Rogue Basin Collaborative Forest Restoration Project

A Collaborative Forest Landscape Restoration Program Proposal
from
The Rogue River-Siskiyou National Forest
and the
Rogue Basin Collaborative

For more information, please contact:

Scott Conroy
Supervisor, Rogue River-Siskiyou National Forest
541.618.2030
sconroy@fs.fed.us

George McKinley
Coordinator, Southern Oregon Small Diameter Collaborative
541.482.6220
collaborative@jeffnet.org

I. Executive Summary:

Dominant forest type(s): Globally recognized for high biodiversity values, the CFLRP project area is a spectrum of dry, fire-dependent stands historically dominated by widespread large trees now populated by the infill of small trees and impacted by disrupted ecological processes due the absence of fire.

Total acreages: Focal Area 639,000 acres; Prioritized Watersheds 191,000 acres
Total acreage to receive treatment: 33,000
Total number of NEPA ready acres: 18,000
Total number of acres in NEPA process: 15-20,000 acres over ten years

Description of the most significant restoration needs and actions: Reduction of fire risk and hazard for communities; shift in ecological departure through commercial and non-commercial thinning and use of fire. Aquatic needs to reduce and control sedimentation, and instream habitat through instream, upland and road restoration actions.

Description of the highest priority desired outcomes of the project at the end of the 10 year period: Social understanding, acceptance and support for restoration; restoration actions monitored to inform ongoing adaptive management and increase acres treated.

Description of the most significant utilization opportunities linked to this project: Smaller diameter material (10-20” dbh) will maintain existing manufacturing and workforce infrastructure; biomass to meet existing capacity and stimulate emerging innovation.

Name of the National Forest and collaborative groups involved in project development: USFS Rogue River-Siskiyou, Applegate Partnership, Josephine & Jackson County Integrated Fire Plans, Josephine County Stewardship Group, Klamath-Siskiyou Wildlands Center, Siskiyou Project, Southern Oregon Small Diameter Collaborative, Southern Oregon Timber Industries Association, and The Nature Conservancy.

Describe the community benefit including number and types of jobs created: (jobs per RCAT) Increased WUI safety, expanded support for active management, workforce opportunities and improved civic dialogue related to federal forest managment.

Total dollar amount requested in FY11: $2,000,000.
Total dollar amount requested for life of project: $20,000,000.
Total dollar amount provided as Forest Service match in FY11: $2,108,900.
Total dollar amount provided as Forest Service match for life of project: $25,270,600.
Total dollar amount provided in Partnership Match in FY11: $250,000.
Total dollar amount provided in Partnership Match for life of project: $1,024,000.
Total in-kind amount provided in Partnership Match in FY11: $90,000.
Total in-kind amount provided in Partnership Match for life of project: $900,000.

Time-frame for the project (from start to finish): 2011-2020

Table of Contents:

II. Ecological, Social and Economic Context

Introduction:
The broad context of this proposal is one of collaboration. The groups party to the proposal have been involved in various efforts over the past 20 years to expand community engagement in federal forest restoration planning and implementation. In recent years, those efforts have increasingly been linked to partnerships with federal forest managers, community fire planners, forest contractors and industry.

The groups and their supporters, members, and working partners are woven into the fabric of the region, both in urban and rural areas, where the multiple values of the region's forests and waters are experienced daily. Through our collective efforts, shared awareness of forest conditions have improved. This includes an understanding of both the risks to forest health posed by historic and current stressors, as well as the risks posed to communities by wildfire.

The role of fire in our largely fire dependent forests is now better known. Fire suppression is a key factor in current forest condition, its absence generating a multitude of lost ecological processes. Into this equation, active management now assumes a prominent and recognized role. Restoration treatments provide a clear opportunity to balance the need for reintroduction of fire while minimizing uncharacteristic effects and reducing risk to communities.

Whether restoration activities targets primarily fuels reduction or takes on the ambitious task of integrating fuels reduction, forest health and wildlife habitat needs, a skilled workforce is required for successful implementation. Our region is fortunate to have an innovative workforce sufficient to the task. However, the absence of a reliable, predictable and sustainable program of work related to forest restoration not only can undermine the capacity and stability of that workforce, it also poses a threat to the existing manufacturing infrastructure. A restoration program of work as outlined in this proposal would not only strengthen existing capacity related to the above, it would also encourage emerging and future innovators to utilize the byproducts of restoration to generate heat and power, or take advantage of appropriate future technologies.

The partners to this proposal have invested years of effort in community outreach and engagement. For landscape restoration success on federally managed lands, it benefits those involved to both build and gauge public support. A recent survey would suggest outreach has been successful, and that local residents are informed and supportive of forest restoration.

In 2008, the Southern Oregon Small Diameter Collaborative commissioned an independent survey to gauge public support for cutting and removing small trees from uncharacteristically dense forests on public lands. According to the poll, 66% of Jackson and Josephine County residents approve of thinning small trees. Primary reasons include the reduced risk of forest fire, improved forest health and job creation. 78% of those surveyed cited reducing the risk of forest fire as the primary reason.

