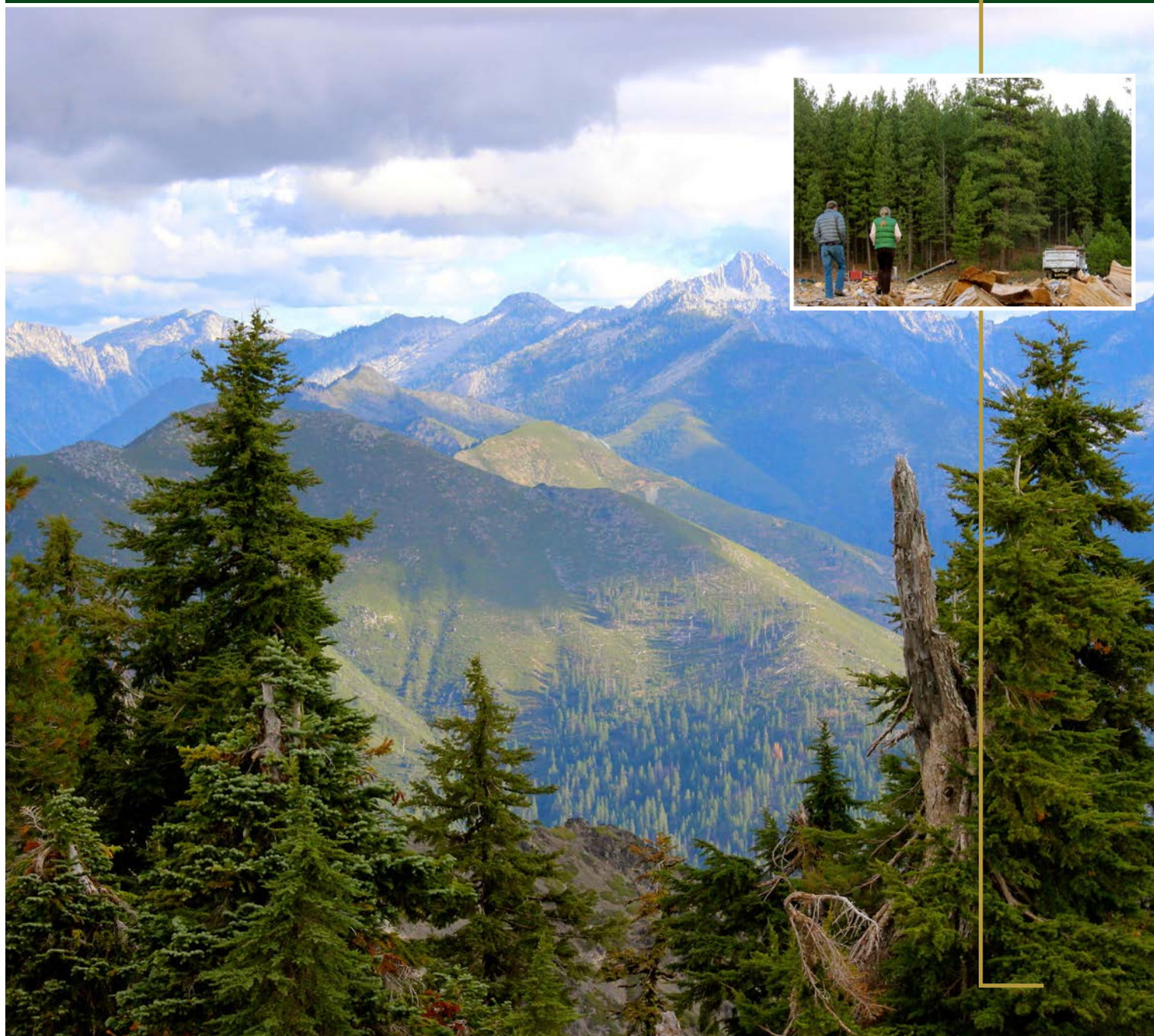


2014

# Dry Forest Zone Maps



## **Acknowledgments:**

This project is made possible through financial support from the US Endowment for Forestry and Communities and USDA Rural Development.

## **About the Dry Forest Zone:**

The Dry Forest Zone (DFZ) is a five-year project to address common natural resource-based economic development challenges through increased networking and capacity building at a regional scale. Sustainable Northwest leads this project in partnership with Willowa Resources in northeastern Oregon, the Watershed Research and Training Center in northern California, and the Ecosystem Workforce Program at the University of Oregon. The central components of the DFZ strategy are: 1) To build strong local nonprofit organizations and collaborative processes to achieve forest and economic resilience, 2) Create multiple value streams from land management and incentives for forest restoration and stewardship, 3) Develop integrated biomass utilization and renewable energy; and 4) Create the policy conditions to support sustainable forest stewardship on public and private lands.

Maps and infographics by Autumn Ellison, Cody Evers, Greg Oldson, and Eric White, Ecosystem Workforce Program

Photos: Emily Jane Davis, Ecosystem Workforce Program

### **For additional information on the Dry Forest Zone project and its partners, contact:**

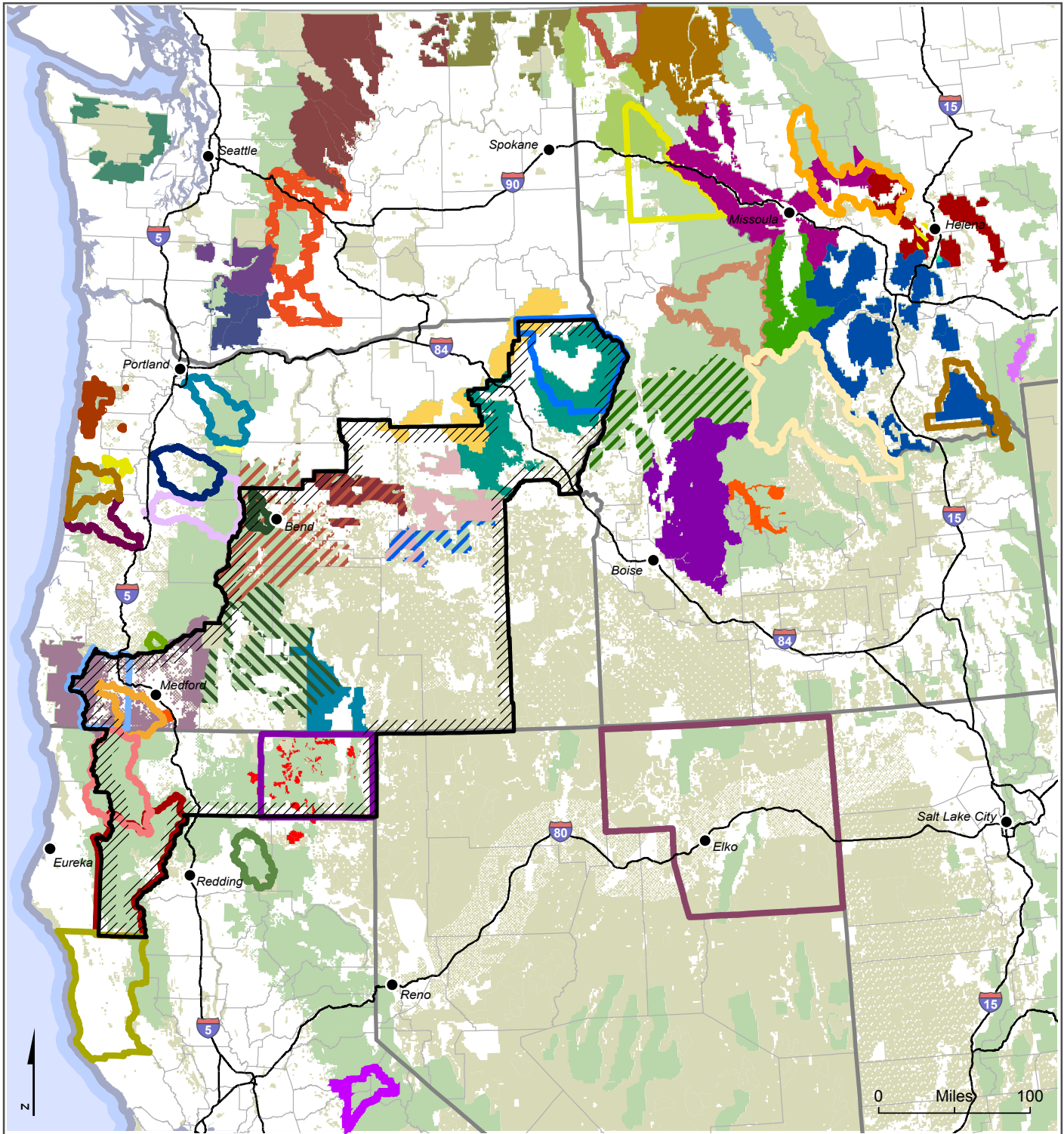
Sustainable Northwest  
813 SW Alder St, Suite 500  
Portland, OR, 97205-3113  
503-221-6911  
info@sustainablenorthwest.org  
www.dryforestzone.org

### **For more information about this report, contact:**

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ewp.uoregon.edu

# Forest collaborative groups

Northwestern United States




Data collected by EWP

- US Forest Service lands
- BLM and other federal lands



## Public lands collaboratives

## All lands collaboratives

- Washington
-  N. Central Wa. Forest Health Collaborative
  -  Northeast Washington Forestry Coalition
  -  Olympic Forest Coalition
  -  Pinchot Partners
  -  South Gifford Pinchot Collaborative Group




-  Tapash Sustainable Forest Collaborative





- Montana
-  Beaverhead-Deerlodge Working Group
  -  Bitterroot Restoration Committee
  -  Elkhorn Restoration Committee
  -  Gallatin Community Collaborative
  -  Kootenai Forest Stakeholders Coalition
  -  Lincoln Restoration Committee
  -  Lolo Restoration Committee
  -  Tenmile Watershed Collaborative
  -  Whitefish Forest Partnership


-  Gravelly Landscape Collaborative
-  Southwestern Crown Collaborative





- Oregon
-  Ashland Forest Resiliency Stewardship Project
  -  Black Hills Collaborative Project
  -  Blue Mountains Forest Partners
  -  Central OR Partnerships for Wildfire Risk Reduction
  -  Harney County Restoration Collaborative
  -  Lakeview Stewardship Group
  -  North Santiam Forest Collaborative
  -  Ochoco Forest Restoration Collaborative
  -  Southern OR Forest Restoration Collaborative
  -  Umatilla Forest Collaborative Group
  -  Wallowa-Whitman Forest Collaborative

-  Alsea Stewardship Group
-  Applegate Partnership
-  Clackamas Stewardship Partners
-  Deschutes Collaborative Forest Project
-  Hebo Stewardship Group
-  Josephine County Stewardship Group
-  Marys Peak Stewardship Group
-  McKenzie Collaborative Group
-  Siuslaw Stewardship Group
-  South Umpqua Rural Community Partnership
-  Sweet Home All Lands Collaborative
-  Wallowa County NRAC

- Idaho
-  Sawtooth Valley Wildland Fire Collaborative
  -  Panhandle Forest Collaborative
  -  Payette Forest Coalition

-  Lemhi County Forest Restoration Group
-  Kootenai Valley Resource Initiative
-  Clearwater Basin Collaborative
-  Shoshone County Forest Health Collaborative

