



History of Offshore Aquaculture in the Gulf of Mexico

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Offshore Aquaculture

Open Ocean Aquaculture is broadly defined as the rearing of marine organisms in exposed areas beyond significant coastal influence – Upton & Buck, 2010

Offshore Aquaculture = Offshore Fish Farming = Open Ocean Aquaculture

- ➔ Federal waters in the Gulf of Mexico (GoM)
- ➔ > 3 nautical miles (LA, MS, AL): > 9 nmi West Coast FL, TX
- ➔ Cages, net-pens, anchored & others

International Status

Research and Commercial Facilities:
Australia, Chile, China, France, Ireland,
Italy, Japan, Panama, Bahamas, Mexico
Vietnam and Norway.



SalMar's Ocean Farm 1 arriving in Norway. Credit: Kystmuseet



A fully assembled A3600 Aquapod. Image: Ocean Farm Technologies

US State/Territorial Waters - 2019

- ➔ Currently no commercial finfish or shellfish aquaculture operations in GoM federal waters (one commercial mussel farm in federal waters off California)
- ➔ Upcoming GoM projects
- ➔ Velella Epsilon (EPA/Corps permit applications submitted)
 - ➔ 1 cage pilot project (moored); ~40 miles SW of Sarasota
 - ➔ Growing out Almaco jack fingerlings for 1 year (~1 year in water)
- ➔ Manna Fish Farms (pre-application phase)
 - ➔ Up to 18 cages; commercial facility
 - ➔ Likely grow red drum (other Gulf finfish species possible)
 - ➔ Federal waters off Pensacola

1980

- ➔ Congress recognizes the importance of domestic aquaculture in meeting future food needs in the U.S.
- ➔ 1980 - National Aquaculture Act
 - “it is in the “national interest and national policy to encourage aquaculture development in the United States”
- ➔ Charged NOAA, through the Dept. of Commerce, to carry out the charge

1980-2007

Development of commercial aquaculture facilities in federal waters is hampered by

- Unclear regulatory process
- Technical uncertainties working in offshore areas
- Potential environmental impacts
- Potential economic impacts
- Potential impacts on existing commercial fisheries
- Lack of experience

2007

April 24, 2007 - H.R. 2010 the “*National Offshore Aquaculture Act of 2007*” was **introduced** to develop a framework to regulate aquaculture in the EEZ, 9-200 miles offshore. Bill **died** in Committee.

June 16, 2007 – S. 1609 the “*National Offshore Aquaculture Act of 2007*” was **introduced** to establish an operating permit process for the development and operation of offshore aquaculture facilities in areas of the U.S. Exclusive Economic Zone (EEZ). Bill **died** in Committee.

2009

Gulf of Mexico Fishery Management Council (GMFMC)

- One of eight US Regional Fishery Management Councils established by the Magnuson-Stevens Fishery Conservation and Management Act
 - Gulf Council manages fishery resources in the federal waters of the GoM (e.g. reef fish, red drum)
 - NOAA's position that aquaculture is fishing under Magnuson-Stevens Act
- January 28, 2009 - Council **approved** a comprehensive plan to permit aquaculture in federal waters of the GoM
 - Fishery Management Plan for Regulating Offshore Marine Aquaculture in the Gulf of Mexico (FMPROMAGOM) or Gulf Aquaculture FMP
 - Provides comprehensive framework for authorizing and regulating offshore aquaculture
 - Establishes approach for evaluating potential impacts
- Entered into effect "by operation of law" on September 3, 2009

2009

- September 4, 2009 – NOAA announced it would develop a new National Aquaculture Policy. That put the Gulf Aquaculture FMP into context
- Fall 2009 several eNGOs and fishing groups sued NOAA on the Gulf Aquaculture FMP (lawsuit later thrown out because “not ripe for adjudication” (i.e., management plan does not = regulations))

2009-2010

- ➔ September 8, 2009 - H.R. 3534 the “*Consolidated Land, Energy and Aquatic Resources Act of 2009*” was **introduced**. Section 704 of the bill would have rescinded the authority of the SOC to develop or approve fishery management plans to permit or regulate offshore aquaculture
 - ➔ July 30, 2010 – H.R. 3534 **passed** by House (offshore aquaculture language was removed)
- ➔ December 16, 2009 – H.R. 4363 the “*National Sustainable Offshore Aquaculture Act of 2009*” was **introduced** to establish a regulatory system for aquaculture in the US EEZ. Bill died in Committee.
- ➔ May 25, 2010 - S. 3417 the “*Research in Aquaculture Opportunity and Responsibility Act*” of 2010 was **introduced** to prohibit OSA until 3 years post impact studies report. Bill died in Committee.

