

**Willapa Resource Utilization and Renewal
Innovative Partnership Zone
Business Plan**

1. **Mission:**

The mission of the Willapa IPZ is to build a healthy, resilient community with an expanding economy based on maximizing sustainable natural resource harvests and creating innovative high value resource based products.

2. **Willapa IPZ Resource Clusters:**

Pacific County's tradition of resource utilization extends to a time before Washington statehood. Formed as a county in the Oregon Territory in 1851, Pacific County was already in the business of exporting trees and oysters. The landscape remains uniquely productive with the Willapa Hills growing high value timber and Willapa Bay producing a bountiful array of seafood and aquaculture products. This commitment to sustaining while enhancing our natural resources will be achieved through the application of advanced technologies fostered by collaboration between entrepreneurs, research institutions and other public and private organizations.

The IPZ will focus on Willapa's primary natural resource sectors including aquaculture/seafood, forest products and agriculture, as well as on building synergies between these sectors.

The aquaculture/seafood and forest product natural resource industries employ approximately 1,414 people, which is 15% of Pacific County's workforce.

The Willapa IPZ will bring together the diverse partners needed to maximize sustainable natural resource productivity and harvests and to develop new products from both primary resources and waste streams.

The initial focus of the Willapa IPZ will be on the aquaculture/seafood and forest products clusters.

- **Aquaculture/Seafood Cluster:**

Today Willapa bay tidelands are considered a major shellfish production region. Approximately 10,000 acres are used to grow approximately 2/3 of Washington State's oysters. There are several larger corporations involved in aquaculture and also many small locally owned businesses in this cluster of industries, all with a shared interest in sustaining and enhancing resources while developing higher value products.

Primary products include salmon, tuna, crab, sturgeon, cod, shrimp, oysters, and clams. Secondary products include chitan/chitosan, organic fertilizers and soil amendments, pet foods, and fish oils.

- **Forest Products Cluster:**

Timber grows on over 90% of Pacific County's land area. Species harvested include Douglas- Fir, Western Hemlock, Maple, Red Alder, Sitka spruce, and Western red Cedar. There are currently two larger sawmills (Weyerhaeuser and Willapa Bay Hardwoods) in Raymond and South Bend, as well as several smaller operations. The primary forest products are raw logs, commodity lumber and wood chips. There is a significant opportunity for expanding local processing to include cut stock mills, furniture/cabinetry, doors, molding and other wood trim, pellets, even Lincoln Logs. There is also opportunity for alternative energy generated by burning waste biomass. Lumber recovery from saw logs is approximately 40 to 50%. Through more efficient cutting techniques and manufacture of end use cut stock products this rate of recovery can be increased.

There is also a range of secondary forest products, which can be expanded and enhanced including mushrooms, salal, fox glove, wild berries, etc.

Many opportunities for improving forestland management and harvest methods can be implemented both for timber quality/quantity, habitat and water quality, long term soil enhancement, carbon sequestration, etc. There are many private timberland owners and logging companies, which will be invited to participate in the Willapa IPZ.

3. **Willapa IPZ Goals:**

- To expand the natural resource based economy within the Willapa IPZ boundaries.
- To protect and increase the sustainable natural productivity of both upland and marine resource lands.
- To develop new and high value products derived from unique coastal resources including the primary harvest resources, waste streams and renewable energy.
- To grow the human capital (entrepreneurs, workforce, leaders) needed to manage, harvest and process resources into an array of high value products.
- To ensure that the infrastructure needed to support the natural resource management and resource based businesses is maintained and expanded.
- To develop a "Willapa" brand that the larger world recognizes for the quality and sustainability of its natural resource based products.

4. Leadership/Governance:

The Willapa IPZ will be built around an organizational structure that welcomes diverse participation, information sharing and joint research, development and business ventures. The IPZ's success will depend on the participation and the value created by and for the members (i.e. the collaborators) to be successful. The majority of the collaborators will be small resource based businesses. The Willapa IPZ will be a bottoms up or "grass roots" organization with working groups focusing on specific projects.

- Working Groups:

Working groups will be the foundation of the Willapa IPZ. Groups will bring together individuals, businesses and support organizations to collaborate on projects of mutual interest and benefit. Working groups will form, disband and form anew as projects are conceived, assessed, researched, developed and implemented.

