# 2024-2025 Risk Assessment Preliminary Assessment and Available Data for Risk Assessment Mitigation Program

Last updated: February 10, 2025

#### PRELIMINARY ASSESSMENT

This Preliminary Assessment and Management Recommendation has been developed by the California Department of Fish and Wildlife (CDFW) Marine Region staff for consideration by the California Dungeness Crab Fishing Gear Working Group for the Risk Assessment Mitigation Program (RAMP; Section 132.8, Title 14, California Code of Regulations) regarding Management Actions to address marine life entanglement risk in the commercial and recreational Dungeness crab fishery. CDFW will prepare a Final Assessment and Management Recommendation after reviewing the Working Group Recommendation and other relevant data.

#### **Recommended Management Actions**

#### **Commercial Fishery:**

- Fishing Zones 1 and 2: Continue 25% Gear Reduction
- Fishing Zones 3-6: Continue 50% Gear Reduction
- All Fishing Zones: Continue Fleet Advisory

#### **Recreational Fishery:**

All Fishing Zones: Continue Fleet Advisory

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#### I. Management Recommendation Summary Rationale

The Marine Region's preliminary recommendation is for the Director to continue the 25% Gear Reduction in Fishing Zones 1 and 2 and the 50% Gear Reduction in Fishing Zones 3, 4, 5 and 6. The Fleet Advisory would also continue in all Fishing Zones.

The Marine Region also recommends a continuation of the Fleet Advisory for all Fishing Zones (1-6) for the recreational fishery.

These recommendations are supported by the high number of entanglements that occurred during the 2024 calendar year and 3-year average Impact Score for the commercial fishery. The elevated number of entanglements supports the recommendations to continue the Vertical Line/Gear Reduction Management Actions to minimize the number of vertical lines/traps for the commercial fishery. Reducing the number of traps used in each Fishing Zone will also reduce the likelihood of lost or abandoned gear throughout the season. Marine Life Concentrations are expected to increase in the coming weeks as whales begin to return from their winter breeding grounds. Precautionary Management Actions should therefore remain employed to reduce entanglement risk, which includes the current 50% Gear Reduction in Fishing Zones 3-6 and 25% Gear Reduction in Fishing Zones 1 and 2.

Entanglements: Numerous humpback whale entanglements have been reported since the close of the 2023-24 fishing season. The RAMP Entanglement History document describes confirmed Actionable Species entanglements that have been reported by the National Marine Fisheries Service (NMFS) as of February 7, 2025. Humpback whale entanglements in California commercial Dungeness crab fishing gear and Unknown Fishing Gear bring the three-year rolling average Impact Score to 3.9 (subject to revision), which exceeds the trigger as defined in RAMP of two entanglements, requiring Management Action to reduce entanglement risk in the commercial Dungeness crab fishery.

All Management Actions will be re-evaluated at the next Risk Assessment, which is expected to occur on or around March 18, 2025. For additional details, see the Entanglement and Marine Life Concentration sections of this Available Data document.

Table 1. Fishing Zones and current management status in the California commercial and recreational Dungeness crab fishery.

Fishing Zone	Commercial Fishery: Current Management Status	Commercial Fishery: Proposed Management Status	Recreational Fishery: Current Management Status	Recreational Fishery: Proposed Management Status	
1	25% Gear 25% Gea 1 Reduction Reduction		Fleet Advisory	Fleet Advisory	
2	25% Gear Reduction	25% Gear Reduction	Fleet Advisory	Fleet Advisory	
3	50% Gear Reduction	50% Gear Reduction	Fleet Advisory	Fleet Advisory	
4	50% Gear Reduction	50% Gear Reduction	Fleet Advisory	Fleet Advisory	
5	50% Gear Reduction	50% Gear Reduction	Fleet Advisory	Fleet Advisory	
6	50% Gear 50% Gear Reduction		Fleet Advisory	Fleet Advisory	

## II. Alternative Management Actions for the Commercial Fishery

# Alternatives Considered but Rejected

- Season Delay Fishing Season has already started in all Fishing Zones, so not considered as a Management Action.
- Depth Restriction given the seasonal whale migration patterns, this Management Action is not recommended.
- Alternative Gear can only be authorized after April 1st.

