Southeast Alaska Forest Products



The Forest Products Industry Cluster, as defined by the NAICS codes in the Southeast Alaska Forest Products Cluster chart below, accounted for less than one percent of jobs and wages in the region in 2009, representing 238 jobs and a payroll of \$11.8 million. In 1990, forest products related employment accounted for 10% of all wage and salary employment in Southeast Alaska. In the last two decades, there has been a 94% decrease in employment. Employment levels are expected to continue to fall.

Southeast Alaska Forest Products Cluster

Cluster/Industry Name	NAICS Industr y Code	Annual Average Monthly Employmen t 2003	Annual Average Monthly Employmen t 2009	SE Businesse s 2009	SE Wages 2009	Avg. SE wage 2009
Forestry and Logging		510	238	32	\$11,759,44 6	\$49,37 5
Logaina	1133	371	158	17	\$8 261 299	\$52,14 9
Support activities for forestry	1153	20	24	6	\$1,374,076	\$56,85 8
Wood product manufacturing	321	119	56	9	\$2,124,071	\$38,21 4

It should be noted that some forest restoration jobs are not counted in the forestry and logging cluster above. Forest restoration jobs at this time are primarily in forest thinning, stream restoration, and road storage or maintenance. Those engaged in the latter two activities are primarily heavy equipment operators. That type of employment is a NAICS code that falls under Construction, so this direct employment in forest restoration is likely not represented in the forestry and logging cluster.

Forest Products as an Economic Force in the Regional Economy

The decline of the timber industry has been well documented. Once one of the main economic foundations of the region, the timber industry was decimated by a combination of forces, the most significant being the changing of federal government forest management policies and practices; but also including declining private timber harvests, and changing market conditions.

The decline of the timber industry cost Southeast Alaska 3,300 direct industry jobs and over \$100 million in annual payroll. The indirect and induced impacts are on an order of magnitude higher – likely a loss of 6,000 jobs and \$160 million loss of annual payroll in Southeast. Significant timber mill closures in Ketchikan, Sitka, and Wrangell eliminated the major private sector source of year round employment in those communities and substantially impacted other communities that depended on the timber industry. While once there were 12 large saw mills operating in Southeast Alaska, today there are none, only one mid-size sawmill—and a handful of very small ones—remain.

The USFS has substantial holdings of timber suitable for harvest (see map on following page); however, the current political climate has hindered sales of many USFS timber stands, and few mills have been able to operate without a predictable, economically viable 10-year timber supply. Mills would prefer to have three years' worth of timber on contract at a minimum, but even that has been difficult to obtain because nearly every timber sale has been subject to litigation, and any timber in litigation is not available to local



purchasers and mill operators. The end result is considerable expense and delay, and this pattern, as it repeats itself will likely lead to further mill closures.

Moreover, the Transition plan for the Tongass calls for the industry to shift from a timber supply primarily based on old growth timber from roadless areas of the Tongass National Forest to small diameter logs from second growth stands and from roaded areas. This proposed switch in raw material supply from old growth timber in roaded and roadless areas to young growth timber limited to roaded areas will require significant investment in new equipment that Southeast timber operators will have to finance themselves. Such investments will be difficult to finance without the assurance of a reliable supply of economic timber from the Forest Service.



Location of Harvested Areas and Available Saw Timber



Southeast Alaska Action Initiatives For Key Economic Clusters May 31, 2011 Page 139 In 2009, the total Southeast Alaska timber harvest was 114 million board feet (mmbf). This includes 51 mmbf from Sealaska land; 15 mmbf from Alaska Mental Health timber operations; 43 mmbf from the Tongass; and 6 mmbf from State timberlands. The total 2009 harvest is a 3.5 percent decrease from 2008, and represents a 77% decrease from the 1997 Southeast harvest of 495 mmbf.

Forest Products Cluster Strategy Development Process

In February, March, April and May of 2011, the Juneau Economic Development Council convened a 33 member Forest Products Cluster Working Group with representation from private industry, including medium and small local mills and a retail establishment; federal, state and local government agency representatives; tribal corporation representatives; regional economic development entities; trade associations and environmental organizations. A full roster of the Working Group membership is below.

Name	Affiliation	Position	
Allen Brackley	USDA Forest Service	Research Forester	
Andrew Thoms	Sitka Conservation Soc	Executive Director	
Bill Thomason	Wood Cuts	Owner	
Bob Deering	USCG - Civil Engineering Unit Juneau	Environmental & Energy Branch Chief	
Bruce Abel	Don Abel	Owner	
Bryce Dahlstrom	Viking Lumber Company	Owner	
Carol Rushmore	City of Wrangell	Economic Development Director	
Carolyn Thomason	Wood Cuts	Owner	
Chris Maisch	DNR	Director	
Clarence Clark	Div of Forestry	Forester	
Dan Parrent	USDA Forest Service	Biomass/Forest Stewardship Coordinator, R10	
Dave Harris	USDA Forest Service	Director, Forest Management	
Ernie Eads	Thuja Plicata Lumber Co	Owner	
George Woodbury	Alaska Forest Assn	President	
Greg Erickson	Erickson Economics/SEACC	Economic consultant	
Jackie Durette	Durette Construction	President	
John Sisk	The Nature Conservancy		
Jon Martin	USDA Forest Service	Tongass Transition Framework Coordiantor	
Karen Petersen	UAF Cooperative Extension Service	Program Assistant/Land Resources	
Keith Rush	The Nature Conservancy		
Kent Nicholson	Timber Sale Program Manager, Tongass National Forest	Ketchikan-Misty Fiords Acting District Ranger	

Southeast Alaska Forest Products Cluster Working Group Membership*

*Attended one or more meetings



Name	Affiliation	Position
Larry Jackson	Tongass Forest Enterprises	Owner
Lindsey Ketchel	SEACC	Executive Director
Marie Messing	USDA Forest Service	Highway Engineer
Merrill Sanford	SEC Board	CBJ Assembly
Michael Kampnich	The Nature Conservancy	
Mike Goldstein	Alaska Coastal Rainforest Center	Director
Owen Graham	Alaska Forest Assn	Executive Director
Paul Slenkamp	The Trust Land Office	Trust Resource Manager
Richard Stubbe	Alaska Wood Products	
Shelly Wright	Southeast Conference	Executive Director
Wade Zammit	Sealaska	President, Sealaska Timber
Wes Tyler	Icy Strait Lumber	Owner

Over the course of four facilitated meetings and numerous between meeting teleconferences, this diverse group worked collaboratively to identify areas where opportunity for job creation and industry development may exist within this sector. In addition, the group identified opportunities for collaboration

and partnership to overcome current constraints that stand in the way of business growth.

Group discussion produced the graphic to the right to show the types of forest product jobs and activity in Southeast Alaska.

Southeast Alaska Forest Products Industry Opportunities and Challenges

The cluster working group was asked to develop a list of the opportunities and challenges offered by the Southeast Alaska Forest Products industry. The group developed the following list:

Round Log Export

• Round log export has the highest



return on invested capital of all wood product sectors. This is where the profit is made to support all other types of commercial wood product activity. This market also supports the basic industry infrastructure.

• Sealaska facilitates all Federal timber sale exports for the region because they support the infrastructure, but need the volume of all players.



- Markets: China, Korea, Canada, Washington. China has growing supply constraints in face of fast growing demands. This means increasing potential that they will buy more raw materials from Southeast Alaska. China buys round logs of 8-22", and Southeast has a competitive advantage here in its 2nd growth timber. However, second growth is commodity priced, but need 10-20 times amount of capital investment.
- Logs are used to make concrete forms and pallets. Do we know much about changing demands from the fastest growing market in the world (Asia)? Can we identify small, niche opportunities in the China economy?
- Round log export market is highly dependent on 50% exemption that allows export to maximize price, rather than all domestic sales.
- Alaskan domestic market is very small and stagnant with slowdown in construction; other domestic markets are in US and Canada.
- The I-5 Corridor has many advantages; it is our major competition in the West, however, there is a mountain beetle infestation in Canada which may lead to lumber supply shortages.
- Infrastructure is aging.

Value Added (primary processing) and High Value Added (secondary and tertiary processing)

- Size and economies of scale are issues. Many products can only be sold locally because the selling price in the global market is not high enough to cover freight costs to export (to other parts of Southeast, Alaska or outside). However, the volume of forest products that meet the need within the region cannot support the capital investment needed to produce them.
- The increasing cost of oil increases freight costs and production costs making the forest products business increasingly difficult. Freight costs make Southeast value added products too expensive to compete in global markets where there is no perceived product advantage. Global markets don't know about the superior products we make here. We could brand and market Tongass high value wood to increase product price. Sell a branded product worldwide, in very small quantities at high prices. Premium priced, promoted and marketed just like craft beer, Copper River reds. Is Sealaska, University, Alaska Rainforest Institute, or any other entity doing applied research or product development for forest products?
- Products include (or could) the following: Dimension lumber (various grades/various markets, green lumber, dried & planed lumber), treated beams, pre-cut molding, fiberboard, specialized cuts for furniture, furniture wood, mooring buoys, poles for local markets, Shingles and shakes (cedar), house kits, posts, fencing, hot tubs (cedar), totem pole and other art, carving, pulp, veneer, chips, specialty wood (music wood, carving wood, furniture wood)
- In the future many sales will be second growth. All this wood will be commodity priced so the products have to be niche-sized. Smaller items that people want to buy as a product that is



"special." This is so because there will be too little profit in large scale cutting of second growth for the investments needed for large scale production. So, work with second growth, 30-35 year old trees and produce the wood for specialized products and niche markets.

