STATE OF CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE FINAL STATEMENT OF REASONS FOR REGULATORY ACTION

Add Section 132.8, Title 14, California Code of Regulations Re: Risk Assessment Mitigation Program: Commercial Dungeness Crab Fishery

I. Date of Initial Statement of Reasons: May 4, 2020

Date of Amended Initial Statement of Reasons: July 16, 2020

Date of Final Statement of Reasons: August 27, 2020

II. Dates and Locations of Scheduled Hearings:

Public Discussion Hearing: Monday, June 29, 2020

Location: Teleconference (meeting details will be made available on

the Whale Safe Fisheries Page:

wildlife.ca.gov/Conservation/Marine/Whale-Safe-Fisheries)

Start Time: 10 a.m.

Additional Public Discussion Hearing: Monday August 3, 2020

Location: Teleconference (meeting details will be made available on

the Whale Safe Fisheries Page:

wildlife.ca.gov/Conservation/Marine/Whale-Safe-Fisheries)

Start Time: 10:00 a.m.

III. Update

The California Department of Fish and Wildlife (Department; CDFW) proposed amendments to Section 132.8, Title 14, California Code of Regulations ("CCR") to establish a Risk Assessment Mitigation Program (RAMP), which will assess and manage risk of marine life entanglement with fishing gear associated with the commercial Dungeness crab fishery.

The proposed RAMP regulations and Initial Statement of Reasons (ISOR) ("Original Proposed Package") were noticed for a 45-day public comment period starting May 15, 2020, ending June 29, 2020 (California Regulatory Notice Register No. Z2020-05-11). The Department held a public hearing on June 29, 2020, by webinar and

teleconference, from 10:00 a.m. to 12:00 p.m. The Department presented an overview of the proposed regulations and a comment session followed.

Upon review of public input received through June 29, 2020, on July 17, 2020, the Department posted notice of a 15-day continuation notice (comment period) for the proposed RAMP, ending on August 3, 2020. This 15-day comment period extension served to provide notice of amendment to the Original Proposed Package as noticed in the "Amended ISOR." The Amended ISOR showed, via double underline and double strikeout, the Department's 49 individual changes or clarifications to the Original Proposed Package. These changes are listed in the Updated Informative Digest.

A second public hearing was held on August 3, 2020 at 10:00 a.m. via webinar and teleconference. The Department presented a brief overview of the amendments to the proposed regulations, and a comment session followed.

With this Final Statement of Reasons (FSOR), the Department provides the following non-substantive changes:

- 1. The Amended ISOR and regulatory text included revision to subsection (a)(7)(A) defining Fishing Zone 1:
 - a. Fishing Zone 1: changing the southern boundary from Horse Mountain (40° 05' N. latitude) to Cape Mendocino (40° 10' N. latitude).
 - b. The Amended ISOR also included an amended Figure 1 depicting this adjusted Fishing Zone boundary. However, Figure 1 in the Amended ISOR showed the southern boundary of the amended Zone 1 as 41° 10' N instead of the intended 40° 10' N. The amended regulatory text under subsection 132.8(a)(7)(A) did correctly show the intended latitude southern boundary latitude measurement.
 - c. Thus, with this FSOR we show the corrected southern boundary latitude line in Final **Figure 1**.
- 2. 132.8(e)(3) the words "the most recent" were added and noticed with the Amended ISOR to this subsection of the regulatory text, but the addition of these three words was mistakenly not shown in double underline. These words, however, were documented as added in the updated Informative Digest and in the 15-day renotice posted to the Department's webpage. The revision reads: "The Director will determine the reduction amount based on the most recent information provided pursuant to subsection (g)."

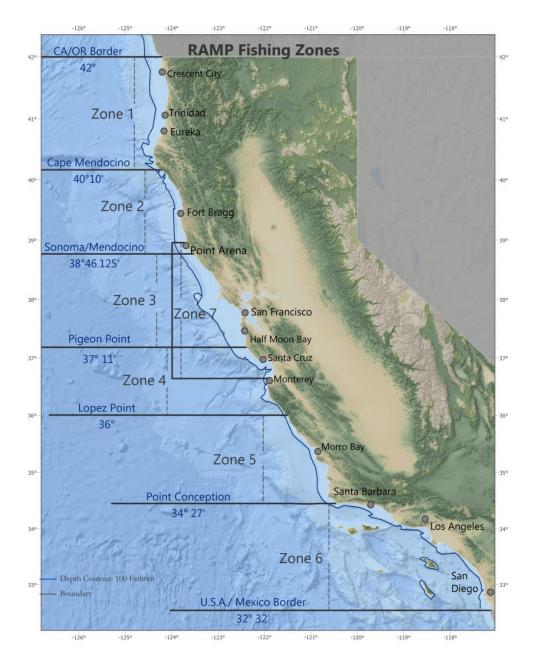


Figure 1. RAMP Fishing Zones (FINAL)

3. Document Supporting Regulation Change referencing the Code of Federal Regulations (page 46 of the Amended ISOR): A non-substantive correction to the name of the intended article in one of the Documents Supporting Regulation Change (referencing the Code of Federal Regulations) clarifies the article meant for reference as a Supporting Document, as the page numbers of 28800-28802 were correct, as well as mention to the concept of Potential Biological Removal (PBR). The reference to "North Pacific Fishery Management Council; Public Meetings" should have said "Taking of Threatened or Endangered Marine Mammals Incidental to Commercial Fishing Operations; Proposed Permits" for a correct citation of:

- a. 64 Federal Register 102, May 27, 1999. Taking of Threatened or Endangered Marine Mammals Incidental to Commercial Fishing Operations; Proposed Permits, pages 28800-28802. Available from: https://www.govinfo.gov/content/pkg/FR-1999-05-27/pdf/FR-1999-05-27.pdf
- 4. Correct minor grammatical and typographic errors:
 - a. References to subparagraphs within a section of the fourth and greater degree were corrected to include a period after the number or lower case letter instead of parentheses. For example, the Department corrected "subsection 132.8(h)(1)(B)(5)" to "subsection (h)(1)(B)5." and "subsection 132.8(c)(1)(A)(1)(a)" to "subsection 132.8(c)(1)(A)1.a."
 - b. 132.8(c)(2)(A)2. add comma after "If data are unavailable after December 1,"
 - c. 132.8(a)(6) capitalize the word "Section" for each of the three references following the words "Fish and Game Code."
 - d. 132.8(c)(2)(A)4.a. remove the unnecessary comma after the words "five (5) or more animals over a one-week period" that was added with the Amended ISOR.
 - e. 132.8(c)(2)(A)4.b. remove the unnecessary comma after the words "three (3) or more animals over a one-week period" that was added with the Amended ISOR.
 - f. 132.8(g)(2)(A) the word "one" was replaced with "once" in this subsection to ensure clarity. The revision reads: "Electronic monitoring systems must be capable of tracking and recording vessel location using GPS coordinates at a frequency of no less than once a minute during fishing operations." The correction of "once" also matches the subsection to follow (g)(2)(B) which also provides a minimum frequency of data collection under subsection (g).
- 5. By request of the Office of Administrative Law, the following words were added for clarity to the end of the last sentence in subsection 132.8(b)(4), "...as determined on a case by case basis" for the language to read, "If such Risk Assessment indicates that the triggers in subsection (c) are no longer met, or a different management response is more appropriate, the Director shall lift or

modify any restrictions in a manner that promotes fair and orderly fisheries as determined on a case by case basis."

