EXPANDING MARKETS FOR LOCAL PROTEINS:

Training Wholesale Buyers, Developing New Products, Aggregating Demand, and Scaling up Supply in the Pacific Northwest

PROJECT SUMMARY
**Introduction**

Despite abundant production of local proteins and market demand, Pacific Northwest ranchers and seafood businesses experience significant challenges in reaching institutional markets. These include difficulty in scaling from small-to-midsize production; lack of market access, specifically to hospitals and schools; lack of expertise in product development to meet the needs of large-scale institutional buyers; and lack of preestablished relationships with traditional broadline distributors to access institutional markets.

From 2018 to 2022, Ecotrust set out with partners Health Care Without Harm, Oregon Department of Agriculture, and others to develop a multi-pronged approach to address these barriers. Building on an earlier planning grant from USDA that piloted innovative models of protein procurement with institutions, this project implemented a variety of approaches and program models to help address these particular challenges and opportunities. These included (1) developing a large-scale, cross-sector institutional purchasing cohort of Oregon hospitals and schools called ProCureWorks Northwest (PCW NW) Community of Practice; (2) developing new beef and fish products suited to institutional buyers needs; (3) hosting Local Link, a trade show to connect producers and institutional buyers; (4) providing training resources for institutions about the benefits, opportunities, and necessary resources to implement the purchasing and utilizing of whole hogs; and (5) launched an Institutional Purchasing Pathways program to support producers’ reach of institutional markets, by providing technical assistance and creating alternative supply chains.

This project focused on two protein categories: beef and groundfish. The Oregon cattle industry is one of the top five farm gate values in the state, with more than $800 million in domestic and export sales. Grass finished producers are a particularly fast-growing niche market that has experienced 25-30% growth annually over the past decade, though the market still accounts for only 2.5% of the total beef market nationwide. West Coast groundfish populations have rebounded considerably since the 1990s and 2000s, when many West Coast fisheries faced decline due to overfishing. Today, Oregon’s groundfish fishery shares a Marine Stewardship Council “certified” status with other west coast states. Species in this fishery include Dover Sole, Rockfish (various species), and many others with underdeveloped market potential. In 2021, species landed in the groundfish fishery represented 72% of all fish commercially caught and landed in Oregon. However, the fishery represented only 19% of the total value of all Oregon commercial fish landings.

Importantly, the COVID-19 pandemic invariably impacted project timelines and planned deliverables, requiring creative and dynamic shifts. Labor shortages, supply chain delays, COVID-19 protocols, and emergency response from school meal programs and hospitals paused all planned in-person activities, such as the PCW NW community of practice gatherings, sensory tastings, whole hog trainings, and the Local Link vendor fair until 2022.

This report discusses these individual approaches and lessons learned over the course of the project.
Establishing a cross-sectoral institutional buyer community of practice to aggregate demand

The global-industrial food system that supplies schools and hospitals is massive, impersonal, and focused on delivering calories at the lowest possible cost. However, food produced locally, in rich soils, and by people who care about the health of their communities has the potential to deliver not only healthy nutrition at a reasonable cost, but also to support rural economic development, bridge rural-urban divides, and steward vital natural resources. Procurement change is hard work that can seem overwhelming. It can be difficult for foodservice directors and chefs to know where to start. Yet schools and hospitals are more committed than ever to increasing local, sustainable purchasing.

ProCureWorks NW (PCW NW) is a joint initiative of Health Care Without Harm and Ecotrust, established to build a pilot community of practice of committed schools and hospital buyers in Oregon to meaningfully increase purchasing to support regional, sustainable production practices. Goals for PCW NW included:

- increasing schools’ and hospitals’ access to local, sustainably raised products;
- providing more nutritious, healthy food to students and patients;
- creating pathways for local farmers and producers to reach school and hospital markets;
- creating reliable, diversified markets for local and sustainably raised products.