- POW has a cluster of high value added small mills. Money to develop this cluster came from Ted Stevens. Many of these are very small entrepreneurial efforts, are they being supported in anyway?
- Forest service cannot do more than a 10 year timber sale contract. Would like to see more wood supply privately provided.

Utilization of a Waste Stream

- Chips or hog fuel for school (and other) heat.
- Bio-mass to sustain a wood pellet plant (if enough demand can be generated in Southeast Alaska; commonly quoted as 10,000 ton/year demand). Pulp, wood pellets, biomass - these need scale to be successful. A broader market is needed because the market is not large enough in Southeast to make scale. Need to look at the export market.
- Opportunities that combine wood and paper waste.
- Opportunities that combine wood and fish waste.
- Increasing price of oil makes cost of heating with wood (cordwood, chips, and pellets) more attractive.
- Take advantage of the road system on Prince of Wales.
- Ideally, want a 20 year supply of fiber identified.

Forest Management

- USFS wants to hire more local consultants rather than from outside Alaska; wants to be more efficient in offering timber sales. Job/consultant opportunities for foresters, those with technical expertise to prepare EAs, ElSs, review them; lay out timber sales, etc., approximately 10-30 jobs, will go to outside firms because there is no local expertise.
- Consistent forest sales needed for transportation planning. Can't keep roads open if we aren't going to use them for timber sales.
- Moral very low at USFS due to endless lawsuits, changing policy, shrinking budgets, have lost expertise and personnel to lay out and put up timber sales, timber sales not a priority-too many policy barriers, too little consensus in the constituency.
- An internal "Gate 3" Committee working to make timber sales easier to accomplish.
- Need to offer a variety of timber sales: e.g., 10 year, small scale, firewood, salvage.

Restoration (stream rebuilding, basal pruning, thinning, road storage, etc.)



- This is a new federal priority with public funding directed to support it.
- Restoration jobs are for those with equipment to move dirt and rock, prune, thin, etc. Also the restored watersheds support fish and wildlife, educational and research jobs, recreation and tourism jobs.
- Restoration should lead to sustained export of 18" logs.
- Restoration is a broad sweep of jobs creation beyond the forest and is available in the near term.

A jobs creation strategy will depend on a combination of initiatives in all five areas:

- Export low grade logs
- Retain higher value wood; process this woods into whatever the highest value added products are. Make money to develop these niches by selling the commodity logs (second growth) on world markets.
- Initiate new efforts in product design, market identification, R&D, technology needs.
- Develop bio-mass and wood waste streams for heat and energy production.
- Take advantage of restoration money for near term while developing niche markets.

By the conclusion of the third meeting, the group developed six initiatives that addressed themes emerging from the Cluster discussions. The primary need identified by the industry was to define the industry objectives for transition from old growth to young growth. To do this, the following questions will require answers:

- Under various assumed volumes of young growth, what does the industry look like when the time has come that Southeast Alaska timber harvest is mostly young growth?
- How much old growth is needed as a bridge during the transition?
- How much old growth is needed on a long term basis?

A cooperative private/public team formed to gather data and perform sustained yield calculations in order to tackle this issue. Legislative changes in forest management were also identified as a means to achieve management changes and land base security. Concerns about the slow internal processes and responsiveness of the USFS led to development of an initiative to improve Forest Service product delivery. The group felt that the inability of the Forest Service to deliver products, permits and partnerships, has contributed to the decline of economic activity in the industry. In-region markets for young growth timber were another issue identified for action by the group. One opportunity area is forest service procurement requirements for timber for regional cabins and recreational structures. A second is to simplify the USFS small sale process and work to create a level playing field between export bidders and domestic processing bidders.



The group felt that increased in-region processing of forest products to capture more value would create economic opportunity. A buy-local program and a Tongass branding and marketing campaign are being explored. Finally, the emerging biomass industry was seen as a potential area for industry growth and job creation. The industry need is to grow local demand large enough to support a regional pellet plant. In addition to creating jobs in harvesting, transportation and processing, growth of this this industry would also contribute to a regional reduction in by-product waste and move the region towards energy diversification.

Forest Products Action Initiatives

The initiatives with full consensus by the Cluster Working Group at this time are:

- 7. Use Young Growth Wood for Cabin and Recreational Structures on Prince of Wales Island.
- 8. Simplify Small Timber Sale Process to Allow Small Mills on Prince of Wales Island to Operate More Efficiently, Economically, and with More Supply Certainty.
- 9. Increase Knowledge about Building with Alaskan Wood and Influence Attitudes about Southeast Alaska Woodworking Industries.
- 10. Continuously Improve Select USFS Processes
- 11. Establish the "Tongass National Forest Congressionally Designated Timberlands" to Provide a Secure and Perpetual Working Forest Land Base Managed Under Forest Regulations and Guidelines that Streamline Process and Improve Predictable Delivery of Supply.
- 12. Substitute Biomass for Diesel to Meet Energy Needs of Southeast Alaska

The initiatives which did not have the full consensus of the Cluster Working Group are:

- 13. Conduct a Timber Base Analysis to Determine the Volume of Young Growth and Old Growth Supply Available for Sustaining and Strengthening the Forest Industry in Southeast Alaska.
- 14. Create a 1.5 Million Acre State Forest (from Tongass lands) to be Managed by State of Alaska
- 15. Restore a Viable Timber Industry in Southeast Alaska



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Cluster Working Group:	Forest Products
Initiative Champion:	Keith Rush, The Nature Conservancy
Initiative Implementation Team:	Michael Kampnich, The Nature ConservancyKaren Petersen, Program Assistant/Land Resources, UAF Cooperative Extension ServicesBill and Carolyn Thomason, Owners, Alaska Wood Cuts
	Clarence Clark, Forester, Alaska Division of Forestry
	Forest Service Partners

Description & Motivation:

At present, Forest Service cabins and recreational structures are not being constructed with young growth logs (round and milled) on Prince of Wales (POW) Island. Further, in three such projects in the last year, for construction in other locations in Southeast Alaska, the Forest Service has refused to consider the use of young growth materials in the cabin construction. An inconsistency in approach by the Forest Service has been noted in that two region cabins have been built on other Tongass NF ranger districts (e.g. Sitka and Wrangell). Communications from some FS staff on POW (neither timber nor silviculture staff) has led to a belief that young growth logs may have broader quality issues than other logs. As a result, other POW entities such as school districts have now decided against considering young growth logs for certain projects being conducted in concert with the Forest Service. Likewise, the suitability of young growth has been called into question for use in any type of structure in this region, whether Forest Service construction or private. This unsubstantiated belief of quality issues is limiting local markets for mills that produce or plan to produce young growth cabin logs. POW FS efforts to build two 3 sided shelters with YG milled logs in a contract with SISD, after one has already been constructed with YG, has been postponed due to uncertainties regarding use of YG for FS Projects.

Objectives:

The objective is to work with the Forest Service to develop young growth cabins and structures (round log and/or milled) that meet Forest Service cabin and structure specifications and to ensure that future recreational structure RFPs will consider YG as a legitimate and desired

building material. The Forest Service should specify regionally produced building materials for all of their building projects (this can be addressed by the In Region Processing AI).

The benefits would be the development of a local (POW and regional) value-added industry for utilization of young-growth materials.

	Key People: Who needs to		
Describe the specific steps/tasks.	step (ID business, agency, or people)	Resources needed to accomplish step	Timeline to accomplish step
Meet with POW Forest Service staff to discuss the situation, define quality issues, and identify the root of the problem.	Michael Kampnich, Karen Petersen, Jason Anderson		March 31, 2011
Meet with Tongass NF staff to discuss the situation, define quality issues, and identify the root of the problem.	Keith Rush, Tricia O'Connor		March 31, 2011
Contact Val Barber and Al Brackley to propose YG cabin demonstration workshop.	Karen Petersen		April 5, 2011
With the information gathered at the first 2 meetings identify key individuals that the group will need to work with to resolve the quality issue, such as FS architects, engineering staff, forest products testing labs, procurement staff, contracting staff, etc.	Forrest Cole, Tongass Forest Supervisor issued letter and directions to his staff that should put the concerns to rest.		April 12, 2011
Obtain the young growth log and lumber quality information produced by the Ketchikan Wood Quality Lab	Al Brackley		May 4, 2011
Meet with FS procurement specialist and Recreation Staff	John Inman, Hans Von		

ACTION PLAN



Describe the specific steps/tasks.	Key People: Who needs to be involved to accomplish step (ID business, agency, or people)	Resources needed to accomplish step	Timeline to accomplish step
Officer to address RFPs for FS cabins and recreational structures; so that YG proposals will be accepted on par with OG proposals	Rekowski, Keith Rush, Bill & Carolyn Thomason		May,2011
Consider grading/stamping of YG wood for construction uses.	Michael Kampnich		Long term
Work with FS to develop young growth cabin (milled and round log) demonstration	Maeve Taylor, Michael Kampnich, Bill & Carolyn Thomason		
Share criteria for acceptable construction with other POW entities.	Michael Kampnich, Karen Petersen	News release to inform the public that young growth logs are acceptable material for the construction of cabins and recreational structures.	At the time of a YG cabin project.

