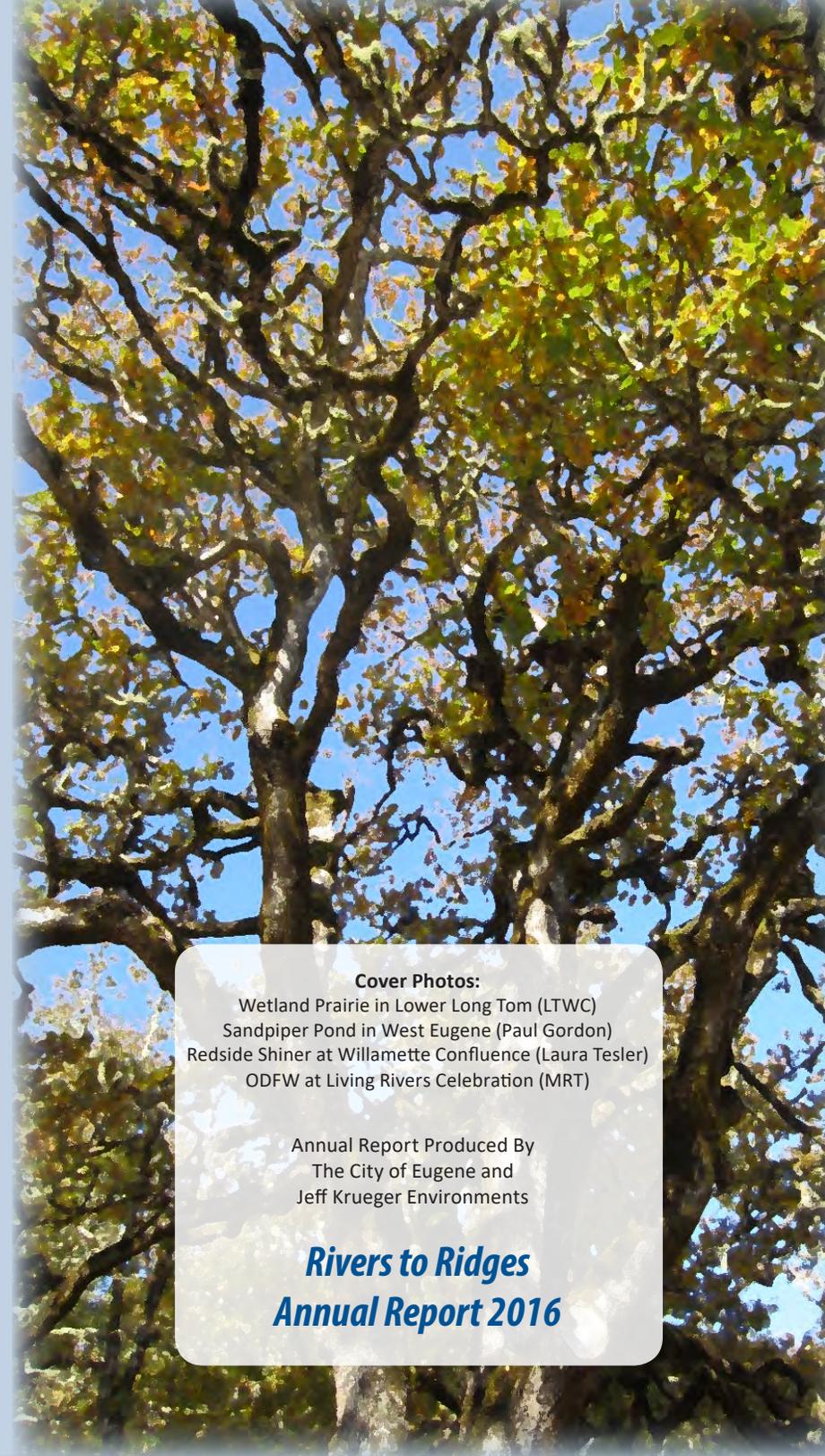




# Rivers to Ridges Annual Report 2016



<b>Section 1: Rivers to Ridges Partnership Background and Overview .....</b>	<b>1</b>
1.1 The Rivers to Ridges Partnership .....	1
1.2 Rivers to Ridges Annual Report .....	2
1.3 Rivers to Ridges Online .....	2
1.4 Awards .....	3
<b>Section 2: Land Protection .....</b>	<b>4</b>
2.1 Land Protection in 2016 .....	4
2.1.1 Coyote Creek Meadows .....	4
2.1.2 Coryell Ridge .....	4
2.1.3 Chub Slough .....	4
2.1.4 Finn Rock Reach .....	4
2.1.5 Allen Property .....	5
2.1.6 Jasper Slough Island .....	5
2.2 Summary of Overall Partnership Acreages in the Rivers to Ridges Planning Area .....	5
<b>Section 3: Habitat Restoration and Management .....</b>	<b>7</b>
3.1 Controlled Ecological Burns .....	7
3.1.1 The Nature Conservancy Wildland Fire Module .....	7
3.1.2 Ecological Burn Milestones and Research .....	7
3.2 Native Plant Materials .....	8
3.2.1 West Eugene Wetland Plant Materials Partnership .....	8
3.2.2 Friends of Buford Park & Mount Pisgah Native Plant Nursery .....	8
3.2.3 Willow Creek Nursery .....	8
3.3 Habitat Restoration and Management .....	9
3.3.1 Willamette Confluence Preserve .....	9
3.3.2 Lower Coast Fork – Turtle Flats Floodplain Restoration Project .....	9
3.3.3 Green Island Riparian Restoration .....	9
3.3.4 Monarch Waystations in the Coast Fork Willamette Watershed .....	10
3.3.5 Coyote Creek South – Oak Release .....	10
3.3.6 Berggren Watershed Conservation Area Riparian Restoration .....	10
3.3.7 Dorris Ranch Oak and Prairie Restoration Project .....	10
3.3.8 Meadowlark East Management Unit: Prairie, Savanna, and Woodland Reset Project .....	11
3.3.9 Wallace Creek Oak Savanna Enhancement Project .....	11
3.3.10 Lost Creek Riparian Corridor Enhancement Project .....	11
3.3.11 Elijah Bristow State Park Turtle Habitat Restoration .....	12
3.3.12 Wild Iris Ridge Habitat Enhancement .....	12
3.1.13 Fir Butte Enhancement and Restoration Project .....	12
<b>Section 4: Recreation, Education, and Events .....</b>	<b>13</b>
4.1 Recreational Improvements .....	13
4.1.1 Springfield Mill Race Path .....	13
4.1.2 Wild Iris Ridge Trail .....	13
4.1.3 Finn Rock Reach Boat Landing .....	13
4.1.4 Coyote Creek Nature Trail .....	13
4.1.5 Howard Buford Recreation Area Trail 4 Repair Project .....	14
4.2 Celebrations and Events .....	14
4.2.1 Living Rivers Celebration .....	14
4.3 Education .....	14
4.3.1 Discover Your Watershed and Middle Fork Science Pubs .....	14
4.3.2 Watershed Rangers .....	15
4.3.3 Willamette Resources and Educational Network Education Program .....	15
4.3.4 Coast Fork Science Pub .....	15
4.3.5 National Public Lands Day at Stewart-Bertelsen Complex .....	15
<b>Section 5: Planning and Publications .....</b>	<b>16</b>
5.1 Oak Habitat Brochure .....	16
5.2 OPRD Natural Resource Assessment and Strategic Action Plan .....	16
5.3 Prospect-R .....	16
5.4 Howard Buford Recreation Area Habitat Management Plan .....	16
5.5 Eugene Parks and Recreation System Plan .....	16
5.6 Lane County Parks Master Plan Update .....	16
<b>Section 6: Administrative Structure .....</b>	<b>17</b>
6.1 Summary of Activities .....	17



**Cover Photos:**  
Wetland Prairie in Lower Long Tom (LTWC)  
Sandpiper Pond in West Eugene (Paul Gordon)  
Redside Shiner at Willamette Confluence (Laura Tesler)  
ODFW at Living Rivers Celebration (MRT)

Annual Report Produced By  
The City of Eugene and  
Jeff Krueger Environments

***Rivers to Ridges***  
***Annual Report 2016***



# 1

## Rivers to Ridges Partnership Background and Overview

### R2R Partnership Organizations

- City of Eugene
- Coast Fork Willamette Watershed Council
  - Friends of Buford Park & Mount Pisgah
  - Lane County Public Works Department
    - Long Tom Watershed Council
    - McKenzie River Trust
- Middle Fork Willamette Watershed Council
  - Oregon Department of Fish & Wildlife
- Oregon Parks and Recreation Department
  - The Nature Conservancy
  - The Trust for Public Land
  - U.S. Army Corps of Engineers
  - U.S. Bureau of Land Management
  - U.S. Fish & Wildlife Service
- Willamalane Park and Recreation District
- Willamette Resources and Educational Network

### 1.1 The Rivers to Ridges Partnership

The [Rivers to Ridges Partnership](#) is a voluntary association of sixteen organizations working collaboratively to advance the protection, restoration, management, and public use of open space resources in the southern Willamette Valley. The name Rivers to Ridges (R2R) emanates from a regional open space vision [document](#) which was endorsed by many organizations and unanimously by local elected officials from the Eugene-Springfield area in 2003.

