2025-2026 Risk Assessment
Preliminary Assessment and Available Data for Risk Assessment Mitigation Program

Last updated: ~~October 20, 2025~~ October 22, 2025
*Updates noted in highlighted text

PRELIMINARY ASSESSMENT

This Preliminary Assessment and Management Recommendation has been developed by the California Department of Fish and Wildlife (CDFW) Marine Region staff to inform the Risk Assessment Mitigation Program (RAMP; Section 132.8, Title 14, California Code of Regulations) effective November 2020. A Final Assessment and Management Recommendation will be prepared after conferring with the Working Group on October 22, 2025.

Recommended Management Actions

Commercial Fishery:

- Season Delay: Fishing Zones 1, 2, 3, 4, 5, and 6

Recreational Fishery:

- Crab Trap Prohibition: Fishing Zones 1, 3, and 4
- Fleet Advisory: All Fishing Zones

Contents

I. Management Recommendation Summary Rationale

For the commercial fishery, the Marine Region's preliminary recommendation is for the Director to delay the commercial fishery in Fishing Zones 1-6.

For the recreational fishery, the Marine Region recommends the prohibition of recreational crab traps in Fishing Zones 1, 3, and 4, and the issuance of a Fleet Advisory for Fishing Zones 1-6 until the next Risk Assessment.

These recommendations are based on the exceedance of Marine Life Concentration data triggers and known migration patterns for humpback whales in Fishing Zones 1, 3, 4, and 6, presence of two leatherback sea turtles in Zone 3, and high 3-year rolling average Impact Score for humpback whales. Additionally, the current marine heatwave is the fourth largest marine heatwave in the Northeast Pacific region since monitoring began in 1982, which may lead to habitat compression of prey for humpback whales further elevating entanglement risk in nearshore areas.

A Fleet Advisory for the recreational fishery in Fishing Zones 1- 6 is recommended based on aerial survey data and known migration patterns of sea turtles and humpback whales. Under a trap prohibition, hoop nets will still be allowed, requiring increased precaution when setting gear and a two-hour service interval to avoid entanglements in vertical lines. Crab traps cannot be used south of Point Arguello, therefore a recommendation to prohibit recreational crab traps in Fishing Zone 6 was not included in the preliminary assessment.

It is anticipated that the delay and trap prohibition for commercial and recreational fishery would be in place until at least the next Risk Assessment, which is expected to occur in mid-to-late November.

A summary is provided here supporting these recommendations. For additional details, see the Entanglement and Marine Life Concentration sections of this Available Data document.

Entanglements: Several humpback whale entanglements have been reported since the close of the 2024-25 fishing season. Table 1 describes confirmed Actionable Species entanglements in 2025 that have been reported by the National Marine Fisheries Service (NMFS) as of Oct. 20, 2025. Humpback whale entanglements in California commercial Dungeness crab fishing gear and Unknown Fishing Gear bring the three-year rolling average Impact Score to 4.90 (subject to revision), which exceeds the trigger as defined in RAMP for the commercial Dungeness crab fishery.

Marine Life Concentrations: CDFW aerial surveys observed 43 humpback whales and 13 unidentified whales in Fishing Zone 3 on Oct. 14, 2025. Cascadia Research Collective observed 16 humpback whales and 11 blue whales during a vessel survey in Fishing Zone 1 on Oct. 11, 2025. Cascadia observed 20 humpbacks whales on Oct. 6, 2025 in Fishing Zone 6. Upwell aerial surveys were conducted between Sept. 15-26, 2025, and observed 42 humpback whales and two leatherback sea turtles in Fishing Zone 3. An additional Upwell aerial survey was conducted in Fishing Zones 1-2 on Oct. 21, 2025, and observed one blue whale, three humpback whales, and one unidentified whale in Fishing Zone 1, and one humpback whale in Fishing Zone 2. Monterey Bay Whale Watch data from Fishing Zone 4 show the seven-day average number of humpback whales-per-half-day trip during October 1-7, 2025, was 9.4.