Obstacles and Impediments Likely to Affect Implementation:

STEP:	Help needed:
Aligning recreational staff and procurement staff, so that there is no disconnect between local project specifications and RFPs of the project.	Outreach assistance.
Communications with the wider audience that may have received misinformation on YG qualities.	

Funding:



Phase:	Budget:	Funding Source:
Demonstration	\$50,000	

Outcome/Results:

Success will be cabins and structures constructed from young growth logs from mills on POW.



Cluster Working Group:	Forest Products
Initiative Champions:	Keith Rush, The Nature Conservancy
	Michael Kampnich, The Nature Conservancy
Initiative Development Team:	Bill and Carolyn Thomason, Owners, Alaska Wood Cuts
	Keith Landers, Owner, H&L Salvage Mill
	Larry Jackson, Owner, Tongass Forest Enterprises
	Kent Nicholson, Timber Sale Program Manager, USFS
	Dave Harris, Director, Forest Management, USFS
	FS partners
	Others – As initiatives are identified or further developed it is likely that new people will contribute in this effort.
Description & Motivation:	

Small mills on POW are dealing with a variety of issues that are threatening their continued operation and/or prohibiting them from operating as efficiently and as economically as they could.

Objective:

To help the small mills on POW to operate more efficiently, economically, and with more supply certainty.

ACTION PLAN

	Key People: Who needs to be		
	involved to accomplish step (ID	Resources needed to	Timeline to
Describe the specific steps/tasks	business, agency, or people)	accomplish step	accomplish step
1. Simplify small sale process. This will require more	Michael Kampnich		
evaluation by operators and FS staff to determine	Keith Landers		
exactly what can/should be done but both FS staff	Kent Nicholson		
and operators acknowledge a complicated,	Stan McCoy		
cumbersome system that is challenging at best.	Others		
2. Develop criteria for USFS sales that will promote a	Michael Kampnich		
level playing field between export bidders and	Dave Harris		
domestic processing bidders. This reduces the likely-	Kent Nicholson		
hood that small sales will be bid up and out of a	Keith Landers		
range local mill operators can afford to purchase.	Others		
3. Extend the time frame for access to newly	Michael Kampnich		
harvested units. Access to newly harvested units is	Jason Anderson		
often closed as soon as harvest has been	Others		
completed. Extending access would provide			
opportunities for micro sales and firewood harvesting			
as well as personal use and subsistence			
opportunities.			



	Key People: Who needs to be		
	involved to accomplish step (ID	Resources needed to	Timeline to
Describe the specific steps/tasks	business, agency, or people)	accomplish step	accomplish step
4. Broaden size of small scale, lump-sum sales to go	Michael Kampnich		
up to 1,000,000 mmbf. Provide a longer timeframe for	Keith Landers		
harvest of units.	Bill & Carolyn Thomason		
	Dave Harris		
	Others		
5. Evaluate opportunities to increase the milling of	Michael Kampnich		
Red and Yellow Cedar logs locally that may	Keith Landers		
otherwise be exported in the round. Develop local	Larry Jackson		
processing to the greatest extent possible.	Appropriate FS staff		
	Others		
6. Evaluate opportunities to develop a sort yard for	Michael Kampnich		
POW based small mills that would allow mill operators	Keith Landers		
to bid on and work with scaled sales. These sales are	Bill & Carolyn Thomson		
easier for the FS to get out the door, they can be	Appropriate FS staff		
done quicker and they can be more cost effective	Others		
for operators to purchase and work with.			
7. Allow for the continued utilization of dead/down	Michael Kampnich		
timber, through the micro sale process in non-	Dave Harris		
development LUDS, other than wilderness.	Others		



Obstacles and Impediments Likely to Affect Implementation:

STEP:	Help needed:
FS policy	FS partners to address the listed issues
FS rules and regulations	

Funding:

Phase:	Budget:	Funding Source:

Outcome/Results:

The small mills on POW will have a steady supply timber and will be able to operate more efficiently and economically than at present.



Action Initiative 3: Increase Knowledge about Building with Alaskan Wood and Influence Attitudes about Southeast Alaska Woodworking Industries

Cluster Working Group:	Forest Products
Initiative Champions:	Bill and Carolyn Thomason, Owners, Alaska Wood Cuts <u>alaskawoodcuts@earthlink.net</u> 254-7653
Initiative Development Team:	Allen Brackley, Research Forester, USFS
	Daniel Parrent, Biomass/Forest Stewardship Coordinator, USFS
	Lindsey Ketchel, Executive Director, Southeast Alaska Conservation Council
	Marie Messing, Highway Engineer, USFS
	Michael Kampnich, The Nature Conservancy
	Shelly Wright, Executive Director, Southeast Conference
	Wade Zammit, President, Sealaska Timber, Sealaska

Description & Motivation:

The Southeast Alaska timber industry is struggling to maintain its existence. It is caught in the crossfire between national interest groups, Federal politics, processes and policies that are squeezing the life out of the local economies and the people that are drawn to local values and opportunities in what would otherwise be a rich timber resource area. These basic tensions make it difficult to sustain business and tackle the true challenges that exist to operating a successful business in Southeast. Alaska. Many traditionally timber-dependent Southeast communities struggle to maintain schools, employment, housing and essential public services.

This initiative aims to influence attitudes toward Alaskan wood and Southeast Alaska woodworking industries and to increase knowledge about building with Alaskan woods. Particular emphasis will be placed upon the increase of in-region processing of forest products while capturing higher economic value from those products. The important role of wood for the environment and society will be highlighted with the message that wood can offer one solution to climate change since it binds carbon dioxide and is a renewable raw material.

Objective:

The aims of the initiative are three-fold:

1. Support existing local forest industries by creating demand for local timber and wood products through improved common marketing of Alaska forest products in cooperation with the sawmill industry, building materials and timber suppliers, and wood

Action Initiative 3: Increase Knowledge about Building with Alaskan Wood and Influence Attitudes about Southeast Alaska Woodworking Industries

products manufacturers;

- 2. Support the development of in-region, sustainable new industry-oriented products, processes and activities; and
- 3. Develop solutions to major barriers inhibiting the start-up or relocation of value-added processing facilities in Southeast Alaska.

ACTION PLAN

	Key People: Who needs to be involved	Resources needed	Timeline to accomplish
Describe the specific steps/tasks	to accomplish step	to accomplish step	step
Establish a marketing association (e.g. "Alaskan Sustainable Forest Industries Association") to increase the positive awareness of Alaska timber regionally, nationally, and globally:	Forest Service, State Forestry, Southeast Conference, JEDC,	Initial funding from USDA grant source	Six months to establish the marketing
Develop long-term common marketing plan following review/update of existing literature and studies. (See Al Brackley's attached notes)	wood products industry representatives		association, recognizing that some items in this step are
Educate public on the technical analysis of Alaska timber, quality of Alaska timber, uses of Alaska timber			ongoing.
Educate public on the existing Alaska timber products (i.e. Initial marketing efforts could be focused on the cluster of existing log and timber home manufacturing business in SE Alaska)			
With the cooperation and support of the FS, construct a marketing program to attract investment in new products and value-added processing from available forest resources			
Advocate the use of Alaska timber for national, state, regional, and local "government" agency construction projects			
Align Alaska timber usage within the wood products industry (i.e. use of Alaska red cedar for decks instead of composite woods, use Alaska timber in glulam beam or Alaska large timbers instead of			



Action Initiative 3: Increase Knowledge about Building with Alaskan Wood and Influence Attitudes about Southeast Alaska Woodworking Industries

	Key People: Who		Timeline to
	needs to be involved	Resources needed	accomplish
Describe the specific steps/tasks	to accomplish step	to accomplish step	step
glulam beams)			
Use efficient and effective fiscal and time management to minimize marketing costs			
Develop brand awareness of Alaska timber			
Enhance in-region processing by identification of and development of solutions to major barriers (as identified in JEDC's Southeast Alaska Economic Asset Map, December, 2010) inhibiting the start-up or relocation of value-added processing facilities in SE Alaska:	a, b, and c: Forest Service, USDA, State Forestry, State of Alaska, communities		
Capital – for example, re-establish USDA's direct lending authority or provide additional funding through intermediary lenders such as JEDC			
High cost of land – for example, support the 'State Forest from Tongass Lands' initiative specifically with regard to the state match transferred to cities from federal lands surrounding the cities, as well as transfers to Alaska Boroughs and unincorporated communities for commercial development	d: Forest Service		
High cost of power – for example, develop/increase hydro-electric, cogeneration of power sources	State Forestry, native forestry, shipping		
Shipping costs to/from SE Alaska – for example, work with the shipping industry to lower costs by improving their economy of scale	industry, forest products industry representatives		
Skilled labor force – for example:			
Develop "wood shop" classes within local schools; do feasible, tangible, finished projects by coordinating and combining projects	e: Forest Service, State Forestry, native		



Action Initiative 3: Increase Knowledge about Building with Alaskan Wood and Influence Attitudes about Southeast Alaska Woodworking Industries

Describe the specific steps/tasks	Key People: Who needs to be involved to accomplish step	Resources needed to accomplish step	Timeline to accomplish step
and students from different schools	forestry, forest		
School classes work with local businesses to learn skills needed to secure a job in value-added processing Develop curriculum (allowing study credits)	products industry representatives, SE Alaska School Districts, University of Alaska, Forestry Department,		
Institute, construction/builders association, wood products processing companies, logging companies	AVTEC Technical Institute		

Obstacles and Impediments Likely to Affect Implementation:

STEP:	Help needed:
In regards to both steps 1 and 2: Propensity to "study, research, review" <i>ad nauseam</i> rather than "do" something Funding Prejudice regarding "mom and pop" businesses	Limit size of committees Cooperation from interested parties to develop "strength in numbers" without sacrificing independence.
	Also see suggestion below.

