and falls on wet surface | |  |  |  |  |
| Identify the signs of hypothermia, dehydration, heat exhaustion | |  |  |  |  |
| Demonstrate how to read a tide chart, weather report where applicable | |  |  |  |  |
| Perform field work safely and properly (ex: pacing, adequate food, water, sleep, and use and knowledge of personal protective equipment (life jackets, whistles, etc.) of personal protective equipment, road rights-or-way). | |  |  |  |  |

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| 1. **Stewardship and Sustainability** | | | | |
| Identify possible approaches to resolve conflict within 1) an organization and 2) between an organization and external partners and/or agencies. |  |  |  |  |
| Define tribal sovereignty and co-management and cite an example in Washington State. |  |  |  |  |
| Describe the ecosystem services of at least one commercially important aquatic species in the larger ecosystem to enhance and maintain the environment beyond aquaculture and fisheries (A&F) systems. |  |  |  |  |

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| **3. Biology and Ecology of Aquatic Organisms** | | | | |
| Use appropriate terminology (Genus, species, tribal name, and common name) when talking about a species |  |  |  |  |
| Identify the stage of the species life cycle. |  |  |  |  |
| Identify predators of the locally relevant organisms and which predator caused the mortality |  |  |  |  |

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| **4. Water Quality and Animal Husbandry** | | | | |
| Handle organisms using correct safety and animal welfare protocol under direct supervision of instructor. |  |  |  |  |
| Use biosecurity practices in accordance with facility and community protocol |  |  |  |  |
| Perform water quality analysis (ex. Nitrogen, algal blooms, heavy metals in seaweeds) |  |  |  |  |
| Identify an invasive species |  |  |  |  |
| Assess health of population, culling | | | | |
| Calculate quantity and feed organisms |  |  |  |  |

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| **5. Data Science and Analysis** | | | | |
| Collect data accurately |  |  |  |  |
| Organize and manipulate data in a spreadsheet (ex: Sort, table, graph functions). |  |  |  |  |
| Report data in a meeting or infographic, etc. |  |  |  |  |

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| **6. Facility Operations and Maintenance** | | | | |
| Demonstrate proper use of tools (ex: washers). |  |  |  |  |
| Obtain a valid driver's license (possibly CDL) | | | | |
| Perform routine maintenance and pre-op maintenance checks. |  |  |  |  |
| Troubleshoot issues with mech pump systems and filtration |  |  |  |  |
| Demonstrate basic safety protocol of electricity |  |  |  |  |

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| **7. Communication and Marketing** | | | | |
| Identify key aspects of responsible digital citizenship that pertains to a facility (ex. Avoid taking photos of dying animals, avoid taking photos of proprietary technology) |  |  |  |  |
| Describe facility operations; communicate concisely and effectively to the public |  |  |  |  |
| Develop a promotional product or program for the facility |  |  |  |  |

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| **8. Career Pathways** | | | | |
| Create a list of gained individual skills and experiences that are relevant to natural resource jobs. |  |  |  |  |
| Complete a practice job application. | | | | |
| Produce clear, reasoned and coherent written and visual communication in a mock job interview for a natural resources position. |  |  |  |  |

Community Partner Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date of Completion\_\_\_\_\_\_\_\_\_