



**NOAA  
FISHERIES**

# Draft Marine Aquaculture Strategic Plan

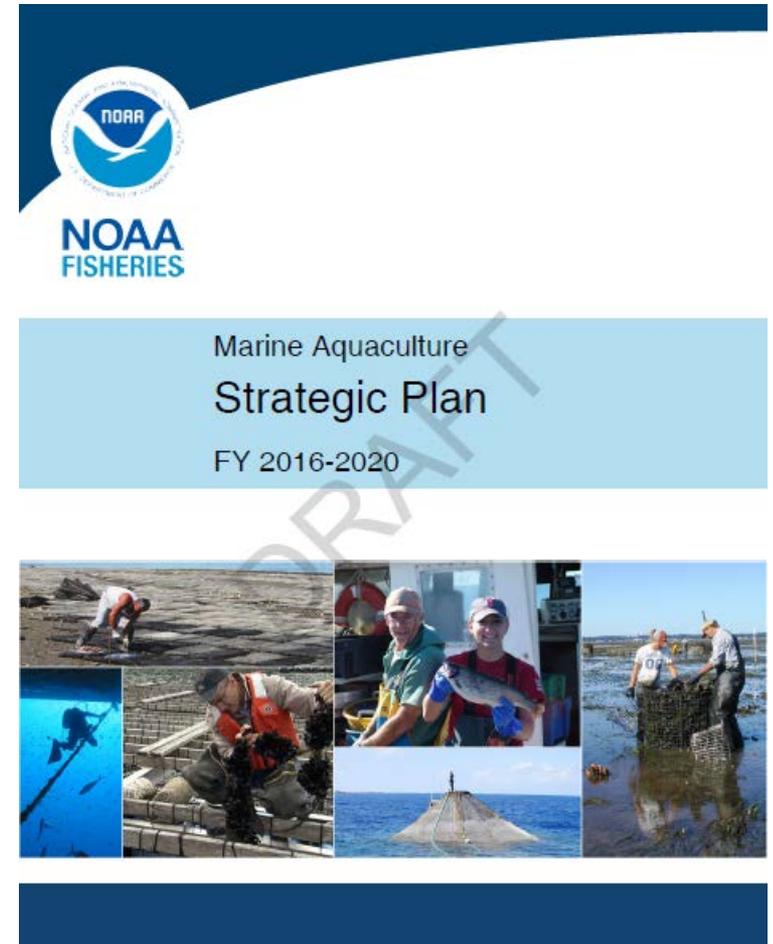


*Marine Fisheries Advisory Committee  
October, 2015; Silver Spring, MD*

*Dr. Michael Rubino  
Director  
Office of Aquaculture*

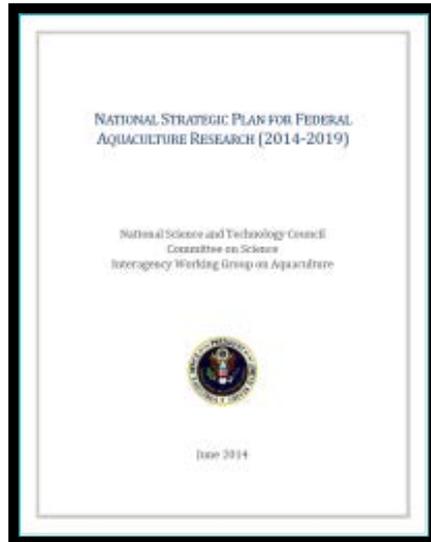
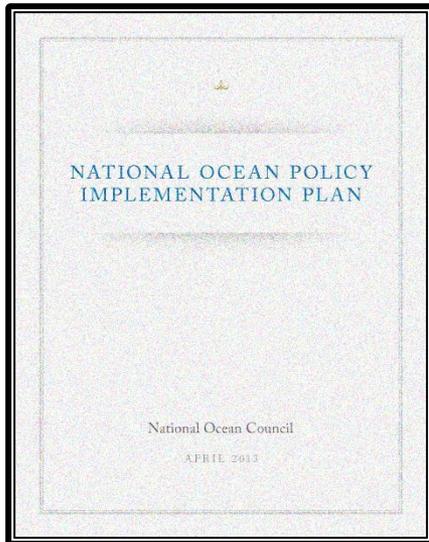
# Draft Marine Aquaculture Strategic Plan:

- Open for public comment for 30 days ending October 22
- The draft included input from NOAA staff, MAFAC Aquaculture Task force and stakeholder priorities



