

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

Last updated: March 28, 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 implement a 30-fathom Depth Constraint, effective April 15, 2025, at 6:00 p.m.
- Fishing Zones 3-6: Season Closure, effective April 15, 2025, at 6:00 p.m.

Recreational Fishery:

- Fishing Zone 4: Crab Trap Prohibition, effective April 15, 2025, at 6:00 p.m.
- 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 implement a Season Closure for the commercial fishery in Fishing Zones 3-6, effective April 15, 2025, at 6:00 p.m. Marine Region also recommends a continuation of the 25% Gear Reduction in Fishing Zones 1-2, and implementation of a 30-fathom Depth Constraint, effective April 15, 2025, at 6:00 p.m. Take and possession of Dungeness crab would be prohibited after 6:00 p.m. on April 15, 2025, in Fishing Zones that have been closed for the remainder of the statutory season.

The Marine Region also recommends a crab trap prohibition for the recreational fishery in Fishing Zone 4, effective April 15, 2025, at 6:00 pm. A Fleet Advisory would be maintained for all Fishing Zones for both the commercial and recreational fisheries.

This preliminary recommendation is based on increasing Marine Life Concentrations in Fishing Zones 3 and 4 and the Entanglement Impact Score for the entire commercial fishery. Humpback whale observations are increasing and based on historical migration patterns, additional Management Actions must be applied because humpbacks are now arriving from their winter breeding grounds. In addition, the current Impact Score is 3.9, which exceeds the rolling average in RAMP, requiring action by the CDFW Director. Marine Life Concentration triggers were exceeded in Fishing Zone 4, so a trap prohibition for the recreational fishery is also recommended. The recommended Management Actions for Fishing Zones 1 and 2 will continue to provide fishing opportunities while balancing the need to reduce risk of entanglement as whale concentrations increase throughout California waters, by continuing the 25% Gear Reduction and implementing a 30-Fathom Depth Constraint. Management Actions for Fishing Zones 1 and 2 will be re-evaluated at the next risk assessment in mid-April. Recreational Management Actions will also be re-evaluated for Fishing Zones 1, 2, 3, 5 and 6.

Entanglements: A confirmed entanglement of a humpback whale was reported on March 22, 2025, in Monterey Bay, CA. This is a resight of a whale that was previously observed in October 2024 with CA commercial Dungeness crab gear. More information regarding the entanglement and response effort can be found on page 4.

Marine Life Concentrations: Based on CDFW aerial surveys, humpback whale sightings are beginning to increase in Fishing Zones 3 and 4 as whales begin their migration north from winter breeding areas. Sightings are expected to increase through the spring months based on historical migration patterns. Humpback whales were predominantly observed in depths of 100-200 m in the Monterey Bay area.

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 Reduction	25% Gear Reduction and 30-Fathom Depth Constraint	Fleet Advisory	Fleet Advisory
2	25% Gear Reduction	25% Gear Reduction and 30-Fathom Depth Constraint	Fleet Advisory	Fleet Advisory
3	50% Gear Reduction	Season Closure	Fleet Advisory	Fleet Advisory
4	50% Gear Reduction	Season Closure	Fleet Advisory	Crab Trap Prohibition
5	50% Gear Reduction	Season Closure	Fleet Advisory	Fleet Advisory
6	50% Gear Reduction	Season Closure	Fleet Advisory	Fleet Advisory

II. Alternative Management Actions for the Commercial Fishery

Alternatives Considered but Rejected

- 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)

A confirmed entanglement of a humpback whale with CA commercial Dungeness crab fishing gear was observed on March 22, 2025, in Monterey Bay, CA. This whale was previously observed in October 2024 with CA commercial Dungeness crab gear. Photo documentation confirmed the presence of at least one CA Dungeness crab tag from the 2023-24 season and one from the 2024-25 season. At least one additional gear set appears to be involved since the original entanglement was first documented in October 2024. Entanglement response was active at the time this document was prepared, with some of the gear having been removed.

