Executive Summary

Southeast Alaska is rugged and remote, and its communities are mostly located along a thin sliver of coast, sandwiched between mountains and the sea and isolated from each other. The small size and remoteness of the communities combined with the landscape, limit the options for transportation, electric energy generation and transmission, and other basic infrastructures and services needed for economic development. In addition, Southeast Alaska is unique in the extent of land ownership in the hands of the Federal government, which owns 95% of the land base (80% is the Tongass National Forest). The lack of private lands and lands available for development impedes the ability of the region to nurture the private sector. Further, all federal laws, regulations and rules affecting the Tongass have a direct or indirect impact on the economic well-being of the population of the region.

This report, Southeast Alaska Action Initiatives for Key Economic Clusters, is an economic development plan for Southeast Alaska that puts a focus on actions to strengthen select industry sectors in the region. The Juneau Economic Development Council (JEDC) chose a Cluster Working Group (CWG) approach to regional economic development because it brings together a private sector industry cluster with federal, state and local agencies, university faculty, trade association representatives and other stakeholders committed to addressing industry needs, concerns and opportunities on a partnership basis. An industry cluster is a set of businesses in the same or related field that are located near one another. These businesses compete with but also complement one another. Together, they rely on regional knowledge and the regional labor market and draw productive advantage from their mutual proximity. Through intensive facilitation -- meeting support and ongoing follow-up, sharing of work and feedback among CWG members, frequent small-group or task-oriented meetings -- JEDC helped each CWG develop a set of industry specific action initiatives based on shared economic vision.

For this work, JEDC partnered with Southeast Conference, Sheinberg Associates, Alaska Map Company, and consultants Brian Kelsey and Ted Lyman, a team that brought regional, national and world-renowned expertise to the project.

Between January and May 2011, JEDC assembled and facilitated the work of four Cluster Working Groups in three established and one emerging industry sectors:

- Southeast Alaska Ocean Products
- Southeast Alaska Forest Products
- Southeast Alaska Visitor Products
- Southeast Alaska Renewable Energy Seed Cluster

Each CWG was comprised of a mix of private businesses, public agencies and others active in the sector; over 130 individuals attended one or more meetings. The working group process was designed to facilitate communication and problem-solving to collaboratively remove barriers and make connections that will



allow growth in jobs and businesses in the specific areas that those in the CWG believe hold the most promise. Each CWG convened up to four times to develop and reach consensus on action initiatives. Between meetings there were many teleconferences and subcommittee meetings to prepare a detailed action plan for each initiative.

Each CWG began by broadly identifying opportunities and challenges specific to their industry and then moved to focus on to a number of possible initiatives. At subsequent meetings, each Cluster Working Group determined the readiness of each initiative for action. A total of 33 action initiatives were developed, most of which enjoyed consensus by all participants; ten by the Oceans Products CWG, five by the Visitor Products CWG, nine by the Forest Products CWG, and nine by the Renewable Energy CWG.

The Action Initiatives developed by CWG participants will, when implemented, remove obstacles and take advantage of opportunities to create more jobs in the respective industry clusters. The list of CWG participants, CWG-identified opportunities, key obstacles and challenges faced by those engaged in the industry, and the title of each Action Initiative are summarized at the end of this Executive Summary.

Common Themes

Each industry Cluster Working Group worked independently, yet several common themes emerged throughout the action initiatives identified. These themes are tied to the need in the region to develop five key economic foundation areas that are vital to the success of all regional industry clusters. The following are examples of Cluster Working Groups developed initiatives in the areas of:

- An educated and productive workforce
 - Marine Industry Technology program
 - Recreation management program integrated with UAS degree programs
 - Renewable Energy education for residents, business and students
- Access to Capital
 - Marketing
 - Promote Southeast to the rest of the nation as a test bed for Renewable Energy projects
 - Increase awareness about building with Alaska Wood
 - SeaTrails promotion regionally and nationally
 - Funding for entrepreneurial projects
- Regulatory Climate
 - Protection and restoration
 - Permitting process
- Research and Development
 - Renewable Energy
 - Fisheries
- Infrastructure
 - Investment in renewable energy



