

Staff Summary for August 13-14, 2025

20. Commercial Bull Kelp Harvest Restrictions**Today's Item****Information** ☐**Action** ☒

Consider authorizing publication of notice of intent to amend regulations regarding temporary commercial bull kelp harvest restrictions along the north coast and the closure of lease-only administrative kelp beds 308, 309, and 312 until January 1, 2029.

Summary of Previous/Future Actions

- | | |
|---|---------------------------|
| • Adoption of temporary commercial bull kelp harvest restrictions along the north coast | February 16-17, 2022 |
| • Marine Resources Committee (MRC) vetting and recommendation | July 16-17, 2025; MRC |
| • Today's notice hearing | August 13-14, 2025 |
| • Discussion and adoption hearing | October 8-9, 2025 |

Background

Regulations in sections 165 and 165.5 govern the commercial harvest of giant and bull kelp, edible seaweeds, and other aquatic plants. The regulations also govern the leasing of administrative kelp beds for the exclusive privilege to harvest.

In February 2022, the Commission adopted a temporary, three-year restriction on commercial bull kelp harvest from Sonoma County to the Oregon border. The decision was made in response to a dramatic, multi-year decline in bull kelp (*Nereocystis luetkeana*) populations, which began in 2014 and was attributed to a series of persistent changes in oceanographic and ecological conditions. However, the restrictions on commercial harvest were specifically implemented due to a lack of scientific data to determine if harvest was further impacting the already-struggling kelp populations.

Leading up to the Commission's 2022 decision, the Department developed and recommended options for amending bull kelp harvest regulations. The options were informed by a multi-year process that included input from the Commission's Marine Resources Committee, its Tribal Committee, a stakeholder working group, and tribal consultation with the InterTribal Sinkyone Wilderness Council member tribes. While the work resulted in long-term management goals to develop, the Department recommended temporary near-term restrictions.

The Commission adopted temporary restrictions, which are set to expire January 1, 2026:

- in Humboldt and Del Norte counties, a combined annual quota of 8,000 pounds (wet weight), with mandatory weekly reporting and a process for closure if the quota is met;
- in Sonoma and Mendocino counties, a complete closure of commercial bull kelp harvest; and
- in Mendocino, Humboldt and Del Norte counties, temporarily close three administrative kelp beds (308, 309 and 312).

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Recent Recommendations and Proposed Amendments

At its July 2025 meeting, MRC received a Department update that bull kelp coverage has shown only limited reestablishment through 2024. As a result, the Department recommended extending the temporary restrictions for an additional three years, until January 1, 2029. The Department also would correct a coordinate error identified for administrative kelp bed 109.

After discussion and public testimony, MRC developed a recommendation to extend the temporary restrictions for an additional three years as recommended by the Department. However, they also asked for a second option to be considered for Sonoma and Mendocino counties to allow limited harvest. MRC requested that the Department confer with the InterTribal Sinkiyone Wilderness Council member tribes regarding this limited-take option, given their support for a full closure in the original rulemaking.

Based on the July MRC recommendation, Commission staff proactively developed and integrated a second option into the draft initial statement of reasons and regulatory language (exhibits 3 and 4) for Sonoma and Mendocino counties. To facilitate the Commission's consideration today, staff utilized the same limited-take option that was included in the 2021-22 rulemaking, though ultimately not adopted.

- Option 1 (Department): A complete closure of commercial bull kelp harvest.
- Option 2 (per MRC): A combined annual quota of 1,000 to 2,000 pounds (wet weight), with mandatory weekly reporting and a process for closure once the quota is met.

Today the Department will present an overview of the proposed regulations and options (Exhibit 6) for Commission consideration and potential authorization for publishing a notice of intent to amend regulations.

Significant Public Comments (N/A)

Recommendation

Commission staff: Authorize publication of notice as recommended by MRC with two options for Sonoma and Mendocino counties.

Committee: Support extending the temporary commercial bull kelp harvest restrictions and correcting a typographical error, as recommended by the Department. Support inclusion of a second option for Sonoma and Mendocino counties offering flexibility to allow limited take.

Department: Authorize publication of notice of Commission intent to extend the current temporary commercial bull kelp harvest restrictions by three years.

Exhibits

1. [Staff summary for Agenda Item 8, February 16-17, 2022 Commission meeting \(for background purposes only\)](#)
2. [Department memo, received July 21, 2025](#)
3. [Draft initial statement of reasons for regulatory action, dated August 5, 2025](#)
4. [Draft proposed regulatory language](#)

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5. [Draft economic and fiscal impact statement \(STD 399\)](#)
6. [Department presentation](#)

Motion

Moved by _____ and seconded by _____ that the Commission authorizes publication of a notice of its intent to amend sections 165 and 165.5 regarding commercial bull kelp harvest restrictions.

STAFF SUMMARY FOR FEBRUARY 16-17, 2022*For background purposes only***8. COMMERCIAL KELP AND OTHER AQUATIC PLANTS****Today's Item**Information ☐Action ☒

Discuss and consider adopting regulations for commercial harvest of kelp and other aquatic plants.

Summary of Previous/Future Actions

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| • MRC received updates on commercial kelp and algae harvest management review | 2015-2019; MRC, various |
| • TC discussed recommendations, updates, and tribal interests for kelp and algae harvest regulations | 2019-2021; TC, various |
| • MRC received DFW updates on bull kelp, stakeholder working group meetings, and recommendation | 2020-2021; MRC, various |
| • FGC approved MRC recommendation with an additional option | Aug 18, 2021; Webinar/Teleconference |
| • Notice hearing | Dec 15-16, 2021; Webinar/Teleconference |
| • Today's discussion and adoption hearing | Feb 16-17, 2022; Webinar/Teleconference |

Background

Beginning in 2014, changing oceanographic and ecological conditions caused bull kelp (*Nereocystis*) in Mendocino and Sonoma counties to decline dramatically outside of the range of normal variability, leading to persisting ecosystem collapse. From 2014 through 2020, the maximum annual bull kelp canopy area across northern California was documented at below the 1984-2013 historical average. Management options for commercial harvest of bull kelp were developed by DFW through a multi-year process with input from MRC, TC, a DFW bull kelp working group, and through government-to-government tribal consultation between DFW and InterTribal Sinkyone Wilderness Council (Sinkyone) member tribes. In Aug 2021, FGC approved an MRC recommendation to schedule a rulemaking and included options for limited harvest or closure in Mendocino and Sonoma counties, pending availability of 2021 bull kelp canopy data. See exhibits 1 and 2 for additional background information.

The proposed regulations include:

- an option for FGC to select a closure or an annual limit (1-2,000 pounds) of commercial bull kelp harvest in Mendocino and Sonoma counties combined;
- an annual limit (8,000 pounds) of commercial bull kelp harvest in Del Norte and Humboldt counties combined;
- an option for FGC to consider a temporary closure of the three, lease-only, administrative kelp beds in Mendocino, Humboldt, and Del Norte counties by imposing a

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non-regulatory hiatus on new lease applications or by designating the beds as closed in regulation;

- a requirement for weekly bull kelp harvest reporting via email to DFW in counties with an annual limit;
- revised, repealed, or new forms to support more detailed bull kelp harvest tracking and improved harvest reporting tools;
- a sunset date for the limits, closures, and weekly reporting requirements, with an option for FGC to select between three to five years; and
- other administrative and non-substantive changes.

See exhibits 3 and 4 for additional information about the proposed regulations.

Tribal Input

Since 2018, FGC staff participated as observers during multiple government-to-government consultation sessions between DFW and Sinkyone member tribes. Sinkyone member tribes submitted and publicly posted a tribal proposal (dated Jul 14, 2021) to DFW, and formal comments to MRC (dated Aug 18, 2021), describing their concerns over commercial harvest in their ancestral waters, and expressing their collective preference for a precautionary 10-year closure to allow for ecosystem recovery. The tribes cite their respective traditional ecological knowledges, understanding and practice, and advise utilization of the precautionary principle here in the context of climate and biodiversity crises.

Updates since the Notice Hearing (exhibits 5-6)

In its pre-adoption statement of reasons (PSOR, Exhibit 6), DFW provides the updated satellite imagery data through the third quarter of 2021, as presented at the Dec 2021 notice hearing. Fourth quarter data was not available at the time of PSOR preparation. The updated 2021 data for Mendocino and Sonoma counties indicates a small increase in kelp canopy; however, there is still a 90% or more reduction in kelp canopy compared to the mean annual canopy maximum for 1984 – 2013. The updated 2021 kelp canopy data for Del Norte and Humboldt counties show a 5% decline and 20% increase in kelp canopy, respectively, compared to the mean annual maximum canopy area for 1984 – 2013. In the PSOR, DFW noted edits to three of the four forms included in the ISOR (113, 113A and 658) to correct typographical and spelling errors and make other minor changes. Copies of original, proposed revised, and proposed new forms are provided in Exhibit 7.

Today's Action

At today's adoption hearing, FGC will consider and is expected to select among options for: (1) Sonoma and Mendocino counties (closure or quota between 1-2,000 pounds combined); (2) administrative or regulatory closure of the three lease-only kelp beds; and (3) a sunset date of three to five years. FGC and DFW staff have heard perspectives from commercial harvesters, tribes, academic experts, advocacy groups, and other stakeholders in preparing recommendations for this resource, and FGC should be aware that a consensus approach could not be identified to the satisfaction of all sides in the matter, either in interpretation of available scientific information or appropriate management response.

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FGC staff recognizes that, while bull kelp recovery has been observed in some areas of the north coast in 2021, the levels still fall far below the historic average; therefore, the observations do not provide sufficient information to indicate or predict that a recovery is underway. The precautionary approach built into the proposed regulations is reflective of the sustained depleted conditions.

Staff concurs with DFW's assessment that limited-term closure of harvest in Sonoma and Mendocino counties represents the most precautionary approach, amid unprecedented ecosystem conditions and uncertainty; this approach is consistent with other measures taken by the state related to bull kelp loss and would align with recommendations of Sinkyone member tribes. However, objective scientific research has yet to evaluate whether commercial harvest of bull kelp, at the levels and via the methods employed in northern California, is likely to have an impact on the current bull kelp biomass or its ability to reproduce and recover. The recommended limited-term closure should not be interpreted to implicate the current, limited, hand-harvest of kelp relative to the extent of the recent decline of the bull kelp ecosystem.

Enacting a limited closure (e.g., revisit after three years) would also accommodate the development of a kelp recovery and management plan (KRMP), which may provide more detailed consideration of potential impacts by commercial kelp harvest and development of more refined harvest and management tools than are currently available. Many potential management tools have been suggested by members of the bull kelp working group, and other kelp harvesters and organizations; these suggestions warrant consideration and would be better explored within the KRMP process.

Significant Public Comments

Five kelp harvesters commented individually, 17 kelp harvesters commented jointly, and one University of California lecturer commented individually. Major themes recurring throughout the comments include:

- DFW did not accurately assess the adverse economic impacts of the proposed regulations and did not consult with harvesters on those impacts which include near- and long-term economic burden on small businesses, and consumer shift to kelp products harvested in other countries;
- DFW did not consider or include harvester input in key documents;
- kelp is already experiencing recovery;
- the manner and amount of take in question is unlikely to have any impact on kelp recovery; there is no evidence of its impact;
- the potential closure, harvest limits, and sunset dates are arbitrary and not based on the best available science; any closure should have clear benchmarks for re-opening.

A table summarizing comments by letter is provided in Exhibit 10; copies of individual comments are provided in Exhibit 11.

STAFF SUMMARY FOR FEBRUARY 16-17, 2022*For background purposes only***Recommendation**

FGC staff: Adopt the proposed regulations as described in the ISOR (Exhibit 4) and revised in the PSOR (Exhibit 6) after selecting options considering the body of scientific, tribal, industry, and stakeholder input, policy considerations and goals, and DFW recommendations. Establish a sunset date of three years (Option 3), a timeframe anticipated to encompass DFW development of a KRMP. Request that DFW provide updates to MRC and TC on progress in developing a KRMP in collaboration with agencies, academics, industry, non-governmental organizations, other stakeholders, and tribes.

DFW: Adopt the proposed regulations as described in the ISOR (Exhibit 4) and revised in the PSOR (Exhibit 6), selecting a closure of commercial bull kelp harvest in Mendocino and Sonoma counties (Option 1A); closure of the three lease-only administrative kelp beds in Mendocino, Humboldt, and Del Norte counties via regulatory action (Option 2B); and the FGC preferred sunset date (Option 3).

Exhibits

1. Background document: Staff summary from Jul 17, 2021 MRC meeting, Item 5
2. Background document: Staff summary from Dec 15-16, 2021 FGC meeting, Item 21
3. DFW memo transmitting ISOR, received Dec 7, 2021
4. ISOR and proposed regulatory language, received Dec 7, 2021
5. DFW memo transmitting PSOR, received Jan 26, 2022
6. PSOR and revised proposed regulatory language, received Jan 26, 2022
7. Forms: Current forms proposed to revise or repeal, proposed revised forms, and proposed new harvesting and release of property forms
8. Economic and fiscal impact statement (STD. 399)
9. DFW presentation
10. Table summarizing public comments
11. Individual comments from kelp harvesters and UC lecturer, received Jan 31-Feb 3, 2022

Motion

Moved by _____ and seconded by _____ that the Commission adopts the amendments to sections 165 and 165.5, addition of Section 705.1, repeal of forms FG 113 and 114 from Appendix A, and incorporation by reference of revised forms DFW 658, DFW 113 and new forms DFW 113A and 1108 as described in the initial statement of reasons and revised in the pre-adoption statement of reasons, selecting the three following options:

Option 1. For Mendocino and Sonoma counties:

A. A closure of commercial bull kelp harvest in Mendocino and Sonoma counties.

OR

B. An annual limit in the amount of _____ [select an amount within the range of 1-2,000] pounds commercial bull kelp harvest in Mendocino and Sonoma counties

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Option 2. A temporary closure of the three lease-only administrative kelp beds in Mendocino, Humboldt, and Del Norte counties via

A. Imposing a non-regulatory hiatus on new lease applications.

OR

B. Designating the beds as closed in regulation.

Option 3. A sunset date for the bull kelp limits and/or closure, and reporting requirements of _____ [select a time period within the range of 3-5 years].