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
20250322Mn	03/22/25	Humpback whale	CA commercial Dungeness crab	0 (resight)

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	0	3.9
Leatherback sea turtle	0	0	0.33

As of March 28, 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: California Department of Fish and Wildlife, US Coast Guard

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 4. 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. * Denotes a partial coverage of a Fishing Zone.

Fishing Zone	CDFW-approved survey data	Triggers attained?
Zone 1	UCSG Aerial Survey	No
Zone 2	CDFW Aerial Survey*	No
Zone 3	CDFW Aerial Survey	No
Zone 4	CDFW Aerial Survey	Yes
Zone 5		No data
Zone 6		No data

A. CDFW Surveys (Fishing Zones 2-4)

CDFW conducted two aerial surveys during this Risk Assessment. On March 20, 2025, CDFW conducted an aerial survey from the coast to the 100-fathom contour line at an altitude of 1000 ft covering Fishing Zones 2-4 (Figure 1). The survey began at Point Pinos (Fishing Zone 4) and ended at Point Arena (Fishing Zone 2). Sea state ranged from Beaufort scales of 1-3. Two humpback whales were observed in Fishing Zone 4.

On March 25, 2025, CDFW conducted an aerial survey in Fishing Zones 3-4 following the East-West transect lines at an altitude of 1000 ft (Figure 2). The survey began at Bodega Bay (Fishing Zone 3) and ended at Pescadero Point (Fishing Zone 4). Sea state ranged from Beaufort scales of 1-2. Two humpback whales and one unidentified whale were observed in Fishing Zone 3. Sixteen humpback whales and two unidentified whales were observed in Fishing Zone 4.

Table 5. Counts of Actionable Species seen by CDFW aerial surveys conducted on March 20 and 25, 2025.

Date	Fishing Zone	Humpback whales	Unidentified whales
3/20/25	Zone 2	0	1
3/20/25	Zone 3	0	2
3/20/25	Zone 4	2	4
3/25/25	Zone 3	2	1
3/25/25	Zone 4	16	2