Collaboration for Success

USDA agencies have an important role in implementing many of the initiatives. Those where USDA agency assistance is needed are noted with a **. Further, collaborative work will be needed among many parties to accomplish the action initiatives. In the body of this report each initiative is described in detail including:

- The team that is committed to working on the initiative
- Motivation and objectives
- The sequence of steps that must be accomplished to make the initiative happen
- Who must be involved to complete each step
- A schedule and funding requirements (if known)
- Outcomes which have been identified as a measure of success

These Action Initiatives reflect priorities and steps needed to strengthen industry, commerce and businesses of Southeast Alaska, which in turn makes communities stronger and more sustainable. Accomplishing these Action Initiatives and tapping this potential will not be easy, and requires commitment, time and energy among private businesses; the federal Forest Service, Rural Development and other USDA agencies; by National Ocean and Atmospheric Administration, Economic Development Administration and other federal agencies; most departments of the State of Alaska as well as policy leadership from the Governor's Office; Sealaska Corporation and Southeast's Native Village Corporations; municipal and tribal governments; the University of Alaska; trade organizations and others.

Implementing the Action Initiatives will occur in stages. The specific roles for some of the major entities in making success happen are described below.

1. Private Sector

Businesses and industry have to take the lead (including for-profit Native Corporations) to make things happen. No one knows better than those actively engaged in making a living in the industry what the obstacles and opportunities are and what is needed to make things work efficiently and create more success. Each Action Initiative lists a project champion, almost always a private sector business representative, and a team that drove development of the initiative on behalf of the full work group. The champion and team need to continue to take a leadership role to push implementation on these initiatives. Other business owners and leaders should join the effort. In order for these efforts to be successful, it is important to note that some groups/teams will need continued administrative and logistical support.

2. USDA¹ and other Federal Agencies

¹ USDA agencies include the following: Agricultural Marketing Service, Agricultural Research Service, Animal and Plant Health Inspection Service, Center for Nutrition Policy and Promotion, Economic Research Service,



Juneau Economic

Because so much of the land and fishery resources in Southeast Alaska are managed by the federal government, commitment and active involvement by federal agencies – especially by the USDA Forest Service and by NOAA – is critical. Not much can happen in Southeast Alaska without the support of the land and resource owner, which is in sharp contrast with the situation in other states where most business and industry takes place on privately owned land. Depending on the initiative, federal agency programmatic, policy or funding support and change or alignment is needed - each initiative itemizes the specific type of support needed on a step by step basis.

3. State of Alaska

The State of Alaska is a critical partner for implementing initiatives and has several roles to play. Like the federal government, the State owns and manages a significant portion of the land and resources in Southeast Alaska and thus its support and partnership is critical for business success. The State must also continue the key role it plays in stimulating investment and development through a variety of low-interest loans, grants, tax credits, and other funding mechanisms it offers, and in its management of resources such as fishing, land and tidelands.

4. Federal and State Government

Each federal and state agency has its own set of regulations and requirements and often each operates in a "silo" unaware of other agency requirements. Cross-agency and program collaboration to look collectively at actions that support or challenge business growth, including the idea of a "one stop permit shop," is desired by many.

5. University of Alaska

The University of Alaska must help provide research, product testing and product development, technical development, and work force training. Given Southeast Alaska's rich ocean and forest resources, the presence of multiple University of Alaska campuses and programs, and the large federal NOAA and Forest Service Laboratories, the area could support world class research and development in the areas of marine life, ocean conditions, forestry, climate change, fisheries and seafood. Several initiatives identify specific partnership opportunities with the University that will strengthen both industry and the University. In addition, the diversity of recreational opportunities on land, sea and ice lend themselves to developing a world-class outdoor recreation management program at UAS in partnership with the Visitor Products industry.

