

**NOAA  
FISHERIES**

# Marine Aquaculture and Fishery Management Councils



**Council Member Training  
October 29, 2015 – Silver Spring, MD**

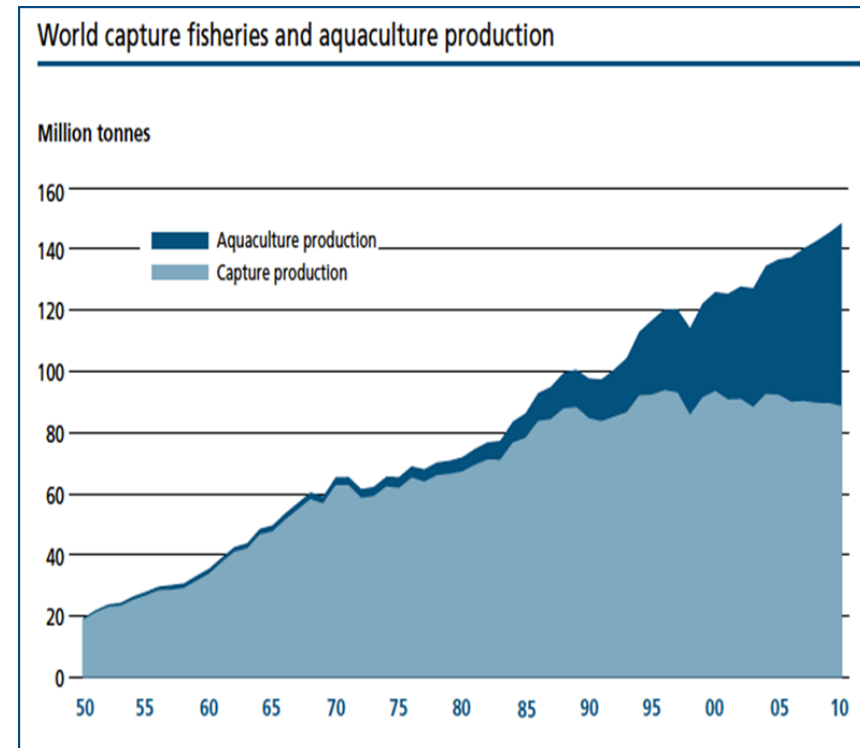
David O'Brien  
Deputy Director  
Office of Aquaculture

# Presentation Overview

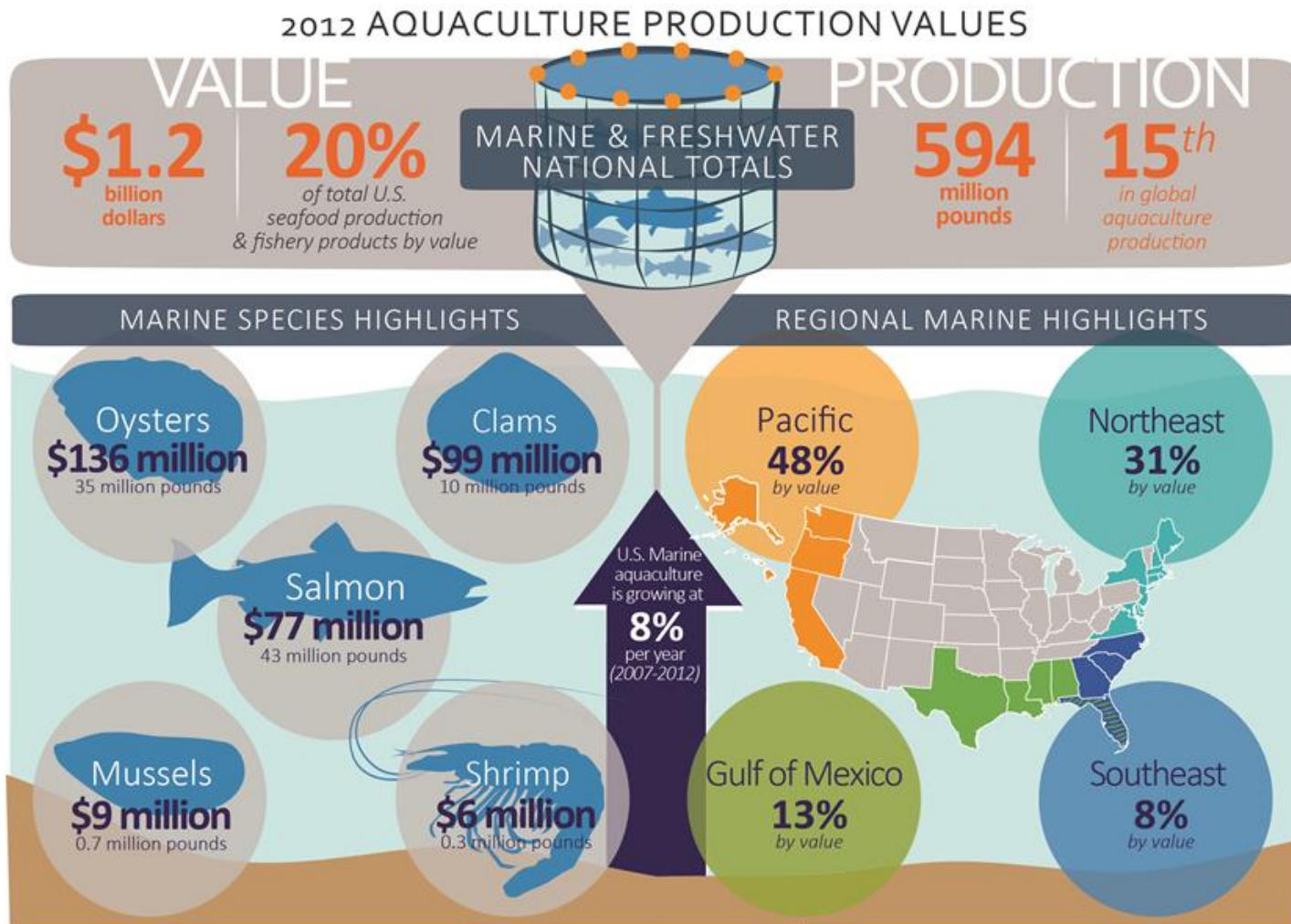
- The importance of aquaculture and NOAA Aquaculture Program Overview
- Role of Fishery Management Councils with respect to aquaculture in federal waters
- Examples
  - Gulf of Mexico Council – Regional Fishery Management Plan for Aquaculture
  - Western Pacific Council Amendments

