

2007 SUMMARY OF CONFERENCE PROCEEDINGS

“Oregon’s Ocean: Resources and Opportunities ”

Keynote Address “The Opportunities and Challenges of Marine Aquaculture ”

Dr. Gil Sylvia, Superintendent, Coastal Oregon Marine Experiment Station, Hatfield Marine Science Center

"Aquaculture is a major food industry worldwide and Oregon is a major producer," declared Sylvia. He defined it as the "propagation and rearing of aquatic organisms in controlled or selected environments for any commercial, recreational, or public purpose." Simply stated, it is farming and ranching-it is agriculture.

The history of aquaculture goes back 4,000 years to China and Egypt. Today, it accounts for 40% of all seafood intended for human consumption; by 2020 it is expected to reach 60%, and provide 90% by the end of the century. Today, China is the top producer with 67% of total production, followed in the rankings by India, Thailand, Indonesia, Vietnam, Bangladesh, Japan, Norway, and then the U.S.

Sylvia described some of the benefits as jobs, exports, animal protein, and utilizing existing infrastructure, while listing some of the challenges as pollution, impacts on sensitive marine environments, fish disease, escapes, and competition for space.

In Oregon, while no offshore aquaculture occurs, ranching of estuarine shellfish, and freshwater trout are practiced. Sylvia cites today's economic impact to range from \$500 million to \$1 billion.

At the national level, Sylvia said there is a need to increase domestic seafood production to complement wild harvest. Further, there is the motivation to shrink the \$6-8 billion seafood trade deficit. Accordingly, a bill was submitted to Congress in June 2005, and amended this year, which would authorize offshore aquaculture permits in U.S. waters. It would establish environmental requirements and exempt aquaculture from the legal definition of fishing.

Sylvia concluded by stating that marine aquaculture is a complex challenge and opportunity. Oregonians must face coastal issues such as spatial planning, globalization, industry consolidation, and limits on traditional seafood production. Sylvia said there is no immediate need for action, and recommended a continuation of our research and public policy planning.