No Other Changes

There have been no changes in applicable laws or to the effect of the proposed regulations from the laws and effects described in the Notice of Proposed Action. The Department adopted the regulations on August 27, 2020.

IV. Summary of Primary Considerations Raised in Support of or Opposition to the Proposed Actions and Reasons for Rejecting Those Considerations:

During the initial 45-day public comment period (May 15, 2020 to June 29, 2020) for the proposed Section 132.8 Risk Assessment and Mitigation Program (RAMP) regulations, the Department received a total of 4,160 comments. Consistent with Government Code Section 11346.9(a)(3), comments were sorted into one of three categories.

- Category A consisted of form comment letters, with identical language in the body of each letter constituting seven comments (A1-A7 described in Appendix 1). Category A comments differ only in their subject and signature lines.
 Substantive elements of an example form comment letter were underlined and labeled and are included as a coversheet with Appendix 1 comments.
- Category B consists of letters with non-substantive or irrelevant language added to the form comments (i.e. those in Category A). Deviations from the form letter language has been highlighted in each Category B comment.
- Category C consists of letters which either (1) include relevant/ substantive additional comments compared to the form comment language from those in Category A, and/ or (2) include new and relevant specific comments aside from the form comment.

Comments were grouped based on similarity in topic or concern. General Responses A-O to the public comments on the proposed RAMP regulations are presented in **Appendix 1**.

Comment letters for Category C were numbered and each individual specific comment consistent with Government Code Section 11346.9(a)(3) was bracketed and assigned a cross-reference code for providing specific response in the Appendices. Responses to Specific Comments for the initial 45-day public comment period are presented in **Appendix 2**. During the public hearing held on June 29, 2020, 11 additional comments were received. A transcript of the hearing and the respective responses are included as **Appendix 3**.

Upon review of public input received through June 29, 2020, on July 17, 2020, the Department posted notice of a 15-day continuation comment period for the proposed RAMP, ending on August 3, 2020. This 15-day comment period extension served to provide notice of amendment to the Original Proposed Package as noticed in the "Amended ISOR." The Amended ISOR showed, via double underline and double strikeout, the Department's 49 individual changes or clarifications to the Original Proposed Package. These changes are listed in the Updated Informative Digest.

With the 15-day continuation notice, the Department identified and bracketed those relevant and specific comments (continuation of Category C comments) received during the 15-day continuation notice as shown in **Appendix 4**. A second public hearing was held on August 3, 2020 at 10:00 a.m. via webinar and teleconference. The Department presented a brief overview of the amendments to the proposed regulations, and a comment session followed. The minutes from this public hearing are provided in **Appendix 5**, and a presentation of the amendments is presented in **Appendix 6**.

Table 1 summarizes the comments received between May and August 2020. All comments received (either written or oral) were numbered sequentially throughout all appendices. Specifically, all comments received after the 45-day comment period were categorized under Category C, and those speakers or letters are numbered accordingly (i.e., letters C01-C95 span the 45-day comment period through the oral comments responded to during the 15-day continuation period).

Table 1. Summary of Comments Received on the Proposed RAMP regulations, May-August, 2020.

| Notice Period | (Appendix Location of Response) | # Letters Received (C-letter code) | Number of Specific Comments |
|--------------------------------|--|--|---|
| 45-day (May 15- June 29) | A: Form letter (exact verbatim) (Responded to in Appendix 1) | 3,917 | 7/ letter |
| | B: Form letter plus non-substantive language or remarks not equivalent to additional comments | 186 | 7/ letter, plus irrelevant language |
| | C: Comments with relevant/ substantive differences from form letter (Responded to in Appendix 2) | 64 (C01-C64) | 314 |
| | C: June 29, 2020 Public Hearing (Responded to in Appendix 3) | 12 speakers (C65-C75) | 50 |

| 15-day (July 17 - Aug 3) | C: Written comments (Responded to in Appendix 4) | 17 (C76-C92) | 113 |
|--------------------------------|---|-------------------------|-----|
| | C: August 3, 2020 Public Hearing (Responded to in Appendix 5) | 3 speakers (C93-C95) | 9 |

V. Location and Index of Rulemaking File:

A rulemaking file with attached file index is maintained at:

California Department of Fish and Wildlife 1416 Ninth Street, Room 1342-A Sacramento, CA, 95814

VI. Description of Reasonable Alternatives to Regulatory Action

(a) No Change Alternative:

Without the proposed regulations, the RAMP mandated by the legislature would not be implemented.

(b) Consideration of Alternatives:

Scope of Rulemaking

Other Fisheries

The Department considered whether to expand the scope of this rulemaking to include other commercial and recreational fishing sectors that pose an entanglement risk to marine life. Senate Bill 1309 which granted the Department authority to implement this program through FGC Section 8276.1 is only applicable to the commercial Dungeness crab fishery and did not contemplate other fishery sectors. While a RAMP approach could be considered for other fisheries, additional work would be needed to design fishery specific triggers and actions (i.e., no one size fits all). The Fish and Game Commission would need to delegate management authority to the Director for some fisheries in order to implement timely management changes. Additional delegation of authority for other fisheries not managed by the Fish and Game Commission may be required, which could not be considered under the limited scope of this Department rulemaking. Given timing and complexity, the scope of this rulemaking was limited to the commercial Dungeness crab fishery.

Other Actionable Species

In considering which Actionable Species to include within the RAMP, the

Department examined confirmed entanglements in California commercial Dungeness crab fishing gear (Saez et al. 2020) and focused on those species that have been entangled on a regular basis, or whose population status warranted additional protection. Although Gray Whales have been entangled in California commercial Dungeness crab fishing gear, they were not included as part of this rulemaking because the Eastern North Pacific population once listed as endangered under the ESA successfully recovered and was delisted in 1994. Other species of whales and sea turtles have never or only very rarely been reported as entangled in California commercial Dungeness crab fishing gear.

Additionally, the California Dungeness Crab Fishing Gear Working Group (Working Group) discussions have focused on Humpback Whales and Blue Whales. It would be very difficult for the Department to independently develop similar criteria for Grey Whales in a timely manner to include in this effort. That, paired with the non-listed status, makes Grey Whales and other species lower on the list for inclusion in this rulemaking.

Any actions implemented under the RAMP to reduce the risk of entanglement will provide similar protections for other marine life not specifically included in this rulemaking.

Entanglement Confirmation Process

The Department considered which entities should be responsible for determining the species and gear types involved in an entanglement. As described in this rulemaking, it is the responsibility of NOAA staff to undertake the entanglement confirmation process because they have resources and access to necessary confidential data. While the Department may assist NOAA staff in a confirmation when requested by providing relevant fishery information, creating a duplicative program would be unnecessary and not be as effective given the lack of resources.