CDFW Aerial Survey March 20, 2025

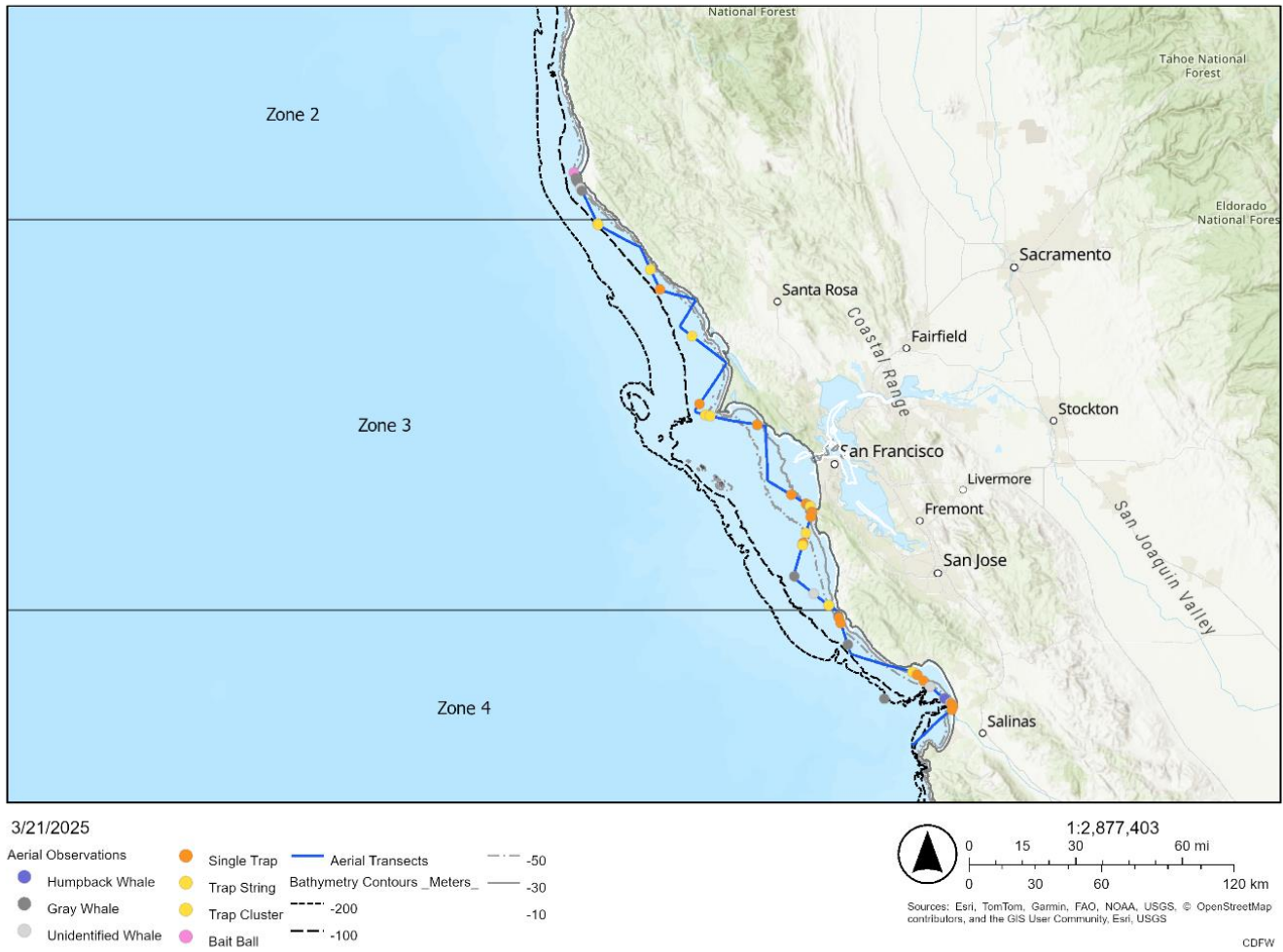


Figure 1. Map of CDFW aerial survey conducted on March 20, 2025.

