

Ventura Port District

Commercial Fishing & Aquaculture Overview

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- ❖ **1952 – Established by election & formed pursuant to the Harbors and Navigation Code**
- ❖ **1963 – Harbor Opened**
- ❖ **1980s – Majority of Harbor development occurred**
- ❖ **VPD is an independent, special-purpose government agency**
- ❖ **Port Commissioners appointed by Ventura City Council**
- ❖ **General Manager appointed by Port Commissioners**

Ventura Port District Formation & History



PORT DISTRICT MISSION



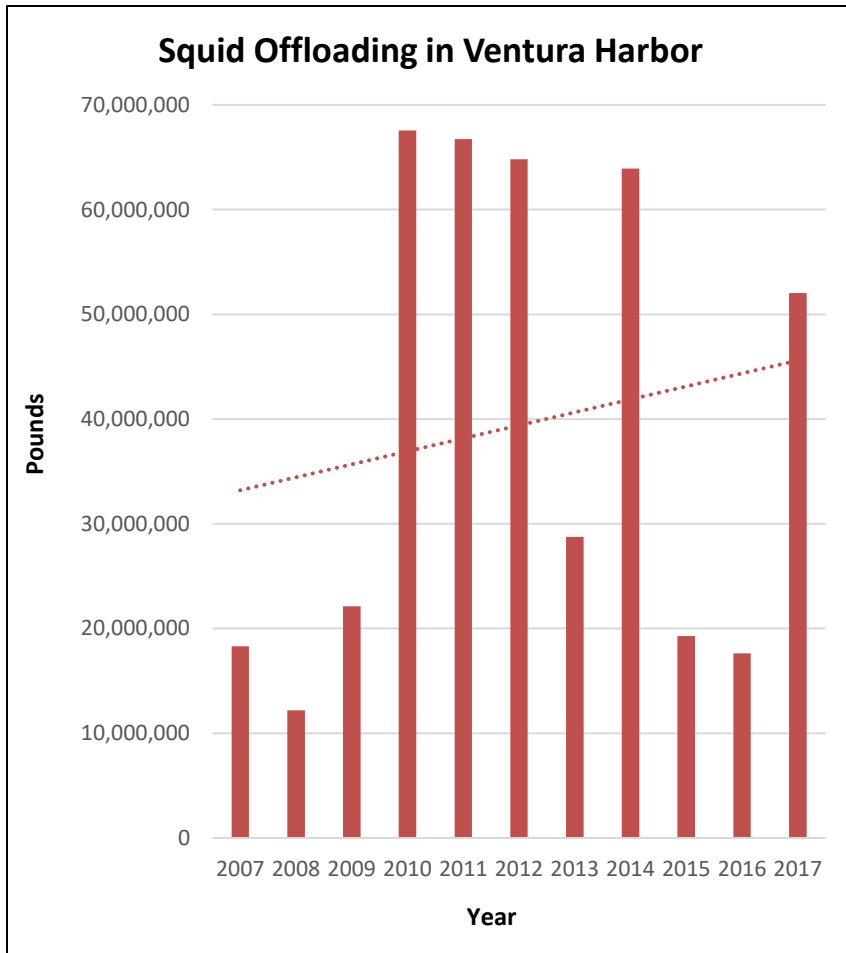
The Ventura Port District is committed to providing a safe harbor that is an inviting inclusive seaside destination and gateway to the Channel Islands National Park, with exceptional facilities for fishers, boaters, residents, and visitors.



VENTURA HARBOR: COMMERCIAL FISHING & WORKING WATERFRONT

- 57 million pounds of squid landed at Ventura Harbor in 2022 (49% of state total)
- Market value of \$34 million
- District working with Port of Hueneme to pursue grant for modernization of commercial fish offloading facilities at Ventura Harbor

Market squid operations in Ventura Harbor 10-year period



Aquaculture - Overview



- Refers to the breeding, rearing, and harvesting of aquatic plants and animals.
- The United States imports 70–85 percent of its seafood.
- It is estimated that more than half of this imported seafood is produced via foreign aquaculture.
- Driven by imports, our national seafood trade deficit has grown to \$17 billion in 2020.
- Marine aquaculture builds seafood supply, supports commercial fisheries, restores habitat and at-risk species, and maintains economic activity in communities in every coastal state.