# Drivers

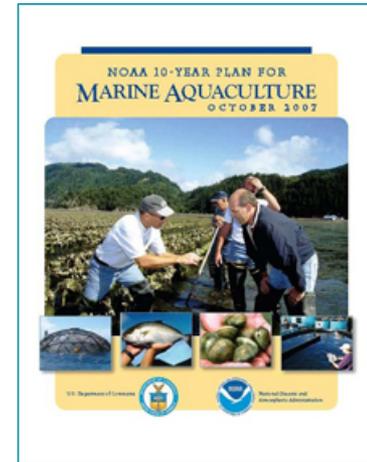
- National Aquaculture Act (1980)
- NOAA Aquaculture Policy (2011)



*NOTE: 10-Year Plan was prepared at MAFAC's request , and MAFAC commented on most of the other policies and plans listed here.*

*"It is, therefore, in the national interest, and it is the national policy, to encourage the development of aquaculture in the United States."*

-- National Aquaculture Act



- DOC Aquaculture Policy (2011)
- National Ocean Policy Implementation Plan (2013)
- National Strategic Plan for Federal Aquaculture Research (2014)
- DOC/NOAA/NMFS Priorities

# Constraints to Marine Aquaculture:

Social license

High coastal  
land values

High costs of  
recirculating  
systems

Complicated  
costly  
regulatory  
process

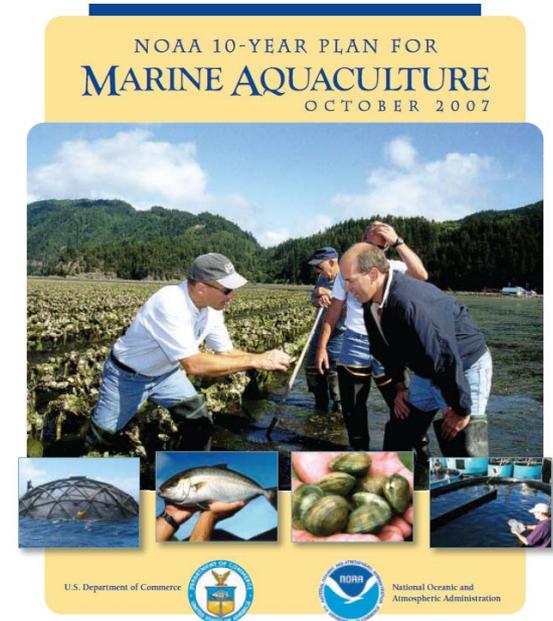


Traditional  
agency  
mandates

No regulatory  
framework for  
federal waters

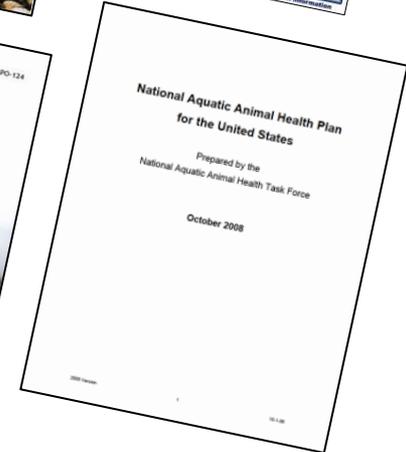
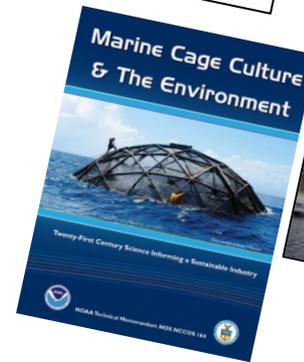
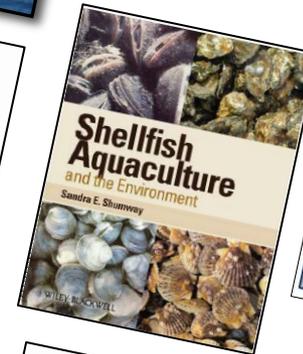
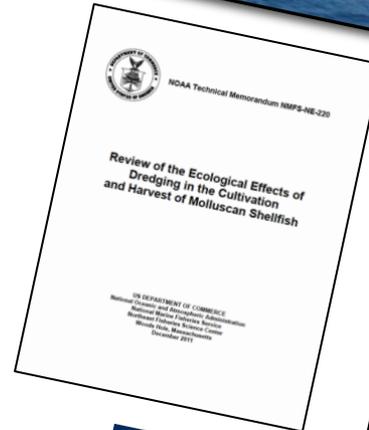
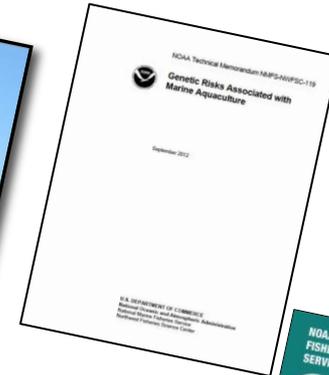
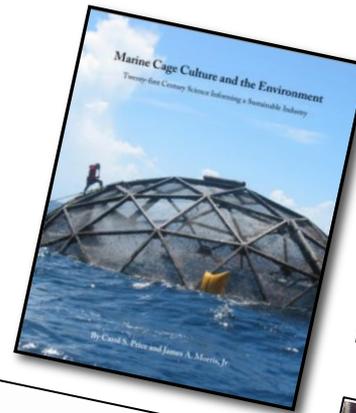
# NOAA Progress in Implementing 10 Year Plan for Marine Aquaculture (2007):