# Aquaculture is critical to future seafood supply

- All future increases in seafood production must come from aquaculture
- Aquaculture is the fastest growing form of food production, globally at 6% per year.
- The United States imports 90% of it's seafood, a threat to U.S. food security

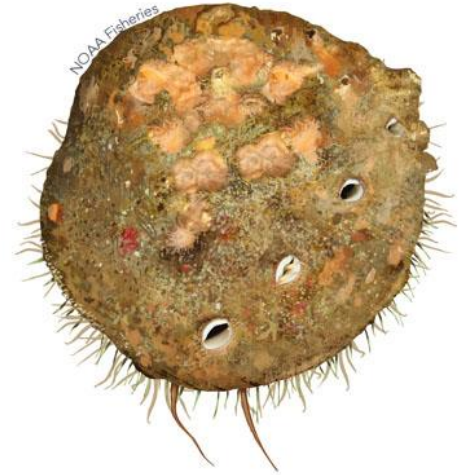


# Aquaculture creates jobs and supports coastal communities



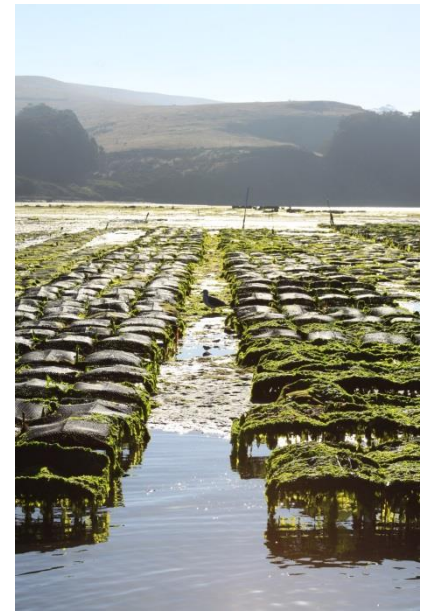
# Aquaculture is a tool for rebuilding species

- Aquaculture is a rebuilding strategy for 3 of 8 NOAA priority endangered species
  - White Abalone
  - Pacific Salmon (central CA Coho)
  - Atlantic Salmon
- Large scale oyster restoration in Chesapeake Bay and elsewhere
- Stock enhancement- Pacific salmon





