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

Last updated: May 14, 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 1-2: Continue 25% Gear Reduction and 30-Fathom Depth Constraint
- Fishing Zones 3-6: Season Closed

#### **Recreational Fishery:**

- Fishing Zones 3-4: Continue Crab Trap Prohibition
- All Fishing Zones: 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 and 30-Fathom Depth Constraint in Fishing Zones 1 and 2. Note: Fishing Zones 3-6 are closed for the remainder of the season.

The Marine Region also recommends a continuation of the Crab Trap Prohibition for Fishing Zones 3-4. A Fleet Advisory remains for all Fishing Zones.

These preliminary recommendations are based on current Marine Life Concentrations, the Entanglement Impact Score for the entire commercial fishery, and historical migration patterns of humpback whales. The current entanglement Impact Score is 4.15, which exceeds the rolling average in RAMP. No Actionable Species were observed during a CDFW aerial survey conducted on May 8, 2025. Fishing effort as reported in biweekly reports for Fishing Zones 1 and 2 continues to decline with 19,460 taps reported during the April 16 reporting period, and 13,710 traps reported during the May1 reporting period. Therefore, the 30-Fathom Depth Restriction and 25% Gear Reduction already in place will provide entanglement risk reduction while allowing for continued fishing opportunities in Fishing Zones 1 and 2.

Management Actions for Fishing Zones 1 and 2 for the commercial fishery and recreational fishery Management Actions for Fishing Zones 1, 2, 5 and 6 will be reevaluated at the next risk assessment in early June.

Entanglements: Since the last Available Data document, there have been three confirmed entanglements with humpback whales: one with CA commercial Dungeness crab gear and two with unidentified gear. CDFW is awaiting additional information before making a determination regarding Impact Scoring under RAMP for the two unidentified gear entanglements. More information is available on page 7 of this document.

Marine Life Concentrations: CDFW conducted an aerial survey on May 8, 2025, in Fishing Zones 1-2 and observed no Actionable Species.

For additional details, see the Entanglement and Marine Life Concentration sections of this Available Data document.

# II. Alternative Management Actions for the Commercial Fishery

# Alternatives Considered but Rejected

- A season closure was considered for Fishing Zones 1 and 2 but was not recommended based on available Marine Life Concentration data at this time.
- Alternative Gear- can be authorized after April 1st, but no gear currently is authorized for the commercial Dungeness crab fishery.

#### **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)

Since the last Available Data document, there have been three confirmed entanglements with humpback whales: one with CA commercial Dungeness crab gear and two with unidentified gear. See page 7 of this document for more detailed information.

Tables 2 and 3 outline 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. Actionable Species Entanglements during 2025 pursuant to RAMP regulations.

Entanglement ID	Date	Species	Fishery	Impact Score
20250506Mn	5/6/25	Humpback	Unknown Fishing	Pending
		whale	Gear	
20250501Mn	5/1/25	Humpback	Unknown Fishing	Pending
		whale	Gear	
20250414Mn	4/14/25	Humpback	CA commercial	0.75
		whale	Dungeness crab	
20250322Mn	3/22/25	Humpback	CA commercial	0 (resight)
		whale	Dungeness crab	

Table 3. 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	0.75	0.75	4.15
Leatherback sea turtle	0	0	0.33

As of May 14, 2025, there have been zero Confirmed Entanglements of blue whales or leatherback sea turtles during the 2025 calendar year.