Built from a proven model, PCW NW was adapted from ProCureWorks California, which engaged five California school districts, representing over 530 schools, and eight California health care systems with over 55 member hospitals. Our Northwest model aimed to support procurement changes by working with a small cohort of committed institutions with aligned purchasing goals. This community of practice engaged 19 members and included seven school districts, one charter school, and eleven hospitals. Schools that participated either had a free and reduced lunch rate of at least 40% or had a student body with at least 40% students of color. Selection criteria for hospitals was based on demographics of the population served as well as the hospitals’ active involvement in Health Care Without Harm’s projects. Demographics included the following percentages by county: people of color, medicaid population, and population living below poverty. Leveraging the purchasing power, unified voice, and knowledge of institutions that serve over 300,000 students and patients, PCW NW community of practice was a critical component of this project. Members supported the drafting of purchasing guidelines, responded to data collection surveys, engaged in product ideation, coordinated sensory tasting of products at their locations with students and/or staff, and utilized the cohort for technical assistance, networking, and peer-to-peer learning.

PCW NW began with an in-person ideation session and quarterly community of practice meetings. After the onset of the COVID-19 pandemic, we conducted sensory tasting remotely with products delivered to school and hospital staff and surveys collected virtually. During this time, the project team continued
to facilitate virtual meetings, which provided a much-needed affinity space for schools and hospitals to discuss the unique challenges and adaptations of nourishing patients, staff, families, and students during the pandemic. Product ideation and development continued with our partners at the Oregon State University Food Innovation Center (FIC), so that we were ready to resume in-person sensory tasting in schools and hospitals when the first opportunity arose in the spring of 2022. Multiple whole hog training sessions that were meant to take place in hospital kitchens were fused into one evergreen recorded training that is available on-demand. You can learn more about product development, sensory tasting, the whole hog model, and Local Link below.

**Developing value-added protein products to meet institutional needs**

Schools and hospitals operate with specific challenges and opportunities. The food served to patients, students, staff, and visitors must meet a range of standards for nutrition, sustainability goals, and other goals determined federally and internally. Limitations on time, staff, and equipment make it difficult to prepare meals from scratch, and the need to consistently serve high volumes of meals on limited budgets often requires these institutions to contract with broadline distributors for ready-to-eat products. Therefore, procurement of local foods—even with external funding (including grants such as Oregon’s Farm to Child Nutrition Programs Noncompetitive Reimbursement Grant for Oregon foods) or contracts—is an added challenge. Local foods often come from smaller farms, ranches, or fisheries that have higher price points and are not affiliated with the broadline distributors on which institutional kitchens depend. These producers also often lack the equipment, resources, and necessary regulatory qualifications to create value-added or prepared products for use in institutions. Locally sourced proteins are especially challenging, as raw or whole products (e.g., fish filet, chicken breast, etc.) have limited use in some institutional settings, among other reasons. And ultimately, producers need to sell the whole animal, not only parts of it. Some parts have less culinary appeal and those that do may not be available in the volumes or standard sizes that food service desires.

To address some of these issues, we partnered with Oregon State University’s Food Innovation Center (FIC) to support the PCW NW Community of Practice. We used a culinary science application in product development and sensory testing to create prepared food products that would perform well for institutional markets and their client/student preferences. We began in 2019 with a three-hour ideation session with FIC staff and the community of practice to discuss product categories, value-added product possibilities, and the abilities of kitchen staff and equipment. This helped inform a first round of product development and sensory taste testing in early 2020. Focusing on rockfish (a genus of over 90 species of groundfish that is often undervalued and underutilized) and grass-finished beef, we developed six new products—two blended beef and four seafood—and led hospital and school staff through sensory testing. (Students and patients were not included as originally planned due to the COVID safety protocols in 2020).
These products replicated food items that may already be on school and hospital menus but were adapted with new ingredients to comply with institutional nutrition standards and meet budget constraints. The products developed and tested in this first round included:

**Rockfish cake:** This product can be an alternative to other fish cakes or meat patties or can be served with a side dish or as part of a sandwich. It is made up of about 45% vegetables.

**Blended meatloaf:** This can be enjoyed as an entrée with an accompanying salad or side dish. Containing a blend of grass-fed ground beef, potato, and additional vegetables, and composed of about 70% vegetables, it is a healthy way to enjoy a rustic homestyle meal.