This Collaborative Forest Landscape Restoration Program (CFLRP) Proposal advanced by the Rogue Basin Collaborative Forest Restoration Project (RBC) emerges from a long-term collaboration between community and agency partners, reflects broad community support, will significantly advance current unfunded restoration activity, and set a productive tone and context for future work. (MAP 1)

Ecological Context:
The RBC CFLRP project is located in the Klamath Mountains ecoregion of southwestern Oregon. This distinctively complex, forested ecoregion is globally recognized for high biodiversity, and is assembled within dramatic topography, varied and unusual geology, extensive watercourses, and often-abrupt climate gradients (Ricketts et al. 1999, Vander Schaaf et al. 2004). Spared the volcanic events and Pleistocene glaciation of surrounding regions, the Klamath-Siskiyou Mountains provided refuge for species and a path for shifting species distributions as climate changed. There remain hundreds of natural vegetation communities and aquatic habitats that sustain numerous sensitive species, many of them endemic.

The diversity of plants, terrestrial invertebrates and amphibians is notably high, and streams support a vast array of aquatic invertebrates and three of the Pacific Northwest's iconic salmonid species (coho and Chinook salmon, and steelhead). The region is rich in old-growth, mixed-conifer forest and provides one of the most viable remaining population centers for the Northern Spotted Owl. This forest landscape restoration project lies within the Rogue River Basin, recently selected by The Nature Conservancy as one of 16 North American priorities for forest restoration (McPeek et al. 2010) and is part of the Rogue-Illinois Salmon Stronghold Demonstration Site established by the Wild Salmon Center.

Our project focuses on the dry, fire-prone forest landscape of the Siskiyou Mountains and Wild Rivers ranger districts of the Rogue River-Siskiyou National Forest. The project area supports forests predominantly in Fire Regime Groups 1 and 3 with frequent low to mixed severity fire (<35 year fire return interval). Moist and cool forests at higher elevations of the Siskiyou Crest retain their historically infrequent fire regime, and are not a focus of this proposal.

The dry forests of the Siskiyou Mountains historically experienced relatively small fires, typically constrained by lack of fuel from preceding burns (Leiberg 1900) and influenced by rugged topography (Taylor and Skinner 1998). Many stands were historically dominated by widespread large trees, and diverse and productive understories. These conditions also well described in the Southwest (Fulé et al. 1997), east of the Cascades (Everett et al. 2000; Youngblood et al. 2004), and portions of the Klamath Mountains (Taylor and Skinner 1998). While dry ridges and slopes may support grassy understories of the Low Load, Dry Climate Timber-Grass-Shrub (Dynamic) fuel model, much of the forest supports chaparral shrub species in the understory, and deciduous and evergreen broadleaf hardwood species which resprout following fire. This adds

complexity to fire dynamics, volatility, and ladder fuels referred to as the Very High Load, Dry Climate Timber-Shrub fuel model (Scott and Burgin 2005).

The Nature Conservancy's ecoregional assessment identified fire exclusion as the overriding threat to the biodiversity of this region (Vander Schaaf et al. 2004), with the majority of the landscape under moderate and high ecological departure. The combination of past timber management, grazing, and fire exclusion have increased recruitment of young trees and protected their growth, tending to homogenize a once more open and heterogenous landscape. Recent modeling conducted in cooperation with Josephine & Jackson County Integrated Plan partners shows a high proportion of the landscape prone to high Fire Intensity Levels.

Frequent fire-adapted forests are at high risk of uncharacteristically large, severe fires that can be destructive to habitats, species, and people (Hessburg and Agee 2003; Spies et al. 2006). The regionally unprecedented 500,000 acre Biscuit Fire of 2002 is a prominent example. In the absence of fire, stands once dominated by large diameter shade intolerant species, in particular P. ponderosa, P. jeffreyi,and P. lambertiana can be converted to closed-canopied forests dominated by small-diameter trees (Lutz et al. 2009). In the Siskiyou Mountains we see accelerated mortality of large trees of all species and their replacement by dense infill of smaller trees.

Climate change is expected to exacerbate these issues and elevates the urgency to promote forests more resilient to fire. By the 2050s, mean annual temperatures in southwest Oregon are predicted to increase 3-4°C. Winter precipitation is predicted to *increase* by ~20%, while summer precipitation is predicted to *decrease* by a similar amount (Field et al. 2007). Under these conditions, fire season length and wildfire size are predicted to increase (Westerling et al. 2006). Given the high likelihood of large and severe fire, contemporary forests prone to releasing high quantities of carbon, will further exacerbate potential climate change impacts (North et al. 2009; Dore et al. 2010).

While large scale fire events have resulted in growing public support for fuels treatments (Abrams and Lowe 2005; Ostergren et al. 2008), at the same time a legacy of public mistrust based on aesthetic and ecological concerns due to past timber practice has slowed federal restoration response, especially in the Pacific Northwest (Bliss 2000; Ribe 2006). The recovery needs of old-growth and dense canopy dependent species like the Northern Spotted Owl, and a public desire for wilderness values introduce additional barriers to forest restoration on public land. Light touch fuels treatment prescriptions may reduce fire severity but they do not necessarily produce forest conditions necessary to maintain forest diversity (Fulé et al. 2001). Prescriptions for restoration can be derived from past experiences, modeled expected fire behavior, and stand development research. In the context of increasing fire, historical references are an appropriate line of evidence for informing these prescriptions because dry forest landscapes were both resilient to frequent-fire and adapted to past variation in climate (Fulé et al. 2001; North et al. 2009; Dore et al. 2010).

