

ILLINOIS VALLEY TIMBER SUSTAINABILITY ASSESSMENT

SUMMARY FINDINGS

Southern Oregon Forest
Restoration Collaborative
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REPORT BY

Southern Oregon Forest
Restoration Collaborative



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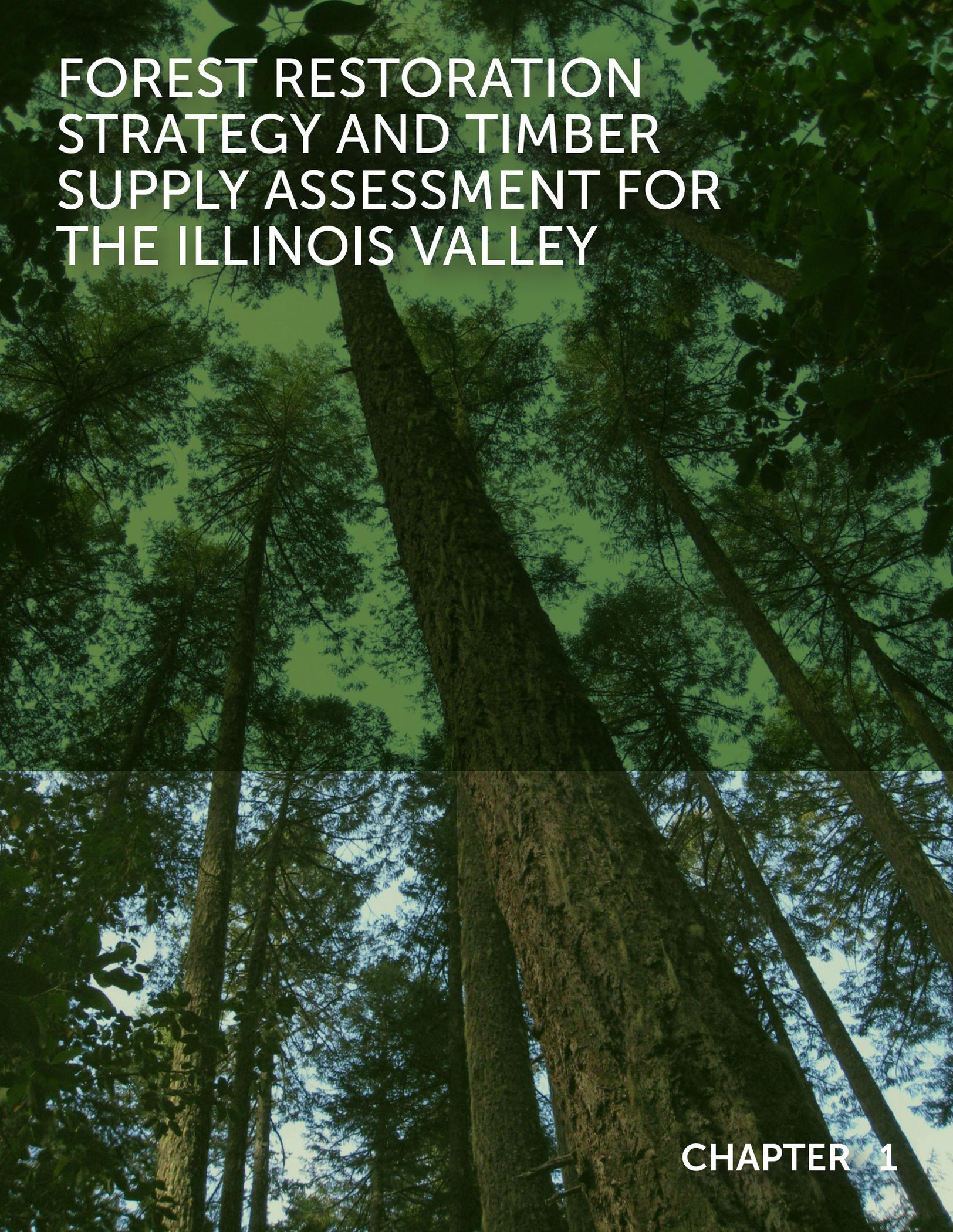
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FOREST RESTORATION STRATEGY AND TIMBER SUPPLY ASSESSMENT FOR THE ILLINOIS VALLEY

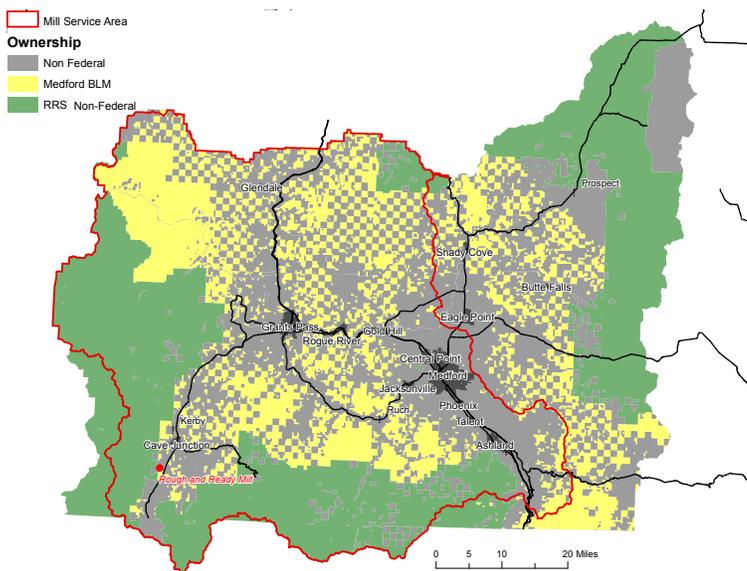
CHAPTER 1

EXECUTIVE SUMMARY

The Southern Oregon Forest Restoration Collaborative (SOFRC) has developed a pragmatic, integrative assessment of forest restoration need and opportunity for federal forests in the Rogue Basin. This assessment, and the cohesive strategy for forest restoration on which it is based, can help inform forest planning, generate recommendations to land managers, strengthen public support for forest restoration, and improve project efficiency and effectiveness.

FIGURE 1

ILLINOIS VALLEY MILL SERVICE AREA



GOALS FOR THE COHESIVE RESTORATION STRATEGY:

- Restore and maintain a diverse mosaic of healthy, resilient forests;
- Protect and conserve habitat for species at risk;
- Reduce the risk of severe fire to forests and communities; and
- Generate products, employment, and economic activity through restoration.

This report evaluates timber supply within a two-hour haul distance of the Rough & Ready mill site in the Illinois Valley. By identifying collaboratively supported, restoration-based timber volume, its findings can inform potential new mill investments. A complementary assessment, described in Chapter 2, outlines the contours of social support for federal forest restoration in southwest Oregon.

Starting from a base of 1.2 million acres (the mill-service area), the assessment applied a variety of screens, including: complex, forest-habitat protection; restoration need; volume of timber available that is consistent with restoration principles; access to timber from existing road networks; and cost effective, timber-sale thresholds.

It identified some fifty-four thousand acres that could generate twenty-eight million board feet of timber annually over the next twenty years. (See Summary Findings at the end of this chapter, and appendix attachment 1 for detail and additional output metrics.)

SETTING AND CONTEXT

The Rogue River Basin of southwest Oregon occupies part of the Klamath Province, one of four dry-forest regions in the home range of the northern spotted owl, as identified in the Northwest Forest Plan (NWFP). The basin drains water from the Klamath, Siskiyou, and Cascade Mountain ranges and is a regional confluence of western U.S. floristic provinces. The varied inland forests in the basin follow complex, environmental gradients, which are centered on relatively cool, moist winters and hot, dry summers. Historically, these conditions have contributed to very frequent fires and fire-adapted vegetation. Dry-forest types in the Rogue Basin include Jeffery pine, ponderosa pine, Douglas fir, white fir (intermediate), and tanoak (dry).

Fire exclusion, past management and land-use decisions, livestock grazing, and widespread, even-aged stand management—combined with other stressors—have reduced critical wildlife habitat and generated dense, overcrowded stands, leading to stressed, unhealthy trees. These conditions place the oldest, most structurally important trees and stands at risk of uncharacteristically severe wildfires. Younger stands are similarly threatened, and without active management their development into mature stands is slowed. Forest diversity, a hallmark of the region, has been reduced at both the stand and landscape scale.

Over many years, collaboration has been critically important in building shared understanding and community support for restoration projects that promote forest health and resilience in southwest Oregon. Ongoing projects, including the Medford District Secretarial Pilot, Friese Camp Forest Management Project, and Ashland Forest Resiliency Stewardship Project, continue to improve this understanding and broaden support.

The SOFRC approach, which identifies the need for restoration and opportunity to harvest timber volume, balances ecological, economic, and social goals for federal forest management. This strategy explicitly integrates habitat protection, forest restoration, fire safety, community engagement, and economic activity. It adheres to the NWFP and aligns with the U.S. Fish and Wildlife Service (USFWS) Revised Recovery Plan as well as designated critical habitat for the northern spotted owl. A USFWS letter of support for the SOFRC strategy outlines how this approach “can play a significant and positive role in spotted owl conservation in Southern Oregon along with the maintenance of vital forest restoration infrastructure in our communities.” (The letter has been submitted along with this report and is available upon request.)

The SOFRC strategy promotes and conserves critical, closed-canopy, old, complex forest habitats in the appropriate landscape positions; restores open-fire and drought-resilient stands in intervening areas; and encourages a fire-adapted landscape that emphasizes fuels reduction around communities in the public-private interface. This active management generates ecosystem benefits, forest products, and associated economic outputs, as well as attendant social benefits.

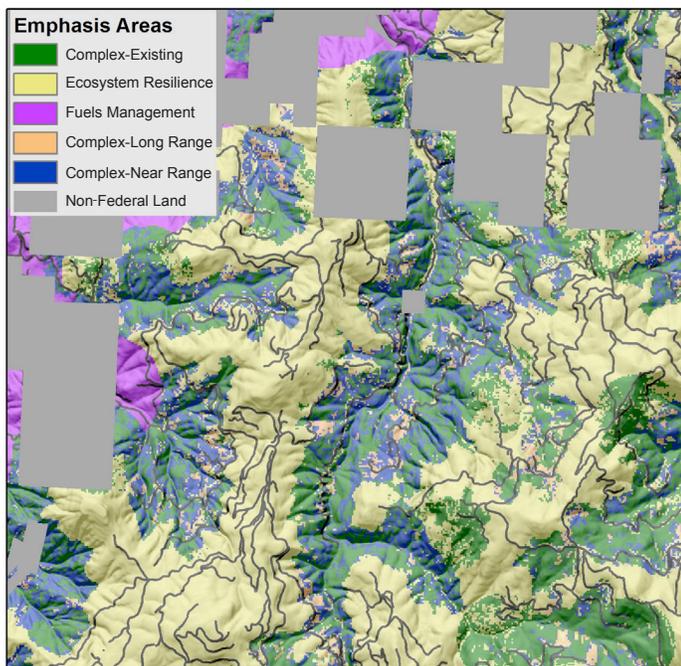
LANDSCAPE EMPHASIS AREAS

Central to the SOFRC restoration strategy and this assessment is the designation of three Landscape Emphasis Areas, each with distinct management guidance. Using restoration forestry principles and practices specific to the forest types of southwest Oregon, the varied sets of objectives outlined for each of the mapped emphasis areas provide a zoom lens through which to view and discuss restoration needs and opportunities in the Rogue Basin.