II. Alternative Management Actions for the Commercial Fishery

Alternatives Considered but Rejected

- Gear Reduction – would not sufficiently reduce the number of vertical lines present in the water column due to elevated whale abundances across multiple Fishing Zones.
- Depth Restriction- will not sufficiently provide protection due to distribution of humpback whales across depths and may concentrate trap gear thereby increasing entanglement risk.
- Alternative Gear- can only be authorized after April 1st.

AVAILABLE DATA

III. Triggers Requiring Management Action

I. Confirmed Entanglements: §132.8(c)(1); Information from NOAA: §132.8(d)(2); Current Impact Score Calculation: §132.8(d)(10)

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 year 2025. See "FAQ: Impact Scoring for the Risk Assessment and Mitigation Program" for information about the RAMP Impact Score. For more information and definitions, please see the RAMP Entanglement History document.

*20250926Mn will no longer be included in RAMP entanglement tracking since the entanglement has been confirmed to be Oregon commercial Dungeness crab gear.

Table 1. 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)
20250414Mn	04/14/25	Humpback whale	CA commercial Dungeness crab	0.75
20250501Mn	05/01/25	Humpback whale	Unknown Fishing Gear	0.38
20250506Mn	05/06/25	Humpback whale	Unknown Fishing Gear	0.38
20250607Mn	06/07/25	Humpback whale	CA commercial Dungeness crab	0.75
20250917Mn	09/17/25	Humpback whale	CA commercial Dungeness crab	0.75
~~20250926Mn~~	~~09/26/25~~	~~Humpback whale~~	~~OR commercial Dungeness crab~~	~~0 (resight)~~ *
20250927Mn	09/27/25	Humpback whale	Unknown Fishing Gear	Pending
20251009Mn	10/09/25	Humpback whale	Unknown Fishing Gear	Pending

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 (2025-26)	Current Calendar Year Impact Score (2025)	3-Year Rolling Average
Humpback whales	NA	3.01	4.90
Leatherback sea turtle	0	1	0.33

As of October 20, 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 Dept of Fish and Wildlife, John Calambokidis (Cascadia Research Collective), Scott Benson and Karin Forney (Upwell), Monterey Bay Whale Watch (processed by Karin Forney, Upwell)

For the period of November 1 until the Fishing Season opens statewide a RAMP Marine Life Concentration trigger has been met when:

- The number of humpback whales is greater than or equal to 20, 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
- A Pacific leatherback sea turtle is seen in any Fishing Zone

Table 3. 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 partial coverage of Fishing Zone.

Fishing Zone	CDFW-approved survey data	Triggers attained?
Zone 1	Cascadia Research Collective Vessel survey, Upwell Aerial Survey	Yes
Zone 2	CDFW Aerial Survey*, Upwell Aerial Surveys	No
Zone 3	CDFW Aerial Survey, Upwell Aerial Surveys	Yes
Zone 4	CDFW Aerial Survey, Upwell Aerial Surveys, Monterey Bay Whale Watch	Yes
Zone 5	CDFW Aerial Survey*	No
Zone 6	Cascadia Research Collective Vessel survey	Yes

A. CDFW Surveys (Fishing Zones 2-5)

On October 14, 2025, CDFW conducted an aerial survey from the coast to the 100-fathom contour line at an altitude of 1000ft covering Fishing Zones 3-4 with partial coverage of Fishing Zones 2 and 5. Conditions were favorable with a Beaufort state of less than 1 and limited to no cloud cover until Fishing Zone 5. In Fishing Zone 2, one humpback whale was observed. In Fishing Zone 3, 43 humpback whales and 13 unidentified whales were observed. In Fishing Zone 4, four humpback whales were observed. No Actionable Species were observed in Fishing Zone 5.

Table 4. Counts of Actionable Species seen by CDFW aerial survey conducted on October 14, 2025.

Fishing Zone	Humpback whales	Unidentified whales
Zone 2	1	0
Zone 3	43	13
Zone 4	4	0
Zone 5	0	0

Figure 1. Map of CDFW aerial survey conducted on October 14, 2025.

