



KITCHEN SYNC
STRATEGIES

Bringing the Opportunity to Oregon's Coast

*Supporting strategic, sustainable, and
long-term success of the seafood economy
along Oregon's coast through educational
initiatives and workforce development*

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Introduction and Project Goals

Oregon's coastal seafood economy consists of a robust network of fishermen, seafood businesses, restaurants, markets, food stores, and consumers: and this network is facing serious challenges. As the Oregon coastal Visitors Association (OCVA) recently highlighted, [some \\$840 million is spent each year by visitors to the coast](#) on food alone, but very little of that fortune is spendy on locally landed seafood, and 90% of seafood sold and consumed along the Oregon Coast is not from Oregon. With projects like its "Capturing Value by Keeping Local Seafood Local" and other federally funded grants, OCVA has been developing the links between key stakeholders across the coastal food economy, and addressing the many interconnected challenges facing this network: one of those core challenges is ensuring the growth of a thriving, vibrant workforce of people trained in skills uniquely vital to the coastal economy.

This project is guided by OCVA's mission to create a "coastal utopia for all". Between April and June 2023, we sought to understand how the organization can better support targeted workforce development in the seafood industry, and we set out to accomplish four core objectives:

Objective 1: Co-create workforce development programs including curriculum to support Seafood industry development

Objective 2: Support OCVA in ensuring smooth launch of Seafood Workforce educational pilots

Objective 3: Conduct landscape assessment of coastal School District partners for Seafood Workforce Development program

Objective 4: Conduct market demand assessment for fish and seafood products (by species) with institutional partners (to be defined)

Our core goal was to achieve a better understanding of how to connect students and young professionals to workforce opportunities in the seafood industry and to facilitate more links between large-scale institutional purchasers of seafood and local seafood businesses. Building a long-term thriving local seafood economy along Oregon's coast will require a strong, trained workforce to process the seafood that is landed in Oregon and an active, healthy marketplace for those seafood products. Many seafood industry partners are concerned about the long-term health of Oregon's seafood workforce given the sharp decrease in local skilled laborers. As such, this is critical not just for the industry's future but also to ensure that more of the \$840 million+ of economic activity generated by visitors to the coast benefits Oregon's fisherman, seafood businesses, restaurants, markets, and food stores.



With this project we hoped to better understand:

- The availability of developed Fish Butchery curriculum that could be utilized in Seafood Workforce educational pilot programs in schools and/or industry settings
- The level of interest from coastal high schools and community colleges in Fish Butchery and Live Tank Tech Trainings
- Which coastal high schools had coursework already in process where these trainings could be added or which of them had an interest in implementing such coursework
- What kind of outside assistance is needed (including curriculum, training materials, and staff bandwidth) from interested schools to implement a pilot training program
- Opportunities for partnership with actors across the value chain including nonprofits and government agencies

Our research was meant to provide strategic guidance for OCVA and its partner to develop key areas of the seafood industry workforce in ways that partners and educators can champion.

Activities we performed

To accomplish these goals, we knew we had to consider the specific training programs we were exploring (Fish Butchery and Live Tank Technician trainings) and the audiences we would contact to understand the opportunities and challenges with these trainings (existing seafood industry partners and high schools & community colleges on the coast). Below is a summary of the activities we performed through this project.

We researched Fish Butchery training for the seafood workforce

We researched how to bring a Fish Butchery training to partners in the culinary and restaurant industries. To do this we:

- Made 2 visits to the Yaquina Lab to build network connections and learn first-hand about the development and process behind an emergent “FIT” (Filleters in Training) conducted by Local Ocean
- Created a database of industry experts whose work links to fish butchery
- Created a [reference document](#) that summarizes key takeaways from our outreach to these industry experts

We supported the completion of a Live Tank Technician Training

We engaged with Rick Goche, a coastal leader in the seafood industry and an advocate for Oregon’s seafood workforce, to refine a training that he has initiated for operating holding tanks for live fish. Rick’s Live Tank Tech Training program is intended to elevate the Oregon



coastal use of commercial live tanks which are critical bulk-hold live seafood for wholesale, transport and retail market channels. We supported Rick's "Practical Curriculum" and provided several rounds of edits to help make the material approachable and accessible for learners aged 15-22.

