

Beetle-kill: The Issues and Opportunities, An Economic Stimulus Outline©

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Salvaging and Reclaiming the
Rocky Mountain's Dying 'Blue
Pine' Forests into Dazzling Log
Homes and Wood Products



Piper's 'Blue Pine Lemonade' Stimulus Plan ©

Goals:

- To help propel Colorado to the forefront of the 'Green and Sustainable Living' agenda, and to bring recognition to the State for forward-thinking and progressive actions
- To present ideas and actions for a sustainable 'Get Colorado to Work Action Plan' that protects lives, environments, society, and industry in our rapidly growing but crisis laden U.S. West
- To help provide solutions for a 'Sustainable Circle of Mitigation and Utilization' of our beetle-killed forest fiber
- To provide Consultation, Marketing, and Expertise in the utilization of our beetle-kill timber and future 'green growth'
- To propose an Educational and Collegiate Plan involving all departments to nurture 'real world interaction' that brings recognition and helps transcend interests to create collaborative actions between Environmental, Conservation, Wildlife, Recreational, Government and Industry groups ('All Groups') on the issues, challenges, solutions, and opportunities regarding our beetle-killed forests



Piper's Plan Goals

- **Pro-Active Preparation Plan creates a sustainable cycle that saves lives and money, while helping to protect our water, electrical, transportation, and communication systems, ('Life Support Systems'), as well as tourism and our communities**
- **Creates both jobs and an 'Army of Community Volunteers'**
- **Progressive actions that move Colorado towards resolutions to our Affordable Housing Crisis and gets contractors back to work**
- **Fosters communication, cooperation, and collaborative efforts between 'All Groups' in protecting our 'Life Support Systems'**
- **Wide spread media coverage for Colorado in taking progressive, positive, and aggressive steps towards the agendas of stimulating the economy and creating a sustainable cycle of living in this beetle-kill devastation, and turning these Rocky Mountain Lemons into 'Blue Pine' Lemonade**



A Short Bio

- **Randy Piper operates a Colorado business that has promoted the use of beetle kill for four years and markets dozens of types of Reclaimed 'Blue Pine' Beetle-kill Wood Products from a wide variety of manufacturers**
 - **Currently working with local wood processing companies, adding value to rough-cut lumber, and marketing finished wood products**
 - **Siding, Flooring, Mouldings, Paneling, Fencing, Furniture, cabinets, etc.**
 - **Plans include wholesale and retail distribution, both within Colorado and Nationally, possibly Internationally**
 - **Working with the Mountain States Lumber and Building Dealer Assoc.**
- **Five years of study and dedication to the 'Issues And Opportunities of the MPB Epidemic'**
 - **Currently assisting in the development of an Operational Plan regarding beetle-kill mitigation and utilization with the Beetle Kill Trade Association and others**
- **Access to an Extensive Network and Experience in the Wood Processing and Utilization Industries**
 - **Industry professionals that can assist in the wide spread implementation of the Beetle Kill Operational Plan**
- **BS In Business Administration and twenty-five years of Product Development, Marketing and Construction Related Experience**



The Media is Paying Attention....

Los Angeles Times

• DISPATCH FROM GRANBY, COLO.

Building on the trunks of ruined pines

As bark beetles ravage Rocky Mountain forests, entrepreneurs scramble to find uses for the dead wood left behind.

By Nicholas Riccardi, Los Angeles Times Staff Writer
December 27, 2007

GRANBY, COLO. – The pine trees cradling this mountain town are dying, turned rusty red by a beetle that is destroying the Rockies' forests.

The brittle corpses are an eyesore as well as a major fire hazard. When they collapse, they make hillsides unstable, increasing erosion and damming streams that feed into the Colorado River, which provides drinking water to seven states and Mexico.

But Randy Piper is trying to focus on the positive.

He moved here four years ago, scanned the hillsides and saw opportunity. Now he has a small showroom displaying beetle-killed pine logs that have been sculpted into doors, moldings or pieces for log cabins.