Initial IPZ working groups will focus on:

- Sea Ranching of Salmonids
- Inventory of IPZ collaborators' research issues and needs
- Inventory of resource waste streams
- Mentoring small businesses
- Generating heat, power and charcoal/biochar from biomass pyrolysis
- Enhancing forest management practices
- Expanding uses of chitan/chitosan
- Developing comprehensive lifelong learning programs
- Expanding access and flexibility of vocational training programs
- Establishing relationships with the end users of furniture grade alder

- Management Team and Roles:

The role of the management team will be to maintain the focus on innovation and collaboration and to seek resources to support the IPZ and its activities. More specifically the management team will:

- Develop an evolving Willapa IPZ plan, which sets forth a frame work to support creativity, collaboration, research and the application of technology, as well as "big thinking" in the Willapa resource sectors.
- Develop a long-term sustainability plan and budget for the Willapa IPZ.
- Schedule and facilitate meetings of all IPZ participants.

- Coordinate and support the working groups and maintain the flow of information between the collaborators.
- Connect the dots and assess opportunities for cross cluster/industry partnerships.
- Keep abreast of new potentially applicable research and technologies and disseminate information to collaborators and working groups.
- Identify and pursue funding opportunities for IPZ initiatives, research, infrastructure and private business development.
- Collect data and track IPZ outcomes.

The management team is comprised of:

Rebecca Chaffee, Manager, Port of Willapa Harbor

Rebecca Chaffee has lived and worked in Pacific County for over 25 years. She is currently the Manager of the Port of Willapa Harbor. As Port Manager, she also works closely with the small manufacturing businesses, as well as the aquaculture/commercial fishing industry.

Rebecca is active in the Willapa community serving on the boards of many organizations including Grays Harbor College, Craft 3, Pacific County Housing Authority, the Willapa Community Development Association, Willapa Bay Water Resources Council, Raymond Planning Commission and the Pacific County Economic Development Council. Rebecca is a recipient of the Governor's Award for Economic Leadership. She is a University of Washington graduate with a degree in civil engineering. Rebecca's husband, Gordon, is the major stockholder and general manager of Willapa Bay Hardwoods LLC, an alder sawmill business located in South Bend.

Cathy Russ, Executive Director, Pacific County Economic Development Council:

As Executive Director of the Pacific County Economic Development Council, Cathy is responsible for the overall direction and management of the organization. Cathy's career has focused on rural economic development strategies, business start-up, retention and expansion services along with marketing and recruitment.

Cathy currently serves on the boards of the following organizations and agencies: Pacific Mountain Workforce Development Council, Pacific Council of Governments, Long Beach Peninsula Visitor Bureau, Pacific County Marine Resource Committee, Willapa Harbor Health Foundation, Willapa Valley FFA Advisory Committee and served as the Past President of the Columbia Pacific Resource Conservation & Economic Development District.

Miranda Wecker, Director Marine Program, Olympia Natural Resources Center, University of Washington:

A graduate of the US School of Law with a Masters of Law and Marine Affairs Degree, Miranda has 30 years of experience working with scientists and policy makers at the international, national, state and local levels. She has an undergraduate degree in economics. Since 1995, she has led the marine program of the Olympic Natural Resources Center, a facility of the University of Washington created by the Legislature to help resolve important natural resources issues and promote sustainable development in coastal WA. She also provides consulting services to non-profit organizations. Miranda spent six years working in Washington DC specializing in international ocean law and policy development. She was appointed to the Washington Fish and Wildlife Commission in 2005 and has served as its Chair since January 2009. She has lived in Pacific County since 1991 and has served on a number of local boards including the Pacific County Noxious Weed Control Board, the Willapa Bay Water Resources Coordinating Council, the Coastal Resources Alliance Board, and the Board of the Willapa Hills Audubon Chapter.

Kathleen Sayce, Shoalwater Botanical Services:

Kathleen is a life long resident of Pacific County. She graduated from Western Washington University, Bellingham, with a B. Science in Biology and minors in Chemistry and Geology. She graduated from Washington State University, Pullman, with a M. Science in Botany. She has led field research on various ecological systems in Willapa Bay. Sayce was the Science Program Director for the Willapa Alliance in the mid 1990's, where she organized annual science conferences, led the local science group, and edited Willapa Indicators for Sustainability. Kathleen was the Science Officer for Shorebank Pacific, the nation's first environmental bank. While at the bank she worked with clients to improve their energy and materials efficiency, and profitability. Kathleen is currently consulting on a variety of natural resource utilization issues including industrial stormwater treatment and soils environment.