We conducted outreach to coastal high schools & Community Colleges

We conducted outreach to a broad range of public coastal high schools and community colleges. We aimed to engage with a cross-section of district leaders, school administrators, and teachers at each high school to identify champions in each institution and understand which individuals were most responsive to the opportunity for bringing seafood workforce training to their campuses. In doing so, we connected with 28 high schools, 18 school districts in 7 counties along the coast.

We created a [robust summary of our outreach](#) which provides profiles of each school¹ and also serves as a database of contacts for coastal high schools. This tool could easily become an initial client resource management (CRM) resource as it tracks communication with each district on this subject.

We surveyed schools and community colleges about Fish Butchery and Live Tank Tech training

We created a survey that gauged how open schools are to integrating these trainings into their existing culinary or aquaculture programs. We generated a timeline for developing and administering these surveys and created two separate surveys- one for [students](#) and the other for [school staff](#). Surveys were sent to 24 high schools, and we received 37 responses from students and 30 responses from school staff members.

What we learned

Fish Butchery in the seafood industry

Before our outreach, we learned that there was not a Fish Butchery training available specifically for the seafood industry and culinary workers on the coast. However, a Seafood Butchery training designed by Laura Anderson of Local Ocean (with support from Kristen Penner of North Coast Industries) happened to develop over the course of this research. This "FIT" (Filleters in Training) program, is an immersive, brief program to support folks already

¹These profiles include key information for OCVA and its partners to consider about possible school/community college partners like their student body size, whether or not the school has some form of cooking/culinary class and aquaculture program, and their existing affiliation with ORLA or the Pro Start culinary training program.



working with seafood in their work to improve their knowledge and skills with Fish Butchery. The FIT program, which began in mid-June at the Yaquina Lab (Newport, OR,) functions like a 'train the trainer' program and utilizes expert filleters already in their network to become guides for trainees. While this training is still under development, a set/standardized curriculum may emerge from these piloted training sessions, and it could serve as a basis for a training that is eventually adapted for a high school or community college audience.

Seafood Butchery in coastal high schools

Our research unfortunately coincided with the school year winding down for coastal school districts. With teachers and administrators focused on completing the academic year, this created challenges for us to gauge what interested schools would need to successfully plan for and implement a Seafood Butcher training. As principal Dr. Heidi Buckmaster of Neah-Kah-Nie High School reminded us, "we plan a year in advance..." and our research didn't afford us that time. More time and energy is needed to deepen the relationships with school/district staff as well as gathering student feedback.

That said, it was abundantly clear from many schools we contacted and surveyed that Seafood Butchery would be welcomed in coastal high schools. It was also clear that a Fish Butchery training could be connected with existing culinary/cooking classes. For some schools, this could mean Fish Butchery would fall under a full CTE Culinary Arts & Hospitality program while at others it could become extra programming in more limited cooking classes.

100% of school staff surveyed thought students would benefit from learning basic Fish Butchery (out of 30 staff responses)

90% of staff believed students at their school are interested in learning how to cook seafood and **60%** of students agreed. (out of 30 staff and 37 student responses)

We harvested some key takeaways from teachers in schools about the prospect of this training in their own words:

"This (Seafood Butchery) sounds like something my students would love. We already do poultry, beef and pork whole animal butchery. Seafood would dovetail perfectly. Love the idea of seafood being used for learning in class being utilized in the cafeteria and bringing in more local seafood to the cafeteria." Kyle Lewis, CTE Culinary Arts, Siuslaw High School

"Incredibly interested in Fish Butchery; students need this! Love the idea of seafood being used for learning in class, and then being utilized in the cafeteria and bringing in more local seafood to the



cafeteria." Stacy Knudson, Director & Patrick McKnight, Cooking Teacher, Eddyville K-12 School

"Absolutely LOVE fish and would love to "do" fish butchery here, but it's really expensive. It's the price of seafood that gets in the way...Even though we're right on the coast, it's hard for us to get fresh fish..." Frank Murphy, CTE Culinary Arts, North Bend High School

"I have converted my old home economics room into a food-certified classroom...and my primary job is to help students explore careers and gain employment. I would love to collaborate on this project with you." Michelle Pruden Brookings Harbor High School

This feedback underscores one of our core findings: there is a tremendous opportunity to bring Fish Butchery training to schools up and down the coast, and both school staff and students alike are interested in it. It would likely also create new market channels for existing seafood businesses (i.e. new school districts would likely purchase fish from local fishermen). Given the critical need to train and develop more skilled seafood industry workers and how important it is to provide students with professional development opportunities, adapting a Fish Butchery training like the "Fileters in Training" resource for high school students would create a positive ripple effect for the coastal seafood workforce.