Proposed management recommendations for these areas outline compositional and structural forest habitat goals, with timber production as a by-product of meeting these goals. The guidance that is provided is robust, yet it allows agency managers the flexibility to use site-specific actions as projects and plans require.

FIGURE 2

EMPHASIS AREAS



LANDSCAPE EMPHASIS AREAS INCLUDE:

1. Fuels Management Emphasis Area

This area occupies a half-mile buffer around communities at risk of wildfire. Here, fire resistant forests made up of larger trees are promoted, and the primary goal is to reduce loss from fire and create safer fire-fighting conditions by reducing surface and ladder fuels and raising canopy height.

2. Complex Forest Habitat Emphasis Area

This area identifies the dense, multi-story forest favored by the northern spotted owl and other species and promotes values consistent with older, complex forests.

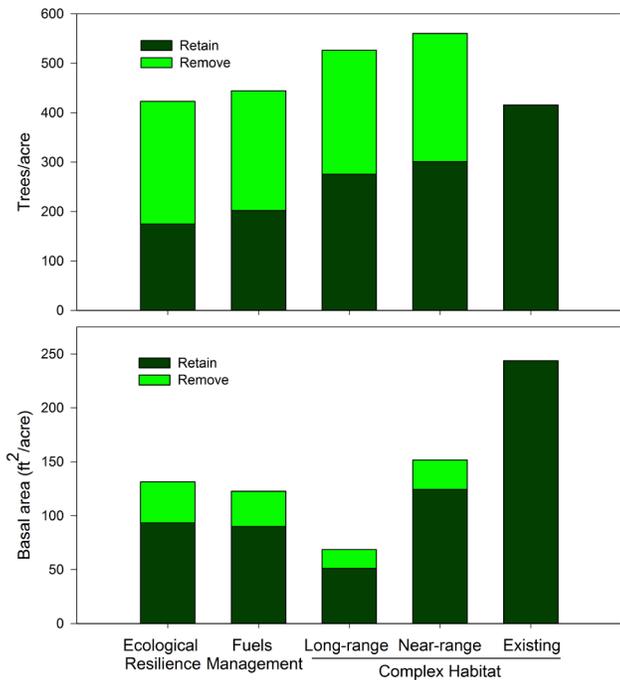
- a. No treatments will occur in existing, high-quality Northern Spotted Owl (NSO) habitat within older, complex forests that also support other critical species.
- b. Near-range, emerging NSO habitat will undergo light thinning to promote multiple canopy layers in relatively simple stands with large trees, accelerating development to high-quality, complex habitat within fifty years. Treatments to improve habitat function may generate timber by-products.
- c. More thinning is needed in young stands of long-range, potential NSO habitat in order to accelerate development of large trees with large branches and deep crowns that will provide high-quality, complex habitat within fifty to one-hundred years. Treatments to improve habitat function may generate timber by-products.

3. Ecosystem Resilience and Forest Productivity Emphasis Area

This emphasis area has the broadest forest management objectives. Restoration of open-forest habitats and promotion of fire- and drought-resistant tree species is expected to promote long-term, sustainable forests that are resilient to a variety of stressors, and, in combination with controlled burning management, have the potential to provide economic return from timber harvest.

FIGURE 3

EMPHASIS AREAS



Restoration goals of this emphasis area include:

- Maintain and restore diversity of habitat, species, and stand structure;
- Reduce loss to fire, insects, and drought (increase resistance and resilience);
- Conserve old trees and stands in and outside of complex forest habitat areas;
- Establish conditions for controlled underburning to promote stand maintenance;
- Foster conditions for timber production using restoration-forestry principles; and
- Generate ongoing products and employment through long-term restoration.

Current conditions and treatment intensities vary across these emphasis areas. Figure 3 displays average existing trees per acre and basal area for each of the Landscape Emphasis Areas, with proposed trees retained (dark green) and removed (light green) through application of SOFRC restoration strategies.

The acreage of SOFRC emphasis areas in the analysis by forest type, plant series, moisture availability, and insolation are provided in the appendix table 1. Density targets for each emphasis area in terms of Relative Density Index (RDI) and Stand Density Index (SDI) are provided in appendix table 2. Existing trees per acre and proposed removals by diameter class and emphasis area are provided in appendix figure 1. Site-specific density targets and proposed removals are used to estimate available volume and will guide prescription development.

Where active management is proposed, managers will use a blend of ecologically restorative thinning to maintain forests with reduced density. Openings will be created to maintain existing, shade-intolerant trees (e.g., pines and oaks), foster their regeneration, and restore understory-plant diversity. The combination of emphasis areas and stand-based guidance will help promote structural heterogeneity at both stand and landscape scales.

The analysis recommends initial treatments to be implemented within twenty years. Initial treatments will provide flexibility for future management, anticipating that sustained forest resilience will be fostered through the most economically appropriate blend of under-burning, mechanical treatments, and commercial harvest at regular intervals, and tiered to historic fire return intervals and stand productivity. SOFRC has yet to develop an analysis to estimate ongoing needs for sustainable harvest.

FINDINGS: ESTIMATING VOLUME, AVAILABILITY, AND EFFICIENCY

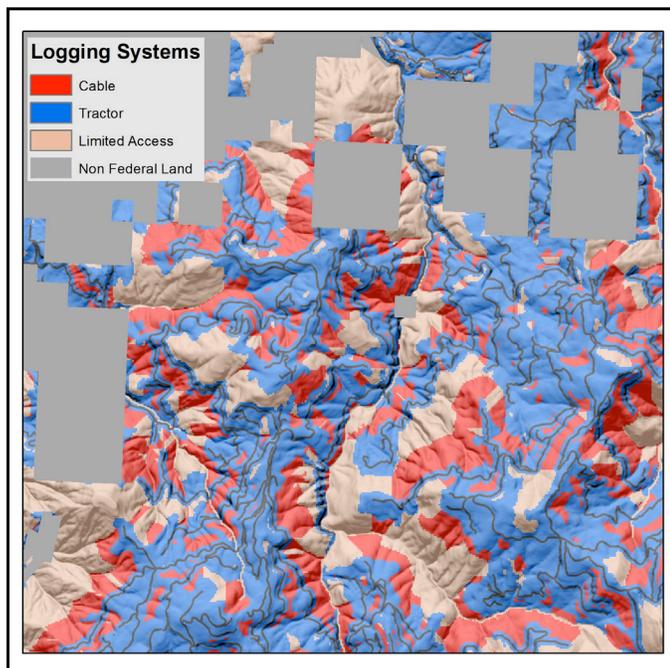
For each of the above Landscape Emphasis Areas, SOFRC developed Desired Stand Condition Models based on restoration forestry principles in order to explicitly identify desired stand density and forest structure that is tailored to forest type, stand productivity, and existing tree size.

Stand level prescriptions are informed by variables such as site productivity, species composition, and size distribution. Stand targets are described in basal area and density terms (SDI and RDI; see appendix table 2), along with composition and structure goals. Desired stand conditions are compared to current stand density and structure data on forest conditions imputed across the entire landscape (Integrated Landscape Assessment Project, Gradient Nearest Neighbor (GNN) data, <http://ecoshare.info>). The amount of material recommended for removal and retention is estimated in five-inch-diameter classes (see appendix figure 1).

To clarify timber availability and advance the efficiency of timber harvest projects, SOFRC has generated a logging systems and access tool that takes into account the existing transportation system, topography, and operations awareness to inform potential projects' scope and design. The tool identifies barriers such as fish streams, owl cores, major highways, ridges, and uphill units in order to categorize accessibility by harvest system (i.e., tractor, cable, mixed). It also identifies the part of a landscape with limited access, such as stands that can be reached only by helicopter or by construction of new roads. Limited-access stands reflect additional cost. For instance, helicopter logging requires strong markets and logistical fine-tuning. New roads require short- and long-term agency expense.

FIGURE 4

LOGGING SYSTEMS



Forest management projects typically use a mix of timber sales, stewardship contracts, and service contracts. Responsible forest management suggests that receipt-generating timber sales be balanced with other management expenditures—for example, those for young-stand treatments and fuels reduction, the latter often subsidized at significant cost.

Future versions of this assessment will benefit from compiling results from three-to-five-acre units in order to distinguish those that are able to generate the minimum value and size necessary for timber sales or other integrated operations.

FOREST RESTORATION BENEFITS

Restoration treatments that reduce the potential risk of severe fire can also reduce loss of life and property, as well as the costs of fire suppression and rehabilitation. The direct economic benefits of restoration include employment and tax revenues associated with harvest, timber production, and forestry-supported jobs. Ecosystem service benefits include: protecting future economic opportunity; maintaining forest processes and critical wildlife habitat; producing clean drinking water; protecting home and property values; and enhancing quality of life through recreation and tourism.

The SOFRC strategy recognizes the importance of federal land in providing these and other economic benefits to the communities of southwest Oregon. However, compared to many of northwest Oregon's moist forests, the dry forests of southwest Oregon are lower in productivity. Steep ground, low volume, and difficult access characterize the region. The need to reduce fuels and maintain resilience requires additional expense. High-volume, complex stands are typically needed for northern spotted owl conservation, and other high-volume southwestern stands have been previously harvested. Consequently, it is unrealistic to expect the federal forests of southwestern Oregon to generate harvest volume and timber receipts comparable to Oregon's moist forests or, for that matter, peak historic regional levels. Nonetheless, as this assessment outlines, a cohesive, regional restoration strategy is capable of providing significant timber volume and associated economic values.

SUMMARY FINDINGS

SOFRC Emphasis Area acres, prescriptions, and expected yield volumes have been sorted by Northwest Forest Plan (NWFP) allocations consistent with current planning and administrative regulations, including the interim Aquatic Conservation Strategy (ACS) buffers. SOFRC anticipates future dialogue to consider work restoring dry uplands in Riparian Reserves consistent with the ACS, but at this time no volume is calculated in these areas. No private, industrial forestlands were quantified in this assessment.

The "Forest Restoration Strategy and Timber Supply Assessment for the Illinois Valley" summary findings are in the following table.

