



## I. Executive Summary

**T**he Dry Forest Zone is a region of eastern Oregon and northern California with challenging market conditions and high levels of poverty and unemployment. However, local entrepreneurship, collaboration, and commitment to integrated economic development and natural resource management in the zone are strong. In the past decade, the scope of community-based nonprofits, integrated biomass utilization businesses, and new networks has increased, fostering sustainable forest stewardship at an increasingly regional scale.

The geography and climate of the zone support dry forests of pine and mixed conifer with fire regimes that are departed from their historical range of variability. These forests are prone to wildfire hazards and in need of active management to restore more diverse and variable-aged structures. As 68 percent of the land in the zone is public, the communities of this region rely on the economic and ecological productivity of these federal forests. The number of sawmills that once provided high levels of primary processing capacity and employment has shrunk to

nine mills in the zone. More forest-related employment is now forestry support work, including activities such as firefighting, pest control, and thinning. Poverty and unemployment have increased, with estimated poverty levels in 2007 of over 15 percent in ten of the fifteen counties. Through the Dry Forest Zone project, we have an opportunity to build on the local strengths of this region and overcome these ecological and socioeconomic challenges.

### APPROACH

To better understand the current conditions and create a baseline for future monitoring, a team of five organizations conducted an assessment of the zone between October 2009 and January 2010. Sub-regional teams each traveled to areas of two to three counties to obtain information about the state of public and private land management, integrated biomass utilization, community and organizational capacity, and policy initiatives. We interviewed county commissioners, forest supervisors, Forest Service and BLM staff members, local entrepreneurs, and leaders in community-based nonprofits and collaborative

groups in each area for a total of ninety-two interviews. Our primary goal was to understand current conditions, challenges that limited sustainable forest stewardship, and future opportunities. To synthesize our results, we interview data from a variety of sources to form a series of maps, profiles of each sub-region, and scans of our project priority areas.

## FINDINGS

We found that communities in the zone were facing numerous challenges such as limited active public land management, a lack of integration between land management and economic development objectives, difficult conditions for local entrepreneurship, and little local policy engagement. However, there were high levels of local activity in collaboration to foster more public land management; restoration of private nonindustrial forestlands; growth of integrated, community-scaled biomass utilization businesses; and building of community-based nonprofit capacity.

Reduced agency capacity, budgetary constraints, and disagreement among the stakeholders on public lands (typically industry, conservation, and community interests) have limited active restoration of dry forests. However, collaborative groups in many areas of the zone, such as Trinity, Lake, Deschutes, and Wallowa counties, have reached significant levels of agreement around community wildfire protection and management of lower-elevation, second growth ponderosa pine forests and juniper. This has enabled successful treatment and vegetation management projects on national forests, and laid the groundwork for landscape-scale restoration. Although smaller contractors can have difficulty competing for federal forest management contracts, there is a growing capacity for local stewardship contracting in the zone.

The nonindustrial private landbase is transitioning toward more absentee, in-migrant, or disengaged ownership, but there are many landowners in the zone who have worked with government agencies to actively restore forests, rangelands, and waterways on their property. There is a significant opportunity to provide resources and programs to landowners to increase their capacity for sustainable forest

stewardship as well as capture of alternative value streams such as carbon or water markets.

We also found that there is strong interest in utilizing the byproducts of restoration, or woody biomass, for a suite of value-added products and energy production. Some communities such as La Pine and Lakeview have used supply models to attract potential investors for large-scale electricity or cogeneration facilities to produce combined heat and power. These operations require large startup investments and have been slow to materialize in the zone. Other communities such as Enterprise and Hayfork have opted for innovative smaller-scale facilities that combine several producers of small diameter, such as post and pole production, firewood, pellets, or chips, in an integrated campus model. Trends in housing and lumber markets have driven densified fuel production toward an integrated, small-scale model of bulk pellets or bricks for institutional heat consumers. The wood heat market is growing in the zone as municipal consumers such as school districts, hospitals, and airports, particularly in eastern Oregon, seek biomass boilers for increased energy efficiency and cost savings.

