## 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

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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!**













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### 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)

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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)

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