B. Cascadia Research Survey (Fishing Zones 1 & 6)

Cascadia Research conducted vessel surveys in Fishing Zone 1 on October 11, 2025, and in Fishing Zone 6 on October 6, 2025.

On October 6, 2025, a survey out of Santa Barbara covered the channel and areas south and west of San Miguel Island and had 10 sightings of 20 humpback whales with an estimated 16 photo-IDs obtained. Most of these sightings were mid-channel north of the shipping lanes (Figure 2).

On October 11, 2025, a survey out of Eureka covered from Cape Mendocino north to just south of the Klamath River and had 11 sightings of 16 humpback whales, seven sightings of 11 blue whales in addition to a single fin whale and two sightings of four unidentified large whales. Most of the humpback and blue whales were near the shelf edge and near the Eel River Canyon feeding on krill (Figure 3).

In mid-August, Cascadia Research also deployed 10 medium duration archival tags on blue whales from central California to southern Oregon. These recorded up to a month of high-resolution data on blue whale movements and feeding behavior (Figure 4) extending into mid-September. These documented the extensive use of both nearshore, shelf-edge, and offshore habitats by blue whales.

Table 5. Summary of small boat surveys conducted on October 6 and 11, 2025 by Cascadia Research.

Date	Fishing Zone	# of Hump. whale sightings	# of Hump. whales sighted	# of Blue whale sightings	# of Blue whales sighted	Unid. whale sightings	# of unid. whales sighted
10/06/25	6	10	20	0	0	0	0
10/11/25	1	11	16	7	11	3	5

