



The Oregon Aquaculture Explorer Platform

An innovative project to catalyze economic growth

The Backstory

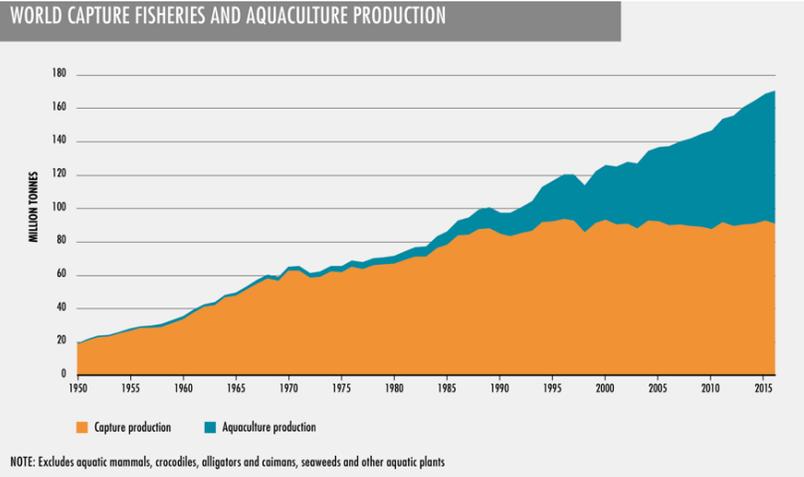
Fish are a deeply embedded and important part of the cultures and economies of Oregon and the Pacific Northwest. The state has been endowed with significant aquatic resources: roughly 2.5% of the state, some 2,394 mi², is water. From the perspective of aquaculture (the husbandry of aquatic organisms), principal activities over past decades have focused on salmonid hatcheries and oyster rearing. Today, these remain the chief endeavors



with USDA (2013) reporting the value of the annual shellfish harvest at \$10.6 M with the corresponding finfish value is estimated at \$1.5 M.

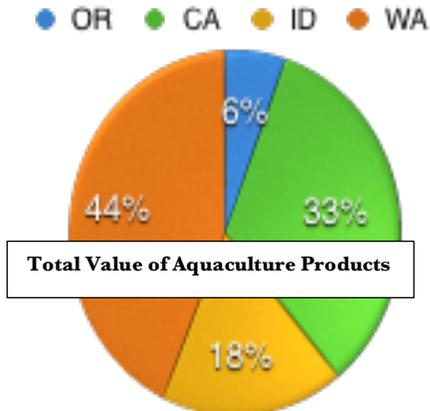
However, between 2005 and 2013, Oregon's total aquacultural production fell by 3% and the number of farms declined by more than 20%. This has occurred in a period when,

worldwide, aquaculture is growing at an average rate of over 8% and now supplies nearly half of the seafood consumed globally (FAO 2018). This also at a time when the United States, importing more than 80% of its seafood, is reporting a seafood deficit of more than \$14 B. Oregon has the smallest private aquaculture program among its neighbors in spite of available natural resources, good infrastructure, welcoming markets, and relatively cheap energy costs.



The Project

It is in this context, backed by policies to reduce the seafood deficit while supplying high quality sustainable crops to the citizenry, that the state of Oregon, through the support of Business Oregon, has embarked on the

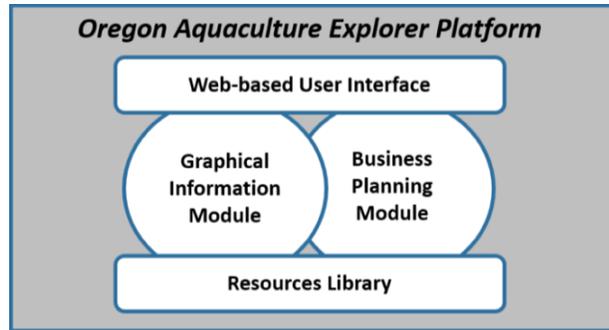


present project. This venture is based on the thesis that the state lacks a source of vetted, Oregon-specific, easily-accessible, and user-friendly information for entrepreneurs, investors, researchers, food processors, and regulators that can support investment decisions, site selection, production planning and operations. This project will develop a novel, open-access knowledge management and decision support system called the *Oregon Aquaculture Explorer Platform*. This integrated instrument will serve as a business planning model to guide and stimulate investment in aquaculture in Oregon. This project will also use the platform to develop case studies that examine the feasibility of developing an aquaculture cluster to stimulate economic development. The project represents a collaboration between the Oregon Aquaculture Association, the

Confederated Tribes of Siletz Indians, VertueLab, Institute for Natural Resources, OSU Libraries & Press, Oregon Sea Grant, OSU Coastal Oregon Marine Experiment Station, and Pacific Seafood.