6. Others

Additional partners whose participation is needed for success are trade associations, non-profits, local and tribal governments. Specific roles are identified in each initiative.

Farm Service Agency, Food and Nutrition Service, Food Safety and Inspection Service, Foreign Agricultural Service, Forest Service, Grain Inspection, Packers and Stockyards Administration, National Agricultural Library, National Agricultural Statistics Service, National Institute of Food and Agriculture, Natural Resources Conservation Service, Risk Management Agency, and Rural Development.



Southeast Alaska Ocean Products Cluster

WHO PARTICIPATED*?

Anthony Lindoff, Ha'ani/Sealaksa Bart Watson, Armstrong-Keta, Inc. Bruce Wallace, Seiner, UFA, Silver Bay, ASMI Casey Campbell, Wells Fargo Casey Havens, Yak Tat Kwaan Chris Knight, United Southeast Alaska Gillnetter's Assn

Deborah Hayden, Grow Ketchikan Don Martin, Forest Service Doug Ward, Alaska Ship & Drydock Galen Tromble, National Marine Fisheries Service

Garry White, Sitka Economic Development Assn Geron Bruce, Alaska Department of Fish and Game

Heather Hardcastle, Trout Unlimited Ian Fisk, Primo Prawns

Jev Shelton, fisherman

Jim Seeland, University of Alaska Southeast John Sund, self

Jon Martin, USFS

Julianne Curry, Petersburg Vessel Owner Assn Julie Decker, UFA: National Seafood Marketing Coalition

Kathy Hansen, Southeast Alaska Fishermen's Alliance

Keith Criddle, University of Alaksa Fairbanks Kris Norosz, Icicle Seafoods

Len Peterson, Taku River Reds

Mike Forbush, Ocean Beauty

Mike Goldstein, Alaska Coastal Rainforest Center

Mike Round, Oceans Alaska & SSRAA Patricia Phillips, Pacific Fishing Inc.

Phil Doherty, SARDFA (Dive Fisheries Assn)

Randy Lantiegne, Icicle Seafoods

Ray Ralonde, Sea Grant Marine Advisory Program

Ray Riutta, Alaska Seafood Marketing Institute

Rick Focht, DIPAC Ron Medel, Forest Service Russell Dick, Ha'ani/Sealaksa Shannon Stevens, Alaska Airlines Shelly Wright, Southeast Conference Steve Reifenstuhl, NSRAA Steve Stromme, Elfin Cove Tim Blust, Armstrong-Keta, Inc. Tom Gemmell, fisherman

WHY?

Opportunities

- Largest Southeast Alaska private sector wage payer - 2009 wages: \$199 million
- Largest Southeast Alaska employer 2009 avg. monthly seafood employees: 2,398
- SE AK's rich clean waters are astounding resource.
- SE AK <u>knows</u> the ocean; industry compatible with lifestyle.
- Ocean products industry is resilient, businesses are diversified.
- Boat and gear repair & manufacturing is a complementary.
- SE AK Branding and Marketing: Tell the Fishing Story!
- Mariculture could be a \$20-\$50 million/year industry.
- More salmon = more opportunity, support hatcheries.
- Young, trainable, local workforce available.
- Given the ocean resources here, University & agencies, should have world class research occurring.
- Great access to Lower 48 customers.
- Consistent utilization of fish byproducts/waste.
- Streamline export permitting process.
- Invest in Southeast Alaska renewable energy.

Challenges

 Access to water and to the resource is primary; without this nothing else is possible.

- Industry success depends on maintaining sustainable fisheries, conservation, and habitat restoration.
- Markets are global and competition is fierce.
- Lack of access to capital is a primary concern.
- Cost of fuel, power, freight, transportation of product to markets, and labor are high.
- More local government support needed.
- Tell Southeast Alaska regional story better.
- Workforce availability, development, & education concerns.
- Federal and state regulations are an obstacle.
- Sea otter management plan is needed for SE AK.