**Blended beef crumble:** This product can be substituted for any ground beef or poultry mixture and enjoyed as a part of an entrée, such as tacos, nachos, or stir fry. Containing 70% vegetables, it is a healthy way to enjoy grass-fed ground beef, cauliflower, and other vegetables.

**Fisherman’s pie:** This product is meant to be enjoyed as an entrée but can also be served with a salad or side dish and contains 70% vegetables.

**Polenta fisherman’s pie:** An alternative version of a common Fisherman’s Pie, this product is meant to be enjoyed as an entrée, but can also be served with a salad or side dish. It contains 70% vegetables.

**Rockfish curry:** As a healthy alternative to other stewed or braised meat options, this product is meant to be served as an entrée along with rice, legumes, or noodles. It is made up of almost 45% vegetables.

Sensory testing revealed that the blended beef crumble was the most preferred. Meanwhile, all four of the seafood products came in at parity (one was not favored over the others) and were rated as slightly to moderately liked by the testers. Although school and hospital buyers expressed wanting to include local seafood in their offerings throughout the project, these results warranted a rethinking or retooling of seafood products.

In response to COVID, the community of practice demonstrated a need for more grab-and-go healthy products. We agreed to pivot away from previous seafood products and test a seasoned fish jerky product that could serve this need. We conducted a second iteration of product sensory testing at one hospital and three schools. The schools included a high school, middle school, and K-8 school all in the Portland Public School District in April 2022, where students provided feedback for the blended beef crumble and fish jerky product.

### BEEF CRUMBLE

**Students and school staff**

- **85%** like or extremely like product

**Hospital staff**

- **92%** like product

### FISH JERKY

**Students and school staff**

- **35%** somewhat like or extremely like product

**Hospital staff**

- **25%** like product

We learned a lot throughout this process. White fish species commonly found in the undervalued groundfish fishery, such as rockfish and dover sole, can be complicated products to work with. While results varied from product to product, one of the most common responses we received to all seafood...
products tested was about the fishy smell. Outside of creating another fish stick type of product, we recommend trying other applications for seafood to reduce the smell of the fish and achieve better likeability. Featuring smoked fish as the main ingredient in seafood chowder, stew, or soup may perform better. We also proposed individually packaged fish entrees that would not smell until they were opened and ready to eat, but buyers raised sustainability concerns related to packaging.

In the initial phases of product development, we had many goals, including developing seafood and blended beef products that were suitable for two different audiences (schools and hospitals) that have different palates and procuring locally sourced ingredients with a preference for regenerative ingredients (organic, grass fed, etc.) that were also affordable and accessible. In terms of supply chain research and product testing, we found that we were trying to do too much with the products and looking to create a “silver bullet” answer that generally worked against progress. As product development progressed, we adjusted our timeline and simplified our goals to focus on schools as the main audience for product development, with procurement focusing on local/regional sources.

We have been in conversation with cattle ranchers with the capacity for value added production however our project team was not able to secure a food manufacturer to aggregate supply, produce, and market the specific blended beef crumble product developed by the Food Innovation Center. Our hope is that this project will advance market innovations within the private sector to develop blended beef products for institutional markets.

Training foodservice chefs and cooks on a whole animal model

The commercial hog industry in the U.S. co-evolved with its primary source of commercial feed, corn and soybeans, and therefore most large hog operations are located in the midwest and southeast. Industrial operations at commodity scale often generate significant waste and environmental degradation, make use of antibiotics (to keep animals healthy despite high numbers in confined spaces), and involve practices (such as tail-docking and gestation crates for sows) deemed inhumane by animal welfare organizations.

The Pacific Northwest is home to relatively few pigs; however, there is good news and great opportunity for pork-lovers. Pigs grow well on a Pacific Northwest diet and can thrive in pasture-based systems in our climate. They can even root out invasive weeds and help rebuild soil health, drawing carbon out of the atmosphere in integrated farming systems. Responsibly raised pigs could also be a lucrative market for small and midsize farmers and ranchers, bringing cash to rural communities. Research conducted by Ecotrust in 2015 suggests that pork has the potential to be an economically viable regional market at scale in the Pacific Northwest, meaning delicious, affordable, humanely raised, climate-smart, local pork holds great potential.