The project will have two deliverables:

(1) Oregon Aquaculture Explorer Platform, and
(2) Prototype Case Studies. This proposal is supported by and tied to Oregon's existing industry clusters related to commercial fishing, oyster farming, sport fishing, and agriculture. It leverages extensive research assets and programs at OSU. It can lead to broad-based (rural/urban, many income levels, technical/non-technical) job creation and catalyze the growth of a high potential cluster of companies within the Natural Resources sector.



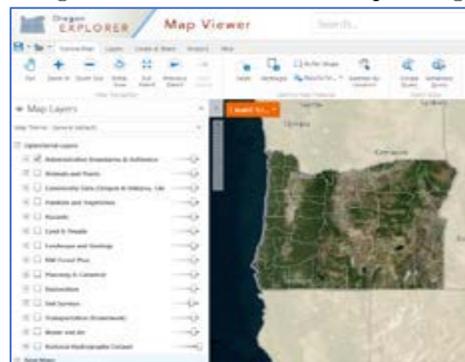
The Work

The project, active through the end of 2020, is implemented under the aegis of the Oregon Aquaculture Association (OAA). The project implementation team is comprised of a group of skilled and experienced

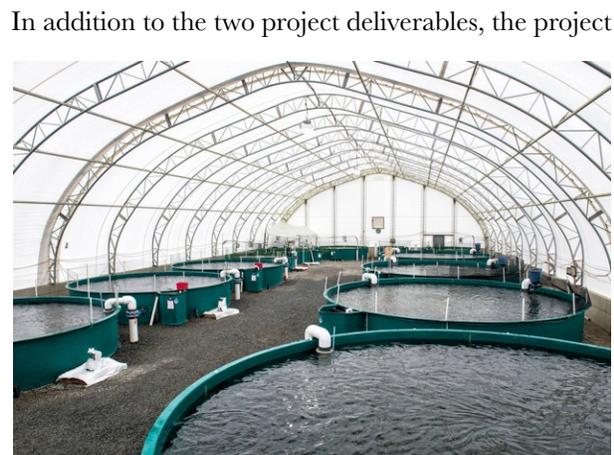


professionals representing the public and private sectors—this team working in close liaison with local, state, and federal agencies, civil society organizations, as well as individual stakeholders. The team and its partners will develop a toolbox of on-line financial and spatial planning instruments that will guide investors—whether expanding existing operations or starting new small-, medium-, or large-scale commercial ventures

using environmentally sound production methods. In addition to OAA, the state's primary aquaculture industry organization, the project interacts with a wide spectrum of practitioners and would-be practitioners including having links with the regional Northwest Aquaculture Alliance and the Oregon Aquaculture Network. The project team, furthermore, engages aquaculture and related specialists across the United States to benefit from earlier efforts while building a *de facto* web of expertise, resources, and references. Through these interactions, the team is mining available information and data, building tools sets, and expanding interconnectivity.



The Results



In addition to the two project deliverables, the project expects to establish a strong, knowledge-based foundation upon which to build an expanded, bankable, and diversified state aqua farming program. Through this process, aims are to produce additional synergistic outputs including, but not limited to, bolstering social license and political will, identifying key sites suitable for aquaculture investment, strengthening intra- and interstate coordination, and taking initial steps toward meaningful aquaculture outreach in conjunction with a newly active extension service, while assisting core agencies in streamlining their actions while using the project-derived tools to the advantage of operators and the population as a whole. Through this mixture of actions and facilitation, it is anticipated that Oregon will be able to develop a 21st

Century program that will be an asset to the state, its citizens, as well as seafood consumers.

For more information, please contact megan@oregonaquaculture.org