"I kept looking around and the trees were all dying," Piper said. "I thought, 'This is a terrific opportunity to make lemonade out of lemons.' "



...To Our Efforts

- **Others:**
 - **The Denver Post**
 - **The Boston Globe**
 - **The Summit Daily**
 - **The Vail Daily**
 - **New West**
 - **Timber Buy Sell**
 - **Design Centre**
 - **The Healthy Planet**
 - **Alpenglow Magazine**
 - **And Others....**

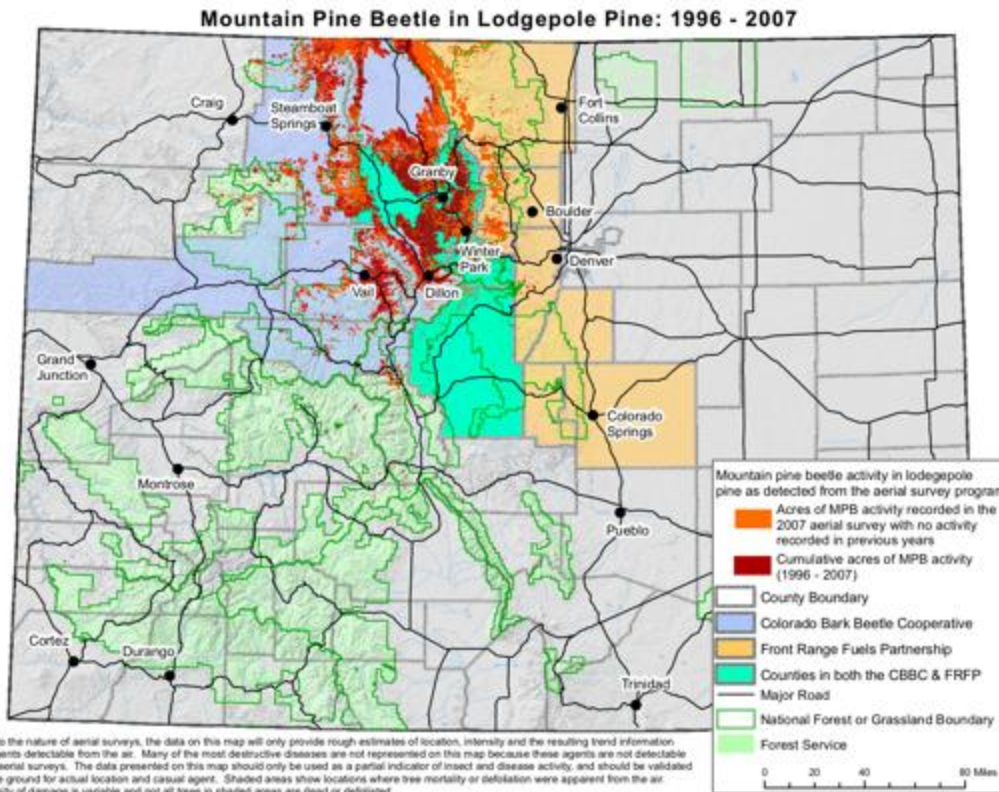


A National Problem

(Not Just a Colorado Problem!)

- **Beetle-Kill Epidemic Will Cost Billions To Resolve**
 - **Societal Safety and Impacts**
 - The protection of, and aftermath effects, on citizens and communities in the likely event of a wildfires
 - Impacts of the loss of a primary water supply, electricity, etc.
 - **Environmental Impacts:**
 - **Water and Erosion:** Increasing shortages compounded by early snowmelt and flooding, insufficient storage, and overall run-off of soil and ash which will clog waterways and treatment plants which stresses an already over-demanded water supply and system
 - **Air quality and carbon out-put exceeding absorption rates**
 - **Wildlife and Aquatic Habitats**
 - **Economic Impacts:**
 - **Cost of clearing Urban Interface Areas including Electrical, Transportation, Communications, and Water Systems**
 - **Massive increases in the cost of water treatment**
 - **Enormous cost to repair fire damaged electrical grids/systems**
 - **Loss of recreationalist and tourism revenue**

Epidemic Progression 1996 – 2007



[Click the image to see a full-screen image.](#)