#### 1.1.1 Vision Statement

The vision for the Rivers to Ridges Partnership, as defined in the R2R Statement of Partnership is:

*To improve the quality of life of residents in the upper Willamette Valley by working together to protect and enhance the region's land and water resources and their ecosystem functions and values, and to provide environmental education and compatible outdoor recreation opportunities as outlined in the Rivers to Ridges Metropolitan Regional Parks and Open Space Study - Vision and Strategies document (2003).*

The 2003 vision was further refined with by R2R partners in subsequent years and includes the Ridgeline Vision and Action Plan (2008) and the Willamette River Vision and Action Plan (2010).

#### 1.1.2 Rivers to Ridges Statement of Partnership

The Rivers to Ridges partnership was formalized in 2010 through a Statement of Partnership (SOP), signed by all partner organizations. The SOP outlines the administrative structure of the partnership and emphasizes the commitment to work collaboratively toward implementation of the vision. The R2R Partnership mission as stated in the SOP is listed below:

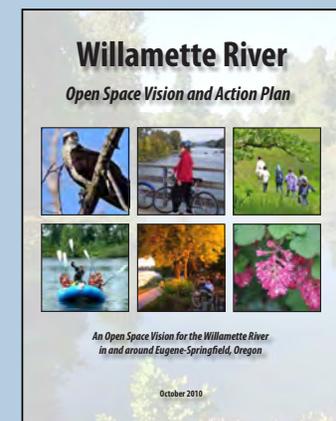
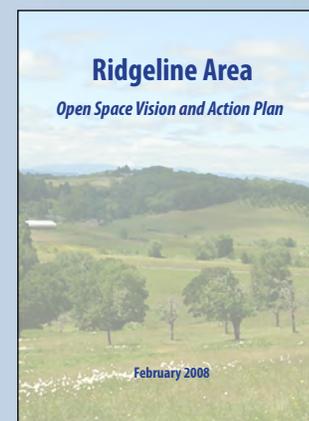
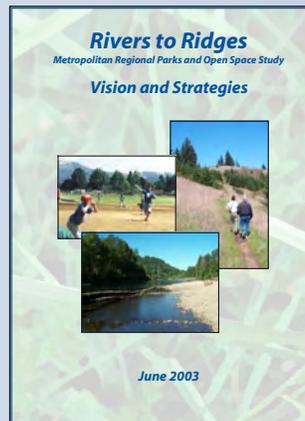
*The R2R Partnership mission is to advance implementation of the vision outlined in the Rivers to Ridges Metropolitan Regional Parks and Open Space Study – Vision and Strategies document.*

### Rivers to Ridges on Facebook

New in 2016 is the Rivers to Ridges Facebook page which was created and is currently being maintained by the Coast Fork Willamette Watershed Council.



Please be sure to Like and Share!



## 2016 by the Numbers

271

Acres treated through controlled ecological burns

300 million

Pounds of sand and gravel moved at the Willamette confluence since 2010

490

Additional acres of land protected by R2R Partners

## 1.2 Rivers to Ridges Annual Report

This is the third Annual Report produced by the partnership. The purpose of the report is to provide an overview of administrative structure of the R2R partnership and to document key decisions and activities for the year. The report tracks annual accomplishments in the areas of land preservation; habitat restoration and management; recreation, education, and events; and planning. Additionally, the annual report provides the partners with an opportunity to highlight their own achievements from the year that have supported the implementation of the shared R2R vision.

[Click to Open Recent Annual Reports](#)



## 1.3 Rivers to Ridges Online

The R2R Partnership maintains a web site at [www.rivers2ridges.org](http://www.rivers2ridges.org) where vision documents, maps, annual reports, and information about R2R Partnership organizations can be accessed.

*Stone skippers and drift boaters enjoy the Willamette River near Green Island*



Photo credit: Jeff Krueger



Photo credit: City of Eugene

*Shawn Donnille (third from left) accepts the 2016 R2R Partnership Award on behalf of Mountain Rose Herbs*

## 1.4 Awards

### 1.4.1 Oregon Recreation and Parks Association Environmental Leadership Award 2016

The Environmental Leadership Award was presented to the R2R Partnership at the ORPA Conference in Eugene in November. The award recognizes an organization that has made an outstanding effort during the last one to five years to sustain and improve the environment. A [video](#) highlighting Partnership efforts was produced and shown at the conference.

### 1.4.2 Rivers to Ridges Partnership Award Presented to Mountain Rose Herbs

This award recognizes an individual or organization that contributes significantly to the mission of the Rivers to Ridges Partnership. This year the Partnership recognized Mountain Rose Herbs' contributions to reaching the Rivers to Ridges Partnership vision. This local company's day to day actions and overarching company values, as well as continued collaboration with several partner organizations, makes Mountain Rose Herbs a clear choice to receive this recognition. Mountain Rose Herbs is a model community partner exemplified by its significant investment to support local and regional conservation organizations and its commitment to sustainability through the management of its facilities and sourcing of its products. Some examples of Mountain Rose Herbs' contributions include: Sponsorship of the stinging nettle and yarrow production beds at the Friends Native Plant Nursery; Staff participation in 6-8 invasive species management community service work parties annually since 2009 in the upper reaches of the Coast Fork and Middle Forks of the Willamette River; Adoption of a mile-long segment of the Amazon Bike path which company employees utilize daily as they commute to work.

### 1.4.3 Rivers to Ridges Service Awards

The Partnership has not previously given this award. The intent of the award was to recognize the significant and lasting contributions of an individual to the mission of the Partnership. This year, we recognized two individuals with long-term connection to the partnership—Dana Dedrick and Neil Björklund.

#### Neil Björklund

Neil has played an important role in the Rivers to Ridges Partnership since its inception as the West Eugene Wetlands Partnership. He saw to completion the ground-breaking West Eugene Wetlands Plan and throughout his career successfully navigated controversial topics to a beneficial outcome. Neil founded the local chapter of the North American Butterfly Association and continues to be a consistent champion for natural resources. For the last several years of his career at the City of Eugene he managed a team of people responsible for park design, land acquisition, and trail development—key components of the Rivers to Ridges vision. For these reasons, and more, the Partners recognized the many years of dedication and service Neil has contributed to the region.

#### Dana Dedrick

Dana Dedrick recently stepped down from her position as Executive Director of the Long Tom Watershed Council. During her 19 years with the Council, she expertly applied her skills in bringing together people from different socio-political backgrounds to create a strong, highly respected, and productive organization. Through the efforts of Dana and her staff, the Council has broadened its financial base to create a stable foundation to do work in both rural and urban landscapes. Dana has been a member of the R2R XT (executive team) since the council joined the partnership in 2007. Her passion and commitment to the watershed, its people, and the natural environment have been tremendous assets to the partnership. Dana will continue to work on special projects for the Council and we look forward to hearing about her continued successes!



