

# **Rural Green Jobs: The Foundation of a Rural Green Economy**

**G**reen jobs are essential to restoring, maintaining, and protecting the ecological infrastructure of our nation and to building sustainable rural economies. National policy and investment priorities will help determine the availability and quality of these jobs. We must ensure that policies advancing green jobs create quality employment opportunities for rural communities to steward the lands and resources that sustain our country.

Eighty percent of our country's land base is rural. The management of our public and private landscapes beyond urban boundaries has broad and diverse impacts upon our water resource availability, forest products, energy systems and food supply. These working landscapes also play a significant role in mitigating climate change through carbon sequestration and storage, reduction of carbon emissions from natural disturbances such as fires, and contributions to bioenergy.

Restoring and maintaining the "ecological infrastructure" of our nation – its watersheds, air sheds, forests and grasslands – will be a key component of emerging green job opportunities. Green jobs that restore and maintain our ecological infrastructure include work in the following sectors:

- public land restoration and maintenance;
- private land restoration and maintenance; and
- utilizing and marketing woody biomass.

## **WHAT ARE GREEN JOBS?**

The RVCC uses the following definition for green jobs:

*Green jobs provide high quality, living-wage employment protecting, restoring, and maintaining environmental quality. They include jobs that restore and maintain ecosystem functions and services, such as clean air, clean water, and biodiversity, as well as those that reduce energy, material, and water consumption and move us toward a low-carbon economy.*

High quality, living-wage jobs in rural areas allow contractors and workers to secure employment close to their families and communities for the majority of the year, minimizing short-term and seasonal work. High quality jobs are those in which workers are treated with dignity and respect and labor laws are followed.

## **SUMMARY RECOMENDATIONS:**

### **Federal policies investing in green jobs should include:**

- Small business assistance and workforce training for rural restoration and maintenance oriented businesses, including biomass utilization.
- Federal contracting reforms to ensure quality, long-term employment in rural communities.
- Incentives for public and private land restoration and maintenance.
- Prioritizing rural green job creation in national thermal energy policy.

## **OBSTACLES TO IMPROVING JOB QUALITY AND ACCESS**

Contracts for federal land management activities are often structured to maximize administrative efficiencies by creating a small number of large contracts performed by large crews over short periods of time. Focusing exclusively on these sorts of contracting mechanisms biases against small businesses located in rural communities, with limited access to a labor pool. Short-duration contracting opportunities result in erratic work opportunities, forcing contractors and workers to travel long distances to find adequate work.

Rural small businesses often lack information technology skills, as well as access to broadband or other high-speed Internet connections, making it difficult for them to access information regarding contracting opportunities and meet online registration requirements.

## **CREATING ECONOMIC OPPORTUNITIES IN RURAL COMMUNITIES**

Federal and state policy, procedures, and investments can be structured to ensure our nation creates green jobs that have significant economic impact in our struggling rural towns and national economy. In addition to direct employment benefits, jobs that restore or maintain our ecological infrastructure, if located in a rural community where dollars are allowed to circulate, generate positive multiplier effects -- economic activities that maintain or enhance essential businesses such as hardware stores, restaurants, gas stations, saw mills, feed stores and, by extension, schools, in our rural towns.

## **WHO WE ARE**

The Rural Voices for Conservation Coalition is comprised of western rural and local, regional, and national organizations that have joined together to promote balanced conservation-based approaches to the ecological and economic problems facing the West. We are committed to finding and promoting solutions through collaborative, place-based work that recognizes the inextricable link between the long-term health of the land and well being of rural communities. We come from California, Oregon, Washington, Idaho, New Mexico, Montana, Arizona and Colorado.

A recent study found that a million-dollar investment in forest and watershed restoration jobs will create or retain 13 - 29 jobs and over \$2 million in economic activity, depending upon the type of activity.<sup>1</sup> Utilization of restoration by-products for bioenergy or value added products creates additional jobs and enhances overall economic impacts.