Memorandum

Received July 21, 2025
Original signed copy on file

Date: July 16, 2025

To: Melissa Miller-Henson
Executive Director
Fish and Game Commission

From: Charlton H. Bonham
Director

Subject: **Submission of Initial Statement of Reasons for the August 13-14, 2025 Fish and Game Commission Meeting to Amend Sections 165 and 165.5, Title 14, California Code of Regulations re: Extension of Commercial Bull Kelp Harvest Restrictions, and Lease of Kelp Beds for Exclusive Harvest of *Macrocystis* and *Nereocystis*.**

Please find attached the Initial Statement of Reasons to amend sections 165 and 165.5, Title 14, California Code of Regulations. The proposed amendment aims to extend the temporary restrictions for commercial harvest of the marine alga bull kelp (*Nereocystis luetkeana*) from January 1, 2026 to January 1, 2029 and correct a coordinate error for an administrative kelp bed.

The project will extend the sunset date from January 1, 2026 to January 1, 2029 for bull kelp:

- harvest closure in Mendocino and Sonoma counties
- annual fishery quota in Del Norte and Humboldt counties combined, and mandatory weekly reporting for bull kelp harvesters in Del Norte and Humboldt counties
- closure and lease prohibition of the lease only administrative kelp beds 308, 309, and 312 and amend the availability to lease the administrative kelp beds from “on or after January 2, 2026” to “on or after January 2, 2029”

Additionally, the project will correct a coordinate error for administrative kelp bed 109 that was introduced in rulemaking file 2013-1205-01S.

It is expected that the new regulations would become effective January 1, 2026. The proposed management measures are necessary to address potential harvest impacts of bull kelp while allowing time to continue the development of the comprehensive, statewide Kelp Restoration and Management Plan for giant (*Macrocystis pyrifera*) and bull kelp and critical studies addressing knowledge gaps around bull kelp biomass and harvest.

If you have any questions or need additional information, please contact Dr. Craig Shuman, Marine Regional Manager at R7RegionalMgr@wildlife.ca.gov. The Department point of contact for this regulation should identify Environmental Scientist

Melissa Miller-Henson, Executive Director
Fish and Game Commission
July 16, 2025
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Rebecca Flores Miller, who can be reached at kelp@wildlife.ca.gov.

cc: Chad Dibble, Deputy Director
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State of California
Fish and Game Commission
Initial Statement of Reasons for Regulatory Action

Amend Subsection (c)(9), of Section 165,
and
Subsections (c), and (k)(2)(I), of Section 165.5, Title 14, California Code of Regulations

Re: Commercial Bull Kelp Harvest Restrictions

I. Date of Initial Statement of Reasons: August 5, 2025

II. Dates and Locations of Scheduled Hearings

(a) Notice Hearing:

Date: August 13-14, 2025

Location: Sacramento

(b) Discussion and Adoption Hearing:

Date: October 8-9, 2025

Location: Sacramento

III. Description of Regulatory Action

(a) Statement of Specific Purpose of Regulatory Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary

Unless otherwise specified, all section references in this document are to Title 14 of the California Code of Regulations (CCR), Commission refers to the California Fish and Game Commission, and Department refers to the California Department of Fish and Wildlife.

Background

Bull kelp (*Nereocystis luetkeana*) is a foundational species providing physical structure of biodiverse and productive habitats that provide ecological functions and ecosystem services as well as supporting fisheries for invertebrates and fish, is important in cultural and ceremonial traditions, and supports tourism.

Bull kelp is managed for commercial harvest in Section 165, Commercial Harvesting of Kelp and Other Aquatic Plants, and Section 165.5, Lease of Kelp Beds for Exclusive Harvest of *Macrocystis* and *Nereocystis*. The reproductive material of this annual species — although some individuals may live into a second year — are located within its blades at the top of the kelp. Current commercial harvest regulations allow cutting of attached kelp up to four feet below the surface of water, and those harvesting bull kelp for human consumption may take the entire individual. The allowance of take of blades which contain or will contain the reproductive material, and its annual life history can result in less available reproductive material.

At its October 2022 meeting, the Commission approved a precautionary approach temporarily restricting commercial bull kelp harvest in the north coast in response to a dramatic and persistent decline of bull kelp populations in Mendocino and Sonoma counties and a lack of scientific data to inform understanding of potential effects of commercial harvest on the remaining kelp population (Office of Administrative Law (OAL) rulemaking file 2022-1014-04SR). The temporary harvest amendments enacted in that rulemaking span a three-year period, to sunset on January 1, 2026, with the intent to allow for drafting and potential adoption of a comprehensive, statewide Kelp Restoration and Management Plan (KRMP). Development of the KRMP was initiated in 2023 and is actively underway. Critical studies addressing knowledge gaps around bull kelp biomass and harvest are in progress, and results are essential to informing the consideration of harvest management within the KRMP.

As described in the January 14, 2022 Pre-Adoption Statement of Reasons (PSOR) in OAL rulemaking file 2022-1014-04SR, Mendocino, Sonoma, and Del Norte counties experienced kelp canopy declines of 90 percent, 95 percent, and 5 percent, respectively, while Humboldt County experienced a 20 percent increase during 2014 through the third quarter of 2021 compared to the mean annual maximum canopy area prior to the Marine Heatwave (MHW), 1984 through 2013. The Department and California Ocean Protection Council's *Status of Research and Monitoring, Restoration Efforts, and Developing Management Strategies for Kelp Canopy Forming Species in California* presented on November 16, 2023 to the Commission's Marine Resources Committee, highlighted continued declines in kelp canopy for 2014 through 2022 post-MHW for Mendocino and Sonoma counties, and declines in Humboldt and Del Norte counties, which continue to be reflected through the fourth quarter of 2024 (Table 1). Kelp canopy area (annual maximum) across the four northernmost counties through the fourth quarter of 2024 have not increased (Figure 1). Del Norte and Humboldt counties historically have supported significantly less kelp than Mendocino and Sonoma counties, as depicted by the total amount of kelp in each county shown in the y-axis in Figure 1. The kelp canopy data processes are improving and refined over time, which may result in changes in the data when comparing past datasets as depicted in the January 2022 PSOR to data updated through 2024. Additionally, minor changes in canopy area in Del Norte and Humboldt counties may reflect larger percentage changes (Table 1). For example, in 2021 the increase in Humboldt County was the result of a small kelp patch that emerged and was sustained for one season.

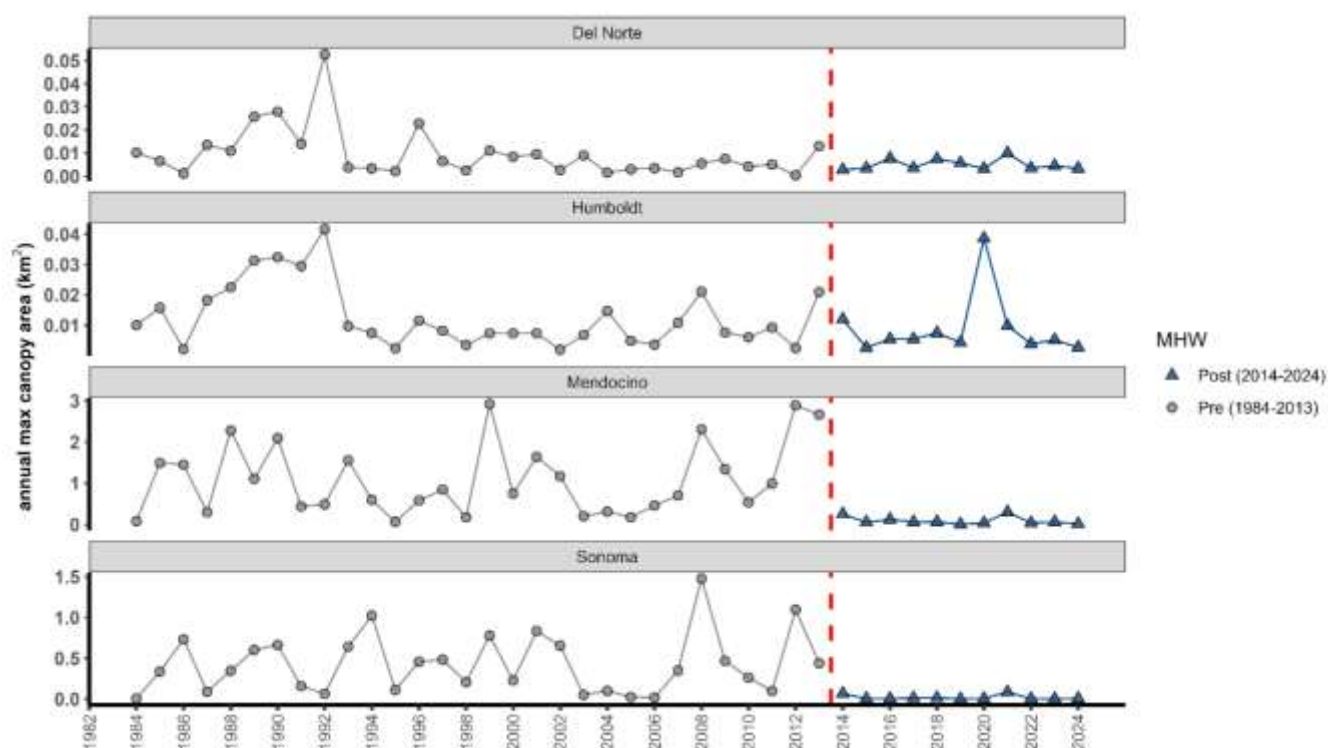


Figure 1. Annual kelp canopy area maximum (measured quarterly) in square kilometers estimated from Landsat satellites (SBC LTER et al., 2025) for Del Norte, Humboldt, Mendocino, and Sonoma counties, 1984 through the fourth quarter of 2024. The vertical dashed line reflects the timeframe before and after the Marine Heatwave (MHW). Bell, T., K. Cavanaugh, and D. Siegel. 2025. SBC LTER: Time series of quarterly NetCDF files of kelp biomass in the canopy from Landsat 5, 7 and 8, since 1984 (ongoing) ver 28.

Environmental Data Initiative.

<https://doi.org/10.6073/pasta/d33bd376547863acffc675a611b40289>. Accessed 2025-03-14.

Table 1. The percent change of the mean annual maximum kelp canopy area in Del Norte, Humboldt, Mendocino, and Sonoma counties. Data reflects the time frame considered during the adopted temporary bull kelp amendments, 2014 through the third quarter of 2021, and current proposed amendments, 2014 through the fourth quarter of 2024.

County	2022 Pre-Adoption Statement of Reasons: 2014 Through the Third Quarter of 2021 Percent Change Time Frame (Compared to 1984-2013 mean)	Updated: 2014 Through the Fourth Quarter of 2024 Percent Change Time Frame (Compared to 1984-2013 mean)
Mendocino	90% decline	91% decline
Sonoma	95% decline	96% decline
Humboldt	20% increase	29% decline
Del Norte	5% decline	48% decline

Current Regulations

The current regulations in Section 165 provide the general licensing provisions for the commercial harvest of kelp and other aquatic plants. The section also establishes harvest reporting and royalty fee requirements, establishes geographical limitations on bull kelp harvesting, establishes harvesting method limitations on giant kelp, bull kelp, agar-bearing marine plants, and edible seaweed and prohibits the disturbance of certain aquatic plants. Although Section 165 provides regulations for kelp and other aquatic plants overall, it also contains subsections which provide more nuanced regulations depending on the species harvested and/or use of the harvest. Current subsections which pertain to the more substantive proposed amendments include:

- Subsection (b) pertains to general harvest of kelp and other aquatic plants and includes information on harvest reporting, harvest restrictions in marine protected areas established under subsections 632(a) and 632(b), prohibition of kelp, marine aquatic plants, and edible seaweed harvest from Tomales Bay or San Francisco Bay, and prohibition of bull kelp harvest in closed or lease only administrative kelp beds as described in subsection 165.5(k), unless harvested for human consumption pursuant to subsection 165(e)(2), or, if a lease is granted for lease only beds by the Commission.
- Subsection (c) pertains to harvest of giant kelp and bull kelp and includes information on allowable harvest methods, the bull kelp harvest seasonal closure within non-leased administrative kelp beds which lie partially or completely within the Monterey Bay National Marine Sanctuary boundaries, kelp harvest reporting, and kelp harvest plans for mechanical harvest or administrative kelp bed leasing as described in Section 165.5. Subsection (c) also provides information on temporary

harvest restrictions and weekly reporting for bull kelp which sunset on January 1, 2026.

- Subsection (e) specifies regulations regarding harvest of marine plants, classified as edible seaweed, for human consumption. These regulations allow limited harvest of bull kelp for human consumption, including take in closed or lease only administrative kelp beds. Subsection (e) also specifies that license holders harvesting bull kelp for human consumption cannot exceed an annual limit of two tons (4,000 pounds (lbs)) wet weight per license.

The existing regulations in Section 165.5 define procedures for leasing administrative kelp beds for the exclusive right to harvest giant or bull kelp. In addition, the regulation spatially describes the existing 87 administrative kelp beds under the following management categories:

- open: beds which are available to harvest by all commercial kelp harvesters;
- closed: all commercial kelp harvest is prohibited;
- leasable: available for harvest by all commercial kelp harvesters until an exclusive lease is granted by the Commission, then only available for harvest by the lessee; and
- lease only: commercial kelp harvest is prohibited unless an exclusive lease is granted by the Commission.

The designations were designed for optimal harvest, while ensuring sustainable management of the resource and the species that depend upon kelp. Administrative kelp beds 308, 309, and 312 in Mendocino, Humboldt, and Del Norte counties are designated as lease only beds wherein only harvest by lease holders is allowed; however, current regulations allow limited harvest for human consumption of the lease only and closed beds within the limits specified in subsection 165(e). Section 165.5 also provides information on temporary lease closures for bull kelp in administrative kelp beds 308, 309, and 312 which sunset on January 1, 2026.