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

Data provided by: CDFW, Monterey Bay Whale Watch (processed by Karin Forney, NOAA SWFSC)

According to the RAMP regulations for the period of March 1 until the Fishing Season closes statewide a trigger has been met when:

- The number of humpback whales is greater than or equal to 10, or there is a running average of five or more animals over a one-week period within a single Fishing Zone.
- The number of blue whales is greater than or equal to three, or there is a running average of three or more animals over a one-week period within a single Fishing Zone
- The number of Pacific leatherback sea turtle is greater than or equal to one within any Fishing Zone

Table 41. 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	CDFW Aerial Survey	No
Zone 2	CDFW Aerial Survey	No
Zone 3	None	Season Closed
Zone 4	MBWW	Season Closed
Zone 5	None	Season Closed
Zone 6	None	Season Closed

# A. CDFW Surveys (Fishing Zones 1 – 2)

On May 8, 2025, CDFW conducted an aerial survey from the coast to the 100-fathom contour line covering Fishing Zones 1-2. The survey began near Point Arena (Fishing Zone 2) and ended at Stone Lagoon in Humboldt County (Fishing Zone 1). Sea state ranged from Beaufort state of 1-3 and skies were clear. One unidentified whale was observed in Fishing Zone 1 and two gray whales in Fishing Zone 2.

Table 5. Counts of Actionable Species seen by CDFW aerial survey conducted on May 8, 2025.

Fishing Zone	Humpback whales	Unidentified whales
Zone 1	0	1
Zone 2	0	0

# CDFW Aerial Survey May 8, 2025

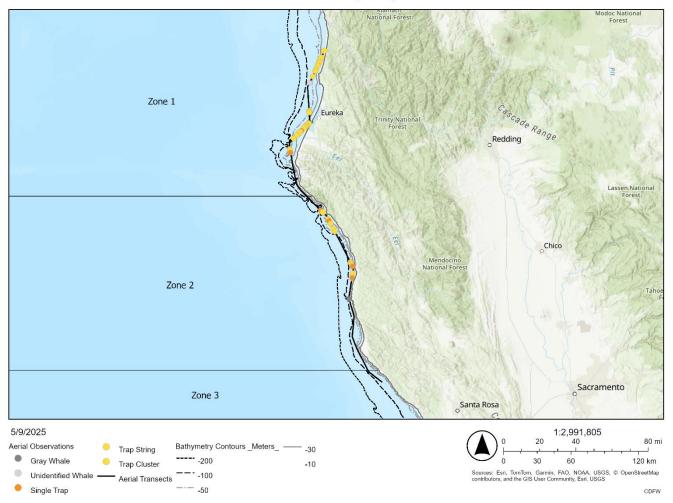


Figure 1. Map of CDFW aerial survey conducted on May 8, 2025, in Fishing Zones 1-2.

#### B. Monterey Bay Whale Watch Surveys (Fishing Zone 4)

Monterey Bay Whale Watch conducted whale-watching trips in southern Monterey Bay on all seven days during the week of April 29 – May 5, 2025. The 7-day average number of humpback whales per half day trip during April 29– May 5, 2025, was 17.9, with a peak of 49 humpback whales observed on a morning trip on April 29<sup>th</sup> (Figure 2).

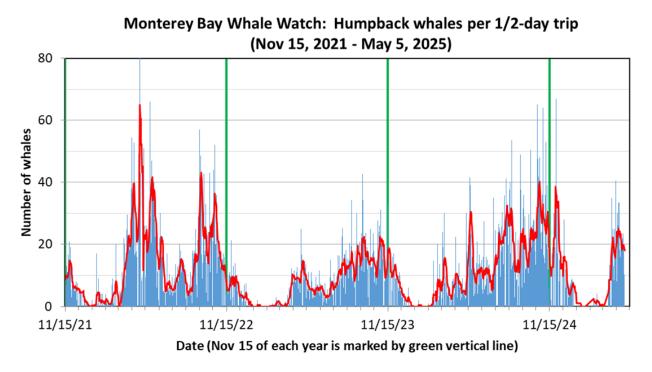


Figure 2. Standardized number of humpback whale sightings for Monterey Bay Whale Watch from 15 November 2020 – 5 May 2025. The y-axis is the number of whales per half-day trip; the thin blue bars are the average daily whale numbers, and the red line is a 7-day running average to make the patterns a bit easier to see. A vertical green line has been added at November 15 of each year for reference. Each tick mark is one month.