- California
-  Modoc Sage-Steppe Collaborative

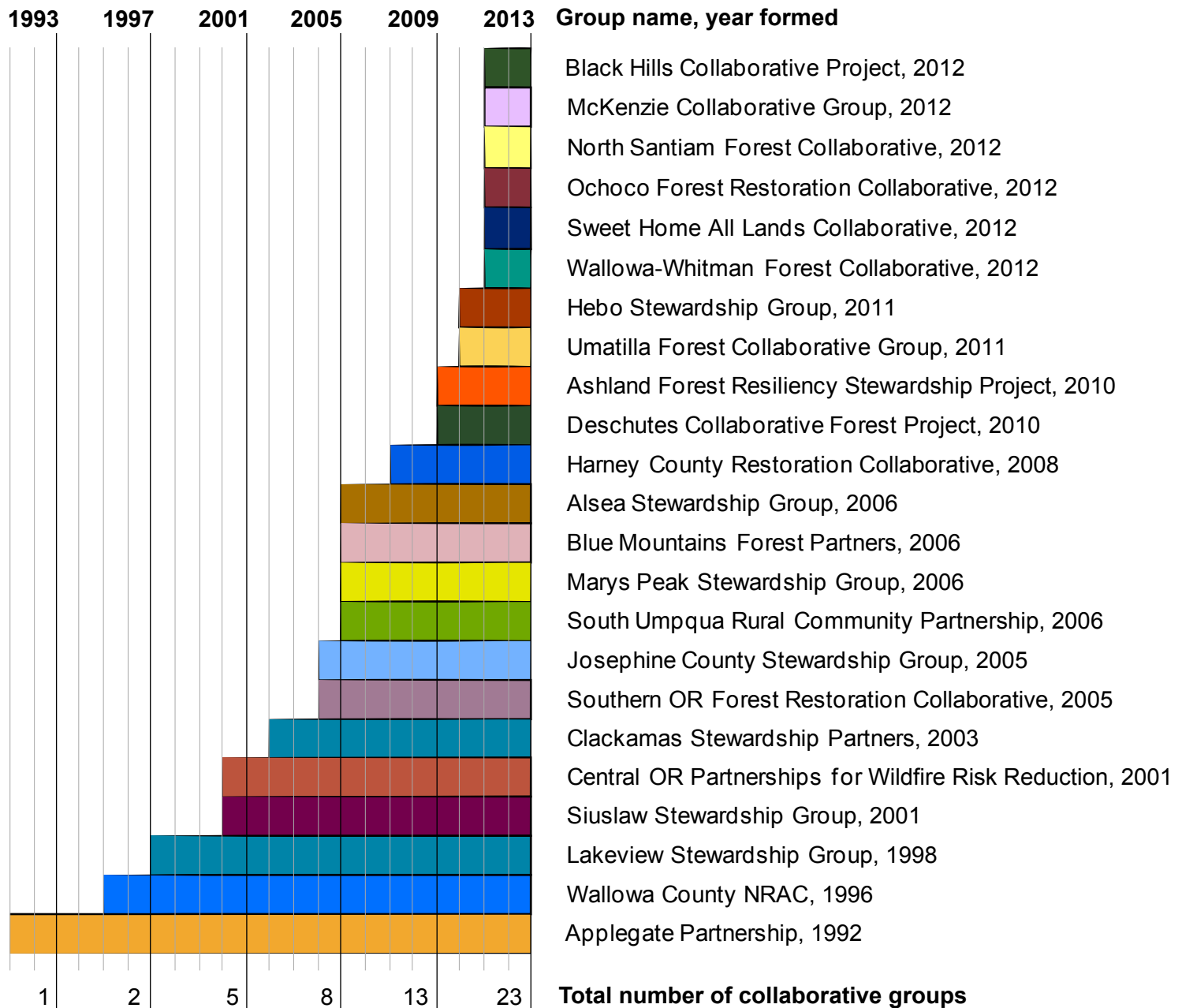
-  Burney-Hat Creek Community Forest and Watershed Group
-  Mendocino Futures
-  Modoc County NRAC
-  Trinity Collaborative
-  Western Klamath Uplands Prioritization Partnership
-  Amador-Calaveras Consensus Group

- Nevada

-  Eastern Nevada Landscape Coalition

# Timeline of active forest collaborative groups

Oregon



## FOREST COLLABORATIVE GROUPS

Collaborative groups build agreement by engaging diverse stakeholders in fostering natural resource management and economic development. There are at least 23 collaborative groups in Oregon, 10 of which have emerged since the start of the DFZ project in 2009.

# Community-based forestry organizations

Northwestern United States



Data collected by EWP

- Community-based organizations
- Major cities

- US Forest Service lands
- BLM and other federal lands

## Washington

1. Northwest Natural Resource Group
2. Chumstick Wildfire Stewardship Coalition
3. Initiative for Rural Innovation and Stewardship
4. Mt. Adams Resource Stewards

## Oregon

5. Willowa Resources
6. Blue Mountains Forest Partners\*
7. Siuslaw Stewardship Group\*
8. Central Oregon Intergovernmental Council
9. High Desert Partnership
10. Applegate Partnership
11. Lomakatsi Restoration Project
12. Southern Oregon Forest Restoration Collaborative\*
13. Lake County Resources Initiative

## California

14. Northern California Resource Center
15. Mid-Klamath Watershed Council
16. Salmon River Restoration Council
17. Redwood Coast Community Action Agency
18. Watershed Research and Training Center
19. Mattole Restoration Council
20. Redwood Forest Foundation
21. Camptonville Community Partnership

## Montana

22. Flathead Economic Policy Center
23. Northwest Connections  
Swan Valley Ecosystem Center
24. Blackfoot Challenge
25. Clearwater Resource Council
26. Big Hole Watershed Committee
27. Centennial Valley Association

## Idaho

28. Priest Community Forest Connection
29. Framing Our Community, Inc.
30. Salmon Valley Stewardship

### Defining CBOs

Community-based organizations are typically rural, small organizations focused on improving ecological and socioeconomic conditions in a specific local area.

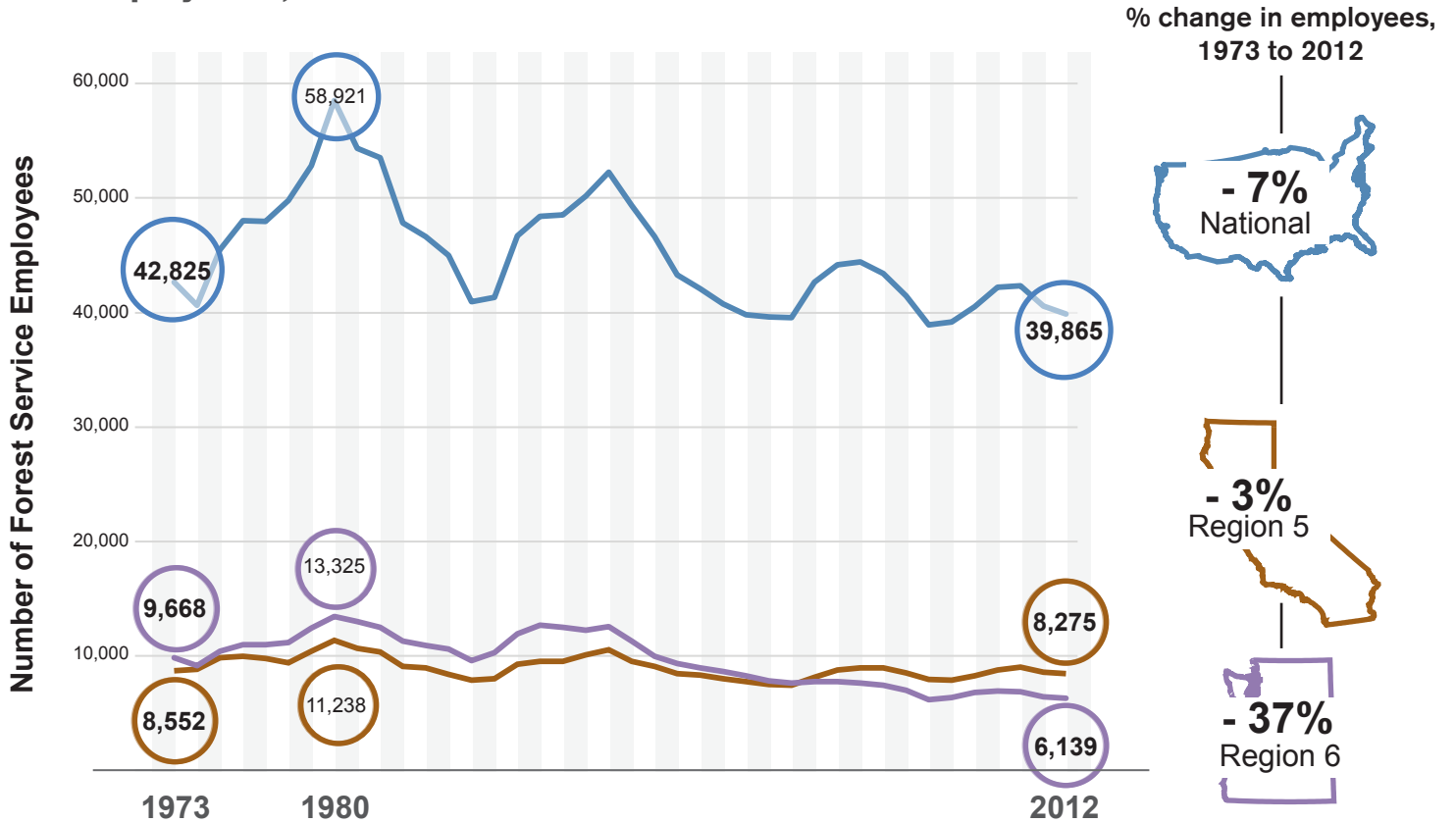
We defined them here as organizations that:

- 1) Were not an established, widespread type of entity such as an Oregon watershed council,
- 2) Had both economic development and land stewardship goals, and
- 3) Had 501(c)3 status.

\*A collaborative group that has acquired 501(c)3 status and meets our current definition of CBOs.