Funding:			
Phase:	Budget:	Funding Source:	



Action Initiative 3: Increase Knowledge about Building with Alaskan Wood and Influence Attitudes about Southeast Alaska Woodworking Industries

Phase:	Budget:	Funding Source:
Step # 1	Develop information for start- up funding through study of similar entities for other industries such as the Alaska Seafood Marketing Institute.	See above for initial funding source.
		The marketing association could have ongoing revenues (dues) from the following sources:
		Implement a 5% "buyers' premium" on value of timber purchases from all timber sales on state and federal lands;
		Similar proportional percentage related to the value of timber exported from native lands (since there is no stumpage upon which to base the value);
		Contribution from Forest Service and State Forestry of 25% of all stewardship revenues (based upon the contract value of the "goods for services") derived from restoration/transition activities;
		Contribution from participating conservation groups of 5% of environmental litigation costs.
Step # 2		Re-establish USDA's direct lending authority or provide additional funding through intermediary lenders such as JEDC



Action Initiative 3: Increase Knowledge about Building with Alaskan Wood and Influence Attitudes about Southeast Alaska Woodworking Industries

Phase:	Budget:	Funding Source:
		Negotiated discounts from shipping industry in exchange for higher
		shipping volumes.
		Funding for school and apprentice programs??

Outcome/Results:

Achievement of the three-fold objectives listed above as measured by:

- 1. Increased employment and increase in overall employment compensation of SE Alaska residents employed in the timber sector, as measured above the baselines established in JEDC's Southeast Alaska Economic Asset Map, December, 2010.
- 2. Reversal of population decline as evidenced by increased percentage growth as compared with growth for the rest of the state
- 3. Increased economic vitality within SE Alaska communities
- 4. Increased school enrollment in SE Alaska 's school districts
- 5. Increased alliance and cooperative effort among SE Alaska forest product businesses as measured by anecdotal evidence
- 6. Increased in-region timber processing measured by revenue increases reported by member firms



Action Initiative 4: Continuously Improve Select USFS Processes

Cluster Working Group:	Forest Products
Champion:	Kent Nicholson, Timber Sale Program Manager, Tongass National Forest
Initiative Development Team:	Merrill Sanford, CBJ Assembly, SEC Board
	Bruce Abel, Owner, Don Abel
	Jon Martin, Tongass Transition Framework Coordinator, USDA Forest Service
	Bryce Dahlstrom, Owner, Viking Lumber

Description & Motivation:

Slow internal processes, in general, slow responsiveness of the USFS in several areas of customer service. Timber Sale customers are not satisfied with the delivery of timber sales, stating that by the time they get to Gate 5 (Bid) nearly 4 years has transpired. Customers seeking permits, timber related permits and special use permits for non-timber related activities, also have expressed a desire to improve permit delivery. Finally partners have expressed concerns that it is often difficult to work with the Forest Service because some internal processes are difficult for employees to understand, like how to receive partnership funds in cash form.

Objective:

The objective of the initiative is to improve product delivery. The benefits to Southeast Alaska would be improved confidence regarding that the Forest Service could deliver its products/permits/partnerships cooperation timely and reliably. Improved confidence should translate into more activities taking place while ideas and opportunities are still fresh, which should lead to greater economic activity.

ACTION PLAN

Describe the specific steps/tasks	Key People: Who needs to be involved to accomplish step	Resources needed to accomplish step	Timeline to accomplish step
Use the Timber Sale Program Schedule, Periodic Timber Sale Announcement, and the Schedule of Proposed NEPA Activities to determine the "products" and delivery dates.	District Planning Staff, District Timber Management Assistants, Forest Supervisors Office, Program Managers Forest Service customers	none	1 Month
Create a tracking spreadsheet that establishes the project deliverables and estimated completion dates assigned in the above referenced documents then shows actual deliverables and actual completion dates.	District Planning Staff, District Timber Management Assistants, Forest Supervisors Office Program Managers	none	1 Month
Establish metrics for evaluating the delivered product based on acceptable deliverable timeframes, rational for changing dates or project deliverables, and determination if a project is successful or not successful in meeting stated product delivery.	Forest Supervisor Staff Officers and District Rangers and Supervisors Officer Program Managers	none	1 Month
Measuring production against the established metrics	Forest Supervisor Program Managers	none	Continuous after metrics are established and production is completed
Where product delivery does not meet planned delivery, initiate a review to determine the reasons for the project(s) variance.	Forest Supervisor Program Managers	none	Continuous after metrics are established and production is



Describe the specific steps/tasks	Key People: Who needs to be involved to accomplish step	Resources needed to accomplish step	Timeline to accomplish step
			completed
Categorize the results of the investigation. For example, within the control of the organization, outside the control of the organization, can be corrected through training, process improvements, or may require cultural change.	Forest Supervisor Program Managers	none	Continuous after metrics are established and production is completed
Produce improvement plans that specify how, when, and by whom the changes will be implemented	Forest Supervisor Program Managers	none	Continuous after metrics are established and production is completed
Recognize there will be resistance to the changes in process if they are needed and to accountability and performance measures; develop plans to overcome the resistance to change	Forest Supervisor Staff Officers and District Rangers and Supervisors Officer Program Managers	none	Continuous after metrics are established and production is completed
Implement the changes	Managers and employees		
Put into place controls to hold new levels of performance, and start over at step 1.	Leadership	none	

Obstacles and Impediments Likely to Affect Implementation:

STEP:	Help needed:
Measuring current performance	Once the products are determined and measurements are established, determination of actual performance will require a check and balance system and an objective third party to the performance measurement.



Action Initiative 4: Continuously Improve Select USFS Processes

STEP:	Help needed:
Making the case for change. After the first report from the new tracking report is shared with employees, expect employees to feel stress, possibly shame and other emotional responses. These are normal human response to accountability and measuring performance.	The Forest Service has already undergone and an enormous amount of change. Workforce change, transitioning, transformation, work priorities, travel tools, etc. The key will be to not lose this change in the mix of all the other changes taking place. In addition, making this change a part of our culture instead of a business management cliché will be the challenge. Care must be taken to recognize the normal responses to change and develop methods for dealing with the responses while at the same time not creating a backlash (Phillip E. Tetlock, Advances in Experimental Social Psychology, Vol. 25, Academic Press Inc. 1992)
Admitting there may be a problem with performance or process and that we collectively have the "power" to change.	Getting buy in that there are problems and that we are not total victims of outside forces will require leadership from District Rangers, Staffs, Forest Supervisor and Regional Foresters.
Determining acceptable test solutions will be a challenge as normal human response is a resistance to change. Secondly, most risk management activities naturally gravitate to reducing risk which does not normally reduce steps or increases in product outputs.	Overcoming the "But this is how we have always done it" mentality and understanding risk management may hold the key.
Putting controls into place will be a challenge due to the FS culture and reluctance to hold management/employees responsible to meeting timelines and budgets.	The FS has employee performance ratings, but if talk to employees across the region, you will find that it does not work well, it is not applied reliably and uniformly, employees who appear to be under performing are rated similar to higher productive employees and any number of other issues. Ensuring the current system is used to enhance performance will require training and reviews of the existing system.



Action Initiative 4: Continuously Improve Select USFS Processes

Funding:

Phase:	Budget:	Funding Source:
All phases	Normal allocation	Normal Source

Outcome/Results:

An increase in productively will mark the successful completion of this initiative. However, like all continuous improvement activities, once an improvement is achieved, continuous monitoring will be necessary to insure any new circumstances are quickly adopted and more productive ways to do the business of the Forest Service.

If the USFS is able to improve their processes of doing what they say they are going to do through the SOPA, 5-Year Plan, and PTSA, the volume of offered timber sales should increase. This year demand is 110 MMBF, for the Limited Lumber. The USFS should plan on offering 110 MMBF this year and adjusting their offer to match the demand each year over the next 5-years. It is estimated, based on tables from Forest Project Environmental Impact Statements in the economic sections, that on a 50 MMBF offer (current situation) there will be about 115 logging jobs. If the USFS offer increases by 60 MMBF (110 MMBF demand) there should be an increase of 138 logging jobs, assuming all logging production is running at capacity now. In addition there would be an increase in sawmill jobs as well of about 340 jobs depending again on current capacity.

