#### Challenges and Opportunities for Offshore Aquaculture in the Pacific Northwest

**Summary and Next Steps** 

Forum on Offshore Aquaculture Sept 9/10 2008 at the Hatfield Marine Science Center: http://oregonstate.edu/conferences/aquaculture2008/

# **Background and Motivation**

- Proposed National Offshore Aquaculture Act 2005
  - Enabling legislation for aquaculture in federal marine waters
- Oregon's Response—Legislative Memorial Statement
- National Offshore Aquaculture Act 2007
- Opportunity for Objective and Balanced Discussion

# **Steering Committee**

- Chris Langdon, COMES, OSU
- Ed Backus, Ecotrust
- Michael Banks, CIMRS, OSU
- Peter Becker, Pacific Aquaculture Caucus
- George Boehlert, HMSC Director
- Jeff Feldner, Sea Grant
- Michael Harte, MRM-COAS, OSU
- Onno Husing, OCZMA
- John Meyer, COMPASS, OSU
- Mike Rust, NMFS
- Gil Sylvia, COMES, OSU





#### Forum on Offshore Aquaculture in the Pacific Northwest

September 9-10, 2008 Hatfield Marine Science Center Newport, Oregon

#### Why a forum on offshore aquaculture?

The global population is estimated to increase by about 50% in the next 40-50 years.

Harvests of most commercial fish stocks around the world are at or above sustainable limits.

In the Pacific Northwest, the fishing industry is facing increasing limits on harvests.

If current levels of per-capita fish consumption are to be maintained, aquaculture production will need to substantially increase.

Join us - scientists, community leaders, legislators and others - for an informed discussion of the risks and opportunities for offshore aquaculture in the Pacific Northwest.

For additional information, please visit our website http://oregonstate.edu/conferences/aquaculture2008



nanks to our generous sponsors: National Oceanic & Atmospheric Administration, Gordon and Betty Moore Foundation, Western Regional Aquaculture Center, Compass, Pacific Aquaculture Caucus, Cooperative Institute for Marine Resources Studies Oregon Sea Grant

# Forum Structure-Day 1

- Welcome Chris Langdon, Oregon State University
- Keynote Speaker: *Realizing the vision for open ocean aquaculture* 
  - Richard Langan, U. New Hampshire Open Ocean Aquaculture Project

### Forum Structure-Day 1 (continued) REGULATORY, BUSINESS AND COMMUNITY PERSPECTIVES

- The Federal perspective: NOAA's role in developing U.S. Marine Aquaculture
  - Michael Rubino, Aquaculture Program manager, NOAA
- Offshore aquaculture California perspective
  - Devin Bartley, Aquaculture Coordinator for CA
- Aquaculture industry perspectives
  - John Forster, Forster Consulting
- Fishing industry perspectives
  - **Panel discussion** moderator **Kaety Hildenbrand**, Oregon Sea Grant Extension

# Forum Structure – Day 1 (continued) TECHNICAL AND SCIENTIFIC ISSUES –

- Site and engineering issues

   Cliff Goudey, MIT
- Biological and husbandry issues

   Mike Rust, NWFSC NMFS
- Environmental issues
  - Rebecca Goldburg, Environmental Defense Fund

Forum Structure – Day 1 (continued) BREAK-OUT SESSIONS (concurrent):

- Why the Pacific Northwest?
- Technical and scientific questions
- Potential environmental impacts
- Social needs and values
- The fishing industry and other offshore interests
- Federal and state policies

# Forum Structure – Day 1-2 (continued)

#### Dinner speech:

- Adding value to Aquaculture
  - Michael Morrissey, FIC, OSU

### **SOCIAL AND ECONOMIC ASPECTS**

- Business case study
  - Randy Cates, Cates Intl. Inc.
- Economic opportunities and strategies
  - Jim Anderson, University of Rhode Island, Gil Sylvia, OSU
- WRAP-UP DISCUSSION Break Out Group reports

### Recommendations

- Core values of coastal communities:
  - Proposed development of offshore aquaculture must consider the core values of coastal communities:,
    - a) maintaining the vitality and cultural values of coastal communities,
    - b) conserving marine ecosystems,
    - c) supporting a transparent evaluation process
    - d) ensuring that assets and interests of coastal communities are protected and, where possible, enhanced.
- Scientific, technical and economic research needs: Much known but the unique conditions of the Pacific Northwest indicate that additional research and demonstration projects are needed

#### Recommendations continued

- *Regulatory framework*:
  - Need enabling legislation and regulatory framewrok
  - The regulatory framework should address the permitting process as well as environmental monitoring, salvage responsibilities and socio-economic factors.
- Coordination between state and federal agencies:
   Improved co-ordination between state and federal agencies
- Outreach and education:
  - Inform local coastal communities of potential risks and opportunities.
  - Local coastal communities should be involved in decision-making processes.

#### Recommendations continued

- Resource conflicts:
  - There is potential conflict with currently established coastal industries and interests, especially the fishing industry
  - Development of offshore aquaculture should not compete with established industries but, rather, complement them
  - Zones for aquaculture, fishing, offshore energy facilities and other uses should be created that would facilitate permitting of new enterprises and reduce competition for space.
- Environmental concerns:
  - Protect the marine environment
  - Development of a code of practice and standards

## Highest Priority Next Steps

- <u>Establish an outreach and education program</u> for coastal communities to facilitate informed discussion and support decision-making processes
- <u>Establish demonstration projects</u> to address key engineering, biological, environmental, economic and social factors that will determine the success or failure of commercial offshore aquaculture.

# Logistical Next Steps

- **Post Draft White paper on website**
- Ask for comments by particpants
- <u>Finalize Draft</u>
- <u>Steering committee Reconvenes to Implement</u> recommendations
- <u>Final press release of Report and Proposed Actions</u>

### THANKS

#### **QUESTIONS?**

FORUM ON OFFSHORE AQUACULTURE IN THE PACIFIC NORTHWEST: http://oregonstate.edu/conferences/aquaculture2008/