# Examples: Shellfish Aquaculture





# Offshore Aquaculture:



# Constraints to Marine Aquaculture:

Social license

High coastal  
land values

High costs of  
recirculating  
systems

Complicated  
costly  
regulatory  
process



No regulatory  
framework for  
federal waters



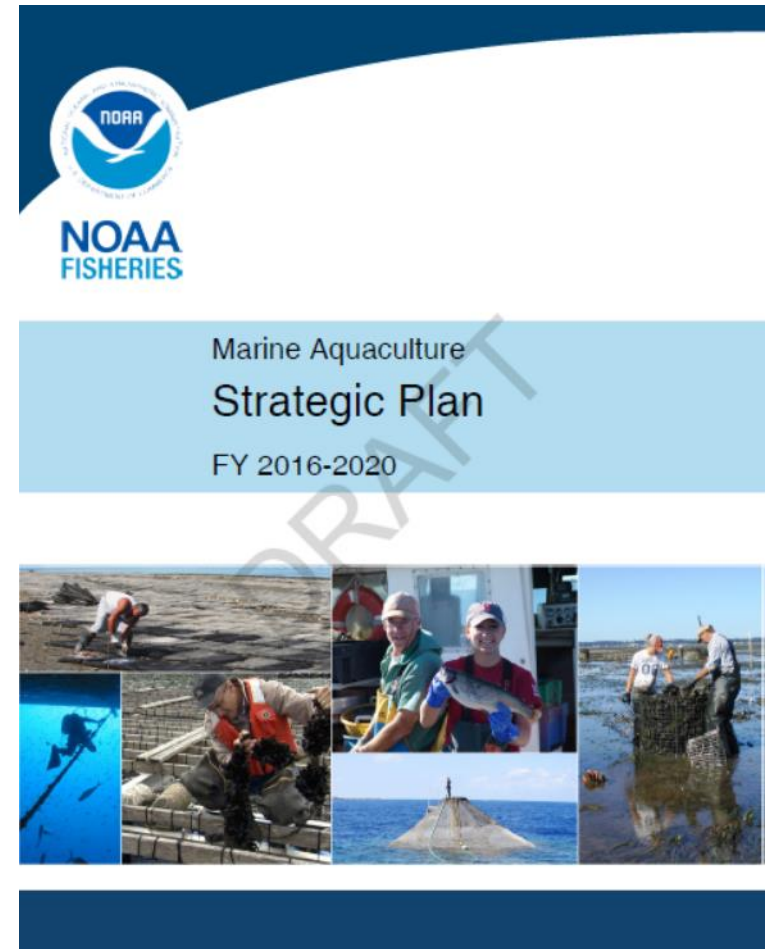
# NOAA's Aquaculture Program

Mission: A robust U.S. marine aquaculture sector that creates jobs, provides sustainable seafood and supports healthy oceans

Vision: To provide science, services, and policies to support significant growth of responsible U.S. marine aquaculture

Goals:

- Regulatory Efficiency
- Tools for Management
- Technology Development and Transfer
- Informed Public



# Federal Regulatory Authorities

- Magnuson-Stevens Act
- Endangered Species Act
- Marine Mammal Protection Act
- Coastal Zone Management Act
- National Marine Sanctuaries Act
- Rivers and Harbors Act
- Clean Water Act
- National Environmental Policy Act
- National Historic Preservation Act
- Fish and Wildlife Coordination Act

For more information, see Regulatory Fact Sheets at  
[http://www.nmfs.noaa.gov/aquaculture/policy/24\\_regulating\\_aquaculture.html](http://www.nmfs.noaa.gov/aquaculture/policy/24_regulating_aquaculture.html)

# Magnuson Authority to Regulate Aquaculture in Federal Waters

The term "fishing" means—

- (A) the catching, taking, or harvesting of fish;
- (B) the attempted catching, taking, or harvesting of fish;
- (C) any other activity which can reasonably be expected to result in the catching, taking, or harvesting of fish; or
- (D) any operations at sea in support of, or in preparation for, any activity described in subparagraphs (A) through (C).

Such term does not include any scientific research activity which is conducted by a scientific research vessel.

NOTE: Authority with respect to aquaculture challenged in court but upheld to date.

# Role of Councils

- Options councils have pursued under Magnuson Act:
  - Develop new, aquaculture-specific fishery management plans (FMPs)
  - Amend existing FMPs to include aquaculture
  - Ad hoc review of applications for NMFS exempted fishing permits or other type of exemption from fishery management plan
  - Councils may also comment on permits issued by other federal agencies (e.g., Corps permit for mussel farm in New England, which does not require a permit from NMFS)



# Example: Direct Council Role in Gulf of Mexico

- Gulf Council received several requests for Exempted Fishing Permits (EFPs) to conduct aquaculture in federal waters.
- EFPs are of limited duration and are not intended for commercial aquaculture production.
- Council developed the Fishery Management Plan for Regulating Offshore Marine Aquaculture in the Gulf of Mexico (Aquaculture FMP)
  - Provides the first regional regulatory framework for commercial aquaculture production in federal waters
  - Council originally worked on a generic amendment to existing FMPs, but decided on a separate FMP specific to aquaculture in the region.