As the USFS gets better at achieving demand, the number of potential jobs should increase, and the volume of harvest should increase as well as mill production in response to more NEPA cleared inventory. At the present harvest level of 40 MMBF a 110 MBF offer would create close to a 3 year supply of NEPA ready volume. By having a 3 year supply of NEPA cleared volume, the USFS should be able to be more responsive to economic changes by offering less economic sales is good markets and better economic sales in poor markets. This will create a more stable inventory supply of volume that the industry can match to market changes. It will also create a buffer between lawsuits, budget fluctuation, or other slow intermittent slowdowns during NEPA and project implementation.



Cluster Working Group:	Forest Products
Initiative Champions:	Wade Zammit, President, Sealaska Timber, Sealaska
	Bryce Dahlstrom, Owner, Viking Lumber
Initiative Development Team:	Clarence Clark, Forester, Division of Forestry
	Dave Harris, Director, Forest Management, US Forest Service
	Allen Brackley, Research Forester, US Forest Service

Description & Motivation:

Following our discussion relative to the different options that are available to secure a working land base that can be dedicated to timber harvesting in the Tongass that will sustain and attract economic investment, two options are available:

- The Legislative Approach
- The Regulatory Approach

The regulatory option provides short term relief to allow for time to generate a more long term solution, but given the political climate using the TFR process as a baseline, the success of a short term option appears to have low probability of achieving economic sustainability goals. As a result we recommend moving to a legislative solution that not only incorporates the land base security element but also the management changes required to optimize and sustain positive economic harvesting activity to support and attract an industry base in SE Alaska.

As a result of our considerations, we propose the establishment of the "Tongass National Forest - Congressionally Designated Timberlands."

This would be a mechanism in legislation that would designate a timberland production economic zone within the Tongass National Forest. The legislation would identify the area for timber management and set out the regulations that would apply to managing this forest incorporating the assumptions in our supply exercise.

Objective:

To sustain a Forest Products Industry in Southeast Alaska it is essential for transitional purposes that there is access to an old growth supply as well as a definitive, predictable and growing volume of 2nd growth timber. A fixed land base is essential, protected from encroachment of other uses is essential. The land base requires management under predominantly even aged harvesting with an overhaul of the process to bring sales to market: This solution benefits the current and future investors, creates sustainable employment, creates positive stumpage values to further invest in forest management and provides continuity of supply to our customers, potential for growth and diversification of the industry.

Describe the specific steps/tasks.	Key People: Who needs to be involved to accomplish step	Resources needed to accomplish step	Timeline to accomplish step
1. Define the specific Elements of change	Working Group	Draft is completed	Complete
2. Define the authorization level required to implement the Elements of Change	Working Group/ George or Owen	First draft in; needs to be circulated	End of first week of May
3. Draft a Land Base Security Proposal	Working Group George or Owen	Time	Late May/early June
4. Draft a Management Proposal for the Land Base	Working Group George or Owen		Late May/early June
5. Draft an action plan for implementation Steps	Working Group George or Owen		Late May/early June

ACTION PLAN



Describe the specific steps/tasks.	Key People: Who needs to be involved to accomplish step	Resources needed to accomplish step	Timeline to accomplish step
6. Draft a proposal for Legislation	Working Group Owen/Rick Harris	Legal counsel	Late May/early June
7. Draft and implement a support process for the proposal	Working Group, Rick Harris, Owen Graham, Lindsey Ketchel		Late May/early June
8. Implementation of the action to create the legislation and the support to create the "Tongass Working Forest"			Late May/ early June

Obstacles and Impediments Likely to Affect Implementation:

STEP:	Help needed:
USFS will not buy into the concept of creating a working forest within the Tongass National Forest without more universal support for the concept	Gathering support from multiple users and stakeholders in the Tongass to support the concept
Having a clear implementation plan that outlines the steps that can be taken and changes made without legislation and having those steps supported and action taken	Clearly defining the regulatory and legislative changes to present a clear implementation strategy to the USFS
Legislative priorities will likely be taken up by election issues in 2012 and so 2011 implementation may be a challenge. Given this a 2 step strategy with implementation of all non-legislative initiatives followed by the legislative piece that would then support the initial actions may be a good plan to develop	Task force to build the options for implementation with a cross section of interests
Understanding all the legislative hurdles in the process from the	Mapping of the internal process to implement within the USFS



STEP:	Help needed:
Secretary of Agriculture to the Tongass USFS management will be critical to building consensus and support within the FS system to move this initiative forward	organization

Funding:

Phase:	Budget:	Funding Source:
Analysis of impact of changes by item to both the USFS operations, harvest and management organization c/w current.	\$100,000	USDA
Establishment of a multi faceted Task Force to review the change options and make a recommendation to integrate into the USFS Five Year Strategic Plan.	Included in above	

Outcome/Results:

The establishment of a "Tongass National Forest – Congressionally Designated Economic Timberland Development Zone" to achieve the following objectives:

Provide a secure supply base for SE Alaska wood products industry

Provide stability for economic activity and jobs in SE Alaska

Provide continued support for Old Growth wood products and future growth in development of 2nd growth wood products

Provide a positive climate for continued investment in the forest products industry

Provide positive stumpage values from Federal lands to re-invest in multiple land use opportunities, and long term security to investments in timberland development and enhancements

Provide a model forest example for federal policy that incorporates multiple values within the National Forests.



Provide efficient, timely and cost effective forest management for timber production on Federal lands in SE Alaska.

Provide a well-defined base to transition the current industry into a more concentrated 2nd growth raw material

Provide transition projects in the creation, management and development of this Timberland entity



Cluster Working Group:	Forest Products
Initiative Champions:	R.C. Deering, Environmental & Energy Branch Chief, USCG and
	D.J. Parrent, Biomass/Forest Stewardship Coordinator, R10, US Forest Service
Initiative Development Team:	Mike Goldstein, Director, Alaska Coastal Rainforest Center
	Karen Hardigg, Alaska Deputy Regional Director, The Wilderness Society
	Karen Petersen, Program Assistant/Land Resources, UAF Cooperative Extension Service <u>mailto:khpetersen@alaska.edu</u>
	Shelly Wright, Executive Director, Southeast Conference
	Kent Nicholson, Timber Sale Program Manager, USFS
	Others Needed for Successful Implementation:
	USDA Forest Service, USDA Rural Development, USDA Farm Services Agency, US DOC Economic Development Administration (Shirley Kelly, 271-2272, skelly@eda.doc.gov), Alaska Energy Authority, Southeast Conference, Sealaska Corp., US Coast Guard, regional sawmill owners & operators, various regional electric utilities

Description & Motivation:

Biomass is an abundant and largely unutilized energy resource in the region. Southeast Alaska is highly dependent on oil for facility heating, and with rapidly rising and fluctuating oil costs, this dependency presents a financial hardship to residents and a headwind to regional economic prosperity.

Additionally, as oil prices rise, energy consumers are shifting to electric heat, which is quickly straining the capacity of the region's hydroelectric utilities, resulting in higher electrical energy costs for the ratepayers. Hydropower is the other abundant source of energy in the region, but the cost (hundreds of millions) and timeframe (decades) to bring new capacity online means that it will not be capable of meeting the region's space heating needs at the cost and timeframe needed.

Biomass can be sourced from, and add value to, many forest products operations. Sawmill wastes and residues are among the least expensive, and most accessible sources of feedstock, but other promising sources result from pre-commercial thinning and restoration logging activities, land clearing, and road and power line maintenance. Given the right price points, even whole-tree conversion of

young growth to biomass fuel may prove economically feasible, as it currently is for the Tok School District.

The most universally usable form of biomass is pellet fuel. Manufactured to consistent size and quality standards, pellets are used in a wide variety of heating units, from small residential fireplace inserts to large commercial boilers. State-of-the-art pellet boilers are highly efficient, with efficiencies approaching 90%. Pellets are a densified fuel media which is economical to transport, store, and handle. Because of their uniform size and consistent characteristics, they are attractive from the end-user standpoint due to the low level of required 'care and feeding' for storage, handling, and combustion equipment. Pellet burners typically have very low air emissions, often lower than oil and natural gas in some key pollutant categories.

Currently there is no regional mill to produce pellets for regional consumption and export. The regional demand at this point does not justify the construction of a mill, though that picture is changing with the installation of the Sealaska HQ pellet boiler, as well as pellet boilers being installed in the Federal Building and the USFS Discovery Center in Ketchikan, and pending conversions of Coast Guard facilities in Sitka, Ketchikan, and possibly Juneau. Other facility conversions are currently being considered as well. A pellet demand of roughly 30,000 tons per year is considered to be necessary to justify a regional mill. Juneau alone has a potential demand of 66,000 tons.

Pellets are not the only form that biomass fuel can take. Cordwood is the most recognizable, and there is still a strong demand for it. But cordwood burns far less efficiently than pellets, has greater air emissions, and does not lend itself to automated handling and metering. It is strictly a residential fuel with a limited application. Other forms are in chips and hog (ground) fuel. These forms of fuel work well in larger commercial boilers which are more tolerant of fuel size irregularity, contaminants, and varying moisture content. The central boiler plant operated by the City of Craig is a good example of a chip boiler, and probably represents the lower end of the feasible size scale. Chips and hog fuel are not densified fuels so shipping economics become limiting factors, especially at smaller scales.