#### IV. Management Considerations

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

Data provided by: Lauren Saez and Dan Lawson, National Marine Fisheries Service (NMFS), California Department of Fish and Wildlife.

Since the last Available Data document, there have been three confirmed entanglements with humpback whales: one with CA commercial Dungeness crab gear and two with unidentified gear. The entanglement with CA commercial Dungeness crab gear was reported in Monterey on April 14. The whale was entangled with two buoys close to the tail, with a white CA Dungeness crab tag attached to one buoy. The first unidentified entanglement was reported on May 1 off Morro Bay. The humpback whale had two bullet buoys close to tail, no trailing line, and an injury on tailstock where line is wrapped indicating a chronic/long term entanglement. The whale is a known individual and presumed still entangled. The second unidentified entanglement was reported on May 6 off Morro Bay. The whale has line around the tail, with one bullet buoy and one oblong polyball following closely behind whale. The whale is presumed still entangled.

For recent entanglement information please see the <u>RAMP Entanglement History</u> document.

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

Data provided by: Point Blue Conservation Science and Monterey Bay Whale Watch (processed by Karin Forney NOAA SWFSC)

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

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

Table 6. 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 May 9, 2025.

Fishing Zone	Number of humpback whales sighted	Number of blue whales sighted
Zone 3	16	0
Zone 4	10	0
Zone 6	58	0

#### B. Monterey Bay Whale Watch (Fishing Zone 4)

The semi-monthly average number of humpback whales per half day trip in southern Monterey Bay is slightly above the historical average for this time of year (Figure 3).

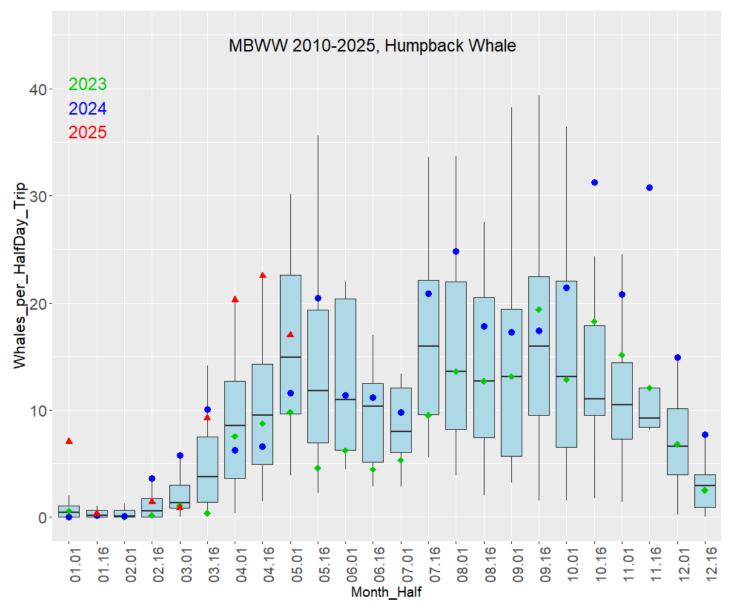


Figure 3. Historical Monterey Bay Whale Watch data for 2010-2025, summarizing the average and variation in the number of humpback whales per half-day trip on a semi-monthly basis (1st- 15th, 16th- end of month). This boxplot follows standard statistical practice in that the black horizontal line is the average number of whales; the blue box shows the 25th-75th percentiles (i.e., half of all past whale numbers are within the blue box); the vertical lines show the range of whale numbers excluding outliers, and outliers are shown as small black dots. Values for 2023 (green diamonds), 2024 (blue dots) and 2025 (red triangles) and are provided for reference, placing recent whale numbers in a historical context.

