Regional Solutions Project Proposal

September, 2013

Project: Investigating Aquaculture's Potential

Proposed by: Oregon Department of Agriculture and others

Requested funds: $66,500

1. Brief description of the project including benefits derived from accomplishing the project.

Globally, aquaculture puts more fishery food products on local markets than capture fisheries. As native fish populations decline, there are more mouths to feed, and aquaculture is expected to increase its significance for our food supply. However, although Oregon has noteworthy aquatic resources, the State has a very modest aqua cultural industry encompassing 21 licensed oyster farmers along with 23 licensed freshwater operators. Compared to neighbouring states, Oregon aquaculture sector is negligible. Washington's shellfish industry is 30 times larger than Oregon's and Idaho's trout industry produces 300 times more revenues than Oregon's. This difference can be attributed to very low levels of investment caused by what is seen by many would-be investors as unsuitable institutional, financial and biological environments for farm-raised aquatic products. Yet, significant technological advances have been made in recent years and it is highly likely there are aqua cultural systems that fit well within Oregon's physical, regulatory, and social environments. Now is the time to assess these systems and determine the best match for Oregon's conditions and requirements; stimulating investment in these selected systems, reaping anticipated gains in food production, employment and income generation. This project calls for hiring a consultant to prepare a "white paper" to evaluate the situation and propose a path forward.

The project should result in a significantly expanded state-wide aquaculture industry including several new ventures producing at least 5,000 tons annually. The benefits derived from this project include: streamlining to permitting process, revitalizing this industry by improving productivity, expanding water and land use capacity, generating new employment opportunities, expanding technical assistance capacity, increased presence of Oregon farm-raised aquatic products on local and external markets, and greater investment in Oregon agriculture. The outputs that relates to these outcomes are; a one-stop-shop for investors, state aquaculture plan to guide sustainable growth, proactive producer' association, and capacity development programs.

2. Does the project comply with the goal of becoming a center for agribusiness innovation?

Aquaculture is agriculture. Viable aquaculture investments are aqua-businesses. Given the current level of minimal investment in the State's aquaculture industry, the project effectively constitutes re-introducing aqua-businesses to the State based on the best available scientific information to insure future investments are bankable. Innovation is a key ingredient of this project.

3. What would happen if the project was not accomplished?

The *status quo* will be maintained: a minimalistic State aquaculture program that provides neither optimum returns for the investment of public or private funds.

4. *Does the project have strong community and agency support? Who are the responsible parties? Who are the partners that need to be involved*?
The project has strong supported from the ODA, OSU and entrepreneurs ready to take advantage of the benefits provided for the information generated by this work. The Director of Agriculture is prepared to appoint an ad-hoc working group and the following organizations have agreed to participate: ODF&W, DEQ, DLDC and OBD. Potential partners also include; Oregon Aquaculture Association (OAA), USDA Rural Development, Ecotrust, Coastal Oregon Marine Experiment Station (COMES), and Pacific Coast Shellfish Growers Association (PCSGA). Community colleges may also be asked to participate in terms of establishing a training program to facilitate finfish production.

5. *List identified or potential funding sources needed to carry out the project. What is the rough cost estimate to complete the project? Are there operating or maintenance costs associated with the project*?
The Regional Solutions Program is seen as a principal partner; evaluating investment options and stimulating the development of the aquaculture sub-sector. Complementary resources could come from private banks, USDA Rural Development, Oregon Business Department and various local economic development funding sources may play a role. Phase I ($66,500) of the project includes assessing the status quo as well as opportunities for introducing new aqua culture systems, establishing an aquaculture advisory group, and developing/expanding partnerships. Total project costs are estimated to be as much as $285,000 if the initial phase suggests moving forward with program development.

6. *Is the project characterized as short or long term? List approximate time frame for implementation*.
The initial phase of this project is expected to take from 9-12 months. Phase II would require a minimum of 15-18 months while Phase II would be on-going. It should be noted that several would-be fish farmers are anxious to start and will likely proceed with or without the guidance foreseen through the project. This could lead to some miscalculations and missteps, thus there are some concerns indicating the project's implementation would be advantageous.

7. *Outside of permits and funding requirements, list any impediments/obstacles to accomplishing the project. List possible solutions to these obstacles*.
Political support is crucial. Oregon, as represented by her politicians, must want to invest in an aquaculture industry. This political will is of the utmost importance. Aquaculture may well suffer from a negative image in Oregon. Worldwide and across the Nation, there have been highly publicized cases of irresponsible aqua farming that have led to unfortunate ecological damage and a loss of both natural and financial resources. Nonetheless, the status of the industry worldwide has demonstrated that aqua farming can and should be undertaken in a responsible and profitable way. The information gap is one of being aware of the negatives without appreciating the positives. This is exacerbated in a very environmentally conscious setting such as Oregon where there is weighty political and public pressure to practice real conservation and good long-term stewardship. For some, aquaculture may be seen as a threat to these auspicious goals. However, with appropriate education and outreach, the populous and its leadership will be able to understand the broad scope of aqua cultural systems and methodologies; gaining an understanding that it is possible, if the right steps are taken and the right buffers put in place, to tailor-make profitable units that will have acceptable interactions with their surroundings while generating the hoped-for economic development and increased food supply. It should be noted that elsewhere in the Pacific Northwest [i.e., California, Idaho and Washington] and in states

across the country, aquaculture is a viable investment and productive sub-sector free of undue controversy. By filling the information gap, there is no reason to believe that the situation in Oregon cannot be similar and aquaculture counted among those profitable investments open to its citizenry.

8. *Is the project economically and environmentally sustainable*?

Economic and environmental soundness are key parts of the project throughout its three phases. Phase I aims to assess these and other aspects of aqua cultural development, validating viable businesses can be promoted that are economically and environmentally sustainable. Through the following two phases these matters will be consistently revisited, ultimately incorporating them into the Monitoring and Evaluation program that will be a long-term part of the industry's development.

9. Proposed budget

Phase One

Item	Consultant	OSU	Total
Design survey		$2,500	$2,500
Inventory sector (visits)	$4,000	$4,000	$8,000
Travel (meals & lodging)	$1,000	$1,000	$2,000
White Paper			
Research industry	$7,500	$12,500	$20,000
Analyze 5 species	$6,250	$6,250	$12,500
Draft report	$10,000	$5,000	$15,000
Finalize report	$2,500	$0	$2,500
Administration	$4,000		$4,000
Total	$35,250	$31,250	$66,500

Consultant	$35,250
OSU (Dr. Dave Landkamer)	$10,000
OSU (Dr. Cathy Durham)	$21,250
	$66,500