Environmental Issues and Natural Disasters





Fire Danger Issues

- **Public and Community Safety**
- **High Tree Density and Heavy Fuel Loads =
Hotter Fires and Faster Moving Fires =
Uncontrollable and Unstoppable Fires?!**
- **Heavy Ground Cover = 'Baked Soil' = Poor Plant Growth + Rapid
Run-off**
- **Ash and Soot Run Off = Clogged Waterways**
- **Melt down of our Electrical Grid and Communications Systems**
- **Disruption and Repairs to our Transportation System**
- **Devastation to our Tourist Industry**
- **Massive Air Quality and Carbon Out-put Effects**



Water and Erosion Issues

- **Epicenter = Colorado River Headwaters**
 - Most widely distributed water resource in the world provides water to 30 Million+ people in 10 States, both East and West of the Continental Divide
 - Irrigates 3.5 million acres of farmland
- **Destruction of aquatic species and habitats**
- **Drought and Faster Snowmelt = More Erosion and Flooding = Likelihood of Increased Pollution and More Water Shortages**
- **Extreme Costs of Water Pollution Clean-up for Retaining Systems, Dredging, Treatment**



Air Quality and Carbon Pollution Issues

The Compound Effect:

- **Carbon Pollution Increases**
 - Dying vegetation releases carbon
 - Fires result in massive pollution/carbon releases
- **Carbon Consumption Loss**
 - Dead trees don't absorb carbon
- **Loss of living forests plays a huge role in climate change. Some information suggests that North American Forests are at a 'tipping point' of producing more carbon than they absorb...**
 - Future emphasis should be on mitigating and utilizing dead timber and re-planting programs to allow living forests to absorb carbon
 - High altitudes are more affected than lower elevations



Societal Issues

- **How will the predicted future growth boom in Colorado be affected?**
- **Will people want to stay and build communities in areas of dead or burnt trees?**
- **Will people want to own second homes and vacation here?**
- **Communities need Government to rally in providing protective and preventative measuresOr will we just wait for the clean up after The Big Fire?**



Economic Issues

- **Preventative Cost VS Reactionary Cost of 2+ million acres of dead forests**
- **The Cost of Protecting Lives/Communities from fire dangers**
- **The Costs of Declines in Property Values**
- **The Cost of Lost Tourism and Second Home Ownership**
- **The ‘Study and Operational Planning’ Cost**
- **The Legal Cost**
- **The Cost of Wildlife Protection, Losses, and Conservation**



What Lead to the Current Situation?

- **Drought and climate changes assisted in creation of unhealthy forests**
- **Our interference with natural processes through fire suppression practices**
- **Confrontation and legal issues, rather than collaboration, between ‘All Groups’ varied and diverse interests**
- **Poor Forest Management and Sustainability Practices**
 - Industrial and economic influences
 - Environmental and conservation influences
 - Recreational influences
 - Political influences
- **A shortage of wood fiber processing and utilization facilities and practices**
 - Very limited infrastructure of current use for biomass
 - Sawmill closings and consolidations in the U.S. and CO
 - High Legal and Economic Risk, Low Margins, Instable Timber Supply, Imported Product Competition

How Do We Make 'Blue Pine' Lemonade?