• **Partner Organizations:**

Partner organizations are committed to support and participate in the Willapa IPZ. They will also lead or support the working groups. Partners will commit staff time. The management team and partners will work together to seek financial resources to support the activities of the Willapa IPZ. Key private partner organizations include:

Business Name:

Business Focus:

Scion Biomedical	Chitosan based medical products
Ekone Oyster	Oyster harvest and processing
Willapa Bay Hardwoods	Alder Sawmill
Willapa Bay Enterprise Corp.	Tribal Business
Dungeness Development Assoc.	Seafood, Chitosan
Ambrosia Technologies	Soil amendments from sea minerals
Pacific Gro	Organic fertilizers from seafood waste
Bay Center Mariculture	Oyster cultivation, harvest, processing
Goose Point Oyster Company	Oyster cultivation, harvest, processing

In addition to private partners the IPZ will include a full range of government and non-profit organization partners, as well as the Shoalwater Bay Indian Tribe, who is a major stakeholder in the Willapa region.

- **Four Year Sustainability Plan:**

The IPZ management team will contribute time to manage, facilitate, coordinate and monitor IPZ activities. The Port of Willapa Harbor has committed 0.10 FTE and the EDC 0.20 FTE to the startup of the IPZ. Over the initial years of the IPZ, the organization will establish a long-term financial plan. The goal of the IPZ is to have a 0.5 FTE staff person dedicated to the administration of the IPZ by year three. The IPZ partners will also seek outside funding to support research and business development.

The geographic focus of the IPZ will initially be on the northern portion of Pacific County (i.e. north of the Nemah River), expanding to include the entire county as momentum grows.

5. **Strengths of the IPZ:**

The strength of the Willapa IPZ will come from the culture, traditions and dedication of the people who live and work in our forests, on our bay and on our farms, as well as in the organizations that support this community. They are passionately committed to passing this bountiful heritage on to the next generations.

- **Technology:**

The application of technology to our resource management, processing and product development is critical to sustaining and expanding our Pacific County economy.

We live in the Information Age; there are voluminous quantities of research and technological information. However, in rural communities this research is often not accessed or accessible. A top priority of the IPZ is to bring potentially useful technology to local entrepreneurs and to seek resources to assist in its evaluation and application.

The second focus is to establish working relationships with research institutions and facilitate research projects, which address issues and opportunities unique to our Willapa region and to our local natural resource industries. Collaborations between the UW Olympic Natural Resources Center, Washington State University and our local entrepreneurs is essential, both to focus the research on practical applications and to ensure the relevance of the research to the resilience of natural ecosystems and the resource based economy.

The third focus is to incorporate scientific methods and data collection into our local natural resource management, harvesting and processing. This information will be shared and utilized to increase sustainability, efficiency and quality of our resources and of our products.

- Human Capital:

Human capital is the foundation of a growing economy and resilient community. The Willapa IPZ will prioritize the building of human capital. The viability of every business depends on a trained, competent and reliable work force. Soft skills, as well as technical skills are essential. Training for many specialized/skilled jobs is best obtained through apprenticeships or a combination of classroom and on-the-job training.

The Willapa IPZ will develop a detailed work plan to build human capital and expand training opportunities including:

- Introduce K-12 students to career opportunities in local resource industries
- Initiate on-the-job training programs in small resource businesses
- Recruit our college graduates to come home to work, raise families and grow the community
- Promote Life Long Learning from preschool to post retirement

- Infrastructure:

Economic infrastructure can be broadly defined as the “built” or physical systems, as well as the business services, which support the local economy. This includes infrastructure such as highways, utilities, internet, K-12 schools, and community colleges, banks and financial institutions.

The Willapa community has invested heavily in public infrastructure. Our K-12 schools are new. The Cities of Raymond and South Bend are just completing a “state of the art” wastewater treatment system. The PUD maintains an outstanding electrical grid. High speed internet is available. The four Pacific County ports maintain six marinas, three industrial parks and two small airports.

Grays Harbor College has invested in satellite campuses in both Raymond and Ilwaco. In addition on line classes make a range of programs available. Local banks and Craft 3 are receptive to business lending.

However, because of our distance from regional population centers our infrastructure also has significant limitations:

- No rail service
- No natural gas
- 50+ miles from I-5 corridor via two lane highways
- No deep water Ports

The IPZ will assess opportunities to minimize the impacts of these infrastructure limitations. Strategies may include sharing wood waste generated heat to lower heat energy costs, coordinating transportation of products, increasing locally added value, rather than shipping commodities for outside processing, and creating more robust relationships between the urban and international consumers of our resource based products.