CDFW Aerial Survey March 25, 2025

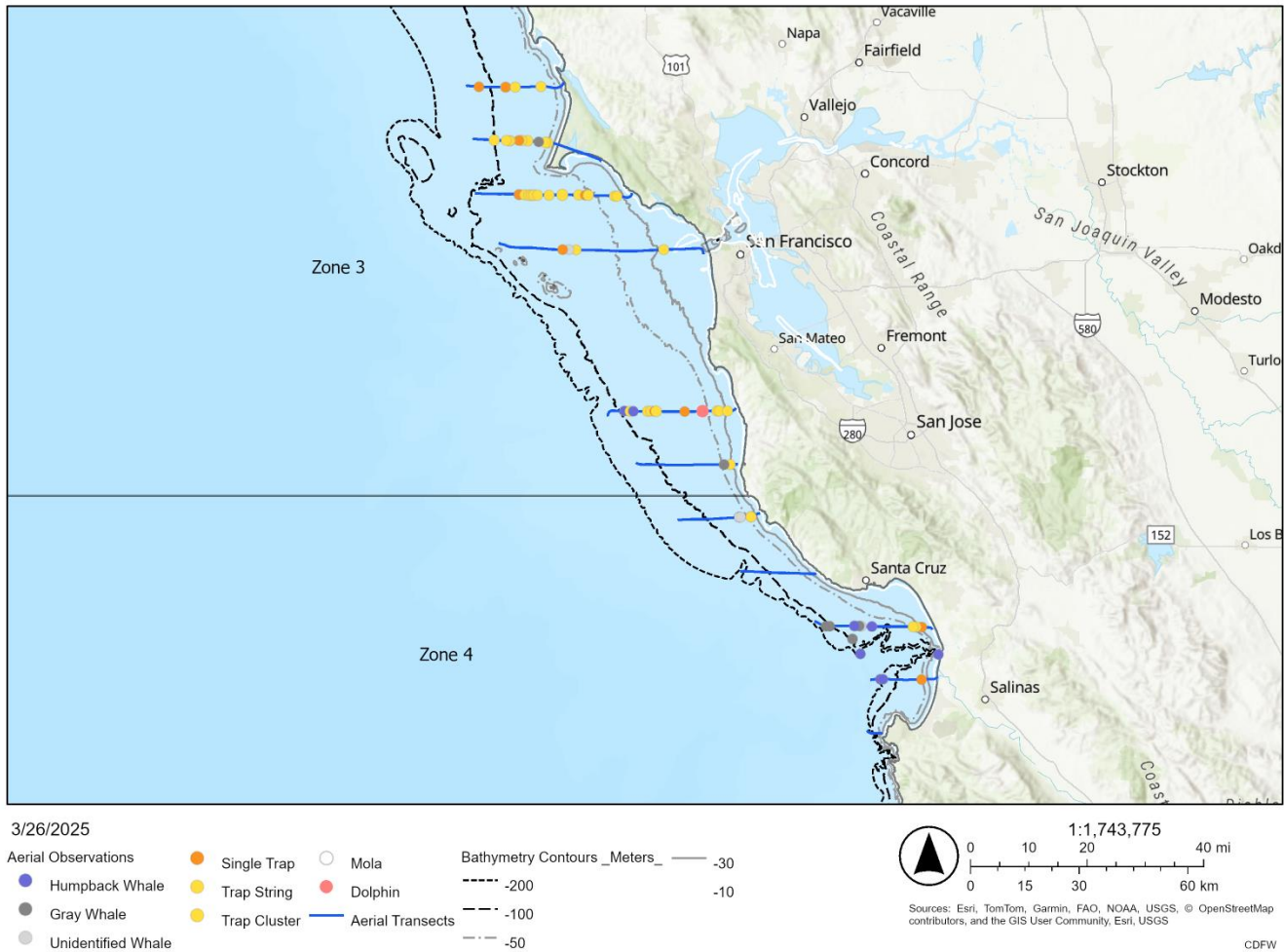


Figure 2. Map of CDFW aerial survey conducted on March 25, 2025.

B. US Coast Guard Aerial Surveys (Fishing Zone 1)

On March 20, 2025, the U.S. Coast Guard conducted an aerial survey from the coast to the 50-fathom contour line at an altitude of 500-1000 ft covering Fishing Zone 1 from the CA-OR border to Cape Mendocino (Figure 3). Wind conditions varied across the survey area, with light to moderate winds less than 12 kts along the Humboldt County Coastline (Beaufort state ranging from 2-4) and moderate to strong winds (15-25 kts) with light to moderate rain in Del Norte County (Beaufort state ranging from 4-6). Consistent wind waves were present north of Reading Rock which limited detectability. No Actionable Species were observed during the survey.

UCSG Aerial Survey March 20, 2025



Figure 3. Map of USCG aerial survey conducted on March 20, 2025.

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.

A confirmed entanglement of a humpback whale with CA commercial Dungeness crab gear was reported on March 22, 2025, in Monterey Bay, CA. More information about the entanglement can be found on page 4. For recent entanglement information please see the [RAMP Entanglement History](#) document.

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

Data provided by: Point Blue Conservation Science

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 March 26, 2025.

Fishing Zone	Number of humpback whales sighted	Number of blue whales sighted
Zone 3	5	0
Zone 4	0	0
Zone 6	32	0

B. Whale Watch 2.0 (All Fishing Zones)

Blue whale habitat predictions for March 24, 2025, show low habitat suitability in Fishing Zones 1-5, and a pocket of suitable habitat 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 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 March 26, 2025, is provided below (Table 7).