Aquatic restoration actions on the Rogue River-Siskiyou National Forest (RRSNF) are guided by direction provided within the USFS Region 6 Aquatic Restoration Strategy (2007). This strategy lays out the framework for watershed prioritization across the Forest, and the implementation of passive and active restoration actions within identified priority watersheds. Principle components contributing to the selection of priority watersheds on the Rogue River-Siskiyou National Forest are coho salmon presence and habitat condition, water quality conditions, aquatic habitat/road interactions, riparian vegetation characteristics, and partnership opportunities.

The Rogue River Basin supports a diverse and robust aquatic resource, which is renowned for its anadromous fish populations and high quality water. However, throughout the basin, various land use activities have affected, and continue to influence the condition and trends of aquatic habitats. On National Forest System lands within the CFLRP focus area, these activities have historically involved logging, mining, and road construction. In some locations (i.e. drainages and/or watersheds), active restoration is needed to reestablish aquatic habitat conditions that are sustainable in the long-term. Most commonly, this aquatic restoration is designed to control and prevent road-related runoff and sediment production, to improve the condition of riparian vegetation stands through silviculture and fuels treatments, and to increase instream habitat, channel stability and complexity.

Social and Economic Context:
Southern Oregon communities have continued to experience social, economic, and ecological changes that influence community life as well as forest management. While Josephine County has a more rural population, less per capita income, greater poverty and less economic diversity, Jackson County has more people, higher population growth, more urban residents, a more diverse economy and higher incomes.

The population is growing at a steady pace. As of 2009, Jackson County population was estimated at 201,286, an increase of 11% since 1990, while Josephine County population was 81,026, an increase of 7.0% since 1990. In 2010, unemployment rates were 11.8% and 13.8% for Jackson and Josephine counties, respectively. Latinos now comprise about 9% of the overall population and have pockets of concentration in the communities and schools of West Medford, White City and Talent.

The economy is changing. Agriculture continues to experience modest but steady decline and many agricultural lands are being converted to residential uses. Pear production remains important, grape production continues to show growth and small farm outputs provide income to farmers and are supported by communities, but remain a small component of the overall economic picture.

Mill capacity and employment remain important in the region, while production has shifted from larger, older trees toward small diameter utilization. The shift over recent decades is noteworthy. In 1954, 91 mills were in operation in Jackson County alone. But by 1978, according to the Rogue River National Forest Management Plan “the region’s big boom period” had passed, and only 8 large-scale mills were in operation in Jackson

County. The lack of access to large trees, improved technology, consolidation, and poor markets were listed as reasons for the passing of an era (McKinley and Frank, 1996). A modest but real economic niche remains for logging, thinning, fuels reduction, reforestation, watershed and forest restoration, and related enterprises to support work on both private and public land.

Trades and services continue to be the source of growth in the region, although these sectors, too, have been affected by the economic downturn and have experienced their first decline in many decades. Along with professional work, trades and services make up the bulk of local employment.

The population is becoming more urban and less rural. While knowledge and use of the forest environment remains prevalent in the rural areas, urban residents have lost many of their ties to forest environments. West Medford, for example, used to house many mill workers whose families would experience forest settings in everyday routines. Studies are showing that young people have less knowledge of forest ecology and spend less time outdoors. Along with the rest of the state, young people are experiencing higher rates of obesity, and recreation on public land among young people is declining. Interestingly, it is Latinos living in the towns that are taking advantage of new employment opportunities in tree planting and forest management.

Despite these changes, the small, rural communities of southern Oregon retain their heritage of forestry connections in work and play. They remain committed to economic livelihoods that make use of the natural resources contained in the woods. They have been active in the management of forest lands and have a long history of partnerships with the private and public sectors of forest management. These communities clearly will have an ongoing role to play in the care and use of forest lands.

The forest health benefits of restoration projects offer many community health opportunities as well. These projects have the potential to reduce poverty and underemployment, and enhance economic diversity by stimulating business and job development. Several plans to stimulate market development and develop new markets for biomass utilization are underway. Moreover, an expanded program of work will help invigorate the cultural traditions of rural communities, re-connecting youth and workers to forest ecology and jobs.

III. Summary of Landscape Strategy

For more information, see: Rogue River-Siskiyou webpage under *Project and Plans*

The Rogue Basin Forest Collaborative came together to identify priority restoration needs within the Rogue Basin (3.3 million acres). This area of concern provided a broad framework to discuss restoration need and opportunity. In order gain focus and advance landscape planning and implementation, the group relied upon existing data, previous experience, and a preliminary assessment to identify focus area within the Siskiyou Mountain and Wild Rivers Ranger Districts (640,000 acres). (MAP 1)

This focus area allowed the application of a more rigorous landscape strategy to identify a set of 6th field watersheds for restoration planning and implementation. The 6th field scale was deemed appropriate for planning, allowed better consideration of ownership patterns and general conditions, reduced total acreage for in-depth consideration, and coincided with the existing scale of Rogue River-Siskiyou National Forest aquatic assessments and aquatic restoration activity.