Proposed Regulatory Changes

The Department recommends that the Commission amend one subsection of 165 and one subsection of 165.5 pertaining to temporary restrictions for commercial harvest of the marine alga bull kelp. At the request of the Commission's Marine Resources Committee during its July 2025 meeting, an option for Mendocino and Sonoma counties has been added for subsection (c)(9) to allow for limited commercial bull kelp harvest.

Section 165

Subsection (c)(9): Current regulations in subsection (c)(9) specify temporary harvest restrictions and weekly reporting for bull kelp.

- The proposed amendment to subsection 165(c)(9)(A) includes two harvest options for Mendocino and Sonoma counties:
 - Subsection 165(c)(9)(A) Option 1 (Department recommendation): Extend the sunset date of the current bull kelp harvest closure in Sonoma and

Mendocino counties regardless of intended use of harvested bull kelp to January 1, 2029.

- Subsection 165(c)(9)(A) Option 2: Impose an annual overall bull kelp harvest quota from 1 pound to 2,000 pounds (1 ton) wet weight in Sonoma and Mendocino counties, combined, between January 1 – December 31 to sunset on January 1, 2029. Harvest is limited for human consumption only. The Commission will select the annual quota within the range provided if this option is chosen.
- Subsections (c)(9)(A)1. through (c)(9)(A)3.: In the event the Commission adopts subsection (c)(9)(A) Option 2, proposed subsections (c)(9)(A)1. through (c)(9)(A)3. are necessary to ensure an orderly fishery in Sonoma and Mendocino counties and that the quota will not be exceeded. The proposed amendment specifies:
 - the Department may temporarily close the harvest in order to obtain an accurate tally of the harvest;
 - the potential for individual harvester allotments;
 - the mathematical formula to calculate the fishery allotments if the fishery is temporarily closed and reopened;
 - the process by which the Department will notify the public and harvesters of the attainment of the quota; and
 - the harvesters' responsibility to monitor the Department's website to be kept informed of the remaining quota.

The Department has determined that the harvesters who may target harvest of bull kelp for human consumption in Sonoma and/or Mendocino counties if the fishery is temporarily closed and reopened are (1) the harvesters who have indicated they **plan to target** bull kelp for human consumption by indicating "Bull Kelp (Human Consumption)" on their Kelp Harvesting License and Drying Application DFW 658 and (2) the harvesters who **have reported bull kelp harvest** for human consumption in Sonoma and/or Mendocino counties on their previously submitted Commercial Edible Seaweed/Agarweed Aquatic Harvester's Monthly Reports DFW 113A in one or more months during the annual fishery quota period. Therefore, the number of harvesters in these two groups will be used in calculating the harvest allotment amount. The formula allows an equitable distribution of the remaining quota amount by ensuring that all harvesters who may target harvest of bull kelp for human consumption in Sonoma and/or Mendocino counties are included in the harvest allotment calculation. The allotment approach in this subsection ensures that all harvesters who may target harvest of bull kelp for human consumption in Sonoma and/or Mendocino counties will be allotted amounts. However, since harvesters may not exceed their annual license quota, any allotment

in excess of a licensed harvester's annual license quota will be allotted to other harvesters who the Department has identified may target harvest of bull kelp for human consumption in Sonoma and/or Mendocino counties to ensure the full amount of the annual overall fishery quota may be harvested.

- Subsection (c)(9)(A)4.: In the event the Commission adopts subsection (c)(9)(A) Option 2, proposed subsection (c)(9)(A)4. specifies that all harvest in excess of the annual overall fishery quota or allotments shall be disposed of or used in a manner determined by the Department by forfeiting the excess harvest to the Department by signing a Release of Property form DFW 1108. This regulation is necessary to ensure that any inadvertent excess harvest is discouraged to prevent waste, and is consistent with existing regulations in subsection (b)(6) which specifies it is unlawful to cause or permit waste of kelp, marine aquatic plants, or marine algae taken in California waters or to take, receive, or agree to receive more kelp, marine aquatic plants, or marine algae than can be used without waste or spoilage.

All Option 2 provisions will sunset January 1, 2029.

- **Subsection 165(c)(9)(B):** The proposed amendment extends the sunset date pertaining to the current harvest restrictions for bull kelp in Del Norte and Humboldt counties from January 1, 2026 to January 1, 2029 in subsection (c)(9)(B).
- **Subsection 165(c)(9)(C):** To allow the Department to monitor the harvest and avoid exceeding the annual harvest quota, in addition to the currently required monthly harvest reports, subsection (c)(9)(C) lists requirements for weekly reporting via email of bull kelp harvest with options dependent on the Commissions decision on Sonoma and Mendocino counties.
 - Subsection 165(c)(9)(C) Option 1: If subsection (c)(9)(A) Option 1 is adopted by the Commission, requirements for weekly reporting of bull kelp harvest for Del Norte and Humboldt counties will remain unchanged and the sunset date will be extended through January 1, 2029.
 - Subsection 165(c)(9)(C) Option 2: If subsection (c)(9)(A) Option 2 is adopted by the Commission, the sunset date for weekly reporting of bull kelp harvest for Del Norte and Humboldt counties will be extended to January 1, 2029 and weekly reporting of bull kelp harvest will be implemented for Mendocino and Sonoma counties, with a sunset date of January 1, 2029.

Section 165.5

Subsection (c): The proposed amendment to subsection (c) extends the temporary closure and lease prohibition of the lease only administrative kelp beds 308, 309, and 312 from January 1, 2026 to January 1, 2029 and amends the availability to lease

administrative kelp beds 308, 309, and 312 from “on or after January 2, 2026” to “on or after January 2, 2029.”

The Department also recommends that the Commission amend subsection 165.5(k)(2)(I) to correct an error.

Subsection (k)(2)(I): The proposed amendment to subsection (k)(2)(I) corrects the second coordinate in the description of administrative kelp bed 109 from **34°** 58.999' N. lat. 119° 29.556' W. long to **33°** 58.999' N. lat. 119° 29.556' W. long. A typographical error was introduced in rulemaking file 2013-1205-01S that placed the coordinate on land (Figure 2); this proposed amendment will correct the coordinate to that which was originally noticed in that rulemaking.

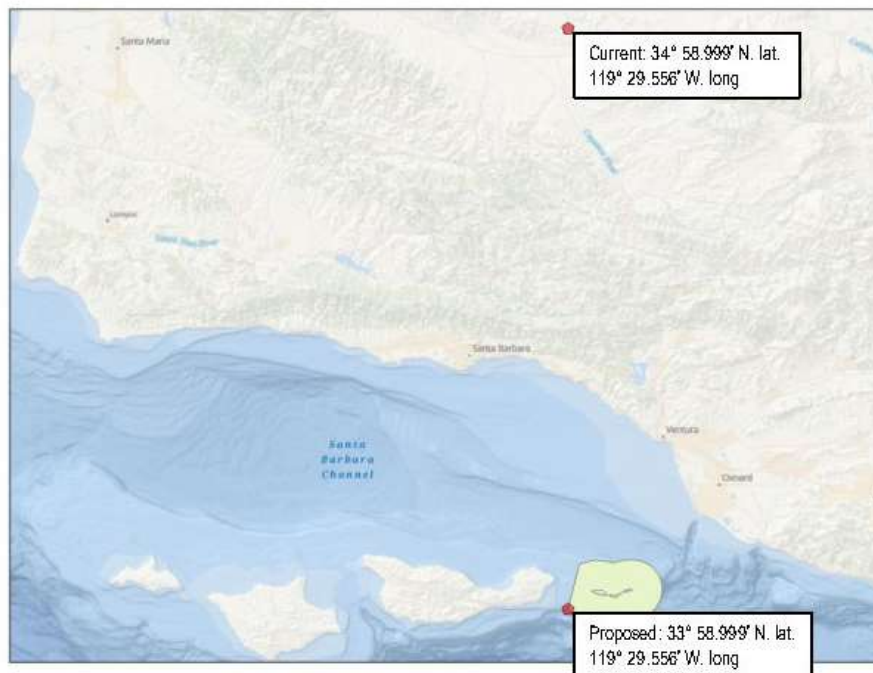


Figure 2. Image depicting current coordinate and proposed amendment to coordinate for administrative kelp bed 109, Anacapa Islands.

Minor edits are proposed for clarity and consistency.

(b) Goals and Benefits of the Regulation

Under the Marine Life Management Act (MLMA), it is the policy of the state to ensure the conservation, sustainable use, and restoration of California’s living marine resources for the benefit of all citizens of the state (Fish and Game Code (FGC), Section 7050). Furthermore, FGC defines a fishery as one or more populations of marine fish or marine plants that may be treated as a unit for purposes of conservation and management and that are identified on the basis of geographical, scientific, technical, recreational, and economic characteristics (FGC, Section 94).

Kelp is therefore considered a fishery and is subject to the policy of the state that programs for the conservation and management of the marine fishery resources of California shall be established and administered to prevent overfishing, to rebuild depressed stocks, to ensure

conservation, to facilitate long-term protection, and, where feasible, restoration of marine fishery habitats, and to achieve the sustainable use of the state's fishery resources [subdivision 7055(b), FGC] and that fisheries are conducted sustainably so that long-term health of the resources is not sacrificed in favor of short-term benefits [subdivision 7056(a), FGC].

To meet the goals of these policies, the Department has determined that a precautionary approach is warranted to protect and maintain the remaining bull kelp along the northern California coast.

The changes to the bull kelp regulations are proposed with the goal to protect and maintain the remaining bull kelp beds in Sonoma, Mendocino, Humboldt, and Del Norte counties.

The temporary nature of the proposed bull kelp regulations provides an interim management measure to protect the resource while allowing for the Department, Tribes, industry, and interested stakeholders to continue to collaboratively develop the KRMP.

The proposed regulations will provide benefits to the sustainable management of kelp resources and will provide regulatory clarity and enforceability.

(c) Authority and Reference Sections from Fish and Game Code for Regulation

Section 165

Authority cited: Sections 6653 and 6653.5, FGC.

Reference: Sections 51, 6650, 6651, 6652, 6653, 6653.5, 6654, 6656 and 6680, FGC.

Section 165.5

Authority cited: Sections 6653, 6700 and 6701, FGC.

Reference: Sections 6653, 6700, 6701, 6701.5, 6702, 6703, 6704, 6705, 6706, and 6707, FGC.

(d) Specific Technology or Equipment Required by Regulatory Change:

None.

(e) Identification of Reports or Documents Supporting Regulation Change

None.

(f) Identification of Documents Providing Background Information

Documents from Office of Administrative Law Rulemaking file 2022-1014-04SR:

- California Fish and Game Commission. January 14, 2022. Pre-Adoption Statement of Reasons for Regulatory Action. Amend Sections 165, and 165.5, and Appendix A, and add Section 705.1 Title 14, California Code of Regulations (CCR). Re: Commercial Harvesting of Kelp and Other Aquatic Plants; Lease of Kelp Beds for Exclusive Harvest of *Macrocystis* and *Nereocystis*; Commercial Kelp Harvesting and Drying Application, Monthly Harvest Reports.
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=199028&inline>

- California Fish and Game Commission. April 7, 2022. Final Statement of Reasons for Regulatory Action. Amend Sections 165, and 165.5, and Appendix A, and add Section 705.1 Title 14, California Code of Regulations (CCR). Re: Commercial Harvesting of Kelp and Other Aquatic Plants; Lease of Kelp Beds for Exclusive Harvest of *Macrocystis* and *Nereocystis*; Commercial Kelp Harvesting and Drying Application, Monthly Harvest Reports. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=207556&inline>

California Department of Fish and Wildlife, Marine Region and California Ocean Protection Council. November 2023. Status of Research and Monitoring, Restoration Efforts, and Developing Management Strategies for Kelp Canopy Forming Species in California. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=216814&inline>

California Ocean Protection Council. December 9, 2024. Staff Recommendation Action Item: Consideration and Approval of Disbursement of Funds to Support Adaptive Management and Resilience of Kelp Forests. <https://opc.ca.gov/wp-content/uploads/2024/11/Item-7-Kelp-Package-2024-508.pdf>

California Department of Fish and Wildlife, Kelp Restoration and Management Plan webpage. <https://wildlife.ca.gov/Conservation/Marine/Kelp/KRMP>. Last accessed 2025-0617.

(g) Public Discussions of Proposed Regulations Prior to Notice Publication

- July 1, 2025, Stakeholder informational meeting webinar. Webinar invitees included commercial kelp harvest licensees (years 2024 and 2025), and members of the 2022 Bull Kelp Working Group. Additionally, the informational meeting information was posted on the Department's Marine Management News blog and sent to the KRMP listserv.
- July 16-17, 2025 Marine Resources Committee meeting

IV. Description of Reasonable Alternatives to Regulatory Action

(a) Alternatives to Regulation Change

Option 2 (to allow limited harvest in Sonoma and Mendocino counties) was added as a result of discussion at the July 16-17, 2025, Marine Resources Committee meeting. No alternatives were identified by or brought to the attention of Commission staff that would have the same desired regulatory effect as the proposed regulations.

(b) No Change Alternative

The no change alternative would leave the existing regulations in place and the bull kelp temporary harvest restrictions in Sonoma, Mendocino, Humboldt, and Del Norte counties and weekly reporting to monitor the annual quota in Humboldt and Del Norte counties will expire on January 1, 2026.

Despite the continued loss of bull kelp, temporary precautionary measures to prohibit and limit bull kelp harvest would not be extended and harvest of bull kelp for human consumption would be allowed to resume and continue. As an annual species with its reproductive material located on the blades at the water's surface, all forms of harvest can result in less reproductive material, which could lead to an even smaller population in the

next generation. Also of concern is the lack of scientific data to inform managers whether commercial harvest does or does not have an impact on the current kelp population. Knowledge gaps around the potential effects of commercial harvest on the remaining kelp population are actively being addressed. Once available, results will be integrated into the harvest framework within the KRMP.

The current temporary closure of lease only administrative kelp beds would expire on January 1, 2026, and the lease only beds will be available for lease on January 2, 2026, regardless of bull kelp decline. Leaving the beds available for lease would also contradict the proposed bull kelp harvest closures (Option 1) or harvest limits (Option 2) in Mendocino and Sonoma counties, and the proposed harvest limits in Del Norte and Humboldt counties. Additionally, maintaining the lease only status or not imposing a temporary hiatus on accepting new lease applications would mislead and confuse the public into the belief that the beds are available for lease when lease applications may result in denial by the Commission due to the loss of bull kelp. This would also cause undue workload for the Department and Commission staff as well as the applicant.