Photo credit: City of Eugene

*Neil Björklund (left) receives award from Eric Wold (Willamalane)*

*Far Right: Dana Dedrick receives award from Joe Moll (MRT) and Eric Wold*



Photo credit: City of Eugene

# 2

## Land Protection



Photo credit: MRT

*Coyote Creek Meadows*



Photo credit: Jeff Krueger

*Coryell Ridge with the Willamette confluence area in the distance*



### 2.1 Land Protection in 2016

In 2016, Partnership organizations including [Willamalane Park and Recreation District](#), [City of Eugene](#), and [McKenzie River Trust](#) conserved an additional 490 acres of land through six fee title acquisitions and a conservation easement. This brings the total partner land base within the R2R planning area to an estimated 23,917 acres. The 2016 acquisitions and easements are listed below and shown on the Rivers to Ridges map on page 6.

#### 2.1.1 Coyote Creek Meadows

This 38-acre conservation easement is situated between [McKenzie River Trust](#)-owned Coyote Spencer Wetlands and [Oregon Department of Fish and Wildlife](#)'s Coyote Creek property. The site is a predominantly wetland with some smaller patches of oak riparian forest. Two federally endangered species (Kincaid's lupine and Bradshaw's lomatium) are present on the property. The owners will continue to manage and restore the wetlands.

#### 2.1.2 Coryell Ridge

On January 1, 2016, the 101-acre site officially became part of the [City of Eugene](#)'s parks and open space system. The site, which is adjacent to Moon Mountain Park and close to Bloomberg Park, contains high quality habitat, outstanding vista points, and provides an exciting opportunity for a future trail connection from Eugene's Ridgeline Trail network to the Willamette River via an existing I-5 underpass. Future plans involving multiple R2R partners could further connect this area to properties owned by [Friends of Buford Park & Mount Pisgah](#), [Oregon Parks and Recreation Department](#), [Willamalane](#), and [The Nature Conservancy](#). The City is calling this new acquisition, Coryell Ridge. Lewis Coryell was an early settler (1848) with a land claim in the area. A historical marker from 1917 identifies the area between Moon Mountain and the Willamette River as Coryell Pass, a stop on the southern branch of the Oregon Trail known as the Applegate Trail.

#### 2.1.3 Chub Slough

Acquired by [McKenzie River Trust](#) in January 2016, this has been a high priority conservation target for McKenzie conservation partners for many years. The site is situated on the opposite river bank from the MRT-owned Big Island and is hydrologically part of the 200-acre Big Island/Berggren complex. The site's riparian floodplain forest contains many large maple, cedar, cottonwood, alder, and ash trees along with several relic side channels. These side channels provide important habitat for Oregon chub, red-legged frog, and Chinook salmon. MRT will be exploring sustainable farming options to help manage the agricultural field located on the site.

#### 2.1.4 Finn Rock Reach

The [McKenzie River Trust](#) acquired 277 acres of floodplain forest with extensive wetlands, braided side channels, and the mainstem McKenzie River flowing through it near Finn Rock, Oregon. Although



Photo credit: MRT

Photo credit: Jeff Krueger

*Elk Creek at Finn Rock Reach*



Photo credit: MRT

Photo credit: McKenzie *Finn Rock Reach*

the property is nearly 20 miles outside of the usual R2R planning area, it is noteworthy since its protection is very important for preserving key upstream habitats and water quality. The Finn Rock boat launch sits just downstream from the site at the far south end of the property. The launch has been open to the public and will remain open under MRT ownership. The site contains a dynamic floodplain, with numerous braids formed by the intersection of a McKenzie River side channel, the outflow of Elk Creek, and wetlands. Spring Chinook salmon have been observed spawning in the main stem river and in the extensive side channels of the property. Bull trout have been tracked foraging in this reach of the river, and data indicates that the confluence the McKenzie side channel has historically been important nursery habitat for Chinook fry. In addition to these keystone fish species, Oregon Department of Fish and Wildlife manages angling on this section of the river as a stronghold for native redbreasted rainbow trout.

Eugene Water & Electric Board (EWEB) has provided site stabilization funds that have been used for infrastructure maintenance, invasive removal, and has allowed MRT to contract with River Design Group for the development of restoration scenarios. Restoration plans are still forthcoming, but will likely focus on two small gravel pits that are in the property's interior.

### 2.1.5 Allen Property

Willamalane purchased this key parcel along the eastern edge of Dorris Ranch in 2016, expanding the park size by 42 acres. The property contains upland oak habitats and some riparian forest

along the Middle Fork of the Willamette River. The District is planning for future habitat and recreational enhancements.



Photo credit: Willamalane

*Allen Property*

### 2.1.6 Jasper Slough Island

This one-acre property along the Mill Race path was acquired by Willamalane to provide additional access for staff to areas along the Mill Race that will be restored to provide additional aquatic and riparian habitat in the future. The property is between Jasper Slough and the Mill Race channel.

## R2R Partner Conserved Lands

<u>R2R Partner Ownership and Easements</u>	<u>Acres</u>
Bureau of Land Management (WEW)*	1,305
Bureau of Land Management Easement	22
U.S. Army Corps of Engineers	3,870
City of Eugene	4,485
Friends of Buford Park & Mount Pisgah	63
Lane County	3,969
McKenzie River Trust	1,600
McKenzie River Trust Easements	1,131
Oregon Department of Fish & Wildlife	607
Oregon Parks and Recreation Department**	1,943
The Nature Conservancy	3,028
Willamalane Park and Recreation District	1,617

**Total: 23,917**

\* BLM owns and manages another 27,409 acres of land within the Rivers to Ridges planning area, mainly O&C land within the Coburg and Thurston Hills.

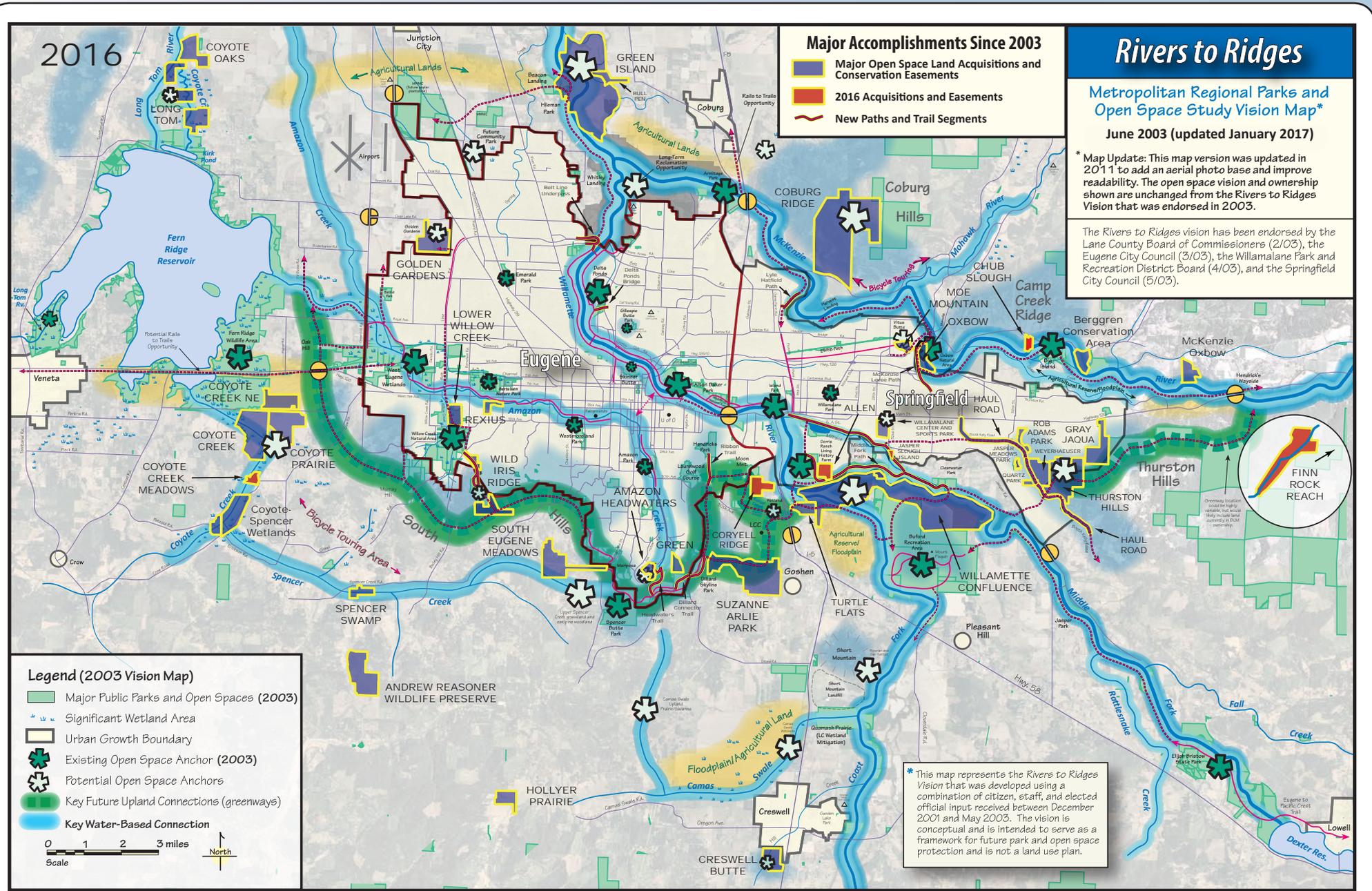
\*\* Includes 120 acres of Oregon Department of State Land ownership.