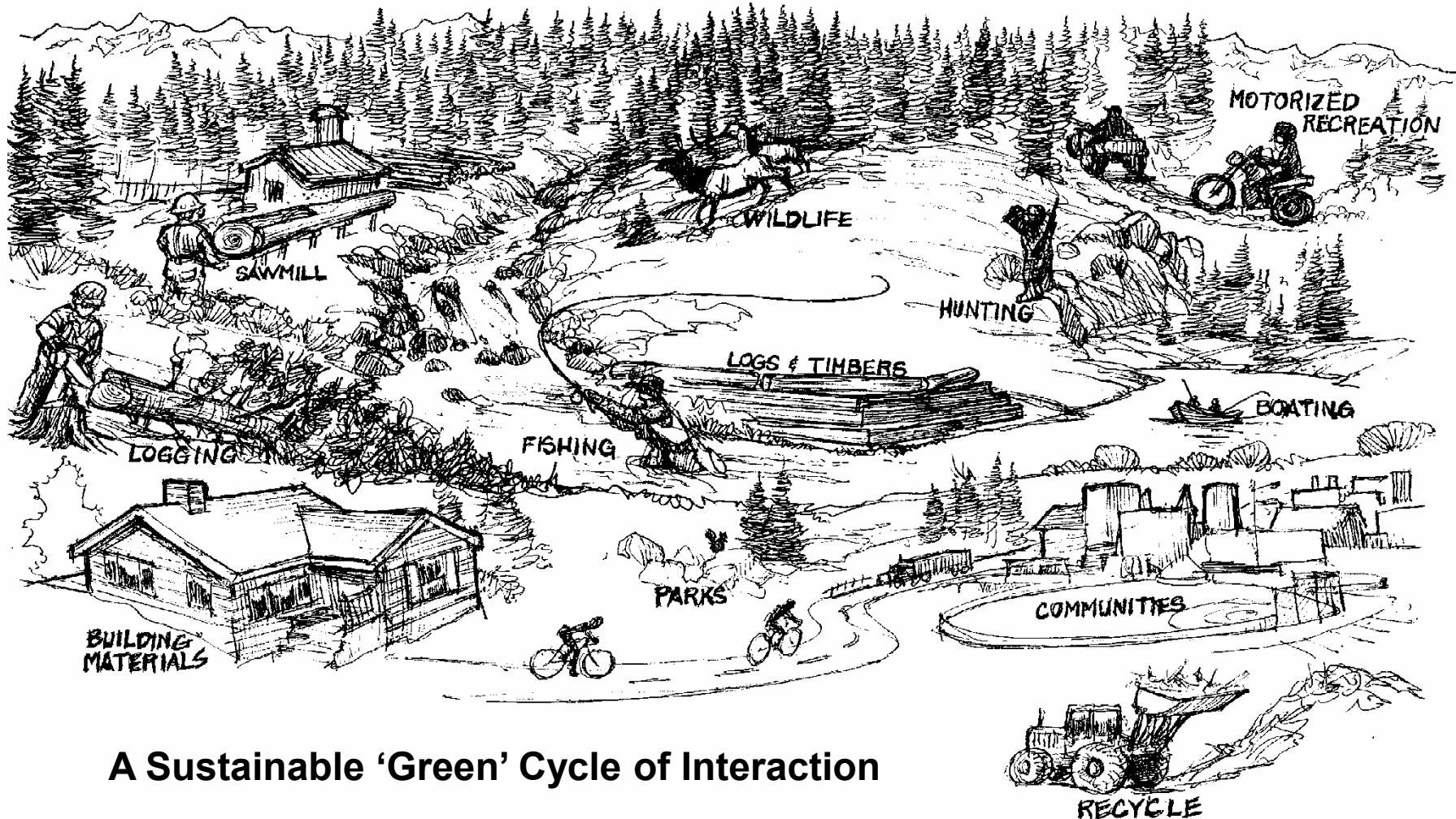




'Blue Pine' Beetle-kill Uses

- **Lumber Products – Siding, Flooring, Paneling, Mouldings, Structural and Framing Materials, Fencing**
- **Furniture, Architectural Woodwork, and Cabinet Products**
- **Multiple styles of Log Homes and Timber Frame Homes**
 - **Marketable Homes, Affordable Housing, and Community/Resort Structures**
- **Biomass for Electricity, Heat, and Fuel**

We Must Create A Sustainable and Collaborative Interaction Between 'All Groups'



A Sustainable 'Green' Cycle of Interaction



Factors Inhibiting Harvesting, Production, and Distribution of 'Colorado Blue Pine'

- Colorado imports about 95% of the wood used to 'build Colorado'
 - Consumers don't know that 'Blue-stain' is imported from other states
- Low demand and oversupply of lumber has created below cost market prices, which widens the gap in creating a sustainable circle, and creates difficulty in establishing a sustainable retail price point
- Lack of public awareness as to the true magnitude and scope of the issues and subsequent impacts
- Lack of market awareness regarding availability of local wood products
- Lack of collaboration and cooperation between "All Groups" creates confrontation detrimental to everyone's goal of healthy forests and a sustainable environment
- Grading methods and timber degradation cause de-valuation for 'blue stain' lumber production, creating losses in profitability at mills
- Low local production capabilities – both milling and biomass
- There are higher costs of low volume production in high cost resort areas at the timber sources = It costs more for Colorado lumber
- Perception that an excess supply of timber = cheap lumber and wood products
- In order to compete with imported lumber from high production mills, some local sawmills sell direct, contributing to unsustainable distribution practices



