Pathways Toward Responsible Aquaculture in California

Moss Landing Marine Labs, 8272 Moss Landing Road, Moss Landing CA 95039

Day 1: Friday August 10th, 8:30 am - 5:30 pm

| | 7:30 - 8:30 am: | Registration |
|---|----------------------|--|
| | 8:30 - 8:40 am: | Welcome - California Sea Grant and Moss Landing Marine Labs |
| | 8:40 - 8:50 am: | The Role of Aquaculture in Providing Sustainable Food Security and Prosperity - Wayne Porter (Naval Post Graduate School) |
| | 8:50 - 9:10 am: | <i>Marine Aquaculture - California Style!</i> - Mike Rust (NOAA) |
| | 9:10 - 9:30 am: | California, the Land of Opportunity for Marine Aquaculture? And Why one Person Took the Plunge - Jerry Schubel (Aquarium of the Pacific) and John Molina (Pacific Six) |
| | 9:30 - 9:45 am: | California Aquaculture, Where are We and How did We Get Here? - Tony Vaught (California Aquaculture Association) |
| | 9:45 - 11:15 am: | Potential Economic Impacts of Aquaculture to California |
| | 9:45 - 10:00 am: | Aquaculture, Biomarine and the California Blue Economy - Michael Jones (The Maritime Alliance) |
| | 10:00 - 10:15 am: | <i>Current and Future Economic Trends of Aquaculture</i> - Shaun Richards (The Center for the Blue Economy at the Middlebury Institute of International Studies) |
| | 10:15 - 10:30 am: | Aquaculture in California: A Need, An Opportunity, A Leader - Mike King (Kings Seafood) |
| | 10:30 - 10:45: am | Economic Considerations for Offshore Mussel Aquaculture from a Port District Perspective - Doug Bush (Ventura Shellfish Enterprise) |
| | 10:45 - 11:00 am: | Marine Finfish Farming in Southern California - From R&D to Commercial Reality? - Mark Drawbridge and Don Kent (Hubbs Seaworld Research Institute) |
| | 11:00 - 11:15 am: | Aquaculture and Blue Economy Initiatives at the Port of San Diego - Paula Sylvia (Port of San Diego, Aquaculture and Blue Tech) |
| | 11:15 - 11:30 am: | Break |
| | 11:30 - 11:45 am: | Perspective of the California Natural Resources Agency for the Future of Aquaculture in the State - John Laird (California Secretary of Natural Resources) |
| | 11:45 am - 12:45 pm: | Case Studies of Aquaculture Activities in or with Relevance to California |
| | 11:45 am - 12:00 pm: | Good Things Grow Slowly - Terry Sawyer (Hog Island Oyster Company) |
| | 12:00 - 12:15 pm: | Aquaculture in the Northwest Atlantic - Challenges and Sustainable Solutions - Simona Augyte (University of Connecticut) |
| | 12:15 - 12:30 pm: | <i>Mariculture Development off Baja California, Mexico - José A. Zertuche-Gonzáles (Universidad Autónoma de Baja California)</i> |
| / | 12:30 - 12:45 pm: | Aquaculture Trends in Chile and an Analysis of some Sustainability Issues - Alejandro Buschmann (Universidad de Los Lagos) |
| - | 12:45 - 1:45 pm: | Catered Lunch |

Our ne labor

| 1:45 - 2:45 pm: | Case Studies of Aquaculture Activities in or with Relevance to California | |
|------------------|---|-----------------|
| 1:45 - 2:00 pm: | Promises and Pitfalls of Emerging Technological Innovations in the Aquaculture Sector - Dane Klinger (Conservation International) | |
| 2:00 - 2:15 pm: | The Role of Seafood Watch in Improving the Sustainability of Global Aquaculture - Lisa Tucker (Monterey Bay Aquarium Seafood Watch) | |
| 2:15 - 2:30 pm: | Offshore Aquaculture - Fast Forward to the Future - Neil Sims (Kampachi Worldwide Holdings) | |
| 2:30 - 2:45 pm: | Feedkind Protein: California-based Feed Ingredient to Support Sustainable Aquaculture - Josh Silverman (Calysta) | |
| 2:45 - 3:35 pm: | Social and Environmental Considerations - Concerns and Proactive Responses | |
| 2:45 - 3:00 pm: | Resolving Controversial Issues in Marine Finfish Aquaculture - Paul Olin (California Sea Grant) | |
| 3:00 - 3:15 pm: | Value and Confidence Across the Chain: How Third-party Certification can Deliver Transparency and Build Public Trust - Contessa Kellogg-Winters (Aquaculture Stewardship Council) | |
| 3:15 - 3:30 pm: | A Guide to Collaborative Efforts to Address Public Misperceptions about Marine Aquaculture - Kim Thompson (Aquarium of the Pacific) | |
| 3:35 - 3:45 pm: | Break | |
| 3:45 - 4:35 pm: | Social and Environmental Considerations - Concerns and Proactive Responses | |
| 3:45 - 3:57 pm: | Addressing Potential Interactions Between Protected Species and Aquaculture Gear - Diane Windham (NOAA Fisheries) | |
| 3:57 - 4:09 pm: | | |
| 4:09 - 4:21 pm: | Inclusive Opportunities for Aquaculture: Working Closely with Coastal Communities to Create Aquaculture Opportunities that Empower Fishermen, Improve Ecological Health, and Reinforce the Local Food System - Alan Lovewell (Local Bounty/Real Good Fish) | |
| 4:21 - 4:33: pm: | The Essential Bond Between Fishing and Farming - William Foss and Kenny Belov (Two by Sea) | |
| 4:35 - 5:20 pm: | Regulatory Landscape of Aquaculture in California and Beyond | |
| 4:35 - 4:50 pm: | Caught in the Framework: Identifying the Hits and Misses of State Aquaculture Regulation - Randy Lovell (California Department of Fish and Wildlife) | |
| 4:50 - 5:05 pm: | A Compressed History of the Virginia Oyster Industry from 1895-2018. What has Changed, What has not, and What Should - Andrew Button (Virginia Marine Resources Commission) | |
| 5:05 - 5:20 pm: | The California Experience - John Finger (Hog Island Oyster Company) | |
| 5:20 - 5:30 pm: | Closing Remarks - California Assemblymember Mark Stone | |
| 5:30 - 7:30 pm: | Social Event - Sustainable Seafood Showcase - Featuring chefs Matthew Beaudin and Adam young (Monterey Bay Aquarium), James Anderson (The Poke Lab), and Hog Island Oyster Bar | All and another |