Some members of the public requested the establishment of "entanglement review board" to review reported entanglements. The Department feels this is unnecessary. NOAA staff possess the subject matter expertise and reach out to members of the Working Group and Department staff, when needed, to help with entanglement confirmation. Establishing a new review board would be duplicative to the current NOAA process and would only slow down implementation of any necessary management actions.

Entanglement Triggers

In developing triggers for entanglements, the Department considered guidance from NOAA and other applicable federal laws governing species of concern (under the Marine Mammal Protection Act and Endangered Species Act). This rulemaking will form an integral part of the Department's application for an Incidental Take Permit under Section 10 of the ESA. Given the status of each Actionable Species and current guidance regarding allowable impacts under the MMPA and ESA, the Department anticipates authorized take levels in an issued ITP to be low. Setting higher triggers would allow additional entanglements to occur prior to taking management action, increasing the likelihood of exceeding take limits in the ITP. Exceeding these take limits would mean the Department is no longer in compliance with the terms of the ITP, and any subsequent take from commercial Dungeness crab fishing operations would potentially violate provisions of the ESA and MMPA.

Potential Biological Removal

During scoping discussions, some Working Group members recommended higher levels for the entanglement triggers. As explained above, the Department selected triggers which are informed by anticipated permitted take levels under the ESA and the MMPA, and therefore did not incorporate the request for higher values. Additionally, some members of the Working Group advocated for framing the entanglement triggers as a percentage of PBR, rather than specifying numerical caps. PBR is defined as the maximum number of animals, not including natural mortalities, that may be removed annually from a marine mammal stock while allowing that stock to reach or maintain its optimal sustainable population level. This value includes all human caused mortality, including ship strikes, acoustic impacts, other types of net entanglements, etc. The PBR for Humpback and Blue Whales is 16.7 and 2.3 respectively (Caretta et al. 2019). While indexing the entanglement triggers to PBR would allow threshold values to automatically change as PBR changes, Working Group members were unable to specify a trigger value (i.e., percent of PBR) for consideration during this rulemaking. Setting as a percentage of PBR would require an additional step for members of the Fleet to determine the level of entanglements that would trigger management actions, and it is clearer to have the numbers outlined in this regulation. Furthermore, PBR is not anticipated to change frequently enough that this regulation could not be updated if necessary to adjust to changes in PBR.

Pacific Leatherback Sea Turtle Impact Score Calculation and Allowable Take Level

During scoping discussions, the Department received requests to revise the Impact Score Calculation to a value less than 1.0, meaning that not all entanglements are assumed to result in death, and to increase allowable take levels. Commenters referenced a NMFS report on hooking mortality and biological opinion for the Hawaii shallow-set longline fishery as the basis for the changes (Andersen et al. 2007, NMFS 2019). Based on an evaluation of available data sources (discussed below), the Department determined it was not appropriate to revise the values for the California commercial Dungeness crab fishery given the significant differences in gear with the Hawaii-based longline swordfish fishery.

The Hawaiian fishery uses shallow-set longline gear to target swordfish. Longline gear consists of a mainline suspended in the water column, with baited circle hooks attached to separate lines off the mainline. The mainline is typically more than one nautical mile in length and is set at a specific depth in the water column using floats spaced at regular intervals. Gear typically soaks for several hours before being retrieved (NMFS 2019). Turtles that do become entangled in this fishery have a higher chance of survivorship and can be more easily released due to the use of circle hooks and gear tending intervals.

The Dungeness crab fishery uses traps that are 3 to 3.5 ft in diameter and weigh up to 75 lbs. Traps are placed on the seafloor and every trap is required to be marked with a buoy. Trailer buoys, which are intended to keep vertical lines buoyant and visible at the surface, are commonly used in addition to the main buoy to facilitate trap servicing. The Dungeness crab fishery is subject to a mandatory 96-hour service requirement (weather permitting). If an animal becomes entangled, it could remain undetected for up to 4 days or more depending on how frequently the gear is serviced. Given the differences in gear and servicing requirements, it is not appropriate to apply mortality rates from the Hawaiian fishery to the commercial Dungeness crab fishery.

During scoping discussions, the Department also received requests to increase the allowable take of Pacific Leatherback Sea Turtles. Commenters cited higher allowable take levels in the Hawaiian fishery as rationale for increasing triggers in the Dungeness crab fishery. The projected annual interaction levels for Pacific Leatherback Sea Turtles expected from the continued operation of the Hawaii shallow-set longline fishery are 24 animals (Capture – 21; Killed – 3) (NMFS 2019). Consistent with the Terms and Conditions set forth in the Biological Opinion, NOAA

issued a proposed rule (85 FR 6131, February 4, 2020) which would set the interaction limit for the fishery at 16 Leatherback Turtles (approximate 25% reduction from predicted interaction numbers in the Biological Opinion).

Unlike the Dungeness crab fishery, the Hawaii shallow-set longline fishery is subject to mandatory observer coverage. Because the Hawaiian fishery has observer coverage it is possible to estimate the total number of Pacific Leatherback Sea Turtle interactions for the fishery. Although observer coverage has limitations (i.e., unable to account for entangled individuals that escaped or were subject to predation), it is acknowledged as the best available information to inform protected species impacts.

The footprint of the Hawaiian fishery has a higher degree of overlap with Leatherback Sea Turtles during seasonal migrations and therefore would be expected to interact with more animals than other fisheries. While the California Dungeness crab fishery does have some overlap with Pacific Leatherback Sea Turtles in the fall months, tagging and telemetry data suggest that degree of overlap is low in time and space compared to the Hawaiian fishery. Since few individuals are expected in the Fishing Grounds and even fewer interactions have been recorded with crab fishing gear, the Department does not support setting higher trigger values.

The Department also notes that NOAA recently implemented hard caps for Pacific Leatherback Sea Turtles in the California drift gill net swordfish fishery (85 FR 7246, February 2, 2020) which are more comparable to those proposed in this regulation. Caps were set at two (2) Leatherback Turtles over a rolling two-year period. If a cap is reached, the fishery will close until the 2-year mortality value (i.e., two fishing seasons) falls below the hard cap value.

In consideration of the low degree of overlap with the fishery, low level of historical entanglements, consistency with permitted take levels allowed in other California fisheries, and severely depressed stock status, the Department does not support increasing allowable take levels for Pacific Leatherback Sea Turtles because based on tagging studies off Central California, a high proportion of Pacific Leatherback sea turtles (3:1) are adult nesting females (Benson et. al. 2011). Proportionally, any take from the nesting female population will have a disproportionate impact on survival and recovery of the species.

Undetected and Unreported Entanglements

The Department also considered how to account for undetected and unreported entanglements in the development of triggers. NOAA assumes that many large whale entanglements go undetected or unreported and the number of confirmed entanglements represents an unknown fraction of total entanglements. Entanglements are undetected or not reported for a several reasons - proximity to areas of high ocean use (i.e., animals are outside areas with common human activities, and thus there is no one to observe and report an entanglement), familiarity with reporting procedures, and confidence in the ability of the agency to respond in a timely manner (Saez et al. 2020).