A series of identified restoration screens were applied to the focus landscape to more closely identify priority watersheds and potential project areas. These include:

1. Wildland-Urban Interface as identified through Josephine & Jackson Integrated Fire Plans and Community Wildfire Protection Plans;
2. Mapped roads with a 1500' buffer in three distance categories to capture economic efficiency consideration and generally avoid roadless areas;
3. Basal area thinning based on excess of collaboratively established carrying capacity for identified dry forest plant associations;
4. Volume estimates based on removal of 10-20" dbh trees;
5. Volume estimates modified by 4 classes of Northern Spotted Owl habitat consideration;
6. Integrated Fire Plans hazard rating;
7. A focus area comparison of USFS 6th field watershed aquatic priorities based on coho habitat, water quality, habitat/road interaction, riparian vegetation and partnership opportunity; and
8. Application of a NEPA-ready layer to identify current opportunity.

This strategy generated a prioritization of 6th field watersheds within the focus area. Further NEPA-ready consideration identified significant unfunded acre opportunities for implementation in the Ashland Forest Resilience, Butcherknife-Slate/Waters Creek and Upper Applegate Road project areas. (MAP 2)

For the CFLRP assessment, stand level FRCC information derived at the sixth field watershed scale shows condition class 2 and 3 dominant across over 75% the landscape. (MAP 3) This was consequently recognized as a baseline condition, and not incorporated into the strategy as a tool for additional landscape prioritization.

Ashland Forest Resilience, Butcherknife/Slate and the Upper Applegate Road projects were designed with extensive community collaboration involving members of Rogue Basin Forest Collaborative, and other community and agency partners. This clearly adds to the import of restoration implementation in these project areas, and highlights an opportunity to support these efforts through the application of CFLRP funds to treat unfunded acres in these project areas.

The Ashland Forest Resilience project was designed through significant, long-term community involvement, and was strategically placed in and around the Ashland Creek watershed to help protect the municipal water supply and surrounding forest from

uncharacteristically severe fire. The project has drawn a high level of support, engaged the community and stakeholders, and is being implemented under a Master Stewardship Agreement between the Rogue River-Siskiyou National Forest, The City of Ashland, Lomakatsi Restoration, and The Nature Conservancy.

Butcherknife/Slate received significant input through the work of the Josephine County Integrated Fire Plan and associated community partners. Project recommendations focused on the need to address noxious weeds and disease, the need to restore and improve existing fish habitat, opportunities for oak release, large tree, old forest and legacy pine retention, needs for plantation thinning, meadow restoration, and brush treatment, as well as the use of prescribed fire, and further development of fire risk mapping and assessment. The need to engage community contractors to maximize local economic benefit was also addressed.

Upper Applegate Road was designed through community input and multi-agency coordination involving the Applegate Rural Fire District, the Applegate Fire Plan, Jackson County Integrated Fire Plan and the Oregon Department of Forestry, and received general community support.

Community involvement in the design of these initial project areas proposed for CFLRP program funding highlights the opportunity to not only accomplish restoration goals, but to acknowledge and advance community-agency collaboration.

Future NEPA planning related to this CFLRP proposal, and related planning efforts involving the Rogue River-Siskyou National Forest and Rogue Basin Collaborative partners will proceed from a consideration of focus area prioritized 6th field watersheds.

IV. Proposed Treatment

The Rogue Basin Collaborative Forest Restoration Project CFLRP proposal expands treatment acres in three existing NEPA-complete, ongoing projects. These areas were previously identified as high priorities for restoration treatments, and our CFLRP landscape strategy prioritization and local Community Wildfire Protection Plans confirm their importance. The breadth and importance of biophysical environments is matched in these areas by a high degree of social capital - people concerned and engaged to help the Forest accomplish restoration goals

The collaboratively developed 5834 acre Butcherknife/Slate project in Josephine County occupies 44% of the Slate Creek sub-basin of the Applegate River, and straddles the divide between the Applegate and Illinois River basins, with minor acreage in Lower Deer Creek. The project area includes predominantly metasedimentary and ultramafic geology that promotes a wide range of biodiversity, from serpentine savanna and rock outcrops, to spring-fed serpentine fens hosting a half-dozen Forest sensitive locally endemic plants. The endemic Port Orford cedar, an important component of riparian areas, forms one end of a spectrum of dry forests and woodlands that include

productive Douglas fir and Tanoak, to California black oak, Oregon white oak woodlands and savanna.

Treatment in Butcherknife/Slate helps protect productive streams that support coastal cutthroat trout, steelhead, coho and Chinook salmon, and Pacific lamprey. The project area lies within the two-county Wildland-Urban Interface, where emphasis on abating potential fire severity and spread is a priority. A range of treatments is planned to address the wide array of terrestrial habitats. Serpentine savanna, forests, and fens are scheduled to receive prescribed underburning to restore fire and its functions to those systems. The remainder of the forests, woodlands, and meadows are uncharacteristically dense with the ingrowth of younger trees due fire exclusion, and will be treated with through commercial and non-commercial thinning. Alongside the Butcher Knife Slate project we include the Waters Creek #2 project treatments planned for 700 acres across the 1500 acres of NFS lands in that branch of Slate Creek.