WHAT? 10 ACTION INITIATIVES

- Develop a Sea Otter Management Program in Southeast Alaska
- 2. Establish Marine Industry Technology and Workforce Improvement Consortium
- Ensure Southeast's Fishing Future: Targeted Education and Training in the Acquisition and Financing of Fishing Permits, Quota and Fishery Businesses
- 4. Increase Wild Salmon Production Through Habitat Restoration
- 5. Include the Seafood Industry in USDA Programs (Regulatory Review)
- 6. Enhance Salmon Production
- 7. Study the Conversion of Southeast Alaska Fish Byproduct to Biogas and Fertilizer through Anaerobic Digestion
- 8. Further Develop Renewable Energy
- Protect Long Term Assured Assess to Fishery Resources for Both Current and Developing Fisheries
- Develop Region-Wide Mariculture Zoning Initiative

^{*}Attended one or more meetings



Southeast Alaska Forest Products Cluster

WHO PARTICIPATED*?

Allen Brackley, Research Forester, USFS Andrew Thoms, Sitka Conservation Society Bill Thomason, Wood Cuts Bob Deering, USCG - Civil Engineering Unit Bruce Abel, Don Abel Building Supplies Bryce Dahlstrom, Viking Lumber Company Carol Rushmore, City and Borough of Wrangell Carolyn Thomason, Wood Cuts Chris Maisch, Alaska DNR Clarence Clark, Alaska DNR Dan Parrent, USFS Dave Harris, USFS Ernie Eads, Thuja Plicata Lumber Co George Woodbury, Alaska Forest Assn Grea Erickson, Erickson Economics/SEACC Jackie Durette, Durette Construction John Sisk, The Nature Conservancy

Jon Martin, USFS Karen Petersen, UAF Cooperative Ext. Service Keith Flanders, Prince of Wales mill operator Keith Rush, The Nature Conservancy Kent Nicholson, USFS

Larry Jackson, Tongass Forest Enterprises
Lindsey Ketchel, SEACC
Marie Messing, USDA Forest Service
Merrill Sanford, Southeast Conference Board
Michael Kampnich, The Nature Conservancy
Mike Goldstein, Alaska Coastal Rainforest
Center, UAS

Owen Graham, Alaska Forest Assn Paul Slenkamp, Trust Land Office Richard Stubbe, Alaska Wood Products Shelly Wright, Southeast Conference Wade Zammit, Sealaska Timber Corporation Wes Tyler, Icy Strait Lumber

WHY?

Opportunities

 Define USFS transition objectives. How soon can this be achieved and under what conditions? What projects and initiatives are needed to 'plug the gap' before young growth volume can sustain industry?

- Round log export has high return on invested capital. This allows profit that supports other types of commercial wood product activity and the basic industry infrastructure.
- Markets: China, Korea, Canada, Washington. China has growing supply constraints in face of fast growing demands.
- Brand and market Tongass high value wood to increase product price.
- Prince of Wales has a cluster of small, entrepreneurial mills. Take advantage of the road system here.
- Use wood waste and byproducts for biomass boilers. If enough demand in Southeast Alaska a pellet plant could be feasible.
- Mountain beetle infestation in Canada may lead to lumber supply shortages.
- Initiate new efforts in product design, market identification, and R&D.
- Increase in-region processing of forest products to capture more value locally.

Challenaes

- Lack of a stable, predictable supply of timber is major obstacle to industry investment and success
- Industry now currently greatly diminished and in survival mode.
- Second growth wood is commodity priced, but need 10-20 times amount of capital investment.
- Round log export market is highly dependent on 50% exemption that allows export to maximize price, rather than all domestic sales.
- Southeast's timber Infrastructure is aging.
- Size and economies of scale issues challenge processing and value-added opportunity success.
- Cost of oil increases freight and production costs.

