



## City Forest Credits Planting Project Application

### 1. Project Name

*Name of City, Town, or County, and whether this is a planting or preservation project. For example, Shoreline, WA - Ballinger Open Space Planting Project)*

City of Puyallup, WA - Peck Riparian Planting

### 2. Project Type

Planting

### 3. Project Location

*Name of City, Town, or County where project is located*

Puyallup, WA

### 4. Project Operator

*Name of organization/entity, and contact information. May have multiple project operators or contacts.*

*Organization:* Pierce Conservation District

*Address:* 308 West Stewart Ave

*City:* Puyallup

*State:* WA

*Zip:* 98371

*Contact(s):*

Melissa Buckingham 253-845-9770 ext. 109 or [melissab@pierced.org](mailto:melissab@pierced.org)

Ryan Mello 253-845-9770 ext. 107 or [ryanm@pierced.org](mailto:ryanm@pierced.org)

### 5. Project Description

Pierce Conservation District (PCD) works with cities and towns across Pierce County to improve riparian habitat and water quality through streamside plantings with native trees and shrubs. PCD is working with the City of Puyallup to remove invasive species and replant forested buffers on City-owned property, and currently manages nearly 40 acres of open space across the city. The Peck Riparian Planting Project is located on a 3.75 acre parcel along Clarks Creek in Puyallup, Washington. Clarks Creek is a salmon bearing stream supporting chinook, coho, and chum salmon, steelhead, and cutthroat trout that is impaired for many parameters, including temperature and dissolved oxygen. The recommendation in many Clarks Creek management plans is to vegetate the streamside to provide shade that will decrease temperature and increase dissolved oxygen.

The planting project area includes 1.5 acres of the site. Prior to planting in Fall 2020, PCD will need to remove invasive plants including reed canary grass and blackberry. PCD will plant 655 trees, including western red cedar, douglas fir, big leaf maple, sitka spruce, alder, cottonwood, and Oregon ash. The City of Puyallup will fund a professional crew to work on this site through establishment, which is typically three years. At that time PCD will install shrubs to complement the trees and will continue to look over the site to ensure success.

## 6. Project Benefits

*Provide a short narrative to describe the project benefits. Examples include information about equity for underserved or disadvantaged communities, flood control, open space preservation, watershed protection, human health, bird or wildlife habitat, etc.*

Clarks Creek is located in the lower Puyallup River watershed. Tributaries include Rody, Diru, Woodland, and Meeker Creeks. Clarks Creek is impaired due to low dissolved oxygen and excess sediment.

Fish and other aquatic life need oxygen dissolved in healthy water to “breathe” in order to survive. Oxygen is also necessary to help decompose organic matter in the water and bottom sediments, as well as for other biological and chemical processes.

Excess sediment loading contributes in a variety of ways to the dissolved oxygen problems in Clarks Creek. Sediment accumulation is an important factor in promoting dense growths of elodea (aquatic plant) that adversely impact dissolved oxygen concentrations. Elodea growth in turn slows flows in the creek, which worsens the problem of sediment accumulation and leads to flooding problems. Sediment loads may also contain elevated nutrient concentrations that promote plant and bacterial growth. Sediment can be improved by controlling stormwater runoff and by adding or maintaining vegetation on stream banks, which this project aims to do.

In May 2015, EPA approved the Clarks Creek Dissolved Oxygen and Sediment Total Maximum Daily Load Water Quality Improvement Report and Implementation Plan where streamside planting, especially with tall evergreen trees, is recommended for water quality improvement.

The Peck property planting is part of a larger restoration effort in the lower part of Meeker Creek as it flows into Clarks Creek and Clarks Creek itself. The City owns and is restoring seven adjacent parcels for a total of over 80 acres. This project will connect to this larger effort, increasing the impact of the riparian buffer and associated ecosystem benefits.

## 7. Total trees planted and planting-approach

*Single-tree, canopy, or riparian*

Riparian planting at an approximate 10' on center density, which will total 655 trees.

## 8. Does your project fall within an Urban Area mapped by the U.S. Census Bureau, or within the boundaries of a city or town? (Click below for Census Bureau mapping information)

<https://www.census.gov/geographies/reference-maps/2010/geo/2010-census-urban-areas.html>

Within an Urban Area

Within a city or town

## **9. Additional Information**

*Examples include project goals, work with other stakeholders, etc.*

The site is not currently accessible to the public, however PCD will host a volunteer planting event in Fall 2020.



## **City Forest Credits Planting Project Application**

Note: This is the second planting site under the Pierce Conservation District Reforestation Program – 2020 Planting Sites.