At the center of the Siskiyou Mountains-Wild Rivers landscape, is the 4150-acre Upper Applegate Road project. Defined by Wildland-Urban Interface boundaries around the communities of McKee Bridge, Boulder City, and communities along the Upper Applegate Road below the Applegate Reservoir, the project lies in Jackson County. The treatment acres account for roughly 22% of the Palmer Creek-Applegate River sub-basin, approximately 25% of the USFS forest. The project is especially significant as it links USFS restoration to the planned Medford District BLM Pilot Project, located downstream on the Applegate River. The pilot will take an “all-lands” approach, treating significant portions of the 80,000-acre Middle Applegate watershed (some 50,000 is BLM managed).

The dry forests and woodlands in the Upper Applegate Road project provide habitat for a range of sensitive plants, including the USFWS listed endangered Fritillaria gentneri. The Applegate River and the tributaries within the project area are known to support abundant coho salmon, steelhead, and cutthroat trout. Proposed treatments include 1,200 acres of commercial density management. Ground based systems would be limited to slopes of 30% or less. Approximately 2,010 acres would receive initial surface and ladder fuels treatments, including some acres coincident with density management. Approximately 940 acres of broadcast burning would be applied.

The Ashland Forest Resiliency Stewardship Project (AFR) on the eastern flank of the Siskiyou Mountains, addresses 22,000 acres of USFS managed land above the Jackson County town of Ashland. The restoration footprint of 7600 acres of treats over one-third of the USFS land. The design is strategically placed to help protect from uncharacteristically large and severe fire the municipal water supply and the health of the forest. The forests are a critically important representation of fire maintained dry mixed conifer stands that contain exemplary expression of fire dependent legacy ponderosa pine. The designation of the watershed as a Late Successional Reserve, and as Critical Habitat for the Northern Spotted Owl, adds complexity and passion for the highly engaged community, which in 1892 successfully petitioned President Cleveland to protect the “Ashland Forest Reserve.”

Proposed treatments include non-commercial surface and ladder fuel treatments, and prescribed underburning, often in combination with commercial density management. Because of sensitivity to soil erosion and slope instability on granitic soils, the bulk of commercial thinning will be helicopter based. The project has drawn a high level of support, engaged the community and stakeholders, and is being implemented under a Master Stewardship Agreement between the Forest, the city of Ashland, Lomakatsi Restoration Project, and The Nature Conservancy. A multi-party monitoring plan is being implemented both as a means to elevate learning and adaptive management, and as a means to increase transparency and trust for stakeholders in Forest Service restoration projects.

The three projects described above are the cornerstones of this CFLRP proposal. They provide NEPA-complete, unfunded project opportunities in a range of biophysical, social, and economic settings that can help the Forest Service prioritize and optimize future planning and implementation. The CFLRP landscape strategy has highlighted a set of 6th field priority watershed areas for future collaborative participation in NEPA planning.

The CFLRP focus area also contains several watersheds that could receive focused aquatic restoration actions within the next decade. These actions would include, but are not limited to road decommissioning, road storm-proofing, riparian planting and thinning, culvert replacement for fish passage, installation of instream habitat structures (i.e. logs, boulders), off-channel fisheries habitat creation, and stream bank stabilization.

The CFLRP focus area includes portions of the Illinois River sub-basin and Middle Rogue/Applegate River sub-basin. These sub-basins are recognized as key areas for the production and overall recovery of coho salmon, which is listed as Threatened under the Endangered Species Act. Aquatic restoration actions pursued within the focus area on RRSNF lands would be designed and implemented to improve coho salmon habitat at the stream reach and/or watershed scale, with the over-arching goal of supporting SONCC coho salmon recovery. Additionally, these actions would contribute towards improved water quality conditions, with emphasis given to streams listed on the Oregon 303(d) list due to impaired water quality.

V. Collaboration and Multi-party Monitoring

The Applegate Partnership & Watershed Council, Klamath-Siskiyou Wildlands Center, Siskiyou Project, Southern Oregon Small Diameter Collaborative and The Nature Conservancy represent well-respected, viable initiatives of long standing effort. In their own work and working together, these groups have pioneered efforts to advance adaptive management, engage communities, implement pilot projects, expand the context and role of collaboration, and generate public support for ecological restoration. The Rogue Basin Collaborative Forest Restoration Project will provide an opportunity for partners to work closely with federal forest managers, regulatory agencies and forest-based communities to develop and implement forest landscape restoration

projects that will provide reasonable, predictable, and sustainable benefits over extended timeframes.

Another partner in the RBC is the Josephine & Jackson County Integrated Fire Plan effort, which has worked with counties and communities to establish local fire plans, and has also worked to link private and public lands in strategic fuels reduction and shared risk assessment. Jackson and Josephine Counties were among the first counties in Oregon to develop collaborative plans and engage public and private sector organizations, as well as local citizens in their planning efforts. In addition, "local" Community Wildfire Protection Plans are active, several – Applegate, Illinois Valley, and Ashland – within the CFLRP focus landscape.

The overarching purpose of these efforts is to reduce the risk of wildfire to life, property and natural resources by coordinating public agencies, community organizations, private landowners, and the public to increase their awareness of and responsibility for fire issues. There are MANY partners involved in the development and implementation of these plans, including federal and state forestry and fire agencies, counties, fire districts, watershed councils, and local social service agencies.