A key factor in both successful forest restoration and biomass utilization in the zone is the presence of several nonprofit community-based organizations. These organizations vary in size and scope, but typically act to support collaboration and local entrepreneurs in the wood products industry. We found that nonprofits such as Wallowa Resources, the Lake County Resources Initiative, the Central Oregon Intergovernmental Council, and the Watershed Research and Training Center can be pivotal in helping reduce risk to small businesses, in providing technical assistance and access to capital, and in convening relevant stakeholders on important forest management issues.

Thus far, the ability of nonprofits to provide policy engagement (advocacy, education, or resources) has been limited to national and regional-scale organizations. However, there are a few efforts among county commissioners to convene around shared policy is-

sues. In particular, the opportunity for zone communities, organizations, and businesses to participate in the Rural Voices for Conservation Coalition (RVCC) offers an emerging platform for expression of local priorities and needs.

**CONCLUSIONS**

Our assessment revealed that, across the Dry Forest Zone, there are trends toward high levels of local capacity, support for forest restoration and community

wildfire protection, desire to utilize woody biomass materials, and active community-based nonprofits. Community, business, and nonprofit leaders are beginning to look toward regional networking as a method of leveraging resources and sharing common goals. As our project proceeds, information from this assessment will inform our baseline understanding of the Dry Forest Zone and ensure that we effectively respond to the needs of our rural community partners and stakeholders.

**II. List of Acronyms, Abbreviations, and References**

AF&PA	American Forest and Paper Association	NEPA	National Environmental Policy Act
AFRC	American Forest Resource Council	NFMA	National Forest Management Act
ARRA	American Recovery and Reinvestment Act	NFP	National Fire Plan
BCAP	Biomass Crop Assistance Program	NGO	Nongovernmental organization
BETC	Business Energy Tax Credit	NRAC	Natural Resource Advisory Committee
BLM	Bureau of Land Management	NRCS	Natural Resource Conservation Service
CHP	Combined heat and power	O&C (Act)	Oregon and California Act
COPWRR	Central Oregon Partnership for Wildfire Risk Reduction	ODF	Oregon Department of Forestry
CROP	Coordinated Resource Protocol Offering	OSWA	Oregon Small Woodlands Association
dbh	diameter (in inches) at breast height	PAC	Provincial Advisory Committee
EIS	Environmental Impact Statement	PILT	Payment in Lieu of Taxes
ESA	Endangered Species Act	RAC	Resource Advisory Committee
FACA	Federal Advisory Committee Act	RC&D	Resource Conservation and Development
FLAME	Federal Land Assistance, Management, and Enhancement Act	RCD	Resource Conservation District
FLN	Fire Learning Network	REIT	Real Estate Investment Trust
FLPMA	Federal Land Policy Management Act	RVCC	Rural Voices for Conservation Coalition
FLRA	Forest Land Restoration Act	SCOEDD	Southern Central Oregon Economic Development District
Forest Service	United States Department of Agriculture Forest Service	SFI	Sustainable Forestry Initiative
FRCC	Fire Regime Condition Class	SNW	Sustainable Northwest
FSC	Forest Stewardship Council	SWCD	Soil and Water Conservation District
FY	Fiscal Year	TIMO	Timber Investment Management Organization
HFI	Healthy Forests Initiative	TNC	The Nature Conservancy
HFRA	Healthy Forests Restoration Act	TFPA	Tribal Forest Protection Act
ICBEMP	Interior Columbia Basin Ecosystem Management Project	USDA	United States Department of Agriculture
LCRI	Lake County Resources Initiative	WAFC	Western Ancient Forest Campaign
LLC	Limited Liability Company	WBUG	Woody Biomass Utilization Grant
mmbf	Million board feet	WOPR	Western Oregon Plan Revision
MW	Megawatt	WRTC	Watershed Research and Training Center
NACo	National Association of Counties	WUI	Wildland-Urban Interface
NAICS	North American Industry Classification		