- Some USFS timber sale design and contractual processes are obstacles to industry.
- Low morale at USFS due to lawsuits, changing policy, shrinking budgets, and lost expertise.

WHAT? 9 ACTION INITIATIVES

- Use Young Growth Wood for Cabin and Recreational Structures on Prince of Wales Island.
- Simplify Small Timber Sale Process to Allow Small Mills on Prince of Wales Island to Operate More Efficiently, Economically, and with More Supply Certainty.
- Increase Knowledge about Building with Alaskan Wood and Influence Attitudes about Southeast Alaska Woodworking Industries.
- 4. Continuously Improve Select USFS Processes.
- Establish the "Tongass National Forest –
 Congressionally Designated Timberlands"
 to Provide a Secure and Perpetual
 Working Forest Land Base Managed Under
 Forest Regulations.
- 6. 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:

- 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.
- Create a 1.5 Million Acre State Forest (from Tongass lands) to be Managed by State of Alaska
- Restore a Viable Timber Industry in Southeast Alaska

^{*}Attended one or more meetings



Southeast Alaska Visitor Products Cluster

WHO PARTICIPATED*?

Bill Hagevig, HAP Alaska-Yukon Bob Janes, Gastineau Guiding Brent Fischer, City and Borough of Juneau Carol Rushmore, City and Borough of Wrangell

Derek Duncan, Goldbelt Corporation Drew Green, Cruise Line Agencies of Alaska Erica Simpson, Alaska Canopy Adventures Ernestine Hayes, UAS, School of Arts and Sciences

Forest Wagner, UAS, Outdoor Studies Greg Brown, Weather Permitting Alaska Jodi Wise, Huna Totem Corporation Johan Dybdahl, Icy Strait Point John McConnochie, Cycle Alaska Jon Martin, USFS

Kathy DiLorenzo, UAS, School of Professional & Technical Studies

Kelli Dindinger, Alaska Travel Adventures, Inc Larry Gaffaney, Huna Totem Corporation Linda Kadrlik, Adventures Afloat Linda Kruger, USFS PNW Research Station Lorene Palmer, Juneau VCB/ SATC Louis Juergens, Alaska Galore Tours Marc Matsil, City and Borough of Juneau Marsha Sousa, University of Alaska Southeast Marti Marshall, USFS, Juneau District Ranger Melanie Lesh, Gustavus City Council Michael Goldstein, AK Coastal Rainforest Center, UAS

Michael Neussl, Alaska DOT&PF Odin Brudie, Alaska DCCED Rick Wolk, UAS, School of Management S. Kirby Day, III, Princess Cruises Smith, Glacier Gardens
Sharon Gaiptman, Gaiptman
Communications
Steve Krause, UAS
Tim McDonnell, TEMSCO
Tory Korn, Alaska Rainforest Sanctuary/Alaska
Canopy Adventures

Sean

WHY?

Opportunities

- There are many ideas to increase the numbers of independent/multi-day visitors
- Many authentic local assets to build visitor experiences around
- We can develop connections and links between region's trails
- Bring broadband/high speed internet to rural communities so they can connect with markets and showcase tourism opportunities
- Develop a UAS visitor industry management/training program or degree with government and private sector internships
- Implement Juneau's Tourism Best Management Practices model on a state and federal level

Challenges

- Government should offer more assistance rather than be an impediment.
- Region's business climate is lacking: we look for others to blame and solve our problems, not enough teamwork and cooperation within region, Southeast Alaska culture is risk averse, we don't have an entrepreneurial spirit, etc.
- Local workforce constraints (both number and skill sets)

- Lack of affordable housing is obstacle to hiring from outside region.
 - Need opportunities to keep workforce employed during off season so they don't leave.
 - Independent visitor sector not good at using web/ social media to provide destination information
 - Insufficient funding to develop infrastructure, e.g., trails, huts, roads
 - High cost of energy makes it hard to be profitable
 - Need better conflict resolution between competing forest user groups
 - Rising fees create rising prices for visitor experiences
 - Excessive regulation creates barriers to entry into business
 - Insufficient funding for marketing collateral
 - Cost of oil increases freight and production costs.
 - Some USFS timber sale design and contractual processes are obstacles to industry.
 - Low morale at USFS due to lawsuits, changing policy, shrinking budgets, and lost expertise.