Fishery observer programs serve as an independent source for many types of information about fishing operations, including catch and bycatch. The West Coast groundfish fishery has various levels of observer coverage for different sectors ranging from 100% to less than 5%. The California drift gill net fishery for swordfish is subject to up to 30% observer coverage. Observers in these fisheries collect independent data on marine mammal interactions. The commercial Dungeness crab fishery does not have a requirement for mandatory observer coverage to monitor marine mammal interactions, although several Dungeness crab permit holders participate in the groundfish fishery and are familiar with mandatory observer requirements.

A state or federally funded observer program could provide information on participation levels, fishing effort, location and number of pots, and marine life interactions. While not perfect, these data could help inform estimates of total fishery related mortality for Actionable Species. Given the significant workload to develop and implement this type of program, it was not included in this rulemaking but could be considered in the future.

Marine Life Concentrations

In collaboration with the Working Group, the Department evaluated several data sources to determine their suitability for assessing marine life concentrations in Fishing Grounds. In addition to Department and NOAA surveys and satellite telemetry data, as defined in subsection (c) of the proposed regulations, the Department considered whale watch data, fishermen observations, reports from breeding grounds in Mexico, and citizen science. While these data sources showed promise, the Department determined they were not appropriate for inclusion in this rulemaking as a quantitative trigger due to limited spatiotemporal scope, lack of standardized data collection methodologies, lags between data

collection and availability for management, and/or lack of a direct connection between information and entanglement risk. Data sources which are limited in scope/area may not be representative of whale presence in other areas, limiting their utility for informing management action on a statewide or finer scale. Data collected opportunistically and without standardized methodologies prevent direct comparisons between areas or over time and would require additional work before incorporating into management. Substantial lags between data collection and availability result in information which may no longer reflect current levels of risk in a given area, inhibiting the Department's ability to make informed decisions. Other data do not directly provide any information on when, or if, those same whales will transit into Fishing Grounds, and therefore are not useful when determining entanglement risk.

The Department considered but rejected whale watch data to inform quantitative triggers based on a Working Group recommendation. The Working Group previously discussed the use of whale watch data from Monterey Bay as a potential data source but did not support its use given concerns in part about potential disconnect between location of whale sightings and actual fishing effort and application of data from Monterey Bay to other areas of the state. The Working Group was also unable to provide a quantitative trigger value for inclusion in this rulemaking. Additionally, the Department notes that there are several companies in Monterey Bay that conduct whale watch trips. Working Group discussions focused on one company (Monterey Bay Whale Watch) but it is unclear why other companies were excluded.

The Department recognizes the importance of these data and has included them in subsection (d) as information the Department shall consider when assessing an appropriate management response.

Season Structure

The season structure in the proposed regulations, including potential delays and/or closures was developed to allow for adaptive inseason management based on demonstrated entanglement risk. The Department discussed whether to utilize a more static approach where allowable fishing periods were defined prior to the season opening, with no inseason adjustments made. Performance of the fishery relative to entanglement risk would then be assessed at the end of the season, and any changes deemed necessary applied to the following season.

Under a static approach, the fishery would most likely be open from

January 1 through March 31, during the time of year when entanglement risk has historically been low.

While a static management approach would provide certainty to the Fleet, it could result in a fishing season that is unnecessarily restrictive and punitive. This would have negative economic consequences without necessarily reducing entanglement risk since it relies on historical data and does not consider real time changes in the fishery or migration patterns. Conversely, the absence of inseason management measures may not provide the necessary protections for species of concern by allowing fishery operations which are resulting in excessive entanglements to continue.

Given that this fishery is highly influenced by changing environmental conditions, the Department determined inseason management provided a balanced approach between providing for economic stability of coastal communities and environmental protections.

The Department notes that dynamic inseason management increases the reliance on real time data collection and the burden on those who collect data. While the Department received two full time staff dedicated to working on whale related issues, additional data collection requirements imposed by the RAMP program are an unfunded mandate. The Department recognizes the importance of this program and will attempt to meet the needs to the best of our ability given current resources.

Fishing Zones

In developing Fishing Zones, the Department explored options ranging from one Fishing Zone (statewide) to seven Fishing Zones (boundaries based on well-known geographic boundaries and/or state fishing blocks). Implementing actions on a statewide basis when data are available to inform management on a smaller scale seemed overly restrictive. While utilizing additional Fishing Zones could allow for management on a finer geographic scale, data may not be available on those same scales, posing a logistical challenge to Department staff.

Early versions of draft regulations contemplated using two Fishing Zones to align with the management areas used in management (Northern Management Area and Central Management Area). Feedback on early drafts of the regulations indicated that a two Fishing Zone management approach was overly restrictive, and the Department determined that available data could support more Fishing Zones.

The Department received a request to further subdivide the current Fishing Zones into 14 sub-Zones. The Department determined this is not practicable or feasible. This number of zones does not fit the scale of available data, nor does it align with current fleet behavior and migration patterns. Because animals are migratory, they can move freely and quickly between smaller subzones. Given the time lag between when the need for action is identified and the action is implemented, the risk in a given area may have changed, especially as those areas get smaller and smaller. Expected protections may not be realized as animals migrate into other areas where similar protections may not exist. The Fishing Zones developed by the Department balance data availability with current capacity for data collection.

Vertical Line/Gear Reduction

In developing alternatives, the Department discussed whether a specified gear reduction would decrease entanglement risk. In other words, would a 50% reduction in amount of vertical lines/gear result in a proportional 50% decrease in entanglement risk. In the absence of other data on the number of deployed traps (e.g. logbooks), the Department assumed that individuals fish their full tier allotment but acknowledges this may overestimate the reduction in entanglement risk from a given gear reduction. If the baseline amount of gear in the water is below the allowable amount for a given vessel's permit tier, any specified reduction would not directly translate to a proportional decrease in risk.

Implementing a mandatory logbook or other vessel tracking system to aid in quantifying trap usage may help refine estimates of savings from vertical line/gear reduction because it would rely on actual, not assumed, estimates of gear usage. Through this rule making (see subsection (g)), the Department will be requiring the Fleet to submit reports every two weeks detailing their current fishing location, depths fished, and number of traps deployed. This new requirement will help to address some of the data limitations for this fishery.

Requiring individuals to double tag their buoys (use two tags instead of one) was also an option discussed to achieve gear reduction as specified in subsection (e)(3). While it could achieve a similar result of reducing the amount of gear, it would have increased costs to replace lost tags in the event of gear loss and increase the burden on enforcement personnel when verifying compliance with such management actions.

In view of information currently possessed, no reasonable alternative

considered would be more effective in carrying out the purpose for which the regulation is proposed, would be as effective and less burdensome to affected private persons than the proposed regulation, or would be more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

VII. Mitigation Measures Required by Regulatory Action

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

VIII. Impact of Regulatory Action:

In response to comments received from the Department of Finance, the Department has updated the Economic and Fiscal Impact Statement (form STD 399) and Addendum to the STD 399.

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 statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states because west coast states with commercial Dungeness crab fisheries are developing or have similar mitigation programs in effect.