#### **AVAILABLE DATA**

#### III. Triggers Requiring Management Action

### I. Confirmed Entanglements: § 132.8(c)(1)

Data provided by: Lauren Saez and Dan Lawson (National Marine Fisheries Service)

The table below outlines the confirmed entanglements under RAMP and their associated Impact Score for the years 2023-2025. See "FAQ: Impact Scoring for the Risk Assessment and Mitigation Program" for information about the RAMP Impact Score. More information and definitions, please see the RAMP Entanglement History document.

Table 2. Impact Score Calculations based on Confirmed Entanglements in California commercial Dungeness crab gear and Confirmed Entanglements in Unknown Fishing Gear reported off California.

Actionable Species	Current Fishing Season Impact Score (2024-25)	Current Calendar Year Impact Score (2025)	3-Year Rolling Average
Humpback whales	0	0	3.9
Leatherback sea turtle	0	0	0.33

As of February 7, 2025, there have been zero Confirmed Entanglements of humpback whales, blue whales or leatherback sea turtles during the 2025 calendar year.

## II. Marine Life Concentrations: §132.8(c)(2)

No CDFW aerial surveys were conducted during this period due to weather.

Table 31. Summary of available CDFW-approved survey data for Marine Life Concentrations for each Fishing Zone, and whether the triggers established in Section 132.8(c)(2) have been met for any Fishing Zone.

Fishing Zone	CDFW-approved survey data	Triggers attained?		
Zone 1	None	N/A		
Zone 2	None	N/A		
Zone 3	None	N/A		
Zone 4	None	N/A		
Zone 5	None	N/A		
Zone 6	None	N/A		

## IV. Management Considerations

## I. Information from NOAA: §132.8(d)(2)

One new humpback whale will be added to the NOAA 2024 entanglement records; a humpback whale was reported off Banderas Bay, Mexico on December 28, 2024. The

whale was reported to be entangled around the fluke with commercial Dungeness crab gear (state unknown), and the buoys are not consistent with any other entanglements reported in 2024. The NMFS team is still reviewing all available information about this case. At this time, this entanglement is not being accounted for under RAMP.

#### II. Historic patterns and current Actionable Species migration: §132.8(d)(6) and (11)

Data provided by: Point Blue Conservation Science, NOAA Channel Islands National Marine Sanctuary, NOAA Coastwatch

## A. Point Blue Conservation Science (Fishing Zones 3, 4, and 6)

For current observation data please see the Point Blue Whale Alert map.

Table 4. Summary of available humpback and blue whale recorded reported via Point Blue Conservation Science in Fishing Zones 3, 4, and 6 during the seven-day period ending February 6, 2025.

Fishing Zone	Number of humpback whales sighted	Number of blue whales sighted
Zone 3	0	0
Zone 4	0	0
Zone 6	1	0

## B. NOAA Channel Islands National Marine Sanctuary (Fishing Zone 6)

The NOAA Channel Islands National Marine Sanctuary (CINMS) and California Marine Sanctuary Foundation aerial survey team completed a flight on January 30, 2025. The survey team sighted eight whales in total on this flight, including seven gray whales and one humpback whale. The survey effort track line is included in the map and shows that they covered the shipping lanes in the Santa Barbara Channel from Oxnard to Point Conception and back.