Table 7. Summary of fishing season dynamics information for the commercial fishery, as of March 26, 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 landings	4,590	NA
Total volume (pounds)	7,687,533	NA
Total Ex-Vessel Value	\$49,916,997	NA
Average unit price	\$6.48	NA
Total number of active vessels	342	NA
Maximum potential traps (based on active permits)	71,819	Estimates reflect gear reductions and are also provided in the Bi-Weekly Fishing Activity Reports

Total volume (pounds) peaked during the week of January 19, 2025, at just over 2 million pounds and has since been decreasing (Figure 4). Fishing Zone 1 shows the highest landings over the course of the season at 4.9 million pounds, followed by Fishing Zone 3 at nearly 2.3 million pounds.

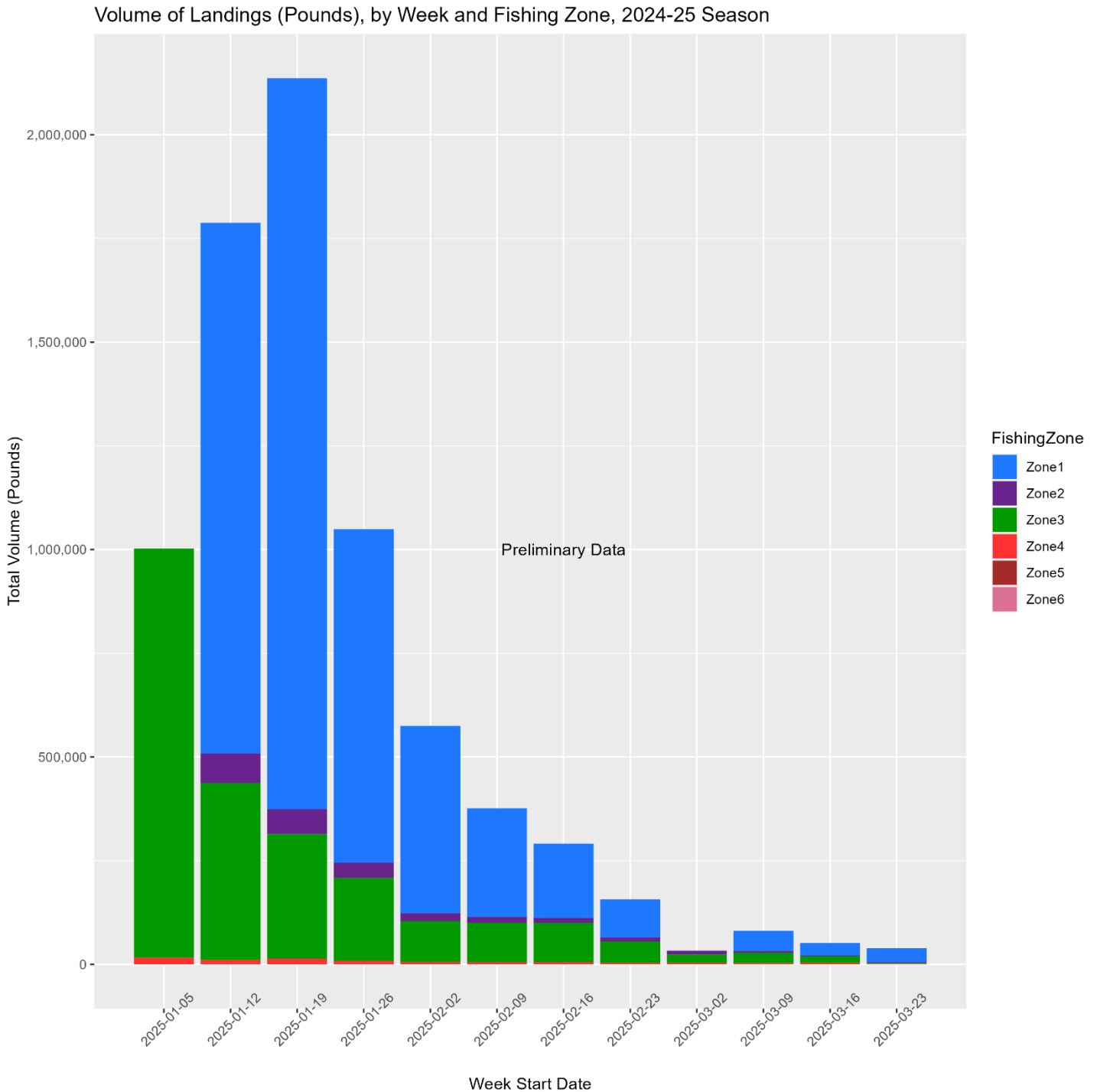


Figure 4. Volume (pounds) landed by week and Fishing Zone. Week 1 starts with the first day the commercial Dungeness crab fishery was open in any area, January 5, 2025. All data are preliminary and subject to change. Certain week-Fishing Zone combinations are withheld due to confidentiality constraints.

Fishing Zones 1 and 3 show the highest number of active vessels throughout the fishing season to date (Figure 5). 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.