The error in the administrative kelp bed 109 description in Section 165.5, subsection (k)(2)(I) will continue to be inaccurate and may affect enforceability of the regulations.

(c) Description of Reasonable Alternatives That Would Lessen Adverse Impact on Small Business:

Option 2 (to allow limited harvest in Sonoma and Mendocino counties) was added as a result of discussion at the July 16-17, 2025, Marine Resources Committee meeting. No alternatives that would lessen adverse impact on small business were identified or brought to the attention of Commission staff.

V. Mitigation Measures Required by Regulatory Action

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed.

VI. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States

The proposed action will not have a significant adverse economic impact directly affecting business, including the ability of California businesses to compete with business in other states.

The proposed amendments extend the current temporary regulatory amendments established through OAL rulemaking file 2022-1014-04SR that closed all commercial bull kelp harvest in Sonoma and Mendocino counties and imposed an annual fishery quota and weekly reporting for bull kelp harvest in Humboldt and Del Norte counties.

The temporary four ton (8,000 lbs) annual fishery quota restriction that expires on January 1, 2026 for Del Norte and Humboldt counties combined has not restricted the industry from harvest in these counties. Weekly reporting of commercial harvest of bull kelp in the combined counties reflected 1,620.2 lbs in 2023 and 2,926.2 lbs in 2024. Extending the current annual fishery quota in Del Norte and Humboldt counties combined would maintain current use and harvest post-2014. Due to the temporary closure, no commercial harvest of bull kelp was reported in Sonoma and Mendocino counties in 2023 and 2024.

Commercial harvesters in Mendocino and Sonoma counties did not shift their harvest to Del Norte and Humboldt counties during the temporary closure in 2023 and 2024. Under Option 2, the reopening of Mendocino and Sonoma counties to harvest could potentially yield an annual monetary benefit of approximately \$21,406 if the full 2,000-pound wet weight harvest quota is met while also introducing approximately \$120 in reporting costs per harvester. See the Addendum to the economic and fiscal impact statement (STD 399) for further details.

Commercial harvest of wild marine algae is not allowed in nearby states of Oregon and Washington. Therefore, the industry is not competing with nearby markets for harvested kelp.

(b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment

The Commission does not anticipate any impacts on the creation or elimination of jobs, the creation of new business, the elimination of existing businesses or the expansion of businesses in California. Under Option 2 harvesters in Sonoma and Mendocino counties may resume their harvesting activities, but it is anticipated that this will reactivate existing harvesters from that area who did not move to Del Norte or Humboldt counties.

The Commission does not anticipate any benefits to health and welfare of California residents or worker safety under either option.

The Commission anticipates benefits to the state's environment in the sustainable management of this resource. As a foundational species forming the physical structure of kelp forest habitats, bull kelp supports fisheries, cultural and ceremonial traditions, and tourism.

(c) Cost Impacts on a Representative Private Person or Business

The current long-standing monthly harvest reporting requirement for all commercially harvested marine alga will continue. The proposed extension of the current weekly reporting requirement for bull kelp harvest would continue to introduce additional time for harvesters in Del Norte and Humboldt counties, which is estimated to be about \$200 annually per harvester (see Table 1. Bull Kelp Harvester Weekly Reporting Costs for Del Norte and Humboldt Counties in the STD 399 Addendum). If Option 2 is selected, it is estimated that harvesters in Sonoma and Mendocino counties would face annual reporting costs of approximately \$120 per harvester (see STD 399 Addendum for further details).

(d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State:

Management of bull kelp harvest quota and weekly reporting of harvest will continue for an additional three years for the Department. Management tasks in counties with a harvest quota will include: weekly compiling and tracking of harvest and posting status updates on the Department webpage, comparison of weekly to monthly reporting and communications with license holders as needed if discrepancies occur in the reports, determining status of harvest toward the quota as needed, drafting and emailing notices to license holders prior to implementation of restrictions triggered by the quota, posting notice of temporary closure or closures on the Department webpage, and ensuring any harvest in excess of any established quota is forfeited to the Department through a Release of Property form. The continuation of these activities by the Department does not represent a new cost to the state as it has already been budgeted. However, under Option 2 the Department could see up to \$24 in additional annual revenue from the collection of the edible seaweed royalty in the reopened Sonoma and Mendocino counties, see STD 399 Addendum for further details.

(e) Nondiscretionary Costs/Savings to Local Agencies:

None

(f) Programs Mandated on Local Agencies or School Districts:

None

(g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code:

None

(h) Effect on Housing Costs:

None

VII. Economic Impact Assessment

The proposed continued temporary harvest limits for bull kelp in Humboldt and Del Norte counties combined (8,000 lbs per year) are above recent annual harvest range during the current limits from 2023 through 2024, thus the average revenue per harvester is anticipated to be within recent historic levels. The proposed continued temporary closure of bull kelp harvest for Mendocino and Sonoma counties under Option 1 could result in a continued decline in revenue for the industry that harvests bull kelp.

The proposed continuation of the weekly reporting requirement would continue to temporarily introduce additional time that is estimated to be \$200 annually per harvester (see Table 1. Bull Kelp Harvester Weekly Reporting Costs for Del Norte and Humboldt Counties in the STD 399 Addendum).

Under Option 2, the reopening of Mendocino and Sonoma counties to harvest could potentially yield an annual monetary benefit of approximately \$21,406 if the full 2,000-pound wet weight harvest quota is met while also introducing approximately \$120 in reporting costs per harvester. See the Addendum to the STD 399 for further details.

(a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State

The Commission anticipates no impacts on the creation or elimination of jobs within the state because the proposed action will not spur the need for more or less labor. While Option 2 does restore the ability of harvesters in Sonoma and Mendocino to resume the harvest of bull kelp, it is unlikely to spur job growth as these activities are typically done under smaller operations, and these businesses have remained in the area due to the harvesting of other marine plants still being permitted under current regulations.

(b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State

The Commission anticipates no impacts on the creation of new businesses or the elimination of existing businesses within the state. The proposed changes under either option are not expected to spur new business creation or the elimination of businesses. The proposed harvest limit in Del Norte and Humboldt counties is within historic take. Harvest of other marine plants is still authorized in Del Norte, Humboldt, Mendocino and Sonoma counties.

Under Option 2 existing harvesters in Sonoma and Mendocino counties are expected to resume their harvest of bull kelp, but as mentioned previously these harvesters have largely remained active in those counties due to the harvest of other marine plants being authorized under current regulations.

(c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State

Under Option 1 the Commission anticipates no impacts on the expansion of businesses currently doing business within the state because the harvest limit is not being increased. However, under Option 2 harvesters could resume activity in Sonoma and Mendocino counties, which could have an annual monetary benefit of approximately \$21,406 if the full 2,000-pound wet weight quota for those two counties is fully harvested.

(d) Benefits of the Regulation to the Health and Welfare of California Residents

The Commission anticipates no direct benefits to the health and welfare of California residents.

(e) Benefits of the Regulation to Worker Safety

The Commission anticipates no impacts on the worker safety because the proposed action does not have any bearing on working conditions.

(f) Benefits of the Regulation to the State's Environment

The Commission anticipates benefits to the State's environment by contributing to the conservation of kelp forest ecosystem benefits.

Informative Digest/Policy Statement Overview

Unless otherwise specified, all section references in this document are to Title 14 of the California Code of Regulations (CCR), Commission refers to the California Fish and Game Commission, and Department refers to the California Department of Fish and Wildlife.

Current Regulations

The current regulations in Section 165 provide the general licensing provisions for the commercial harvest of kelp and other aquatic plants. The section also establishes harvest reporting and harvest royalty fee requirements, establishes geographical limitations on bull kelp harvesting, establishes harvesting method limitations on giant kelp, bull kelp, agar-bearing marine plants, and edible seaweed and prohibits the disturbance of certain aquatic plants. Although Section 165 provides regulations for kelp and other aquatic plants overall, it also contains subsections which provide more nuanced regulations depending on the species harvested and/or use of the harvest, including temporary harvest restrictions and weekly reporting for bull kelp which sunset on January 1, 2026.

The existing regulations in Section 165.5 define procedures for leasing administrative kelp beds for the exclusive right to harvest giant or bull kelp. In addition, the regulation spatially describes the existing 87 administrative kelp beds under the following management categories: open, closed, leaseable, and lease only. The designations were designed for optimal harvest, while ensuring sustainable management of the resource and the species that depend upon kelp. Administrative kelp beds 308, 309, and 312 in Mendocino, Humboldt, and Del Norte counties are designated as lease only beds wherein only harvest by lease holders is allowed; however, current regulations allow limited harvest for human consumption of the lease only and closed beds within the limits specified in subsection 165(e). Section 165.5 also provides information on temporary lease closures for bull kelp beds 308, 309, and 312 which sunset on January 1, 2026.

Proposed Amendments

Subsection 165(c): The Department recommends temporary prohibitions, limits, weekly reporting, and lease restrictions for commercial harvest of bull kelp (*Nereocystis luetkeana*).

- The proposed amendment to subsection 165(c)(9) extends the sunset date pertaining to the current harvest restrictions and weekly reporting for bull kelp in Del Norte and Humboldt counties from January 1, 2026 to January 1, 2029.
- Two options are provided for Mendocino and Sonoma counties.
 - Under Option 1 (Department recommendation), the proposed amendment to subsection 165(c)(9) extends the sunset date pertaining to the closure of commercial bull kelp harvest in Mendocino and Sonoma counties from January 1, 2026 to January 1, 2029.
 - Under Option 2, the proposed amendment to subsection 165(c)(9) implements an annual fishery quota, from 1 to 2,000 pounds wet weight, in Mendocino and Sonoma counties combined with the amount to be determined by the Commission; mandatory weekly reporting for bull kelp harvesters in Mendocino and Sonoma

counties; authorization for the Department to temporarily close harvest in order to obtain an accurate tally of the harvest; the potential for individual harvester allotments to ensure the quota is not exceeded; the mathematical formula to calculate the fishery allotments if the fishery is temporarily closed and reopened; the process by which the Department will notify the public and harvesters of the attainment of the quota; the harvesters' responsibility to monitor the Department's website to be kept informed of the remaining annual fishery quota; and the requirement that harvest in excess of the annual overall fishery quota or allotments shall be disposed of or used in a manner determined by the Department by forfeiting the excess harvest to the Department. These provisions would sunset on January 1, 2029.

Subsection 165.5(c): The proposed amendment to subsection (c) extends the temporary closure and lease prohibition of the lease only administrative kelp beds 308, 309, and 312 from January 1, 2026 to January 1, 2029 and amends the availability to lease administrative kelp beds 308, 309, and 312 from "on or after January 2, 2026" to "on or after January 2, 2029."

The Department is also recommending correcting a coordinate error for administrative kelp bed 109.

Subsection 165.5(k)(2)(l): The proposed amendment to subsection (k)(2)(l) corrects the second coordinate in the description of administrative kelp bed 109 from **34°** 58.999' N. lat. 119° 29.556' W. long to **33°** 58.999' N. lat. 119° 29.556' W. long. A typographical error was introduced in rulemaking file 2013-1205-01S that placed the coordinate on land; this proposed amendment will correct the coordinate to that which was originally noticed in that rulemaking.

Minor edits are proposed for clarity and consistency.

Benefits of the Regulations

Under the Marine Life Management Act (MLMA), it is the policy of the state to ensure the conservation, sustainable use, and restoration of California's living marine resources for the benefit of all citizens of the state (Fish and Game Code (FGC), Section 7050). Furthermore, FGC defines a fishery as one or more populations of marine fish or marine plants that may be treated as a unit for purposes of conservation and management and that are identified on the basis of geographical, scientific, technical, recreational, and economic characteristics (FGC, Section 94).

Kelp is therefore considered a fishery and is subject to the policy of the state that programs for the conservation and management of the marine fishery resources of California shall be established and administered to prevent overfishing, to rebuild depressed stocks, to ensure conservation, to facilitate long-term protection, and, where feasible, restoration of marine fishery habitats, and to achieve the sustainable use of the state's fishery resources [subdivision 7055(b), FGC] and that fisheries are conducted sustainably so that long-term health of the resources is not sacrificed in favor of short-term benefits [subdivision 7056(a), FGC].

To meet the goals of these policies, the Department has determined that a precautionary approach is warranted to protect and maintain the remaining bull kelp along the northern California coast.

The changes to the bull kelp regulations are proposed with the goal to protect and maintain the remaining bull kelp beds in Sonoma, Mendocino, Humboldt, and Del Norte counties.

The temporary nature of the proposed bull kelp regulations provides an interim management measure to protect the resource while allowing for the Department, Tribes, industry, and interested stakeholders to continue to collaboratively develop the Kelp Restoration and Management Plan, a comprehensive management framework for kelp.

The proposed regulations will provide benefits to the sustainable management of kelp resources and will provide regulatory clarity and enforceability.

Consistency and Compatibility with Existing Regulations

The proposed regulatory changes are neither inconsistent nor incompatible with existing state regulations. Section 20, Article IV, of the state Constitution specifies that the Legislature may delegate to the Commission such powers relating to the protection and propagation of fish and game as the Legislature sees fit. The Legislature has delegated to the Commission the power to adopt regulations governing the harvest of kelp and other aquatic plants for profit (FGC, Section 6653). No other state agency has the authority to adopt regulations governing the harvest of kelp and other aquatic plants for profit. Commercially manufactured and processed food for human consumption in California is regulated by the California Department of Public Health (CDPH); however, CDPH regulations do not address the harvesting of kelp. The Commission has reviewed its own regulations and finds that the proposed regulatory changes are neither inconsistent nor incompatible with existing state regulations. The Commission has searched the CCR and has found no other state agency regulations pertaining to the commercial harvest of kelp and other aquatic plants; therefore, the Commission has concluded that the proposed regulatory changes are neither inconsistent nor incompatible with existing state regulations.