Biomass can also be dried and densified in a variety of fashions, into cubes, pucks, or 'bio-bricks'. These products can be used in appropriate commercial burners or even residential applications.

Wood isn't the only biomass feedstock in the region. Fish waste, sewage sludge, and densified paper can also be utilized as fuels, which helps address troublesome and expensive waste streams.

Local biomass fuel utilization will reduce economic leakage and generate local jobs. Juneau alone imports over 10 million gallons of heating oil per year which means about \$30 million leaves the region. Conversion of fossil fuel heating usage to biomass would keep most of that \$30 million in the region, funding local jobs and building a local biomass industry. These numbers can be easily extrapolated to the rest of the region.



Burning biomass generates greenhouse gasses, with all of the attendant negative consequences. But so does burning oil. The difference between the two is that biomass comes from a renewable resource. When a tree is harvested, a new tree grows in its place (assuming that the land use it came from is still designated as forest), and that tree reabsorbs a comparable amount of CO2 from the air. It may take decades for that absorption to take place, but it does occur. In the case of burning a fossil fuel, the reabsorption is many orders of magnitude longer. Additionally, if sawmill residues or forest thinning remnants can't be economically utilized, they decay and generate CO2 during that process. Using those residues to offset the burning of fossil fuels has a significant positive impact on GHG emissions.

As discussed earlier, increasing heating oil prices have the effect of shifting heating demand to our hydroelectric utilities, thereby consuming their available capacity. Juneau's current fossil fuel heating demand by itself exceeds the entire generation capacity of the local utility, and the other regional utilities are in a similar circumstance. In Juneau's case, as more capacity is used up offsetting heating oil, the interruptible loads of Greens Creek and Princess Cruises get cut off. From a GHG perspective this is disastrous. A diesel generator such as on a cruise ship or at the mine operates at approximately 30% efficiency, meaning that enormous amounts of CO2 are generated for comparatively small benefit. A far better result would be obtained if biomass, burning at 85% efficiency, offset heating oil usage so that diesel generators could remain idle.

On a similar note, electric cars, both plug-in hybrids and full electric, are projected to make significant inroads into the gasoline car market. The extent of that penetration is not clear yet, but SE Alaska, with its relatively cheap and clean electricity and limited roads system, is a perfect location for electrics. These cars will bring additional load on our hydro capacity. Juneau's potential load is roughly 20% of AEL&P's generation capacity. A gasoline car runs at about 20% efficiency, meaning that 80% of the energy contained in the gasoline is wasted as heat. Burning biomass at 85% efficiency to enable our hydroelectric system to displace 20% efficient cars with electrics is a winner from a GHG perspective.

Biomass is a very viable solution to a multitude of the region's energy needs. The potential demand is adequate to drive a thriving industry. The existing barriers appear to be largely surmountable.



Objectives:

To develop a vision and roadmap to the development of a vibrant and thriving biomass energy industry which economically meets the energy needs of the region's residents, while creating local jobs.

The development of this underutilized fuel supply faces several challenges which range from culture to economic to policy. These are hurdles faced by many emerging industries. The solution largely rests in generating critical mass. Once the technologies have proven themselves and the supply infrastructure has demonstrated that it's reliable, the rest of the pieces will fall into place.

Many of the economic challenges are due to a lack of scale. Transporting small quantities at a time is highly inefficient, as is milling small amounts of fuel. And because the quantities are small, the motivation to change culture and policies is limited as well. One of the key goals of this initiative needs to be to reach critical mass as quickly as possible.

The public sector (Federal, State, local and tribal governments) and corporate stakeholders (Native corporations, transportation providers, utilities) play a key role in developing that critical mass. With limited risk they can make significant initial investments into this sector. Education and encouragement of these players will be essential. Once critical mass is reached, the industry must remain sustainable. This will require careful investments and policies, and long term strategies.

Securing a reliable, economical supply of biomass feedstock will also be essential. A second key goal of this initiative, in the near term, is to transform Southeast mill by-product residues into a usable bio-mass stream. In the long run, a thorough, out-of-the-box analysis needs to be conducted of every possible source including mill residues, thinning byproducts, young growth, and non-wood sources (fish waste, sewage sludge, recycled paper, etc.). Seeking innovative ways to change the economic and supply paradigm will be essential.

And finally, this transformation of our energy economy will require change agents and leaders. People who can articulate the vision and communicate the benefits to all stakeholders. One objective of this action plan should be to identify, educate, and recruit those individuals.

Identify potential biomass boiler facility conversion projects and seek to install biomass heating systems in public and private commercial, industrial and/or institutional facilities. Grow local demand large enough to support a regional pellet plant (industry?).



ACTION PLAN

	Key People: Who needs to be	Resources needed to	Timeline to
Describe the specific steps/tasks	involved to accomplish step	accomplish step	accomplish step
1. Develop a VISION for regional pellet production	Everyone; need consensus,	Meetings – time &	
capacity	shared VISION	money	
2. Provide detailed biomass (supply) resource	Forest Service (TNF, WUC)	Time, money, personnel	
assessment including mill by-products, harvestable	Alaska Div. of Forestry		
time; also need reliable cost information.	Sealaska Corp.		
	Mental Health Trust		
	University of Alaska		
	Other landowners		
3. Perform pellet plant cost, benefit and feasibility	Funding partners,	Funding for contractual	
analysis and develop model business plans	Administrator,	services; contract	
	Consultant (Beck Group, Mater	oversight	
	Engineering, Paul Janz, etc.)		
4. Review findings of Steps 3 and 4. Assess sufficiency of			
regional resources (timber supply, energy, labor,			
capital, transportation, etc.); conduct SWOI analysis; decide Go/No Go			
5. Identify potential biomass boiler facility conversion	Funding partners		
clinics, office buildings, district heating projects, etc.)			



Describe the specific steps/tasks	Key People: Who needs to be involved to accomplish step	Resources needed to accomplish step	Timeline to accomplish step
6. Conduct informational meetings to educate facility operators about the potential benefits of biomass energy; identify candidates; conduct facility-specific feasibility assessments			
7. Identify funding sources (public, private, grants, loans, ESCOs)			
8. Design/build biomass heating systems at candidate facilities			
9. Identify supporting logistical needs such as fuel transportation, fuel storage, fuel delivery, technical skill sets not currently present	UAS, existing regional fuel distributors, barge lines, heating companies	Need to invite these entities to the table to participate – does not appear that's happened yet.	In the next six months, to support projects currently coming online.

Obstacles and Impediments Likely to Affect Implementation:

STEP:	Help needed:
1. Develop a VISION for regional pellet production capacity	What is the desired and appropriate scale of pellet manufacturing in southeast Alaska? What are the limiting factors: biomass resources? demand? transportation? cost? What is the best solution - one large plant or several smaller, distributed plants? What locations have the right "ingredients" (cheap power, industrial site, social license, biomass, transportation infrastructure, labor, etc.) for success?
2. Provide detailed biomass (supply) resource assessment including mill by-products, harvestable logging residues, and second- growth volumes over time; also need reliable cost information.	When it comes to timber, the issue is always Supply, Supply, Supply. This issue must be resolved in a meaningful way and reliable data (volumes and costs) must be provided.



STEP:	Help needed:
	growth timber program. This is not likely to change significantly for the next 10 years at a bare minimum; more likely 15 to 20 years. Beyond 20 years, second-growth timber could begin to make some significant contributions to biomass harvests.
	It is essential that the existing industry infrastructure (harvesting transportation, road building, processing) NOT be further eroded, or risk losing it altogether. More?
3. Perform pellet plant feasibility analysis and develop model business plans (alternatives)	This step is straightforward. It IS however going to require funding \$50,000 to \$100,000 depending on the desired level of detail and precision.
4. Review findings of Steps 3 and 4. Assess sufficiency of regional resources (timber supply, energy, labor, capital, transportation, etc.); conduct SWOT analysis; decide Go/No Go.	Steps 3 and 4 only provide data. It is not until that data is thoroughly analyzed that a Go/No Go business decision can be made to proceed.
	that must be considered, such as intra-regional transportation? Others?
5. Identify potential biomass boiler facility conversion projects in Southeast Alaska (schools, hospitals, health clinics, office buildings, district heating projects, etc.)	The Alaska Department of Labor maintains a database of all commercial boilers in the State. The list may be able to be used to identify aging boilers and facilities of sufficient minimum size. This is only the first step; on-site follow ups, region-wide, will be required to make other determinations.
6. Conduct informational meetings to educate facility operators about the potential benefits of biomass energy; identify candidates; conduct facility-specific feasibility assessments	Like Step 3, this step is also straightforward. However, due to geography and travel constraints, meetings must be local, not regional. Targeted attendees would include commercial, industrial, public and institutional facility operators and decision makers. Identify potential "early adopter" candidates.
7. Identify funding sources (public, private, grants, Ioans, ESCOs)	Self explanatory



STEP:	Help needed:
8. Design/build biomass heating systems at candidate facilities	The initial investment costs of biomass heating systems are significantly higher than conventional oil, gas and electric systems. Most institutional facility operators would struggle to find funding for such installations, even if the payback period was exceptionally short. And while there are various funding opportunities available, they are disconnected and uncoordinated.
9. Lack of logistical support	There are many steps to establishing a successful new energy supply. Establishing a regional pellet mill is a critical step, but transporting, storing, delivering, and marketing that fuel from producers to end users is also critical. All links of the supply chain must be present for it to function. Many possible stakeholders have not been brought to the table including transporters, existing fuel suppliers, etc.