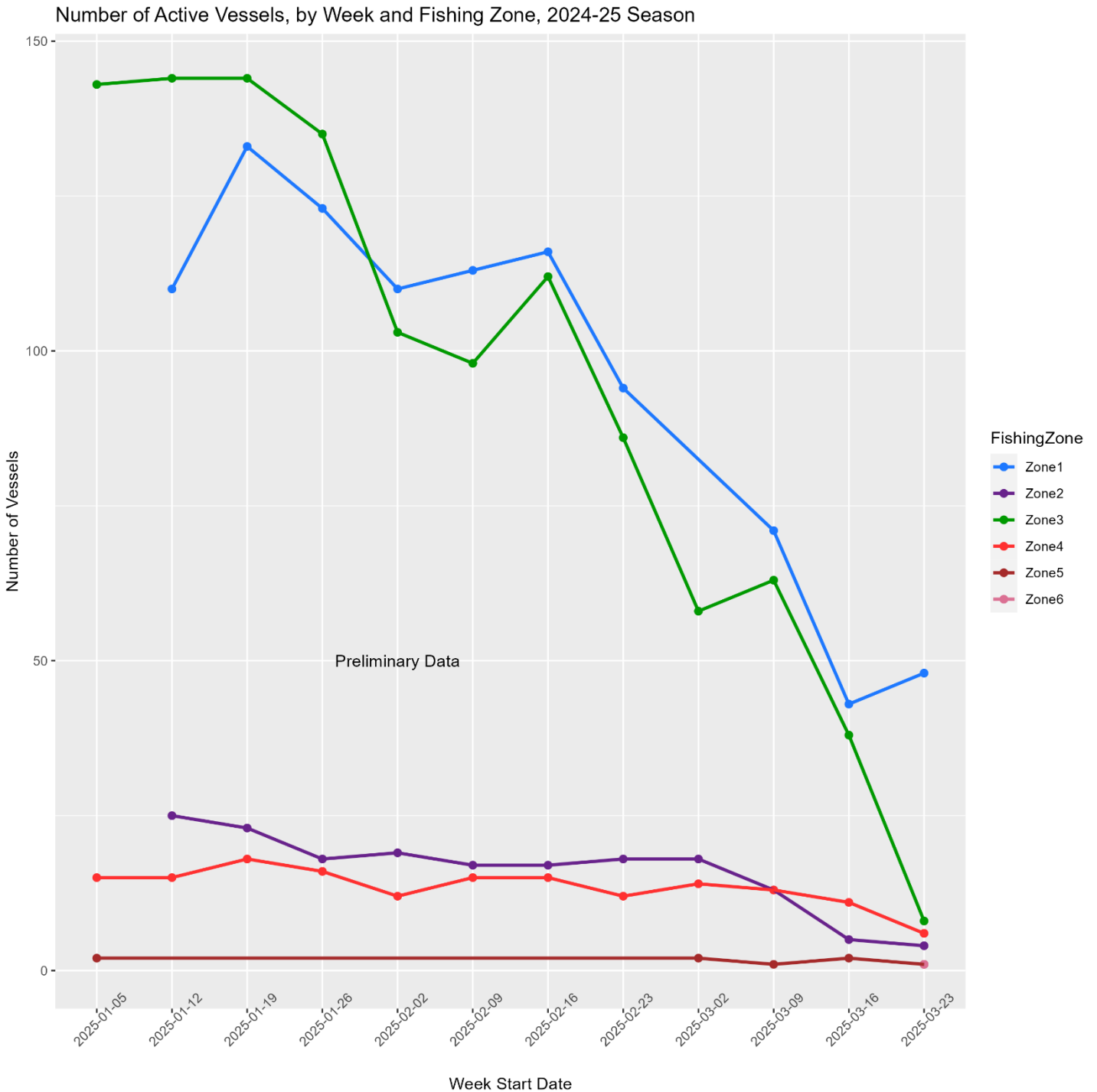


Figure 5. Number of active vessels by week and Fishing Zone. Week 1 starts with the first day the commercial Dungeness crab fishery was open in any area, January 5, 2025. All data are preliminary and subject to change. Some week-Fishing Zone combinations are withheld due to confidentiality constraints.

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 March 16, 2025. A summary of reports received for March 16, 2025, is provided in Table 8; note this summary may not reflect all permitted vessels participating in the fishery due to compliance issues.

Table 8. Summary of information provided for the March 16, 2025, bi-weekly reporting period by Fishing Zone (1-6). Accessed from CDFW's Bi-Weekly Reporting database on March 26, 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	118	256	29,733	15	36	115	28	92
Zone 2	22	170	3,740	15	37	60	2	1
Zone 3	83	130	10,051	22	40	75	20	64
Zone 4	18	94	1,605	20	35	70	4	26
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	241	NA	45,129	NA	NA	NA	54	183

Table 9. Total reported traps deployed in each Fishing Zone for the five most recent bi-weekly reporting periods. NR-C refers to data withheld due to confidentiality and all data is preliminary and subject to change.

Fishing Zone	Jan 16 - Total Traps	Feb 1 - Total Traps	Feb 16 - Total Traps	Mar 1 - Total Traps	Mar 16 - Total Traps
Zone 1	33,647	37,792	38,235	39,636	29,733
Zone 2	3,115	5,007	5,130	4,361	3,740
Zone 3	22,751	22,552	20,058	17,375	10,051
Zone 4	2,337	2,455	2,050	2,380	1,605