Proposed Regulatory Language

Section 165, Title 14, CCR, is amended to read:

§165. Commercial Harvesting of Kelp and Other Aquatic Plants.

[...*No changes to subsections (a) through (c)(8)(K)*...]

[...*Subsection (c)(9) is amended as follows*...]

(9) Temporary harvest restrictions and weekly reporting for bull kelp. Subsections (c)(9) through (c)(9)(C)3. shall remain in effect only until ~~January 1, 2026~~, January 1, 2029, and as of that date are repealed.

[subsection (c)(9)(A) Option 1 - no change to current regulatory language]

(A) Notwithstanding subsection (b)(8), bull kelp may not be taken for any purpose in Sonoma and Mendocino counties.

[subsection (c)(9)(A) Option 2 - amends subsection (c)(9)(A) and adds subsections (c)(9)(A)1. through (c)(9)(A)4.: Sonoma and Mendocino counties annual harvest quota. The Commission will select the annual quota within the range provided]

(A) Bull kelp may be harvested in Sonoma and Mendocino counties for human consumption only, not to exceed an annual overall fishery quota of [1 to 2,000 pounds (one ton)] wet weight for the combined counties between January 1 and December 31.

1. The department may announce a temporary commercial bull kelp harvest closure in order to obtain an accurate tally of harvest. If the annual overall fishery quota has not been met, the fishery will reopen and commercial kelp harvester license holders shall be limited to allotted harvest amounts to preclude exceeding the annual overall fishery quota and the annual license quota specified in subsection 165(e)(2)(A).

a. Allotted harvest amounts will be calculated as the difference between the annual overall fishery quota and bull kelp harvest from Sonoma and Mendocino counties reported in the monthly harvest reports required pursuant to subsection 165(b)(3) and the weekly harvest reports required pursuant to subsection 165(c)(9)(C), divided by the number of licensed harvesters who indicated "Bull Kelp (Human Consumption)" on their Kelp Harvesting License and Drying Application DFW 658 and those who have not indicated "Bull Kelp (Human Consumption)" on their Kelp Harvesting License and Drying Application DFW 658 but have reported take of bull kelp in Sonoma and/or Mendocino counties on their Commercial Edible

Seaweed/Agarweed Aquatic Plant Harvester's Monthly Reports DFW 113A in one or more months during the current annual fishery quota period.

b. Licensed harvesters who indicated "Bull Kelp (Human Consumption)" on their Kelp Harvesting License and Drying Application DFW 658 and licensed harvesters who did not indicate "Bull Kelp (Human Consumption)" on their Kelp Harvesting License and Drying Application DFW 658 but have reported take of bull kelp in Sonoma and/or Mendocino counties on their Commercial Edible Seaweed/Agarweed Aquatic Plant Harvester's Monthly Reports DFW 113A in one or more months during the current annual fishery quota period shall be allotted the amount calculated in subsection 165(c)(9)(A)1.a. If the allotment exceeds the amount remaining in a licensed harvester's annual license quota specified in subsection 165(e)(2)(A), the licensed harvester's allotment shall be decreased to the amount remaining in the licensed harvester's annual license quota and the amount of the allotment in excess of the licensed harvester's annual license quota shall be divided equally between the remaining licensed harvester(s) who have not exceeded their annual license quota specified in subsection 165(e)(2)(A). Prior to reopening the fishery, the department shall notify licensed harvesters via email of their allotted amount.

2. The department shall inform the public by posting a notice on its webpage <https://wildlife.ca.gov/Conservation/Marine/Kelp/Commercial-Harvest> and shall notify commercial kelp harvester license holders by email prior to any implementation of a temporary closure pursuant to subsection 165(c)(9)(A)1., allotments pursuant to subsections 165(c)(9)(A)1. through 165(c)(9)(A)1.b., or an annual closure triggered by the annual overall fishery quota. (Note: A department status report on progress toward the annual overall fishery quota is updated weekly and available at <https://wildlife.ca.gov/Conservation/Marine/Kelp/Commercial-Harvest>.)

3. It is the responsibility of the harvester to keep themselves informed of the remaining quota by monitoring the reported harvest on the department's webpage: <https://wildlife.ca.gov/Conservation/Marine/Kelp/Commercial-Harvest>. Any announcement issued shall constitute official notice.

4. All harvest in excess of the annual overall fishery quota or allotments shall be forfeited to the department by signing a Release of Property DFW 1108 incorporated by reference in Section 705.1. The excess harvest shall be used, sold, disposed of, or donated to a non-profit institution. If sold, the proceeds of all such sales shall be paid into the Fish and Game Preservation Fund.

[...No changes to subsections (c)(9)(B) through (c)(9)(B)4.; however, they are provided for here for context...]

(B) Bull kelp may be harvested in Humboldt and Del Norte counties for human consumption only, not to exceed an annual overall fishery quota of 4 tons (8,000 lbs) wet weight for the combined counties between January 1 and December 31.

1. The department may announce a temporary commercial bull kelp harvest closure in order to obtain an accurate tally of harvest. If the annual overall fishery quota has not been met, the fishery will reopen and commercial kelp harvester license holders shall be limited to allotted harvest amounts to preclude exceeding the annual overall fishery quota and the annual license quota specified in subsection 165(e)(2)(A).

a. Allotted harvest amounts will be calculated as the difference between the annual overall fishery quota and bull kelp harvest from Humboldt and Del Norte counties reported in the monthly harvest reports required pursuant to subsection 165(b)(3) and the weekly harvest reports required pursuant to subsection 165(c)(9)(C), divided by the number of licensed harvesters who indicated "Bull Kelp (Human Consumption)" on their Kelp Harvesting License and Drying Application DFW 658 and those who have not indicated "Bull Kelp (Human Consumption)" on their Kelp Harvesting License and Drying Application DFW 658 but have reported take of bull kelp in Del Norte and/or Humboldt counties on their Commercial Edible Seaweed/Agarweed Aquatic Plant Harvester's Monthly Reports DFW 113A in one or more months during the current annual fishery quota period.

b. Licensed harvesters who indicated "Bull Kelp (Human Consumption)" on their Kelp Harvesting License and Drying Application DFW 658 and licensed harvesters who did not indicate "Bull Kelp (Human Consumption)" on their Kelp Harvesting License and Drying Application DFW 658 but have reported take of bull kelp in Del Norte and/or Humboldt counties on their Commercial Edible Seaweed/Agarweed Aquatic Plant Harvester's Monthly Reports DFW 113A in one or more months during the current annual fishery quota period shall be allotted the amount calculated in subsection 165(c)(9)(B)1.a. If the allotment exceeds the amount remaining in a licensed harvester's annual license quota specified in subsection 165(e)(2)(A), the licensed harvester's allotment shall be decreased to the amount remaining in the licensed harvester's annual license quota and the amount of the allotment in excess of the licensed harvester's annual license quota shall be divided equally between the remaining licensed harvester(s) who have not exceeded their annual license quota specified

in subsection 165(e)(2)(A). Prior to reopening the fishery, the department shall notify licensed harvesters via email of their allotted amount.

2. The department shall inform the public by posting a notice on its webpage <https://wildlife.ca.gov/Conservation/Marine/Kelp/Commerical-Harvest> and shall notify commercial kelp harvester license holders by email prior to any implementation of a temporary closure pursuant to subsection 165(c)(9)(B)1., allotments pursuant to subsections 165(c)(9)(B)1. through 165(c)(9)(B)1.b., or an annual closure triggered by the annual overall fishery quota. (Note: A department status report on progress toward the annual overall fishery quota is updated weekly and available at <https://wildlife.ca.gov/Conservation/Marine/Kelp/Commerical-Harvest>.)

3. It is the responsibility of the harvester to keep themselves informed of the remaining quota by monitoring the reported harvest on the department's webpage: <https://wildlife.ca.gov/Conservation/Marine/Kelp/Commerical-Harvest>. Any announcement issued shall constitute official notice.

4. All harvest in excess of the annual overall fishery quota or allotments shall be forfeited to the department by signing a Release of Property DFW 1108 incorporated by reference in Section 705.1. The excess harvest shall be used, sold, disposed of, or donated to a non-profit institution. If sold, the proceeds of all such sales shall be paid into the Fish and Game Preservation Fund.

(C) Mandatory Harvest Data Reporting Requirements for bull kelp.

[subsection (c)(9)(C)1. Option 1 – if subsection (c)(9)(A) Option 1 is selected, no change to current regulatory language]

1. In addition to monthly reporting, persons harvesting bull kelp in Humboldt and Del Norte counties must submit weekly reports by email to kelp@wildlife.ca.gov.

[subsection (c)(9)(C)1. Option 2 – if subsection (c)(9)(A) Option 2 is selected]

1. In addition to monthly reporting, persons harvesting bull kelp in Sonoma, Mendocino, Humboldt and Del Norte counties must submit weekly reports by email to kelp@wildlife.ca.gov.

[...No changes to subsections (c)(9)(C)2. through (c)(9)(C)3.; however, they are provided for here for context...]

2. Weekly harvest reports shall be submitted by 5:00 p.m. on each Monday for the Sunday through Saturday of the preceding week. Weekly harvest reporting is required for the duration of the annual license unless the harvester provides

a notice via email to kelp@wildlife.ca.gov that bull kelp will not be harvested within a specified time frame or no longer occur for the remainder of the license year.

3. Harvest reporting shall be provided in the email body and shall include business name, business contact name, harvester license number, amount of harvest in pounds by county in which harvest occurred, and time period of harvest which includes the month, specific calendar days of harvest, and year.

[...*No changes to subsections (d) through (d)(4)*...]

[...*No changes to subsection (e); however, it is provided for here for context*...]

(e) Harvesting of marine plants, including the genera Porphyra, Laminaria, Monostrema, and other aquatic plants utilized fresh or preserved as human food and classified as edible seaweed.

[...*No changes to subsections (e)(1) through (e)(1)(E)*...]

[...**subsection (e)(2) is amended as follows**...]

(2) Harvest of Bull Kelp for Human Consumption.

(A) Unless otherwise prohibited, in addition to open or leasable beds, bull kelp may be harvested for human consumption in a closed or ~~lease-only~~ lease only administrative kelp beds described in subsection 165.5(k) if the beds are not leased. Persons operating under the authority of an edible seaweed harvesters license may take, not to exceed, 2 tons (4,000 lbs) of bull kelp annually per license. The entire plant may be harvested.

(B) Temporary bull kelp harvest restrictions and harvest reporting are specified in subsections (c)(9) through (c)(9)(C)3.

[...*No changes to subsections (e)(3) through (g)*...]

Note: Authority cited: Sections 6653 and 6653.5, Fish and Game Code. Reference: Sections 51, 6650, 6651, 6652, 6653, 6653.5, 6654, 6656 and 6680, Fish and Game Code.

Proposed Regulatory Language

Section 165.5, Title 14, CCR, is amended to read:

§165.5. Lease of Kelp Beds for Exclusive Harvest of *Macrocystis* and *Nereocystis*.

[...*No changes to subsections (a) through (b)(6)...*]

[...***Subsection (c) is amended as follows...***]

(c) Lease only administrative kelp beds 308, 309, and 312 are temporarily closed and cannot be leased through ~~January 1, 2026~~January 1, 2029. Beds 308, 309, and 312 are available for lease on or after ~~January 2, 2026~~January 2, 2029.

[...*No changes to subsections (d) through (k)(2)(H)...*]

[...***Subsection (k)(2)(I) is amended as follows...***]

(I) Administrative kelp bed 109. Anacapa Islands. Open. 0.32 square miles. This bed encompasses all of the Anacapa Islands, defined as the area bounded by the mean high tide line and a straight line connecting the following points in the order listed except where noted:

34° 03.605' N. lat. 119° 28.116' W. long.; and

~~34° 58.999' N. lat.~~ 33° 58.999' N. lat. 119° 29.556' W. long.; thence eastward along the three nautical mile offshore boundary to

34° 03.605' N. lat. 119° 28.116' W. long.

[...*No changes to subsections (k)(2)(J) through (k)(4)(H)...*]

[...*No changes to subsections (k)(4)(I) and (k)(4)(J); however, they are provided here for context...*]

(I) Administrative kelp bed 308. Lease only. Temporary lease restrictions per subsection (c). 0.20 square miles. This bed extends from the mouth of Ten-mile River to Point Delgada, defined as the area bounded by the mean high tide line and straight lines connecting the following points in the order listed except where noted:

39° 33.260' N. lat. 123° 46.000' W. long.;

39° 33.260' N. lat. 123° 50.548' W. long.; thence northward along the three nautical mile offshore boundary to

39° 57.631' N. lat. 124° 04.134' W. long.; and

40° 01.278' N. lat. 124° 04.134' W. long.

(J) Administrative kelp bed 309. Lease only. Temporary lease restrictions per subsection (c). 0.14 square miles. This bed extends from Point Delgada to Cape

Mendocino, defined as the area bounded by the mean high tide line and straight lines connecting the following points in the order listed except where noted:

40° 01.278' N. lat. 124° 04.134' W. long.;

39° 57.631' N. lat. 124° 04.134' W. long.; thence northwestward along the three nautical mile offshore boundary to

40° 25.120' N. lat. 124° 31.323' W. long.; and

40° 26.309' N. lat. 124° 24.582' W. long.

[...No changes to subsections (k)(4)(K) and (k)(4)(L) ...]

[...No changes to subsection (k)(4)(M); however, it is provided here for context ...]

(M) Administrative kelp bed 312. Lease only. Temporary lease restrictions per subsection (c). 0.20 square miles. This bed extends from the mouth of the Klamath River to the California/Oregon Border, defined as the area bounded by the mean high tide line and straight lines connecting the following points in the order listed except where noted:

41° 32.828' N. lat. 124° 04.821' W. long.;

41° 32.828' N. lat. 124° 10.636' W. long.; thence northward along the three nautical mile offshore boundary to

42° 00.000' N. lat. 124° 19.814' W. long.; and

42° 00.000' N. lat. 124° 12.735' W. long.

Note: Authority cited: Sections 6653, 6700 and 6701, Fish and Game Code. Reference: Sections 6653, 6700, 6701, 6701.5, 6702, 6703, 6704, 6705, 6706 and 6707, Fish and Game Code.