As reported by NOAA, in 2018, Working Groups in Oregon and Washington (both initially formed in 2017) continued meeting to evaluate whale entanglements, develop Best Practices Guides applicable to their respective state fisheries, and discuss potential measures to avoid entanglements with Dungeness crab and other gear in their state. Potential measures that have been discussed by the Working Groups and industry at large include: limitations on gear during the later portion of the fishing season, implementing summer buoy tags to better distinguish when entanglements may be occurring, and promoting research to determine if there are particular whale "hot spot" areas that could be avoided by fishermen during certain times.

(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 Department anticipates the potential for some seasonal impacts on the creation or elimination of jobs due to direct, indirect and induced impacts, some jobs (from 50 to 900) may be eliminated during a potential full closure period. However, the most likely Scenario 2(a) of no season delay with an early closure of May 1 is estimated to induce the loss of a total of 51 jobs (as described in the SRIA and the STD 399 amended Addendum). Any fishery closures are to be minimized in duration and extent, and expeditiously lifted when the risk has been abated. The Department does not anticipate substantial impacts on the creation of new businesses or the elimination of existing businesses within the state because any fishery closures would be minimized in duration and extent, and because it's expected that businesses are diversified and are fishing other species commercially to offset the unpredictability of the Dungeness crab fishery. The Department anticipates benefits to the health and welfare of California residents from better protection of the State's natural resources and through the better management of valuable state fisheries that benefit fishing communities and consumers, among other residents of the state. The Department does not anticipate any benefits to worker safety because this regulatory action will not impact working conditions or worker safety. The Department anticipates benefits to the environment through the better protection of the State's natural resources better management of sustainable fisheries.

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

The proposed regulation includes a new reporting requirement that is estimated to take 4-6 hours to complete per vessel, amounting to an average of \$116/year in labor costs annually. The mandatory electronic monitoring required by 2023, is estimated to have an initial cost of \$500 per vessel. Resulting in \$116 + \$500 = \$616 initial costs for a typical small business. All vessels would incur \$300 in ongoing costs for maintaining electronic monitoring. The ongoing costs for reporting is \$116 per vessel along with \$300 in ongoing costs of electronic monitoring resulting in \$116 + \$300 = \$416 annually. Additionally, RAMP management actions could result in season delays, early closures, and/or reductions in gear that

could reduce the amount of Dungeness crab brought to market. The impacts on the total fishery and supporting businesses from a range of potential reductions in the direct expenditure from the seasonal Dungeness crab harvest is described in a Standardized Regulatory Impact Assessment (SRIA; Appendix A to the Original ISOR) and Supplement to the SRIA, prepared for the proposed regulation (see attached Appendix B to the Original ISOR).

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

The Department anticipates ongoing Implementation, Monitoring, and Enforcement Costs. The Department also anticipates to experience reductions in Landings Fee Revenue projected to range from \$0 to a maximum of \$2,057,628 per fiscal year of full implementation, although the most likely Scenario 2(a) would result in an annual loss of \$113,081 (as described in the SRIA and the STD 399 amended Addendum). No impact on costs/savings in Federal Funding to the State are anticipated.

- (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: This regulation does not affect any local entity or program. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution.
- (h) Effect on Housing Costs: None.

EFFECT ON SMALL BUSINESS

The proposed regulations may affect several entities characterized as small businesses in that they are independently owned and operated business that are not dominant in their field of operation (CA GOV Code, Article 2, 11342.610). Those alternatives described under Section IV(b) of this ISOR were evaluated as means to lessen potential adverse impact on small businesses, in accordance with Government Code Section 11346.2(b)(4)(B). The Department does not collect information on the overall business diversification or size of Dungeness crab permit holders, but data on vessel size is collected (SRIA, pg. 5-8). For the state of California, about 60% of active permits are in the medium and large category or 36-99 feet in length, with the remaining 40% categorized as small

vessels or less than 36 feet (per recent Department 2013-14 and 2014-15 permitting and landings data). Additionally, it is reasonable to presume that a large share of businesses that support the Dungeness crab fleet harvest and distribution are small businesses.

- IX. Results of the Standardized Regulatory Impact Assessment (Refer to SRIA Appendix A to the Original ISOR, and Supplement to SRIA Appendix B to the Original ISOR for more details):
 - (a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State: The Department anticipates the potential for some seasonal impacts on the creation or elimination of jobs due to direct, indirect and induced impacts, some jobs (from 50 to 900) may be eliminated during a potential full closure period. However, the most likely Scenario 2(a) of no season delay with an early closure of May 1 is estimated to induce the loss of a total of 51 jobs (as described in the SRIA and the STD 399 amended Addendum). Additionally, any fishery closures are to be minimized in duration and extent, and expeditiously lifted when the risk has been abated.
 - (b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State: The Department does not anticipate substantial impacts on the creation of new businesses or the elimination of existing businesses within the state because any fishery closures would be minimized in duration and extent, and because it's expected that businesses are diversified and are fishing other species commercially to offset the unpredictability of the Dungeness crab fishery.
 - (c) Effects of the Regulation on Competitive Advantages or Disadvantages for Businesses Currently Doing Business Within the State: The Department does not anticipate substantial impacts on the competitive advantages or disadvantages for businesses currently doing business within the state because other west coast states with commercial Dungeness crab fisheries are developing or have similar mitigation programs in effect.
 - (d) Effects of the Regulation on the increase or decrease of investment in the state: It is difficult to measure the change in investment that this regulation could induce; however, generally new requirements may induce compliance investment.

Since the environmental consequences of marine life bycatch have precipitated public and legislative action, new government regulations may act as critical triggers to prompt investment. Fishing gear designers and

- manufacturers are anticipated to be compelled to invest in the development new gear protocols that comply with developing alternative gear standards. The spread of new technologies may eventually bring costs down and externalities as well.
- (e) Effects of the Regulation on the incentives for innovation in products, materials, or processes in the state: Innovation typically involves research and development expenditures and prototype development at less than cost-effective scales of production. Moreover, firms that invest in innovation often have difficulty retaining all of the benefits of their expenditures because their new technologies may be copied by competing firms. In this instance the proposed regulations will spur incentives to innovate in a larger variety of crab trap gear types than are currently available. Over time, competition among manufacturers is expected to promote innovation in performance and to reduce production costs that may be passed onto consumers.
- (f) Benefits of the Regulation to the Health and Welfare of California Residents: The Department anticipates benefits to the health and welfare of California residents from better protection of the State's natural resources and through the better management of valuable state fisheries that benefit fishing communities and consumers, among other residents of the state.
- (g) Benefits of the Regulation to Worker Safety: The Department does not anticipate any benefits to worker safety because this regulatory action will not impact working conditions or worker safety.
- (h) Benefits of the Regulation to the State's Environment: The proposed regulations will clearly define the process by which the Department, in consultation with the Working Group, will implement and remove restrictions on commercial Dungeness crab fishing activity in response to marine life entanglement risk. This will provide a measure of certainty to fishery participants regarding how their future operations may be impacted. Furthermore, regulations are expected to promote the survival and recovery of Actionable Species by reducing anthropogenic impacts from entanglement in fishing gear. These regulations are also expected to provide benefits to other marine life which co-occur in space or time with Actionable Species and are at similar risk of entanglement.