Live Tank Tech Training In coastal high schools

We also learned that coastal high schools were enthusiastic about having Live Tank Tech Training programs available to their students. We learned that a creative and convenient way to bring a training like this to

schools is through existing science classes. Several teachers of science in schools we contacted shared their enthusiasm for this training, citing its compatibility with existing curriculum in their classes and its added benefits of providing CTE opportunities for students. Here

are some key takeaways from these science teachers about integrating Live Tanks learning into their curriculum:

"This pairs easily with my marine biology program. I can set up several tanks in my room if I am supplied with the right equipment."

- Slade Sapora, Science Department, Tillamook High School

"I wonder if between Slade's Marine bio class and possibly the food science class we could have a

72% of students surveyed would consider a career in the Fishing Industry

Over 50% of students were interested in learning about Live Tank Tech Training in school



good fit."

- Mark Roberts, Agricultural Sciences and Industrial Technology Instructor, Tillamook High School

"I would definitely be interested in learning more about Live Tank Maintenance. I had my middle school Natural Resource kids doing basic tank maintenance for steelhead tanks last year for our elementary school students... the plan was to have the first half of [our Natural Resources CTE class] be a Forestry/Environmental class, with the second half...focusing on aquaculture."

- Amy Tregoning, Natural Resources Siuslaw High School

Training the next generation of Live Tank Technicians is critically important for Oregon's seafood economy. As climate change continues shifting where and when many species of fish off Oregon's coast are caught, and in order to capture more of the market for Oregon seafood, live holding tanks will be a key part of the solution for maintaining the safety and quality of fresh seafood from off the coast: and these tanks need trained, proficient workers to run them. The opportunity to bring Rick Goche's Live Tank Technician training to high schools and community colleges would help foster interest and support for this vital role in the coastal seafood workforce.

Opportunities for Future Programming

Even though our research was limited by the timing of our outreach to school, we identified clear and confident interest in the development of Fish Butchery and Live Tank Tech programming at Oregon's coastal high school and community colleges. As such, there are many opportunities OCVA and its partners can explore to build on these opportunities.

As a starting point, it will be key for OCVA to determine its role in developing these training programs. Since the Association is primarily a place-based tourism and coastal economic resource and not a workforce development agency, we suggest considering these guiding questions to clarify OCVA's strategy and unique role to develop these programs into the future:

- To what degree, and to what duration does OCVA want to retain a hands-on involvement in either of these training programs moving forward?
- As OCVA pursues funding to advance this project, what is OCVA's exit strategy from being the holder, or driver, of this project to being its shepherd?
- Ideally, what entity is best positioned to house and offer the Fish Butchery and Live Tank Technician trainings?
- Are these trainings kept together or transferred to other organizations/agencies separately?



Next steps with ProStart

Collaborating with a partner that has the level of statewide and national reach like ProStart certainly has advantages. As such, there may be an opportunity to connect Fish Butchery with ProStart's standard curriculum and leverage the support of ORLA to raise awareness and interest in this combined curriculum across Oregon. OCVA, with its expertise in holistically developing coastal economies, could consider encouraging ProStart to create a Seafood-spotlighted curriculum to pilot in Oregon's coastal high schools and, eventually, expand across the state.