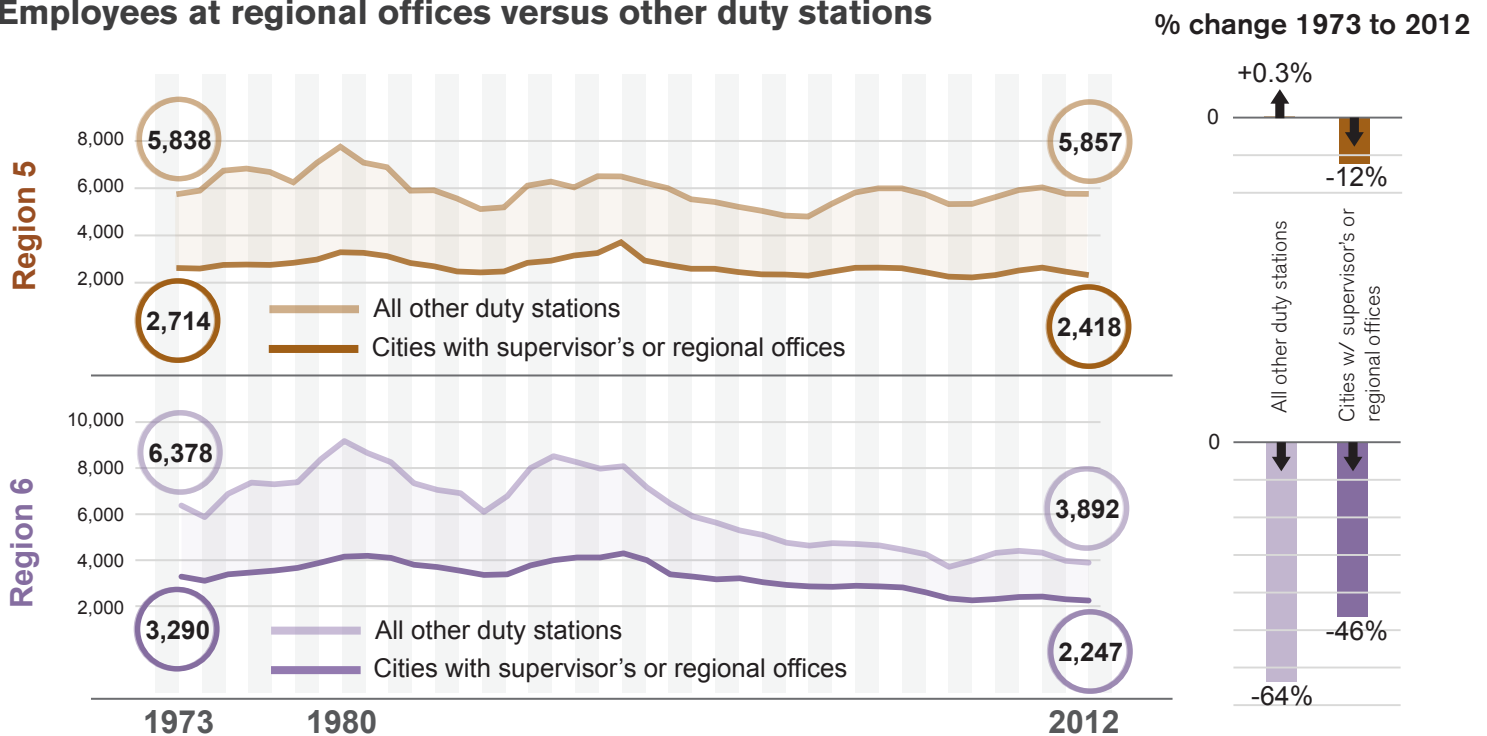
# US Forest Service personnel

## Total employment, 1973-2012



Data source: United States Office of Personnel Management

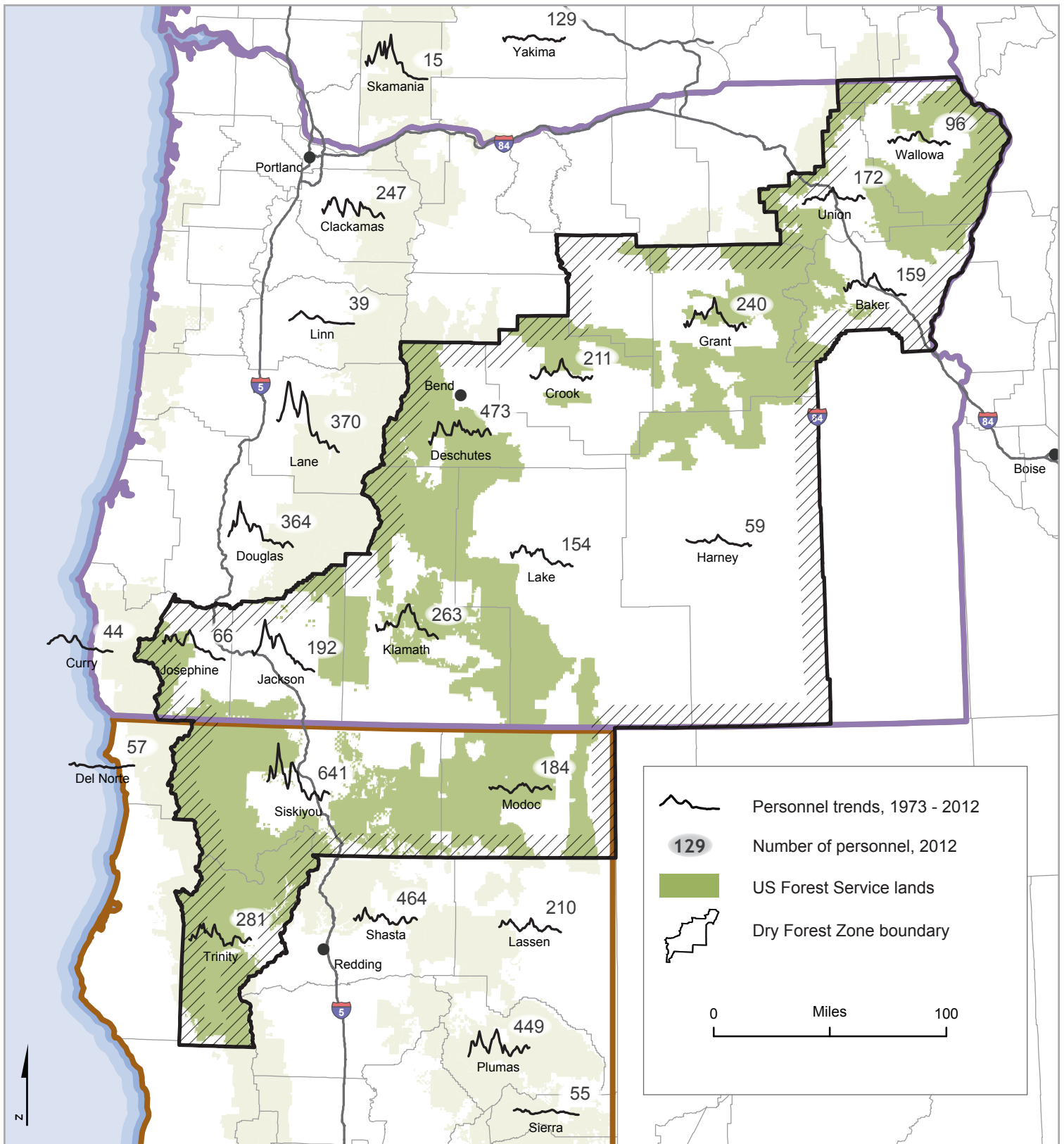
## Employees at regional offices versus other duty stations



Data source: United States Office of Personnel Management



# Forest Service personnel trends by county

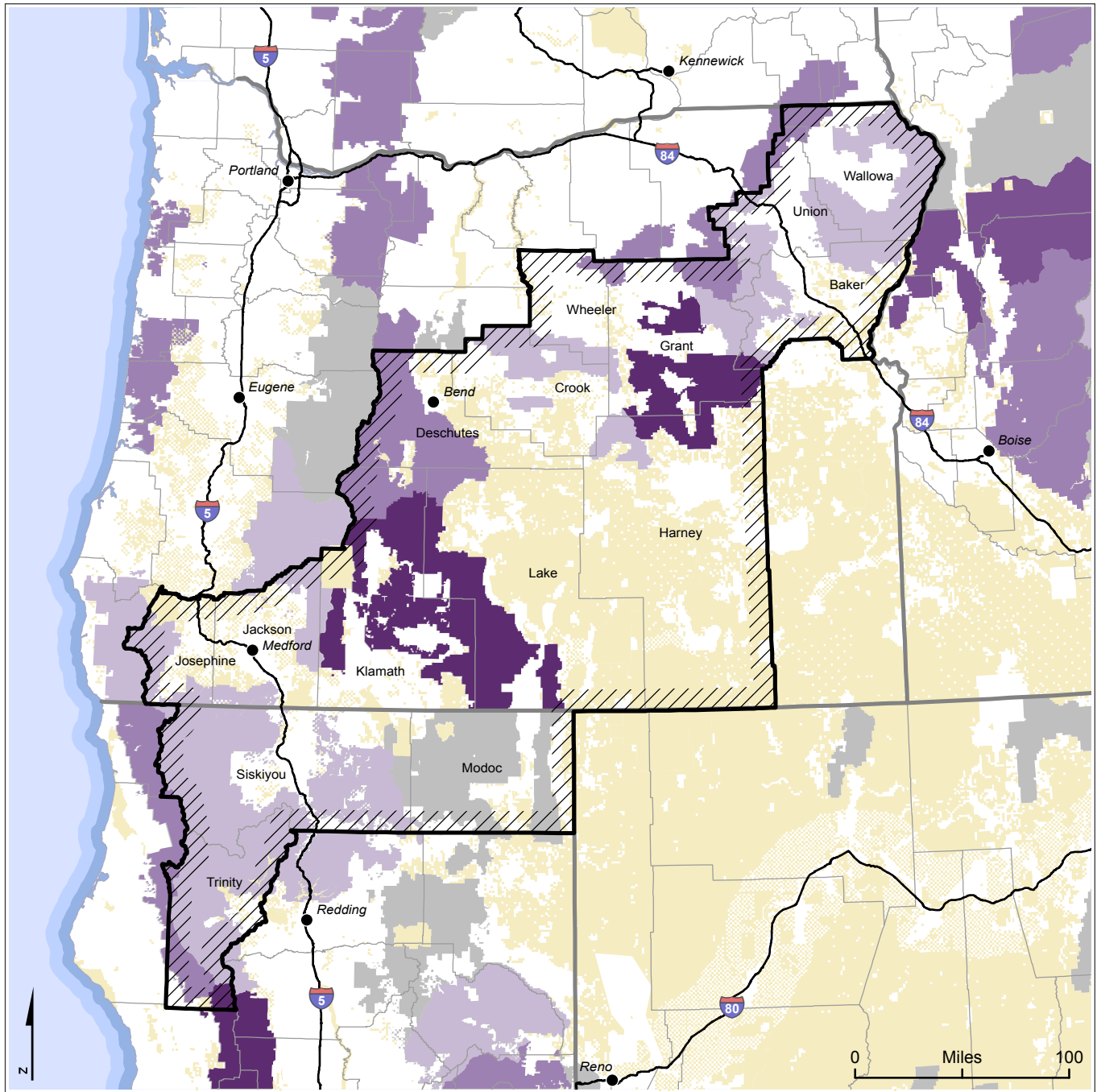


\* County trends are represented for counties with greater than 350,000 acres of National Forest land.

Data source: United States Office of Personnel Management; USDA Forest Service, Forest Inventory and Analysis

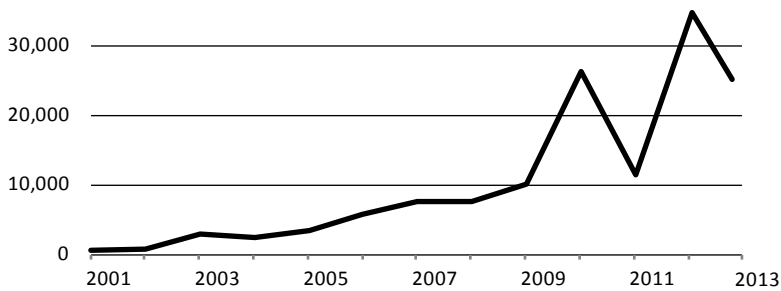
# Acres treated with stewardship authorities, US Forest Service, FY2013

## Dry Forest Zone

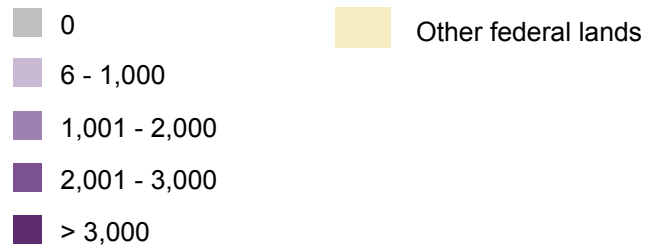


Data source: US Forest Service

### ANNUAL NATIONAL FOREST ACRES TREATED WITH STEWARDSHIP AUTHORITIES IN THE DFZ, FY1999-2013



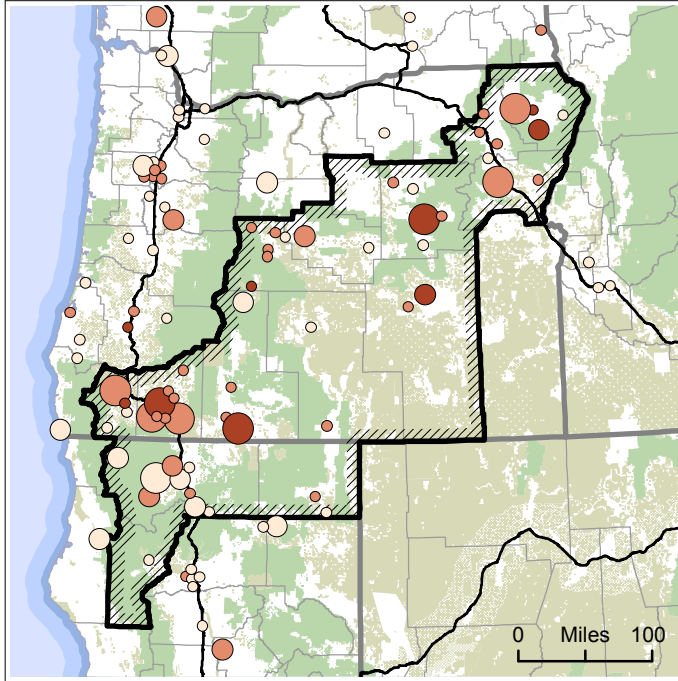
### Number of acres treated



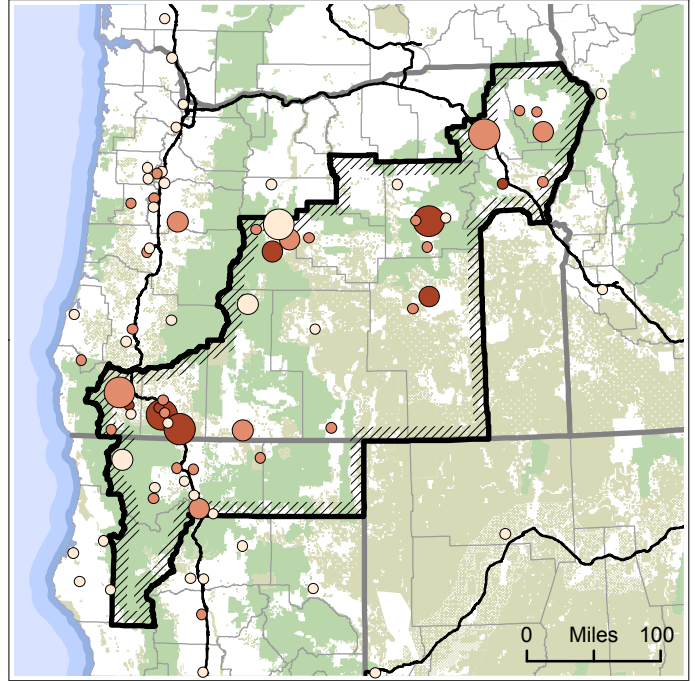
# US Forest Service contracts awarded for restoration-related work