# Dry Forest Investment Zone



Data Source: National Landcover Data

 Pacific Northwest Forests

0 100 Miles

### III. Introduction

The Dry Forest Zone project seeks to address the challenges of social acrimony, economic stagnation, and landscape degradation in eastern Oregon and northern California, by fostering an integrated approach to forest management, which we call *sustainable forest stewardship*. By this, we mean forest management that restores the ecological integrity of forest ecosystems; provides a diversity of services to society such as clean air and water, biodiversity, carbon storage, and fiber; and provides local economic benefit through employment and local business ownership. Because we face social, ecological, and economic challenges simultaneously, we need multiple strategies to address all three dimensions simultaneously. The Dry Forest Zone consists of fifteen counties across eastern Oregon and northern California. The Dry Forest Zone project is a five-year collaborative effort between Sustainable Northwest, Wallowa Resources, the Watershed Research and Training Center, the Ecosystem Workforce Program of the University of Oregon, and The Resources Innovations Group. (See Dry Forest Investment Zone map, page 4.)

The goals of this project are to increase the health of forested landscapes and the vitality of the rural communities, businesses, and entrepreneurs in the zone. We will develop a regional model to increase the viability of sustainable forest stewardship in which rural communities participate and prosper. The activities will build upon preexisting community and collaborative capacity across the zone. We believe this will help our team to effectively and equitably collaborate with communities and stakeholders in the zone.

Taking community-based natural resource management “to scale” is the fundamental premise underlying our project. Our regional model will both foster the development of a networked set of local entities and efforts that maintain the benefits of community-based natural resource management while also creating the social and economic relationships necessary for communities and landscapes to flourish across the zone. This model has two components. First, our strategy involves two anchors—clusters of three high-poverty counties in the northeast and southwest ends of the zone. Local partner organiza-

tions in each anchor (Wallowa Resources in Oregon and the Watershed Research and Training Center in California) have more than a decade of experience with collaboration and forest-based small business development. In the anchors, these local organizations will accelerate community and business infrastructure development to support sustainable forest management. We will use their experience to provide assistance and support to emerging collaborative groups and business efforts. Second, we will boost the connectivity between local leadership, collaborative groups, nongovernmental organizations (NGOs), and sustainable forestry businesses. By increasing the social, political, and market connections among local leadership, collaboratives, nonprofits, and businesses, we will help create a critical density of organizational capacity and markets to support a sustainable forestry industry across the region. Our hypothesis is that by increasing the density of networks, we can effectively build the capacity for transformative change at both the local and the regional scale.

Our strategies to build such a system have five central components:

- 1) Create multiple value streams from land management and incentives for forest restoration and stewardship;
- 2) Develop integrated biomass utilization and renewable energy;
- 3) Build strong local nonprofit organizations and collaborative processes to achieve forest and economic resilience;
- 4) Create the policy conditions to support sustainable forest stewardship on public and private lands; and
- 5) Document and communicate lessons in the zone, regionally, and nationally.

#### THE ASSESSMENT APPROACH

The scope and scale of the Dry Forest Zone project requires a coordinated five-year strategy for both working in and gathering information about the zone. In year one, we developed a detailed assessment plan to collect quantitative and qualitative data about land management, biomass utilization, community and organizational capacity, and policy engagement in this region. This assessment effort has been crucial to our work in two significant ways. First, it allowed us to engage directly with

communities and stakeholders in the zone. In doing so, we were able to document their perspectives, understand their needs and priorities, and develop strategies to respond. Second, it will act as a baseline for our future efforts to monitor changes in the zone and assess our progress. Measuring the efficacy of our work will help us to adaptively learn and make midcourse modifications to our approaches. In years two through four, we will collect data on the key indicators developed from this process and continue to connect with key participants to assess the impact of our project and release interim findings. Year five will involve the dissemination of results and key findings to a broad and diverse audience including other forest communities, investors and business networks, policy makers and interest groups, and scholars.