## 2.2 Summary of Overall Partnership Acreages in the Rivers to Ridges Planning Area

Rivers to Ridges partners currently own or hold conservation easements on an estimated 23,917 acres of land within the R2R planning area (see table) including the additional 490 acres added in 2016.

Since the Rivers to Ridges vision was endorsed in 2003, the R2R partners have combined to preserve approximately 6,190 acres of land, increasing the conserved land base by nearly thirty percent in just over a decade. The majority of this newly acquired land is in an undeveloped condition and has been acquired to preserve and restore high value native habitats, protect natural resource functions, and preserve the visual quality of the area. Compatible recreational and educational uses are planned on many of these lands in the future.

# Rivers to Ridges Vision Map with Accomplishments and 2016 Acquisitions



The map above is a compilation of the Rivers to Ridges vision map that was endorsed by local elected officials in 2003 and an overlay of major open space acquisitions that have occurred since that time. 2016 acquisitions are shown in red.

# 3

## Habitat Restoration and Management



Photo credit: TNC

*This past year marked the 30th anniversary of ecological burning at the Willow Creek Preserve.*

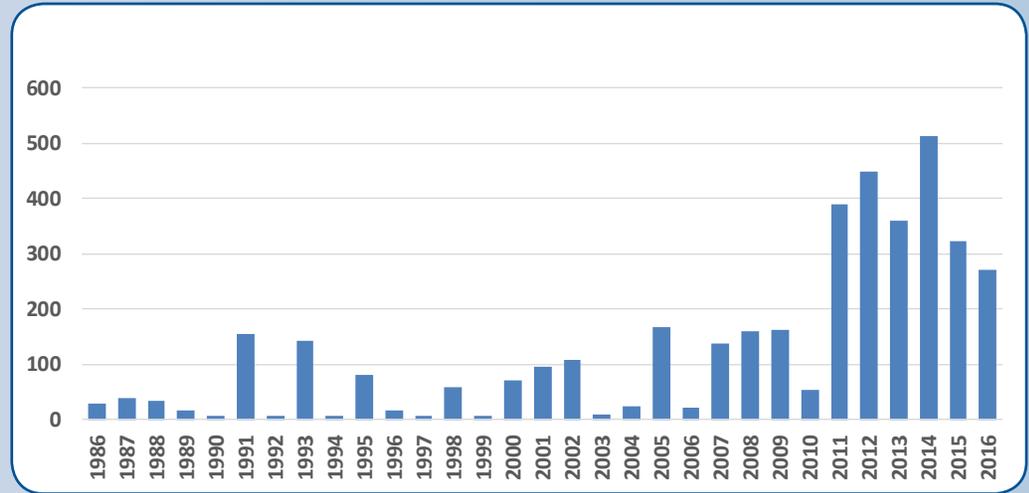


Photo credit: TNC

*Coburg Ridge Preserve*

### 3.1 Controlled Ecological Burns

The R2R Partnership completed eight controlled ecological burns totaling 270.5 acres in 2016 on U.S. Bureau of Land Management, The Nature Conservancy, and U.S. Army Corps of Engineers administered lands. This was below the five-year average of 431 acres, primarily due to the complex nature of several burns and because many were within small experimental plots. Upland prairie in the Coburg Hills directly adjacent to private timberlands, wet prairie at Speedway directly adjacent to West 11th Avenue within the Eugene City limits, and oak woodlands along Willow Creek Road all required more time and resources relative to acreage burned. Building upon successes and learning from experiences with applying fire in such sensitive and challenging landscapes are essential to using fire for conservation amongst diverse partners and stakeholders.



#### 3.1.1 The Nature Conservancy Wildland Fire Module

For the third year, The Nature Conservancy’s Southern Rockies Wildland Fire Module returned for ten days to assist with controlled ecological burning operations throughout Oregon. The eight-person module assisted with two days of fire operations within the R2R Partnership, four days elsewhere in the Willamette Valley, and four days at TNC’s Zumwalt Prairie Preserve near Imnaha.

#### 3.1.2 Ecological Burn Milestones and Research

The 2016 ecological burns were unique, challenging, and varied:

- For the first time in recent history, fire was successfully carried across the upper prairie at Coburg Ridge Preserve.
- The 30-year anniversary of ecological burning at Willow Creek Preserve was celebrated with drone filming of this year’s maintenance burn in the Bailey Hill unit which was intended to benefit habitat for Fender’s blue butterfly and its host plant Kincaid’s lupine.
- Burns occurred in multiple experimental plots studying interactions of fire, grass-specific herbicides, and plant response in Fender’s blue butterfly and Kincaid’s lupine habitat.



Photo credit: City of Eugene

*WEW Plant Materials Partnership  
production beds at Heritage Seedlings*

*Oregon iris at the Friends Native Plant Nursery*



Photo credit: Friends

## 3.2 Native Plant Materials

### 3.2.1 West Eugene Wetland Plant Materials Partnership

The U.S. Bureau of Land Management, City of Eugene, and The Nature Conservancy's plant materials partnership continues to produce locally-sourced native seed and plants for restoration and enhancement efforts within the West Eugene Wetlands and associated upland prairies. In addition to more common native annuals and perennials, the program is now providing seed of several slow-growing prairie species, such as common camas and narrow-leaf mule's ear. These species take five or more years to reach reproductive size and thus require a long-term production commitment. In 2016, the partnership provided seed and plants of at least 75 native plant species for use in local restoration and enhancement projects. Although almost all of the seed is produced by Willamette Valley growers, the partnership continues to rely on hand collection from wild sites for a few, locally common wetland species and to add genetic diversity to cultivated species.

Seasonal botanists working for the partnership hand collected seed of 20 native species in 2016 and submitted seed from several of these collections to the national Seeds of Success program, which partially funds the native plant materials program through the BLM. Students from local academic institutions also donated volunteer time for native seed collection while learning about our local plants and wetlands. Altogether, almost 1,400 pounds of local native seed was produced and procured for the plant materials program in 2016. The program successfully provided seed for about 240 acres of restoration projects in 42 customized seed mixes for emergent, vernal pool, wet prairie, and upland prairie communities. In addition, the program provided 72 seed mixes for an ongoing research project addressing recovery of Fender's blue butterfly and prairie restoration.

### 3.2.2 Friends of Buford Park & Mt. Pisgah Native Plant Nursery

The Friends of Buford Park & Mount Pisgah (Friends) manages a native plant materials program with a two-acre nursery facility at its core. The nursery, located in Lane County's Buford Park, propagates plant materials for use in habitat projects in the greater Mount Pisgah area. The nursery also provides surplus seed and plants to other restoration entities for habitat projects elsewhere in the Willamette Valley. Staff and supervised volunteers collect cuttings, divisions, and seeds from diverse native plant populations found at Mount Pisgah, and then propagate them in the nursery. In 2016, the nursery produced plant materials from 150 native species, including grasses, wildflowers, shrubs, and trees.