## Dry Forest Zone

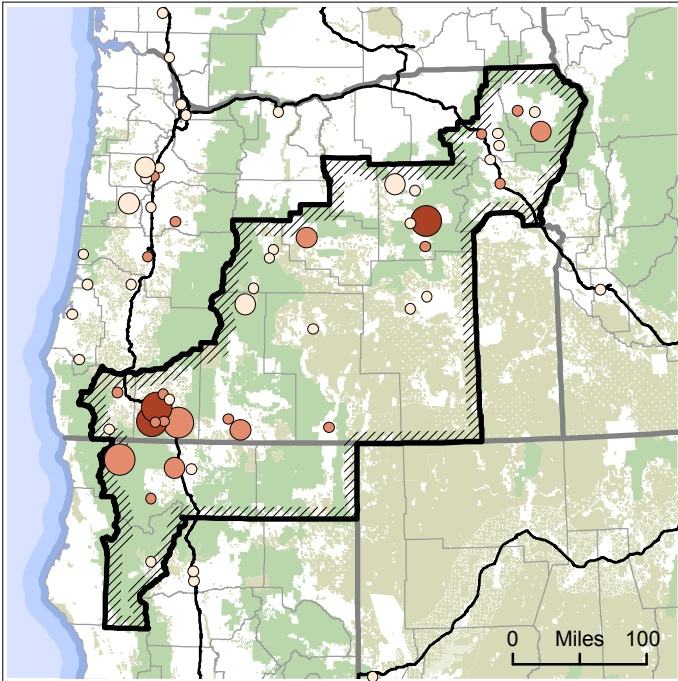
Fiscal year 2010 (\$55.9M procured, 70% captured in DFZ)



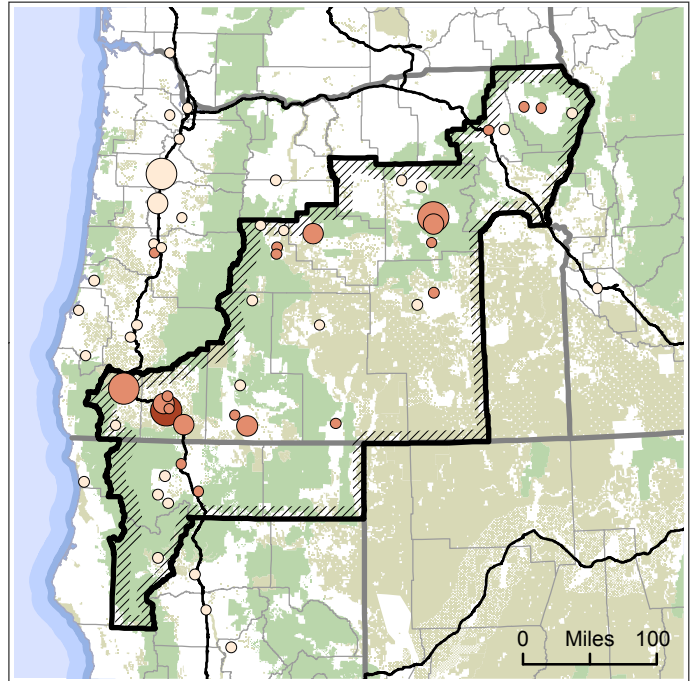
Fiscal year 2011 (\$33.2M procured, 83% captured in DFZ)



Fiscal year 2012 (\$20.1M procured, 75% captured in DFZ)



Fiscal year 2013 (\$21.2M procured, 71% captured in DFZ)



Data Source: USA Spending

### FOREST SERVICE CONTRACTS AWARDED

The US Forest Service procured \$130 million of services between fiscal years 2010-2013 to perform forest and watershed restoration work on national forests within the DFZ. ARRA significantly increased the amount invested in contracted work during 2009-2010.

#### Total value

- < \$500,000
- \$500,001 - \$1,000,000
- > \$1,000,000

#### Total vendors

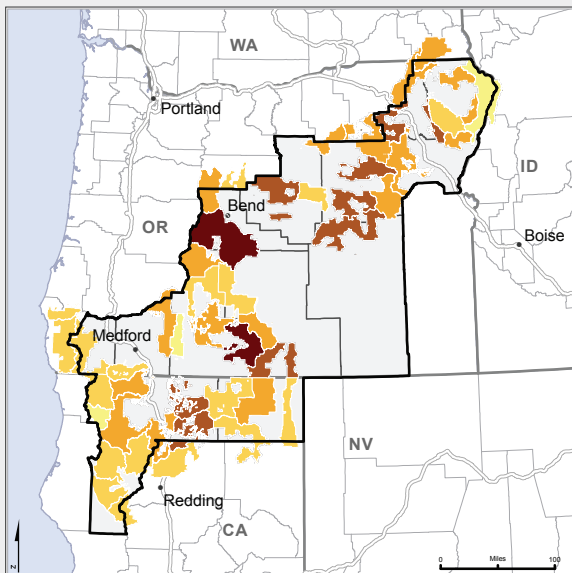
- 1
- 2 - 10
- > 10

- US Forest Service lands
- Other federal lands

# What treatments are being used and who is doing the work?

The US Forest Service manages 16.8 million acres of national forest land in the Dry Forest Zone. It conducts a range of activities or "treatments" including timber harvest and hazardous fuels reduction. These activities may be implemented by the agency itself, a contracted business, or other organizations. Some activities can produce revenue, while others can incur costs. From 2009-2013, a total of nearly 700,000 acres were treated.

**Total number of acres treated by ranger district, 2009 - 2013**



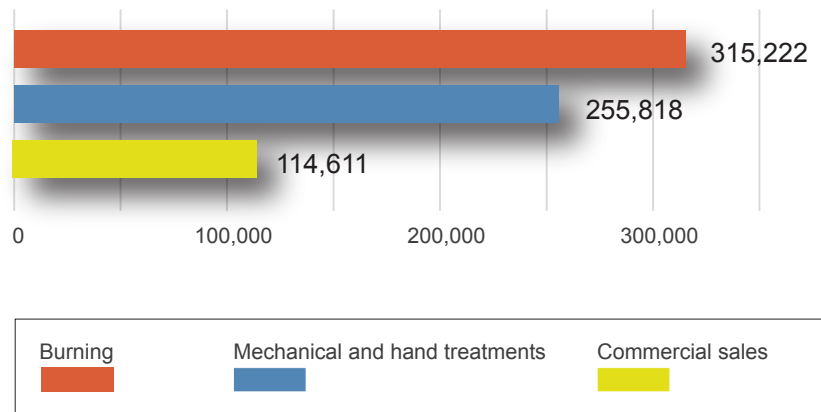
- Less than 1,000 acres
- 1,001 - 10,000 acres
- 10,001 - 25,000 acres
- 25,001 - 50,000 acres
- Greater than 50,000 acres

Data source: Forest Service Activity Tracking System (FACTS)

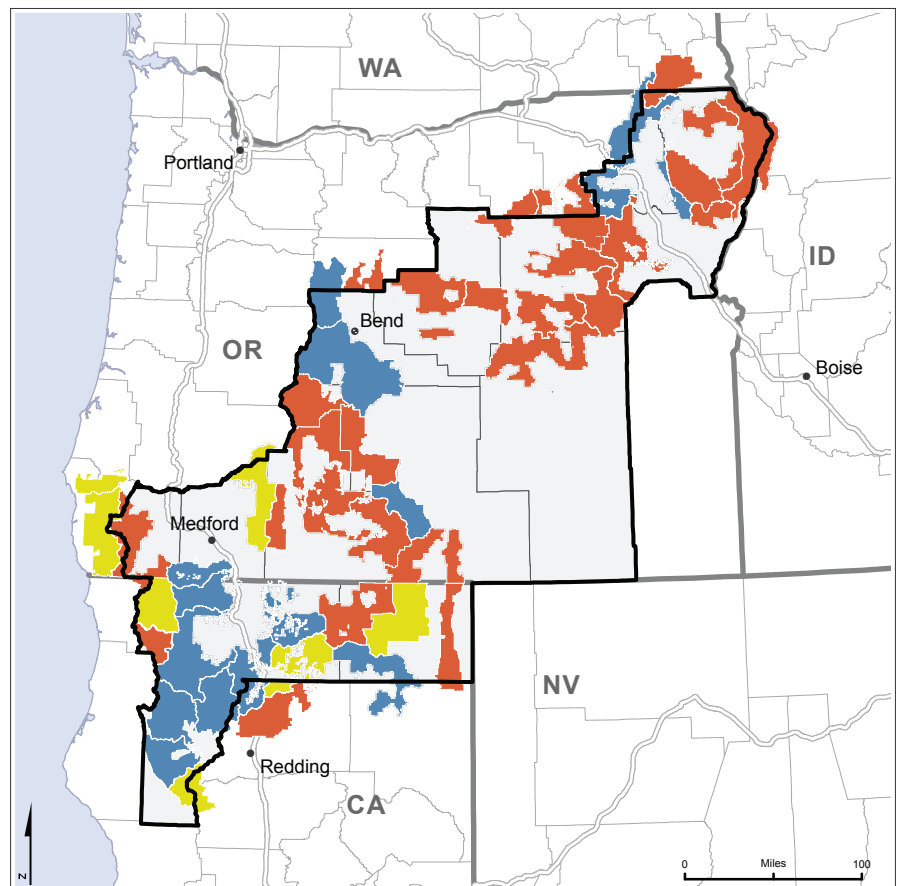
## TREATMENT

The majority of these acres (46 %) were treated using prescribed burning to reduce fuels. Only 17 % were commercial sales that generated revenue, but on several ranger districts in southern Oregon and northern California, this was the primary means of treating acres.

**Total number of acres by treatment method**



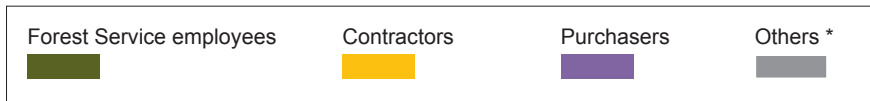
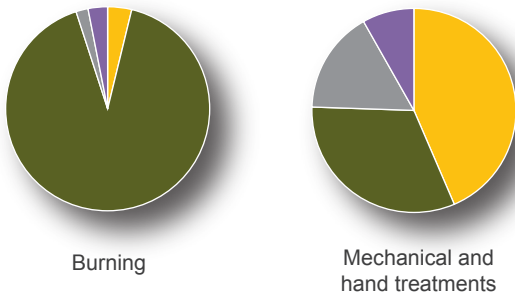
**The most commonly applied treatment by ranger district**



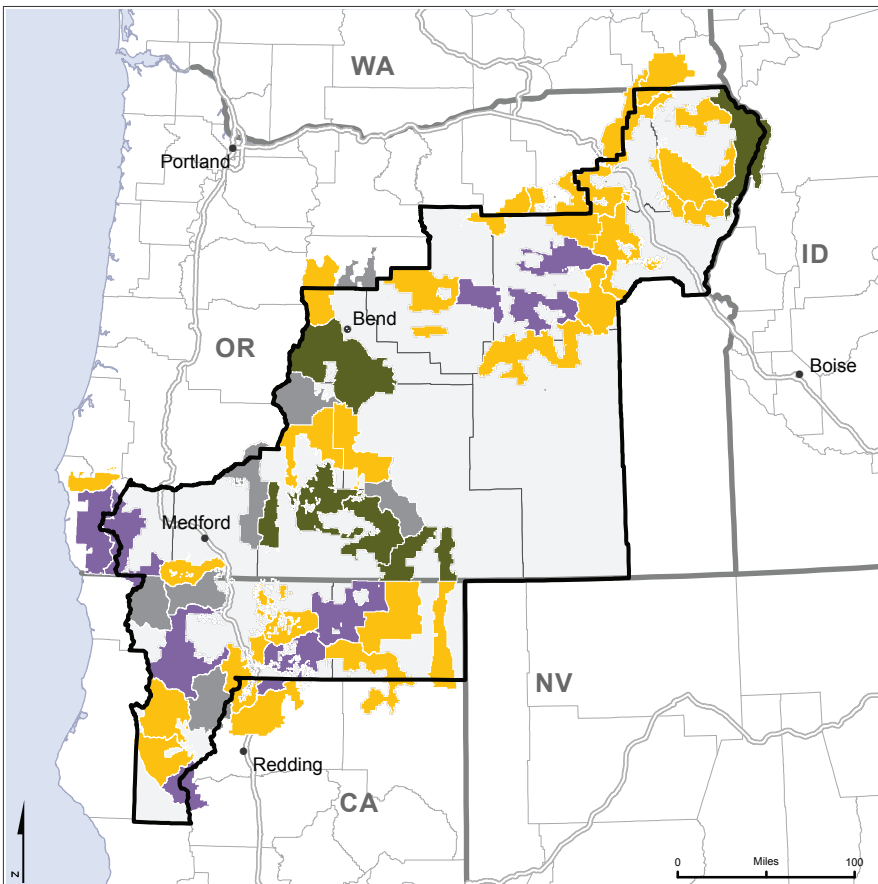
# WORKFORCE

Workforces including Forest Service employees, private sector contractors, timber purchasers, and others perform treatments. Forest Service employees implemented the most prescribed burning. Contractors performed the most mechanical and hand treatments. A majority of ranger districts relied on non-Forest Service groups to implement mechanical and hand treatments.