We learned that there is already strong interest in workforce readiness opportunities across coastal high schools. We believe it would be strategic for OCVA to more closely collaborate with ORLA to bring the Fish Butchery and Live Tank Tech Trainings to these schools to support their students' career exploration and job readiness. Specifically, we saw opportunity for OCVA and ORLA to explore pilot training opportunities with Seaside High School (Seaside, OR) in school year 2024-2025; as one of two schools already partnered with the ProStart culinary training program Seaside was interested in the Fish Butchery curriculum their principal Jeff Roberts shared with us

"I think this is a really cool idea and opportunity, however, the timing just doesn't work for us in the fall. We are opening a food cart on campus that will be run by our Culinary Arts program in the fall and ... while we are still in the start-up phase, the potential of adding seafood to our menu is certainly something we would like to happen."

Focusing on piloting the training in a school that already uses the ProStart curriculum could easily allow OCVA to bring the Fish Butchery training to one of the additional 16 high schools that offers some sort of culinary class(es).

Next steps with Fish Butchery Trainings

It is clear that it is important for OCVA to remain connected with the industry-focused Fish Butchery program being developed at the Yaquina lab by Local Ocean. As the closest thing to an existing curriculum available, this "Fileters in Training" program can provide a template for future high school focused trainings. OCVA could support the adaptation of this curriculum by:

- Recruiting high schools with interest in Fish Butchery to expand the candidate pool for the FIT training



- Supporting Local Ocean in replicating the FIT training at other sites along the coast to further refine the curriculum
- Using the Lab as a training hub, collaborate with Local Ocean in creating ongoing learning workshop-style opportunities (in person & virtual) for FIT graduates, and advanced filleters such as: skill shares, branding and marketing yourself as a contract filleter, networking and community building

It is clear that operating Fish Butchery training in high school settings will require additional planning and significant curriculum development. Brandii O' Reagon of Washington Sea Grant would be a strategic partner for OCVA and could provide support in generating school age level- appropriate Fish Butchery curriculum and advising on the training development. In one of our conversations, Brandii expressed interest in working in this capacity as potential funding emerges.

Based on available funding, OCVA may have the ability to pilot this Fish Butchery training at 2-4 sites from [our database of potential schools](#). As stated, developing a level-appropriate curriculum for this training is the first and most important next step. After completion of a curriculum, OCVA would need to identify the target schools and support them in implementing the training. To accomplish this, we suggest:

- Starting in late July-early August (when school staff return to buildings), re-engage with staff the pilot sites selected and:
 - a. Garner formal commitment from district and/or school administration to implement the pilot at a time during the year
 - b. Conduct a needs assessment with these teachers and building administrators
 - c. Draft a project plan for each pilot site and seek input from community partners and collaborators
 - d. Provide funding needs for each pilot site based on needs assessment (for things like staff time, materials, equipment, etc.)
 - e. Finalize a work plan for each pilot site and implement the training accordingly

Next steps with Live Tank Technician trainings

This training is the most developed and ready-to-implement of the two that we explored. The curriculum seems to be nearly ready to be delivered to an industry audience, but it will take some time to be adapted for an audience of high school or community college students before it can be delivered as a pilot. To ensure Rick (or another entity) is ready to deliver the training to either of these audiences, we suggest OCVA consider the following course of action:

- Support Rick to complete the final industry-focused curriculum



- Contract with an additional curriculum expert to adapt the industry-focused curriculum for an audience of high school or community college students
- Clarify the training length and recruit a trainer,
 - Engage Rick Goche to see if he has interest in delivering the training with a complete curriculum
 - Secure funding to pay trainer for delivery to either industry or school-based audience
- Identify schedule for training² and find a location along the coast with the equipment required for the training
- Raise awareness of the opportunity for the training amongst industry partners and schools from our outreach who expressed interest in the training and recruit a cohort of trainees
- Deliver the pilot training according to the needs of each audience

Conclusion

Workforce development is a critically important piece of the puzzle for Oregon's coastal seafood economy. Our initial research has identified some key opportunities for OCVA to further develop strategic tools to train more current and future industry workers in the areas of Fish Butchery and Live Tank technology. We are hopeful that with continued focus, additional funding from state and regional agencies, and deeper collaboration with important partners up and down the coast like ORLA, Local Ocean, Rick Goche, and Washington Sea Grant, OCVA will be able to build on these findings and open up new opportunities to strengthen the stability of this vital component of the state's food economy.

² For a Live Tank Tech training to be delivered successfully in schools, we recommend following the same steps as noted above for delivery of the Fish Butchery curriculum in schools.