Special Thanks to All of Our Partners!













Pathways Toward Responsible Aquaculture in California

Moss Landing Marine Labs, 8272 Moss Landing Road, Moss Landing CA 95039

Day 2: Saturday August 11th, 9 am - 4:30 pm

| | 9:00 am - 12 pm: | Exploring the Potential for Responsible Aquaculture in the Monterey Bay National Marine Sanctuary |
|----------------|----------------------|--|
| | 9:00 - 9:15 am: | Summary of Day 1 and Introduction to Monterey Bay National Marine Sanctuary Session - Katherine O'Dea (Save our Shores) and Mike Graham (Monterey Bay Seaweeds) |
| R | 9:15 - 9:30 am: | Perspective of Monterey Bay National Marine Sanctuary on aquaculture - Paul Michel (Monterey Bay National Marine Sanctuary) |
| | 9:30 - 9:45 am: | State Regulatory Perspective and How it Interacts with the Sanctuary - Randy Lovell (California Department of Fish and Wildlife) |
| M | 9:45 - 10:00 am: | Mariculture and Conservation - Mark Silberstein (Elkhorn Slough Foundation) |
| <u>(</u>) | 10:00 - 10:15 am: | Break |
| | 10:15 - 10:45 am: | Current Aquaculture Operators in the Monterey Bay National Marine Sanctuary |
| Å | 10:15 - 10:30 am: | Monterey Abalone Company - Art Seavey |
| J. Contraction | 10:30 - 10:45 am: | <i>Monterey Bay Seaweeds</i> -Mike Graham |
| | 10:45 - 11:45 am: | Potential for Restorative Aquaculture in the Sanctuary to Mitigate Environmental Issues |
| 6 | 10:45 - 11:00 am: | Cohabitation - Aquaculture Partnerships - Tony Vaught (California Aquaculture Association) |
| Ş | 11:00 - 11:15 am: | Aquaculture as a Tool for Restoring Native Oyster and Understanding Lost Species Interactions - Brent Hughes (University of Washington) |
| - | 11:15 - 11:30 am: | New Technologies for Turning Aquaculture Waste into Biofuel and Fertilizer - Mike Cox (Anaerobe Systems) |
| | 11:30 - 11:45 am: | Aquaculture in Partnership with Terrestrial Farmers - Ross Clark (Central Coast Wetlands Group) |
| | 11:45 am - 12:00 pm: | Can the Sanctuary Become a Global Model for Integrating Aquaculture- Agriculture to Secure Food, Water, and Energy? - Mike Graham (Monterey Bay Seaweeds) |

| | | 0000 |
|-------------------|--|----------|
| 12:00 - 12:05 pm: | LIFT Economy and Sustainable Design Masterclass - Emergent Restorative Seaweed and Shellfish Economies in California | |
| 12:05 - 1:00 pm: | Lunch (HOG Island Oyster Bar, Salt Point Seaweeds Seaweed Salad, Box Lunches) | |
| 1:00 - 2:30 pm: | Panel Discussion: What is Happening in California Now and What is the Restorative Potential for Current Ocean Initiatives in California? | V |
| | - Moderator: Erin Axelrod (LIFT Economy) | |
| | - Leslie Booher and Torre Pollizi (Sunken Seaweeds) | <u> </u> |
| | - Scotty Schmidt (Primary Ocean Producers) | |
| | - Dr. Jose Zertuche (Blue Evolution) | |
| | - Lindsay Cruver (Catalina Sea Ranch) | |
| 2:30 - 2:45 pm: | Break and Networking Opportunity | |
| 2:45 - 4:00 pm: | Panel Discussion: What are the Next Steps Towards Establishing Additional Restorative Ocean Farms and Businesses in California? | |
| | - Moderator: Michael Murphy (PharmerSea and Eco-EconFuture) | |
| | - Severino Gomes (Kashia Band of Pomo Indians) | M |
| | - Karen Gray (Greenwave) | |
| | - Renee Angwin (San Diego State University) | |
| 4:00 - 4:30 pm: | Closing Conversation and Next Steps | CA.V |
| | - Erin Axelrod (LIFT Economy) | |

- Michael Murphy (PharmerSea and Eco-EconFuture)

Special Thanks to All of Our Partners!