## Division of labor for the two primary treatment methods

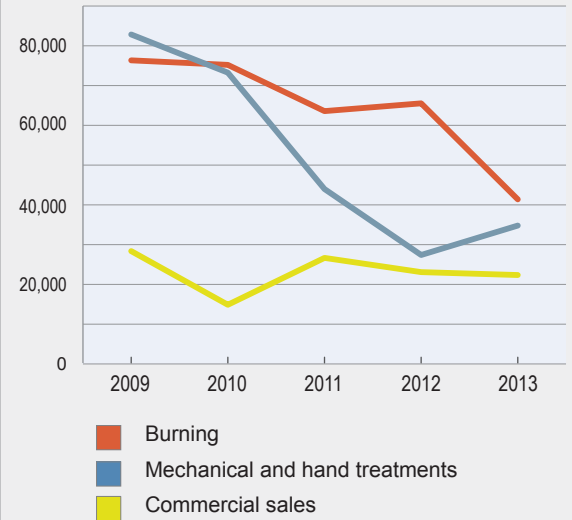


## Implementation of mechanical and hand treatments by workforce type

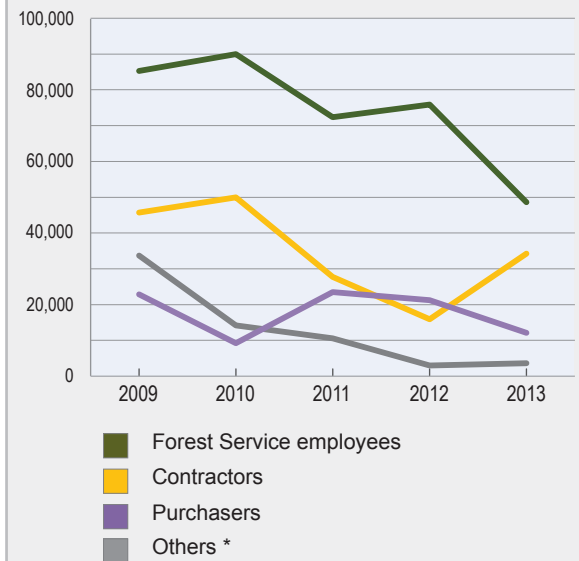


## Treatment trends

Total acres treated by method, 2009 - 2013



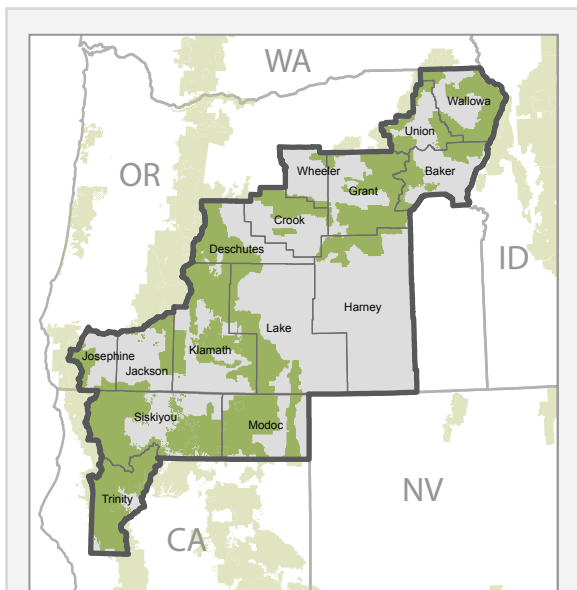
Total acres treated by workforce type, 2009 - 2013



\* Others includes combinations of workforce groups as well as stewardship work.

# Who gets the wood? US Forest Service timber sales and purchases in the Dry Forest Zone, 2009-2012

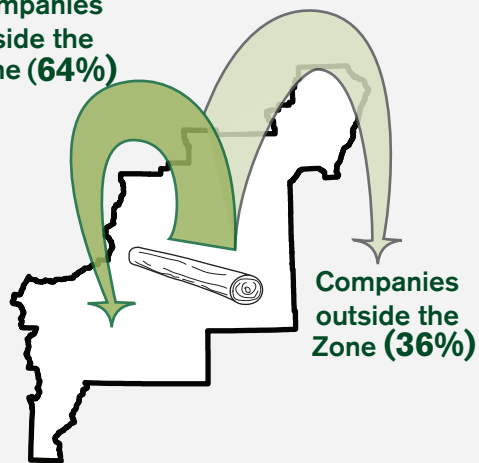
## The timber sales



The Dry Forest Zone has 16.8 million acres of national forests, which produced a total of \$53 million in timber sales from 2009-2012. Who got this wood?

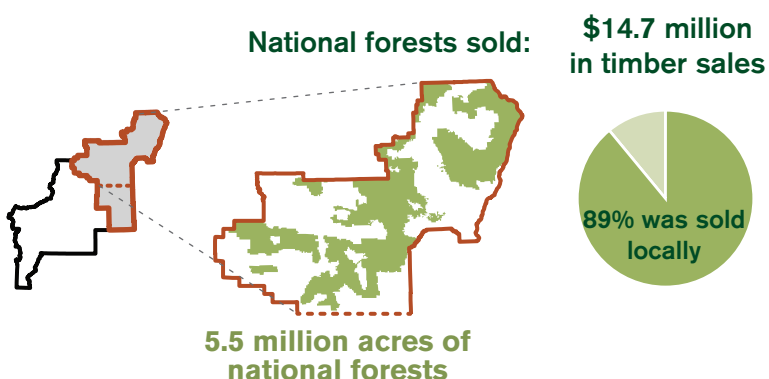
### Forest Service timber from the Dry Forest Zone was sold to:

Companies inside the Zone (64%)

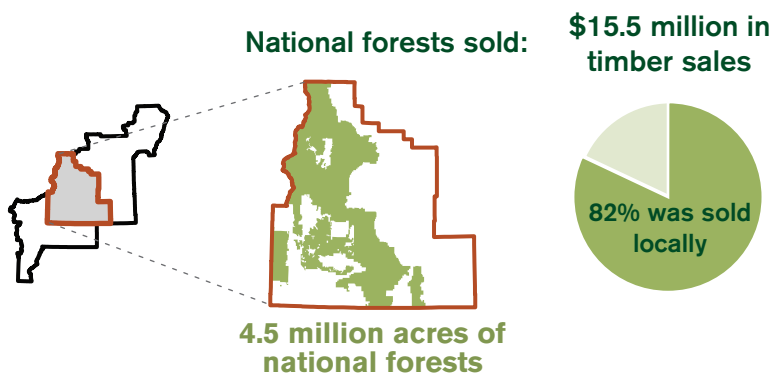


64% (\$34 million) of these timber sales went to companies in the Zone. Amount of timber sold locally (within specific regions) differed greatly.

### Blue Mountains



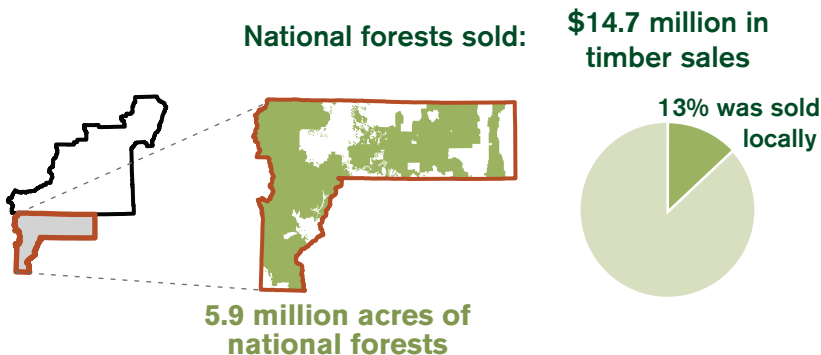
### Central Oregon



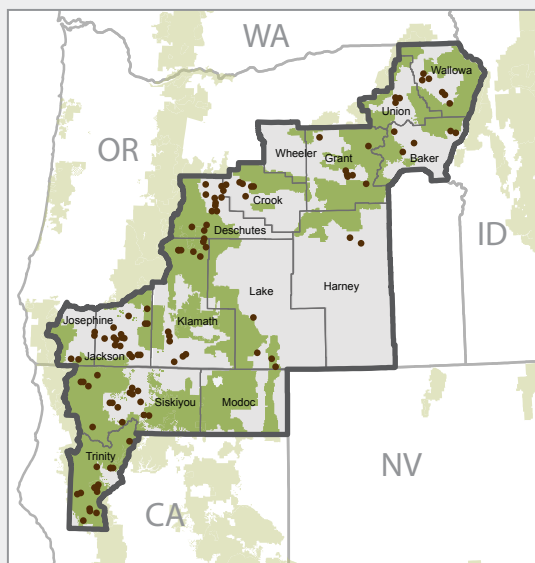
### Southern Oregon



### Northern California

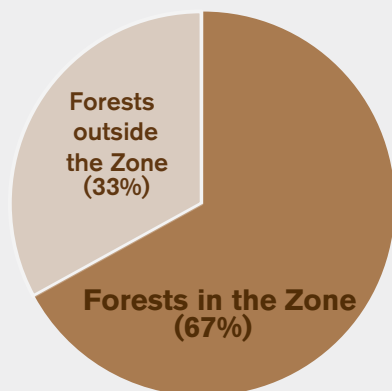


## The companies



117 companies located within the Dry Forest Zone purchased Forest Service timber from 2009-2012. How much wood did they get from the Zone?

### Companies from the Dry Forest Zone purchased Forest Service timber from:



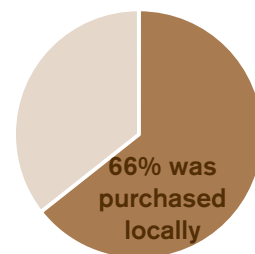
These companies purchased a total of \$48 million in Forest Service timber. 67% (just over \$32 million) of this came from Zone forests. The amount of timber and proportion purchased locally (within specific regions) differed greatly, suggesting differences in purchaser dependence on local timber supplies.

### Blue Mountains

32 companies made:



\$20.4 million in Forest Service timber purchases

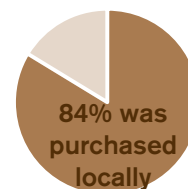


### Central Oregon

32 companies made:



\$15.2 million in Forest Service timber purchases



### Southern Oregon

21 companies made:

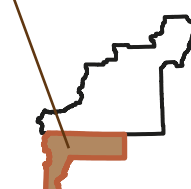


\$9.1 million in Forest Service timber purchases



### Northern California

32 companies made:

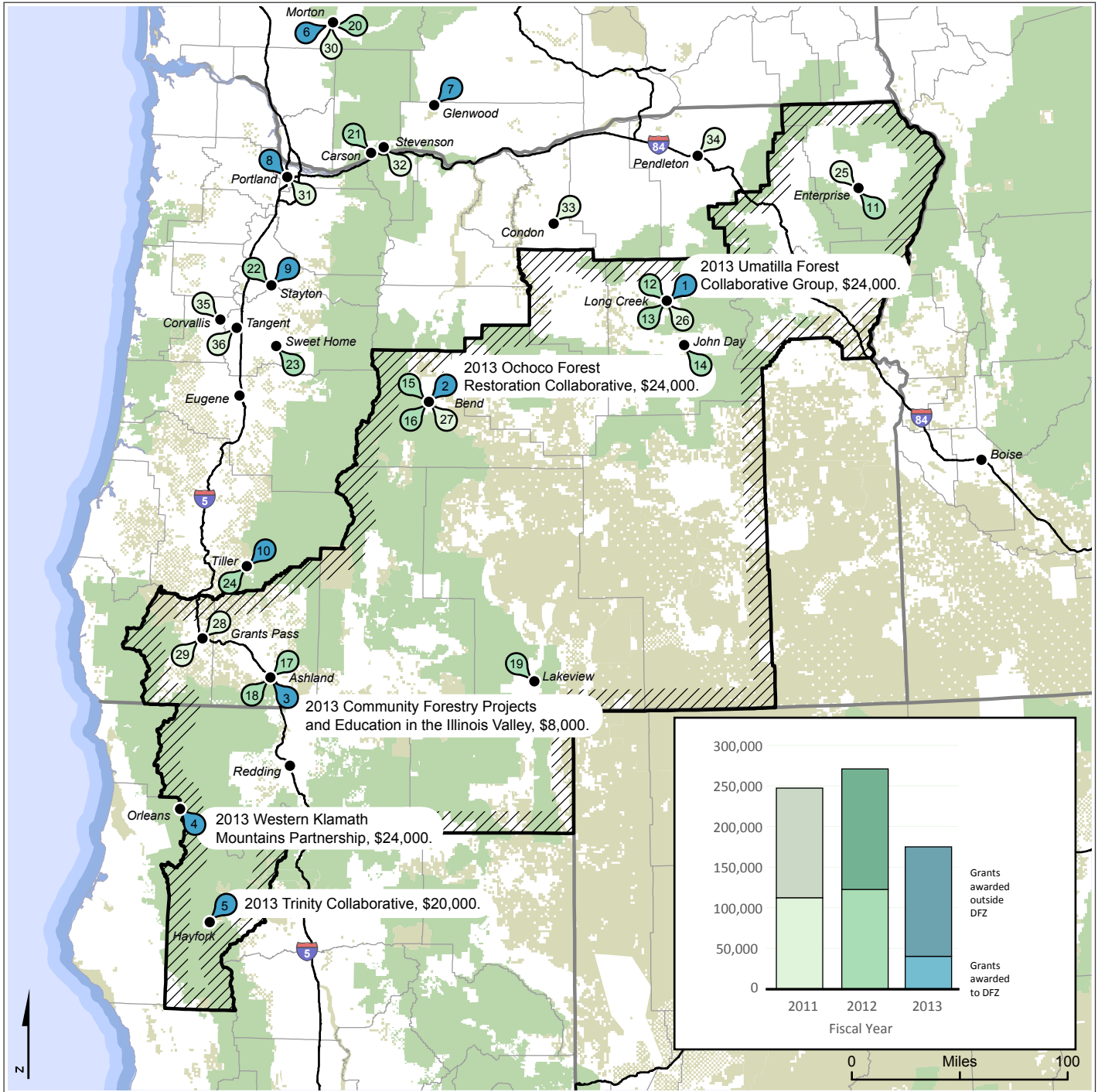


\$3.2 million in Forest Service timber purchases



# Community Capacity and Land Stewardship Program, 2011-2013

## Dry Forest Zone



Data source: EWP

-  CCLS awards
-  Participant cities
-  US Forest Service lands
-  BLM and other federal lands



## 2013 Award Recipients

### Inside the Zone

1. Umatilla Forest Collaborative Group, \$24,000
2. Ochoco Forest Restoration Collaborative Development, \$23,981
3. Community Forestry Projects and Education in the Illinois Valley, \$8,000
4. Western Klamath Mountains Partnership, \$24,000
5. Trinity Collaborative, \$20,000

### Outside the Zone

6. Expanding Community Capacity Building, \$20,000
7. Growing Collaborative Capacity through Landscape Assessment, \$20,267
8. Long-Term Strategic Planning and Multi-Party Monitoring Coordinator, \$20,000
9. Stewardship Cont. for Indust. Dev. and Approach to Restore Watershed Health, \$18,040
10. Elk Creek Watershed Restoration Project, \$24,000

## 2012 Award Recipients

### Inside the Zone

11. Wallowa-Whitman Forest Collaborative Planning Project, \$20,00
12. Range Alliance for Malheur National Forest Allotments, \$24,000
13. Umatilla Forest Collaborative Group - Phase 2, \$24,000
14. Collaborative Forest Conservation on the Malheur National Forest, \$19,000
15. Deschutes Collaborative Forest Project Capacity Building, \$23,980
16. Ochoco Forest Restoration Collaborative, \$23,947
17. Klamath Tribal Ecosystem Restoration Workforce Initiative, \$24,000
18. Rogue Basin Dry Forest Restoration Project, \$24,000
19. Lakeview Stewardship Group, \$12,240

### Outside the Zone

20. Pinchot Partners Continue Community Capacity Building, \$24,000
21. South Gifford Pinchot Collaborative Continues, \$24,000
22. Integrated Restoration of the Breitenbush Watershed at the Landscape Scale, \$23,540
23. Sweet Home All Lands Collaborative, \$20,665
24. Elk Creek Collaborative Restoration Program, \$23,400

## 2011 Award Recipients

### Inside the Zone

25. Joseph Creek Collaborative Watershed Restoration Program, \$15,000
26. North Fork Whole Watershed Restoration Capacity Building Project, \$10,000
27. Deschutes Skyline Collaborative Forest Landscape Restoration Project, \$15,000
28. A Landscape Assessment for the Illinois Valley, Oregon, \$22,500
29. Organizational Capacity Building, \$14,000

### Outside the Zone

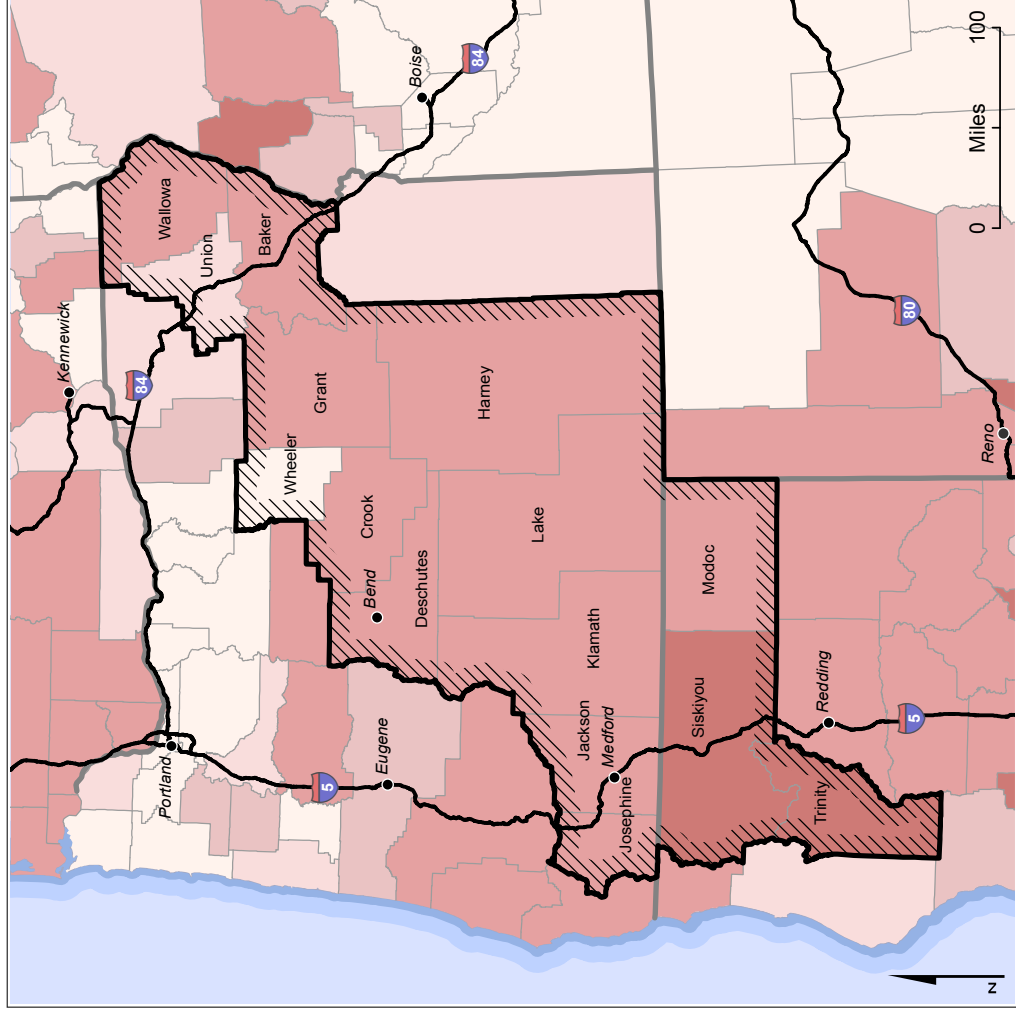
30. Pinchot Partners Community Capacity Building, \$10,000
31. Clackamas Stewardship Partners Coordinator, \$23,911
32. Strengthening Collaboration on the Gifford Pinchot National Forest, \$15,000
33. Lower John Day Tri-County Watershed Coop. Man. and Conserv. Coordination, \$7,889
34. Umatilla National Forest Landscape Collaboration Capacity Project, \$9,192
35. Greasy Creek Watershed Partnership and Project Design, \$23,720
36. Hebo Stewardship Group Planning, \$15,000

# 2013 Unemployment rate and 2008-2013 trend

## Dry Forest Zone

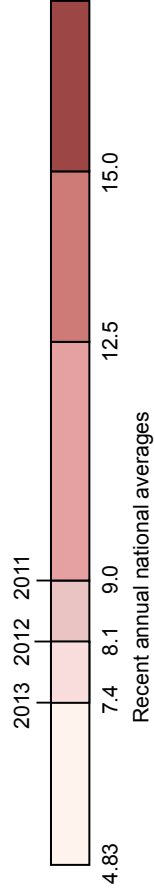
Unemployment rates spiked in 2009 due to the nationwide recession. Since 2010, joblessness has declined in the DFZ but remains consistently higher than the national average. Unemployment is currently highest in Trinity and Siskiyou counties.