To address the complex range of issues with the fire plans, it became clear early in the planning process that broader and diverse participation was needed for successful implementation. Through public meetings and invitations to organize stakeholders, subcommittees were formed to develop objectives and implement actions to support the plans. Each of the local CWPP's and Firewise efforts have additional committees and work groups. These CWPP efforts are supported by the Josephine/Jackson Coordinating Group (JJLCG), a team of stakeholders that share common needs and interests related to the implementation of the 10-Year Strategy of the National Fire Plan and community protection components of the Healthy Forest Restoration Act (HFRA) for Josephine and Jackson Counties.

Constituents of the Rogue Basin Collaborative have been collaborating with the USFS and BLM to develop and implement pilot projects, stewardship demos, community based NEPA planning and other restoration based activities across the Rogue Basin for over a decade. To support the development of this CFLRP proposal, members of local collaborative efforts and groups, conservation groups, industry associations and the public formed the Rogue Basin Collaborative Forest Restoration Project (RBC). The group submitted pre-proposals in response to the 2010 and 2011 CFLRP RFP issued by the USFS. To develop a full 2011 proposal, the RBC held 2-hour weekly planning sessions, convened numerous sub-sessions, and engaged in countless hours of conversation over an eight month period. Most meeting were held at the USFS/BLM Medford Interagency Office. The collaborative group used a consensus process.

The collaborative group has created a consensus-driven framework of prioritized restoration goals incorporated into GIS mapping to create a landscape strategy assessment tool that facilitated prioritization of both current and future landscape

restoration projects. This is a flexible but specific tool that can be further refined to accommodate the development of future restoration projects.

The collaborative process is at the root of this proposal because it increases the level of community involvement, leads to comprehensive success, and reduces potential for conflict during landscape level project implementation. A broad spectrum of partners from diverse backgrounds reaching collaborative consensus to utilize ecologically-based thinning and logging to facilitate landscape restoration is paradigm shift for rural southwest Oregon communities. It now provides an important opportunity to foster healthier communities, economies, watersheds and forests.

Monitoring:
The Rogue River-Siskiyou National Forest in committed to fulfilling monitoring requirements of the CFLRP program. The RBC is formulating a multi-party monitoring plan drawing upon member's expertise and involvement with collaborative restoration and stewardship projects already in progress within the proposal landscape. The Nature Conservancy has used a monitoring plan and process in the Ashland Watershed that is amenable to the goals of the RBC. Likewise, members of the RBC serve on the Ecological Restoration Advisory Team providing monitoring baselines, protocol and data collection on projects of Hope Mountain Stewardship Agreement, facilitated by the Siskiyou Project and Lomakatsi Restoration Project.

The Nature Conservancy approach in AFR represents a tested and viable approach to multi-party monitoring. A core requirement of the community in the AFR project was that implementation be science-based and monitored closely to provide transparency, overcome mistrust, inform adaptive management, and provide opportunities for learning by doing. Multi-party monitoring was designed into the project and captured in the 10-year project Master Stewardship Agreement between the Forest, City of Ashland, Lomakatsi Restoration Project, and The Nature Conservancy.

Stakeholders collaboratively developed a multi-party monitoring plan. The plan addressed a range of biological, physical, economic, and social attributes and specific protocols for each, borrowing from the best available science. A diverse array of stakeholders and the public are engaged in ongoing effectiveness and implementation monitoring. A science team provides oversight for the monitoring. A technical Implementation Review Team comprised of staff from Klamath Siskiyou Wildlands Center, Southern Oregon Small Diameter Collaborative, and the Oregon State University Extension provide insight for implementation planning and review of completed work.

VI. Utilization

Stewardship contracting, service contracts, and timber sale contracts will be some of the "tools" used in offering material from the landscape restoration strategy. By-products of forest restoration made available on a consistent basis will aide in maintaining a strong forest products infrastructure as well as a trained workforce.

The proposed initial CFLRP project area equals 15,400 NEPA completed acres. We can anticipate that these acres will produce at least 80 MMBF of small logs and 50,000 tons of green convertible non-saw material. Most of this material is considered small diameter, averaging less than 20 inches in diameter, and is ideally suited for the existing mill infrastructure. Smaller thinning material from fuels reduction, service work and Stewardship contracts, as well as tops from merchantable trees, can be offered as biomass and removed as part of the landscape restoration strategy. Valuing the merchantable small logs at $40/mbf, and sub-merchantable material at $.01/ton, the forest could realize $3,200,500 of value.

Rogue Basin Collaborative (RBC) members have partnered with the Rogue River-Siskiyou National Forest to identify current projects that generate material for utilization. The Southern Oregon Small Diameter Collaborative has developed Productive Harmony Guidelines and a series of indicators to help identify active forest management that is ecologically driven, socially acceptable, and economically viable. RBC partners will also work on monitoring, as well as community outreach and education to further share the landscape restoration strategy and goals.

Currently, there are six regional mills producing construction grade lumber products, mostly from smaller diameter trees. These six mills presently consume about 250 million board feet of raw logs each year, of which 85% currently comes from private lands. This existing infrastructure is operating well below full capacity and is capable of processing larger quantities of small diameter trees over the next ten years from landscape restoration projects on the Rogue River-Siskiyou National Forest. Company names, mill locations, utilization capacities, and number of current employees are listed below.