- Improved regulatory efficiency: new permits, Gulf Rule
- Science tools for rules
- Institutionalized aquaculture activities within NOAA
- Technology Transfer



# Examples of NOAA's Science Products Serving Industry Needs:

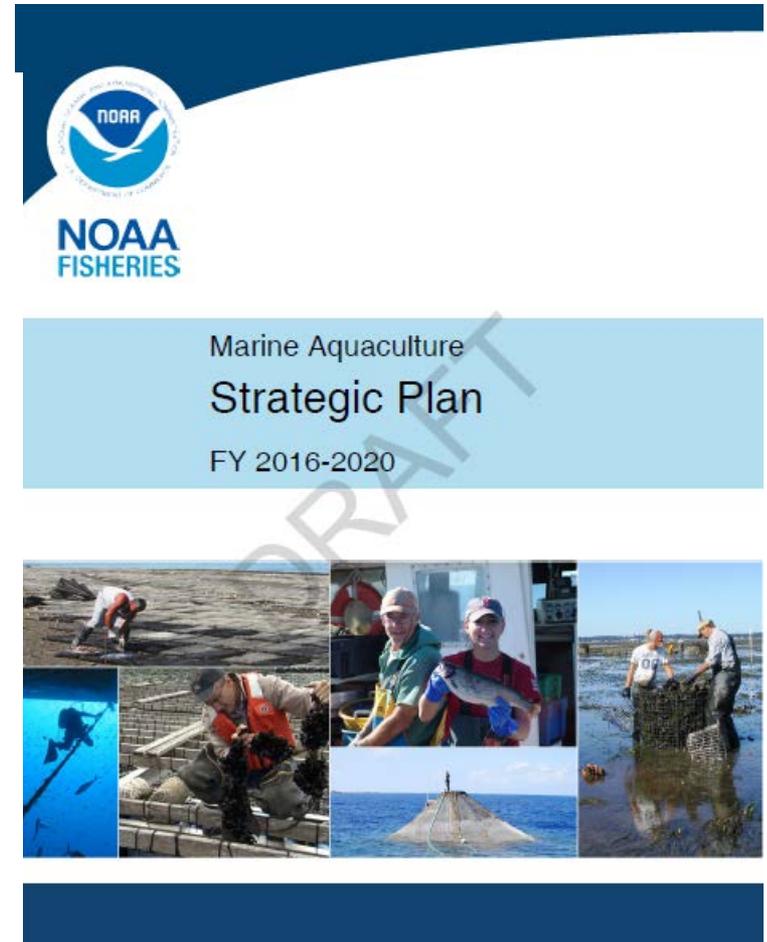
- Genetics/escapes model
- Benthic and water column effects
- Best Management Practices Environmental Monitoring and Modeling
- National Aquatic Animal Health Plan
- Alternative feeds



# Draft Marine Aquaculture Strategic Plan:

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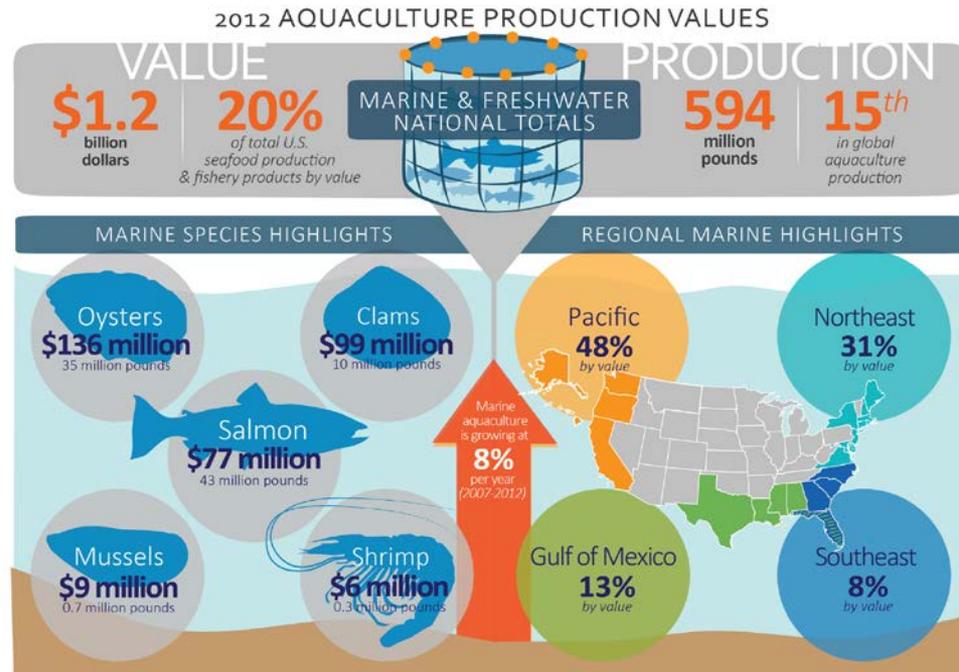