### Unemployment rate in 2013

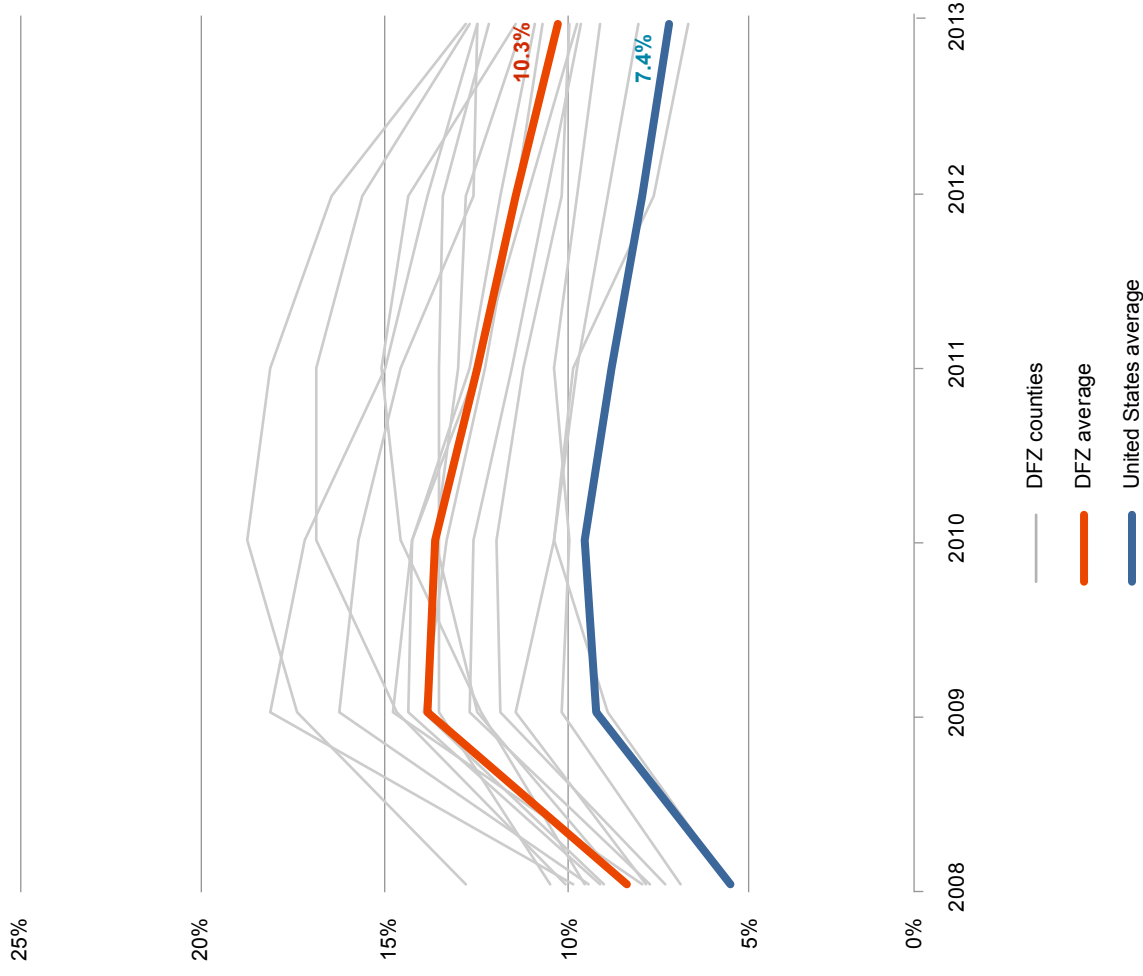


Data source: Bureau of Labor Statistics

### 2013 unemployment rate (%)



### Unemployment trends between 2008 and 2013

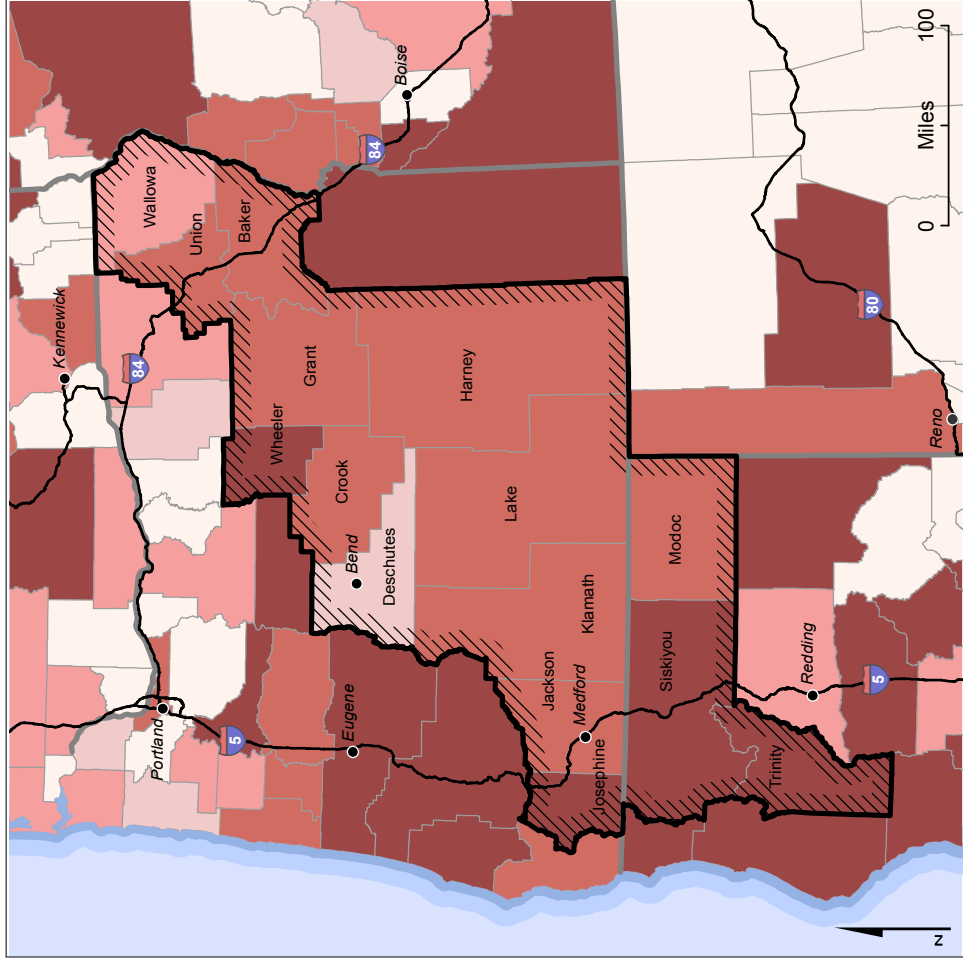


# 2012 Poverty level and 2007-2012 trend

## Dry Forest Zone

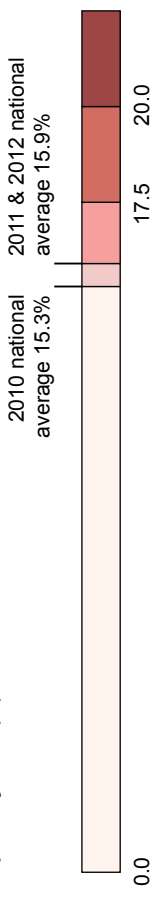
Poverty has increased nationally since 2008. Poverty in the DFZ has been more prevalent than the national average and has increased at a faster rate. Poverty levels in 2012 were highest in Wheeler, Josephine, Siskiyou, and Trinity counties.

### Poverty levels in 2012

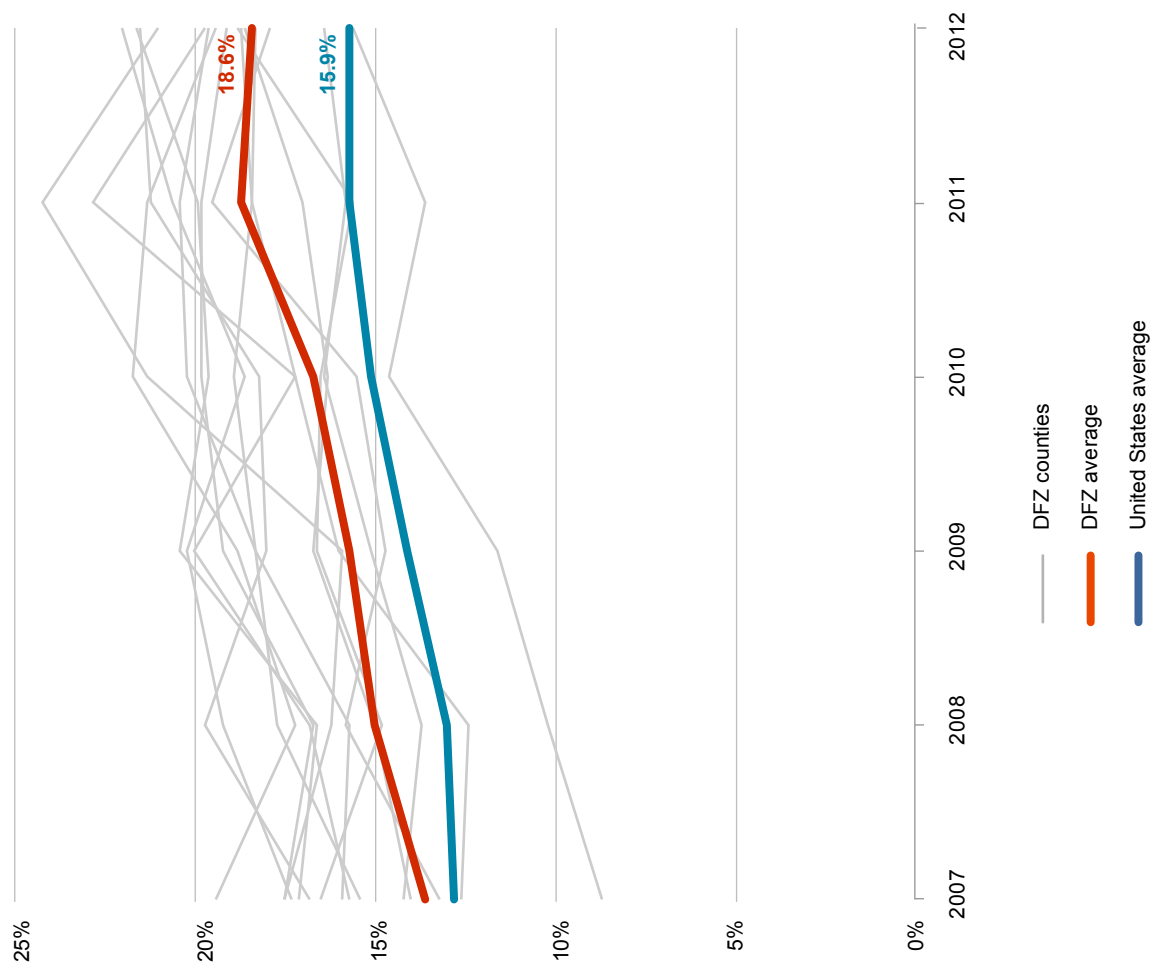


Data source: Census Bureau SAIP

2012 poverty level (%)

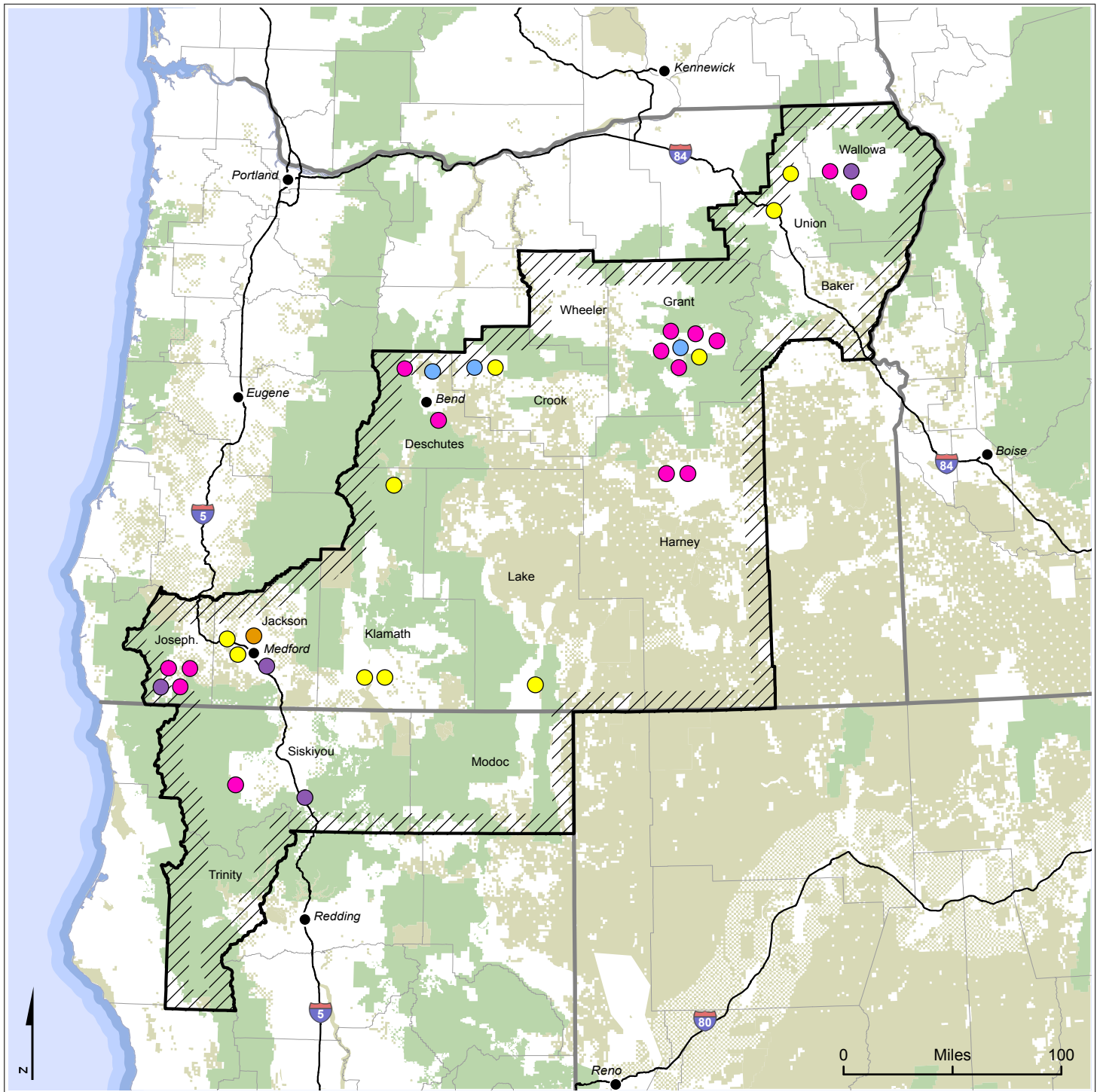


### Poverty trends between 2007 and 2012



# Wood-to-energy market, 2013

## Dry Forest Zone



Data source: EWP

### BIOMASS ENERGY FACILITIES

The DFZ has diverse infrastructure for utilizing woody biomass for energy. Clusters of biomass energy producers and end users have emerged across the region, especially in Grant County, Oregon.