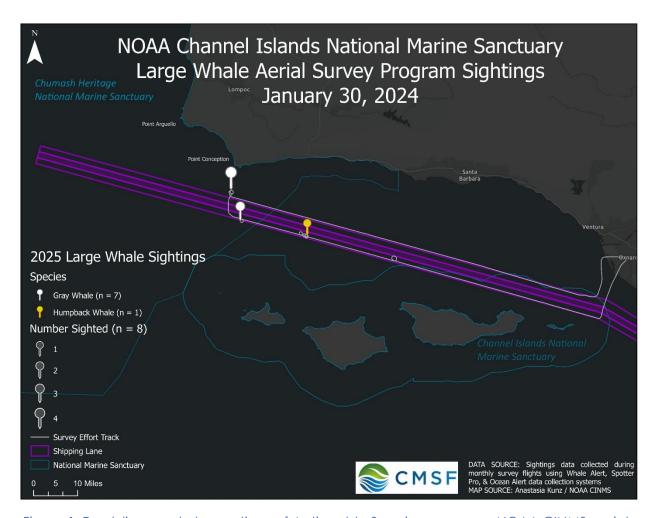


Figure 1. Track lines and observations of Actionable Species seen on a NOAA CINMS aerial survey conducted on January 30, 2025.

## C. Whale Watch 2.0 (All Fishing Zones)

No new available data, please see the <u>December 16, 2024 Preliminary Assessment</u> and Available <u>Data document</u> for latest data or visit the <u>NOAA Coastwatch Habitat Suitability map</u>.

# III. Fishing Season dynamics: §132.8(d)(7)

## A. Marine Landings Data System (All Fishing Zones)

Data provided by: California Department of Fish and Wildlife. \*CDFW data presented in this section is preliminary and subject to revision.

Fishing Zones 3-6 opened on January 5, 2025, under a 50% Gear Reduction. Fishing Zones 1-2 opened on January 15, 2025, under a 25% Gear Reduction. A summary of landings information as of February 6, 2025, is provided below (Table 5).

Table 5. Summary of fishing season dynamics information for the commercial fishery, as of February 6, 2025.

Metric	Value	Additional Info
Season status	NA	Open in Fishing Zones 1-2 under a 25% Gear Reduction and Fishing Zones 3-6 under a 50% Gear Reduction
Number of daily landings	2,611	NA
Total volume (pounds)	6,243,395	NA
Total Ex-Vessel Value	\$39,578,237	NA
Average unit price	\$6.20	NA
Total number of active vessels	333	NA
Maximum potential traps (based on active permits)	67,500	Estimates reflect gear reductions and are also provided in the Bi-Weekly Fishing Activity Reports

Since the season opened statewide, Fishing Zone 1 has seen the majority of landings with 1,279,502 lbs landed during the first week and 1,762,445 lbs landed in the second week. Fishing Zone 3 reached a peak volume of landings during the season opener, with 986,288 lbs landed.