# C. NOAA Channel Islands National Marine Sanctuary and California Marine Sanctuary Foundation Aerial Survey (Fishing Zone 6)

On April 29, 2025, the NOAA Channel Islands National Marine Sanctuary and California Marine Sanctuary Foundation aerial survey team observed 18 whales in total on this flight, including 16 humpback whales and two unidentified whales (Table 7). The survey effort track line is included in the map (Figure 4) which covers

the eastern portion of the shipping lanes in the Santa Barbara Channel. Weather conditions limited their ability to fly the full track line past Point Conception.

Table 7. Summary of humpback and unidentified whales observed on an aerial survey Fishing Zone 6 on April 29, 2025.

Fishing Zone	Number of humpback whales sighted	Number of unidentified whales sighted
Zone 6	16	2

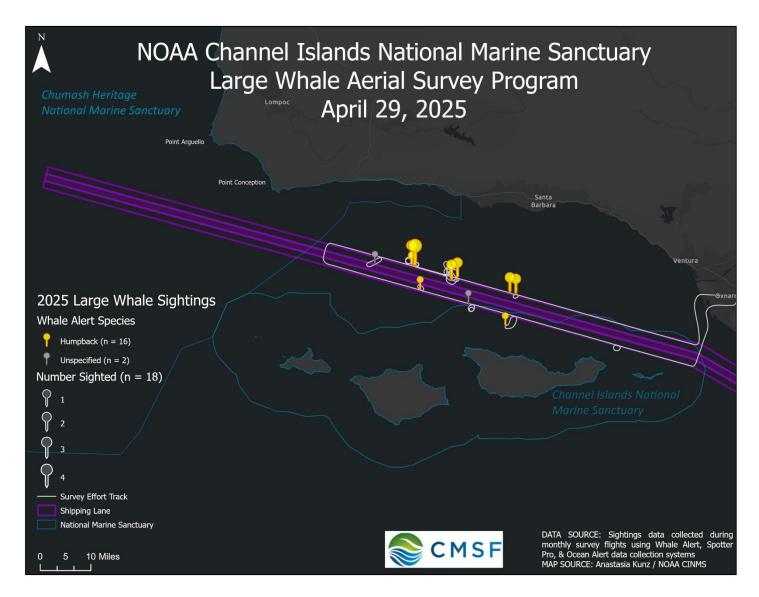


Figure 4. Map of aerial survey conducted by the NOAA Channel Islands National Marine Sanctuary and California Marine Sanctuary Foundation aerial survey team on April 29, 2025.

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

Blue whale habitat predictions for April 29, 2025, show low habitat suitability in Fishing Zones 1-5 and high habitat suitability in Fishing Zone 6, particularly near the

US-Mexico border. Current habitat suitability can be accessed at NOAA Coastwatch Habitat Suitability Map.

### 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 are 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. Fishing Zones 4-6 closed on April 15, 2025, and Fishing Zone 3 closed on May 1, 2025. A summary of landings information as of May 9, 2025, is provided below (Table 8).

Table 8. Summary of fishing season dynamics information for the commercial fishery, as of May 9, 2025.

Metric	Value	Additional Info
Season status		Open in Fishing Zones 1-2
		under a 25% Gear
		Reduction and Depth
		Constraint.
Number of landings	5,354	NA
Total volume (pounds)	8,240,140	NA
Total Ex-Vessel Value	\$53,789,600	NA
Average unit price	\$6.62	NA
Total number of active	356	NA
vessels		

Total volume (pounds) peaked during the week of January 19, 2025, at just over 2 million pounds and has since been decreasing (Figure 5). Fishing Zone 1 shows the highest landings over the course of the season at 5.4 million pounds, followed by Fishing Zone 3 at 2.4 million pounds.