Funding:

Phase:	Budget:	Funding Source:
1. Develop a VISION for regional pellet production capacity		
2. Provide detailed biomass (supply) resource assessment including mill by-products, harvestable logging residues, and second-growth volumes over time; also need reliable cost information.		
3. Perform pellet plant feasibility analysis and develop model business plans (alternatives)		
4. Review findings of Steps 3 and 4. Assess sufficiency of regional resources (timber supply, energy, labor, capital, transportation, etc.); conduct SWOT analysis; decide Go/No Go.		
5. Identify potential biomass boiler facility conversion projects in Southeast Alaska (schools, hospitals, health clinics, office buildings, district heating projects, etc.)		
6. Conduct informational meetings to educate facility operators about the potential benefits of biomass energy; identify candidates; conduct facility-specific feasibility assessments		
7. Identify funding sources (public, private, grants, loans, ESCOs)		



Phase:	Budget:	Funding Source:
8. Design/build biomass heating systems at candidate facilities		

Outcome/Results:

Achievements will not be difficult to observe, but whether that translates into "success" depends on other outcomes.

Biomass conversions have already taken place (Craig School/Pool, Sealaska Corp. office, Coffman Cove School) and others are in the process to some degree (US Coast Guard facilities in Sitka and Ketchikan with possibilities in Juneau and Kodiak, Forest Service Discovery and Visitor Information Center, Ketchikan Federal Building).

But there is no coordination, and no strategic plan. The Craig School/Pool project burns locally-sourced green wood chips and hog fuel; the Sealaska project burns pellets imported from WA; the Coffman Cove School burns locally-sourced firewood. The Ketchikan Federal Building is projected to burn pellets, while the Discovery Center (a few hundred feet away) is being designed to burn green chips. How will we achieve "critical mass?"

Numerous other facilities in southeast Alaska have already had some preliminary feasibility assessment work conducted (Craig Community Center, Thorne Bay Ranger District, Thorne Bay School and other city buildings, Naukati School, Hames Athletic Center, Mount Edgecumbe High School, SEARHC, Sawmill Cove Administration Bldg., Kake Community Center, Kake School, Hoonah School/Pool/Gym, Hoonah Ranger District, Haines School and other city buildings). All of these were done under the auspices of the Alaska Wood Energy Development Task Group, which has been inactive since 2008. Some of these have applied for funding through the Alaska Energy Authority with very limited success, but most lack leadership.

Eventually, we may reach a point where the demand for pellets in southeast Alaska could warrant the construction of a pellet plant. But without a strategic plan and the resources to implement it, that metric could be a very long time coming. A recognition by all parties that there is an appropriate and valuable role for biomass to play in our regional energy portfolio is essential to developing that strategic plan.



Cluster Working Group:	Forest Products
Initiative Champion:	Wade Zammit, President, Sealaska Timber, Sealaska
Initiative Development Team:	Allen Brackley, Research Forester, US Forest Service
	Dave Harris, Director, Forest Management, US Forest Service
	Clarence Clark, Forester, Division of Forestry
	Keith Rush, The Nature Conservancy
	Bryce Dahlstrom, Owner, Viking Lumber
	Lindsey Ketchel, Executive Director, SEACC
	Jon Martin, Tongass Transition Framework Coordinator, US Forest Service
	Ron Wolfe, Sealaska Corporation

Description & Motivation:

How quickly can a sustainable young growth harvest commence in the Tongass based on current harvest information with respect to available acreage, growth, yield, harvesting costs, markets and rotation age?

Answering this question will fundamentally entail analysis of each individual Tongass forest young growth and old stand in the considered area: i.e. all young growth not in wilderness, LUD II etc., in the roaded land base. The Forest Planning and Projection Software (FPS) is the analytical tool to perform the sustained yield calculations and scheduling. In order to do this each stand will be "grown" from the date of inventory, scheduled for harvest and grown again throughout the planning horizon, which will be at least 100 years.

The team is evaluating the land base and corresponding volumes of YG and OG under minimum (current rules, regulations and exclusions) and Maximum (assumptions in original data set) conditions.

Objective:

Define transition objectives.

Define how many acres and volume, what mix of species, and what management practices are needed to achieve transition objectives.

Gather initial or '1st tier' data to discuss and consider answers to the following questions (note: state assumptions clearly):

Under various assumed volumes of young growth, what does the industry look like when the time has come in Southeast?

Describe specific steps/tasks.	Key People: Who needs to be involved to accomplish step	Resources needed to accomplish step	Timeline to accomplish step
1. Complete the Growth Model Validation – FPS uses mathematical algorithms to project timber growth and yield. Current projections are reasonably close but can be improved to increase the precision and accuracy of this analysis. This is commonly done in other projects that are securitized by outside entities.			
2. Build Graphic Information System (GIS) Overlays – All spatial data must be organized according to various layers for GIS analysis in a manner that is consistent with the analysis constraints	The Initiative implementation team has been diligently working on all tasks with	Significant time and resources have been provided by all team members	Between early February 2011 and May 31,
3. Complete the Database Assembly and Yield Stream Building – Complete records for each stand must be assembled for the entire data set. Each analytical constraint must be identified for all anticipated analytical iterations. This provides the basis for FPS to "filter" stands suitable for all respective management iterations. The Timber Cluster Team identified the high volume and low volume scenarios and additional alternative scenarios are anticipated so every effort will be made to identify every record necessary to perform these as yet not identified management	many additional parties involved.	and others to conduct this work.	2011 all work will be completed.

ACTION PLAN



Describe specific steps/tasks.	Key People: Who needs to be involved to accomplish step	Resources needed to accomplish step	Timeline to accomplish step
alternatives. 4. Complete and deliver FPS Model Sustained Yield Projections – The data set constraints are 'filtered' in order for FPS to calculate and schedule harvest volumes according to the high volume scenarios and low volume scenarios identified by the Timber Cluster Learn	-		
5. Assemble and generate summary Reporting – Available volumes by species, size and year under high and low scenarios are the key information items. The report will highlight this and explain the methodology and other ancillary key issues.			

Obstacles and Impediments Likely to Affect Implementation:

STEP:	Help needed:
At this point we do not see any obstacles to completing this data exercise. The resources are adequate and the cooperation from the USES has been outstanding and now it is a matter of	
compiling data and running the simulation options.	



Phase:	Budget:	Funding Source:
This is a preliminary analysis. Additional studies that explore other scenarios and their impact on future economic conditions in the region should be conducted to assess impact of the various proposals	\$150,000	USDA
Establishment of a working Task Force to drive the internal recommendations into the USFS 5- year strategic plan	Included in above	

Outcome/Results:

Initial Scenario: Given current Young Growth and Old Growth Structures Resulting from the Roadless Rule what does a feasible (if possible) transition strategy encompass?

Conduct and complete a Young Growth Analysis study to deliver the following objectives:

What inventory information is available and assessment of reliability

What is the age class distribution of the total area

Available site index information and assessment of reliability

When can a sustainable harvest level begin

What level of harvest can the land base support

What rotation age range would be the expectation given average site class

What is the gap between the beginning of the harvest and today

What data set would we need (if positive results) to support changing the necessary elements to achieve this management regime

Conduct and complete an Old Growth Analysis Data Availability with the Roadless Rule in Place as default assumption to meet the



following objectives:

What is the harvest level for OG over the transition years and beyond

What is the best estimate of economical harvest using the YG standards and guidelines?

What is the gap between harvest and needs for the period of time that it takes to get a 2nd growth harvest operational

How much old growth is available and what can be done to bridge the difference between this and the needs.



Action Initiative 8: Create a 1.5 Million Acre State Forest (from Tongass lands) to be Managed by State of Alaska (without full CWG consensus)

Cluster Working Group:	Forest Products
Initiative Champion:	George Woodbury, President, Alaska Forest Association
Initiative Development Team:	Owen Graham, Executive Director, Alaska Forest Association
	Allen Brackley, Research Forester, USFS
	Others needed to implement this initiative:
	Governor, State of Alaska; Gary Morrison; Cascade Appraisal; Clarence Clark, Alaska Division of Forestry

Description & Motivation:

Establish a timber supply for and integrated forest products industry in SE Alaska.

The need results from the failure of the USFS to provide and economic reliable supply of timber that will support an integrated industry. The Forest Service timber sale program is subject to the whims of changing federal administrations and as a result, has become unnecessarily costly and mostly dysfunctional.

Other land for cities and boroughs should also be considered because the federal government has developed a disinterest in allowing commercial use of most of these lands even though that was the original intent for establishment of the Tongass National Forest. Further, the State and cities and boroughs would have selected lands from the Tongass had the federal government not alleged that they wanted to retain the lands for their timber sale program which has since been largely discontinued.

This is a strategy that has been on the table for 10-15 years and has not been moved because of the heavy lifting necessary to make it happen. Time has now run out and we are left with only this alternative. To not move this strategy now will mean that all options available to restore an industry were not tried. This is not something that we want to look back on and wonder why it was not tried.