While its primary purpose is to provide genetically local plant materials, the nursery also helps cultivate a culture of community stewardship through volunteer service. Volunteers contributed over 5,185 hours during 2016 to produce more than 350 pounds of live seed and over 15,000 live plants. Friends also trained 14 interns from Lane Community College, University of Oregon, and the broader community throughout 2016. The Friends, in partnership with Pacific Northwest Natives, also produced larger crops of selected native grasses associated with prairie, savanna, woodland, and forest habitat. This partnership venture produced nearly 1,250 pounds of California oatgrass seed in 2016!

### 3.2.3 Willow Creek Nursery

The Nature Conservancy's Willow Creek Nursery continues to produce small quantities of Bradshaw's lomatium, Willamette daisy, and Kincaid's lupine seed for use in local restoration projects, mostly at the Willow Creek Preserve.

### 3.3 Habitat Restoration and Management

Listed below is a sampling of major habitat restoration and management projects implemented by R2R partners in 2016.

#### 3.3.1 Willamette Confluence Preserve

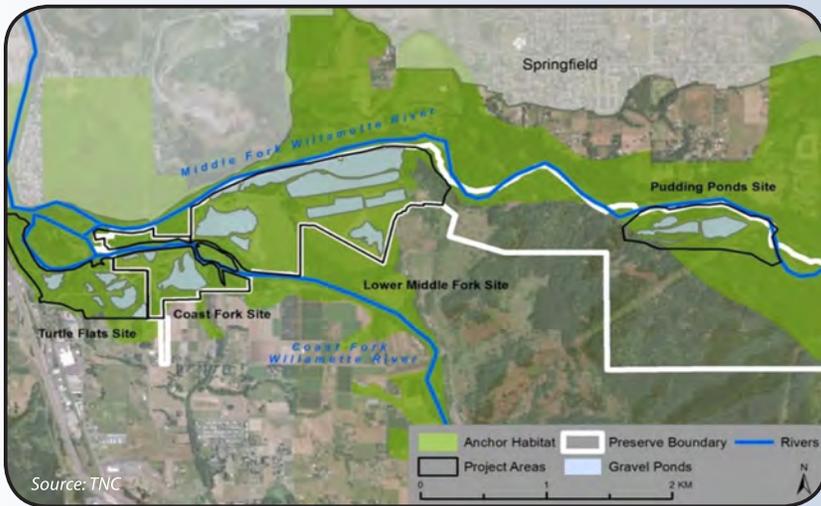
Beginning with acquisition in 2010, [The Nature Conservancy](#)-owned Willamette Confluence has seen many changes in six short years. The floodplain restoration effort was phased into four unique projects (see map left), each with its own funding, design, engineering, permitting, construction, revegetation, and monitoring challenges. By the end of 2016, three of these four projects were either completed (Pudding Pond) or in-progress (Coast Fork/Turtle Flats). To date, almost 300 million pounds of sand and gravel have been moved with a goal of reconnecting over two miles of stream channel and hundreds of acres of floodplain forest.

The final, and largest, phase of this massive restoration project will begin in the summer of 2017 and focus on the Lower Middle Fork area. An extensive revegetation effort and related monitoring will continue through 2020. Completing these projects in succession has allowed TNC and its partners to learn from the previous year's experiences and to gain efficiencies. Prospect-R, an online decision support tool is being utilized to help determine the feasibility and effectiveness of various floodplain restoration decisions (see section 5.3 for more information on Prospect-R).



Photo credit: Jeff Krueger

*Excavator cutting a channel at Turtle Flats*



Source: TNC



Photo credit: Jeff Krueger

*Re-contoured pond at Turtle Flats (prior to planting)*



Photo credit: MRT

*Site preparation underway at Green Island*

#### 3.3.2 Lower Coast Fork – Turtle Flats Floodplain Restoration Project

Implementation of a significant component of this major floodplain restoration project (see Section 3.3.1 above), which spanned three ownerships and 195 acres at the Confluence of the Coast and Middle Forks of the Willamette River, was initiated in 2016. The [Friends of Buford Park & Mount Pisgah](#) worked with [Oregon Parks and Recreation Department](#) and [The Nature Conservancy](#) to improve habitat for beavers, fish, frogs, otters, turtles, wading birds, water fowl and numerous other species. Heavy equipment reshaped the floodplain modified by decades of gravel extraction. The result: creation of twelve river channel segments designed to restore hydraulic connections between the river, ponds, and existing sloughs; reshaped ponds to afford increased emergent wetland and scrub-shrub wetland habitat; improved upland meadows; and restoration of riparian forest. Planting began in the fall of 2016 and will continue into 2017. The project was supported with funding from Bonneville Power Administration, Friends, Meyer Memorial Trust, [Oregon Department of Fish & Wildlife](#), National Fish & Wildlife Foundation, Oregon Wildlife Heritage Trust, and The Nature Conservancy.

#### 3.3.3 Green Island Riparian Restoration

[McKenzie River Trust](#) staff spent much of the summer preparing approximately 200 acres at Green Island in advance of floodplain tree and shrub plantings scheduled for the winters of 2017 and 2018. Site preparation on this former agricultural field included mowing and selectively applying herbicide in strips to ensure the successful planting of over 224,000 stems. Site prep work will continue into 2017. This project is being funded by the Oregon Watershed Enhancement Board, Bonneville Power Administration, and Meyer Memorial Trust.



*Waystation Signage*

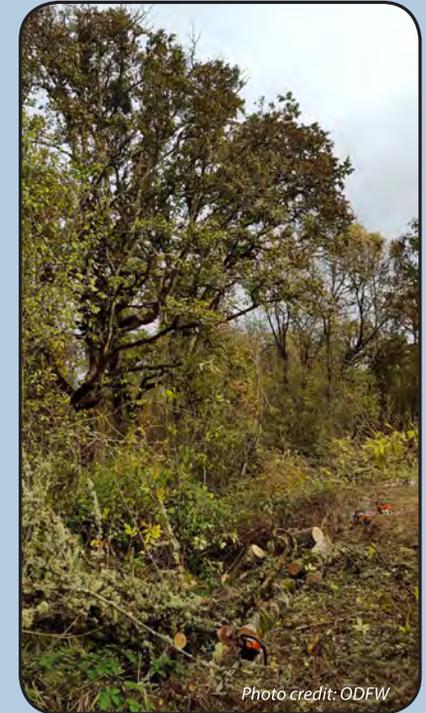
### 3.3.4 Monarch Waystations in the Coast Fork Willamette Watershed

Six Monarch Waystations were established in 2016 to help provide stopping points throughout the Coast Fork watershed for migrating pollinators, specifically Monarch butterflies. Monarch butterfly habitat has severely declined over the past few decades with many studies showing a 90 percent decline in habitat since 1990. Habitat conservation is a challenge because monarchs require ‘grounds’ in multiple locations throughout their life cycle and migration. Monarchs residing to the west of the Rocky Mountains will leave their summer grounds in autumn to overwinter in the warm Southern California coastal tree groves.

The waystations provide stops for these butterflies during their migration. Project partners include the [Coast Fork Willamette Watershed Council](#), U.S. Forest Service, [U.S. Bureau of Land Management](#), [U.S. Army Corps of Engineers](#), and the City of Cottage Grove. Waystations have been planted at Bohemia Elementary School, Lincoln Middle School, Dorena School, Row River Nature Park, Holland Meadows, and Bake Stewart Park. The waystations, which are approximately 20 x 20 feet in size, not only benefit monarchs and other pollinator species, but also create educational and stewardship opportunities for local schools and community members. Because of the public access at each of the locations, interpretive signage was an important part of the project.

### 3.3.5 Coyote Creek South – Oak Release

The [Oregon Department of Fish & Wildlife](#) completed an oak release project on 46 acres of the Coyote Creek South unit in 2016. Oregon ash trees were removed to eliminate competition with oaks for sunlight, water, and nutrients. The cut trees were retained on-site to provide habitat for small mammals, to shade streams, and provide food and building materials for beaver. Partners included the Institute for Applied Ecology; funding was provided through an Oregon State Wildlife Grant.