Updated Informative Digest/Policy Statement Overview

Background

Under current regulations, the California Department of Fish and Wildlife (Department) Director's authority to alter operations of the commercial Dungeness crab fishery is limited to closures protecting human health (Fish and Game Code (FGC) Section 5523) and delays due to low crab quality (FGC Section 8276.2). Senate Bill (SB) 1309 (2018, McGuire) added Section 8276.1 to the FGC. FGC Section 8276.1(c) provides additional, interim authority for the Director to restrict take of Dungeness crab in response to significant risk of marine life entanglement. FGC Section 8276.1(b) requires the Department, in consultation with the California Dungeness Crab Fishing Gear Working Group (Working Group) and other stakeholders, to adopt regulations establishing criteria and protocols to evaluate and respond to potential risk of marine life entanglement.

Regulatory Proposal

The proposed regulation would add Section 132.8 to Title 14, California Code of Regulations (CCR) to establish a Risk Assessment Mitigation Program (RAMP) which will evaluate and respond to marine life entanglement risk from California commercial Dungeness crab fishing gear. Upon the effective date of these regulations, the RAMP would replace the Director's interim authority under FGC Section 8276.1(c) as the primary mechanism for mitigating entanglement risk in this fishery. The following is a summary of the new regulations proposed in Section 132.8:

- Define Actionable Species which will be considered under the RAMP as Blue Whales, Humpback Whales, and Pacific Leatherback Sea Turtles;
- Define seven Fishing Zones which prescribe the scale at which available data will be assessed and management actions considered;
- Specify how Impact Score Calculations are used to represent severity of injury caused by Confirmed Entanglements with California Commercial Dungeness Crab Gear or Confirmed Entanglements with Unknown Fishing Gear and the necessity for management action;
- Define the Working Group and their role in assessing available information and informing management actions by the Director;
- Specify the frequency and process by which Risk Assessments will be conducted;
- Specify triggers for management action, including closure of one or more Fishing Zones, based on confirmed entanglements (Impact Score Calculation) or presence of Actionable Species;
- Identify data which will be considered when determining the need for, and appropriate category of, management action;

- Identify categories of management actions which the Director may implement in response to attainment of a specified trigger as including an advisory to the Fleet, depth constraint, vertical line/gear reduction, closure of one or more Fishing zones, and use of Alternative Gear;
- Specify the process by which the Department will notify the Fleet of any management actions;
- Establish mandatory reporting requirements for all members of the Fleet, and additional requirements when fishing during a depth constraint or using Alternative Gear; and
- Define Alternative Gear and the process by which it will be authorized to reduce the risk of marine life entanglement, including circumstances in which the Department would not approve an initial application or later deauthorize an approved gear.

Benefits of the Proposed Regulations

The proposed regulations will clearly define the process by which the Department, in consultation with the Working Group, will implement and remove restrictions on commercial Dungeness crab fishing activity in response to marine life entanglement risk. This will provide a measure of certainty to fishery participants regarding how their future operations may be impacted. Furthermore, regulations are expected to promote the survival and recovery of Actionable Species by reducing anthropogenic impacts from entanglement in fishing gear. These regulations are also expected to provide benefits to other marine life which co-occur in space or time with Actionable Species and are at similar risk of entanglement.

Consistency and Compatibility with Existing Regulations

The Legislature has delegated authority to the Department to adopt regulations establishing criteria and protocols to evaluate and respond to risk of marine life entanglement in the commercial Dungeness crab fishery (Section 8276.1 of the FGC). The Department has reviewed existing regulations in Title 14, CCR and finds that the proposed regulations are neither inconsistent nor incompatible with existing State regulation. Department staff have searched the CCR and has found no other State regulations that implement measures to reduce marine life entanglement in commercial Dungeness crab fishing gear.

Documents Incorporated by Reference

The Department proposes to incorporate into reference the following Code of Federal Regulations (CFR) sections and NMFS Instruction/ Policy Directive because publication of these documents in full in the CCR would be cumbersome, unduly expensive, or otherwise impractical (Section 20, Title 1, CCR) because the documents

are lengthy, are publicly available on the internet, and it would be inefficient for printing purposes. These documents are also available upon request from CDFW, and they are reasonably available from commonly known or identified sources as noted by the webpage links provided.

Title 50, Code of Federal Regulations (CFR) Part 660, sections 660.71 through 660.73, as revised December 12, 2018 (available from https://wildlife.ca.gov/Notices/Regulations/RAMP):

- Section 660.71, CFR Latitude/longitude coordinates defining the 10-fm (18-m) through 40-fm (73-m) depth contours
- Section 660.72, CFR Latitude/longitude coordinates defining the 50 fm (91 m) through 75 fm (137 m) depth contours
- Section 660.73, CFR Latitude/longitude coordinates defining the 100 fm (183 m) through 150 fm (274 m) depth contours
- NMFS Instruction (02-038-01), 2012. Process for Distinguishing Serious from Non-Serious Injury of Marine Mammals: Process for Injury Determinations, effective January 27, 2012 (42 pages), renewed July 2014, available from: https://www.fisheries.noaa.gov/webdam/download/64690371

Updates with the Amended ISOR:

In response to comments received during the initial 45-day comment period May 15-June 29, 2020 to the Original Proposed Package, the Department amended the proposed Section 132.8, Title 14, CCR regulatory text for RAMP for a 15-day continuation notice (Amended ISOR).

The following changes to the Original Proposed Package address public comments and concern related to how RAMP would be implemented.

The changes for the Section 132.8 regulatory text and Amended ISOR are described as follows (for every change to the regulatory text, the Amended ISOR has been updated with language justifying the change):

- 1) Include a reference to the Ocean Protection Council's Strategic Plan for 2020-2025 on page 5 of the Amended ISOR under the discussion for subsection 132.8(a)(1).
- 2) Revise subsection (a)(4)(A) language by removing, "or identifiable by the department by clearly visible gear markings" to rely solely on National Oceanic Atmospheric Administration (NOAA) confirmation process for entanglements, and not the Department.

- 3) Revise subsection (a)(4)(C) language by changing "any additional data" to "relevant fishery information."
- 4) Add new subsection (a)(4)(D) that reads: "An entanglement determined, either at time first reported or through NOAA final determination of injury or mortality (pursuant to subsection (a)(9) below), to have occurred after the death of the Actionable Species will not be deemed a Confirmed Entanglement."
- 5) Add new subsection (a)(4)(E) that reads: "In the event a Confirmed Entanglement involves gear from multiple fisheries, and NOAA identifies the fishing gear resulting in the initial entanglement, the entanglement will be attributed to that fishery. If the fishery resulting in the initial entanglement cannot be determined, the entanglement will be attributed equally among the fisheries."
- 6) Revise subsection (a)(5) to add new language, "The 100-fathom contour is defined by approximating a particular depth contour by connecting the appropriate set of waypoints adopted in Federal regulations and published in Title 50, Code of Federal Regulations Part 660, Section 660.73 (Revised December 12, 2018), incorporated by reference herein."
- 7) Revise subsection (a)(6) to remove "November 15 through July 15," and add "any period of time in which it is lawful to deploy California Commercial Dungeness Crab gear."
- 8) Revise subsection (a)(7)(A) Fishing Zone 1 southern boundary from Horse Mountain (40° 05' N. latitude) to Cape Mendocino (40° 10' N. latitude).
- 9) Revise subsection (a)(7)(B) Fishing Zone 2 northern boundary from Horse Mountain to Cape Mendocino.
- 10) Revise subsection (a)(7)(E) Fishing Zone 5 southern boundary from the U.S./Mexico border to Point Conception (34° 27 N. latitude).
- 11) Add new subsection (a)(7)(F) Fishing Zone 6: From Point Conception to the U.S./Mexico Border.
- 12) Revise subsection (a)(7) lettering and Fishing Zone numbering (changing former F to G), and replace Figure 1 Map of Fishing Zones with an updated map.