Objective:

Restore a reliable timber based industry that will supply year round well paying jobs and that is a significant contributor to the economy of SE. Reestablish infrastructure lost with the shrinkage of the timber industry brought about by the lack of a reliable timber supply. Equipment suppliers and other vendors that will come with a revised industry will also serve fishing, tourism and other business

Action Initiative 8: Create a 1.5 Million Acre State Forest (from Tongass lands) to be Managed by State of Alaska (without full CWG consensus)

by establishing an economy of scale that will make SE competitive again, so that transportation cost and other service costs will go down. Year round reliable jobs will stabilize the education system. These benefits can occur in SE wherever communities support this effort.

Describe specific steps/tasks.	Key People: Who needs to be involved to accomplish step	Resources needed to accomplish step	Timeframe to accomplish step
1. Revise and update selections and maps.	George Woodbury	\$30,000	One Month
	Owen Graham		
	Clarence Clark		
	Gary Morrison		
2. Determine best way to accomplish the task.	Same as above, with addition of:	\$100,000	One Month
Transfer acres to boroughs from federal lands within the boroughs, Support STC selection finalization, MHT exchange and the Landless	State of Alaska, Governor Office; State of Alaska, Attorney General's		
Native selections.	Office		
3. Depending on results of 2. Prepare the alternative determined to have the greatest chance of success for presentation. Much of this work has already been done by previous State administrations and simply needs to be updated.	Same as 2, with addition of: Congressional delegation representation	\$50,000	2 months
4. Put alternatives in a form that can be presented to each person group etc. that will be taking part in the evaluation of the action.	Same as above plus Lobbyist and other expertise necessary to sell the project.	\$100,000	3 months
5. Write legislation to accomplish the transfer of	Same as above plus representatives	\$50,000	2 months

ACTION PLAN



Action Initiative 8: Create a 1.5 Million Acre State Forest (from Tongass lands) to be Managed by State of Alaska (without full CWG consensus)

Describe specific steps/tasks.	Key People: Who needs to be involved to accomplish step	Resources needed to accomplish step	Timeframe to accomplish step
lands to cities and boroughs	from cities and boroughs		
6. Identify potential lands for the cities and borough lands.	Same as 5	\$50,000	2 Months

Obstacles and Impediments Likely to Affect Implementation:

STEP:	Help needed:
National environmental group interest in locking up more of the Tongass	Political will to provide the people of SE Alaska the environment to be self sufficient
Cultural opposition from the Forest Service	Leadership is needed at the national level to overcome this self- serving attitude.

Funding:

Phase:	Budget:	Funding Source:
State Forest	\$280,000	Ś
Cities and boroughs	\$100,000	Ś

Outcome/Results:

Success will be the existence of a viable integrated forest products industry in SE Alaska



Cluster Working Group:	Forest Products
Initiative Champion:	Wade Zammit, President, Sealaska Timber, Sealaska Corp
Initiative Development Team:	George Woodbury, President, Alaska Forest Assn
	Owen Graham, Executive Director, Alaska Forest Assn
Description & Motivation:	
Motivation is to restore a viable timber i	industry in Southeast Alaska.
There are four elements to address this	effort:
Existing Old Growth Value Add Manufa	cturing- Large Grade type logs:
Small to medium scale operations in WI sawn lumber for sale to remanufacturin	RC, Hemlock and Sitka value added products e.g lumber products, veneer, shake/shingle and g facilities.
Log Exporting:	
Compliment and support the infrastruct	ture of SE Timber Industry provide positive values to timber sales and market options for operators.
Additional Log Manufacturing	
Wood products with Old growth charac specialty lumber.	cteristics, but potentially more varied products including sawmilling, veneer production, short
Residual options:	
Bio fuels (pellets/chips) for local consun and shipping for export markets.	nption and for export markets with facilities to process and ship on scale - Wood chip processing
Objective:	
To recommend extensions, changes an	nd additions to current USFS timber sale policies and programs and eligibilities that can build a

current activities and growth by additional investments into the area, which is predicated on a predictable, stable and sufficient supply of

Old Growth logs from the Tongass and supplemented by young growth as it becomes mature and economically available in the future.

ACTION PLAN

needs to be involved to accomplish step	needed to accomplish step	Timeline to accomplish step
	needs to be involved to accomplish step	needs to be involved to accomplish step



Describe specific steps/tasks.	Key People: Who needs to be involved to accomplish step	Resources needed to accomplish step	Timeline to accomplish step
Exports currently provide higher returns, giving operators more options in the market and improve stumpage returns to the timber owners. In this sector, the recommended volume to sustain activity and viability is directly related to the number and financial health of contractors and subcontractors that contribute to a healthy and competitive bidding environment. There are currently 4 medium sized (compared to west coast operators) conventional harvesting/road building companies and one selective (helicopter) harvesting company operating in SE Alaska. In addition there are 1-3 smaller owner operator harvesting operations affiliated with the smaller manufacturing operations in the region. To support them are 2 primary towing and 2-3 subsidiary towing services companies to move products and service infrastructure. This infrastructure is also depends on the security of supply and is currently operating below efficient operating rates. This has impact on rates and capital investment and in the road building services in particular scale and the outlook for future continue to erode the stability of these operators.			
Although the young growth market exists in log form for export, this product is a commodity and has much more price volatility than old growth products. As a result of this and the need to sustain the old growth manufacturing infrastructure it is critical to continue to supply both OG and, when it is appropriate, to include YG to build and sustain a broad base for the industry and improve market appeal for SE timber by having both products available in an adequate, predictable, sustainable supply. This leveraging opportunity can be a significant strategic advantage for our region.			
3. Development and implementation of 25 year timber sales to attract new investments in Medium/Large Log Manufacturing. This activity will also include a literature search of all the potential wood processing options that have been evaluated in SE and that the SE wood supply would create a specific strategic fiber			



	Key People: Who needs to be involved to	Resources needed to accomplish	Timeline to accomplish
Describe specific steps/tasks.	accomplish step	step	step
advantage. We must consider the logistics of sustaining an industry that is located on separate islands in this region and we must take into account the wide range of timber species, sizes and grades that are available in the mature timber stands. A higher economy of scale will help address the logistic issues and will also provide the opportunity to have several mills that can each concentrate on their own manufacturing and marketing strategy. For instance, committing a supply of logs that fit within the medium to small side of the large log profile would attract new product profile and attract new investment for current and future young growth timber. What is uncertain and will take considerable research is the choice of operation for such small a scale activity to begin, but has the ability to expand when additional volumes of 2nd growth timber become available. Ideas for this type of operation would include veneer (rotary) or slicing veneers and sawmilling operation.			
In order to properly address the economy of scale issues, the long-term goal should be to restore a timber supply of at least 300 mmbf annually. This requisite volume level has been confirmed through various studies in the past.			
4. Remove the restriction of utilizing old growth timber for residual products applications such as bio-fuels and open up the current USDA incentives to these kind of projects in SE Alaska to support the construction and operation of Residual Operations:			
This change in policy, along with the summary of the above recommendations to address a viable industry given current state would provide an adequate base to explore and develop contingent on market development a manufacturing and processing facility for residuals and pulp logs.			
5. Summary and Conclusion:			



Describe specific steps/tasks.	Key People: Who needs to be involved to accomplish step	Resources needed to accomplish step	Timeline to accomplish step
In this review of the viability of SE manufacturing operations and the necessary volume to sustain an industry of this scope would be in the 300 to 360 MMBF range.			

Obstacles and Impediments Likely to Affect Implementation:

STEP:	Help needed:
The primary obstacle to achieving the above is the lack of a reliable economic supply of timber. The only source for the timber to achieve the above is the Tongass NF. In the past 10 years the Forest Service has not been able to fulfill the needs of the industry and the current administration has changed the mission of the FS. And this new mission does not include providing a reliable economic timber supply that will serve the above objectives.	The only certain solution to the problem is to put Tongass timberlands under the control of State and private entities. This must be done through the Statehood Act, Administratively or through Legislation. This will require a strong unified effort from communities, the State and Industry to convince Legislators and other entities that the only certain way to achieve the above is a transfer of ownership of some of the Tongass timber lands to entities that have the desire and wherewithal to provide the required reliable economic supply of timber necessary to achieve the above.

Funding:

Phase:	Budget:	Funding Source:
1. Re-establishment of the 10 year timber sale program to sustain current OG log		



processors	
2. Recommendations to provide continuity to the USFS Export policy and the addition of volume to its normal timber sale program (note: the normal Forest Service timber sales have a term of 3 to 7 years depending upon a number of factors including volume, timing constraints, road construction requirements, etc.)	
3. Establishment of 25 year investment timber sale to attract new investment into the region to generate employment and improve multi mill synergies.	
4. Recommendations to provide either the policy of legislative information to remove OG from use in residual product development and open access to USDA incentives in the region.	

Outcome/Results:

Revise, modify and secure elements of the USFS timber sales program and associated regulations that combined with streamlining the process of implementation can produce 300-360 MMbf of timber /year to sustain a viable forest industry and associated employment in SE Alaska in the 4 integrated components outlined in this initiative.