### **THREE DEFINING SECTORS OF THE RURAL GREEN ECONOMY** **Public Land Restoration and Maintenance**

In our new green economy, the argument about jobs vs. healthy public lands is an outdated, false choice. We can have sustainable land management and jobs; indeed, we cannot have one without the other. This requires a new vision for public land management agencies to implement sustainable land management activities in a manner that maximizes green job creation and retention, especially for people living in public land communities.<sup>2</sup> Coupled with this new vision, we need sustained investment in restoring and maintaining our public lands – through restoring federal budgets, improving contracting systems, and providing small business assistance.

### **Private Land Restoration and Maintenance**

Private lands, and the work that is done on them, are important components of the green economy for rural communities. Along with the direct employment benefit of working private lands (ranch hands, loggers, harvesters, etc.), adding value to the raw materials produced on these lands sustains local wood product infrastructure and other related enterprises. As in public land management, we have seen steep declines in federal resources for private working lands including technical and financial assistance, tax incentives for land conservation, and land acquisition programs to stem development pressures. It is critical to revitalize private land programs that provide incentives for land management practices that make significant contributions to public ecosystem services and environmental benefits.

### **Using and Marketing Woody Biomass**

Integrated, community-scaled biomass utilization strategies can reduce the costs of forest restoration and hazardous fuel reduction activities while providing economic benefit, increased energy independence, and reduced carbon emissions. Markets are emerging for woody biomass that is produced as a by-product of forest restoration and fuel reduction management activities on public and private lands. In addition to value-added wood products, forest restoration can reduce carbon intensive energy use through appropriately scaled, thermal energy applications, which can be up to 90% efficient, including combined heat and power biomass projects. These community scaled projects also reduce the need for hauling biomass feedstocks long distances to reach large centralized energy facilities, thus reducing consumption of fossil fuels and improving overall cost efficiency of the biomass application.

1 Moseley, Cassandra and Max Nielsen-Pincus, Economic Impact and Job Creation from Forest and Watershed Restoration: A Preliminary Assessment. Briefing Paper #14. Ecosystem Workforce Program. Institute for a Sustainable Environment. University of Oregon. Winter 2009.

2 A public land community is in a county where a significant percentage of the land base (sometimes defined as 30% or more) is in public ownership.

The federal government has an opportunity to support the development and retention of a diversified woody biomass utilization infrastructure in rural communities across the nation that is made up of appropriately-scaled, integrated facilities that sort woody materials for their highest and best uses to make a suite of wood and energy products. Scale is an important consideration for effective woody biomass energy systems. Community-scaled projects inherently address ecological concerns facing Western forests; facilities of this size typically need smaller amounts of supply, which aligns well with the ecological objectives of restoration. Additionally, a network of small, community-scaled combined heat and energy plants will not require huge investments in transmission lines (up to 3MW of power can be transmitted over local lines).<sup>3</sup> Such facilities also allow a community to diversify its economy, adding dry kilns, greenhouses, and other heat users.

A significant benefit of community-scaled bioenergy development is that energy dollars stay in the community rather than leaving the region, state and country. Community-scaled bioenergy development keeps these energy dollars in the local economy where they work to create jobs in forest restoration, fuels preparation, and fuel delivery and support.

### **GREEN “ECOLOGICAL INFRASTRUCTURE” JOBS**

#### **Public and Private Land Restoration and Maintenance**

- Hazardous fuels reduction
- Restoration treatments to improve wildlife habitat, stand structure and hasten the development of old growth
- Reforestation and post-fire rehabilitation
- Stream restoration including addressing fish passage, bank stabilization and riparian planting
- Restoration and enhancement of wildlife and fish habitat
- Noxious weed and invasive species control and eradication
- Road and trail maintenance
- Road decommissioning and obliteration
- Stand inventories, plant and animal surveys, water quality monitoring, data collection and analysis activities
- Boundary line location for federal lands
- Wood bridge repair and construction
- Stewardship of forests and grasslands
- Maintenance and greening of recreation sites and facilities
- Conducting and advising carbon sequestration activities and inventories
- Verifying climate change mitigation projects

#### **Biomass Utilization**

- Small business development in wood to energy programs including biomass feedstock removals and plant construction for community scaled combined heat and power and thermal energy
- Small business development in utilizing the byproducts of restoration for value added processing opportunities

3 Adapted from Ferrell, John and David Morris, Rural Power: Community Scaled Renewable Energy and Rural Economic Development. The New Rules Project. Institute for Local Self Reliance. August 2008.