- 13) Revise subsection (a)(9) by changing the sentence from reading "The Impact Score is determined by evaluation of evidence available to the department and is subject to revision after NOAA's final determination of injury or mortality" to reading "The Impact Score is determined by evaluation of evidence available to the department and will be revised if NOAA provides a final determination of injury or mortality pursuant to NMFS Policy Directive 02-238-01 -Process for Injury Determinations (Issued January 27, 2012, renewed July 2014), incorporated by reference herein."
- 14) Revise subsection (a)(10) to add new language after the three Actionable Species "...within Fishing Grounds between Point Conception and the California/Oregon Border."
- 15) Revise subsection (a)(12) by changing the definition of "Risk Assessment" from reading "...potential entanglement of Actionable Species with commercial Dungeness crab fishing gear by the Director and Working Group" to reading "...potential entanglement of Actionable Species with California commercial Dungeness crab gear by the Director."
- 16) Add clarification of Working Group role on page 14 of the Amended ISOR under the discussion for subsection 132.8(b).
- 17) Revise subsection(b)(2) language to add "a minimum of" before "48 hoursnotice" and add the language "The notification will also provide all nonconfidential data under consideration by the Department."
- 18) Revise subsection (b)(3) to clarify the role of the Working Group in the RAMP process, and amend language by removing "of the Working Group assessing entanglement risk and management response."
- 19) Delete references to the Department determining fishery origin of gear, consistent with changes to subsection (a)(4)(A) on page 17 of the Amended ISOR under the discussion for subsection 132.8(c)(1).
- 20) Update Impact Scores based on a new Document Supporting Regulation Change (NMFS West Coast Region Protected Resources Division; NMFS 2020)
 - a. Revise subsection (c)(1)(A)1.a. Impact Score from 0.70 to 0.75
 - b. Revise subsection (c)(1)(A)1.b. Impact Score from 0.35 to 0.38

- 21) Revise subsection (c)(1)(A)2.a. to add "California" before "commercial Dungeness crab fishing gear" to clarify how non-California commercial Dungeness crab gear is to be considered.
- 22) Revise subsections (c)(1)(B)1., 2., and 3. to remove "minimum of a" before "Fishing Zone closure" to clarify that closures are by default linked to defined Fishing Zones.
- 23) Revise subsection (c)(1)(C)1., 2., and 3. by changing "the Director shall consider" with "the Director shall implement" to provide assurance of measures to be taken.
- 24) Revise subsection (c)(2) to add "for the purposes of determining Marine Life Concentrations in this subsection (c)(2)" and "Surveys shall be conducted systematically across a full range of Fishing Zone depths when weather and visibility conditions enable accurate detection of Actionable Species. A survey is only current through the first Risk Assessment immediately following the survey." Revisions also add capitalization to Marine Life Concentrations.
- 25) Revise subsection (c)(2)(A)4.a. to change Fishing Zone exclusion from 6 to 7 and replace "Fishing Zone closure" with "Fishing Season delay."
- 26) Revise subsection (c)(2)(A) 4.b. revise Fishing Zone exclusion from 6 to 7, remove "minimum" and replace "Fishing Zone closure" with "Fishing Season delay."
- 27) Revise subsection (c)(2)(B)1. by removing "the Fishing Season shall close April 1 statewide and remain closed for the remainder of the normally scheduled season" and replace with "for each Fishing Zone, the Director shall implement a management action as described in subsection (e) for the Zone(s)."
- 28) Revise subsection (c)(2)(B)2.a., b., and c. by removing "minimum of a" prior to "Fishing Zone" and update the Fishing Zone exclusion from 6 to 7 for (c)(2)(B)2. a. and b.
- 29) Revise subsection (d) by removing "based on statistically valid data" in response to public comment due to lack of clarity of level of significance, focusing on best available science made available to the Department.
- 30) Revise subsection (d)(1) by changing the language from "Working Group recommendation based on its independent Risk Assessment of the factors

described in subsection (c) as well as best available science related to considerations identified in this subsection" to "Working Group management action recommendation and best available science made available to the department related to considerations identified in this subsection."

- 31) Revise subsection (d)(7) to correct capitalization of 'dynamics."
- 32) Revise subsection (d)(9) by removing "such as" and adding "including but not limited to" as well as adding "La Niña" to clarify the listed factors of examples of ocean conditions.
- 33) Revise subsection (d)(11) with capitalization of "Marine Life Concentrations" and adding "over the course of the current Fishing Season" to clarify Director's use of most recent survey data.
- 34) Revise subsection (e) by replacing "the Director may" with "the Director shall" implement a certain measure.
- 35) Revise subsection (e)(1) to replace "encourage volunteer efforts" with "employ voluntary efforts and/or measures to reduce the risk of entanglements (i.e. best fishing practices) and..."
- 36) Revise subsection (e)(2) to change "660.74" to "660.73" to reflect incorporation by reference of the correct maximum fishing depths needed for this regulation.
- 37) Revise subsection (e)(3) to change the language from "The Director may decrease the number of vertical lines or amount of gear (e.g., number or percentage of traps) an individual permit holder can use based on fishing activity reported pursuant to (g)(1), statewide, or within any or all Fishing Zone(s)" to "The Director may decrease the number of vertical lines or amount of gear (e.g., number or percentage of traps) an individual permit holder can use such that there will be a reduction in the total number of lines in use. The Director will determine the reduction amount based on the most recent information provided pursuant to subsection (g). Gear reduction may occur statewide, or within any or all Fishing Zone(s)."
- 38) Revise subsection (f) by adding a new subsection (D) "Duration of management action," and re-letter the previous subsection (D) to (E).
- 39) Revise subsection (g)(1) from "all members of the Fleet" to "all vessels", and correct capitalization of Department.

