U of W Restoration Ecology Network RFP Form

Question 1. Client Name: Ron May

Question 2. Organization: Pierce College--Fort Steilacoom

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Question 6. Mailing Address: 9401 Farwest Dr SW, Lakewood, WA 98498

Question 7. Name of Project: Oak Prairie Restoration, Pierce College Fort Steilacoom

Question 8. Site Location (city, county, watershed, cross-streets, section, township, range):

Pierce College Fort Steilacoom is located n the City of Lakewood, Pierce County, WA, adjacent to Fort Steilacoom Park. The land was originally part of historic Fort Steilacoom and then became part of Western State Hospital. Proceeding south on I-5 from Seattle, take Exit 129 toward south 72nd /84th Sts. Take the S 74th St West ramp and turn the slight right onto 74th, which eventually becomes Custer Rd W. Stay on Custer as it curves south and then turn right onto 88th St SW and stay straight to go onto Steilacoom Blvd for two miles. At the end of Western State Hospital property, turn left of Farwest Dr SW; Pierce College is at the top of the hill. Site legal description is Section 32 Township 20 Range 02 Quarter 44.

Question 9. Site Description: (Size of project area, topography, watershed positioning, level of disturbance, existing land use):

The site consists of a section of an ancient glacial moraine (moderate slope and level top) with the gravelly soil typical of this landform. The site for the REN project is several acres in size and will be a multi-year project. The exact boundaries are not defined as they intermingle with adjacent sites which also have prairie restoration. The site is within the Chambers Creek-Clover Creek Watershed and has no existing surface water. Current plant cover consists of native and invasive grasses, scotch broom, and blackberry vines. The site is used for recreation, college field course work, and sky watching by the Tacoma Astronomical Society.

Question 10. Project Goals & Objectives (What is to be accomplished and why):

A new science building is under construction and part of the landscape design includes an oak prairie planting. The land was historically oak prairie and remnants still exist within Fort Steilacoom Park. Both Pierce College and the City of Lakewood (which manages Fort Steilacoom Park) are interested in restoring the native oak prairie and have implemented plans to do so. Our site consists of a strip of land between the two large restoration areas of the College and the City. The site is expected to be an on-going project connected to courses in the Earth & Space Sciences and Biology Departments at Pierce. The goal is to remove/control the invasive species and plant native species. Oak prairies are an endangered ecosystem and this restoration will connect several smaller prairie sites on the surrounding hills as well as those within the park. Restoring the oak prairie will enlarge the habitat for native animal species and help re-establish the natural cycles of the prairie ecosystem. The site will be an effective outdoor classroom and ongoing study area for Pierce courses including botany, restoration ecology, and environmental science.

Question 11. Deliverables (What are the deliverables you expect from the UW-REN student Group):

1. A suggested rÈgime for removal of invasive species focused on best methods for each species.

2. A planting plan for the site using species found in native Washington State oak prairies. Plan should include appropriate species, quantities of plants and planting densities (as per native oak prairies), and recommendations for best planting times for each species.

3. Information from #1 & 2 provided in table, schematic map, and written formats.

4. A report on the site containing the following: assessment of existing conditions and approximate order of work, justification for plants selected, weed control methods (including the possibility of controlled burning), and a monitoring and maintenance plan.

5. A manageable watering plan that can be sustained during dry months to allow for the plants to become established.

6. If timing allows, REN students would provide a workshop to staff and volunteers on proper installation techniques, maintenance methods, and native plant propagation techniques.

Question 12. Reference Material (what reference information can be provided to assist in the research and development of the project goals/ baseline data, reports, site reconnaissance information):

The client will provide readings on oak prairies, landscape data/plans for the science building site, soil profile for the site, and miscellaneous other reference documents as needed and available. The client will also provide the draft long term plan for the site. (See attached document.)

Question 13. Volunteer Resources (If volunteers are going to assist in aspects of the project does your organization have access to a volunteer resource pool).

Student volunteers will be available at certain times as part of their service learning requirement and local volunteers are being recruited but definite numbers not available yet. During the Fall 2009 Quarter we have twenty-four students enrolled in a BIOL& 213 (Majors Plant) course. They will work with the REN students. In addition, environmental science and biology courses have students who should be available to volunteer.

Question 14. Other Relevant Information:

One of our hopes for this site is that it will become a working classroom and "feeder site" to provide students with some of the background and techniques in restoration ecology needed to successfully transfer to UW Tacoma and the REN program. We have at least $500 that can be accessed to obtain plants through the Pierce College Foundation.

PIERCE COLLEGE
ENVIRONMENTAL RESTORATION PLAN

Goal: Remove Scotch Broom and replace with native plants that make up an oak prairie habitat.

Rationale: Scotch Broom (*Cytisus scoparius)* is an introduced, aggressive invasive plant that forms dense, monotypic stands reducing wildlife habitat. It is considered to

be a Class B Noxious Weed in Washington State. While Pierce County lists Scotch Broom as a non-designated noxious weed where control is recommended but not required, Pierce College should be a leader in doing what it can to eradicate this plant on its property. The RCW dealing with noxious weeds is below:

RCW 17.10.140

Owner's duty to control spread of noxious weeds.