FOREST RESTORATION STRATEGY & TIMBER SUPPLY ASSESSMENT FOR THE ILLINOIS VALLEY

TOTAL BLM/USFS ACRES IN THE ILLINOIS VALLEY ASSESSMENT SERVICE AREA	1,221,513 ACRES
LAND AVAILABLE FOR HARVEST IN ACCORD WITH NWFP ALLOCATIONS	692,074 ACRES
POTENTIAL VOLUME AVAILABLE (10-30" DBH) BY APPLYING THE SOFRC STRATEGY	1,067 MILLION BOARD FEET
ACRES ACCESSIBLE FROM EXISTING ROADS	391,470 ACRES
ACRES ACCESSIBLE FOR COST-EFFECTIVE TREATMENT (> 3 MBF/ACRE)	54,142 ACRES
RESTORATION VOLUME AVAILABLE ON COST-EFFECTIVE ACRES; TOTAL AND PER YEAR OVER 20 YEARS	563 MILLION BOARD FEET OR 28.1 MILLION BOARD FEET/YEAR

The above table shows total Bureau of Land Management (BLM)/United States Forest Service (USFS) acres in the Illinois Valley service area and those available for harvest under current administrative conditions. Fifty-seven percent of total acres are currently available for timber harvest under existing land use plans.

If all available acres were treated in accord with SOFRC principles, some 1,067 billion board feet would be available. However, this is an unlikely scenario, and meant to simply show current standing volume potentially available through restoration.

Distance from existing roads is an important indicator of cost-effective treatment. Forty-three percent of the Illinois Valley assessment landscape is inaccessible from the existing road network and thus currently unavailable for ground-based systems. These acres are excluded from consideration in this report.

As summarized above, site-specific restoration on accessible stands with commercially viable volume (> 3 mbf/acre) can be expected to yield some 28.1 million board feet of timber per year annually over twenty years.

It is expected that the majority of trees that are removed consistent with a dry-forest restoration strategy will be Douglas fir (lower elevation) and white fir (higher elevation). Gradient Nearest Neighbor data utilized for this assessment does not provide reliable species composition information. Approximately 5 percent of the trees removed from current, analogous, restoration-based timber sales (Vine Maple, Middle Friese, Friese Camp, and Ashland Forest Resilience) were ponderosa pine.

Models have estimated that approximately 60 percent of that volume is in the ten-to-twenty-inch diameter at breast height (dbh) size class.

Of the 692,074 acres identified as available for harvest in the Illinois Valley assessment area, the SOFRC Complex Forest emphasis area highlighted 265,720 acres as providing either existing, long-range, or near-range owl habitat. In other words, 38 percent is identified for priority owl conservation. While volume may derive from treatments to benefit owl conservation in complex forests (reducing risk of fire to known sites), it is expected that some 92 percent of total restoration volume will be outside the complex forest. (For additional information on acreage and volume totals, see appendix attachment 1.)

The Southern Oregon Forest Restoration Collaborative Board of Directors thanks the Technical Team and Technical Advisors; agency, non-governmental organization, and community partners; and the numerous contributors to and reviewers of this assessment and following zone of agreement (chapter 2) for their support and assistance.

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FOREST RESTORATION STRATEGY AND TIMBER SUPPLY ASSESSMENT FOR THE ILLINOIS VALLEY

APPENDIX TABLE 1

Plant Series	Moisture	Insolation	Ecosystem		Fuels		Complex Forest			Percent of Total
			Resilience	Management	Long-range	Near-range	Existing	Total		
Douglas fir	Dry	Cool	56,161	36,040	8,129	35,059	47,399	182,787	14%	
Douglas fir	Dry	Warm	117,485	68,238	8,233	50,290	45,888	290,135	23%	
Douglas fir	Mesic	Cool	9,340	814	1,420	5,665	8,917	26,157	2%	
Douglas fir	Mesic	Warm	13,240	682	1,226	4,433	4,505	24,086	2%	
Jeffery pine	Dry	Cool	9,621	731	297	2,419	2,112	15,180	1%	
Jeffery pine	Dry	Warm	18,933	2,958	400	2,128	1,460	25,879	2%	
Mountain hemlock	Mesic	Cool	1,401	0	4	7	12	1,424	0%	
Mountain hemlock	Mesic	Warm	1,212	0	1	1	14	1,228	0%	
Ponderosa pine	Dry	Cool	671	763	104	372	806	2,715	0%	
Ponderosa pine	Dry	Warm	2,087	3,569	86	446	767	6,955	1%	
Red fir	Mesic	Cool	15	0	29	6	125	175	0%	
Red fir	Mesic	Warm	6	0	3	4	22	35	0%	
Tanoak	Dry	Cool	61,931	2,765	4,707	20,905	32,923	123,232	10%	
Tanoak	Dry	Warm	81,613	3,662	3,540	26,697	22,583	138,094	11%	
Tanoak	Mesic	Cool	10,303	476	1,113	4,493	8,838	25,222	2%	
Tanoak	Mesic	Warm	10,567	344	639	3,629	3,698	18,876	1%	
Western hemlock	Mesic	Cool	5,339	150	741	2,599	5,163	13,993	1%	
Western hemlock	Mesic	Warm	6,213	153	534	2,749	2,846	12,494	1%	
White fir	Dry	Cool	27,865	2,011	4,078	15,501	29,966	79,421	6%	
White fir	Dry	Warm	42,481	2,225	3,162	14,352	25,354	87,575	7%	
White fir	Mesic	Cool	28,623	182	785	2,650	6,731	38,972	3%	
White fir	Mesic	Warm	32,313	168	435	1,913	5,566	40,395	3%	
Non-forest	NA	NA	74,289	26,367	1,446	5,901	5,372	113,374	9%	
Totals			611,710	152,297	41,113	202,219	261,066	1,268,405	100%	

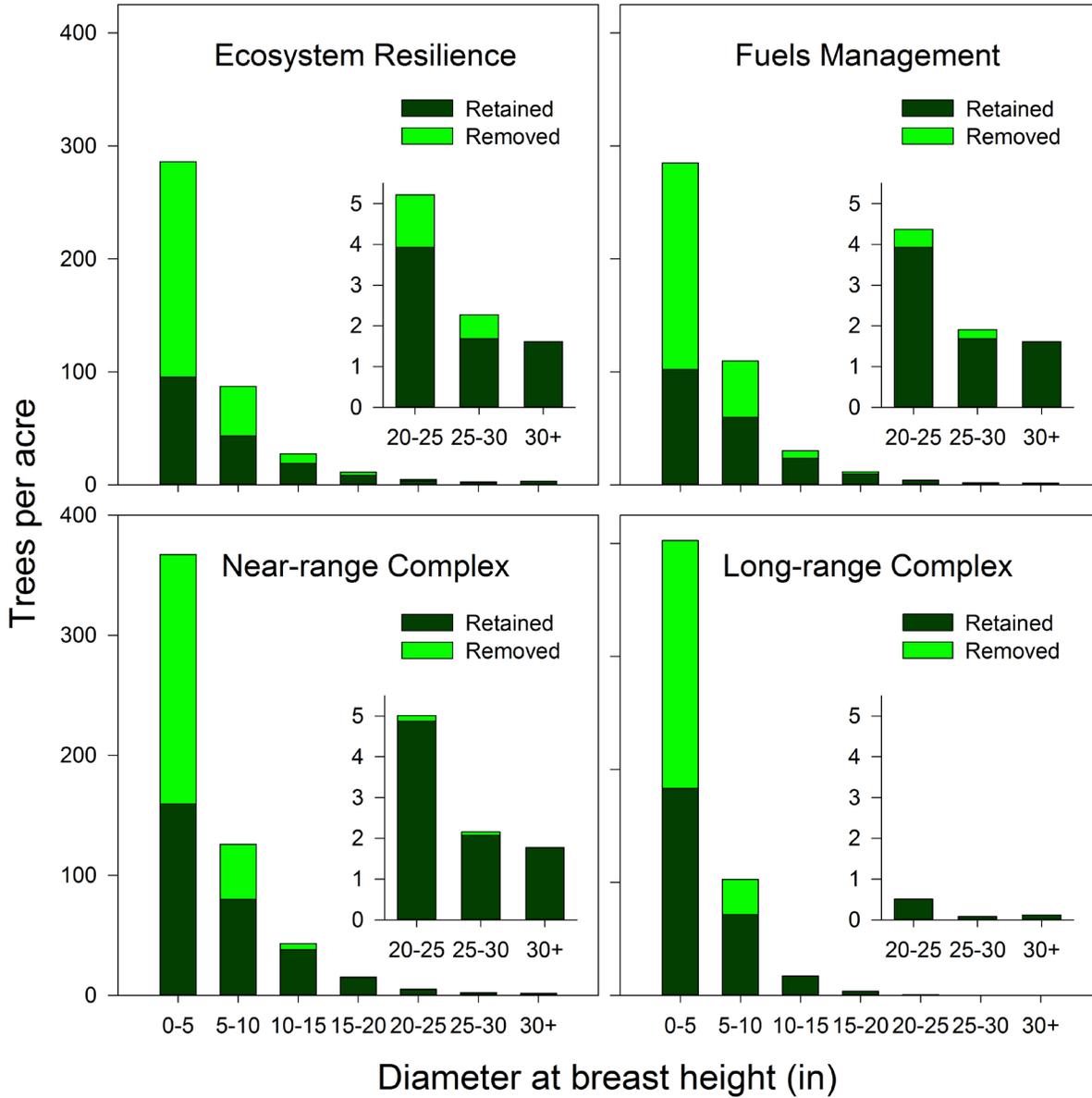
Appendix Table 1: Acreage of mapped emphasis areas in the Illinois Valley Restoration and Timber Supply Assessment by corresponding forest type, classified by plant series, moisture availability, and insolation.