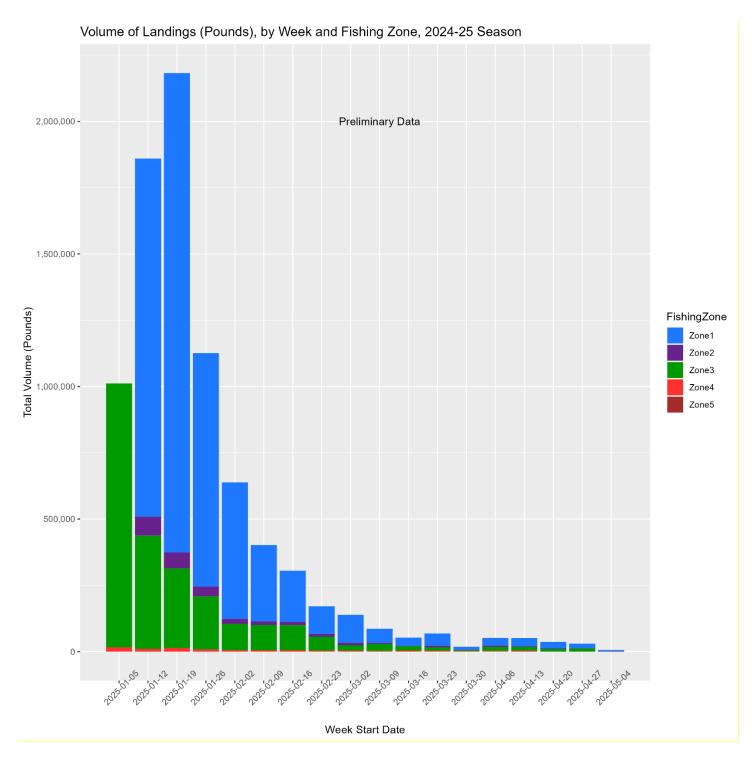


Figure 5. Volume (pounds) landed by week and Fishing Zone. Week 1 starts with the first day the commercial Dungeness crab fishery was open in any area, January 5, 2025. All data are preliminary and subject to change. Certain week-Fishing Zone combinations are withheld due to confidentiality constraints.

Fishing Zones 1 and 3 show the highest number of active vessels throughout the fishing season to date (Figure 6). The number of active vessels peaked the week of January 12,

2025, in Fishing Zone 3 with 144 vessels. Since week 2, the number of active vessels has decreased sharply.

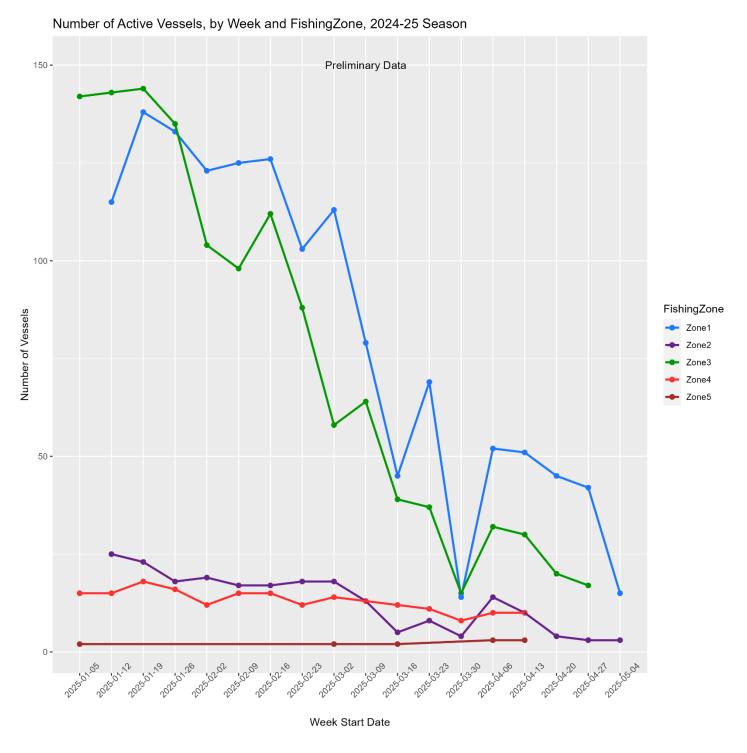


Figure 6. Number of active vessels by week and Fishing Zone. Week 1 starts with the first day the commercial Dungeness crab fishery was open in any area, January 5, 2025. All data are preliminary and subject to change. Some week-Fishing Zone combinations are withheld due to confidentiality constraints.