The culinary creativity from forward-looking, community-minded chefs, cooks, foodservice directors, and other food systems partners are needed to make whole animal purchasing
a successful practice. While purchasing whole animals or primal cuts is nothing new, purchasing whole hogs by institutions has been a point of inspiration for Ecotrust. Since 2016, we have engaged in six projects to help further the institutional use of local hogs by providing practical information, training, and connections, through the development of forward contracting templates, the whole hog animal toolkit “Going Whole Hog: A guide for foodservice chefs and cooks”, and promotional materials, and hosting Local Link with an emphasis on local protein vendors. For this project, we continued working with Andre Uribe, a chef with a background in local food procurement for large institutions, to lead an in-person demonstration with institutional buyers and food systems partners on how to purchase a whole hog, the benefits of doing so, and how to break down and utilize primal cuts in an institutional setting. In 2019, this demo was a special offering to Local Link participants and had 15 attendees representing seven institutions and community partners. In 2022, rather than hold in-person demos with Chef Andre Uribe, we worked with him to create a recorded training session that will be available on our website.

While the whole hog model has been a point of inspiration for several years, it remains a point of aspiration. This model can be used, adapted, and implemented in a variety of settings, in institutional foodservice settings, most kitchens and foodservice staff are not operating in scratch kitchens. Purchasing whole animals and breaking down big cuts of meat won’t happen overnight. Oftentimes, kitchens who are interested in this model need to invest in equipment (such as coolers and freezers), tools (deboning knives, work tables, etc.), and staff skills to break down larger portions. Additionally budgets and menuing need to synchronize to support this holistic method of purchasing. Even for well-equipped kitchens engaged in scratch cooking, implementing a new workflow and way of thinking to accommodate whole animal cooking can take time.

Of note, pork is a forbidden food in Jewish and Muslim traditions and for this reason is not served in some school districts. However, it is served in the districts that are part of the community of practice, though to varying degrees. For example, one school district limits it to pepperoni on pizza while others serve it in multiple ways. All of the districts offer alternative protein sources when pork is served. Pork is also a culinary staple for many cultures and traditions. Understanding the cultures and food traditions of the populations served should always be a key component of local food procurement decisions.

Helping local producers with the resources to scale up production and access institutional markets

**Institutional Purchasing Pathways**

In 2020, we began piloting an operational model, called Institutional Purchasing Pathways (IPP), aggregating products from local producers to institutional markets via The Redd on Salmon Street, a food hub in Portland, Ore. The pilot model recruited the first cohort of five businesses, with the help of a
selection committee of peers from the Portland food business community. As discussed in the previous section on product development, sometimes hospital and school buyer needs and budgets vary, resulting in aspects of this overall project to focus on one or the other. IPP became solely focused on hospital buyers and expanded the cohort to businesses beyond local proteins, based on the hospital buyers needs and guidance.

To date, the businesses have met with hospital buyers at different institutions, participated in product taste tests, and worked to ready their products for these institutions. The pandemic has impacted and slowed the project, as hospitals have been incredibly busy and resilient this past year. Our project team and first cohort of businesses are thrilled that the first purchase was made in 2022. Additionally, we have recruited two additional cohorts of businesses, bringing the program total to 15 businesses.

Aside from the value chain coordination work of connecting interested businesses and hospital buyers, the IPP model relies on a local delivery partner, who mainly uses trikes and several vans, in place of a distributor or broadliner. IPP’s local delivery partner uses trikes, which are electric and human powered three-wheeled bikes with temperature controlled trailers to haul products. Their trikes decrease reliance on fossil fuels and work towards a shared goal of environmental sustainability. Additionally, due to the hefty cost of working with distributors, the project team felt it important to structure costs so they were passed onto the hospital, who have a budget to absorb the cost, as opposed to the small and local businesses. For the IPP project to be sustainable beyond the pilot phase, the local delivery partner will oversee ordering, fulfillment, aggregation, and delivery of products to the hospital. Additionally, the delivery partner is the approved vendor on record with each hospital. This removes the barrier of each business having to go through the process and paperwork required to become an approved vendor, while also giving the hospital one point of contact, much like working with a distributor, a set up to which hospital buyers are accustomed.