## RECOMMENDATIONS

### Administrative Recommendations

#### **1. Create green job business assistance programs that support the work of the federal land management agencies**

Create and invest in programs within the Forest Service and Bureau of Land Management that provide rural business assistance *to retain and create jobs* related to restoration and maintenance, and processing and manufacturing of value added products and wood to energy services. This program should provide grants and technical assistance to help existing and new small businesses access capital, equipment, and other business support services such as grant writing assistance and instruction, bonding access, and federal bidding procedural instruction.

#### **2. Direct the land management agencies to structure work to create year-round employment in their stewardship, service, and other contracts**

Contractors need to have access to a constant program of work in order to invest in equipment and workforce training, and ultimately, to stay in business. Federal contracts should be scaled to the local business and workforce capacity. Structuring contracts to require work over a long duration using a small crew, rather than structuring the contract to occur over a short period using a large crew can often accomplish this. Bundling seasonal activities into year-round employment opportunities also creates long-duration employment opportunities that are accessible to small and micro businesses in rural communities.

#### **3. Direct the land management agencies to make full use of best value contracting in service and stewardship contracts**

The federal land management agencies should make full use of best value contracting in both service and stewardship contracts to foster multiple goals including improving ecological conditions, using highly qualified contractors, providing local rural community benefits, and ensuring that workers are treated fairly.

Effective best value contracting can reward contractors that perform high quality work, build and retain a trained workforce, create local community benefits, and use the by-products of forest restoration. It can create a bridge between collaboration and implementation, enabling contractors to propose innovative approaches to achieving complex ecological goals, encouraging local economic development, and building trust by ensuring that projects are implemented as the federal land management agencies and their collaborators intended.

#### **4. Require interagency coordination to ensure rural contractors can access federal lands work**

Federal land management agencies need to work with the Economic Development Administration offices, Small Business Development Centers, Resource Conservation and Development Districts, and job training centers to train their staff to assist contractors in the use of DUNS, CCR, and HUB Zone registration and the use of FEDBIZOPS.gov.

## BENEFITS OF THE RURAL GREEN ECONOMY

- Economic contributions from rural communities in the form of tax revenues, reduced government assistance, and positive contributions to the national green economy.
- Contributions to ecosystem services such as water quality and quantity, clean air, maintaining biodiversity, and climate change mitigation.
  - Eighteen percent of our national water supplies originate on Forest Service land – an annual consumptive value of \$27 billion.<sup>1</sup>
  - About 425 species listed under the Endangered Species Act and an additional 3,250 at-risk species are found on Forest Service lands.<sup>2</sup>
  - Private lands are home to river, lake, riparian and wetland habitat that support the lifecycle stages of terrestrial species.
  - Active forest management on private lands in the U.S. could provide 30 megatons of carbon offset.<sup>3</sup>
- Maximizing federal investments in restoration and maintenance:
  - Reduces federal expenditures on uncharacteristically large wildfires.
  - Produces non-governmental leveraged dollars for public land management. In communities that are already building the green ecological infrastructure through collaborative land management, non-profit groups routinely bring in thousands of dollars per project of non-federal money, to create jobs on both public and private forestlands.

1 United States Department of Agriculture, Forest Service, Forest Health Protection, Forest Insect and Disease Conditions in the United States 2006: Healthy Forests Make A World of Difference. June 2007.

2 *Ibid*

3 McKinsey & Company. Reducing U.S. Greenhouse Gas Emissions: How Much at What Cost? U.S. Greenhouse Gas Abatement Mapping Initiative, Executive Report, December 2007.