**ECONOMIC AND FISCAL IMPACT STATEMENT
(REGULATIONS AND ORDERS)**

STD. 399 (Rev. 10/2019)

ECONOMIC IMPACT STATEMENT

DEPARTMENT NAME California Fish and Game Commission	CONTACT PERSON Dixie Van Allen	EMAIL ADDRESS fgc@fgc.ca.gov	TELEPHONE NUMBER 916-201-6201
DESCRIPTIVE TITLE FROM NOTICE REGISTER OR FORM 400 Amend Sec. 165 and 165.5, Title 14, CCR re: Extension of Commercial Bull Kelp Harvest Restrictions, etc.			NOTICE FILE NUMBER Z

A. ESTIMATED PRIVATE SECTOR COST IMPACTS *Include calculations and assumptions in the rulemaking record.*

1. Check the appropriate box(es) below to indicate whether this regulation:

- | | |
|--|---|
| <input checked="" type="checkbox"/> a. Impacts business and/or employees | <input checked="" type="checkbox"/> e. Imposes reporting requirements |
| <input checked="" type="checkbox"/> b. Impacts small businesses | <input type="checkbox"/> f. Imposes prescriptive instead of performance |
| <input type="checkbox"/> c. Impacts jobs or occupations | <input type="checkbox"/> g. Impacts individuals |
| <input type="checkbox"/> d. Impacts California competitiveness | <input type="checkbox"/> h. None of the above (Explain below): |

*If any box in Items 1 a through g is checked, complete this Economic Impact Statement.**If box in Item 1.h. is checked, complete the Fiscal Impact Statement as appropriate.*2. The California Fish and Game Commission estimates that the economic impact of this regulation (which includes the fiscal impact) is:
(Agency/Department)

- ☒ Below \$10 million
- ☐ Between \$10 and \$25 million
- ☐ Between \$25 and \$50 million
- ☐ Over \$50 million *[If the economic impact is over \$50 million, agencies are required to submit a Standardized Regulatory Impact Assessment as specified in Government Code Section 11346.3(c)]*

3. Enter the total number of businesses impacted: 6Describe the types of businesses (Include nonprofits): Commercial kelp harvestersEnter the number or percentage of total businesses impacted that are small businesses: 100%4. Enter the number of businesses that will be created: 0 eliminated: 0Explain: Closure or harvest limits in Sonoma & Mendocino cos. and current harvest limits Del Norte & Humboldt cos.5. Indicate the geographic extent of impacts: ☐ Statewide
☒ Local or regional (List areas): Mendocino, Sonoma, Humboldt, Del Norte cos.6. Enter the number of jobs created: 0 and eliminated: 0

Describe the types of jobs or occupations impacted: _____

7. Will the regulation affect the ability of California businesses to compete with other states by making it more costly to produce goods or services here? ☐ YES ☒ NO

If YES, explain briefly: _____

**ECONOMIC AND FISCAL IMPACT STATEMENT
(REGULATIONS AND ORDERS)**

STD. 399 (Rev. 10/2019)

ECONOMIC IMPACT STATEMENT (CONTINUED)**B. ESTIMATED COSTS** *Include calculations and assumptions in the rulemaking record.*

1. What are the total statewide dollar costs that businesses and individuals may incur to comply with this regulation over its lifetime? \$ 720
- a. Initial costs for a small business: \$ 120 Annual ongoing costs: \$ 120 Years: 3
- b. Initial costs for a typical business: \$ 120 Annual ongoing costs: \$ 120 Years: 3
- c. Initial costs for an individual: \$ 0 Annual ongoing costs: \$ 0 Years: 3
- d. Describe other economic costs that may occur: Opt 1: No costs imposed by continuing closure in Mendocino and Sonoma cos.
or by extending the reporting requirements for the annual quota in Del Norte & Humboldt cos. Opt 2: Reporting costs from reopening Mendocino and Sonoma, see addendum.
2. If multiple industries are impacted, enter the share of total costs for each industry: N/A, only industry impacted are commercial kelp
harvesters.
3. If the regulation imposes reporting requirements, enter the annual costs a typical business may incur to comply with these requirements.
Include the dollar costs to do programming, record keeping, reporting, and other paperwork, whether or not the paperwork must be submitted. \$ 120 see add.
4. Will this regulation directly impact housing costs? ☐ YES ☒ NO
If YES, enter the annual dollar cost per housing unit: \$ _____
Number of units: _____
5. Are there comparable Federal regulations? ☐ YES ☒ NO
Explain the need for State regulation given the existence or absence of Federal regulations: Resource is within State waters in which notable
resource declines have been documented. CA Fish and Game Commission is charged with protecting state natural resources.
- Enter any additional costs to businesses and/or individuals that may be due to State - Federal differences: \$ 0

C. ESTIMATED BENEFITS *Estimation of the dollar value of benefits is not specifically required by rulemaking law, but encouraged.*

1. Briefly summarize the benefits of the regulation, which may include among others, the health and welfare of California residents, worker safety and the State's environment: No impacts to health, welfare, or worker safety.
Benefits include the value of the commercial harvest, ecosystem benefits for the commercial
and recreational fisheries, cultural traditions, and tourism. See addendum.
2. Are the benefits the result of: ☐ specific statutory requirements, or ☒ goals developed by the agency based on broad statutory authority?
Explain: FGC Section 6653 provides the authority to regulate taking of kelp and other aquatic plants.
3. What are the total statewide benefits from this regulation over its lifetime? \$ 45,569; see addendum
4. Briefly describe any expansion of businesses currently doing business within the State of California that would result from this regulation: No expansion
is anticipated, but under Option 2 harvesters in Mendocino and Sonoma counties could resume activity if they are reopened; see addendum.

D. ALTERNATIVES TO THE REGULATION *Include calculations and assumptions in the rulemaking record. Estimation of the dollar value of benefits is not specifically required by rulemaking law, but encouraged.*

1. List alternatives considered and describe them below. If no alternatives were considered, explain why not: The no-change alternative eliminates
the reporting requirements and quotas in Humboldt/Del Norte cos. by letting them sunset, and reopens Sonoma and Mendocino cos. with no quota.

**ECONOMIC AND FISCAL IMPACT STATEMENT
(REGULATIONS AND ORDERS)**

STD. 399 (Rev. 10/2019)

ECONOMIC IMPACT STATEMENT (CONTINUED)

2. Summarize the total statewide costs and benefits from this regulation and each alternative considered:

Regulation: Benefit: \$ 45,569 Cost: \$ 240

Alternative 1: Benefit: \$ 37,018 Cost: \$ 0

Alternative 2: Benefit: \$ _____ Cost: \$ _____

3. Briefly discuss any quantification issues that are relevant to a comparison of estimated costs and benefits for this regulation or alternatives: Calculating ecosystem services for the preservation of bull kelp is difficult to do as the ecosystems are inherently not a monetized resource.

4. Rulemaking law requires agencies to consider performance standards as an alternative, if a regulation mandates the use of specific technologies or equipment, or prescribes specific actions or procedures. Were performance standards considered to lower compliance costs? ☐ YES ☒ NO

Explain: Harvest limits and harvest reports are more enforceable for kelp resource management.

E. MAJOR REGULATIONS *Include calculations and assumptions in the rulemaking record.*

California Environmental Protection Agency (Cal/EPA) boards, offices and departments are required to submit the following (per Health and Safety Code section 57005). Otherwise, skip to E4.

1. Will the estimated costs of this regulation to California business enterprises **exceed \$10 million**? ☐ YES ☒ NO

If YES, complete E2. and E3

If NO, skip to E4

2. Briefly describe each alternative, or combination of alternatives, for which a cost-effectiveness analysis was performed:

Alternative 1: _____

Alternative 2: _____

(Attach additional pages for other alternatives)

3. For the regulation, and each alternative just described, enter the estimated total cost and overall cost-effectiveness ratio:

Regulation: Total Cost \$ _____ Cost-effectiveness ratio: \$ _____

Alternative 1: Total Cost \$ _____ Cost-effectiveness ratio: \$ _____

Alternative 2: Total Cost \$ _____ Cost-effectiveness ratio: \$ _____

4. Will the regulation subject to OAL review have an estimated economic impact to business enterprises and individuals located in or doing business in California exceeding \$50 million in any 12-month period between the date the major regulation is estimated to be filed with the Secretary of State through 12 months after the major regulation is estimated to be fully implemented?

☐ YES ☒ NO

If YES, agencies are required to submit a Standardized Regulatory Impact Assessment (SRIA) as specified in Government Code Section 11346.3(c) and to include the SRIA in the Initial Statement of Reasons.

5. Briefly describe the following:

The increase or decrease of investment in the State: No impact on the level of investment in the State is anticipated from the extension of the current harvesting regulations (Opt 1) or implementation of harvest limits in Sonoma & Mendocino cos.(Opt 2).

The incentive for innovation in products, materials or processes: No impact on the incentive for innovation in products, materials, or processes is anticipated from the extension of the current harvesting regulations (Opt 1) or implementation of harvest limits in Sonoma & Mendocino cos.(Opt 2).

The benefits of the regulations, including, but not limited to, benefits to the health, safety, and welfare of California residents, worker safety, and the state's environment and quality of life, among any other benefits identified by the agency: No benefits to the health and welfare of residents or to worker safety from either option. Both reduce negative cumulative impacts to bull kelp.

**ECONOMIC AND FISCAL IMPACT STATEMENT
(REGULATIONS AND ORDERS)**

STD. 399 (Rev. 10/2019)

FISCAL IMPACT STATEMENT**A. FISCAL EFFECT ON LOCAL GOVERNMENT** *Indicate appropriate boxes 1 through 6 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.*

- ☐ 1. Additional expenditures in the current State Fiscal Year which are reimbursable by the State. (Approximate)
(Pursuant to Section 6 of Article XIII B of the California Constitution and Sections 17500 et seq. of the Government Code).

\$ _____

- ☐ a. Funding provided in _____
Budget Act of _____ or Chapter _____, Statutes of _____

- ☐ b. Funding will be requested in the Governor's Budget Act of _____
Fiscal Year: _____

- ☐ 2. Additional expenditures in the current State Fiscal Year which are NOT reimbursable by the State. (Approximate)
(Pursuant to Section 6 of Article XIII B of the California Constitution and Sections 17500 et seq. of the Government Code).

\$ _____

Check reason(s) this regulation is not reimbursable and provide the appropriate information:

- ☐ a. Implements the Federal mandate contained in _____
- ☐ b. Implements the court mandate set forth by the _____ Court.

Case of: _____ vs. _____

- ☐ c. Implements a mandate of the people of this State expressed in their approval of Proposition No. _____

Date of Election: _____

- ☐ d. Issued only in response to a specific request from affected local entity(s).

Local entity(s) affected: _____

- ☐ e. Will be fully financed from the fees, revenue, etc. from: _____

Authorized by Section: _____ of the _____ Code;

- ☐ f. Provides for savings to each affected unit of local government which will, at a minimum, offset any additional costs to each;

- ☐ g. Creates, eliminates, or changes the penalty for a new crime or infraction contained in _____

- ☐ 3. Annual Savings. (approximate)

\$ _____

- ☐ 4. No additional costs or savings. This regulation makes only technical, non-substantive or clarifying changes to current law regulations.

- ☒ 5. No fiscal impact exists. This regulation does not affect any local entity or program.

- ☐ 6. Other. Explain _____

**ECONOMIC AND FISCAL IMPACT STATEMENT
(REGULATIONS AND ORDERS)**

STD. 399 (Rev. 10/2019)

Draft Document**FISCAL IMPACT STATEMENT (CONTINUED)****B. FISCAL EFFECT ON STATE GOVERNMENT** *Indicate appropriate boxes 1 through 4 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.*☐ 1. Additional expenditures in the current State Fiscal Year. (Approximate)

\$ _____

It is anticipated that State agencies will:☐ a. Absorb these additional costs within their existing budgets and resources.☐ b. Increase the currently authorized budget level for the _____ Fiscal Year☐ 2. Savings in the current State Fiscal Year. (Approximate)

\$ _____

☐ 3. No fiscal impact exists. This regulation does not affect any State agency or program.☒ 4. Other. Explain Option 2 may create additional revenue from the collection of edible seaweed royalties from the reopening of Sonoma and Mendocino counties to harvest. This is estimated to be \$24 annually, see addendum.**C. FISCAL EFFECT ON FEDERAL FUNDING OF STATE PROGRAMS** *Indicate appropriate boxes 1 through 4 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.*☐ 1. Additional expenditures in the current State Fiscal Year. (Approximate)

\$ _____

☐ 2. Savings in the current State Fiscal Year. (Approximate)

\$ _____

☒ 3. No fiscal impact exists. This regulation does not affect any federally funded State agency or program.☐ 4. Other. Explain _____

FISCAL OFFICER SIGNATURE

DATE

*The signature attests that the agency has completed the STD. 399 according to the instructions in SAM sections 6601-6616, and understands the impacts of the proposed rulemaking. State boards, offices, or departments not under an Agency Secretary must have the form signed by the highest ranking official in the organization.*

AGENCY SECRETARY

DATE

*Finance approval and signature is required when SAM sections 6601-6616 require completion of Fiscal Impact Statement in the STD. 399.*

DEPARTMENT OF FINANCE PROGRAM BUDGET MANAGER

DATE



STD. 399 Addendum

**Amend Subsection (c)(9), of Section 165
and
Subsections (c), and (k)(2)(I), of Section 165.5,
Title 14, California Code of Regulations
Re: Commercial bull kelp harvest restrictions extension**

BACKGROUND

Bull kelp (*Nereocystis luetkeana*) is a foundational species providing physical structure of biodiverse and productive habitats that provide ecological functions and ecosystem services as well as supporting fisheries for invertebrates and fish, is important in cultural and ceremonial traditions, and supports tourism.