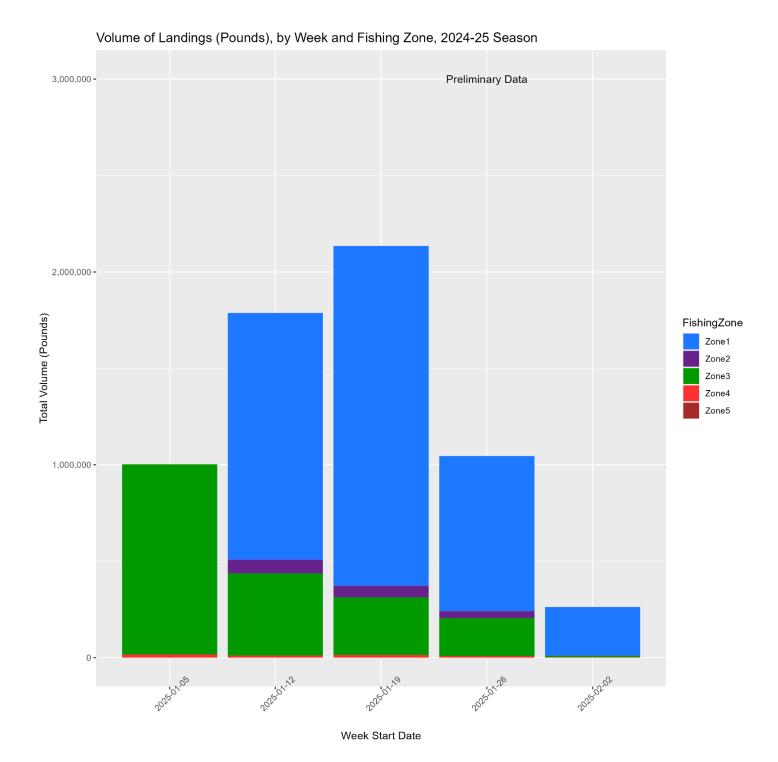


Figure 2. Cumulative volume (pounds) landed by week and Fishing Zone. Week 1 starts with the first day the commercial Dungeness crab fishery was open in any area, January 5, 2025. All data are preliminary and subject to change. Certain week-Fishing Zone combinations are withheld due to confidentiality constraints.

The number of active fishing vessels reached a peak during the second week for both the Central Management Area (Fishing Zone 3) and the Northern Management Area (Fishing

Zone 1). Fishing Zone 3 had a maximum of 144 active vessels and Fishing Zone 1 had 133 active vessels landing crab.

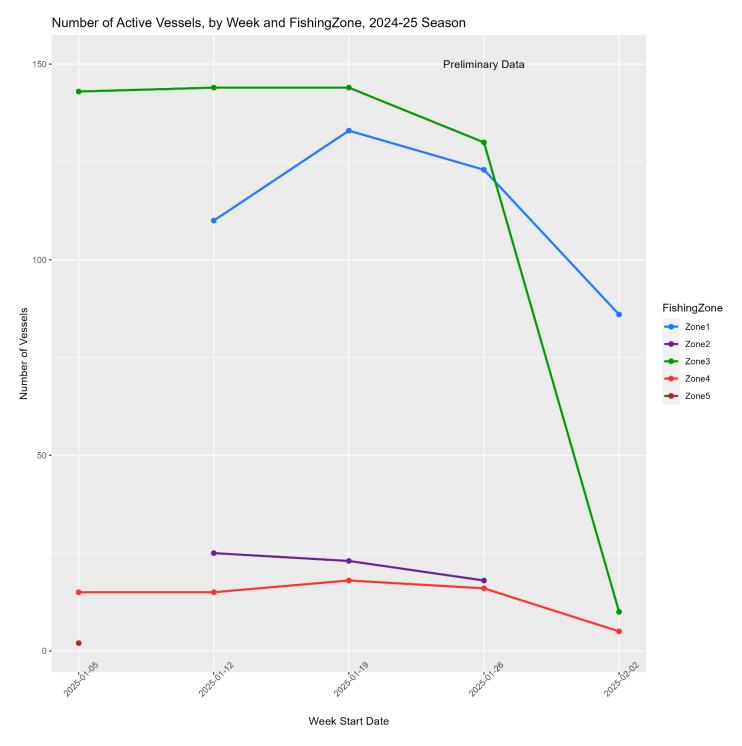


Figure 3. Number of active vessels by week and Fishing Zone. Week 1 starts with the first day the commercial Dungeness crab fishery was open in any area, January 5, 2025. All data are preliminary and subject to change. Some week-Fishing Zone combinations are withheld due to confidentiality constraints.

### B. Bi-Weekly Fishing Activity Reports (All Fishing Zones)

CDFW has received bi-weekly reports since the first reporting period on January 16, 2025, through the most recent reporting period of February 1, 2025. A summary of reports received for January 16, 2025, provided in Table 6 and those received for February 1, 2025, are provided in Table 7; note this summary may not reflect all permitted vessels participating in the fishery due to compliance issues.

Table 6. Summary of information provided for the January 16, 2025, bi-weekly reporting period by Fishing Zone (1-6). Accessed from CDFW's Bi-Weekly Reporting database on February 5, 2025. NR-C refers to data withheld due to confidentiality and all data are preliminary and subject to change.

