

Handshake Partnership Program Report - FY 2014 Recipients

1. Name of Corps Project/Lake: Dorena Lake, Willamette Valley Projects

2. District / Division of Corps Project/Lake: Portland District, NWD

3. Handshake Project Name: Bikes to Blooms

4. What has been accomplished? Please provide photographs; before, during, and after!:
Upland prairie restoration: invasives removal, propagation and outplanting native prairie plant
species, production of interpretive signs along the Row River Trail, and a new kiosk at the Bake
Stewart Park trailhead.

	Total
Handshake Program Funding Amount	\$27,500
Local Corps Office Funds (total expended on labor, materials, contracts, etc.)?	\$26,500
Partner's Contributions (total value of funds, goods, services, volunteer hours, etc.)	
Partners Name	Total Value of Contributions
1 City of Cottage Grove	\$9,500
2 Kennedy Alternative High School	\$16,000
3 Coast Fork Watershed Council	\$3,900
4 Cottage Grove Coalition for Bicycle Safety	\$2,500
5	\$
6	\$

5. Handshake Program Recipient Feedback

Please take this opportunity to provide feedback on all aspects of the Handshake Program and the Challenge Partnership Agreement authority. Your productive comments are important to the ongoing improvement of the program. Make sure to let us know how the Handshake funds have benefited your efforts to initiate and/or strengthen your partnerships.

A. Comments About Handshake Program: The ability to carry funding over through a second fiscal year is often essential to accomplishment--cooperation can mean the project timeline is defined by our partners time constraints.

B. Comments About Challenge Partnership Agreement: This agreement launched the first on-the-ground project of the greater Row River partnership. It enabled successful accomplishment of a number of the partners' priorities, building confidence and inspiring future collaborative efforts.

C. Recommendations: Keep the award program!

6. Handshake Summary:

Please also include a separate one-page newspaper type article describing the project and the benefit to the Corps of Engineers and to the public as a result of this partnership project.

Examples can be found on the gateway under Handshake Success Stories.



Dorena Lake “Bikes to Blooms” 2014 Handshake Partnership Program Award Project Report

The Corps and its partners in this project are part of the Row River Partnership (formerly called Bikes to Blooms.) This group of Federal and local government agencies, non-profit organizations, and other volunteers is dedicated to environmental stewardship, education and improving outdoor recreation opportunities in the Row River watershed. The Challenge Agreement partners are the City of Cottage Grove, Kennedy Alternative High School, the Coast Fork Willamette Watershed Council, and the community volunteer group called the Cottage Grove Coalition for Bicycling Safety.

The 2014 Handshake Award to the Willamette Valley Projects Dorena Lake supported restoration of upland prairie, trailside interpretive signs around Dorena Lake, and a new park kiosk. The project accomplishments include 60 acres of invasive species treatment and removal, 40 acres of native species planting, production of six interpretive signs, a wildflower interpretive event at Bake Stewart Park, and installation of a kiosk at Corps-managed Bake Stewart Park.

Prairie Restoration

The unique upland prairies of the Willamette Valley are one of the rarest habitats in North America. Since European settlement, almost all of the vast prairies have been lost to agricultural and urban development. The Corps manages several remnants of upland prairie and oak habitat around Dorena Lake. Bake Stewart Park and the adjacent East Wildlife Area contain quality remnants of upland prairie that are management priorities for the Environmental Stewardship Program. Restoration activities included in this project focused on upland prairie within the East Wildlife Area management unit that borders the park. Restoration of the prairie plant community improves the quality of habitat for native bees and other pollinators, grassland birds, and a variety of mammals that use the area.

Students from the Kennedy Alternative High School manually removed invasive blackberries and Scot's broom from 60 acres of the unit. Treatment of the invasive species released areas of the grassland for introduction of a variety of native prairie plants in the coming planting seasons.



Native plants in nursery beds outside the high school's greenhouse.