Zone 5	NR-C	0	0	NR-C	NR-C
Zone 6	0	0	0	0	0
Totals	61,850	67,806	65,473	63,752	45,129

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

A. MBARI Krill Model

No new data, please see the [March 12, 2025 Available Data document](#) or visit the [MBARI website](#).

V. Ocean conditions: §132.8(d)(9)

A. El Niño/Southern Oscillation (ENSO) Diagnostic

As of March 13, 2025, ENSO neutral is favored to develop in the next month and persist through the Northern Hemisphere summer (62% chance in June-August 2025). Please visit the [NOAA ENSO Diagnostic webpage](#) for more information.

B. Large Marine Heatwave Tracker

As of March 3, 2025, the current heatwave forecast suggests the existing heatwave may continue for the next several months but remains far offshore. Please visit the [NOAA Heatwave Tracker webpage](#) for more information.

C. Habitat Compression Index

No new available data, please see the [March 12, 2025 Available Data document](#) or visit the NOAA Habitat Compression Index webpage 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. Commercial fleet landings have sharply decreased since early March. Additionally, 23% of reporting permit holders have submitted their final bi-weekly report as of March 16, 2025, signifying the end of their fishing season. Bi-weekly reports also show a notable decline in effort, as the total number of deployed traps decreased from 63,752 traps to 42,219 traps as of the March 16 reporting period.

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](#).