# Vision and Mission:

- Vision: A robust U.S. marine aquaculture sector that creates jobs, provides sustainable
- Mission: To provide science, services, and policies to support significant growth of responsible U.S. marine aquaculture

# Evaluating Our Impact

- Establishes target to increase responsible U.S. marine aquaculture production by 50 percent by the year 2020



# Goals:

## Goal 1: Regulatory Efficiency

- Develop coordinated, consistent, and efficient regulatory processes for the marine aquaculture sector

## Goal 2: Tools for Management

- Encourage marine aquaculture using best available science

## Goal 3: Technology Development and Transfer

- Develop technologies and provide extension services for the marine aquaculture sector

## Goal 4: Informed Public

- Improve public understanding of marine aquaculture

# Cross-cutting Strategies:

- Strengthen Partnerships
- Improve external communications
- Build internal support for marine aquaculture
- Sound program management

# Deliverables

Organization	Deliverables	FY 16	FY 17	FY 18	FY 19	FY 20
Headquarters	Finalize a Memorandum of Understanding among federal agencies for aquaculture permitting in federal waters of the Gulf of Mexico (Goal 1)	✓				
	Complete Aquaculture Science Review and develop and implement Aquaculture Science Strategic Plan (Goals 2, 3)	✓	✓			
	Expand external funding opportunities for aquaculture including Saltonstall-Kennedy, SBIR, Sea Grant competitions and public-private partnerships (Goals 2, 3)	✓	✓	✓	✓	✓
	Improve aquaculture online resources particularly science webpages (Goals 1, 2, 3, 4)	✓	✓			
	Complete an economic impact analysis for marine aquaculture and improve the accuracy of annual aquaculture production statistics (Goal 3)	✓	✓	✓	✓	✓
All Regions	Assist with grants management, including Saltonstall-Kennedy (Goal 2, 3)	✓	✓	✓	✓	✓
	Collaborate with Protected Resources and Habitat Conservation programs to complete Endangered Species Act/Essential Fish Habitat consultations on Army Corps of Engineers permits, as appropriate (Goal 1)	✓	✓	✓	✓	✓
	Improve reporting of regional aquaculture production statistics (Goal 3)	✓	✓	✓	✓	✓
Greater Atlantic Regional Office	Work with state and federal partners to identify and implement ways to improve the permit processes for aquaculture, particularly for shellfish aquaculture (Goal 1)	✓	✓	✓	✓	✓
	Conduct a review of mixed aquaculture and protected resource interactions (Goal 1)	✓	✓			
Southeast Regional Office	In coordination with federal agencies, develop a regional permit review process and issue the first permits for aquaculture in federal waters of the Gulf of Mexico (Goal 1)	✓	✓			
	Support the development of off-bottom shellfish aquaculture in the Gulf of Mexico (Goals 1, 3)	✓	✓	✓	✓	✓
West Coast Regional Office	Complete NOAA actions identified under the Washington, California, and Oregon Shellfish Initiatives (Goals 1, 2, 3, 4)	✓	✓	✓		
	Work with state agencies and local governments in Washington to improve aquaculture guidance for updates of Shoreline Master Programs (Goal 1)	✓	✓			
	Work with state and federal partners to ensure timely and efficient permitting decisions for proposed offshore aquaculture projects in the region (Goal 1)	✓	✓	✓	✓	✓

# Current activities of MAFAC Aquaculture Task Force

- Review progress on NOAA's 10 year plan and input into New Strategic Plan
- Mock Permit Process for Gulf of Mexico Fishery Management Plan for Aquaculture



# Examples of MAFAC's Past Actions on Aquaculture:

- Recommended drafting of NOAA's 10-Year Plan for Marine Aquaculture (issued by NOAA in 2007)
- Recommended creation of an office of aquaculture within NMFS and increasing budgetary resources for aquaculture
- Featured aquaculture in MAFAC's 2020 vision report
- Commented on the NOAA and DOC aquaculture policies (issued by NOAA and DOC in 2011)
- Commented on the National Strategic Plan for Federal Aquaculture Research (issued by White House Office of Science and Technology Policy in 2014)



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# THANK YOU!



PHOTO: EPA