#### **5. Enforce labor laws on public land projects**

The Secretaries of Labor, Agriculture, Interior should prioritize the following administrative actions to ensure that quality jobs are created on public lands:

- 5a. Actively involve inspectors and contracting officer's representatives from the land management agencies in labor law compliance;
- 5b. Agency contracting officer's representatives and inspectors who visit remote work sites should be tasked with recording worker-days and other information. When activities show a discrepancy between worker-days and bid award, an investigation of wages should follow, with the help of the Department of Labor; and
- 5c. Agency field staff should be given clear guidance, training, and performance standards to ensure that they understand their roles, responsibilities, and obligations under applicable labor laws.



## **6. Department of Labor should rescind the newly-adopted H2B guest worker rules**

Rescind the newly-adopted rules for the recruitment of guest workers and strengthen requirements to recruit local workers. The new system, which requires very limited efforts to identify workers residing near where work will occur, will further erode the local workforce ability to obtain forest restoration jobs.

### **Legislative Recommendations**

#### **1. Foster green jobs through national climate change policy**

Federal climate change legislation should include incentives for sustainable land management and associated rural green jobs in forest and rangeland restoration and maintenance, and wood processing activities, including value-added wood products and wood to energy. Legislation should also include worker training and business assistance to help residents of rural communities participate in emerging carbon markets; including assistance to small, private landowners for carbon sequestration offset registration and marketing, and worker education in verifying climate change mitigation projects.

#### **2. Ensure that national energy policy, including thermal strategies, creates rural green jobs**

Congressionally created policy and tax incentives should prioritize the development of efficient and sustainable uses of natural resources by recognizing the role of thermal energy in reducing our dependence on petroleum. Creating incentives for appropriately scaled energy facilities in rural communities increases opportunities for local ownership, contributes to the creation of local green jobs, and creates lasting economic resiliency.

#### **3. Authorize and create a rural green business loan fund in USDA Rural Development**

This loan fund should provide direct low-interest loans and zero-interest short-term lines of credit to eligible businesses in forest and rangeland restoration and maintenance related enterprises. Eligible businesses should be those owned and operated in a rural county and/or can show that significant portions of their workers are residents of a rural county. The program should require interagency coordination between the Forest Service, Bureau of Land Management, and USDA Rural Development to maximize its effectiveness. This forest - and rangeland - specific loan program, and the call for interagency coordination, is specifically recommended to address ongoing concerns that current USDA Rural Development programs are focused almost exclusively on agricultural issues, leaving small rural forestry and ranching businesses no access to comparable loans and assistance programs.

#### **4. Include renewable biomass from public lands in national energy policy**

When developing national renewable energy policy, use a definition of renewable biomass that includes material derived in an ecologically sustainable manner, from private and public lands, including National Forest System lands, to ensure that rural public land communities can benefit from woody biomass utilization job opportunities.

## **RURAL GREEN JOBS IN ACTION**

In August 2004, the Apache-Sitgreaves National Forests in Arizona awarded a 10-year Stewardship Contract to thin 150,000 acres of primarily small-diameter ponderosa pine trees. In the first year alone, the \$4 million Forest Service investment directly involved 13 businesses, created 450 jobs (318 of them local), and put \$12 million of private sector investment into the local economy for goods and services. Additionally, the Forest Service reduced treatment costs by over 50%.

Products created from the thinned wood fiber include wood pellets for home and industry heating, animal bedding and compost materials, wood molding, structural lumber, paneling, wood pallets and biomass to generate electricity. The Forest Energy Corporation increased their wood pellet mill capacity by 50% and recently doubled their supply contract with a major retailer. Several industrial wood pellet heating customers are on line, including the town of Eagar, AZ offices and the Apache-Sitgreaves National Forest Supervisor's Office.

### **Appropriative Recommendations**

#### **1. Invest in the restoration and maintenance of federal lands<sup>4</sup>**

Restore agency budgets to sufficiently restore and maintain the ecosystems they manage, coupled with a mandate to do this in a manner that creates sustainable jobs for rural communities.