- 40) Revise subsection (g)(2) by splitting the subsection into two parts (A), changing "members of the Fleet" to "all vessels" and adding a new subsection (B). New subsection (g)(2)(B) expands the existing proposed requirement for electronic reporting in subsection 132.8(g)(2)(A) for depth constraint or other management action, and applies it to the rest of the fleet. "By the 2023-24 Fishing Season, all vessels will be required to carry an electronic monitoring device that is capable of tracking and recording vessel location using GPS coordinates at a frequency of no less than once a minute during fishing operations when participating in the California commercial Dungeness crab fishery. Data shall be made available to the Department within 72-hours of request." Also, capitalization of Department was corrected in (g)(2)(A).
- 41) Adding a new subsection (g)(4), "(4) All information collected pursuant to this subsection (g) shall remain confidential to the extent permitted by law. Insofar as possible, the information shall be compiled or published as summaries, so as not to disclose the individual record or business of any person."
- 42) Revise subsection (h)(1)(B)1. to add new language, "If "ropeless," the gear must be used with software that enables Department law enforcement and other fishing vessels within ¼ mile of the gear to identify the location of the gear at all times when it is deployed."
- 43) Revise subsection (h)(1)(B)2. to change the language from "Retrievability: means of retrieval, including description of release mechanism, equipment and any specialized training needed to deploy and/or retrieve Alternative Gear, mechanism to address equipment malfunction, safeguards to prevent gear loss number of successful deployments and retrievals of not less than 90%." to "Retrievability: means of retrieval, including description of release mechanism, equipment and any specialized training needed to deploy and/or retrieve Alternative Gear, description of safeguards and procedures to minimize gear loss and ghost gear, with gear loss rates of no more than 10%. Gear must include a back-up release capability so it will surface in the event of an equipment failure and must include a gear recovery plan if the gear does not rise to the surface."
- 44) Revise subsection (h)(1)(B)3. to change the language from "Ability to Identify: means of Alternative Gear identification, including description of mechanism for the department to identify Alternative Gear to permitholder both remotely when submerged, and at the surface" to "Ability to Identify: means of Alternative Gear identification, including the method or

description of the mechanism required for the department to identify Alternative Gear to permitholder both remotely when submerged, and at the surface."

- 45) Revise subsection (h)(1)(B)5. to add new language "department law enforcement must be able to retrieve and redeploy the gear."
- 46) Revise subsection (h)(1)(C)3. removing "number of successful deployments and retrievals of not less than 90%" and replacing with "gear loss rates of no more than 10%."
- 47) Revise subsection (h)(1)(C)6. for capitalization and remove "Division."
- 48) Revise subsection (h)(1)(D)5. by replacing "or" with "and."
- 49) Revise subsection (h)(2) by adding capitalization to "Fishing Season" and replacing "state waters" with "Fishing Grounds."

Further, response to comments received from the Department of Finance (DOF), the Department has updated the Economic and Fiscal Impact Statement (form STD 399) and Addendum to the STD 399. The comments focused primarily on expansions from the Standardized Regulatory Impact Assessment (SRIA) and comments from DOF review of the Supplement to the SRIA (Appendix B to the Original ISOR). The changes center on the Department's judgement of the most likely Scenario (as outlined in the SRIA), disclosing assumptions behind range of costs and benefits with different triggers and mitigation actions, as well as clarifying statewide costs/ total economic impact. The Department also proposes expanding the new electronic reporting requirement under subsection 132.8(g)(2)(B) to be phased in for all vessels for 2023-2024 fishing season, therefore those costs are estimated and presented in the amended STD 399 and Addendum.

Update with the FSOR August 2020:

The Department adopted the final regulations on August 27, 2020, as amended in the 15-day continuation notice in the Amended ISOR dated July 17, 2020.

With this Final Statement of Reasons (FSOR), the Department has included the following non-substantive changes:

1. The Amended ISOR and regulatory text included revision to subsection (a)(7)(A) defining Fishing Zone 1:

- a. Fishing Zone 1: changing the southern boundary from Horse Mountain (40° 05' N. latitude) to Cape Mendocino (40° 10' N. latitude).
- b. The Amended ISOR also included an amended Figure 1 depicting this adjusted Fishing Zone boundary. However, Figure 1 in the Amended ISOR showed the southern boundary of the amended Zone 1 as 41° 10' N instead of the intended 40° 10' N. The amended regulatory text under subsection 132.8(a)(7)(A) did correctly show the intended latitude southern boundary latitude measurement.
- c. Thus, with this FSOR we show the corrected southern boundary latitude line in Final Figure 1.
- 2. 132.8(e)(3) the words "the most recent" were added and noticed with the Amended ISOR to this subsection of the regulatory text, but the addition of these three words was mistakenly not shown in double underline. These words, however, were documented as added in the updated Informative Digest and in the 15-day renotice posted to the Department's webpage. The revision reads: "The Director will determine the reduction amount based on the most recent information provided pursuant to subsection (g)."
- 3. Document Supporting Regulation Change referencing the Code of Federal Regulations (page 46 of the Amended ISOR): A non-substantive correction to the name of the intended article in one of the Documents Supporting Regulation Change (referencing the Code of Federal Regulations) clarifies the article meant for reference as a Supporting Document, as the page numbers of 28800-28802 were correct, as well as mention to the concept of Potential Biological Removal (PBR). The reference to "North Pacific Fishery Management Council; Public Meetings" should have said "Taking of Threatened or Endangered Marine Mammals Incidental to Commercial Fishing Operations; Proposed Permits" for a correct citation of:
 - a. 64 Federal Register 102, May 27, 1999. Taking of Threatened or Endangered Marine Mammals Incidental to Commercial Fishing Operations; Proposed Permits, pages 28800-28802. Available from: https://www.govinfo.gov/content/pkg/FR-1999-05-27/pdf/FR-1999-05-27.pdf
- 4. Correct minor grammatical and typographic errors:
 - a. References to subparagraphs within a section of the fourth and greater degree were corrected to include a period after the number or lower case letter instead of parentheses. For example, the Department corrected "subsection 132.8(h)(1)(B)(5)" to "subsection

- (h)(1)(B)5." and "subsection 132.8(c)(1)(A)(1)(a)" to "subsection 132.8(c)(1)(A)1.a."
- b. 132.8(c)(2)(A)2. add comma after "If data are unavailable after December 1,"
- c. 132.8(a)(6) capitalize the word "Section" for each of the three references following the words "Fish and Game Code."
- d. 132.8(c)(2)(A)4.a. remove the unnecessary comma after the words "five (5) or more animals over a one-week period" that was added with the Amended ISOR.
- e. 132.8(c)(2)(A)4.b. remove the unnecessary comma after the words "three (3) or more animals over a one-week period" that was added with the Amended ISOR.
- f. 132.8(g)(2)(A) the word "one" was replaced with "once" in this subsection to ensure clarity. The revision reads: "Electronic monitoring systems must be capable of tracking and recording vessel location using GPS coordinates at a frequency of no less than once a minute during fishing operations." The addition of "once" also matches the subsection to follow (g)(2)(B) which also provides a minimum frequency of data collection under subsection (g).
- 5. By request of the Office of Administrative Law, the following words were added for clarity to the end of the last sentence in subsection 132.8(b)(4), "...as determined on a case by case basis" for the language to read, "If such Risk Assessment indicates that the triggers in subsection (c) are no longer met, or a different management response is more appropriate, the Director shall lift or modify any restrictions in a manner that promotes fair and orderly fisheries as determined on a case by case basis."