Annual Proof-of-Use Summary Report for Marine Aquaculture Leases for the Year 2025

Photo: Tomales Bay by Katherine Williams, Pelican Studios

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Overview of State Water Bottom Leases

The Department of Fish and Wildlife (Department) manages 17 state water bottom leases for marine aquaculture. The aquaculture leases consist of approximately 909.5 acres of state-owned aquatic lands that are leased by 9 commercial businesses. Two leases, located in Santa Barbara County, one is focused on kelp research, while the other is dedicated to both commercial shellfish aquaculture and kelp research. The dominant species of shellfish cultured on state water bottom leases are Pacific oysters (*Crassostrea gigas*), Kumamoto oysters (*Magallana sikamea*), and mussels (*Mytilus* spp.).

Proof-of-Use Reports

The Annual Proof-of-Use Report for Aquaculture (POU) is required by Title 14 California Code of Regulations, Section 237, to verify annual planting and harvesting activities on all state water bottom aquaculture leases. POU Reports must be submitted to the Department's Marine Region Aquaculture Coordinator on or before February 1 each year, for activities conducted for the preceding year (January 1 – December 31). Failure to submit the required POU Report on or before the due date may result in the delinquent tenant being required to appear before the Fish and Game Commission (Commission) to show cause why the lease should not be declared abandoned.

As of February 2026, POU reports have been received from all aquaculture lessees describing planting and harvesting activities during 2025.

Minimum Planting Requirements

As specified in Title 14 California Code of Regulations, Section 237, leases utilizing off-bottom culture must be improved by planting an average rate of 5,000 single oyster seed per acre per year over the allotted acreage.

All leases met the minimum planting requirements for state water bottom leases in 2025 with an exceptional case for Point Reyes Oyster Company (PROC), whose three leases in Tomales Bay fulfill different operational purposes, and are subject to varying runoff or other environmental conditions. In typical years, lease M-430-17 is primarily used to plant starter sized oysters (i.e: seed), which are later transplanted to the other two leases (M-430-13 and -14) for final growout. In 2025, exceptional rainfall runoff, while producing good growing conditions, also caused harvests to be closed due to public health restrictions. When viewing the allotted acreage holistically, the combined three leases operated by Point Reyes Oyster Company exceed both the minimum planting and harvesting requirements.

Minimum Harvesting Requirements

As specified in Title 14 California Code of Regulations, Section 237, the annual harvest rate shall be an average of 2,000 oysters per acre (over one year of age) over the allotted acreage effective three years after the effective date of the lease.

All leases met the minimum harvesting requirements in 2025 with the exception of allotments held by both Grassy Bar Oyster Company (GBOC) in Morro Bay and the aforementioned PROC.

GBOC's lease M-614-02 is constrained by eelgrass habitat protections to utilization of less than one acre out of the fifteen acres leased. Although both of GBOC's leases are used for planting, advanced sized oysters are transplanted from M-614-02 and added to GBOC's second lease, M-614-01 parcel 1 to continue growout; market-sized oysters are then harvested from this second site only. See previous section for explanation of PROC utilization of its total allotment to stage planting and harvesting.

Production Overview

Production Reporting[1]

Aquaculture Lessee Monthly Tax Reports are rendered in accordance with the provisions of Sections 15003 and 15406.7 of the Fish and Game Code, by holders of state-issued leases. The information included in these monthly reports is used to calculate the annual production for the state water bottom leases.

Annual shellfish production for state water bottom leases totaled approximately 8.9 million in 2025. This is an approximate 6 percent increase from 2024.

Humboldt Bay Harbor, Recreation, and Conservation District also issue shellfish leases, and make up a large portion of shellfish produced in California. The estimated shellfish production by this district for 2025 was 9.4 million. The combined total of shellfish produced (State leases and Humboldt Bay leases) equate to approximately 18.4 million in 2025. This is a 2 percent increase compared to the previous year. Although dollar value data is not available, Humboldt's significant seed production industry contributes greatly to California's and the U.S west coast's overall shellfish production.