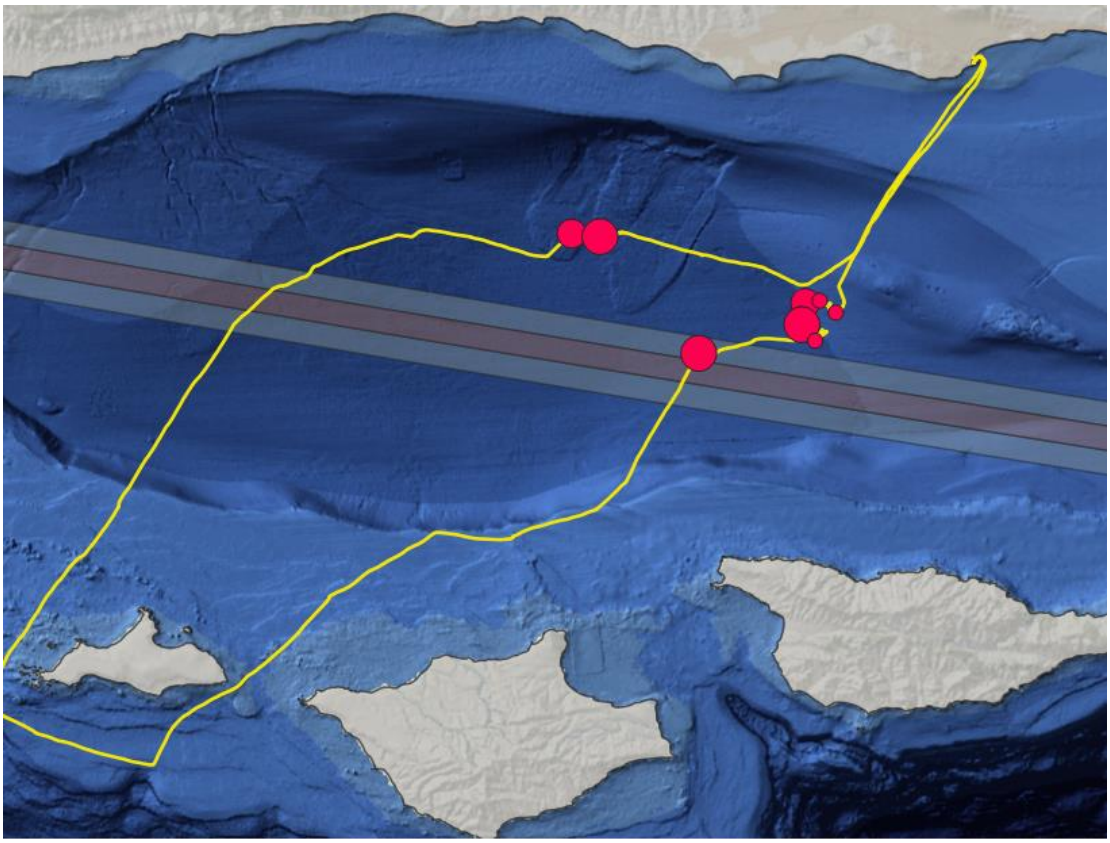

Figure 2. Survey effort and whale sightings during small boat surveys by Cascadia Research Collective in Fishing Zone 6 on October 6, 2025.