Fishing Zone	Permits Reporting	Avg. Trap Number	Total Traps	Avg. Min. Depth (fa.)	Avg. Max. Depth (fa.)	Max. Depth (fa.)	Final Report	Number of Lost Traps
Zone 1	107	274	29,360	12	30	60	0	0
Zone 2	16	187	2,995	13	26	42	0	0
Zone 3	142	152	21,630	24	42	150	4	1
Zone 4	18	125	2,257	21	46	70	0	0
Zone 5	NR-C	NR-C	NR-C	NR-C	NR-C	NR-C	NR-C	NR-C
Zone 6	0	0	0	0	0	0	0	0
Totals	283	NA	56,242	NA	NA	NA	4	1

Table 7. Summary of information provided for the February 1, 2025, bi-weekly reporting period by Fishing Zone (1-6). Accessed from CDFW's Bi-Weekly Reporting database on February 6, 2025. All data are preliminary and subject to change.

Fishing Zone	Permits Reporting	Avg. Trap Number	Total Traps	Avg. Min. Depth (fa.)	Avg. Max. Depth (fa.)	Max. Depth (fa.)	Final Report	Number of Lost Traps
Zone 1	114	279	31,337	13	34	77	0	0
Zone 2	21	189	3,989	13	36	90	0	0
Zone 3	128	153	19,659	24	41	80	9	9
Zone 4	16	128	2,057	19	43	60	1	4
Zone 5	0	0	0	0	0	0	0	0
Zone 6	0	0	0	0	0	0	0	0
Totals	279	NA	57,042	NA	NA	NA	10	13

#### IV. Distribution and abundance of key forage: §132.8(d)(8)

#### A. MBARI Krill Model

No new available data, please see the <u>December 16, 2024 Preliminary Assessment</u> and <u>Available Data document</u> for latest data or visit the <u>MBARI website</u> for more information.

#### V. Ocean conditions: §132.8(d)(9)

## A. El Niño/Southern Oscillation (ENSO) Diagnostic

As of January 9, 2025, La Niña conditions are present and are expected to persist through February-April 2025 (59% chance), with a transition to ENSO-neutral likely during March-May 2025 (60% chance). Please visit the <u>NOAA ENSO Diagnostic</u> webpage for more information.

#### B. Large Marine Heatwave Tracker

No new available data, please see the <u>December 16, 2024 Preliminary Assessment and Available Data document</u> for latest data or visit the <u>NOAA Marine Heatwave</u> Tracker webpage for more information.

## C. Habitat Compression Index

As of January 2024, Region 2, which includes the north coast of California, shows high habitat compression. Region 3, which includes the central coast of California, shows high habitat compression (Figure 4). Please visit the NOAA Habitat Compression Index webpage for more information.

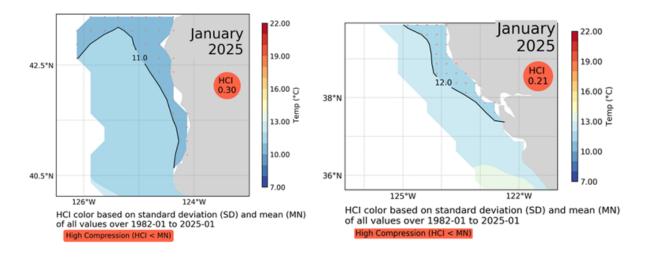


Figure 4. Spatial structure of the Habitat Compression Index (HCI) for Region 2 (40 to 43.5° N: left side) and Region 3 (35 to 40° N: right side).

## VI. Effectiveness of management measures: §132.8(d)(3)

Data provided by: California Department of Fish and Wildlife

CDFW's effectiveness evaluation for the Management Actions specified in §132.8(e) are provided above in the Initial Assessment.

VII. Total economic impact to the fleet: §132.8(d)(4)

Data provided by: California Department of Fish and Wildlife

The RAMP regulations specify that, when deciding amongst multiple management measures which would equivalently reduce entanglement risk, CDFW shall consider total economic impact to the fleet and fishing communities.

VIII. Current Impact Score Calculation: §132.8(d)(10)

Data provided by: California Department of Fish and Wildlife

See Table 2 for the current fishing season and calendar year Impact Score. For more information about Impact scoring, please review the <u>Impact Score FAQ</u>.