Tomales Bay

Tomales Bay shellfish growers produced 6.8 million oysters for the 12-month period from January 2025 to December 2025. This total comprised 128,072 eastern oysters, 1,403 of European flat oysters, 10,736 of Native oysters, 128,709 of Kumamoto oysters, and approximately 6.5 million Pacific oysters. Pacific oysters accounted for approximately 96 percent of the total shellfish production for Tomales Bay growers.

In addition to oysters, approximately 15,900 clams and 389,020 mussels were harvested. Mussel production in Tomales Bay increased by 164 percent in 2025; clam production experienced a decrease by 21 percent compared to the previous year. Clams represented 0.14 percent and mussels represented 5 percent of the total

[1] *All production numbers, unless otherwise noted, are reported as 'singles' (whole, in shell). A conversion of singles to pounds produced relies on knowing average size per oyster. As the primary, if not only species raised in CA that has been shucked for many decades, the factor used by CDFW for past CA oyster production reporting converted singles to weight (in pounds) for Pacific oysters by assuming 233 oysters per gallon x 8.5 lbs per gallon. Such conversion factors may vary as markets for different sized oysters change over time.*

shellfish harvested.

Compared to 2024, total annual oyster production in Tomales Bay increased by 8 percent and total shellfish production increased by 6 percent.

Morro Bay

Combined, the two shellfish growers in Morro Bay harvested approximately 674,256 Pacific oysters in 2025. This is approximately a 1 percent increase from 2024.

In addition, approximately 11,400 clams were harvested. Clam production increased by 24 percent in 2025 compared to the previous year. Clams represented 1 percent of the total shellfish harvested.

Santa Barbara The lease in Santa Barbara has been used primarily for mussel culture with small amounts of oyster production as well. In 2025 approximately 990,400 mussels were harvested; the Pacific oyster harvested from this lease was around 9,419. There was a 29 percent decrease in mussel production from the previous year.

Discussion

In 2025, approximately $66,200 in rent, $4,300 in privilege taxes, and $12,240 in Aquaculture Registration fees, were generated from the state water bottom aquaculture leases for a total of $82,740.

There appears to be no shortage of shellfish seed in 2025, and availability seems to have remained consistent the past couple of years which may result in higher production numbers in 2026.

Tomalas Bay

Production of Pacific oysters increased by approximately 7 percent compared to 2024 as a whole for Tomales Bay growers. However, due to higher mortalities caused by environmental factors such as runoff, siltation, and increased temperatures, more seed are planted to compensate for uncertainty and potential losses.

Harvest closures by California Department of Public Health (CDPH) included those caused by rainfall, of which there were 99 closure days from July 2024 through June 2025, and at least one due to paralytic shellfish poisoning (PSP) concentrations exceeding the alert level.

Morro Bay

Growers continue to experience water quality issues in Morro Bay; however, the number of unscheduled closures in 2025 is lower than previous years. California Department of Public Health initiated a calendar-based (seasonal) closure for the lease operated by Morro Bay Oyster Company (MBOC) from October 1, 2024 ending March 1, 2025.

The seasonal closures for GBOC's two leases were lifted in 2024 because of the extensive water quality sampling conducted by the operator over the last few years that has shown improved water quality at their location. However, GBOC leases were closed to harvest for 15 days due to rainfall.

Santa Barbara

The two leases in Santa Barbara include one focused on kelp research, and a commercial shellfish producer. The kelp operation is working to update all regulatory permits to operate, including CA Coastal Commission and US Army Corps of Engineers. The shellfish lease, as described above, has focused on mussel production in recent years, but continues to plant small amounts of oyster seed and also partners with seaweed researchers.