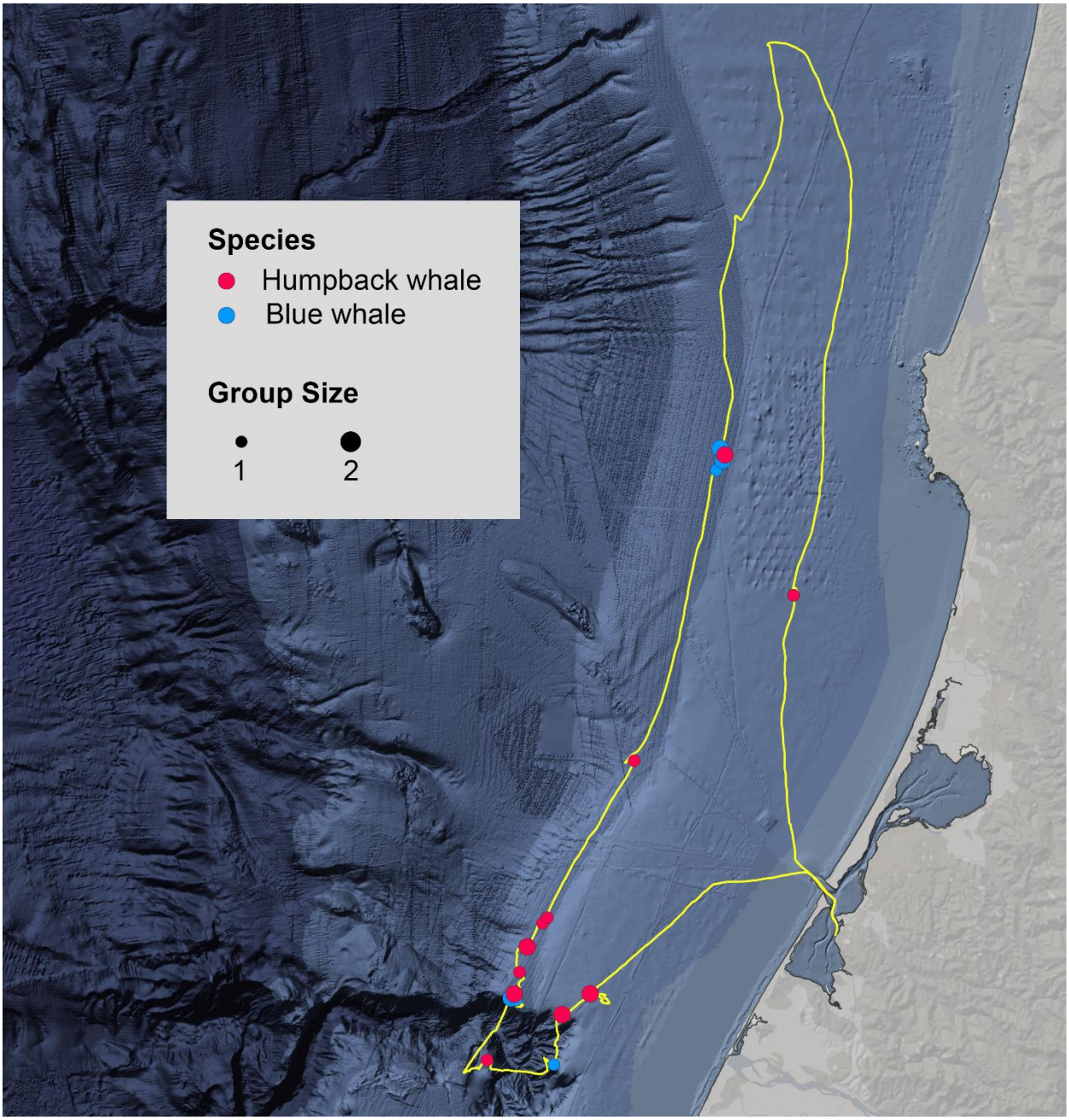

Figure 3. Survey effort and whale sightings during small boat surveys by Cascadia Research Collective in Fishing Zone 1 on October 11, 2025.