Using native species seeds and materials provided by the Corps, the students propagated over 12,000 plugs of perennial forbs and grasses in their greenhouse. The students were eager to transplant the new starts into a permanent home, and by working on-site they appreciated their role in the accomplishment of the prairie restoration. It is also noteworthy that although the project proposal described a target of 17 acres of restoration, these high school students ultimately improved 40 acres of the prairie!



Kennedy High School students planting native species at Bake Stewart Park.

Recreation Enhancement

The Row River Trail, a 16-mile National Recreation Trail, closely follows the northern shoreline of Dorena Lake. It lies along an old abandoned railroad bed that was converted through the Rails-to-Trails program. The popular multi-use trail connects the town of Cottage Grove to the lake and it passes several nearby recreation sites such as day-use areas, boat launches, swimming areas, and fishing spots.

The award funding made it possible to add interpretive signs to broaden awareness of natural features and entice more visitors to both the trail and the lake. Handshake Award funding paid for the graphic design and commercial fabrication of the interpretive signs. Through an Americorps agreement, a graphics design intern worked under guidance from Corps specialists and partners. The intern produced the narrative and layout and is responsible for the original watercolors appearing on the signs.



At the wildflower event, a volunteer naturalist describes to visitors how lupine flowers are pollinated.



A new interpretive sign at Dorena Prairie.

Sign topics include ecology of the upland prairie communities, Corps' prairie management activities, history of the local area, the old railroad, construction of Dorena dam, and the cultural significance of the Willamette Valley prairies to regional Native Americans. (Pictures of the signs can be seen at the end of this report.)

Staff from the City of Cottage Grove provided valuable assistance with research of local history, helping the intern by locating historic photos, and providing crucial details about the community at the time of dam construction. An unexpected find was an aged photo of local residents enjoying the new Dorena Lake following the dam construction.

Thoughts of prairie restoration led to visions of wildflowers, and a public event took form. The Coast Fork Willamette Watershed Council staff were instrumental in coordination and outreach for the 2014 Bikes to Blooms wildflower bicycle tour. Agency specialists and local experts volunteered to guide visitors through prairie remnants at the lake while teaching flower identification and prairie ecology. The event was well-received and has become an annual spring happening, receiving 90 visitors in 2016.

The final piece of this Handshake project is the addition of a new kiosk placed near the trail access to Bake Stewart Park. The photo at right was taken at our November 2017 NRM team building day. Corps rangers and maintenance staff installed the kiosk near the entrance to Bake Stewart Park.



INTERPRETIVE SIGNS – NWP WILLAMETTE VALLEY PROJECTS, DORENA LAKE – 2014 HANDSHAKE AWARD

Pollination Partners

Several rare butterflies lay their eggs only on oak leaves.

Many different creatures pollinate flowers, from bees and hummingbirds to bats and flies. In return, flowers reward their pollinators with food in the form of nectar and pollen.

Flower shape makes all the difference to a choosy pollinator. Simple, open flowers like clustered wild rose and bitter cherry make nectar and pollen rewards easy to find. A wide variety of flies, wasps, beetles and bees visit these flowers.

Flowers with wide landing areas like common yarrow attract more clumsy insects like beetles.

Complicated flowers sometimes depend on only one kind of pollinator. Clever and strong bumblebees can pry open the tricky flowers of Menzies' larkspur.

Grasses don't need pollinators because the wind blows their dusty pollen around.

Train your eye to notice pollinators of all sizes

Did you know 4,000 species of native bees live in North America?

Please don't pick the wildflowers because pollinators need them to survive.

Butterfly hummingbird
Selasphorus rufus

Bitter cherry (or chokecherry)
Prunus virginiana

Clustered wild rose
Rosa pratincola

Menzies' larkspur
Dolichopis menziesii

Common yarrow
Achillea millefolium

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For over 100 years, this path has connected people to nature.

Billowing Steam to Bicycles

Use this timeline to imagine the changing traffic on this route through time.

You are standing near the former tracks of an old railroad: the Oregon and Southeastern Railroad, called the 'Old Slow and Easy.'

From 1889 to 1949, trains hauled lumber from the Row River Valley to be milled and used by local businesses such as the Cottage Grove Manufacturing Company. They built windows, doors and cabinets at this site. You can still see examples of their windows around town.