To carry out the assessment plan, the project team met and compiled information about the zone. We then developed a detailed interview process and contacted forest supervisors, Forest Service and BLM personnel, county commissioners, business owners, and leaders in community-based nonprofit organizations. Team members traveled across the zone in subregional teams of two to three counties each and conducted ninety-two interviews in total. We asked interviewees to discuss current and planned projects, partnerships that they had, and challenges and opportunities that they faced. At the end of the interview phase, each subregional team synthesized its findings to produce a profile of its respective counties. We then conducted zone-wide scans to evaluate the state of our project priority areas: land management, integrated woody biomass utilization, community and organizational capacity, and policy. We also used data from a variety of sources to describe the conditions of the zone visually through a series of maps. The assessment process revealed several key findings about conditions in the zone:

**1) There is a strong desire to achieve sustainable forest stewardship and economic development goals through an integrated approach, but current networks are inadequate to develop these goals.**

Stakeholders from counties, businesses, and agencies in the zone see a need for community wildfire protection and active restoration of our valuable public lands. They also want to create employment opportunities and socioeconomic benefits for rural communities struggling with high unemployment and a challenging future. Most importantly, stakeholders feel that sustainable forest stewardship and economic development are interdependent goals. However, capacity-building activities typically remain separate; for example, federal land management and economic development agencies do not work together.

**2) Active management on national forests is limited.**

The ability of the USDA Forest Service to conduct restoration activities, offer contracts, and offer timber sales varies across the zone. However, stakeholders on most national forests perceive a lack of adequate public land management. They feel that this impacts forest health, community wildfire protection, economic opportunities, and biomass supply.

**3) The zone is home to a number of successful local collaborations that are advancing agreement on public land management.**

In some areas of the zone, stakeholders have collaborated for over a decade. By starting small, using demonstrations and field tours, and monitoring project implementation, several collaborative groups have built sufficient trust to begun moving toward landscape-scale restoration.

**4) An integrated, community-scaled model of biomass utilization is emerging as an innovation in the zone.**

Businesses in Wallowa, Trinity, Josephine, and Deschutes counties are in various stages of developing integrated facilities that utilize biomass in several forms. This model reduces transportation costs, creates partnerships, and has potential to provide stable community economic development.

**5) Small business operators have limited resources and face competition from larger companies.** Local entrepreneurs in the zone are often limited in their capacity to adapt to changing market conditions. The investments required to retool business design, machinery, and operations can be too risky or difficult to make. Small contractors must compete for timber sales with far larger companies, and are often unable to access public lands opportunities.

**6) Nonprofit organizations can play a critical role in incubating businesses and increasing community-based forestry mobilization.** Both established and new community-based nonprofit organizations in the zone have prioritized partnerships with local entrepreneurs, agencies, and community leaders to find opportunities for small business development and to increase the flow of benefits from forest management to local communities.

**7) Capacity for policy engagement in the zone typically is found in national and regional-level organizations.** While some governmental and nonprofit coalitions operating at a national level are active in the zone, there have been few local initiatives to provide policy education, resources, or advocacy.

**8) There is a robust commitment to the role of natural resources in the zone's economy and way of life.** The zone is home to a large private family forest landbase, multigenerational ranches, local entrepreneurs in the logging and wood products industry, and stewards of our public lands. Despite challenges to the forest products and ranching industries, forests and rangelands remain central to the lives and identities of people living in the zone. Natural resource management is at the heart of significant local and regional strategies for economic development.

## THE ASSESSMENT REPORT

This report presents the findings of our assessment process. Chapter One begins by introducing the context of the Dry Forest Zone. We describe the biogeographical characteristics that contribute to the diversity of dry forest types, fire-driven disturbances, and management needs across the zone. In addition, this chapter discusses the socioeconomic and political context. Although the zone is primarily a rural region with limited transportation and market access, a few of its local areas have experienced rapid growth and development. Economic downturn and unemployment, however, have impacted the entire region. Chapters Two to Five scan the state of each project priority area in the zone: land management, integrated woody biomass utilization, community and organizational capacity, and policy. Each chapter describes the current situation of the priority area, variations across the region, trends, challenges, and future opportunities. Chapter Six presents a picture of each of the subregions of the zone: north-eastern Oregon (Wallowa, Union, and Baker counties), eastern central Oregon (Grant, Harney, and Wheeler counties), central Oregon (Deschutes and Crook counties), southern central Oregon (Klamath and Lake counties), southern Oregon (Josephine and Jackson counties), and northern California (Trinity, Modoc, and Siskiyou counties). We conclude by summarizing our findings about the challenges and opportunities that the entire zone faces.