APPENDIX TABLE 2

Series	Moisture	Insolation	Max SDI	Ecosystem Resilience		Fuels Management		Complex habitat					
				RDI	SDI	RDI	SDI	Long-range		Near-range		Existing	
				RDI	SDI	RDI	SDI	RDI	SDI	RDI	SDI	RDI	SDI
Douglas fir	Dry	Cool	501	0.35	175	0.40	200	0.30	150	0.45	225	NA	NA
Douglas fir	Dry	Warm	501	0.30	150	0.35	175	0.30	150	0.45	225	NA	NA
Douglas fir	Mesic	Cool	501	0.40	200	0.45	225	0.35	175	0.45	225	NA	NA
Douglas fir	Mesic	Warm	501	0.35	175	0.40	200	0.35	175	0.45	225	NA	NA
Jeffery pine	Dry	Cool	430	0.35	151	0.40	172	0.30	129	0.45	194	NA	NA
Jeffery pine	Dry	Warm	430	0.25	108	0.35	151	0.30	129	0.45	194	NA	NA
Mountain hemlock	Mesic	Cool	800	0.25	200	0.45	360	0.35	280	0.45	360	NA	NA
Mountain hemlock	Mesic	Warm	800	0.25	200	0.40	320	0.35	280	0.45	360	NA	NA
Ponderosa pine	Dry	Cool	501	0.35	175	0.40	200	0.30	150	0.45	225	NA	NA
Ponderosa pine	Dry	Warm	501	0.25	125	0.35	175	0.30	150	0.45	225	NA	NA
Red fir	Mesic	Cool	800	0.25	200	0.45	360	0.35	280	0.45	360	NA	NA
Red fir	Mesic	Warm	800	0.25	200	0.40	320	0.35	280	0.45	360	NA	NA
Tanoak	Dry	Cool	530	0.35	186	0.40	212	0.30	159	0.45	239	NA	NA
Tanoak	Dry	Warm	530	0.30	159	0.35	186	0.30	159	0.45	239	NA	NA
Tanoak	Mesic	Cool	530	0.25	133	0.45	239	0.35	186	0.45	239	NA	NA
Tanoak	Mesic	Warm	530	0.25	133	0.40	212	0.35	186	0.45	239	NA	NA
Western hemlock	Mesic	Cool	530	0.25	133	0.45	239	0.35	186	0.45	239	NA	NA
Western hemlock	Mesic	Warm	530	0.25	133	0.40	212	0.35	186	0.45	239	NA	NA
White fir	Dry	Cool	530	0.35	186	0.40	212	0.30	159	0.45	239	NA	NA
White fir	Dry	Warm	530	0.30	159	0.35	186	0.30	159	0.45	239	NA	NA
White fir	Mesic	Cool	530	0.40	212	0.45	239	0.35	186	0.45	239	NA	NA
White fir	Mesic	Warm	530	0.35	186	0.40	212	0.35	186	0.45	239	NA	NA

Appendix Table 2: Restorative targets for Relative Density Index (RDI), and Stand Density Index (SDI), scaled by the maximum SDI of the seral tree species for the emphasis areas in the Illinois Valley Restoration and Timber Supply Assessment, tailored to plant series, moisture availability, and solar insolation.

APPENDIX FIGURE 1



Appendix Figure 1: Average existing trees per acre by diameter class (inches) by emphasis area for current stands in the Rogue Basin. Application of the restoration principles will retain (dark green) or remove (light green) an average number of trees per acre. Inset focuses on trees >20 in. diameter at breast height.

APPENDIX ATTACHMENT 1

Illinois Valley Analysis Area			
	NWFP Allocations	Acres	Totals
Scheduled Yield (AMA/ Matrix)	BLM Timber	232,241	32%
	FSTimber	155,856	388,097
Partial Yield	BLM LSR	70,281	
	FSLSR	132,731	25%
	BLM Restricted	100,965	303,977
Not in Base	BLM Riparian	201,300	
	BLM Withdrawn	32,469	
	FSRiparian	49,116	
	FSRoadless	160,961	43%
	FSWithdrawn	85,592	529,438
Grand Total		1,221,513	

	NWFP Land Allocation	Predicted Removal Volume 10-30 inch DBH (MMBF)	
Scheduled Yield (AMA/ Matrix)	BLM Timber	389	
	FSTimber	234	36%
Partial Yield	BLM LSR	118	
	FSLSR	198	
	BLM Restricted	128	42%
Grand Total		1,067	

Appendix Attachment Upper: Northwest Forest Plan land allocations within Illinois Valley assessment area.

Appendix Attachment Lower: Predicted yield after application of SOFRC prescriptions and emphasis area recommendations within NWFP land allocations. Commercial timber is 10-30 inch material. Note 43 percent of acres are "not in base" and removed from predicted volume removal.

SOFRC EMPHASIS AREAS

Acres	SOFRC Emphasis Areas					
	Complex Forest (Existing)	Ecosystem Resilience	Fuels	Complex Long Range	Complex Near Range	Grand Total
BLM Timber	36,995	95,807	58,723	6,695	34,021	232,241
FSTimber	40,216	74,803	5,654	5,951	29,232	155,856
BLM LSR	14,675	32,007	5,629	3,056	14,914	70,281
FSLSR	27,760	78,556	2,554	4,722	19,140	132,731
BLM Restricted	12,925	44,571	28,050	1,811	13,607	100,965
Grand Total	132,571	325,743	100,611	22,235	110,914	692,073

MMBF	SOFRC Emphasis Areas					
	Complex Forest (Existing)	Ecosystem Resilience	Fuels	Complex Long Range	Complex Near Range	Grand Total
BLM Timber	-	241	119	0.4	28	389
FSTimber	-	200	8	0.1	26	234
BLM LSR	-	87	16	0.0	15	118
FSLSR	-	182	6	0.0	10	198
BLM Restricted	-	94	25	0.1	9	128
Grand Total	-	803	174	0.7	90	1,067

SOFRC Emphasis Areas Upper: Acres and volume within NWFP allocations and SOFRC Emphasis Areas.

SOFRC Emphasis Areas Lower: Total potential volume in SOFRC Emphasis Areas after applying density goals and removing stands with less than 3,000 board feet per acre.

LOGGING SYSTEMS

Acres	Logging Systems				Grand Total
	Cable	Cable / Tractor	Tractor	Limited Access	
BLM Timber	39,339	69,228	40,168	83,505	232,241
FSTimber	25,955	40,372	20,462	69,065	155,856
BLM LSR	15,595	21,733	9,073	23,879	70,281
FSLSR	28,711	30,723	13,434	59,863	132,731
BLM Restricted	12,114	11,541	13,019	64,291	100,965
Grand Total	121,715	173,598	96,157	300,603	692,073
Percent of Total	18%	25%	14%	43%	100%

MMBF	Logging Systems				Grand Total
	Cable	Cable / Tractor	Tractor	Limited Access	
BLM Timber	58	101	82	148	389
FSTimber	40	59	35	100	234
BLM LSR	23	33	20	42	118
FSLSR	42	42	26	89	198
BLM Restricted	17	13	16	82	128
Grand Total	180	248	178	461	1,067
Percent of Total	17%	23%	17%	43%	100%

Logging Systems Upper: Acres by logging system within NWFP allocations. Forty-three percent of acres and volume are limited access (outside range of ground systems or existing roads).

Logging Systems Lower: Total potential volume by logging system and in limited access areas.

BOARD FOOT PER ACRE CLASSES

Acres	Board foot per acre classes- with current access							Grand Total
	No Removal	<1 mbf	1-3 mbf	3-5 mbf	5-10 mbf	10-20 mbf	20+ mbf	
BLM Timber	110,556	7,342	8,653	5,878	8,733	5,098	2,477	148,736
FSTimber	67,825	3,084	3,673	2,964	4,361	3,804	1,079	86,790
BLM LSR	34,479	2,150	2,944	1,700	2,825	1,555	749	46,402
FSLSR	57,465	3,120	3,471	1,966	2,971	2,844	1,033	72,869
BLM Restricted	29,806	1,365	1,395	1,025	1,588	1,021	474	36,674
Grand Total	300,131	17,061	20,135	13,532	20,478	14,320	5,812	391,470

MMBF	Board foot per acre classes- with current access							Grand Total
	No Removal	<1 mbf	1-3 mbf	3-5 mbf	5-10 mbf	10-20 mbf	20+ mbf	
BLM Timber	0	3	16	23	63	70	66	242
FSTimber	0	1	7	12	32	53	29	134
BLM LSR	0	1	5	7	21	21	22	76
FSLSR	0	1	6	8	23	40	32	110
BLM Restricted	0	1	3	4	12	14	12	46
Grand Total	0	7	37	54	151	197	161	606

Board Foot per Acre Classes Upper: Total accessible acres by board foot class per NWFP land allocations.

Board Foot per Acre Classes Lower: Volume totals by board foot class and NWFP allocations.

TOTAL VOLUME REMOVED BY BOARD FOOT PER ACRE CLASS

MMBF					Grand
	3-5 mbf	5-10 mbf	10-20 mbf	20+ mbf	Total
BLM Timber	23	63	70	66	223
FSTimber	12	32	53	29	126
BLM LSR	7	21	21	22	70
FSLSR	8	23	40	32	102
BLM Restricted	4	12	14	12	42
Grand Total	54	151	197	161	562

Acres					Grand
	3-5 mbf	5-10 mbf	10-20 mbf	20+ mbf	Total
BLM Timber	5,878	8,733	5,098	2,477	22,185
FSTimber	2,964	4,361	3,804	1,079	12,208
BLM LSR	1,700	2,825	1,555	749	6,829
FSLSR	1,966	2,971	2,844	1,033	8,813
BLM Restricted	1,025	1,588	1,021	474	4,107
Grand Total	13,532	20,478	14,320	5,812	54,142

Upper: Total volume removed by board foot per acre class.

Lower: Total acres by board foot class.



THE ZONE OF AGREEMENT:
THE CONTOURS OF
SUPPORT FOR FOREST
RESTORATION IN
SOUTHWEST OREGON



CHAPTER 2

Chapter 1 of this report, “Forest Restoration Strategy and Timber Supply Assessment for the Illinois Valley,” used a cohesive, forest-restoration strategy and associated tools to estimate potential timber supply within a two-hour haul distance of the Rough & Ready mill site in the Illinois Valley. A variety of restoration, economic, and administrative screens were used to identify some fifty-four thousand acres able to provide twenty-eight million board feet of timber through cost-effective restoration treatments annually over the next twenty years. Northern spotted owl conservation in complex forests was prioritized on 38 percent of the landscape currently available for management.

This chapter outlines the contours of community support for such a strategy. Sources used to inform the identification of this zone of agreement include regional surveys, local project summaries, and perspectives collected from a variety of wide-ranging interviews, conversations, and presentations. A brief introduction to the social landscape sets the context for the discussion.

The “metrics” of this chapter differ from those of chapter 1. Social perspective and dynamics are better identified than modeled. Identifying a zone of agreement for forest restoration is less a matter of definition than a process based on shared understanding, where trust must translate across a variety of settings on the physical, social, and economic landscape.

Trees display unique characteristics and are highly influenced by the setting in which they live. People are no different. Both can be challenged and sometimes strengthened by stress and generally respond well to beneficial treatment. The following outlines a variety of perspectives on the role of beneficial treatments for forests, identifying shared understanding and key concerns that highlight the contours of agreement for advancing forest restoration.

The goal is to assist the expansion of beneficial treatments where appropriate in the Illinois Valley and across the Rogue Basin. This is a strategy that identifies and highlights the opportunity to strengthen the health and well-being of both forests and communities alike.

SUMMARY FINDINGS

Findings from surveys, interviews, conversations, and presentations indicate support for the SOFRC restoration strategy as applied to the Illinois Valley and broader Rogue Basin. High-profile, forest-restoration projects provide additional details that help identify the zone of agreement in practice.