Source: National Oceanic and Atmospheric Administration (NOAA)

Aquaculture

Rising Global Seafood Demand

- Marine aquaculture (or farmed seafood) is vital for supporting our nation's seafood production, year-round jobs, rebuilding protected species and habitats, and enhancing coastal resilience.
- Aquaculture—the breeding, rearing, and harvesting of animals and plants in all types of water environments—is one of the most resource-efficient ways to produce protein.
- It has helped improve nutrition and food security in many parts of the world.
- Globally, aquaculture supplies more than 50 percent of all seafood produced for human consumption—and that percentage will continue to rise.

Source: National Oceanic and Atmospheric Administration (NOAA)



Aquaculture As Climate Resilient Food Production

- Aquaculture is resilient to many effects of climate change and offers mitigation and adaptation opportunities.
- Less fresh water, land resources, and fewer greenhouse gas emissions are required to produce food through aquaculture than traditional agriculture.
- Growth of domestic aquaculture presents an opportunity to shorten seafood supply chains and decrease emissions associated with the 70-85% of seafood currently imported and consumed in the U.S.

Source: NOAA

Source Photo: Sustainably grown, organic Alaskan kelp is harvested at the Seagrove Kelp Co. farm in Doyle Bay. Credit: NOAA Fisheries/Jordan Hollarsmith



Aquaculture Constraints

- While the benefits of Aquaculture are evident, there are barriers to entry that make it almost impossible for local growers and producers to succeed.
- Cost and time expense for permitting
 - \$400K average price tag for aquaculture startup
 - The actual time between application submittal and permit issuance is often much longer, often between 1 and 2 years
 - Unknown Outcome, Very risky
- Compliance with government regulations
 - Endangered Species Act
 - Coastal Zone Management Act
 - Section 401 Water Quality Certification
- Lack of representation at the State and Federal level
- A large amount of data is needed to properly select the area for farming



Source: NOAA - Atlantic Sea Farms partner farmers harvesting their seaweed in Casco Bay, Maine. Credit: Nicole Wolf, courtesy of Atlantic Sea Farms

Mediterranean Mussel

(*Mytilus Galloprovincialis*)

- Also known as the black mussel because the shell can be dark blue or brown to an almost black color, relatively smooth.
- The two shells are equal, each with a rounded and a slightly bent edge.
- Grows up to 15 cm (6") but is typically found to grow between 5-8 cm
- Native to the Mediterranean coastline, but is found around the world
- Extremely tolerant to environmental changes.
- Feeds by filtering particles through gills.



Source: California Sea Grant

Source Photo: California Sea Grant

Seaweed: The Miracle Macroalgae with Major Economic and Environmental Value

- Seaweed is a nutritious, versatile, and pervasive organism.
- It is a type of macroalgae that can be used to make products we use every day—including fertilizers, animal feed, and cosmetics. It has even been described as a "superfood."
- In addition to being good for you, it's also good for the environment and the economy.
- Use of seaweed to create habitat, capture and store carbon from the atmosphere, and support working waterfronts.
- Fishers can harvest it during their slow season to diversify their income.
- This seaweed farming—or seaweed aquaculture—provides an opportunity for fishers to continue making a living as fisheries sectors face impacts from climate change.



Ventura's Role in Meeting Rising Demand

- The Ventura area is ideally poised to help meet a burgeoning seafood demand with mussel aquaculture.
- The nearshore waters of the Southern California Bight are extremely suitable environments for mussel farming based on overall quality, temperature profile, nutrient abundance, seabed characteristics.
- Proximity to established commercial landing facilities in the Ventura Harbor.
- Mussel farming within this region of the California coast has enormous potential to create a substantial and dependable supply of new seafood product.



Source: Ventura Shellfish Enterprise

Ventura's Role in Meeting Rising Demand

- Diversify the range of existing seafood products currently landed at Ventura Harbor's working waterfront.
- The local production of mussels will enable growers to supply fresh, high-quality mussels to some of the largest markets in the world, thereby enhancing economic development in the region at significant levels.
- At the same time, mussel cultivation in the Ventura area will accommodate growing consumer interest in locally sourced food with higher quality and freshness, and a dramatically lower carbon footprint than food transported over long distances.
- Because farmed mussels are harvested under strict guidelines and sold to consumers live, quality and freshness are ensured.

Source: Ventura Shellfish Enterprise
Source Photo: California Sea Grant



Aquaculture as a Climate Solution

- In the face of climate change, the ocean can be a source of climate adaptation and mitigation solutions.
- They provide benefits like good-paying jobs, sustainable livelihoods and communities, and healthier ocean ecosystems.
- From abalone restoration to oyster and seaweed farming, aquaculture is an ocean-based climate solution.

Source: NOAA

