



THE CULTURED ABALONE FARM
Santa Barbara, California

September 1, 2026

Temporary Amendment to Approved Kelp Harvest Plan (2023–2028), The Cultured Abalone Farm, LLC – Addition of Administrative Kelp Beds 207 and 208 and Temporary Relocation of Harvest Operations to Morro Bay Harbor, Contingent on El Niño-Driven Kelp Conditions in the Santa Barbara Channel

Dear Commissioners:

The Cultured Abalone Farm, LLC (“TCAF”) submits this Kelp Harvest Plan (“KHP”) amendment requesting Commission approval to temporarily add administrative kelp Beds 207 and 208 to TCAF’s currently approved KHP (submitted March 10, 2023, updated for the April 2023 renewal, covering the five-year term 2023–2028, and concurrent with TCAF’s lease of administrative kelp bed L-26), and to temporarily operate the F/V Ocean Harvest out of Morro Bay Harbor. This amendment follows the same structure as TCAF’s approved KHP and addresses each item required under section 165(c)(8)(A)–(J), below.

This is a temporary, contingent amendment — not a request to permanently relocate operations, relinquish TCAF’s Santa Barbara Harbor home port or Bed L-26 lease, or increase TCAF’s approved annual harvest ceiling of 3,900 wet tons. Section 3 below describes the contingency and reversion terms in detail.

Section 1 — Reason for the Requested Amendment

TCAF is requesting authorization to mechanically harvest additional beds, and to operate temporarily from Morro Bay Harbor, for the following reasons:

1.1 Forecast El Niño conditions threaten kelp canopy in TCAF’s approved operating area

As of NOAA’s Climate Prediction Center ENSO discussion dated August 13, 2026, a strong El Niño is active and strengthening, with greater than 90% probability of a very strong event peaking in fall/winter 2026–2027, and meaningful probability that the event will exceed all recorded El Niños since 1950.¹ This is compounded by a co-occurring Northeast Pacific marine heatwave present off the California coast since approximately December 2025. Locally, UCSB researchers have reported coastal sea-surface temperatures running as much as 4–5°F above normal off Santa Barbara — conditions associated with reduced nutrient upwelling that *Macrocystis pyrifera* in the Santa Barbara Channel depends on for growth.² TCAF’s approved operating radius (Ventura to Point Conception, administrative Beds 18–32) sits entirely within the area expected to be most affected. Ocean Harvest captain Rick Gutierrez has kept a

¹ Climate Prediction Center. “EL NIÑO/SOUTHERN OSCILLATION (ENSO) DIAGNOSTIC DISCUSSION”. (2026) https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/ensodisc.shtml

² Jean Yamamura, “Experts Weigh in on Super El Niño, the Blob, and Sea Life” (Santa Barbara Independent, 2026).

detailed record of all harvesting activities for his fifteen years working on the boat, and has been observing a decline in bed quality a month sooner than what would be expected. It is possible that this early decline will be followed by months without access to

1.2 Historical precedent supports moving operations north of Point Conception

Following the 1997–98 El Niño NOAA's Office of National Marine Sanctuaries has documented that kelp forests south of Point Conception sustained losses as severe as complete canopy mortality in some areas, while kelp beds north of Point Conception were comparatively unaffected, attributed to cooler, more nutrient-rich water in that region.³ TCAF has selected Beds 207 and 208, near Morro Bay for this reason.

Section 2 — Kelp Harvest Plan Details (14 CCR §165(c)(8)(A)–(J))

(A) Bed number(s), description, status, and area; Marine Protected Areas

TCAF requests the addition of two administrative kelp beds, both located in Estero Bay near Morro Bay, San Luis Obispo County, and both currently listed as leasable under 14 CCR §165.5(k):

- **Bed 207** — Morro Rock to Point Estero. Status: Leasable. Area: 1.46 square miles.
- **Bed 208** — Point Estero to Von Helm Rock. Status: Leasable. Area: 2.61 square miles.