General principles can sometimes find an easier path to social agreement than specific details or on-the-ground action. The below findings reflect the dynamic process and sometime tension at the intersection of the general (e.g., support for forest health) and the specific (e.g., the use of diameter limits).

FINDINGS INCLUDE:

- The SOFRC strategy is seen as clear and consistent, both science-based and commonsense;
- Key regional projects have helped build understanding, generate lessons learned, and increase support for restoration;
- A clear and fine-grained “emphasis area” approach (e.g., fuels management, complex-forest habitat) helps community members better understand restoration need compared to Northwest Forest Plan allocations (e.g., matrix, adaptive management areas (AMA));
- Fire-risk reduction (for homes, communities, public and private land) is well supported and is a good organizing tool to advance understanding, build community partnerships, and prioritize action;
- There is an increased awareness of the distinct character of dry forests in southern Oregon and support for strategies that recognize that distinction;
- Clearcutting dry forests in southwest Oregon has little community support;
- Variable retention strategies are not well understood and generally considered a form of clearcutting;
- The economic benefits of restoration and the importance of a forest management infrastructure (processing capacity, skilled workforce) are recognized and supported;
- Project monitoring is viewed favorably;
- Diameter limits are generally seen as sideboards that facilitate successful project implementation (21” remains a common “upper limit” in the environmental community);
- The removal of larger trees to benefit preferential species (ponderosa pine) has been supported in numerous projects;
- Legacy tree retention at stand and landscape scales is broadly supported (leave big old trees);
- Conservation of the northern spotted owl is generally favored; and
- Site specificity (forest and community) in planning and implementation is key to success.

The above findings delineate the contours of agreement. They are a starting point for landscape-level planning and implementing community-supported projects.

Yet in order to strengthen the Illinois Valley assessment and suggest next steps for success—for both the valley and forest landscape restoration in general—we have identified common concerns. The list below does not qualify the list above, but it recognizes the potential transient nature of agreement. Restoration agreements, like personal agreements, have conditions and expectations; if those are not transparent, not met, or are violated, the agreements can shift or disappear altogether.

Outlying perspectives are not considered particularly instructive for identifying a zone of agreement, for example: “There should be no commercial products removed from public land”; “There should be no management on public land for fifty years”; “Fire should be allowed to take its course and reset the clock”; “The spotted owl should not be a concern when harvesting federal forests.” These are a variety of minority perspectives and generally do not impact project design or implementation.

IN CONTRAST, COMMON CONCERNS, EXPECTATIONS, AND SUGGESTIONS THAT ARE INSTRUCTIVE INCLUDE:

- We should honor and support good examples and efforts underway (e.g., community fire plans, Josephine County Stewardship Group/Forest Practices Committee, case studies below);
- A landscape scale project (min. > 10,000 acres) tiered to the SOFRC Illinois Valley assessment strategy is necessary to fully demonstrate required planning, quantify implementation outcomes, and demonstrate on-the-ground restoration as defined and modeled;
- The current assessment is too focused on volume and would be strengthened by assessing broader restoration opportunity and outcomes (e.g., prioritize fuels reduction, weigh the value of clean water);
- There is a primary need for site-specific planning that considers local conditions and engages local partners in planning and decision-making;
- The informal, local networks of a place, as opposed to special interests, should be the measure of community engagement;
- Community involvement at every stage—from design through implementation and monitoring—is a gold standard;
- Agency vision, leadership, and commitment to agreement is necessary for success;
- Agency capacity needs to be maintained, improved, and supported in the long term;
- Monitoring and adaptive management are helpful frameworks to advance long-term success and learning;
- Stewardship contracts and agreements are commonly supported (though sometimes misunderstood) and could be better used in dry forests;
- Pooled fiscal resources (i.e., federal, nonprofit, foundation, state) may be necessary for future restoration success; and
- Forest restoration and community engagement practiced as “business as usual” will be necessary to build additional support for forest restoration in the region.

SETTING AND CONTEXT

Josephine and Jackson counties are home to some of the most diverse forests in the country. Wise commentators, often longtime residents, commonly suggest the social diversity matches the landscape.

Some three-hundred thousand people currently call the counties home, a near tripling of the population since 1950. The majority of the population now lives along the I-5 corridor. However, the region is still known for widely dispersed homesites and non-incorporated communities. Indeed, Josephine and Jackson Counties are number one and number two among all western counties ranked by acres of developed land in the wildland-urban interface (Headwaters Economics). Unlike many other western counties high on the list, the vast majority of homes provide year-round residence; only 5 percent are seasonal.

SETTING AND CONTEXT

Other key shifts in the region have occurred since 1950. The year 1952 was the peak year for Oregon timber harvest, and the 1950s were the peak harvest decade for Josephine and Jackson Counties, the majority coming from private lands. In 1947, the Rogue River–Siskiyou National Forest tallied eighty-two mostly small mills in the Illinois Valley, and in 1954, ninety-one mills were identified in Jackson County. Nineteen fifty-eight found nearly a quarter of wage and salary employment tied to the lumber and wood products industry. However, by 1978, “the region’s big boom period” had passed, according to the Rogue River National Forest Management plan from that year. Improved technology, a lack of large trees, consolidation, and poor markets were listed as reasons for the passing of an era.

Since that time, both counties have seen ongoing decreases in non-service sector employment and income (farm, manufacturing, etc.) and increases in the service sector (investment, healthcare, etc.). There has also been a steady decline in labor earnings compared to non-labor income (dividend, transfer payments, etc.). By 2010, 56 percent of Josephine County income was from non-labor sources. It is perhaps not surprising to note the transition to an aging population as well, with both counties shifting from 25 percent of the population over the age of fifty in 1950, to over 40 percent in that age group by 2010.

These social indicators and demographic shifts form a backdrop to changing perspectives about forest management. Fewer individuals and families are now dependent on forest-related jobs. An aging population and new arrivals are more often tied to increases in the recreational use of forests and attraction to the non-fiscal, quality-of-life values the region offers.

The complex relationship of the Oregon & California Railroad Act to counties, communities, and forests is beyond the scope of this report. However, as the above snapshot of change highlights, social context is rarely static for long. Shared understanding on forest health and the need for restoration is long in developing, and current legislative proposals may create uncertainty and destabilize agreements. Yet they also provide opportunity for communities to coalesce around a shared vision for forest restoration.

REGIONAL SURVEYS

Regional surveys have helped assess community opinion, guide regional collaborative thinking, enhance project success, and improve project planning and implementation. As such, they provide insight into core perspectives and understanding that help delineate the contours of agreement for fuels reduction and forest restoration in the Illinois Valley and across the Rogue Basin. The below findings are reflected in key items of the above Summary Findings.

RECENT SURVEYS CONSULTED INCLUDE (SEE APPENDIX ITEM 1 DETAIL):

1. "Jackson and Josephine Small Diameter Support Survey";
2. "Interests and Issues of Illinois Valley Residents Regarding Public Land Management";
3. "Wildfire Public Opinion Survey Report"; and
4. "Public Perceptions of AFR (Ashland Forest Resiliency Stewardship Project) and Forest Restoration" (Opinion Survey of Ashland Residents).

KEY FINDINGS SHOW:

- Sixty-six percent of voters approve cutting and removing small diameter trees (< 21" dbh) from dense forests;
- Sixty-five percent said there should be flexibility to protect the oldest, largest trees; and
- The top reasons cited for these beliefs were to reduce wildfires (78 percent), create jobs (71 percent), provide renewable energy (67 percent), and provide revenue to counties (64 percent).

- "Jackson and Josephine Small Diameter Support Survey"

1. Public land management should be science-based and fact-based;
2. Public land management should be oriented to ecological integrity and diversity;
3. Economics are secondary to ecological integrity;
4. Clearcuts are to be avoided; and
5. Forest health and the need to reduce the severity of fire supports the approach of restoration forestry, defined as a focus on thinning, reduction of fuel load, brush removal, some canopy opening, small-diameter-tree harvest, and some commercial timber production.

- "Interests and Issues of Illinois Valley Residents Regarding Public Land Management"

Fifty percent of regional respondents see wildfire as a serious issue, compared to 21 percent of the American public. Fifty-nine percent worry about personal risk from wildfires, compared to a national average of 27 percent. Respondents are more likely than the American public to see an ecologically beneficial role for fire (51 percent compared to 44 percent).

And as summarized in the Josephine County Fire Plan, the survey showed residents "reported in high numbers that they have taken actions to promote defensible space on their own properties . . . shifts in attitudes and reported behavior are significant, both statistically in the confidence we can have about the survey results, and because they reflect key Fire Plan goals."

- "Wildfire Public Opinion Survey Report"

CONTINUED:

1. When asked what they value most about their local community, Ashland residents cite the natural environment. Many have a special connection to the Ashland Creek watershed, visiting the forests there often;
2. Residents are fairly knowledgeable about fire ecology and are very concerned about the risk of high-severity fire in the watershed, though they do not view forests in the watershed as unhealthy;
3. Where restoration is needed, residents believe its goals should be more ecological (functional integrity) than historical (returning to pre-settlement conditions); and
4. There is little support among residents for allowing forests in the region to evolve without any more human intervention.

- "Public Perceptions of AFR and Forest Restoration"

PROJECT CASE STUDIES

Projects that integrate public participation into planning, design, and implementation have clearly helped identify and build social acceptance for federal forest restoration in Josephine and Jackson Counties. Acceptability, along with forest characteristics and community dynamics, varies from place to place.

Below are brief descriptions of four important regional projects that have drawn upon social assets in order to succeed: community resources, agency managers, organizational expertise, and collaborative partnerships. These cases demonstrate how projects can be successful and provide lessons for moving forward in forest management. They provide examples of the zone of agreement in action, both generally and in detail.

The descriptions precede collective Lessons Learned below. The case studies can be read in more detail in the Appendix Item 2.

Ashland Forest Resiliency (AFR), an ambitious restoration project in the Ashland watershed, strategically engages a community that values the forest for its recreational, scenic, and spiritual values, and also as its source of water. Ashland is home to active environmental groups, and though one might have expected a NIMBY response to chainsaws in the forest, educational campaigns over the last decade have made clear the threat of doing nothing. A highly trained, diverse group of stakeholders laid the technical foundation for the project. Scientific expertise provided credibility. Ashland Forest Resiliency draws on Ashland's government and non-government organizational capacity, particularly the fire department, the ranger district, and environmental leadership from the Lomakatsi Restoration Project and The Nature Conservancy.

The Josephine County Integrated Fire Plan engages the community through education about the risk of wildfire and steps to mitigate that risk through forest management. Unlike densely populated and incorporated Ashland, Josephine County serves many isolated residents through volunteer fire departments.

Fire chiefs are highly respected in this county where government is often distrusted and self-sufficiency is valued. Fire plan leaders have worked with emergency managers and land management agencies to rank and design fuels treatments across boundaries in many neighborhoods. Special efforts were made to reach those in need. Less highly capitalized than the other cases, the fire plan works cooperatively with a currency of “brownie points”—sharing resources and expertise, leadership and trust.