What We Need To Do

- **Need immediate and enormous support and money from our Governments (Federal/States/Local) and Entrepreneurial Investment**
 - All States dependent upon the Colorado River water supply and the electrical grid have a need to provide funds for immediate preventative measures
- **Implement ‘Blended Value’ and ‘Triple Bottom Line’ Methodologies**
- **Use State and Federal stimulus funds to clear timber from our ‘Life Support Systems’, i.e. Urban Interface Areas, Water Ways, Electrical Grid Systems, Communications and Transportation ROW’s**
- **Marketing, Media Attention, Education, and Publicity: A State sponsored Media Campaign, as well as Sponsorships and Promotion of wood product availability and utilization by celebrities and sports figures**
- **Increase Harvesting, Sorting, and Wood Product Manufacturing i.e. increased sawmill production, biomass processing and utilization**
- **Wholesale and Retail Distribution of local wood products**
- **Bring in Experts for Re-training Programs in Environmental Reclamation and Retaining Systems, Re-planting, Logging, Sawmilling, Grading, etc.**
- **Create Collaboration, ‘Cause Marketing’ and Education for Grass-roots, Environmental, Conservation, and Recreationalist Organizational Efforts**
- **Implementation of a University Program that creates a Student Force that crosses all departments and provides ‘Real World Interaction’ while fostering collaboration between ‘All Groups’**



The Stimulus Plan

- Step One:

- Provide extensive funds to the Forest Services for Advisory and Over-sight Committees for mitigating and utilizing beetle-kill
- Form and finance a diverse beetle-kill committee to create an ‘Operational Plan’ and act as private enterprise oversight
 - ‘All Groups must have some representation to begin a collaborative effort to seek balance in obtaining a healthy forest, clean water and air, sustainability, and ‘green technology’
 - Consists of Business/Industry, Political/Legislative, Environmental/Conservationist, Educational,
 - Compile Community and Urban Interface Area Data
 - Identify Accessible Water Sheds and Drainage Basins
 - Compile Available Data on Electrical, Communications, and Transportation Systems in beetle-kill areas
 - Determine quantities and use mix of fiber for ‘shovel ready’ projects in most crucial ‘Life Support Systems’ Areas
 - Analyze transportation systems/impacts, wood processing facilities locations and usage, distribution systems, sales and marketing potential, etc.
- Determine ‘Operational Plan’ from above data and disperse funds
 - Contract with experts to assist



The Stimulus Plan

- **Step Two:**
 - **Create a ‘Single-source Clearing House of Information’**
 - **Overseen by the ‘Beetle-kill Committee’, which is represented by ‘ All Groups’ to gain cooperation and collaboration of efforts**
 - **Begins collaborative effort of information sourcing and sharing to streamline information and actions**
 - **Immediately begin harvesting the most urgent areas identified through data analysis in the ‘Operational Plan’**
 - **Set up ‘log and fiber sort yards’ on forest/public lands**
 - **Incent consumers with a ‘Colorado Blue Pine’ Customer Rebate Program from stimulus funds**
 - **A 30%* Consumer Rebate levels field between open lumber market and prices needed for local lumber production and motivates consumers**
 - ***25% to consumer, 5% to Affordable Housing Fund in consumer’s name**
 - **Coordinate and implement a Statewide, and Nationwide, state-sponsored Marketing, Education, and Awareness Campaign**
 - **Cooperate with the Forest services to encourage the use of ‘Colorado Blue Pine’ beetle-kill wood products**
 - **Increase awareness of the CO State Sales Tax Exemption and any other applicable incentive programs**



The Stimulus Plan

Step Three:

- **Allow the Forest Services to ensure a long-term sustainable supply of fiber for milling and biomass**
 - Hard to encourage business expansions/start ups with a 10 year supply
- **Remove inhibiting factors and restrictions regarding beetle-kill mitigation and Colorado wood product utilization**
- **Provide Grants and Low Interest Funds to existing operations and entrepreneurs to increase wood processing production, promote/market ‘Colorado Blue Pine’ and open additional distribution and sales outlets nationwide and internationally**
- **Establish a ‘Remanufacturing, Grading, and Distribution Yard’ to centralize processing of rough cut mill lumber into higher value lumber products**
- **Implement ‘Cause Marketing’ Campaigns with ‘All Groups’**
 - Market and sell ‘Colorado Blue Pine’ to their members to receive group donations
- **Bring in experts to facilitate knowledge and interaction which increases likelihood of success and rapid production increases.**
- **Initiate training programs related to the harvesting and production of wood products**
 - A % of the Construction Industry will re-train for Logging, Sawmilling, Furniture and Cabinet Making



The Stimulus Plan

- **Step Four:**
 - **Design and Implement an ‘Education System Activist Plan’**
 - **Colleges and students can provide tremendous value in assisting with the implementation of ‘sustainable education’, creating collaboration between ‘All Groups’, and public awareness**
 - **Progressive universities with ‘green agendas’ will gain in student recruitment by attracting recognition from the media and peers**
 - **Implement Community Education + Activism Plans**
 - **Allow credit in Community Service Programs for labor in brush clearing, re-planting, and retaining systems (low risk, low skill)**
 - **This reduces hard cost in ‘unskilled’ labor intensive operations leaving more money to pay the experts for tree removal**
 - **Create a ‘Community Volunteer Program’ whereby ‘x’ hours labored results in the ‘gift’/purchase of a log home shell**
 - **Log shell then acts as a down payment to create additional access to an affordable way into home ownership**
 - **A % of logs cleared are donated to a non-profit entity to be used for a variety of Affordable Housing Programs**
 - **This also reduces hard cost for ‘unskilled’ labor intensive operations**
 - **Citizens working together will help create a sense of bonding and community**
 - **Encourage Employee Housing + Employer Sponsored ‘Home Savings’ and Home Ownership Education/Preparation Programs**



The Stimulus Plan

- **Step Five:**
 - Incent schools, hospitals, community centers, etc. to utilize biomass for heat and/or co-generation
 - Implement a ‘Water-shed Maintenance’ fee for all states and municipalities that use Colorado water resources
 - Implement a tiered water usage price structure
 - Explore ‘Carbon Credits’ opportunities: biomass, re-planting
 - Create ‘A Combined Affordable Housing, Open Space and Agricultural Protection Trust Fund’
 - The State Division of Housing estimates that 36,000 affordable housing units are needed each year.
 - » Available assistance does not come close to meeting these needs.
 - Create Additional Incentive and Tax Benefits Programs
 - Allow a tax deduction for private land-owners whom donate House Log and Saw Log Quality Timber to the ‘Beetle-kill Affordable Housing Program’

The Stimulus Plan

Step Six:

Continue to increase production of 'Colorado Blue Pine' Wood Products!





The Stimulus Plan

Step Seven:

- **Build Affordable Housing**
 - **Puts Contractors Back to Work**
 - **Create Additional ‘Habitat for Humanity Style’ Community Building Programs**
 - **Reduces cost per unit, thus stretching available funds to do more**
 - **A Portion should be D-Log Homes with SIP Panel Roof Systems, as it is a very cost-effective and efficient method of building**
 - **One Step Wall Structure eliminates exterior framing, insulation, siding, and drywall construction**
 - » **Stacking logs is relatively low skilled labor perfectly suited for this style of Community Building**
 - **Skilled construction labor can be spread out to increase unit production per dollar spent**



Why Will This Plan Work?

On the Economic Level:

- **There is a Worldwide ‘Green and Sustainable Living’ Movement’, thereby, an increased market value for these practices**
 - **The ‘Green’ and Sustainable Boom is the ‘Re-industrialization of Industry’ and is predicted to be the ‘motherlode of opportunity’**
- **An influx of entrepreneurs act as ‘Problem Solvers and Opportunity Seekers’, which creates more jobs**
- **Salvaging, reclaiming, and recycling creates ‘green jobs’ and sustainable living practices per USA goals**
- **Environmentally-friendly and ‘Specialty’ Products = Higher Returns**
- **‘Blue Pine’ is a unique specialty product that will only be available for a limited period of time, therefore it should be marketed as an ‘Eco-friendly Specialty Product’ (At higher price points outside Colorado)**
 - **The Retail Price Point needs to be sufficient to support a fully sustainable circle, from generating revenue from the timber sale, to logging, to milling to end sale**
 - **Central ‘Remanufacturing and Distribution Yard’ with kiln**



Why Will This Plan Work?

