NOAA Fisheries
Aquaculture Opportunity Area Updates
NOAA Aquaculture Program

**NOAA Fisheries**
- fisheries.noaa.gov
  - policy/regulatory
  - aquaculture outreach
  - science for sound aquaculture development

**Sea Grant**
- seagrant.noaa.gov
  - external grants
  - extension and education for coastal and Great Lakes aquaculture

**National Centers for Coastal Ocean Science**
- coastalscience.noaa.gov
  - spatial planning and siting
  - ecosystem services
  - environmental monitoring and modeling
Executive Order on Promoting American Seafood Competitiveness and Economic Growth
Section 7: Aquaculture Opportunity Areas

• The Secretary of Commerce, in consultation with other appropriate Federal officials, appropriate Regional Fishery Management Councils, and in coordination with appropriate State and tribal governments, shall:
  • Within 1 year of date of E.O., identify at least two geographic areas containing locations suitable for commercial aquaculture.
  • Within 2 years of identifying each geographic area, complete a PEIS for each to assess the impact of siting aquaculture facilities there.
  • Each of following 4 years, identify two more geographic areas and complete PEIS within 2 years.
# Executive Order on Promoting American Seafood Competitiveness and Economic Growth

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*AOAs = Aquaculture Opportunity Areas  
PEIS = Programmatic Environmental Impact Statements
What is an Aquaculture Opportunity Area?

Aquaculture Opportunity Areas show high potential for commercial aquaculture. A science and community-based approach to identifying these areas helps minimize interference with other enterprises, account for current fishing patterns, and protect the ecosystem.

AOAs will expand economic opportunities in coastal and rural areas, and increase our nation’s seafood security.

AOAs use the best available science to find appropriate spaces for sustainable aquaculture.

AOAs minimize interactions with other users, such as shipping, fishing, and the military.

Assessment and Use of AOAs

Stakeholder input is essential in the design and location of AOAs and NOAA expects these areas will be shaped through a public process that allows constituents to share their community and stewardship goals, as well as critical insights.

AOA size, exact location, and farm types will be determined through spatial analysis and public input to expand sustainable domestic seafood production while minimizing potential user conflicts. Farms will still need to go through the permitting process and environmental reviews.
Permitting Still Required for AOAs

- The federal and state permitting and authorization requirements are the same within AOAs as anywhere else.
  - Aquaculture operations proposed within an AOA would be required to comply with all applicable federal and state laws and regulations (e.g., Clean Water Act, Rivers and Harbors Act, Endangered Species Act [ESA], essential fish habitat under the Magnuson-Stevens Act, Marine Mammal Protection Act).
- Potential impacts to protected species and habitats will be considered at multiple points in the process.
- Identifying AOAs is an opportunity for proactive stewardship to use best available global science-based guidance on sustainable aquaculture management, and support the “triple bottom line” of environmental, economic, and social sustainability.
Southern California Study Areas

Rules we used to define study areas:

- USA Federal Waters (EEZ)
- Depth = 10 - 150 m
- Distance from shore = 25 nm maximum
Gulf of Mexico Study Areas

Rules we used to define study areas:
- USA Federal Waters (EEZ)
- Depth = 50 - 150 m
- Ecoregion study areas
Aquaculture Opportunity Area Timeline

**SUMMER 2020**

1. Select regions for areas for evaluation. Convene NOAA AOA Teams.
2. Announce selected regions to regulatory partners, stakeholders, and general public.
3. National Center for Coastal Ocean Science (NCCOS) compiles siting data for the first two regions (ongoing).
4. Outreach to fishery management councils, marine fisheries commissions, stakeholders, and the public.

[fisheries.noaa.gov/aquaculture]
Aquaculture Opportunity Area Timeline

FALL 2020

1. Publish Request for Information (RFI) to gather public input.
2. Continue outreach and engagement to stakeholder groups.
3. Host five public listening sessions and review submitted RFI comments.
4. Using best available data, NCCOS conducts siting analysis to find areas that may support sustainable aquaculture development.

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Aquaculture Opportunity Area Timeline

**WINTER 2020/SPRING 2021**

1. NCCOS drafts an Aquaculture Opportunity Atlas to present maps and share the results of their siting analysis.

2. Combine results of draft Atlas with RFI public input to select areas in the Gulf of Mexico and Southern California to evaluate in more depth during the NEPA process.

3. Consider information collected through RFI, including industry interest, state agency input, and ecosystem factors to begin selection of regions to assess for possible future AOAs.


[fisheries.noaa.gov/aquaculture](http://fisheries.noaa.gov/aquaculture)
Aquaculture Opportunity Area Timeline

LATE SUMMER/FALL 2021

1. Publish Atlases as peer reviewed NOAA tech memos for each region.

2. Publish Notice of Intent (NOI) for each programmatic EIS in the Gulf of Mexico and Southern California, beginning in-depth evaluation of potential areas.

3. Continue to coordinate with other federal agencies, Fishery Management Councils, Marine Fisheries Commissions, states, and tribes.

4. Announce selection of next region(s) of focus for AOA identification using best available scientific data and stakeholder input.

fisheries.noaa.gov/aquaculture
Comment Summary

• Comments closed December 22, 2020
• 73 unique comment submissions through regulations.gov; 24 from five public listening sessions
• A mix of Federal and State agencies, Councils, Makah Tribe, NGOs, individuals submitted comments
• Two write-in campaigns
  • Friends of the Earth - 27,368 signatures
  • Center for Food Safety - 6,519 signatures
Comment Details

- Mix of support and opposition
- Opposition primarily focused on finfish aquaculture
- Specific areas within Southern CA and Gulf of Mexico to focus on or avoid
- Issues raised (e.g. water quality, marine mammals, impacts to fishing markets, escapes, disease) to be considered in the Programmatic Environmental Impact Statement (PEIS)
Next Steps: AOAs 1 & 2

- Southeast and West Coast regions will complete PEISs for first AOAs
  - Notice of Intent (NOI) to prepare each PEIS expected late summer/fall 2021
- Areas considered in PEISs will be based on NCCOS Aquaculture Opportunity Atlas, coordination with Protected Resources, Sustainable Fisheries, and Habitat Conservation, public comment
Comments on Future AOA locations

• Support for AOA for shellfish and seaweed mariculture in Alaska (state and federal waters)
• Support for AOA in Western Pacific
• Support for AOA in USVI and Puerto Rico (through public meeting)
• Support for AOA in waters off of Florida
• Primarily opposition for AOA in Northeast at this time
  • Potential conflicts with wind planning, lobster industry, right whales
  • One comment in support of AOA in Northeast
• Opposition for AOA in Oregon at this time
• Opposition for AOA in coastal Washington (Makah Tribe)
Next Steps: Future AOAs

- Review comments
- Work with Regional Offices to define opportunities and challenges of AOAs in their region
- NMFS Leadership consideration of opportunities and challenges, including resource limitations
- Decision on next steps