The Wild Rivers Master Stewardship Agreement includes projects to create resilient forests in an area of even-aged tree plantations. Beyond forest restoration, the partnership established by the agreement has been used to strengthen economic and community capacity in the Illinois Valley. The Lomakatsi Restoration Project and local environmental interests have worked collaboratively with communities to accomplish ecologically based forest restoration by training workers, writing treatment prescriptions, creating jobs, engaging contractors, building consensus, monitoring, and obtaining scientific input and review. Lomakatsi’s emphasis on holistic restoration, maximizing both species and structural diversity, has earned wide social support. The group’s “light touch” on the land is complemented by a respectful social approach that includes learning from and valuing local cultures.

Pilot Joe, a BLM secretarial pilot project, joined the Southern Oregon Forest Restoration Collaborative, the Applegate Partnership and Watershed Council, Professors Norm Johnson and Jerry Franklin, and BLM and U.S. Fish and Wildlife Service partners to demonstrate dry-forest restoration principles and spotted owl conservation in order to gain broader social support for “active management.” Pilot Joe’s innovative treatments have entailed not only extensive public outreach and citizen learning about principles of restoration, but also organizational learning—professionals and agency staff taking a more integrated approach across disciplines and specialties, addressing challenges in implementation, and evaluating current regulations regarding contracting and implementation. A multi-party monitoring team was established to track project implementation and assess a spectrum of outcomes.

Detailed case studies (see Appendix Item 2) describe the above projects more fully. These projects show partner collaboration and community outreach efforts are crucial to building a zone of agreement to advance project success. Interestingly, the process can sometimes be more important than outcomes to the public. In these projects, goals are multiple and integrated. Field trips and monitoring activities help stakeholders assess management consequences and, rather than being paralyzed by distrust and disagreement, move public discourse forward to future action.

THE FOLLOWING COMPONENTS, IN ALL OR MOST OF THESE CASES, WERE IMPORTANT TO THEIR SUCCESS:

- **Monitoring:** From the annual report about fire-planning processes in Josephine County to photo points in Hope Mountain and Pilot Joe and technical forest stand research in AFR, monitoring efforts informed stakeholders about process, provided feedback for adaptive management, and built trust.
- **Science-based prescriptions and restoration principles:** Leading professors of forestry, a respected national environmental organization, a community-based ecological restoration organization, and various partners provided innovative ideas, linkages to other institutions and established literature, and political credibility to help advance a new vision for forest management.

- Community participation and sense of ownership: Concerted efforts at community engagement empowered individuals and built social capital (volunteerism, economic benefit, and political leadership).
- Outside resources: All of the projects enjoyed funding streams beyond the usual forest management budget allocations—some federal and some from foundations, partner organizations, and local governments.
- Leadership: A variety of individuals with vision, technical expertise, earned trust, and organizational skills helped instigate, implement, and sustain these projects. These people were “willing to push the envelope” and to go beyond job requirements in order to make a project successful.
- Dedicated staff: Funds were committed to part- and full-time staff who could coordinate planning and communicate across organizations and stakeholders; individuals invested in projects where they could share and promote project goals.
- Integrated Approach: Active forestry and ecosystem restoration were integrated at multiple scales and across a range of concerns, including impacts on wildlife, human communities, and economic outcomes.
- Joint Learning: Opportunities were created for learning from multiple parties and divergent viewpoints, frequently “grounded” by field trips. Treatment prescriptions were often collaboratively designed; rather than lecturing the public and other stakeholders, project staff engaged in dialogue.
- Framing: Outcomes of projects were aligned with community concerns, such as creating jobs and training in Hope Mountain, water quality and wildfire safety in Ashland, and demonstrating restoration principles that generate economic benefits in Pilot Joe.
- Partners: Most of the above was accomplished by multiple organizations, institutions, and agencies sharing resources and expertise.
- Integrated Approach: Active forestry and ecosystem restoration were integrated at multiple scales and across a range of concerns, including impacts on wildlife, human communities, and economic outcomes.
- Joint Learning: Opportunities were created for learning from multiple parties and divergent viewpoints, frequently “grounded” by field trips. Treatment prescriptions were often collaboratively designed; rather than lecturing the public and other stakeholders, project staff engaged in dialogue.
- Framing: Outcomes of projects were aligned with community concerns, such as creating jobs and training in Hope Mountain, water quality and wildfire safety in Ashland, and demonstrating restoration principles that generate economic benefits in Pilot Joe.
- Partners: Most of the above was accomplished by multiple organizations, institutions, and agencies sharing resources and expertise.

INTERVIEWS, CONVERSATIONS AND PRESENTATIONS, SUMMARY/CONCLUSION

To help identify a zone of agreement for restoration in Josephine and Jackson Counties, a wide range of individuals were formally interviewed (12). They engaged in structured individual or small-group conversations to discuss the merit of the restoration strategy (c. 20), provided feedback through dialogue, questionnaires, and written responses at presentations (over sixty), reviewed the assessment (c.16), and/or have made substantive contributions to this report.

These individuals include members of community organizations, environmentalists, industry representatives, educators, scientists of various stripes, economic development advocates, private landowners, business owners, forest workers, fire planners, city and country residents, agency representatives, government workers, watershed councils, resource advisory council members, and family and friends.

Primary concerns, thoughts, perspectives, recommendations, and opinions have been addressed and included in this report. Many will be verbalized again in new and ongoing projects. In conclusion, several key and representative quotations will draw this report to a conclusion.

KEY QUOTES AT THE HEART OF THE MATTER:

"I think the proposal is as straightforward as it could possibly be. I do not see any fatal flaws. I would like to see this strategy implemented across southwestern Oregon. . . . I still do not think that the minute details of this strategy are as important as the idea of maintaining (appropriate) densities across seral stages for overall forest health. In this case, it's like maintaining our own personal health. Eating properly and exercising are not rocket science solutions."

- Forest ecologist, thirty-five years of regional experience

"Generally, on paper it looks good and is something that I support, but it is vague without an actual project outlined."

- Natural resource professional project participant

"This assessment provides a larger management context where ecology informs broad management opportunities, and conceptually provides a less volatile and more practical way of looking at landscape management. . . . One of the biggest benefits of this assessment is the whole system of bidding, management, pre- and post-sale administration can all become more predictable, less contentious, and more productive as a result. The lawsuits and time delays can be avoided."

- Illinois Valley Economic Development

"Thanks for letting me take a look. . . . I don't have any suggestions for changes—it doesn't get in the weeds with techno-babble, maps and tables are easy to read and support the text, and it speaks to the challenges of doing this work down here."

- Agency community relations staffer

"Generally if you keep the cut to below 18" dbh you'll have enviro support. Over 25" dbh you might start getting resistance. There's just an emotional threshold there."

- Illinois Valley resident

"This is where monitoring and adaptive management become part of the strategy. Tweaks may be necessary to accomplish some specifics that we are not getting, and tweaks may be necessary to temporarily adjust to social and economic conditions, but the general strategy stated here should be a generally continuously ongoing proposition."

- Retired forester

"Members of the Forestry Practices Working Group (a committee of the Josephine County Stewardship Group) appreciate SOFRC applying the dry-forest restoration strategy to the Illinois Valley. . . . Most especially, group members stress the importance of full community engagement on these questions as a way to foster common direction and collaborative approaches to the next generation of forest management."

- Stewardship group member

"This is a great plan, you need to speak up! Our biggest issue is a lack of trust. Let me know if I can help."

- Health care professional

"I think it's important to stress that there is not ambiguity on where the public is. There's a lot of support for pragmatic restoration work."

- Regional social scientist, fifteen years of experience

THE ZONE OF AGREEMENT:
**THE CONTOURS OF
SUPPORT FOR FOREST
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SOUTHWEST OREGON**

APPENDIX ITEM 1

SURVEYS CONSULTED INCLUDE:

1. "Jackson and Josephine Small Diameter Support Survey";
2. "Interests and Issues of Illinois Valley Residents Regarding Public Land Management";
3. "Wildfire Public Opinion Survey Report"; and
4. "Public Perceptions of AFR and Forest Restoration" (Opinion Survey of Ashland Residents).

JACKSON AND JOSEPHINE SMALL DIAMETER SUPPORT SURVEY

The "Jackson and Josephine Small Diameter Support Survey" by Davis, Hibbitts & Midghall (DHM) was a telephone survey commissioned by SOFRC to assess the level of community support for cutting trees less than 21" dbh in public forests of Jackson and Josephine counties. Completed in 2008, it has been used to help advance the collaborative's long-term goal to thin dense forests in the Rogue Valley in order to improve ecological health and resiliency, reduce severe wildfire, and improve the region's economy and quality of life.

Four hundred voters in Josephine and Jackson counties were interviewed by subgroups including gender, age, county, political affiliation, length of residence in the area, forest visitation frequency, forest industry workers, and environmental voters.

Key findings showed a majority (66 percent) of voters approved of cutting and removing small-diameter trees from uncharacteristically dense forests. The highest approval rating came from voters aged thirty-five to fifty-four (74 percent) and Josephine County residents (70 percent). Almost two-thirds of voters (65 percent) said there should be flexibility in cutting to protect the oldest, largest trees.

Reduction of wildfires was the top reason to approve thinning uncharacteristically dense forests (78 percent). Other highly ranked reasons included job creation (71 percent), renewable energy production (67 percent), and increased revenue to counties (64 percent). Assurance that tree removal would not damage waterways or habitat was ranked important by 66 percent of respondents.

"Interests and Issues of Illinois Valley Residents Regarding Public Land Management" was put together by Kevin Preister (coordinator) and a team of Josephine County Stewardship Group members to gauge community opinion regarding the development of a landscape-scale stewardship project in the Illinois Valley. Two-hundred and sixty-five individuals were interviewed for an average of over one hour each and encouraged to "speak in their own words" in helping to identify a zone of agreement for public land management.

INTERESTS AND ISSUES OF ILLINOIS VALLEY RESIDENTS REGARDING PUBLIC LAND MANAGEMENT

The principles of community-based public land management, which were developed by conversations with Illinois Valley residents and explored more fully in subsequent sections of this report, are these:

1. Public land management should be science-based and fact-based.
2. Public land management should be oriented to ecological integrity and diversity.
3. Economics are secondary to ecological integrity.
4. Clearcuts are to be avoided.
5. Manage for the continued presence of old growth trees.
6. Balance is the watchword for level of harvest. "Take a little, leave a little."
7. Manage for meadows and hardwoods.
8. Forest health and the need to reduce the severity of fire supports the approach of restoration forestry, defined as a focus on thinning, reduction of fuel load, brush removal, some canopy opening, small diameter tree harvest, and some commercial timber harvest.
9. Replanting must keep pace with removal of forest resources.
10. Reduce burning if possible.
11. No new roads should be built and existing roads should be better maintained.
12. Project design includes monitoring to ensure accountability to all interested people.
13. Put local people to work.
14. Foster market development for biomass utilization and value-added production to support individual and family enterprises and jobs.
15. Public land should be available for a wide variety of public uses.
16. Outdoor recreation opportunities should be encouraged, especially eco-tourism that fosters extensive, dispersed, and low-impact uses of the land while supporting local businesses and jobs.