#### **2. Invest in private non-industrial land incentives programs**

Invest in programs such as the State and Private Forestry, Forest Stewardship Program, and the Natural Resource Conservation Service, Environmental Quality Incentives Program, Wetland Reserve Program, and Wildlife Habitat Incentives Program to promote the retention and stewardship of private lands and the jobs this creates.

#### **3. Fund the Community Wood Energy Program established in the 2008 Farm Bill**

Appropriate the full authorization of \$5 million a year to encourage the use of woody biomass as the primary fuel for heat or energy at publicly owned or operated facilities such as schools, town halls or libraries. This program offers the opportunity for local job creation through the use of restoration by-products on an appropriate, community scale to maximize local economic gain from the resource.

#### **4. Invest in rural broadband to increase rural access to federal jobs on public lands**

Invest in the rapid diffusion of broadband technology into rural areas. Rural contractors, who must access federal contracting opportunities and registration systems on-line, are disadvantaged compared to their urban counterparts because they lack high-speed Internet access.

<sup>4</sup> For specific public land management agency investment recommendations refer to the RVCC FY 2010 Appropriations Issue Paper (<http://sustainablenorthwest.org/quick-links/resources/rvcc-issue-papers>).

## CONCLUSION

Rural communities need federal assistance to jump start green economies focused on the restoration and stewardship of natural resources. Green job policies that fail to address the contribution afforded by our natural resources and the rural communities located in or near these resources are missing critical opportunity. The future of both public and private land management and sustainability is dependent on a local, well-trained workforce that is invested in the working landscapes they call home. Enhancing the economic infrastructure of rural communities with green jobs, businesses, and training opportunities will strengthen these communities, protect the landscape from fragmentation and over-development, provide ecosystem services for all Americans, and promote land health and resiliency.

## FOR MORE INFORMATION

### Ecosystem Workforce Program

Cassandra Moseley  
541-346-4545  
cmoseley@uoregon.edu

### Sustainable Northwest

Maia Enzer  
503-221-6911 ext. 111  
menzer@sustainablenorthwest.org

Wendy Gerlitz  
503-449-0009  
wgerlitz@gmail.com

### The Watershed Research and Training Center

Lynn Jungwirth  
530-628-4206  
lynnj@hayfork.net

Learn more about RVCC: 503-221-6911  
issue@sustainablenorthwest.org  
www.sustainablenorthwest.org/rvcc

## COALITION PARTNERS

### California

Alliance of Forest Workers and Harvesters  
Jefferson State Forest Products, LLC  
Sierra Business Council  
Trinity County Board of Supervisors - District 3  
Watershed Research and Training Center

### Idaho

Framing Our Community  
Lemhi County Economic Development Association, Inc.  
Salmon Valley Stewardship  
Woody Biomass Utilization Partnership

### Maryland

Communities Committee

### Montana

Flathead Economic Policy Center  
Northwest Connections  
Vander Meer's Wildland Conservation Services  
Watershed Consulting, LLC

### New Mexico

Center for Biological Diversity  
Forest Guild  
Gila WoodNet  
Restoration Technologies, LLC  
Santa Clara Woodworks  
SBS Wood Shavings

### Oregon

Applegate Partnership & Applegate River Watershed Council  
Bear Mountain Forest Products  
Central Oregon Intergovernmental Council  
Community Smallwood Solutions, LLC  
Ecosystem Workforce Program  
Grant County Court  
Hells Canyon Preservation Council  
Institute for Culture and Ecology  
Lake County Resources Initiative  
Lomakatsi Restoration Project  
National Association of Forest Service Retirees  
Resource Innovations  
The Siuslaw Institute, Inc.  
South Central Oregon Economic Development District  
Sustainable Northwest  
Upstream 21  
Wallowa Resources

### Vermont

Biomass Energy Resource Center

### Washington

Gifford Pinchot Task Force  
Mt. Adams Resource Stewards

### Washington, D.C.

American Forests