TCAF requests authorization to harvest the full leasable extent of each bed, exclusive of any portion that falls within a no-take Marine Protected Area (“MPA”) or is otherwise closed.

Marine Protected Areas — disclosure and statement of compliance

Morro Bay State Marine Reserve (SMR) and State Marine Recreational Management Area (SMRMA). Both are located within Morro Bay itself — the SMR covers the area below mean high tide east of longitude 120°50.34' W, and the SMRMA the area east of the harbor entrance breakwater and west of that same longitude. Neither extends onto the open coast and neither overlaps Beds 207 or 208. The F/V Ocean Harvest will transit through this area to reach open water but will not harvest within it.

(B) Intended use of kelp

Abalone forage and direct sale — the same intended use described in TCAF's approved KHP for all other beds.

(C) Mechanical harvester avoidance measures

- **Repetitive harvest avoidance:** TCAF will apply its existing, approved practice — cutting only slack canopy from the bed margin at slow speed on calm days with moderate tides, never pulling plants from the base/holdfast, and using GPS/chartplotter overlays of prior harvest tracks to avoid re-cutting the same canopy — in Beds 207 and 208.
- **Bull kelp (*Nereocystis*) avoidance:** TCAF's approved KHP notes that bull kelp is rare south of Point Conception and unusual in TCAF's normal operating area. Bull kelp is more likely to be encountered in the Morro Bay/Estero Bay area. TCAF will apply its existing

³ “Impacts on Kelp Forests” NOAA Marine Sanctuaries.
<https://sanctuaries.noaa.gov/visit/ecosystems/kelpimpacts.html>

protocol — visually identifying and GPS-tagging any canopy area containing greater than 10% bull kelp and avoiding those areas — with a specific pre-season crew briefing on *Nereocystis* identification before any harvest activity in Beds 207/208.

- **Sea otter rafting avoidance (including female rafts with dependent pups):** TCAF acknowledges that the Morro Bay/Estero Bay area lies within the core range of the federally threatened southern sea otter, with greater otter density — including female rafting groups with dependent pups — than TCAF's historical operating area near Point Conception. In addition to TCAF's existing slow-speed, visual-avoidance protocol, TCAF will: (i) consult available data on known or recurring rafting sites (e.g., through CDFW, USFWS, or the Monterey Bay Aquarium Sea Otter Program) before operating in Beds 207/208; (ii) maintain a specific standoff buffer from any observed raft, with an increased buffer and immediate cessation of cutting near any raft that includes pups; and (iii) log all otter observations by date/location for inclusion in monthly reporting.

(D) Proposed monthly and annual harvest amount, next five years

TCAF's existing approved annual harvest ceiling of 3,900 wet tons (all beds combined, remainder of the 2023–2028 KHP term) is unchanged by this amendment. Harvest from Beds 207 and 208 will be credited against, not added to, that ceiling. Because this amendment is contingent on conditions in the Santa Barbara Channel, TCAF cannot predict with precision how much of its total harvest will shift to Beds 207/208, however can be estimated:

- Harvest can be estimated at 30-70 tons per month/ 360-840 tons per year.

(E) Estimated frequency of harvesting activity, by bed

Consistent with TCAF's approved KHP, actual frequency will depend on weather, canopy conditions, and vessel maintenance, up to the vessel's maximum operating capacity of 5 trips/week. Due to operational costs involved with relocating the vessel and the transporting of kelp from Morro Bay to Goleta, TCAF expects to do only 1 or 2 trips per week.

(F) Harvest vessel(s), capacity, tonnage, and fuel capacity

TCAF will use the same single vessel identified in its approved KHP — no additional or different vessel is proposed. F/V Ocean Harvest: 50' LOA steel-hulled modified landing craft; maximum holding capacity approximately 15 wet tons per trip; 23 GRT / 18 NRT; fuel capacity 2 × 400-gallon tanks; USCG registration no. 1189178; CDFW commercial vessel registration no. 06640. In the event of relocation, TCAF will dock Ocean Harvest at a temporary slip (still to be arranged).