WILDFIRE PUBLIC OPINION SURVEY REPORT

The "Wildfire Public Opinion Survey Report" was completed by the Southern Oregon University Research Center for the Rogue Valley Fire Prevention Cooperative in 2011. The report covers findings from a survey of twenty-seven communities and neighborhoods regarding attitudes and beliefs about and behaviors around wildfire. Communities surveyed included Applegate, Ashland, Greensprings, and Seven Basins. The overall response rate for the survey was 42 percent of the total sample, with 1,426 residents of the four communities participating. This response rate exceeded the national standard for mail-in surveys. This high response rate meant that 145,452 individual pieces of data were entered for this project.

Fifty percent of the respondents see wildfire as an extremely serious or very serious issue, compared to 21 percent of the American public. Most respondents (59 percent) worry about personal risk from wildfires, compared to a national average of 27 percent.

Respondents are more likely than the American public to see an ecologically beneficial role for fire (51 percent compared to 44 percent). Similar to national findings, those with more information were more likely to take this view than those with less information.

In reporting survey findings, the Josephine County Integrated Fire Plan noted:

...survey results indicate high interest and concern for wildfire and other natural resource issues. A high percentage of respondents have an understanding of their responsibility as land and property owners for reducing wildfire risk. The surveys also show a significant increase in recognition of the term "Defensible Space." Residents reported in high numbers that they have taken actions to promote defensible space on their own properties. . . . These shifts in attitudes and reported behavior are significant, both statistically in the confidence we can have about the survey results, and because they reflect key Fire Plan goals.

This report of a shift in attitude and increased action due to increased fire risk awareness shows residents are responsive to fire plan education and outreach programs in Josephine and Jackson counties.

"PUBLIC PERCEPTIONS OF AFR AND FOREST RESTORATION" OPINION SURVEY OF ASHLAND RESIDENTS

(More information on the Ashland Forest Resiliency Project is listed below as case study.)

Relevant/most important findings:

1. Compared to other amenities in Ashland, residents most value the natural environment, and many have a special connection to the Ashland Creek watershed, visiting the forests there often.
2. Residents place a high value on the aesthetic beauty and perceived naturalness of the Ashland Creek watershed. They see it primarily as a source of beauty, sustenance, and recreation.
3. Residents are fairly knowledgeable about fire ecology and are very concerned about the risk of high-severity fire in the watershed, though they do not view forests in the watershed as unhealthy.
4. Most residents had not heard of AFR, though there is very strong support for AFR's fuel-reduction goals and tools, including the careful use of commercial thinning and prescribed fire. There is also strong support for public involvement in monitoring AFR.

5. Among AFR partners and potential interest groups, The Nature Conservancy is seen by residents as the most trustworthy, the Southern Oregon Timber Industry Association the least so. The U.S. Forest Service has more public trust than the City of Ashland. Though less well known, KS Wild and Lomakatsi Restoration Project have substantial public trust.
6. Residents are not sure that national forestland in the region needs large-scale restoration.
7. Residents are unfamiliar with some key terms related to restoration used commonly by resource professionals (e.g., legacy tree, ecological reference condition), and restoration is not seen as merely fuel reduction, though fuel reduction is central to restoration.
8. Where restoration is needed, residents believe the goals should be more ecological (functional integrity) than historical (returning to pre-settlement conditions).
9. There is little support among residents for allowing forests in the region to evolve without any more human intervention.

APPENDIX ITEM 2: PROJECT CASE STUDIES, ASHLAND FOREST RESILIENCY PROJECT

Ashland Forest Resiliency (AFR) is a ten-year stewardship project designed to reduce the risk of severe wildfire in the Ashland watershed and to protect water quality, older forests, wildlife, people, property, and quality of life. To achieve these outcomes, which the project's guiding principles posit are best sustained by treatments mimicking the natural presence of fire, the project entails thinning accumulated smaller trees, reducing flammable fuels, and introducing controlled burns under selected conditions. In addition to saving older trees, the plan's priorities include preserving wildlife and streamside habitat and protecting unstable slopes and erosive soils.

Success of the ongoing project can be attributed to a number of local actions as well as timely federal policies and funding. An earlier thinning demonstration project on forestland within the City of Ashland's watershed provided an important preview and test of the approach. Extra effort by the city forester to engage the community through meetings, field tours, and outreach garnered public trust and support for thinning, including helicopter logging of merchantable timber, and increased awareness of wildfire risk.

The Healthy Forest Restoration Act provided authority for the City of Ashland to develop a community alternative for the Community Wildfire Protection Plan. The city invested considerable staff time convening community meetings and a multi-stakeholder technical team; in 2009 the AFR ultimately adopted the community alternative with some modifications as the basis for the ongoing project.

Foundational to AFR is its multi-party monitoring, an effort coordinated by The Nature Conservancy and City of Ashland, with support of the National Forest Foundation. Development of the plan began by convening stakeholders to list priorities articulating the values and outcomes desired in the treatment design and assessment. Guided by an advisory committee and reviewed by a third party implementation review team, monitoring is undertaken by a variety of entities and individuals coordinated through The Nature Conservancy.

Social assessments and monitoring efforts commissioned by AFR have included a variety of qualitative and quantitative surveys of stakeholders and the general public to gauge community attitudes and understanding of forest restoration in the watershed (Sturtevant 2009, Preister 2010, Shibley 2011 and 2013). Ashland Forest Resiliency's community involvement is guided by a strategic community engagement and communications plan, which is coordinated by the city and includes interpretive signs in the watershed to inform visitors about watershed values and the project to sustain them.

Educational outreach focused on the watershed restoration implemented by Lomakatsi Restoration Project is ongoing, including field trips for school groups.

With the great potential represented by funding through the American Recovery and Restoration Act (ARRA) to implement the project at scale, the AFR turned to its partners to increase capacity to work on the project. In 2010, the City of Ashland, The Nature Conservancy, and Lomakatsi Restoration Project signed a ten-year Master Stewardship Agreement, which would enable a collaborative effort on designing, decision making, implementation, and monitoring. A combined total of \$6.2 million from ARRA, \$830,000 in partner match, reinvestment of receipts from the sale of by-products timber, and additional leveraged funding has supported treatments to date on thirty-seven hundred acres, including five hundred acres of cross-boundary work. So far, 355 acres have been commercially thinned by helicopter and 344 acres have undergone ground-based commercial thinning, with some 3.5 million board feet of timber sold to mills. Non-commercial service work (brushing and small-tree thinning) has been conducted on 1,567 acres and 855 acres have been burned (hand piles and underburn). This work created one hundred seasonal jobs, seventeen which were full-time equivalent, between March 2009 and September 2013 (<http://ashland.or.us/Page.asp?NavID=15069>).

Maintaining engagement and the transparency of the project has been critical. Nearly fifty field tours and meetings for the public and interested stakeholders have been held. Data, photos, and interpretation are posted on a user-friendly website, along with project updates, alerts about road closures, prescribed burning activity, and other impacts of the project. Several videos have been produced to help introduce interested viewers to the project.

The success of this project can be measured many ways, but one indicator may be the level of financial support from partners. In addition to the \$300,000 from The Nature Conservancy, the City of Ashland has been annually budgeting for staff and contractors to engage in the project and recently the council approved \$350,000 over the next biennium to pay for on-the-ground treatment on federal forestland. The chamber of commerce recently publicly recognized the partnership and celebrated the watershed's contribution to the local economy with funding and a commitment to produce an educational map.

Some will consider the project a success because it is science-based and focuses on forest restoration, drawing on experts from several institutions and basing work on the premises in established literature and best management practices. Some stakeholders will care most that the work was monitored effectively to inform adaptive management. And some will point out the collaborative nature and partnerships, which increase capacity for design, implementation, monitoring, engagement, and fundraising. The Lomakatsi Restoration Group's community-based and holistic forest restoration principles have positioned them as a reputable implementing partner.

JOSEPHINE COUNTY INTEGRATED FIRE PLAN

In 2002, the Biscuit Fire burned over five-hundred thousand acres in southern Oregon and northern California and put fifteen thousand citizens on evacuation notice. While the fire resulted in minimal loss of life and property, the costs of suppressing the fire (and the long-term recovery efforts) exceeded \$150 million. This event was a reminder of the persistent threat of wildfire, and the Josephine County board of commissioners directed staff to develop a countywide fire plan, which would identify communities at risk, prioritize hazardous fuels treatment projects, increase public awareness about wildfire, and strengthen emergency management procedures.

The county community development director led the process with the goal to “change the culture of how people in Josephine County think about wildfire.” He contracted with a retired Forest Service fire manager and the Program for Watershed and Community Health at the University of Oregon to facilitate the core planning team. They quickly saw integration as the key strategy, given the complex set of issues and stakeholders. With the rural population comprising over 50 percent of the county’s citizens, the need to address fuels conditions on private and adjacent public lands was paramount. Many citizens live in or move to Josephine County because of the vast public lands, forest amenities, and geographic isolation. The Josephine County Integrated Fire Plan (JCIFP) focused on establishing a collaborative process so that the needs of rural residents would be heard by land management agencies. Likewise, the JCIFP has resulted in opportunities for citizens to learn more about the public agency goals for fire planning and fuels reduction through this process.

From the beginning, it was important to find credible, local organization partners throughout the county. Rural fire protection districts, community-based organizations, and social service agencies provided connections to diverse residents and helped establish a foundation of trust with community members. Fire districts and county emergency management services were brought in as the core respected leaders; federal agencies participated on the Risk Assessment and Fuels Reduction committee, which identified and prioritized mitigation actions, coordinated fuels treatment projects across the landscape, and identified opportunities for marketing and small diameter utilization. The Education and Outreach committee developed strategies for increasing citizen awareness and action. Special effort was made to coordinate the programs for equitable access across fire districts and to provide low-income and special-needs citizens with opportunities to participate in fuel reduction and emergency planning activities. Coordinated post-fire response was an important goal for those who had worked on the Biscuit Fire, as was leveraging funding for fuel reduction.

The Josephine County Stewardship Group was created as a working committee of the fire plan to integrate community fire-safety planning with the development of forest restoration and stewardship projects. The group has worked to promote the use of stewardship contracting and the development of local businesses to the by-products of restoration activities. It has participated in planning efforts, such as the Forest Service’s Butcher Knife Slate project, which successfully incorporated community recommendations into the environmental assessment and the upcoming federal contract.