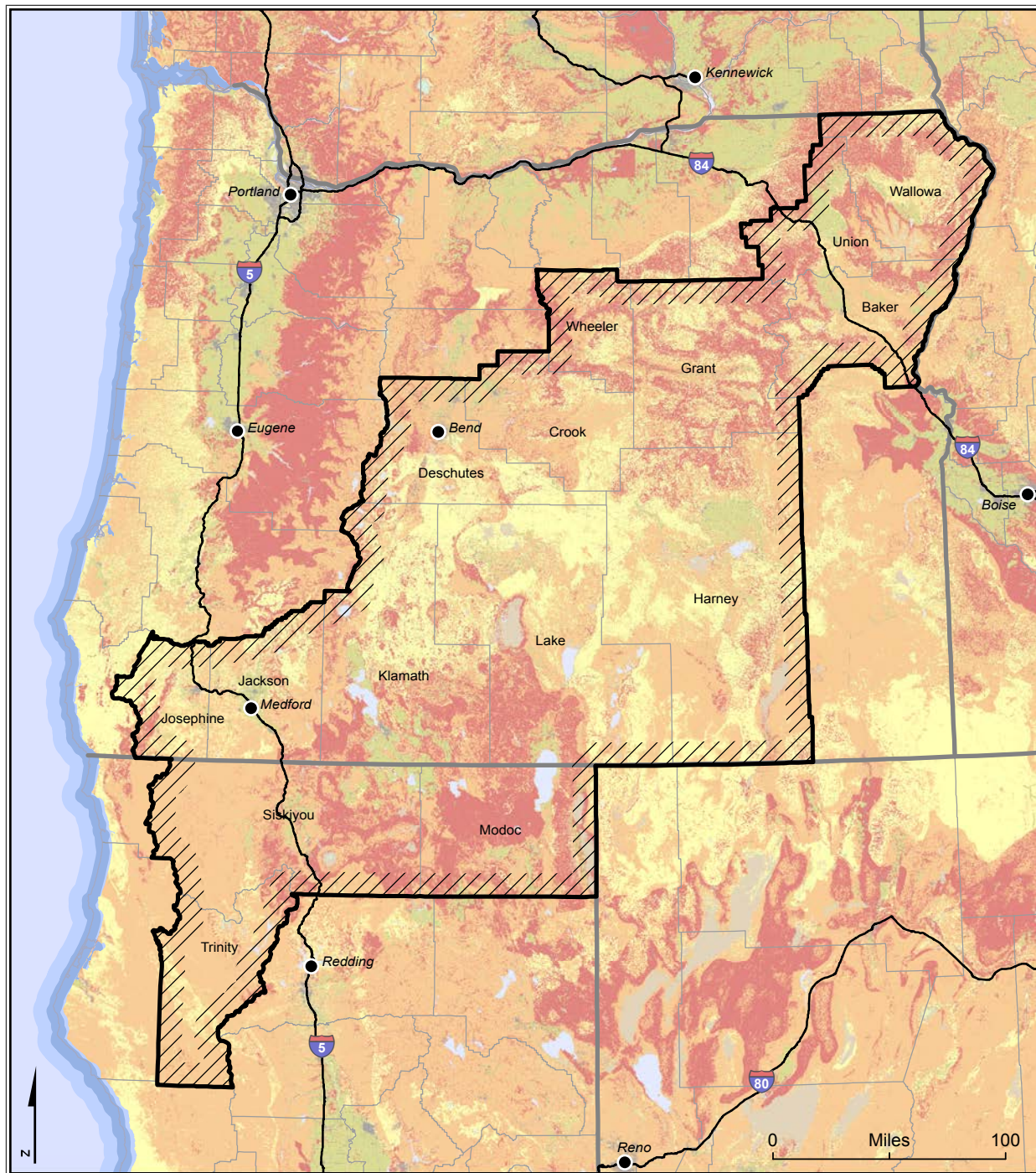
### Biomass facility type

- Combined heat and power
- Densified fuels
- Electricity
- Process heat
- Space heat

- US Forest Service lands
- Other federal lands

# Fire regime condition class

## Dry Forest Zone



Data source: Landfire.gov

### CHANGE IN FIRE REGIME

The LandFire fire regime condition class (FRCC) describes the degree that current fire conditions have diverged from historic patterns. Changes to fire regimes are driven by altered vegetation characteristics, fuel composition, land use, and fire patterns. Changes to fire regime can drastically alter key ecosystem characteristics.

### Condition class

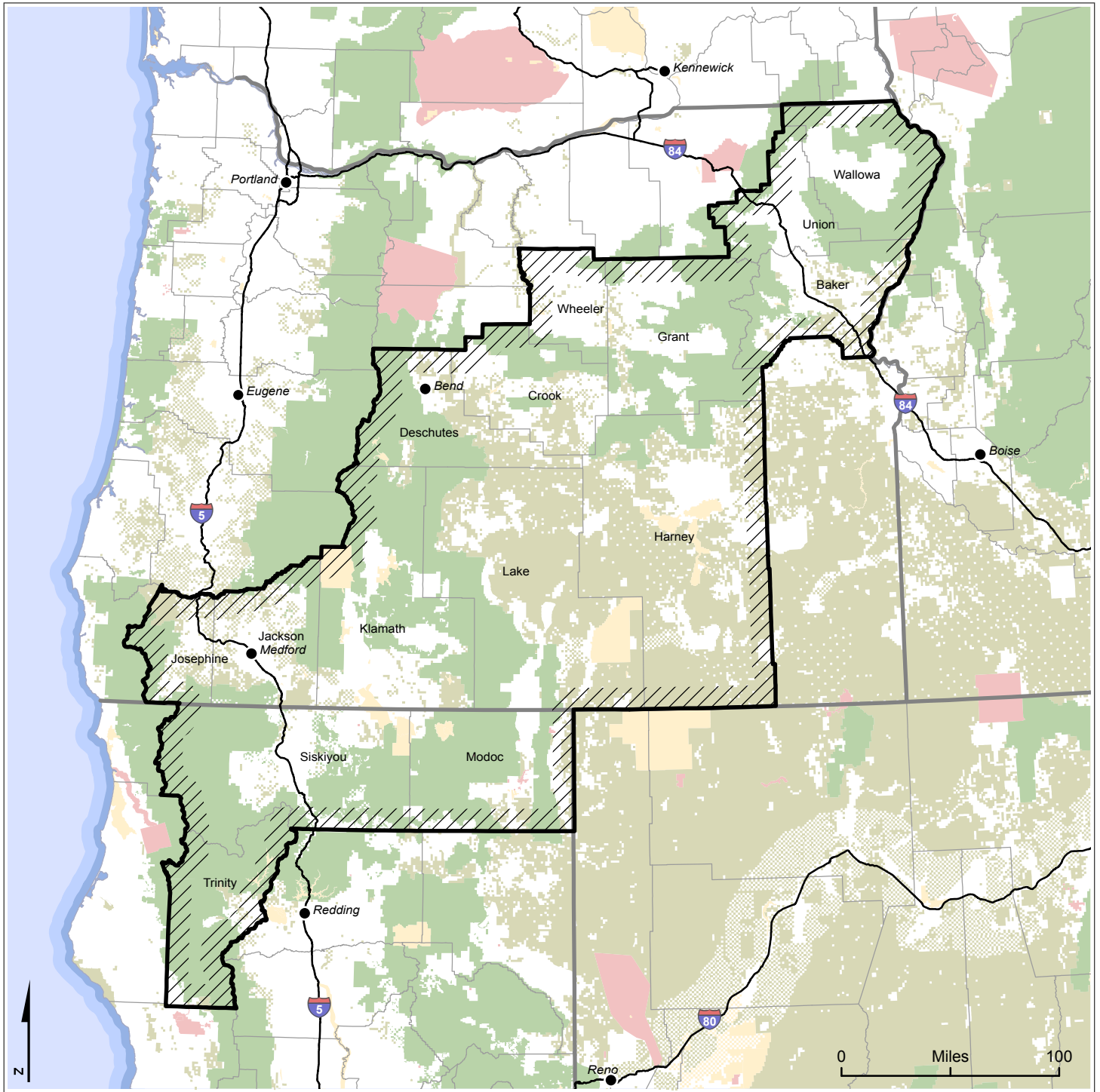
- Normal (FRCC I)
- Moderate change (FRCC II)
- High change (FRCC III)

### Land cover

- Water
- Urban / barren
- Agriculture

# Federal land ownership

## Dry Forest Zone







Data source: National Atlas

### FEDERAL LAND OWNERSHIP

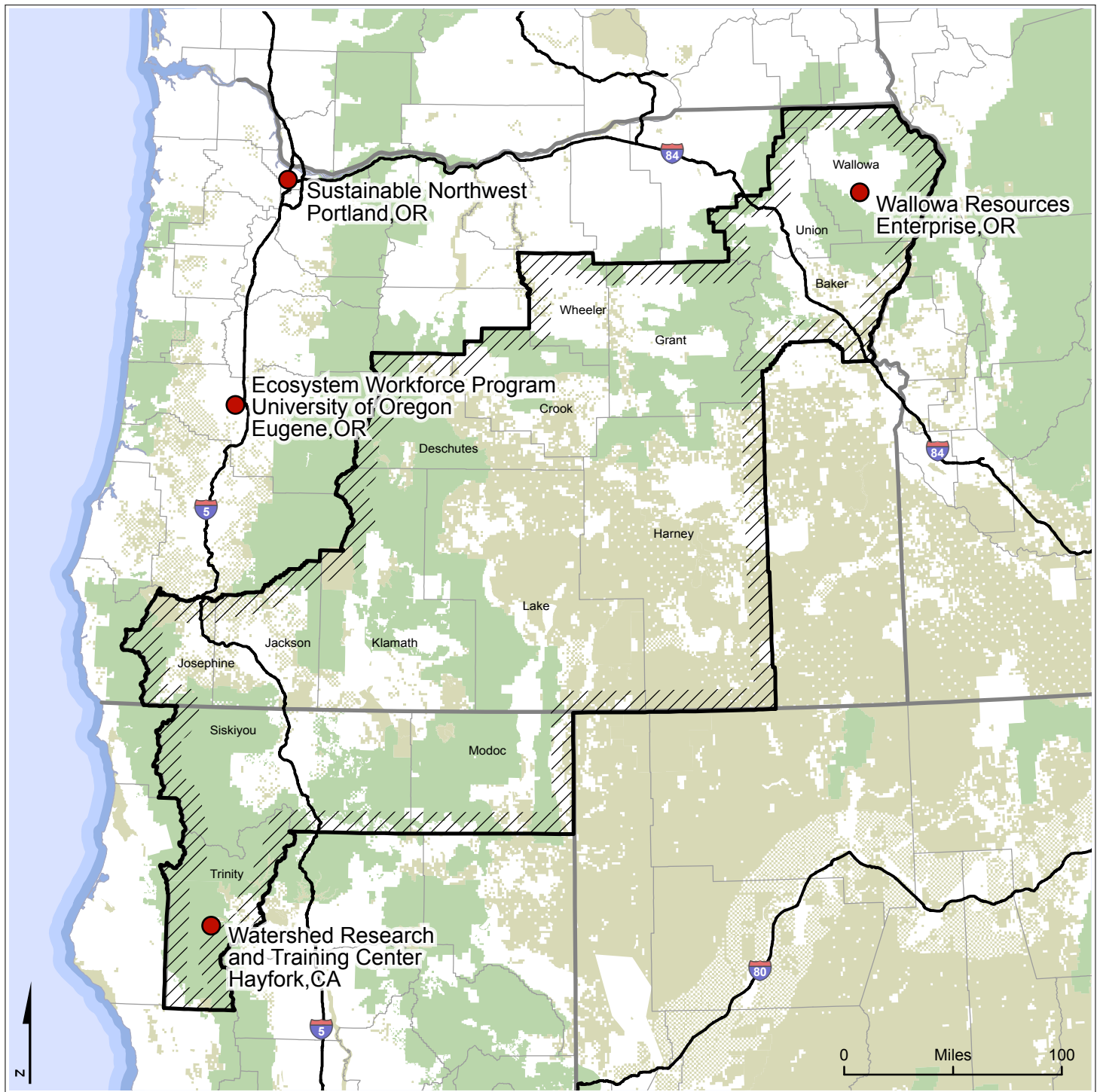
Federally-owned lands cover 68% of the DFZ and much of the West. This affects the opportunities and constraints that rural communities face in fostering natural resource-based economic development.

### Land management

-  US Forest Service
-  Bureau of Land Management
-  Other federal agencies
-  Indian reservations

# Executive team locations




## Dry Forest Zone



Data source: EWP

### EXECUTIVE TEAM

The Dry Forest Zone project is led by Sustainable Northwest in partnership with Wallowa Resources, the Watershed Research and Training Center, and the Ecosystem Workforce Program at the University of Oregon. The project is funded by the US Endowment for Forestry and Communities, and USDA Rural Development.

-  Interstates
-  US Forest Service lands
-  Other federal lands



UNIVERSITY OF OREGON