*Photo credit: ODFW*

*Oak release area at Coyote Creek South*

### 3.3.6 Berggren Watershed Conservation Area Riparian Restoration

The [McKenzie Watershed Council](#) is in the process of planting 22,000 riparian floodplain forest trees and shrubs over 11 acres of the [McKenzie River Trust](#) owned Berggren Watershed Conservation Area (2016/2017) thanks to an Oregon Watershed Enhancement Board (OWEB) restoration grant. Over the summer, the watershed council diligently used a combination of mowing and herbicide treatments to prevent the new plantings from being overtaken by blackberry.

### 3.3.7 Dorris Ranch Oak and Prairie Restoration Project

In 2016, [Willamalane](#) and the [Middle Fork Willamette Watershed Council](#) initiated the Dorris Ranch Living History Farm Habitat Restoration Project. The project focused on oak and prairie communities within the 258-acre park. Project assistance was given by the [U.S. Fish and Wildlife Service](#) and funding provided by the Oregon Watershed Enhancement Board. The initial restoration actions focused on controlling invasive species and removing encroaching woody vegetation in prairie areas. 2016 accomplishments included: botanical survey and characterization, mowing and weed control across 38 acres of prairie (see photo), and weed control in 21 acres of woodland.



*Photo credit: Willamalane*

*Brush mowing at Dorris Ranch*

In 2017 the focus of the project will shift to focusing on restoring the oak woodland through removal of encroaching conifers and controlling invasive vegetation. Additionally, several community events to educate the public about this restoration work will be offered.



Photo credit: Lane County Parks

*Oak Release underway at Howard Buford Recreation Area*

### 3.3.8 Meadowlark East Management Unit: Prairie, Savanna, and Woodland Reset Project

In 2016, Lane County Parks and Friends of Buford Park & Mount Pisgah successfully implemented this ambitious project to restore and enhance the structure of oak savanna, oak woodland, and wet prairie habitats in Lane County's Howard Buford Recreation Area. Treatments included management of invasive species and the harvest and removal of trees encroaching upon legacy Oregon white oak trees. The total project area was 145 acres, with savanna restoration occurring over 76.5 acres. Much of the project was implemented by a forestry contractor, and logs, pulpwood, and chips removed as part of this project were sold to local mills. Project benefits include rescuing large "legacy" oak trees that are in decline due to shade from firs; creating beautiful wildflower displays and vistas; improving birding and habitat for grass nesting birds, including western meadowlark; reducing the risk of destructive wildfire; and improving forage and habitat structure for over 150 native wildlife and plant species that depend on rare prairie, oak savanna, and woodland habitats. The project was supported with funding from Lane County and OWEB.

### 3.3.9 Wallace Creek Oak Savanna Enhancement Project

The Middle Fork Willamette Watershed Council performs restoration projects of all shapes and sizes with a variety of public and private partners. One of the smaller, but most successful in 2016 was along Wallace Creek on the property of Paul Johnson. Paul and his family have been planning an oak restoration project on their land near Jasper for four years. This fall, Paul, his daughter, and his parents planted 160 trees, including Oregon white oak, ponderosa pine, and redosier dogwood. They will continue the project in the spring by planting Pacific madrones and native wildflowers. Paul and his family are excited to watch the new landscape take shape as the trees grow and the wildlife visit!



Photo credit: MFWWC

*Paul Johnson*



Photo credit: MFWWC

*Lost Creek riparian enhancement project area*

### 3.3.10 Lost Creek Riparian Corridor Enhancement Project

The Lost Creek Riparian Corridor Enhancement project built upon riparian restoration work that has been done within this sub-watershed since 2008. The current and previous projects have targeted problems of invasive species, lack of stream shade, and narrow riparian buffers. Through this phase of the work, the Middle Fork Willamette Watershed Council (MFWWC) engaged eight new landowners in riparian restoration on their properties. Restoration work also occurred at Oregon Park and Recreation Department's Elijah Bristow State Park. In total, MFWWC and partners restored approximately 30 acres along the lower reaches of Lost Creek and Wagner Creek. Restoration work included removing riparian noxious weeds, planting riparian shrubs, trees and forbs, and installing riparian exclusion fencing.





Photo credit: OPRD

*One of many truck loads of Scotch broom and blackberry removed from Elijah Bristow State Park*



Photo credit: City of Eugene

*Thinning underway at Wild Iris Ridge*

### 3.3.11 Elijah Bristow State Park Turtle Habitat Restoration

Oregon Parks and Recreation Department staff coordinated restoration of nesting habitat for Western Pond Turtles on approximately 10 acres in Elijah Bristow State Park in 2016. The project was intended to expand suitable habitat for the park's established turtle population. Park staff, local students (through the [Middle Fork Willamette Watershed Council Watershed Rangers](#)), Americorps volunteers, and contractors removed invasive scotch broom and blackberry in known and potential nesting areas. In addition, turtle friendly fencing was installed to keep visitors on trails near turtle nesting areas, and a viewing platform that was affecting wildlife behavior was converted into an accessible viewing blind.

### 3.1.12 Wild Iris Ridge Habitat Enhancement

Over the last two field seasons, the [City of Eugene](#) Parks and Open Space division worked with the [Long Tom Watershed Council](#) through an OWEB Grant and with the BLM through Community Assistance funding to accomplish multiple goals including oak habitat restoration and fuels reduction. Over 60 acres were thinned to promote healthy oak woodland and savanna. In the restoration areas and in an experimental upland prairie site, City staff and volunteers have removed non-native vegetation and seeded and planted native grasses and forbs.

The City has led multiple field trips to the site including a tour during the annual meeting of the Oregon Recreation and Parks Association, a WREN Wetland Wander, and an R2R Field Operations Group (FOG) tour.

### 3.1.13 Fir Butte Enhancement and Restoration Project

Fir Butte is an important site for both the federally threatened Kincaid's lupine and the federally endangered Fender's Blue butterfly. The [U.S. Bureau of Land Management](#) continued to partner with several organizations to restore the prairie habitats and benefit both listed species. Institute for Applied Ecology (IAE), volunteers, interns, and youth members from Looking Glass and North West crew conducted specific hand-weeding of priority species, hand-weeding of nectar islands, planting of natives plugs, and mowing of tall oatgrass. Treatments including mowing, burning, and herbicide application were implemented on the plots in 2016.

A field trip that included representatives from the [U.S. Fish and Wildlife Service](#), BLM, [City of Eugene](#), IAE, [McKenzie River Trust](#), and [Lane County Parks](#) was held at Fir Butte in August to discuss the progress made at the site.



Photo credit: BLM

*Institute for Applied Ecology and youth crew at Fir Butte*



# 4

## Recreation, Education, and Events

### 4.1 Recreational Improvements

#### 4.1.1 Springfield Mill Race Path

Willamalane completed construction of this 3.1-mile hard-surfaced path along the recently restored Springfield Mill Race in 2016. The path connects downtown Springfield to the Middle Fork Path near Clearwater Park. Two trailheads were also constructed to support path access. The first trailhead is at 32nd Street and Jasper Road and the second, which was constructed in partnership with the City of Springfield is located at the former Booth Kelly site just south of downtown Springfield. The official grand opening for the trail was January 19th, 2017. Funding for the project came primarily from Willamalane Bond project dollars.



Photo credit: Willamalane

*Grand opening of the Springfield Mill Race Path*

#### 4.1.2 Wild Iris Ridge Trail

In coordination with the oak and prairie restoration on site at Wild Iris Ridge Park, the City of Eugene made significant progress towards the completion of 1.3 miles of new trail connecting Bailey Hill Road to Bailey View Drive. The work was completed through the coordination of volunteers from AmeriCorps, Northwest Youth Corps, the Obsidians and other local volunteer groups.

#### 4.1.3 Finn Rock Reach Boat Landing

With the purchase of Finn Rock Reach in March 2016 (see Section 2.1.3), McKenzie River Trust took ownership of a popular boat landing that had been owned by Rosboro. MRT plans to maintain the landing and continue providing access to the public. Site stabilization funds provided by EWEB were used to fund the site's maintenance and signs.