# Implementation of the Aquaculture FMP

- NMFS is currently in the Rulemaking Process; Final Rule under Review by the Office of Management and Budget
- NMFS also working with other federal agencies on a coordinated permitting process for the region

## Benefits

- Enable offshore aquaculture to develop in Gulf
- Provide a model framework for other regions
- Potential to create jobs and revenue for Gulf communities and boost U.S. seafood production



# The Aquaculture FMP and implementing regulations will:

1. Establish an aquaculture permitting process.
2. Establish operational conditions and restrictions.
3. Establish permit duration of 10 years and 5-year renewal periods.
4. Allow the culture of native, non-genetically modified species managed by the Council (except shrimp and corals).
5. Provide guidelines for approval of grow-out systems allowed for culture.
6. Establish criteria for siting marine aquaculture facilities.
7. Create a restricted access zone for each aquaculture facility.
8. Establish numerous recordkeeping, reporting and operational requirements to minimize or mitigate potential environmental impacts.
9. Establish biological reference points and status determination criteria.
10. Specify framework procedures for modifying biological reference points and management measures.

*For details, see <http://www.nmfs.noaa.gov/aquaculture>*

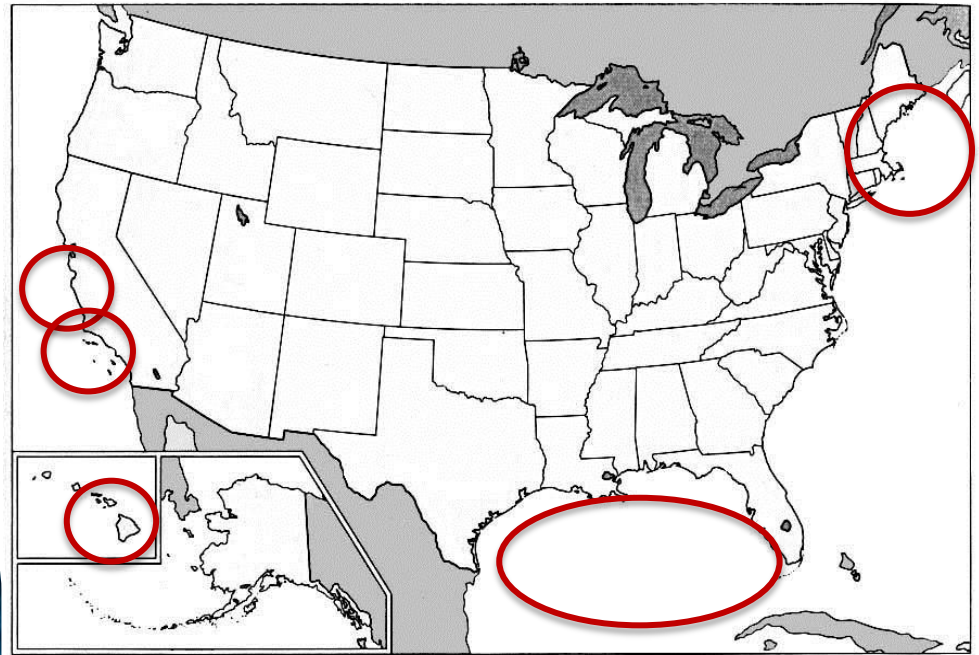


# Example of Ad Hoc and Evolving Approach

- Western Pacific Council
  - NMFS consulted with Council on use of Special Coral Reef Ecosystem Fishing Permits for “Velella Project” application in federal waters off Hawaii
  - Meanwhile, Council is drafting an Omnibus Amendment to its Fishery Ecosystem Plans
  - NMFS NEPA/EIS analysis for potential Western Pacific Council action



# Aquaculture in Federal Waters



## Take-Away Points

- Councils have role to play in aquaculture under Magnuson
- The FMP approach has benefits over ad hoc review:
  - Allows for longer permit duration needed for commercial-scale aquaculture operation to be successful
  - Allows for a more comprehensive, programmatic approach in identifying and addressing region-specific issues (e.g., potential conflicts with commercial or recreational fishing, impacts on wild fish stocks)
  - Provides opportunities for coordination with other federal permitting agencies
- NOAA's Aquaculture Policy (2011) provides guidance for Councils interested in developing FMPs for aquaculture.

# For more information

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## Regional Aquaculture Coordinators

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Office of Aquaculture Web site

[www.nmfs.noaa.gov/aquaculture](http://www.nmfs.noaa.gov/aquaculture)

# THANK YOU!