2011-2014

- June 2011 - The U.S. Department of Commerce Aquaculture Policy affirms NOAA's role in fostering marine aquaculture in the US
- June 2011 – NOAA releases of the National Marine Aquaculture Policy and the Agency's intent to move forward with rulemaking for the Gulf Aquaculture FMP.
- August 2014 – Proposed rule published
 - > 1100 public comments received (>90% were form letters/identical comments)
 - 115 responses to comments published in the Final Rule

2016

- ➔ January 2016 – NOAA Fisheries publishes the Final rule implementing the Gulf Aquaculture FMP to become effective February 2016
- ➔ February, 2016 – NOAA Fisheries sued by several eNGOs, led by the Center for Food Safety, and fishing groups

2018

- September 25, 2018 – CFS wins lawsuit
- **Defendants:** National Marine Fisheries Service (NMFS); National Oceanic and Atmospheric Administration (NOAA); Eileen Sobeck, in his official capacity as Assistant Administrator for Fisheries; Dr. Roy Crabtree, in his official capacity as Regional Administrator for NMFS, Southeast Region; Kathryn Sullivan, in his official capacity as Undersecretary of Commerce for Oceans and Atmosphere and Administrator of NOAA; and Penny Pritzker in her official capacity as United States Secretary of Commerce.
- **Plaintiffs:** are Gulf Fishermen’s Association; Gulf Restoration Network; Destin Charter Boat Association; Alabama Charter Fishing Association; Fish For America USA, Inc.; Florida Wildlife Federation; Recirculating Farms Coalition; Food & Water Watch, Inc.; and Center for Food Safety.

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF LOUISIANA

GULF FISHERMENS
ASSOCIATION ET AL.

CIVIL ACTION

VERSUS

NO: 16-1271

NATIONAL MARINE FISHERIES
SERVICE ET AL.

SECTION: “H”(1)

ORDER AND REASONS

Before the Court are Cross Motions for Summary Judgment (Docs. 80, 82). For the following reasons, Plaintiffs’ Motion is GRANTED, and Defendants’ Motion is DENIED.

BACKGROUND

This case is a challenge to administrative action by the National Marine Fisheries Service (NMFS), whereby it adopted a regulatory scheme for offshore aquaculture in the federal waters of the Gulf of Mexico Exclusive Economic

2018

- ➔ June 26, 2018 - Senator Roger Wicker, a Mississippi Republican, **introduced** S.3138 the Advancing the Quality and Understanding of American Aquaculture (AQUAA) Act (S. 3138), a bill that would streamline the permitting process for putting aquaculture farms in federal waters -- 3 to 200 miles offshore -- while also providing funds for research purposes.

2019

- ➔ Current proposed initiatives still moving forward and utilizing NMFS requirements as a guide to good practices(Vella & Manna)
- ➔ NOAA Fisheries has appealed the ruling; lower court ruling still stands while appeal is being considered
- ➔ Offshore Aquaculture projects in the GOM continue under EPA and Army Corps permits

References

DOC, 2011. U.S. Department of Commerce Aquaculture Policy, June 2011, 3p. [file:///C:/Users/lgtiu/Downloads/DOC%20Aquaculture%20Policy%202011%20\(1\).pdf](file:///C:/Users/lgtiu/Downloads/DOC%20Aquaculture%20Policy%202011%20(1).pdf)

Fisheries Management Plan for Regulating Offshore Marine Aquaculture (June 4, 2009) / Federal Register Docket No. 080225276-4124-01 Proposed Rule for Aquaculture & Fisheries of the Caribbean, Gulf, and South Atlantic (August 28, 2014) <https://www.federalregister.gov/d/2016-00147>

GovTrack.us. (2019). S. 1650 — 96th Congress: National Aquaculture Act of 1980. Retrieved 10 July, 2019 from <https://www.govtrack.us/congress/bills/96/s1650>

GovTrack.us. (2019). H.R. 2010 — 110th Congress: National Offshore Aquaculture Act of 2007. Retrieved 10 July, 2019 from <https://www.govtrack.us/congress/bills/110/hr2010>

GovTrack.us. (2019). H.R. 3534 — 111th Congress: Consolidated Land, Energy, and Aquatic Resources Act of 2010. Retrieved 10 July, 2019 from <https://www.govtrack.us/congress/bills/111/hr3534>

GovTrack.us. (2019). H.R. 4363 — 111th Congress: National Sustainable Offshore Aquaculture Act of 2009. Retrieved 10 July, 2019 from <https://www.govtrack.us/congress/bills/111/hr4363>

GovTrack.us. (2019). S. 3417 — 111th Congress: Research in Aquaculture Opportunity and Responsibility Act of 2010. Retrieved from <https://www.govtrack.us/congress/bills/111/s3417>

GovTrack.us. (2019). H.R. 2373 — 112th Congress: National Sustainable Offshore Aquaculture Act of 2011. Retrieved 10 July, 2019 from <https://www.govtrack.us/congress/bills/112/hr2373>

GovTrack.us. (2019). S. 3138 — 115th Congress: AQUAA Act. Retrieved from <https://www.govtrack.us/congress/bills/115/s3138>

Gulf of Mexico Fishery Management Council and National Oceanic and Atmospheric Administration Fishery Management Plan for Regulating Offshore Marine Aquaculture in the Gulf of Mexico (Including a Programmatic Environmental Impact Statement, Regulatory Flexibility Analysis and Regulatory Impact Review) [(accessed on 10 July, 2019)]; Available online: <http://gulfcouncil.org/wp-content/uploads/Aquaculture-FMP-PEIS-Final-02-24-09.pdf>

NOAA MARINE AQUACULTURE POLICY.2011 <https://www.afdf.org/wp-content/uploads/8g-NOAA-Marine-Aquaculture-Policy-2011.pdf>

Upton H.F., Buck E.H. Open Ocean Aquaculture (Congressional Research Service Report for Congress) [(accessed on 10 July, 2019)]. Available online: <https://nationalaglawcenter.org/wp-content/uploads/assets/crs/RL32694.pdf>.