Photo credit: MRT

#### 4.2.4 Coyote Creek Nature Trail

Oregon Department of Fish & Wildlife staff completed major maintenance to re-establish over two miles of soft surface recreation trails within West and East Coyote Units at Fern Ridge Wildlife Area. Fallen trees and understory vegetation were removed to re-establish the long-established trail system. The trails allow visitors to experience wet prairie, riparian forest, wetland, and agricultural habitat types while exercising, birding, or just enjoying nature. Trail maps, benches, and interpretation markers are under development. Seasonal access restrictions apply.



Photo credit: Willamalane

*Newly constructed Mill Race Path*



Photo credit: Jeff Krueger

*Newly constructed Wild Iris Ridge Trail*



Photo credit: ODFW

*Upgraded Coyote Creek Nature Trail*



Photo credit: Friends

*Newly repaired Trail 4 at Buford Recreation Area*

#### 4.1.5 Howard Buford Recreation Area Trail 4 Repair Project

The 'Trail 4 Repair Project' improved a 5,900-linear foot segment of trail 4 between trails 14 and 46 in proximity to the northern boundary of the Howard Buford Recreation Area. Friends of Buford Park & Mount Pisgah volunteers worked with Lane County Road Division staff to grade the trail bed to improve storm water management and create a durable, six foot-wide all season trail surface to support equestrians, hikers, as well as access for emergency vehicles. Site work began in April, and construction concluded in August. The project was funded by a private donor.

## 4.2 Celebrations and Events

### 4.2.1 Living Rivers Celebration

McKenzie River Trust held its fourth consecutive Living River Celebration at Green Island in June where over 1,000 people enjoyed a warm early-summer day. Visitors could go on guided hikes, climb trees, float on kayaks, listen to music, or quietly explore nature's beauty at their leisure. Numerous partners had educational booths including Oregon Department of Fish and Wildlife, the Middle Fork Willamette Watershed Council, the Coast Fork Willamette Watershed Council, and the McKenzie Watershed Council just to name a few. This free event was made possible by a multitude of sponsors and volunteers.



Photo credit: Jeff Krueger

*Living Rivers Celebration*



Photo credit: MFWWC

*Great Backyard Bird Count: Birds of the Middle Fork at Elijah Bristow State Park*

## 4.3 Education

### 4.3.1 Discover Your Watershed and Middle Fork Science Pubs

The Middle Fork Willamette Watershed Council hosts educational and recreational events in collaboration with a variety of partners throughout the year to help residents and visitors of the watershed learn about and explore this beautiful place. Science Pubs are held at venues in Springfield, Pleasant Hill, Lowell, and Oakridge, and Discover Your Watershed Events are offered throughout the Middle Fork basin. In 2016, the MFWWC hosted the following events:

- UPRIVER: A Film for the Willamette
- Past, Present, and Future Operations at Fall Creek Dam to Support Wild Chinook Salmon
- 20 Years of Turtles on the Middle Fork: A Natural History & Conservation of a Native Turtle
- Batty for Bats
- Great Backyard Bird Count: Birds of the Middle Fork
- Tire Mountain Wildflower Tour
- Great Willamette Clean Up
- Mushrooms of the Middle Fork
- Forest Management Tour: Private Lands in Lost Creek Basin





Photo credit: MFWWC

*Watershed Rangers field trip at Buckhead Creek*

### 4.3.2 Watershed Rangers

The Watershed Rangers youth education program delivered a place-based watershed science education program in local elementary schools, strengthening students' connection to the natural world within the Middle Fork Willamette watershed. Watershed Rangers provided both physical access and meaningful engagement for participants through a comprehensive partnership with land managers, scientists, and professional educators, while meeting teachers' expectations to fulfill both CORE and Next Generation Science standards for each participating grade level. Students gained a sense of environmental ethics and civic pride while participating in community service learning projects incorporating restoration through cultivation of native species, habitat improvement, and invasive species removal. These projects also benefitted agency project partners by contributing volunteer labor and in-kind resources, such as use of equipment and plants.

Rivers to Ridges partners participating in the delivery of Watershed Rangers include [Middle Fork Willamette Watershed Council](#), [Oregon Parks and Recreation Department](#), [U.S Bureau of Land Management](#), [U.S. Army Corps of Engineers](#), and [Friends of Buford Park & Mount Pisgah](#). 2016 Watershed Rangers program activities included:

- 56 classroom lessons
- 53 field trips (70% with a service learning component)
- 583 students reached



Photo credit: WREN

*WREN dragonfly class with volunteer Cary Kerst*

### 4.3.3 Willamette Resources and Educational Network Education Program

[Willamette Resources and Education Network \(WREN\)](#) was formed in 1999 by the West Eugene Wetlands Partnership to fulfill the Partnership's environmental education goals. WREN's mission is to practice and promote land stewardship through education, science, and partnerships. WREN's classroom and field trip programs are unique in the area, because they meet both national and state common core and next generation science education standards, and are aligned with STEM (science, technology, engineering and math) education goals. WREN has served more than 59,000 people since its inception through field trips and classroom presentations for K-12 students at schools throughout Lane County, Wetland Wanders, Family Exploration Days, local festivals, and many other community events. During 2016, approximately 1,400 students and 735 adults participated in WREN's formal education programs along with thousands more who interacted with WREN at other events.



Photo credit: WREN

*Dragonfly student*

### 4.3.4 Coast Fork Science Pub

The [Coast Fork Willamette Watershed Council](#) hosts a free monthly public meeting series called the *Coast Fork Science Pub* on the fourth Tuesday of each month at the *Axe & Fiddle* in Cottage Grove. In 2016, a total of 876 people (approximately 80 per month) attended these fun informational events. Topics ranged from wildlife (Western pond turtles and wolves) to native species (pollinators and truffles) to emergency preparedness (earthquakes and fires), and much more. The event begins with informal socializing, trivia, prizes and updates about the watershed.

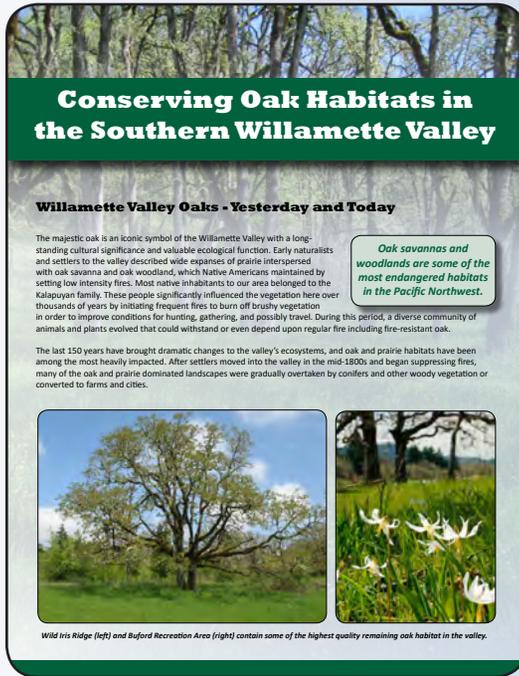
### 4.3.5 National Public Lands Day at Stewart-Bertelsen Complex

Community volunteers spent a day outdoors giving back to a unique natural area within the west Eugene wetlands project. The [U.S. Bureau of Land Management](#), [City of Eugene](#), and [Willamette Resources and Education Network](#) partnered to host this family-friendly event in September. Activities included invasive species control, trash collection, blue bird nest box installation, and planting native seed for the great copper butterfly.



Photo credit: CFWWC

*Science Pub*



## Conserving Oak Habitats in the Southern Willamette Valley

### Willamette Valley Oaks - Yesterday and Today

The majestic oak is an iconic symbol of the Willamette Valley with a long-standing cultural significance and valuable ecological function. Early naturalists and settlers to the valley described wide expanses of prairie interspersed with oak savanna and oak woodland, which Native Americans maintained by setting low intensity fires. Most native inhabitants to our area belonged to the Kalapuyan family. These people significantly influenced the vegetation here over thousands of years by initiating frequent fires to burn off brushy vegetation in order to improve conditions for hunting, gathering, and possibly travel. During this period, a diverse community of animals and plants evolved that could withstand or even depend upon regular fire including fire-resistant oak.