#### 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 May 1, 2025. A summary of reports received for April 16, 2025, and May 1, 2025, is provided in Tables 9 and 10; note this summary may not reflect all permitted vessels participating in the fishery due to compliance issues.

Table 9. Summary of information provided for the April 16, 2025, bi-weekly reporting period by Fishing Zone (1-6). Accessed from CDFW's Bi-Weekly Reporting database on May 7, 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	86	213	17,271	13	26	90	18	143
Zone 2	17	128	2,189	13	26	30	0	0
Zone 3	47	124	5,605	16	30	100	14	56
Zone 4	11	104	1,042	18	31	50	11	54
Zone 5	3	65	195	22	40	44	2	5
Zone 6	0	0	0	0	0	0	0	0
Totals	164	NA	26,302	NA	NA	NA	45	258

Table 10. Summary of information provided for the May 1, 2025, bi-weekly reporting period by Fishing Zone (1-6). Accessed from CDFW's Bi-Weekly Reporting database on May 7, 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	58	226	12,020	12	22	30	9	48
Zone 2	13	130	1,690	14	24	30	1	1
Zone 3	28	138	3,335	14	27	50	25	75
Zone 4	0	0	0	0	0	0	0	0
Zone 5	0	0	0	0	0	0	0	0
Zone 6	0	0	0	0	0	0	0	0
Totals	99	NA	17,045	NA	NA	NA	35	124

Table 11. Total reported traps deployed in each Fishing Zone for the most recent six bi-weekly reporting periods. All data are preliminary and subject to change.

Fishing Zone	Feb 16 - Total Traps	Mar 1 - Total Traps	Mar 16 - Total Traps	Apr 1 - Total Traps	Apr 16 - Total Traps	May 1 - Total Traps
Zone 1	38,235	40,496	33,313	20,738	17,271	12,020
				·		· ·
Zone 2	5,130	4,361	4,108	3,103	2,189	1,690
Zone 3	20,233	17,493	11,095	9,041	5,605	3,335
Zone 4	2,050	2,380	1,705	1,374	1,042	0
Zone 5	0	NR-C	NR-C	NR-C	195	0
Zone 6	0	0	0	0	0	0
Totals	65,648	64,730	50,221	34,256	26,302	17,045

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

#### A. MBARI Krill Model

No new available data. Please see the <u>April 15, 2025 Available Data and Preliminary Assessment document</u> or the <u>MBARI website</u> for latest data.

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

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

As of May 8, 2025, ENSO neutral is favored through the Northern Hemisphere summer (74% chance during June-August). 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>April 15, 2025 Available Data and Preliminary Assessment document</u> or the <u>NOAA Marine Heatwave Tracker</u> webpage for more information.

#### C. Habitat Compression Index

No new available data. Please see the <u>April 15, 2025 Available Data and Preliminary Assessment document</u> or the <u>NOAA Habitat Compression Index webpage</u> for more information.

# 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 3 for the current fishing season and calendar year Impact Score. For more information about Impact scoring, please review the Impact Score FAQ.

# **APPENDIX I: Experimental Fishing Permit (EFP) Landings**

EFP activity is currently underway in Fishing Zones 3, 4 and 5. EFP landings were first reported on April 22, 2025. As of May 12, 2025, eight vessels have made 34 landings under an EFP permit, totaling 25,168 pounds for a total ex-vessel value of \$193,709. The average unit price for these landings was \$7.64.