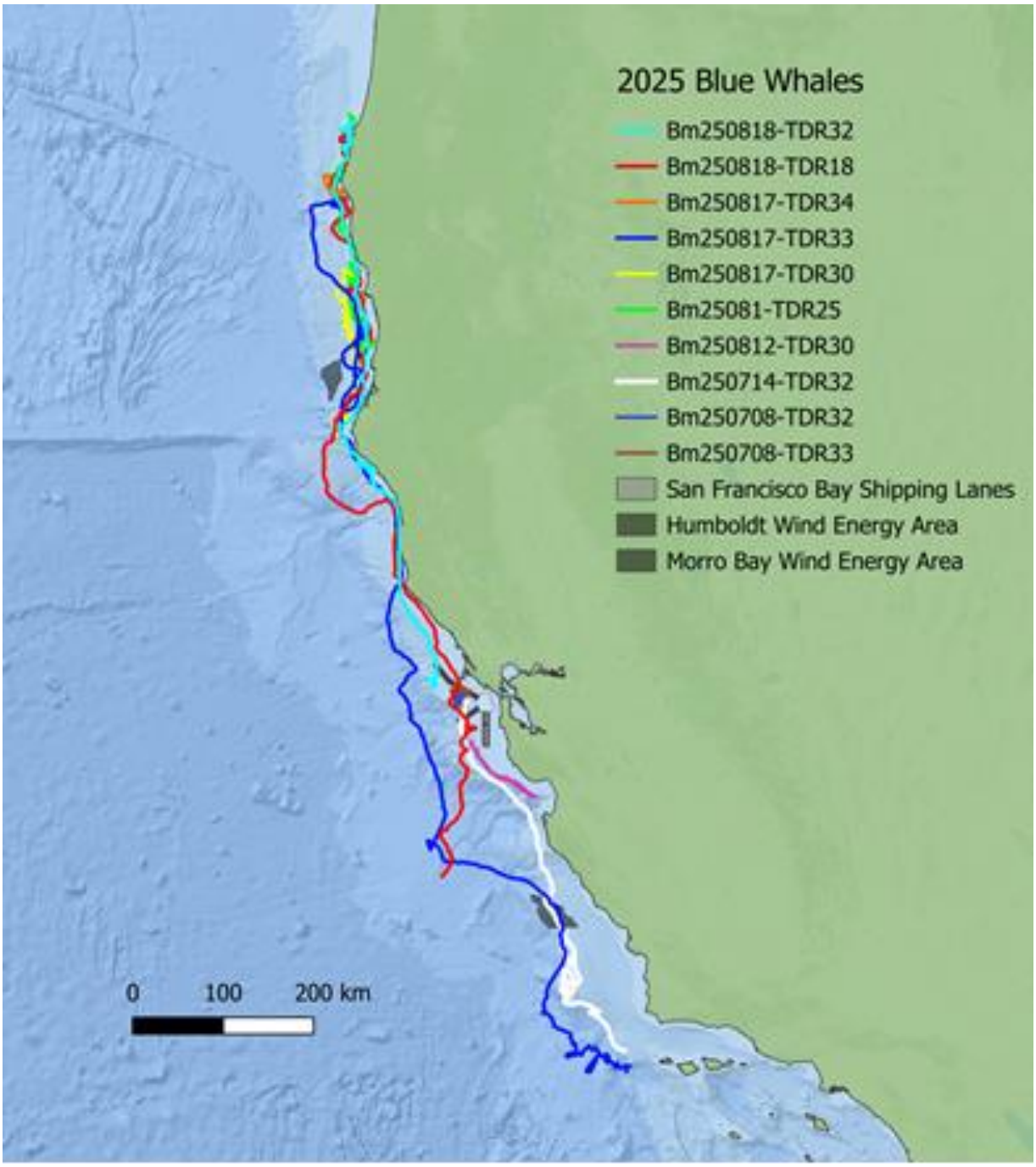

Figure 4. Track of 10 blue whales tagged in July and August 2025 with medium-duration tags demonstrating the variety of habitats including inshore and offshore waters from California up into southern Oregon.

C. Upwell Aerial Surveys (Fishing Zones 1-4 ~~2-4~~)

Aerial surveys were conducted September 15-26, 2025, and on October 21, 2025, within Fishing Zones 1, 2, 3 and 4 in support of leatherback turtle monitoring and capture/tagging operations. Transects included a zig-zag design between the coast and the 50-fathom isobath between Montara, CA and the Navarro River (Mendocino County), and east-west transect lines spaced at 1-2 nm intervals within Monterey Bay and the Gulf of the Farallones (Figure 5-6). Standardized survey methods were applied from a chartered Partenavia P-68 Observer aircraft to record whales, turtles,

dolphins/porpoises, and other ecosystem indicator species such as forage fish, jellies (leatherback prey), and ocean sunfish (Molas').

Surveys were spatially limited by persistent low clouds and fog, particularly in the Gulf of the Farallones, and some surveys were forced to fly beneath the cloud layer with poor light conditions. Although it was still possible to see most marine mammal species, leatherback turtles, and ocean sunfish, it was difficult to assess the presence of forage species (jellies, anchovies, krill).

One leatherback sea turtle was sighted on September 20, 2025, approximately seven miles southwest of Pillar Point, CA in Fishing Zone 3. Another leatherback sighting was made a few miles away from that location on September 23, 2025; this turtle (named "Ricky Ricardo") was captured and released with a satellite-linked transmitter. The tagged leatherback moved west, off the shelf, after release and has since moved southwest to waters approximately 170 miles west of Point Conception, CA (Figure 5).

Of the completed surveys, most notable were sightings in Fishing Zone 3, where up to 42 humpback whales were observed during one transect on September 23, 2025. On September 15, 2025, 10 humpback whales were observed in Fishing Zone 2. Additionally, two unidentified large whales, which were likely humpback whales, were observed in Fishing Zone 2.

A few small aggregations of small sea nettles and moon jellies were documented within the Gulf of the Farallones, and relatively few large ocean sunfish were encountered, in contrast with previous years, indicating that foraging habitat for leatherback turtles was poor.

~~No blue whales were encountered during the aerial surveys.~~

An additional Upwell aerial survey was conducted in Fishing Zones 1-2 on Oct. 21, 2025, and observed one blue whale, three humpback whales, and one unidentified whale in Fishing Zone 1, and one humpback whale in Fishing Zone 2 (Figure 8).

Table 6. Counts of humpback and blue whales seen on Upwell aerial survey conducted from September 15-26, 2025. Survey coverage and location varied each day, as low clouds and fog limited operations.