WHAT? 5 ACTION INITIATIVES

- Develop Multi-Purpose, Multi-Community Land and Water Trails and Support Facilities
- 2. Increase Guided Access to Land
- 3. Promote Multi-Community and Regional Visitor Packages
- 4. Strengthen Accountability for Tongass Access Fees
- Integrate Tourism Course with UAS Existing Degree Program

^{*}Attended one or more meetings



Southeast Alaska Renewable Energy Seed Cluster

WHO PARTICIPATED*?

Barbara Stanley, USFS Bart Watson, Armstrong-Keta, Inc. Ben Haight, Haight & Associates Bill Leighty, The Leighty Foundation/Alaska Applied Sciences, Inc Bob Deering, US Coast Guard Brandon Smith, Alaska Brewing Brian Hirsch, National Renewable Energy Laboratory Bryan Ferrell, AELP Dan Lesh, SEACC Duff Mitchell, Juneau Hydropower, Inc. Heather Hardcastle, Fisherman's Daughter **Biofuels** Jackie Stewart, Business Works John Hickey, US Coast Guard John Sandor, self Jon Martin, USFS Kirk Hardcastle, Alaska Center for Energy and Larry Miles, Wind Turbine Company Lew Madden, Mat-Su owners representative Nathan Soboleff, Ha'ani/Sealaska

Paul Southland, Alaska Canada Energy

Peter Naoroz, Kootznoowoo Corporation

Robert Venables, Southeast Conference

*Attended one or more meetings

Zach Wilkinson, JEDC SpringBoard



Corporpation

Coalition

Rob Holman, Self

Ross Good, Elcon Corp

WHY?

Motivation, Opportunities and Challenges

- We are looking ahead to the next economy of Southeast Alaska. While renewable energy is not one of the region's driving engines, we see fertile conditions for a renewable energy industry other than large-scale hydro in Southeast Alaska for the future.
- We need the courage and conviction to take advantage of Southeast's obvious and abundant Renewable Energy resources- tidal, wave, wind, geothermal, solar, ocean thermal, osmotic, biomass -Southeast Alaska can become a model, a leading industry outside of this region.
- Currently importing Renewable Energy expertise and equipment from outside Southeast Alaska.
- If we improve the economic foundation of region, can we build up this industry?
- Do we have the starting point for a more robust energy industry?
- Is there potential for developing renewable energy firms in Southeast Alaska that could export their skills and expertise beyond the region?
- What conditions would foster increased industry development?
- Multitudes of assets critical to an emerging industry are here: willing workforce, community support, existing Infrastructure, zoned "Industrial" sites, deep water ports near many communities, heavy equipment from former industries, communities in dire need of a better economy, high unemployment in region, and demographics for skilled labor.

WHAT? 9 <u>DRAFT</u> ACTION INITIATIVES

- 1. Propose Net Metering Legislation
- Develop Revolving Loan Fund for Renewable Energy**
- Market Southeast Alaska Nationally as a Test Bed for Renewable Energy Projects
- 4. Market-driven Renewable Energy Economic Modeling for Southeast Alaska, including Multiple Transmission and Energy Storage Strategies
- Explore Opportunities to Connect the Southeast Alaska Intertie to North American Grid
- 6. Biomass Energy Demand Development**
- 7. Determine Best practices for Renewable Energy Industry in Southeast Alaska**
- 8. Review Regulatory Process to Expedite Project Permitting Process
- Renewable Energy Education for SE Alaska Residents, Students and Businesses