Boise Building Solutions (Medford, White City):
Current annual usage is over 50 MMBF of Douglas fir and white fir veneer logs per year on a two shift basis. All of this material is consumed in their local mills for panel products and engineered I-beams. Boise mills are SFI Certified. If additional volume can be made available, the number of shifts could be increased depending on market conditions. The company employs approximately 400 employees in their local operations.

Murphy Lumber (White City, Grants Pass, Rogue River):
Annual usage is around 40 MMBF of Douglas fir, white fir, and Ponderosa pine on a two shift basis. The White City plant (65 employees) produces core and face veneer for the Grants Pass layup plant (150 employees), while higher structural quality veneer is sent to Sutherlin, Oregon for engineered I-beams. The company recently purchased and restarted a panel mill in Rogue River, paving the way for 110 additional jobs. There is additional log manufacturing capacity that will require federal timber for the company to remain a viable entity.

Timber Products (Yreka, California):
Annual usage is over 50 MMBF of Douglas fir, white fir, and Ponderosa pine on a two shift basis. The Yreka plant produces core and face stock for panel products, as well as

decorative laminates and particle board at facilities in the Medford-White City area, employing 500 or more workers.

Swanson Group (Glendale, Oregon):
Annual usage is approximately 125 MMBF of Douglas fir, true fir, and pine on a two shift basis. The white fir, and other species and larger Douglas fir is peeled on site, while the smaller logs are manufactured into dimension lumber which is sold green. The company is SFI Certified and employs 300 employees at this location.

South Coast Lumber (Brookings, Oregon):
Annual usage (when both the mill and plywood plant are operating) is approximately 125-200 MMBF of Douglas fir (almost all production), true fir, and pine. The company recently installed a high-speed small log mill for dimension lumber, and peels veneer for plywood, laminates, and industrial LVL. The company is FSC Certified and employs over 350 employees.

Rough & Ready Lumber (Cave Junction, Oregon):
Annual usage on a one shift basis is approximately 27 MMBF of predominantly larger Ponderosa and Sugar pine logs (78%) and Douglas fir (22%). R&R employs 75 workers and is FSC Certified. The mill is capable of producing additional product and creating more jobs if more volume was available. The company recently installed a 1.5 megawatt cogeneration plant at the mill and expects to use about 30,000 green tons of biomass per year, half from forest thinning and half from internal operations.

Biomass One (White City, Oregon):
A 30 megawatt cogeneration facility utilizing biomass from the surrounding forests and public waste since 1985. Current utilization capacity is 370,000 green tons per year. The company recently added a third turbine to its operation and is in the process of negotiating a new power purchase agreement with the region's major electrical utilities.

Emerging innovation:
Planning, feasibility studies, and negotiations by the Forest Energy Group are underway, potentially leading to a third biomass facility in the area. A feasibility study for a mid-size pellet mill to be located in the area is also underway. As federal agencies are expected to offer more biomass material through landscape projects than can be utilized within the existing biomass infrastructure, additional biomass utilization capacity will become needed.

While the industry will always be susceptible to the whims of a cyclical lumber market, the necessity of maintaining a viable market infrastructure is paramount in order to reduce the cost to the government as it works to achieve ecosystem restoration goals. CFLRP proposal funding can help provide the needed assurance for further investments in the local small diameter/biomass utilization infrastructure.

The request for funds for the project work described in this CFRLP proposal is consistent with the goals of the Southwest Oregon Interagency Biomass Utilization

Strategy. The Strategy was developed to coordinate a small diameter/biomass utilization program that is ecology, socially and economically acceptable, and results in increased offerings of this material as part of the U.S. Forest Service's hazardous fuels reduction, ecosystem restoration and timber sale projects in southwest Oregon.

VII. Benefits to local economies

An implemented CFLRP proposal is expected to add some 165 direct, indirect and induced jobs into the regional economy. Direct employment is expected to provide some 65 jobs, primarily in logging, manufacturing and restoration activities, including monitoring. A total economic benefit of $7,920,490 is projected. It is expected that CFLRP implementation would provide both new jobs as well reduce loss of jobs to the regional economy. Utilized material is perceived necessary to maintain existing regional manufacturing capacity, as well as permit innovation to proceed with any level of confidence.

In addition to the quantitative numbers above, other benefits to the local economy and myriad communities across the region would be realized under full CFLRP proposal implementation. Reducing un- and underemployment through forest sector work would stimulate economic diversity through business and job development helping to invigorate the cultural climate in rural communities. A mobilized workforce positioned to respond to federal management opportunity is also better able to mobilize in response to fuels reduction and forest management needs on private land as well. Benefits accrue to workers, private forest resilience is enhanced, community risk from wildfire is reduced and a climate of stewardship in fostered.

VIII. Funding Plan

Appropriate out-year planning related to the CFLRP proposal will begin in fiscal year 2011. Planning will proceed consistent with the proposed initial implementation of existing unfunded NEPA acres in the CFLRP identified project areas and through a collaborative process to identify "next step" planning and implementation within CFLRP identified priority watersheds.

FY 2011 implementation funding will be allocated at appropriate levels to accomplish fuels reduction, commercial and non-commercial thinning, prescribed fire, aquatics restoration and other identified restoration actions that meet identified restoration needs. Service, timber and stewardship contract tools will be utilized as most appropriate. Monitoring requirements for the life of the CFLRP program will be met by the Forest.