(G) Harvesting methodology

Harvest methodology in Beds 207/208 will be identical to TCAF's approved KHP: a purpose-built hydraulic cutting system using articulating blades operating approximately 18 inches below the surface while the vessel is piloted at very low speed along the margin of kelp canopy. Cut kelp is lifted by a rotating stainless flat-wire conveyor belt into net bags (approximately $\frac{3}{4}$ wet ton capacity each); when full, each bag is pursed, closed, and moved into the cargo hold via the vessel's hydraulic crane. Operation requires one captain and one crew, is conducted at slow speed, and generally in calm conditions.

(H) Landing and weighing locations

Temporary landing site: Morro Bay Harbor, City of Morro Bay Harbor Department, 1275 Embarcadero, Morro Bay, CA 93442.

- The hoist here has a 2 ton limit, which will be sufficient to hoist Ocean Harvests ¾ ton bags onto TCAF's truck for transport.

Existing landing site (unchanged, resumes when this amendment is not active): Public commercial pier, Santa Barbara Harbor, Santa Barbara, CA, as described in TCAF's approved KHP.

(I) Weighing equipment and methods

TCAF will use the same method described in its approved KHP at the Morro Bay landing site: net bags are weighed and recorded at the time of unloading using a high-capacity digital hanging scale. Total tonnage will be recorded by date, time of cutting, and location (specifically identifying Bed 207 or 208) and reported to CDFW, together with royalty payments, at month end, in the same manner as TCAF's other beds.

(J) Kelp processor and transport

Processor: The Cultured Abalone Farm, LLC, 9580 Dos Pueblos Canyon Rd, Goleta, CA 93117

Transport method: Net bags landed at Morro Bay Harbor will be transported to TCAF's Goleta processing facility by class-C commercial truck — the same transport method and equipment described in TCAF's approved KHP, over a longer route (Morro Bay to Goleta, approximately 100 miles) than TCAF's existing Santa Barbara Harbor-to-facility route.

Section 3 — Duration, Contingency, and Reversion

This amendment is requested strictly as a temporary, contingent measure:

- This authorization takes effect only for so long as kelp canopy in Beds 18–32 (Santa Barbara Channel) remains materially degraded relative to historical baseline, or until May 2027 at the latest.
- TCAF will notify the Department and Commission promptly upon confirmed recovery of Santa Barbara Channel conditions and will resume standard operations from Santa Barbara Harbor within Beds 18–32 within 1 month of that confirmation.
- TCAF does not seek, through this amendment, any permanent addition of Beds 207/208 to its KHP, any change to its Santa Barbara Harbor home port, or any change to the terms of its Bed L-26 lease. If TCAF later determines that continued or permanent access to Beds 207/208 is warranted beyond May 2027, it will submit a standard-track KHP amendment through the ordinary Section 165 process for the Commission's separate consideration.

Conclusion

While it is impossible to predict what the next eight months will entail, the option to expand north of Point Conception in the event that El Niño conditions limit TCAF's ability to harvest in the Santa Barbara Channel would greatly increase food security for the farm. This includes forage

both for production abalone, and abalone set to be outplanted for restoration. TCAF has held its kelp harvest lease and operated under Commission-approved harvest plans without incident, and this request follows the exact procedure TCAF's own KHP committed to in the event conditions required a northward shift. TCAF is available to provide any additional information the Commission or Department requires, including current trip logs, and vessel operating data.

Sadie Calhoun, *Production Manager*
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Sources

“EL NIÑO/SOUTHERN OSCILLATION (ENSO) DIAGNOSTIC DISCUSSION.” Climate Prediction Center/NCEP/NWS.

https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/ensodisc.shtml

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