On the Environmental Level:

- **The Enormity of the problem combined with the ‘Green’ + Sustainable Living Boom can help bridge the gap and create greater cooperation and collaboration between ‘All Groups’**
- **Using Local Lumber Reduces Carbon Footprint**
 - Both decay or fire output, and transportation impacts
- **Our Performance Resolving this Devastation is Related to Sustainability in the Growing Western Population**
- **Preventative Measures Will Be Far less Damaging Than Reactionary Measures**



Why Will This Plan Work?

On the Social Level:

- Home ownership and Affordable Housing helps creates stronger and more stable neighborhoods
- Community Clean-Up, Re-Planting, and Housing Programs foster pride and bring people together to create a 'greater sense of community and responsibility'
- Employee Housing + Employer Sponsored 'Home Savings' Programs breed loyalty and stability
- Tax Breaks for Timber Donations to build homes decreases the cost to land owners and communities for tree removal, as well as affordable home building

Taking Steps Towards Sustainability in a.....

GreenWay

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Salvaging and Reclaiming the Rocky Mountain's Dying 'Blue Pine' Forests into Dazzling Log Homes and Wood Products





GreenWay's Role

- **Implementation of promotion, marketing, sales, and distribution of 'Colorado Blue Pine' beetle-kill lumber and wood products**
 - Working with the past President and 'beetle-kill appointee' for the Mountain States Lumber and Building Dealer Association
 - Been selling Colorado and Rocky Mountain 'Blue Pine' for 4+ years
- **Can provide 1 to 2 million BF of lumber into the market immediately, increasing volume to 4 million +/- BF in 12 months**
 - Colorado sawmill and wood manufacturers representation and support
- **Designing, developing and sourcing the 'Distribution and Remanufacturing Yard' to include wholesale distribution channels**
- **Expertise and assistance in designing and implementing the 'Operational Plan'**
- **Assistance and expertise in helping with 'Operational Planning and Implementation' of Wood Fiber**
 - Wood and fiber logistics
 - Costing and pricing
 - Network of professionals to assist in the design and implementation



Our Mission

Our Mission is to better utilize the dying forests in the Rocky Mountain Range, and build our business with strong emphasis on a 'blended value' approach. We will support our communities with social, economic, and environmental benefits through attainable housing products, sustainable forestry and lumber operations, and education. Our dedication, hard work and honesty, along with our beautiful and unique 'Blue Pine Reclaimed Wood Products', and other eco-friendly products, will become our trademark in the world of sustainable living.



Our Vision

- **To Become the Leader in the Production, Marketing, and Sales Distribution of Beetle-kill 'Blue Pine' Wood Products**
- **To Become a Market Force in the Promotion, Production, and Education for the Better Utilization and Management of Natural Resources**
 - **Local Focus, Global Sustainability**
 - **Health of All Species**
 - **Land, Water, Air**



Our Goals

- **Base Company Growth upon the Principles of ‘Blended Value’ and ‘The Triple Bottom Line’ Methodology**
- **To Market and Distribute Rocky Mountain ‘Blue Pine’ Homes + Wood Products on a national level, possibly internationally**
 - Support a Sustainable Circle and Balanced Value
 - Help determine true market costs and establish value through market distribution for beetle-kill wood products.
 - Initiate ‘Cause Marketing’ and Promotion through ‘All Groups’
- **Make Positive Impacts in Communities**
 - Help create and assist in Affordable Housing Programs
 - Assist in implementing educational programs on sustainable living
 - Support Local Economies and Community Programs
- **Provide Tools for Sustainable Living + Forest Health**
 - Assist in Cooperation of Industry + Environmental Groups
- **To Expand into other Environmentally Friendly Product and Service Offerings**



The 'Green' Team

Randy Piper

Bobby Hernandez

Al Herbel

Mark Gelinas

Kathy Pitts

Kevin Osburn

And others.....