Did you know? The cone-like structure nearby is the last concrete wigwam burner west of the Mississippi River. Built in about 1917, it was used to burn wood scraps and sawdust, producing huge plumes of smoke and ash. Wigwam burners were phased out following the Clean Air Act of 1970.

Follow this trail and trace a path through Oregon's history.

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Prairie on the Hill

Grassy areas on the hill nearby are remnants of the historically expansive Willamette Valley prairie. Hundreds of plants and animals depend on conservation of this vanishing habitat.

How do prairies form?

Willamette Valley prairies formed in a hot, dry period after the Ice Ages when the climate didn't support trees. Later, Native Americans used fire to maintain the prairies.

Today, fringe prairies remain where the soil is poor and conditions are too hot and dry to support trees. Where trees and shrubs don't thrive, grass and wildflowers often do.

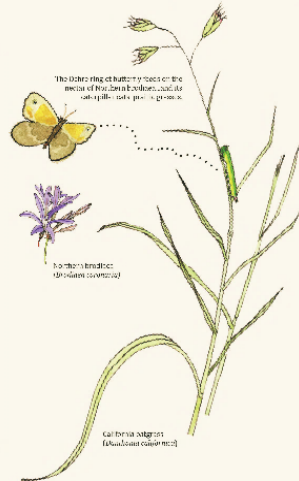
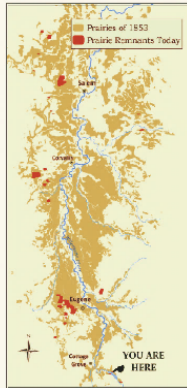
Less than 1% of the Willamette Valley prairie exists today

Study the map and see what remains of the prairie habitat today. Settlers converted the prairie to farms, towns, and other developments. Willamette Valley prairie is among the most endangered ecosystems in North America.



Look for the red flower buds of a rare wildflower in the grass of the prairie.

Willamette Valley Prairie



The striking yellow of butterfly flowers is the result of the bright colors of the soil.

Yellow butterfly flowers (Gutierrezia)

Call the red (Gutierrezia)



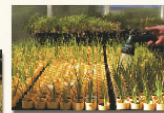
Look for the yellow and black of the prairie warbler in the grass of the prairie.

Conserving prairie remnants

Land managers maintain and enhance the remaining prairie using a variety of methods.



Hand grubbing and mowing control weeds.



Hand grubbing and mowing control weeds.



Hand grubbing and mowing control weeds.

Hand grubbing and mowing control weeds and help prepare the ground for sowing seed and planting. Growing native plants in a nursery gives them a better chance to survive when planted. Prescribed burning controls invading trees, shrubs and weeds.

The bald slope before you, Cerro Gordo, provides vital fringe prairie habitat.

Enhancing the Living Prairie



A person uses a traditional digging stick of the hardwood with an arrow handle to dig camas.

Camas (Eriogonum fasciculatum)

Bounties of Food

If you were a land surveyor in 1856 you might have seen Kalapuya people digging for camas bulbs just as tribal members do today.

Camas root tastes sweet when steamed in pits and dried into cakes. Before European introduction of sugar, camas was a valued source of sweet flavor and was traded like currency for other needed goods.

Each year, the Kalapuya set controlled fires to burn grass, shrubs, and young trees. This maintained open prairie for food gathering, and the new growth attracted game for hunting.

What seasonal treasures will you find?

Train your eyes to spot these beautiful native wildflowers in late spring. Please leave them in their home for seed and to provide pollen and nectar.



Oregonian (Eriogonum fasciculatum)

Oregonian (Eriogonum fasciculatum)

Oregonian (Eriogonum fasciculatum)



Dorena Prairie Returns

The native plant community is thriving at this prairie site thanks to mowing, weeding, and replanting of native species. These efforts control shrubby weeds and invasive plants to make room for native flowers which feed native insects and wildlife.

Less than 1% of native Willamette Valley prairie remains • Dorena Prairie is part of the legacy