Oak savannas and woodlands are some of the most endangered habitats in the Pacific Northwest.

The last 150 years have brought dramatic changes to the valley's ecosystems, and oak and prairie habitats have been among the most heavily impacted. After settlers moved into the valley in the mid-1800s and began suppressing fires, many of the oak and prairie dominated landscapes were gradually overtaken by conifers and other woody vegetation or converted to farms and cities.

Wild Iris Ridge (left) and Buford Recreation Area (right) contain some of the highest quality remaining oak habitat in the valley.



Howard Buford Recreation Area

## 5.1 Oak Habitat Brochure

In recent years, R2R Partners have identified a need for a public and landowner outreach tool that could concisely describe why oak habitats are valuable, what can be done to preserve and restore these areas, and how restoration is accomplished. In 2016, an illustrative 4-page flyer was produced and is available to the public through the Rivers to Ridges web site. The [City of Eugene](#) funded the development of the flyer.

## 5.2 OPRD Natural Resource Assessment and Strategic Action Plan

The [Oregon Parks and Recreation Department](#) (OPRD) embarked on development of a Strategic Action Plan in 2016 to guide stewardship and restoration of their natural area sites within the Willamette River Basin. OPRD manages a total of 131 sites on more than 23,000 acres including several in proximity to the Rivers to Ridges planning area. The planning effort includes a Function & Value Assessment, which will allow OPRD to determine what habitat, water quality, and recreational functions each site provides and will score each site on a number of criteria. The results of the assessment will inform the Plan and help OPRD to prioritize future site management actions.

## 5.3 Prospect-R

Prospect-R is an online decision support tool that helps users determine the feasibility of floodplain restoration efforts. Prospect-R was developed specifically for the restoration of aggregate pit mines on the Willamette River, but is ultimately intended to be used more broadly. Users of Prospect-R learn how to navigate the socioeconomic, ecological, and logistical components of restoration that should be evaluated before the project begins. The tool helps users organize their available data, broadly identifies the likelihood of project success, and pinpoints potential challenges that a project may encounter. Prospect-R is intended to be used by land managers, conservation groups, and agencies. The tool is user-friendly and does not require specialized experience in hydrology, ecology, or land management. Additional information on the Prospect-R tool can be found at <http://prospectr.nature.org>.

## 5.4 Howard Buford Recreation Area Habitat Management Plan

[Lane County Parks](#) and partners have made substantial progress toward completing the Habitat Management Plan for Howard Buford Recreation Area. The draft plan was released for public comment in May 2016, and a number of outreach activities were undertaken to solicit feedback. Public comment and other new information is now being incorporated in to a revised plan, which is scheduled to be finalized in spring 2017.

## 5.5 Eugene Parks and Recreation System Plan

The [City of Eugene](#) is in the process of updating its Parks and Recreation System Plan, completing the public outreach and needs assessment phase in January 2016. During that time, over 7,000 community members provided input on their desired future park and recreation system through a series of workshops, events, and online surveys. The Trust for Public Land provided technical support for this phase of the planning process by developing a series of equity maps that helped identify where parks or recreational facilities were most needed. Once completed in mid-2017, the System Plan will identify and prioritize future land acquisitions, new and improved park and recreational facilities, new recreational trails, and habitat restoration projects. The first iteration of the proposed Projects and Priorities List was released in November and is currently being reviewed by elected officials and the public.

## 5.6 Lane County Parks Master Plan Update

[Lane County Parks](#) also continues to develop its 20-year Parks Master Plan Update. A task force of citizens has been developed to help guide the refinement of the draft document moving forward. The anticipated completion date for the plan is summer 2017.

## 2016 FOG Field Trips and Events:

- Field tour of Lower Long Tom Conservation Area led by Katie MacKendrick from the Long Tom Watershed Council. The tour looking at a range of habitat management and restoration project areas and discussion with property owner Art Johnson.
- Field tour of the Coburg Ridge property led by Matt Gibbons of The Nature Conservancy. The FOG group toured the recently completed 250-acre oak restoration project area and a unit logged in summer 2015.
- Field tour of U.S. Army Corps of Engineers sites near Fern Ridge Reservoir led by Wes Messinger. The tour looked at Kidcaid's lupine/Fender's Blue Butterfly upland prairie restoration sites.
- Field tour of Wild Iris Ridge led by Emily Steel of the City of Eugene. Participants looked at several upland prairie restoration plots and walked a segment of the new trail alignment.
- Float trip on the McKenzie River with a tour of McKenzie River Trust's Finn Rock Reach property. The float trip concluded with an exciting run through Martins Rapids.
- 2016 Habitat Management and Restoration in the Southern Willamette Valley meeting. This fourth annual forum was hosted by Greenbelt Land Trust in Corvallis and organized by Ed Alverson. The 2016 event was attended by nearly 100 participants from across the Willamette Valley.
- Field tour of the Willamalane Thurston Hills Natural Area led by Eric Wold and Fraser MacDonald. This included a walking tour of future trail alignments and vista points. Heavy rain made this event memorable.



Photo credit: Jeff Krueger

*FOG in the fog in the Thurston Hills*

# 6

## Administrative Structure

### 6.1 Summary of Activities

Beginning in 2010, the Rivers to Ridges Partnership took over the administrative function that had been in place under the West Eugene Wetlands (WEW) Partnership since 1992. The WEW partnership had originally formed to oversee the implementation of the West Eugene Wetlands Plan, but over time had expanded its focus to include a much broader geographic area representing a range of additional habitat types. The formation of the R2R partnership, with the addition of several new partners, was an acknowledgement of this expanded reach. It is important to note that the R2R partnership has no outside funding sources for the administration of the partnership and currently relies on voluntary annual partner dues, plus a significant amount staff time contributed by partners. The basic administrative structure used by the R2R partnership, is described below.

#### 6.1.1 Rivers to Ridges Executive Team (R2R XT)

The function of the Rivers to Ridges Executive Team (R2R XT) is to guide management of the regional open space system in a cooperative manner. The team includes at least one executive representative from each members of the R2R Partnership and typically meets once annually. The 2016 meeting was held on December 2 at the Eugene Public Library and was facilitated by Eric Wold from [Willamalane](#). The meeting included an overview of land acquisitions, partner accomplishments from 2016, highlights of upcoming activities planned for 2017, an overview of the ecological burn program, and a preview of an online mapping tool to display partner lands open to the public. Also at this meeting, the XT presented three awards to R2R contributors (see Section 1.4).

#### 6.1.2 Rivers to Ridges Implementation Team (IT!)

The Rivers to Ridges Implementation Team (IT!) includes manager level representatives from each of the partner organizations. The IT! provides broad oversight for the implementation of the objectives of the R2R vision. The IT! met approximately a half dozen times in 2016 and meetings continue to be marked by good attendance from the R2R partners and productive discussions.

#### 6.1.3 Rivers to Ridges Field Operations Group (FOG)

The Field Operations Group (FOG) is a multi-jurisdictional team that meets several times annually to coordinate on-the-ground activities and share technical information and experience. The mission of FOG, as defined by the IT!, is to “Effectively coordinate information sharing and provide professional development opportunities through educational presentations and project field tours.” Much of the coordination role of FOG has been delegated to subcommittees with general meetings dedicated to guest lectures, trainings, or site visits. Katie MacKendrick from the [Long Tom Watershed Council](#) scheduled and coordinated the 2016 FOG meetings and tours (see list of FOG tours to the right).

Additionally, three subcommittees meet as needed to help coordinate specific aspects of FOG. These include:

- SPROUTS (Seeds, Plugs, Rhizomes, or Underground Tubers): This committee meets on an ad-hoc basis to develop and coordinate the R2R Partnership's native plant materials program.
- Prescribed Fire: This committee meets on an ad-hoc basis to coordinate and plan the annual controlled ecological burn program.
- Acquisition: This committee meets periodically to coordinate on upcoming acquisition efforts and priorities.
- Oak Folk: This committee meets regularly to discuss and coordinate on technical aspects of oak and prairie restoration.