### **1. Project Name**

Pierce Conservation District Reforestation Program – 2020 Project  
Site #2: South Prairie Creek Preserve – Interior Floodplain Planting

### **2. Project Type**

Planting project

### **3. Project Location**

Unincorporated Pierce County, approximately one mile west of the town of South Prairie, WA.  
Reference address for project: 13518 Pioneer Way East, Orting WA 98360.

### **4. Project Operator**

*Organization:* Pierce Conservation District

*Address:* P.O. Box 1057

*City:* Puyallup

*State:* WA

*Zip:* 98371

*Contact(s):* Jayme Gordon

*Phone:* (253) 845-9770 ext. 102

*Email:* jaymeg@pierced.org

### **5. Project Description**

This project will restore native vegetation to an estimated 7.65 acres of riparian and floodplain habitat along South Prairie Creek, a tributary to the Carbon River in the Puyallup-White River watershed. Planting will take place in an area that lies between a newly constructed, half-mile long side channel and the right bank of South Prairie Creek.

This planting is part of a larger project to improve salmon habitat and restore floodplain processes. The project site had been utilized as pasture for many decades and is characterized by a mix of mostly non-native grasses and invasive weeds. Ultimately, a total of approximately 40 acres will be planted; prior to excavation and in-stream construction, 9.8 acres were planted Fall 2017-Spring 2020, and the remainder of the site will be planted over the course of two planting seasons. This application represents some of the planting scheduled to occur in the 2020-2021 season and the remainder of the site expected to be planted 2021-2022.

## 6. Project Benefits

This planting is part of a larger project to improve salmon habitat and restore floodplain processes in a high priority stretch of South Prairie Creek. Construction of a half-mile side channel and instream improvements to a half-mile of South Prairie Creek are intended to support adult to juvenile out-migrant survival and productivity for spawning, rearing, foraging, migrating, and overwintering life history stages for fall Chinook, Steelhead, Coho, Chum, Pink, and Cutthroat and Bull Trout.

However, the long-term success of this project – and the long-term achievement of self-sustaining ecosystem processes – depends on establishment of riparian and floodplain plant communities throughout the project site. This planting effort is the final piece of the project. Over time, the trees planted now will provide erosion control; floodplain and riparian habitat and ecosystem processes; shade to lower water temperatures; and contribute to instream habitat diversity, in addition to sequestering carbon.

## 7. Total trees planted and planting-approach

This is a riparian-type planting.

The planting plan submitted in this application is for a 7.65-acre area of former pasture fields. It is bordered to the north by a newly constructed (2020) half-mile long side channel and on the south by the mainstem of South Prairie Creek. Excluded from this application is a 2.65-acre area originally planted in the mid-2000s, a narrow linear strip along the face of the banks of the new side channel, and several small areas that have been reinforced with extra wood and rock (e.g. inlet and outlet of the side channel).

The interior floodplain is planted with a conifer/deciduous tree-shrub mix approximately 8' on center. Bare root material is the primary plant stock suggested. However, live stakes were selected in order to minimize ground disturbance for one area along the right bank of South Prairie Creek where the bank is unstable, and alternate plant material (e.g. 1-gallon pots) may be used based on availability.

**Table 1: Plant List for Interior Floodplain  
(only trees meeting CFC protocols are included)**

Plant Spacing = ~10' on center

Plant Name (common)	Plant Name (scientific)	# of Plants	Stock
Douglas fir	<i>Pseudotsuga menziesii</i>	110	bare root
Western red cedar	<i>Thuja plicata</i>	800	bare root
Sitka spruce	<i>Picea sitchensis</i>	200	bare root
Black cottonwood	<i>Populus balsamifera</i>	600	bare root
Black cottonwood	<i>Populus balsamifera</i>	50	36" live stake
Oregon ash	<i>Fraxinus latifolia</i>	150	bare root
Big leaf maple	<i>Acer macrophyllum</i>	485	bare root
Red alder	<i>Alnus rubra</i>	300	bare root
Black hawthorn	<i>Crataegus douglasii</i>	150	bare root
Vine maple	<i>Acer circinatum</i>	220	bare root

**Total: 3065**

See attached map for additional information about the planting plan.

**8. Does your project fall within an Urban Area mapped by the U.S. Census Bureau, or within the boundaries of a city or town? Choose one.** *Census Bureau mapping information link*

<https://www.census.gov/geographies/reference-maps/2010/geo/2010-census-urban-areas.html>

Within an Urban Area

Within a city or town

**9. Additional Information**

This planting occurs on contiguous properties totaling 129 acres owned by both Pierce County and the Pierce Conservation District, and the project as a whole is done in partnership with Pierce County, the Puyallup Tribe of Indians, and the South Puget Sound Salmon Enhancement Group. This project is the culmination of a multi-year effort by these partners and others to identify high-priority opportunities to improve endemic salmonid populations, many of which are threatened and endangered.