Clean-up Efforts

Tomales Bay

Starting more formally in August 2016, sections of the bay's shoreline were divided up by the Tomales Bay lease holders (themselves) for quarterly clean-ups, post-storm patrols, and monitoring. In addition to their own ongoing efforts throughout the year, some growers have coordinated and partnered with other entities and organized events, including California Coastal Cleanup Day, the state's largest annual volunteer event and has been going and growing its public involvement for over forty years with support from Coastal Commission, State Parks, many growers, and non-profits. Also, PROC reported teaming up with the staff of Nick's Cove Restaurant to host a separate annual shoreline cleanup in fall during low tide.

HIOC has increased from 9 cleanups in 2024 to 15 in 2025. Overall, debris was down in 2025: 3,809 items vs 2024 at 5,283 items. The percentage of aquaculture gear found has steadily decreased from a high of 35% in 2016, to 7% or less by 2020, and down below 2% in the last two years.

Starbird Mariculture was assigned lease M-430-06 (formerly operated by Cove Mussel Company) in February 2025. Since the transition, Starbird Mariculture has implemented Marine Debris Reduction Training, performed quarterly clean-ups of surrounding area, and onsite removal of legacy gear left by previous tenants. Post-storm searches were also conducted typically within 24 hours. Mooring inspections have been performed by a third party to ensure they meet the Tomales Bay Mooring requirements as described in the Tomales Bay Mooring Program. In the event that gear was broken or loose, dives were periodically performed or a grapnel was used to recover the items. Quarterly clean-ups alternate from Marconi Boat launch to Tomasini Point and Lawsons Landing to Tom's Point. Debris found included plastic bags, aluminum cans, plastic bottles, pieces of plywood, Styrofoam, a small trailer and tires, among other items.

Tomales Bay Oyster Company (TBOC) and Charles Friend Oyster Company (CFOC) perform shoreline inspections and clean-up between Preston Point, TBOC's facility, Tomasini Point, and Millerton Point. In addition, they perform extensive on-site cleanups

that include the removal of old pipes, legacy gear, and visitor trash. Leases are continuously monitored for legacy gear that may have resurfaced after a storm. Each quarter, all identifiable growers gear is logged and returned; public/visitor trash continues to count for the highest percentage. Example quantities of debris removal totals during the last reporting year (2025) consisted of 11.5 cubic yards of shellfish gear recovered, 10.5 cubic yards of public trash, and 19.3 cubic yards of storm-deposited and bulk debris. For comparison, this combined volume of 41.3 cubic yards of recovered debris is roughly equivalent to three large dump truck loads, or the interior volume of a standard 20-ft shipping container.

Morro Bay

Lease holders in Morro Bay perform quarterly cleanups and patrols post storms for gear that may have gotten loose.

GBOC continues to do onsite cleanups of legacy gear that has been left from previous tenants. In February, the day after a strong storm, a clean-up was performed. Unknown boat slips and Styrofoam floats were found along with PVC pipe. In March the second annual cleanup was held the day after a strong wind system had occurred. The east shore of Morro Bay from the Morro Bay State Park Marina to the public boat launch ramp was searched. Small amounts of debris were found and a floating boat bumper. A oyster bag was recovered; however, it did not belong to GBOC. August clean-up consisted of walking the entire east beach below South Bay Blvd., November beaches around Morro Bay State Park Marina were searched. Two additional cleanups were performed in December one after the largest king tides of the year occurred, Elfin Forest area was searched, a few of MBOC gear were found and returned (a few buoys, and oyster bags w/ floats attached). Other items found not associated with MBOC were a sunken wood rowboat, boat bumpers and a wetsuit bootie and the second post storm late December.

Marine debris reduction training was implemented for employees which covered how to identify culture gear or associated materials that are at risk of coming loose, proper gear repair and removal of gear. Focus was also on management and maintenance practices to reduce loss of any gear type.

Santa Barbara

Santa Barbara Mariculture conducts quarterly beach walks for cleanup of debris and performs weekly assessments and inventories of grow out area to monitor gear.