Bull kelp is managed for commercial harvest in Section 165, Commercial Harvesting of Kelp and Other Aquatic Plants, and Section 165.5, Lease of Kelp Beds for Exclusive Harvest of *Macrocystis and Nereocystis*. At its October 2022 meeting, the Fish and Game Commission (Commission) approved a precautionary approach temporarily restricting commercial bull kelp harvest in the north coast in response to a dramatic and persistent decline of bull kelp populations in Mendocino and Sonoma counties and a lack of scientific data to inform understanding of potential effects of commercial harvest on the remaining kelp population. The temporary harvest amendments enacted in that rulemaking span a three-year period, to sunset on January 1, 2026, with the intent to allow for drafting and potential adoption of a comprehensive, statewide Kelp Restoration and Management Plan (KRMP). Development of the KRMP was initiated in 2023 and is actively underway. Critical studies addressing knowledge gaps around bull kelp biomass and harvest are in progress, and results are essential to informing the consideration of harvest management within the KRMP.

Kelp canopy area (annual maximum) across the northernmost counties, Sonoma, Mendocino, Humboldt, and Del Norte, through the fourth quarter of 2024 have continued to experience declines.

PROPOSED REGULATIONS

The Department of Fish and Wildlife (Department) recommends that the Commission adopt temporary harvest restrictions and weekly reporting for bull kelp for Sonoma, Mendocino, Humboldt, and Del Norte counties. The temporary harvest restrictions will expire on January 1, 2029.

For Humboldt and Del Norte counties combined, the Department recommends extending the annual overall fishery harvest quota sunset date for commercial take not to exceed four tons (8,000 pounds (lbs)) wet weight through January 1, 2029. Commercial harvest of bull kelp in the combined Humboldt and Del Norte counties per weekly reporting reflected 1,620.2 lbs in 2023 and 2,926.2 lbs in 2024. Capping harvest in Del Norte and Humboldt counties would maintain current use and harvest post-2014.

Two options are provided for Mendocino and Sonoma counties.

- o Under Option 1 (Department recommendation), the proposed amendment to subsection 165(c)(9) extends the sunset date pertaining to the closure of commercial bull kelp harvest in Mendocino and Sonoma counties from January 1, 2026 to January 1, 2029.
- o Under Option 2, the proposed amendment to subsection 165(c)(9) implements an annual fishery quota from 1 to 2,000 pounds wet weight, in Mendocino and Sonoma counties combined, with the amount to be determined by the Commission; mandatory weekly reporting for bull kelp harvesters in Mendocino and Sonoma counties; authorization for the Department to temporarily close harvest in order to obtain an accurate tally of the harvest; the potential for individual harvester allotments to ensure the quota is not exceeded; the mathematical formula to calculate the fishery allotments if the fishery is temporarily closed and reopened; the process by which the Department will notify the public and harvesters of the attainment of the quota; the harvesters' responsibility to monitor the Department's website to be kept informed of the remaining annual fishery quota; and the requirement that harvest in excess of the annual overall fishery quota or allotments shall be disposed of or used in a manner determined by the Department by forfeiting the excess harvest to the Department. These provisions would sunset on January 1, 2029.

Additionally, the proposed amendment extends the temporary closure and lease prohibition of the lease only administrative kelp beds 308, 309, and 312 from January 1, 2026 to January 1, 2029 and amends the availability to lease administrative kelp beds 308, 309, and 312 from "on or after January 2, 2026", to "on or after January 2, 2029."

ECONOMIC IMPACT STATEMENT

Section B. Estimated Costs

Question 1. What are the total statewide dollar costs that businesses and individuals may incur to comply with this regulation over its lifetime?

Sonoma and Mendocino counties: \$0 for Option 1, \$240 annually for Option 2.

Option 1: The proposed amendments extend the current temporary regulatory amendments which began on January 1, 2023 which closed all commercial bull kelp harvest in Sonoma and Mendocino counties.

Option 2: Allows for limited commercial harvest of bull kelp in Sonoma and Mendocino counties and requires weekly reporting to manage the annual fishery quota.

Under Option 1, the proposed regulations do not impose any new direct costs to businesses or individuals who participate in the commercial bull kelp harvesting sector. By temporarily extending the current closure in Mendocino and Sonoma counties (Mendocino/Sonoma Option 1) and the current annual fishery quota and weekly reporting requirements to allow the Department to monitor the annual fishery quota for Del Norte and Humboldt counties, the proposed regulations would continue the current baseline conditions for the commercial harvest of bull kelp in these counties, and thus do not require participants in that sector to

adjust their reporting practices or take new actions that would incur direct and indirect costs in order to participate in harvesting.

The temporary four ton (8,000 lbs) annual fishery quota restriction for Del Norte and Humboldt counties combined that expires on January 1, 2026 has not restricted the industry from harvest in the counties. Commercial harvest of bull kelp in the combined counties, per weekly reporting, was 1,620.2 lbs in 2023 and 2,926.2 lbs in 2024. Extending the current annual fishery quota in Del Norte and Humboldt counties combined would maintain current use and harvest post-2014. Due to the temporary closure, no commercial harvest of bull kelp was reported in Mendocino and Sonoma counties in 2023 and 2024.

Commercial harvesters in Mendocino and Sonoma counties did not shift their harvest to Del Norte and Humboldt counties during the temporary closure in 2023 and 2024. However, if bull kelp harvesting reopens in Mendocino and Sonoma counties, it is assumed that these harvesters will resume their activity, which could result in up to \$120 in annual reporting costs per harvester, which are further documented in the response to Question 3 of this section. Applied to the average of two active harvesters from 2018-2022, this would lead to \$240 in total additional annual costs.

Commercial harvest of wild marine algae is not allowed in nearby states of Oregon and Washington. Therefore, the industry is not competing with nearby markets for harvested kelp.

Question 3. If the regulation imposes reporting requirements, enter the annual costs a typical business may incur to comply with these requirements. Include the dollar costs to do programming, record keeping, reporting, and other paperwork, whether or not the paperwork must be submitted:

The recommended proposed regulations do not add any additional reporting requirements for commercial bull kelp harvesters to comply with, but rather temporarily extend the current weekly reporting requirements for monitoring the annual harvest quota in Del Norte and Humboldt counties. The costs for the existing reporting requirements for compliance with the current regulations are documented below and are based on the number of harvesters licensed by the Department that reported bull kelp harvest in the specified counties, as well as the associated wages and time requirements to conduct the reporting (Table 1).

Table 1. Bull Kelp Harvester Weekly Reporting Costs for Del Norte and Humboldt Counties

Task	Minutes	Hourly Rate	Cost
Record Keeping	15 (0.25 hour)	\$30	\$7.50
Reporting to Department	5 (0.083 hour)	\$30	\$2.49
Total	20 (0.333 hour)	\$30	~\$10

Sources: Department analysis; Bureau of Labor Statistics, Supervisor of Fishing Workers hourly wage rate, 2024, [Occupational Employment and Wage Statistics](#)^[OES]

\$10 x 4 extra reports each month of harvest x 5 months = \$200 maximum annual costs per harvester. Five (5) months is the period of harvest activity during 2023 and 2024 in Del Norte and Humboldt counties combined and thus the metric for calculating potential costs. Applied to

an estimated two harvesters in the area, the total annual cost for the current weekly reporting costs that will be temporarily extended by the proposed regulation is \$400 per year.

Under Option 2, limited harvest would be allowed in Mendocino and Sonoma counties, which would require bull kelp harvesters in these counties to begin submitting weekly reports to the Department. Based on historical averages from the five years prior to the temporary closure (2018-2022), Department staff estimate that approximately two harvesters would be active in these counties for about three months out of the calendar year. This would put the estimated total reporting costs imposed by these regulations at $\$10 \times 4 \text{ extra reports each month of harvest} \times 3 \text{ months} \times 2 \text{ harvesters} = \240 annually, or \$720 over three years and \$120 per harvester annually.

Section C. Estimated Benefits

Question 1. Briefly summarize the benefits of the regulation.

The adoption of these regulations is anticipated to benefit the state's environment in the sustainable management of this resource. As a foundational species forming the physical structure of kelp forest habitats, bull kelp supports fisheries, cultural and ceremonial traditions, and tourism. Sustaining kelp resources benefits the value of the commercial harvest of the kelp harvest industry, and other commercial and recreational fisheries that benefit from kelp forest habitats.

There are some challenges in the monetization of much of the anticipated benefits of the proposed regulation because a portion of the intended outcomes are comprised of non-market traded ecosystem values. However, if Option 2 is selected by the Commission and Sonoma and Mendocino counties are allowed to reopen, the direct economic benefit of harvesting the full quota of 2,000 wet pounds per year would be approximately \$21,406 annually.

No direct benefits to the health and welfare of California residents, or to worker safety are anticipated as a result of these regulations.

Question 3. What are the total statewide benefits from this regulation over its lifetime?

Kelp harvest value in Del Norte and Humboldt counties of \$24,163 + ecosystem values for Option 1, additional direct impact of \$21,406 to harvesters if Sonoma and Mendocino counties open up under Option 2 with a total annual monetary impact of approximately \$45,569.

The value of the commercial bull kelp harvest in Del Norte and Humboldt counties is documented in Table 2 and is estimated to be approximately \$24,163 annually, and the number of harvesters engaged in bull kelp harvest from 2018 to 2024 range from 0 to 2. As stated above, there are some challenges in the monetization of much of the anticipated benefits of the proposed regulation because a portion of the intended outcomes are comprised of non-market traded ecosystem values. This value is the benefit from the harvest under Option 1.

Table 2: Bull Kelp Harvest for Del Norte and Humboldt Counties 2018-2024

Year	2018	2019	2020	2021	2022	2023	2024	Average 2018- 2024
Combined Harvest (wet pounds)	3,248	4,129	0	2,635	1,258	1,620	2,926	2,259
Combined Harvest (dry pounds)	226	287	0	183	87	113	203	157
Combined Gross Revenue	\$34,736	\$44,157	\$0	\$28,180	\$13,454	\$17,325	\$31,292	\$24,163

Note: Department commercial bull kelp harvest data reported from commercial Edible Seaweed/Agarweed Aquatic Plant Harvester's Monthly Reports. No reported harvest for 2020. Preliminary wet kelp to dry conversion factor 14.14 lbs wet = 1 lb dry bull kelp.

Retail prices for bull kelp by three businesses engaged in the fishery during 2021 through 2024 are presented in Table 3, with an average price of \$154 per pound based on the three sellers with listed retail pricing. These estimates for revenue are conservative because gross revenue does not subtract out the costs of labor and other inputs utilized in the production of the finished bull kelp products. Additionally, the prices used in Table 3 identified by program staff are retail and not wholesale prices.

If Option 2 is selected and Sonoma and Mendocino counties are reopened to harvest, then the value of harvesting the annual quota of 2,000 wet pounds of bull kelp would be approximately \$21,406 annually (2,000 wet pounds/14.14 = 138.89 dry pounds, or approximately 139 pounds, multiplied by \$154 per pound). Combined with the value of the harvest from Del Norte and Humboldt counties, the total monetary benefit of harvesting under Option 2 is approximately \$45,569 annually. However, it should be noted that this value assumes that the Commission selects a 2,000-lb quota and that harvesters elect to harvest the full quota, which is higher than the historical average from 2018-2022 of 1,170 wet pounds with an estimated value of \$12,513, as documented in Table 4 in Section D of the Economic Impact Statement.

Table 3: Retail Cost of Bull Kelp (Dry Weight) for Three Businesses with Reported Bull Kelp Harvest 2021-24

Business Scenarios	Retail Cost (Dry Weight)
Business 1	\$10 per 0.5 oz (\$320/lb)
Business 2	\$12 per 1/4 lb or \$40 per lb
Business 3	\$18.75 per 2 oz or \$57 per 0.5 lb or \$102 per 1 lb

Question 4. Briefly describe any expansion of businesses currently doing business within the State of California that would result from this regulation.

The Commission does not anticipate any impacts on expansion of businesses in California under Option 1 because the recommended proposed regulations extend the existing baseline conditions for the closure in Mendocino and Sonoma counties, and the baseline conditions for the annual fishery quota and weekly reporting for Del Norte and Humboldt counties.

If Option 2 is selected and Sonoma and Mendocino counties are reopened to harvest, then the harvesters who had previously operated in the area would likely resume their operations. Based on historical data from Department staff from the last five-year period of harvest before the temporary closure (2018-2022), the range of harvesters in those counties is zero to four with an average of two active harvesters in a year. While their return would likely yield economic activity similar to 2018-2022 levels, it would still represent a net increase in activity for the region.

Section D. Alternatives to the Regulation

Question 2. Summarize the total statewide costs and benefits from this regulation and each alternative considered.

Alternative 1: The no-change alternative would leave the existing regulations in place and the bull kelp temporary harvest restrictions in Sonoma, Mendocino, Humboldt, and Del Norte counties and weekly reporting to monitor the annual quota in Humboldt and Del Norte counties will expire on January 1, 2026. The number of harvesters engaged in bull kelp harvest in Sonoma and Mendocino counties from 2014 to 2022 ranged from 0 to 4, with an average of two active harvesters annually. Reopening Mendocino and Sonoma counties would bring the benefit of the economic activity related to harvesting bull kelp, which is calculated in Table 4 in a similar manner as the calculations made in Table 2 using the price information from Table 3. As mentioned above, these estimates for revenue are conservative because gross revenue does not subtract out the costs of labor and other inputs utilized in the production of the finished bull kelp products. Additionally, the prices used in Table 3 identified by program staff are retail and not wholesale prices. Finally, this estimate uses the historical average annual harvest from the last time these counties were open (2014-2022), which is different than the robust approach that assumes the full quota is harvested in Sonoma and Mendocino counties under Option 2.

Table 4: Bull Kelp Harvest in Mendocino and Sonoma Counties 2014-2022

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	Average
Combined Harvest (wet pounds)	951	1915	892	118	560	0	5	4,300	1,789	1,170
Combined Harvest (dry pounds)	66	133	62	8	39	0	0	299	124	81

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	Average
Combined Gross Revenue	\$10,170	\$20,480	\$9,539	\$1,262	\$5,989	\$0	\$53	\$45,986	\$19,132	\$12,513

Note: Department commercial bull kelp harvest data reported from commercial Edible Seaweed/Agarweed Aquatic Plant Harvester's Monthly Reports. No reported harvest for 2019. Preliminary wet kelp to dry conversion factor 14.14 lbs wet = 1 lb dry bull kelp. Average price is \$154 per pound.