VIII. Citations

Abrams, J. and K. Lowe. 2005. Public perceptions of forest restoration in the southwest: a synthesis of literature and surveys. Ecological Restoration Institute, Northern Arizona University, Flagstaff, AZ.

Bliss, J. 2000. Public perceptions of clearcutting. Journal of Forestry 98:4-9.

Dore, S., T. Kolb, M. Montes-Helu, S. Eckert, B. Sullivan, B. Hungate, J. Kaye, S. Hart, G. Koch, and A. Finkral. 2010. Carbon and water fluxes from ponderosa pine forests disturbed by wildfire and thinning. Ecological Applications 20:663-683.

Everett, R. L., R. Schellhaas, D. Keenum, D. Spurbeck, and P. Ohlson. 2000. Fire history in the ponderosa pine/Douglas-fir forests on the east slope of the Washington Cascades. Forest Ecology and Management 129:207-225.

Field, C. B., L. D. Mortsch, M. Brklacich, D. L. Forbes, P. Kovacs, J. A. Patz, S. W. Running, and M. J. Scott. 2007. North America. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.in M. L. Parry, O. F. Canziani, J. P. Palutikof, P. J. van der Linden, and C. E. Hanson, editors. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK.

Fleeger, W. and M. Becker. 2008. Creating and sustaining community capacity for ecosystem based management: Is local government the key? Journal of environmental management 88:1396-1405.

Fulé, P. Z., W. W. Covington, and M. M. Moore. 1997. Determining reference conditions for ecosystem management of southwestern ponderosa pine forests. Ecological Applications 7:895-908.

Fulé, P. Z., A. E. M. Waltz, W. W. Covington, and T. A. Heinlein. 2001. Measuring forest restoration effectiveness in reducing hazardous fuels. Journal of Forestry 99:24-29.

Hessburg, P. F. and J. K. Agee. 2003. An environmental narrative of Inland Northwest United States forests, 1800-2000. Forest Ecology and Management 178:23-59.

Leiberg, John B. 1900. Cascade and Ashland Forest Reserves.

Lutz, J. A., J. W. van Wagtendonk, and J. F. Franklin. 2009. Twentieth-century decline of largediameter trees in Yosemite National Park, California, USA. Forest Ecology and Management 257:2296-2307.

McKinley, G. and D. Frank. 1996. Stories on the land: an environmental history of the Applegate and upper Illinois valleys. USDOI, USDA.

McPeek, B. and North America Leadership Team. 2010. North America Priorities: Achieving transformative conservation. The Nature Conservancy.

North, M., M. Hurteau, and J. Innes. 2009. Fire suppression and fuels treatment effects on mixed-conifer carbon stocks and emissions. Ecological Applications 19:1385-1396.

Ostergren, D., J. Abrams, and K. Lowe. 2008. Fire in the forest: public perceptions of ecological restoration in north-central Arizona. Ecological Restoration 26:51-60.

Phalen, K. 2009. An invitation for public participation in ecological restoration: the reasonable person model. Ecological Restoration 27:178.

Ribe, R. 2006. Perceptions of forestry alternatives in the US Pacific Northwest: Information effects and acceptability distribution analysis. Journal of environmental psychology 26:100-115.

Ricketts, T.H., E. Dinerstein, D.M. Olson, C.J. Loucks, W. Eichbaum, K. Kavanagh, P. Hedao, P. Hurley, K.M. Carney, R. Abell, and S. Walters. 1999. Ecoregions of North America: A conservation assessment. Island Press. Washington DC. 485 pp.

Scott, Joe H.; Burgan, Robert E. 2005. Standard fire behavior fuel models: a comprehensive set for use with Rothermel's surface fire spread model. Gen. Tech. Rep. RMRS-GTR-153. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 72 p.

Spies, T. A., M. A. Hemstrom, A. Youngblood, and S. Hummel. 2006. Conserving Old-Growth Forest Diversity in Disturbance-Prone Landscapes. Conservation Biology 20:351-362.

Taylor, A. H. and C. N. Skinner. 1998. Fire history and landscape dynamics in a latesuccessional reserve, Klamath Mountains, California, USA. Forest Ecology and Management 111:285-301.

Vander Schaaf, D., M. Schindel, D. Borgias, C. Mayer, D. Tolman, G. Kittel, J. Kagan, T. Keeler-Wolf, L. Serpa, J. Hak, K. Popper. 2004. Klamath Mountains Ecoregional Conservation Assessment. The Nature Conservancy. Portland, Oregon.

Westerling, A., H. Hidalgo, D. Cayan, and T. Swetnam. 2006. Warming and earlier spring increase western US forest wildfire activity. Science 313:940.

Youngblood, A., T. Max, and K. Coe. 2004. Stand structure in eastside old-growth ponderosa pine forests of Oregon and northern California. Forest Ecology and Management 199:191-217.

Attachment A
Projected Accomplishments Table

Attachment B
R-CAT spreadsheet, and data sources and assumptions utilized.

Attachment C
Members of the Collaborative

Attachment D
Letter of commitment developed and signed by all members of the collaborative

Attachment E
TREAT spreadsheet

Attachment F
Funding Estimate

Attachment G
Maps