Date	Fishing Zone 1	Fishing Zone 2	Fishing Zone 3	Fishing Zone 4
9/15/25	Not surveyed	10	15	2
9/20/25	Not surveyed	Not surveyed	4	1
9/22/25	Not surveyed	Not surveyed	2	Not surveyed
9/23/25	Not surveyed	Not surveyed	42	Not surveyed
9/26/25	Not surveyed	Not surveyed	6	Not surveyed
10/21/25	3 humpback whales, 1 blue whale	1		

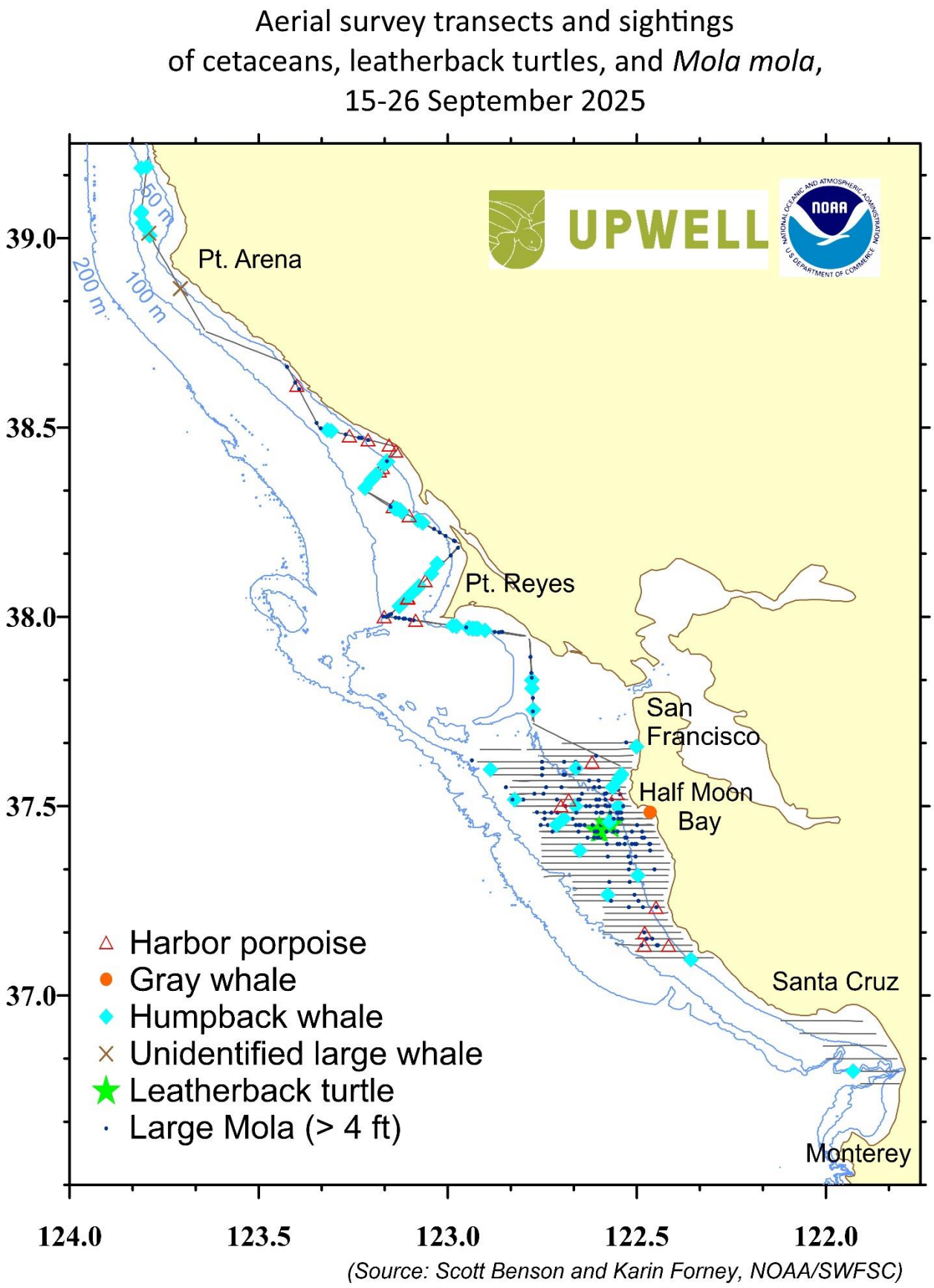

Figure 5. Aerial survey track lines and observations of cetaceans, leatherback turtles, and large ocean sunfish (molas), September 15-26, 2025.