The combined estimated average gross revenue from reopening Mendocino and Sonoma counties (\$12,513) plus the combined estimated average gross revenue from Del Norte and Humboldt counties in Table 2 (\$24,163), which would likely remain unchanged from the average in Table 2 given that the harvest before 2022 remained below the current quota and would not necessarily change under the no change alternative, gives a total estimated monetary benefit of \$36,618 from the harvest. When the removal of the \$400 in annual reporting costs for Del Norte and Humboldt counties described in Section B are factored in, the total estimated annual monetary benefit rises to \$37,018. The costs for the no-change alternative would be \$0, as there would be no direct costs imposed by the no-change alternative.

Despite the continued loss of bull kelp, temporary precautionary measures to limit bull kelp harvest would not be extended and harvest of bull kelp for human consumption would be allowed to continue. As an annual species with its reproductive material located on the blades at the water's surface, harvest can result in less available reproductive material, which could present a non-monetized cost to harvesters via the impact to the bull kelp's ability to reproduce and replenish itself as a resource. Also of concern is the lack of scientific data to inform managers whether commercial harvest has an impact on the current kelp population. Knowledge gaps around the potential effects of commercial harvest on the remaining kelp population are actively being addressed. Once available, results will be integrated into the harvest framework within the KRMP.

Additionally, under the no change alternative, the current temporary closure of lease only administrative kelp beds would expire on January 1, 2026, and the lease only beds will be available for lease on January 2, 2026, regardless of bull kelp decline. Leaving the beds available for lease would also contradict the proposed bull kelp harvest closures in Mendocino and Sonoma counties, and the proposed harvest limits in Del Norte and Humboldt counties. Additionally, maintaining the lease only status or not imposing a temporary hiatus on accepting new lease applications would mislead and confuse the public into the belief that the beds are available for lease when lease applications may result in denial by the Commission due to the loss of bull kelp. This would also cause an undue workload for the Department and Commission staff as well as the general public.

FISCAL IMPACT STATEMENT

A. Fiscal Effect on Local Government. None.

B. Fiscal Effect on State Government

Answer: 4. Other:

No fiscal impact exists for Option 1. This regulation extends current harvesting conditions regarding the closure in Sonoma and Mendocino counties and the harvest quota and weekly reporting requirements for Del Norte and Humboldt counties and does not require additional staff time or resources from the Department or other state agencies.

While Option 2 reopens the harvest in Sonoma and Mendocino counties, it does not represent a new fiscal cost to the Department, as monitoring would be folded into the existing duties for current staff and not incur any new costs. However, under Option 2 the Department would collect revenue from the edible seaweed royalty rate, which is \$24.00 per wet ton (2,000 lbs) or \$ 0.012 per lb.

Considering the range of harvest proposed of 1 to 2,000 lbs, the estimated royalty collection range is \$ 0.012 to \$24.00 of additional revenue to the Department.

C. Fiscal effect on federal funding of state programs. None.



Commercial Bull Kelp Harvest Regulatory Sunset Date

14 August 2025

Presented to:

**California Fish and Game
Commission**

Presented by:

Rebecca Flores Miller
Environmental Scientist
CDFW Marine Region



Overview

- Outreach and engagement
- Current temporary commercial bull kelp regulations
- Recent harvest
- Sonoma through Del Norte counties bull kelp status
- Kelp biomass and harvest research
- Proposed amendments
- Kelp Restoration and Management Plan (KRMP) development
- Proposed timeline and next steps



Outreach and Engagement



PC: S. Kawana

2025

- May 28: Tribal notification
- July 1: Stakeholder webinar
- July 16: Marine Resources Committee



Current Commercial Bull Kelp Harvest Temporary Regulations

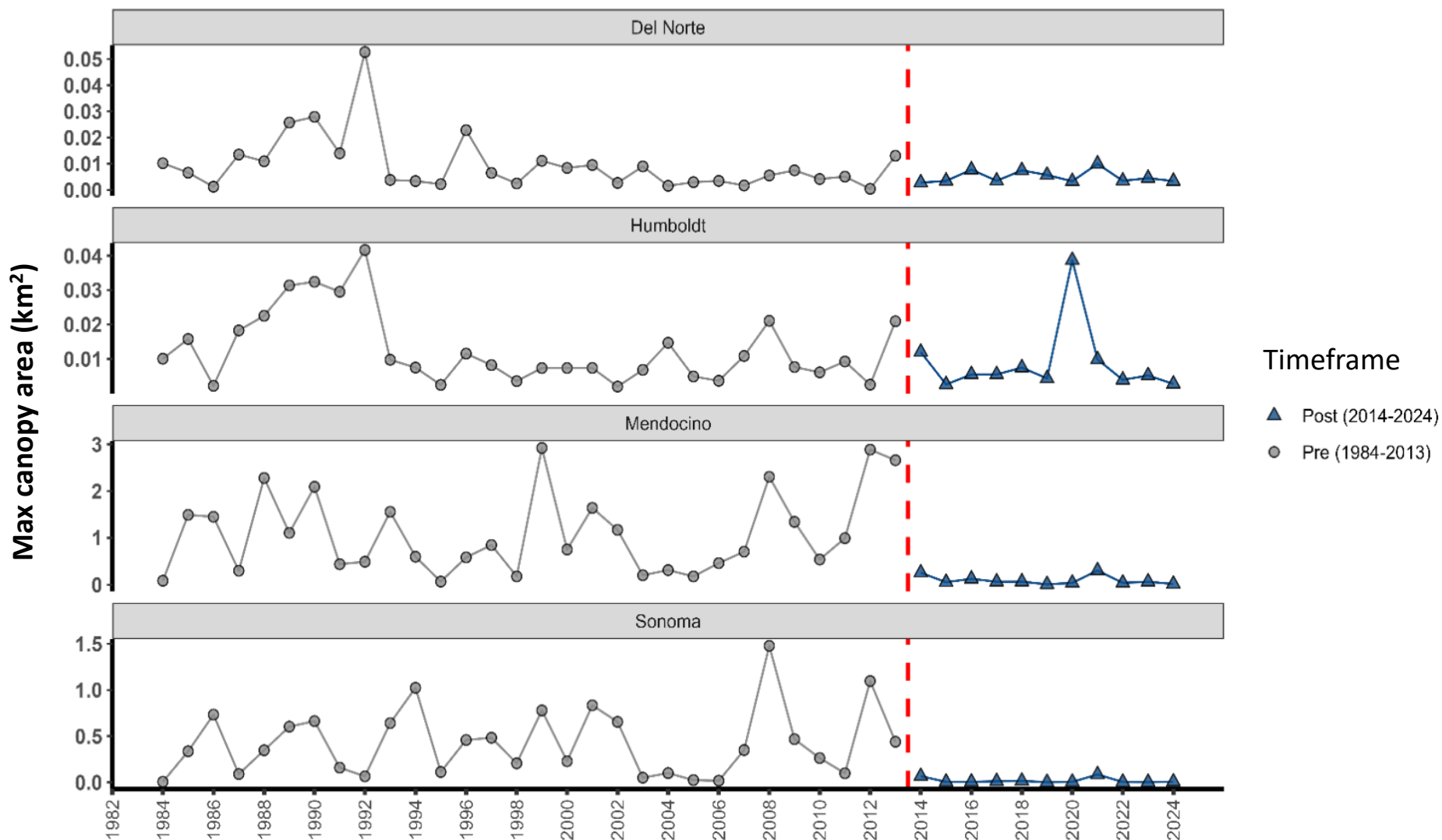
- Temporary regulations, January 1, 2023 until January 1, 2026
 - Closed bull kelp harvest: Sonoma and Mendocino counties, regardless of use
 - Imposed an annual bull kelp harvest limit of 4 tons (8,000 lbs.) wet weight: Humboldt and Del Norte counties combined
 - Edible seaweed for human consumption only
 - Required weekly in addition to monthly harvest reporting
 - Closed lease only kelp beds 308, 309, and 312 in Mendocino, Humboldt, and Del Norte counties



Recent Bull Kelp Harvest – Del Norte and Humboldt

- Reported commercial bull kelp harvest, 2023-2024:
 - Del Norte and Humboldt counties combined harvest was not impacted by the annual fishery harvest quota
 - Mendocino and Sonoma county harvesters did not shift harvest to Del Norte and Humboldt counties

Bull Kelp Canopy Area



Kelp Biomass and Harvest Assessment

- Assessment of Biomass, Production, and Harvest Effect for Canopy-forming Kelps in California (2025-2027)
 - Location: Statewide
 - Project Lead: Woods Hole Oceanographic Institution
 - Providing quantitative metrics for giant and bull kelp biomass and production
 - Partnership with commercial harvesters in Northern, Central and Southern California
 - Informing the adaptive harvest framework within the KRMP





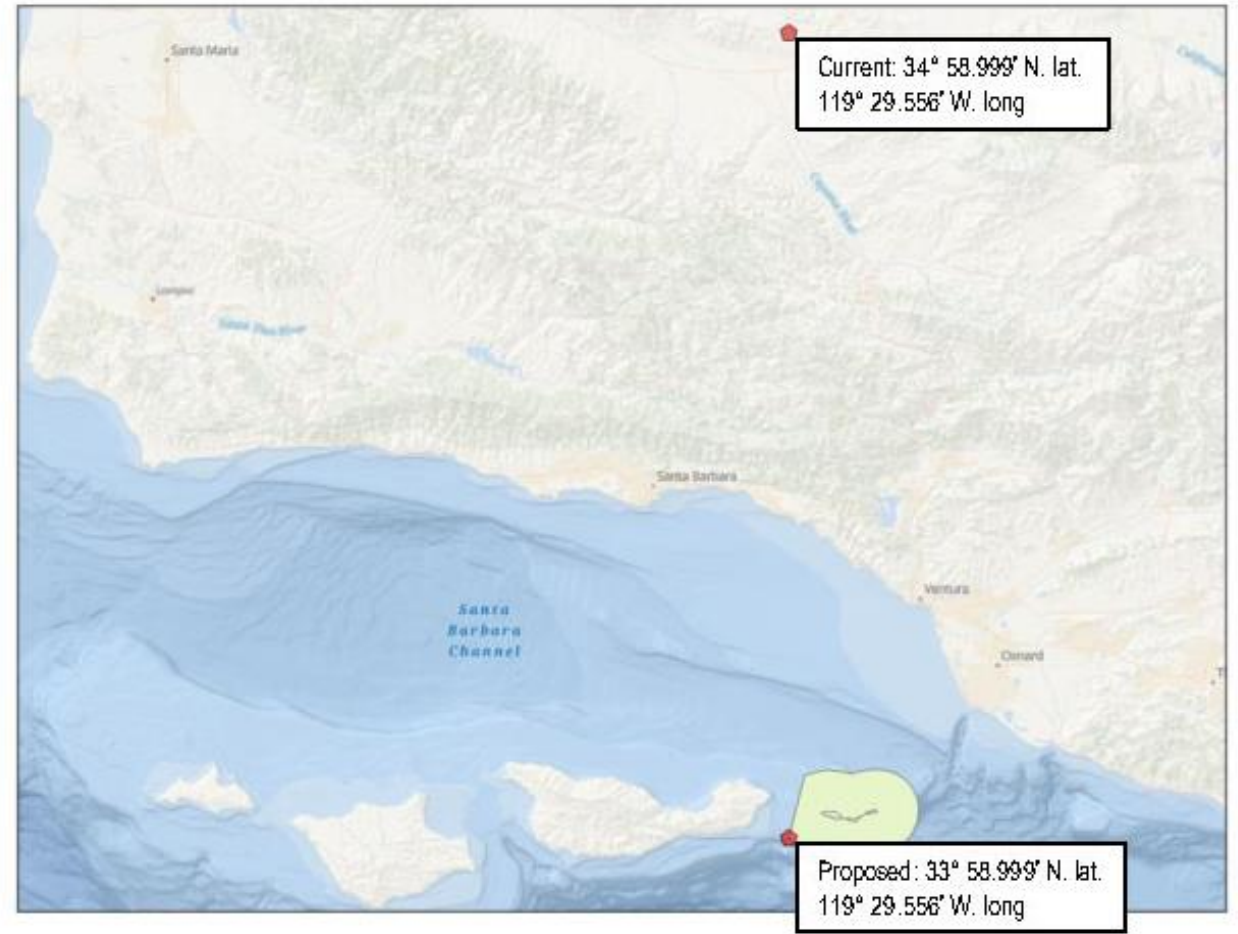
Proposed Bull Kelp Regulations

- Recommend extending temporary restrictions until January 1, 2029
 - Four ton (8,000 lbs.) wet weight annual quota in Humboldt and Del Norte counties, weekly reporting
 - Closure and lease prohibition on lease only administrative kelp beds 308, 309, 312
 - Commercial harvest in Mendocino and Sonoma counties
 - Option 1: Closed
 - Option 2: 1 to 2000 lbs. wet weight annual quota for Sonoma and Mendocino counties, weekly reporting (MRC)



Proposed Kelp Bed Regulation

- Correct typographical error in administrative kelp bed 109 coordinate





Kelp Restoration and Management Plan (KRMP)

- **Overarching Goal:**
 - To develop a robust, adaptive, climate-ready approach to managing, protecting, and restoring giant and bull kelp forest ecosystems statewide for consideration and adoption by the Fish and Game Commission
- **Core Components:**
 - Overarching ecosystem-based management framework
 - Adaptive kelp harvest framework
 - Restoration toolkit



KRMP Development Timeline



Science Advisory
Committee

Tribal
Engagement and
Consultation

Community Working
Group



2023-2026

Recommendations informing the KRMP



On the Ground
Research

2025 - 2026

KRMP Drafting, CEQA, Peer
Review, and Finalization

2026 - 2027

Management Plan and
Regulatory Process



2027

Implementation



Proposed Timeline and Next Steps

- Notice: August 2025 (today)
- Discussion and Adoption: October 2025
 - Effective January 1, 2026
 - Sunset January 1, 2029 (except administrative kelp bed coordinate)
- Continue collaboration to fill priority research gaps and complete the KRMP

Thank You

Rebecca Flores Miller

Environmental Scientist

Nearshore and Bay Management Project

Department of Fish and Wildlife

Marine Region

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