The Josephine County Integrated Fire Plan (JCIFP) is now a strong partnership between public agencies, fire districts, community-based organizations, and citizens. The process has emphasized a cooperative approach to identify and reach common objectives around fire prevention, education, fuels treatment, and other fire-related programs. It has met its goals of collaborative decision-making, providing opportunities for citizen participation and implementing landscape-scale fuels treatment projects across private and public land boundaries. The JCIFP has also focused on extending resources and opportunities to low-income and other special-needs citizens in the county (a significant percentage of the county's population at risk to wildfire). The primary challenges have been related to the lack of resources in the fire districts and community organization that would otherwise allow them to be greater participants in the planning and implementation of the JCIFP. Fire plan partners have approached this challenge by sharing resources and providing on-site technical assistance.

WILD RIVERS MASTER STEWARDSHIP AGREEMENT

In November 2008, Siskiyou Project, Lomakatsi Restoration Project, and the Rogue River–Siskiyou National Forest entered into a ten-year, ten-thousand-acre Master Cost-Share Stewardship Agreement (MSA) to achieve a variety of goals: ecological restoration, climate change resiliency, reduced risk of wildfire, community collaboration, workforce training and job creation, and increased capacity to achieving forest restoration work.

Lomakatsi Restoration Project has been working collaboratively with the Forest Service, BLM, county and city governments, private citizens, and nongovernmental organizations for more than a decade. In a region with considerable conflict regarding forest management, the nonprofit, community-based organization builds a broad base of support with its respectful and integrative approach to culture, economies, and forest ecosystems. Lomakatsi achieves its goals through education, vocational training, specialized workforce development, on-the-ground workforce activities, and the utilization of restoration by-products.

The first project under the MSA was the Hope Mountain Stewardship Project, located in the headwaters of the Wild and Scenic Illinois River. Forest restoration activities within the project area were aimed at reducing fuel hazards and enhancing structural and species diversity on approximately thirteen hundred acres of even-aged tree plantations within Late Successional Reserves—a Northwest Forest Plan land designation to promote and maintain old-growth characteristics and wildlife habitat for threatened and endangered species. Lomakatsi restoration crews and subcontractors implemented over 750 acres of ecological treatments in 2009 and approximately 1,000 acres in 2010. Plantation stands younger than thirty years on 670 acres were treated with non-commercial activities consisting of cutting, piling, and hand-pile burning within the Elk Creek and Scotch Creek watersheds, land adjacent to the community of Takilma. Lomakatsi also treated 110 acres of sixty-year-old plantation stands in the Page Snow Park Project Area. These older, second-growth conditions permitted some commercial harvest of small diameter (less than twelve inches) trees and biomass utilization helped offset costs of fuel-reduction treatments.

Job creation, workforce training, and development are primary objectives of the stewardship agreement, and in 2009 much of this was supported through American Recovery and Reinvestment Act in the amount of \$1.1 million. This funded Lomakatsi's training and employment of 130 forest workers for Hope Mountain. A new thirty-two-person workforce from the communities of Cave Junction, O'Brien, and Takilma received a nine-month training series in both the technical and labor-intensive aspects of holistic ecosystem management.

Siskiyou Project, a local environmental organization, was the lead stewardship agreement partner for monitoring, public outreach, and education and community collaboration. When Siskiyou Project dissolved, Lomakatsi took on these responsibilities to fulfill its commitment to the long-term success of stewardship contracting and the continuing support of environmental groups for the project's forest restoration prescriptions. Many conservation groups support variable density thinning as a method that will maximize both species and structural diversity while still greatly reducing fire hazards and providing materials from the forest to communities.

Lomakatsi and Siskiyou Project organized an Ecological Restoration Advisory Team (ERAT) to include scientists, foresters, restoration ecologists and practitioners, Native American representatives, local organizations, and knowledgeable activists to partner in the design and monitoring of the stewardship projects. Their input assured that the best available science was complemented by local knowledge and incorporated into the development of workforce training, community education, and multi-party monitoring.

In their May 2013 report summarizing a field tour of the Pepperbuck thinning and fuels reduction project, ERAT members noted that forest treatments implemented by Lomakatsi and contract partners met thinning specification developed by the Forest Service. Density was reduced and structural heterogeneity was promoted by a small number of multi-tree clumps as designated by prescription, but the ecological value of gaps and skips has been downplayed and outcomes could be further improved with the explicit incorporation of gaps, skips, and multi-tree clumps. Retention of varying age classes and species was accomplished, though the spacing guidelines did not fully allow for leave tree selection based on species, size, condition, or structural diversity. In short, trees in poor condition were retained and gaps for regeneration of healthy trees were not planned. While Forest Service prescription designations were followed, some of Lomakatsi's ecological principles were lost. Detailed prescriptions are more costly to mark and implement than simple spacing, yet for project partners, marking is an important up-front investment in restoration treatments. Lomakatsi agreed to mark stands at its own cost and allow contract inspection prior to commercial removal.

The Wild Rivers Stewardship Agreement, the second in southwest Oregon and second with Lomakatsi as principle partner, is distinguished in its community-oriented focus and weighing of non-price over price-value considerations. In addition to local workforce training for restoration, agreement criteria include: education and interpretation opportunities, collaboration, community needs, and an approach that demonstrates that stewardship contracting can produce a broad suite of benefits while ensuring high-quality performance.

Joel King, retired district ranger for the Wild Rivers Ranger District, saw the agreement as an opportunity to build community trust, do restoration work, put people to work, and supply logs to the mills. When ARRA provided additional funding to get the work done, he was quoted as saying, “We didn’t want to spend these stimulus dollars, we wanted to invest them—and not only invest them so that we have a more resilient workforce, but so we have a better functioning community. So that’s why we involve the local nonprofits, the local governments, and the private sector.”

PILOT JOE DEMONSTRATION PROJECT

The Secretary of Interior designated Pilot Demonstration Projects in Bureau of Land Management (BLM) Districts in southwest Oregon to demonstrate the application of principles of restoration developed by Drs. Jerry F. Franklin and K. Norman Johnson. Franklin and Johnson define “restoration” broadly to encompass activities that are designed to restore forests and landscapes to conditions that are both more resistant and resilient to disturbances and that provide the diversity needed to restore and maintain native biodiversity and essential ecosystem functions. Restoration of ecosystems at the stand and landscape scale are a primary focus, rather than singular goals, such as fuel and wildfire abatement, timber production, or wildlife habitat. Sustaining local community economies with skilled workforces and milling infrastructure are integrative goals in Franklin and Johnson’s “active forestry.”

Pilot Joe is the first “learning” and demonstration project in a multi-year effort by BLM to apply these principles within the Middle Applegate watershed. Planned in 2011 and implemented in 2012, this project integrates ecosystem restoration, conservation of northern spotted owl habitat, and commodity production. As a pilot, it was essential that the project move forward from planning to implementation rapidly working within an existing National Environmental Policy Act (NEPA) framework. A planning area of five thousand acres yielded a project of nearly one thousand acres (three hundred of which were commercial harvest).

As stated in the Pilot Joe Environmental Assessment: The Secretary of Interior and the Oregon Congressional Delegation have expressed a deep need to break existing administrative and legal gridlock in order to move forward with ecosystem restoration and with economic recovery in southwest Oregon. As such, the Secretarial Pilot Demonstration Projects would serve to illustrate the various principles and tools of restoration to aid in gauging whether or not broader social support for active management can be achieved.

The Southern Oregon Forest Restoration Collaborative and the Applegate Partnership were instrumental in the pilot from its inception. A 2009 letter to the secretary of interior and director of the BLM requested a demonstration project in the Applegate Adaptive Management Area to advance landscape planning and forest restoration. The 2010 Solutions for Forests conference sponsored by SOFRC, the Applegate Partnership, BLM, and other agency and collaborative partners identified the Middle Applegate project area and invited Professors Johnson and Franklin to the table to help advance the proposed demonstration through application of their dry-forest principles. The pilot was announced in December of that year, and remains notable in going from design to implementation within one year, 2011.

The BLM worked with project partners, the Southern Oregon Forest Restoration Collaborative and the Applegate Partnership, for assistance in public engagement and multi-party monitoring. A broad array of opportunities for direct participation for the interested public were offered, including more than a dozen field tours along with community meetings to discuss pilot goals. Franklin and Johnson attended many of these and explained their restoration approach and criteria for tree marking. Stakeholders expressed support for the project goals of restoration, protecting wildlife habitat, and reducing risk of wildfire. Although many applauded the prescription's retention of hardwoods, some worried about harvesting's effect on residual stand characteristics; others questioned restoration forestry's ability to provide an economic return and criticized the limited commercial harvest.

The Southern Oregon Forest Restoration Collaborative and Applegate Partnership were instrumental in facilitating outreach and garnering community support for the pilot. As asserted then by a BLM planner, having local community members make presentations and facilitate meetings provided a different tone to the proceedings than the usual meetings run solely by federal agency staff. Two decades of community outreach by the agency and collaborative capacity building by these groups became evident, especially in comparison to the other secretarial pilots, which ran into more social resistance.

Multi-party monitoring can be important for building and sustaining support for this type of active management. Multi-party monitoring also promotes transparency and provides a context for the BLM and USFWS to advance interagency coordination, cooperation, and shared understanding on how forest restoration can best maintain and enhance late seral habitat, which is important for a variety of species including the northern spotted owl.

The Multiparty Monitoring Initiative for Pilot Joe has been coordinated by the Southern Oregon Forest Restoration Collaborative and funded in part by Title II funds. A June 2011 public meeting, attended by over forty stakeholders, gathered ideas for monitoring needs and goals, and gauged participant interest in the process. The resultant multi-party monitoring team, a diverse group of engaged community members and agency staff, has created a list of indicators across multiple scales. Pre- and post-treatment plots have been installed, along with photo points. A series of Learning Conversations have garnered staff, operator, and community experiences and responses to project design, innovation, and implementation. Oregon State University scientists are contributing to studies of logging systems and layout, as well as spotted owl inventories.

During implementation, a member of the monitoring team in the field with a community representative on the BLM interdisciplinary team, noticed legacy trees, which had been incorrectly marked. This was brought to the attention of the agency. However, as a result of confusion and miscommunication between the BLM and the operator, the legacy trees were cut. The fact that the trees were cut after being brought to the attention of the agency undermined BLM transparency and challenged honest communication regarding this error, which could have otherwise been a learning experience.

The success of this project has been attributed to its notoriety as a secretarial pilot. Certainly, the scientific credibility of Franklin and Johnson and the extensive public involvement undertaken by the BLM and facilitated by local partners were key to this success. Some argue, however, that the political spotlight created additional challenges.



SOUTHERN OREGON FOREST
RESTORATION COLLABORATIVE