The Willapa IPZ will also work to build stronger relationships with the Port of Grays Harbor with its deep-water port, rail and highway connections and the Satsop Industrial area.

6. **Long Term Market Growth for the Technology:**

The demand for the Willapa's primary natural resource based products including seafood, logs, lumber and wood chips is both high and well established, domestically and internationally. The demand for Willapa seafood far outpaces the supply. However, to maximize sustainable productivity and add value to these resources, we must apply innovations and technology. The target opportunities identified to date have excellent potential for market growth.

- Increased salmon populations and harvest via sea ranching
- Increased oyster harvest via breeding for ocean acidification tolerance
- Expanded use of waste crab and shrimp shell for medical and industrial grade chitosan based products.
- Expanded use of organic fertilizers from seafood waste and sea water minerals
- Increased lumber recovery from both high and low grade logs
- Develop an array of products including heat/energy from waste streams that currently require costly disposal including biomass and seafood wastes.

In the years to come, the primary purpose of the Willapa IPZ will be the ongoing facilitation of innovation through the continued collaborations to develop and apply new technologies to our resource industries. The IPZ will also assist businesses entering new market sectors, establish sales relationships with end users to avoid the "middle man" or brokers.

7. **Entrepreneurial Climate in the Proposed Zone:**

Rural economies depend on small businesses. Although our entrepreneurial spirit flourishes the success of startup businesses is too often limited by lack of educational attainment, limited workforce and the lack of business resources.

The IPZ will focus on these limitations by strategically cultivating and nourishing entrepreneurship. Grays Harbor College plans to offer business management associate degrees at its campuses in Raymond and Ilwaco next fall. Interactions between small businesses and students will be facilitated. Small business round tables and mentoring will be available. Our local Willapa Community Development Association has launched a micro business loan program in partnership with Craft 3.

We will also formally assess our established service community for their “friendliness” and quality of service to businesses. This will include a survey of businesses on their experiences with local agencies to obtain permits, business licenses, business assistance, law enforcement, utility hookups, etc. The IPZ will work with these entities to eliminate red tape and streamline their services to businesses.

8. **Commercialization Plan:**

The key to commercialization is the close collaboration of private businesses with research institutions. Too often research is completed in an academic vacuum, never to be applied to commercial ventures. The Willapa IPZ will:

- Identify and collect information on research, technology and new innovations, which can be applied to our resource businesses.
- Identify and seek funding for specific research projects related to Willapa IPZ resource businesses with commercial potential.
- Seek resources for technical assistance for testing, licensing, certifications, patents, etc. of new products.
- Assist with market research, market development, market trials and marketing of new products.
- Assist in developing relationships with the end users of our resource products to bypass brokers/middlemen.

A decline in demand for high quality, natural seafood is not anticipated. The lumber market is more cyclical and subject to fluctuations in the overall economy. The IPZ will work with businesses to develop specialty niche markets for higher value wood products, which in turn will provide higher returns and avoid the fluctuations of commodity markets.

9. **Plan for Measuring and Reporting:**

The plan for measuring and reporting the impacts of the Willapa IPZ will be based on metrics established for each of the goals.

Goal: To expand the natural resource based economy within the Willapa IPZ

Natural Resource Sector Jobs Created	100 jobs
Startup/New Resource Businesses	10 businesses
Increased Resource Business B & O Tax Receipts	5%

Goal: To protect and increase productivity of upland and aquatic resource lands

Number of Acres of Forestlands with improved management	1,000 acres
Increased pounds oysters harvested	5%
Collaborative Projects with Research Institutions	10 projects

Goal: To develop new products from coastal resources

Number New Products	8 products
Collaborative Projects with Research Institution	10 projects
Process waste crab & shrimp shell and reduce volumes of land applied shell	50% of shell waste

Goal: To grow human capital

On-the-job training/apprenticeships	20 apprenticeships
Participation in GHC workforce programs	50 students
Participation in Lifelong Learning Savings Accounts	25 participants
College graduates returning to resource careers	10 returnees

Goal: To ensure business infrastructure is maintained and expanded

Launch small business peer mentoring program	1 program
Develop ongoing dredging program for Ports	3 Ports
Assess and implement business friendly practices in local agencies	10 improved practices

Goal: To develop the Willapa Brand

Encourage businesses to incorporate “Willapa”
in their marketing/product and business names
Develop a joint venture marketing campaign

10 products/business names
1 Campaign