**Local Link**

After a two-year hiatus, we brought back the Local Link vendor fair in 2022, now in its 6th year. This event is a key networking opportunity for institutional food buyers, chefs, foodservice and nutrition services professionals; regional farmers, ranchers, fishers, and value-added food businesses; distributors; and community food system organizations to connect and do business. In 2022, along with our partners the Oregon Department of Agriculture and Health Care Without Harm, we hosted a pre-event info session for vendors to ensure they had foundational knowledge about working with institutions such as schools and hospitals and could make the most of the event. There were 77 registrants and 43 of attendees the day of the info session. The recorded version of the info session was viewed 56 times. Big transactions or commitments to purchase don’t necessarily happen at the event; rather it has become a critical component of long-term relationship cultivation. For example, during the 2018 event, Portland Public Schools (PPS) met Lucy De León of Salsas Locas/Tortilleria Y Tienda De León’s. At the time, Lucy did not have a product formulated for school meals, but this meeting led to her adapting her recipe to meet USDA school nutrition guidelines and PPS purchasing 15,000 tamales on their first order. Now Lucy sells to more than ten school districts.
In 2019, we welcomed more than 100 buyers and sellers. 77% of buyer attendees in 2019 reported that they expanded or increased local product offerings. 12 school districts attended, 2 hospitals, and 10 other wholesale buyers. In 2022, we had more vendors apply to participate in the event than we had capacity for. There were 44 businesses represented at the vendor fair, many of whom brought multiple staff. There were over 80 buyer, school staff, and community partner attendees representing 11 school districts, 3 hospitals, and 10 other institutional buyers.

Summary

As the title of this report suggests, we took a multi-tiered approach to exploring market expansion for local proteins. At the onset of this project, we could not have anticipated the impact that the COVID-19 pandemic would have on all facets of the food supply chain and how clearly those impacts would manifest in our work together.

However, through these setbacks, we see more clearly where vulnerabilities in market development exist. The pandemic highlighted the need for more secure, sustainable, and equitable supply chain and business development efforts. Our work toward solving for these challenges, and supporting connections between institutional purchasers and local food producers, continue in partnership.

In addition to the project activities mentioned throughout this report, we learned several valuable lessons while navigating this project:

Developing a product that works for both schools AND hospitals is very challenging.

Originally, our goal was to create six seafood and blended beef products that would work for both schools and hospitals. These products needed to please the palates across age ranges and dietary needs, be affordable and accessible, and utilize locally-sourced, regenerative ingredients. With the impacts of COVID, and the ambitious nature of these goals, we needed to adjust the timeline for product development. We also learned that trying to create products that met all of the needs for both types of institutions generally worked against the progress we could make by focusing on and responding to their unique needs with individualized products.

Seafood products need special consideration.

In our initial testing, we received feedback related to the fishy smell of the products developed using white fish species. While we found that individually packaged entrees or smoked products may help improve likeability of the product, we learned that working with these fish species can be a complicated prospect.

Evergreen educational materials may help kitchens pick up where they left off.

With the impacts of COVID, especially related to staffing, institutional kitchens are challenged to restart scratch cooking programs that may have been in place before the onset of the pandemic, much less start something new. So, while programs like the whole hog model have been a point of inspiration for several years, it remains a point of aspiration.
Creating accessible educational materials around programs like the whole hog model that can be referenced in the future is a worthwhile investment as these links in the local food system are rebuilt.

**Building an equitable, resilient food system depends on strong relationships.**

Institutional purchasing is complex. But opportunity blossoms when buyers and producers have the space and time to connect, problem solve, and create shared understanding of needs and challenges. Through the community of practice model, the Institutional Purchasing Pathways cohort, and the production of Local Link, participants all noted the benefits of dedicated space and time to nurture and grow relationships.

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