(1) Except as is provided under subsection (2) of this section, every owner shall perform or cause to be performed those acts as may be necessary to:

†††† (a) Eradicate all class A noxious weeds;

†††† (b) Control and prevent the spread of all class B noxious weeds designated for control in that region within and from the owner's property; and

†††† (c) Control and prevent the spread of all class B and class C noxious weeds listed on the county weed list as locally mandated control priorities within and from the owner's property.

Ten Year Project Timeline

2007-8

1. **September 5-7, 2007** Pierce College faculty (Michele LaFontaine and Tom Broxson) attended the 2007 Summer Institute where the idea of a bioregion project was formulated. Since the City of Lakewood is interested in Oak Prairie restoration for Ft. Steilacoom Park it would be natural to examine that as a framework upon which a "learning community" curriculum could form.
2. **November 7, 2007** Meeting with members of the faculty of the University of Washington Restoration Ecology Network to learn more about their program and to determine if it could support a potential bioregion project at Pierce College. Members in attendance: Erica Cline (UW-Tacoma), Karen Harding (Pierce College Chemistry), Robert Sager (Pierce College Earth Sciences), Michele LaFontaine (Pierce College Earth Sciences), Jim Gawel (UW-Tacoma), Buck Banks (UW-Tacoma), Elysia Mbuja (Pierce College Biology), Laurie Shuster (Pierce College Library), Beth Norman (Pierce College-Earth Sciences).
3. **January 15, 2008** Meeting convened to discuss the Oak Prairie restoration and the UW-REN program with stakeholders associated with Ft. Steilacoom Park. The concept was well received by all and many members expressed the appreciation for working collaboratively on the common goal of oak prairie restoration. Members in attendance: Michele LaFontaine (Pierce College Earth Sciences), Elysia Mbuja (Pierce College Biology), Robert Sager (Pierce College Earth Sciences), Tom Broxson (Pierce College Geography), Scott Williams (City of Lakewood Park Manager), Diana Halar (City of Lakewood Compliance Inspector), Lee Chase (Western State Hospital), Chris Campbell (Western State Hospital), Kent Baskett (Pierce County Parks), Emily Stachurski (AHBL Landscape Architecture), Mary Dodsworth (City of Lakewood Parks and Recreation), Beth Jorgenson (City of Lakewood Planner), Ria Bakker (Friends of Ft Steilacoom Park), Lou Lyle (Friends of Ft. Steilacoom Park), Ursula Hall (Friends of Ft. Steilacoom Park), Jim Taylor (Pierce College Facilities), Ron May

(Pierce College Science and Technology Division Chair).

4 Laid the foundation for the Applied Environmental Methods course and partnership with UW REN program.

5 The Environmental Methods course (ENVS 155) was taught during the Spring 2008 Quarter by Michele LaFontaine (Earth Sciences), Tom Broxon (Geography), and Elysia Mbuja (Biology). The course had full enrollment.

2008-9

1 Application was made to the UW-REN program and was approved. A group of five UW REN students self selected to be part of the Pierce College oak prairie restoration work.

2 Completion of UW-REN project with a maintenance plan designed by the UW-REN students.

3 ENVS 155 was scheduled for Spring 2009 but was cancelled due to low enrollment.

4 Begin monitoring and maintaining REN site.

5 Begin germination and cultivation of native species through the Pierce College Biology Department for use in subsequent oak prairie restoration plots. Have the Plant Biology class students design best practices for the germination and cultivation of the various native species.

2009-10

1 Continue monitoring and maintaining REN site. Begin monitoring and maintaining of Rainier landscape oak prairie restoration area once it is completed.

2 Expand the germination and cultivation of native species to other Pierce College departments beyond the Biology Department (e.g., Early Childhood Education and Earth and Space Sciences).

3 Teach ENVS 155 during Fall 2009?. Students in the ENVS 155 class will maintain the REN site and will expand to an additional, adjacent plot. The size of the plot will be contingent upon the number of plants available.

2010-11

4 Continue monitoring and maintaining REN site, Rainier landscape site, and additional plot created by the ENVS 155 students.

5 Expand the germination and cultivation of native species to other groups beyond Pierce College. This will be done by promoting a “Native Plant Adoption” program to elementary and middle school classes where they would choose what native plant they would like to germinate and grow to the appropriate size for planting. A curriculum would be developed to assist the teachers with their work with the students.

6 Teach ENVS 155 during Fall 2009?. Students in the ENVS 155 class will maintain the REN site and will expand to an additional, adjacent plot. The size of the plot will be contingent upon the number of plants available.

7 Have a volunteer day where the elementary and middle school students would come on campus to plant their native plants. We would promote this to the high schools as a way for students to get their community service hours toward their

graduation requirement.

2011-2017

1 Repeat the steps in 2010-11 and expand as appropriate.

2018

2 Removal of the last remaining scotch broom plants on the Pierce College Ft. Steilacoom Campus. Celebrate!!