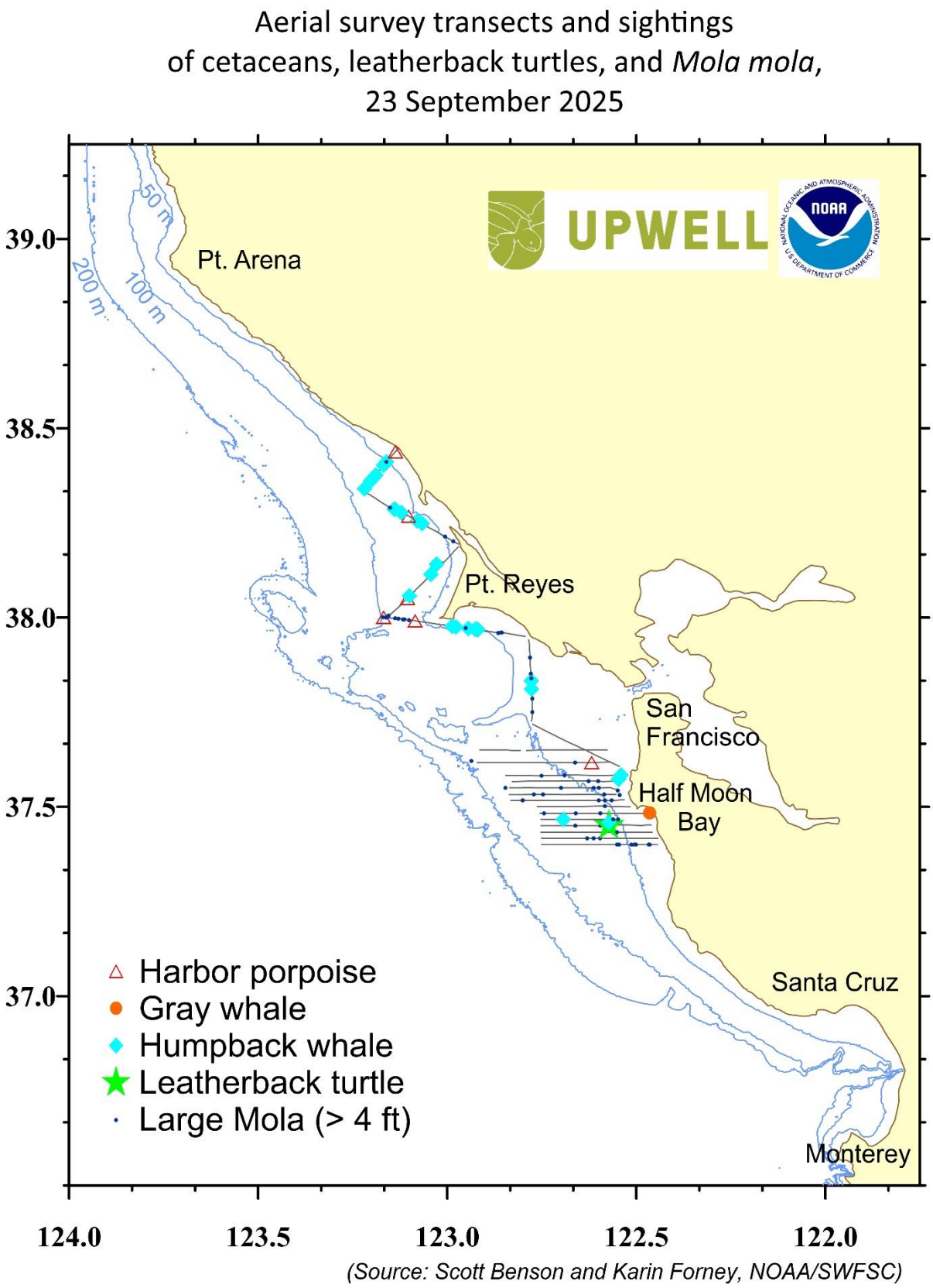

Figure 6. Aerial survey track lines and observations of cetaceans, leatherback turtles, and large ocean sunfish (molas), September 23, 2025.

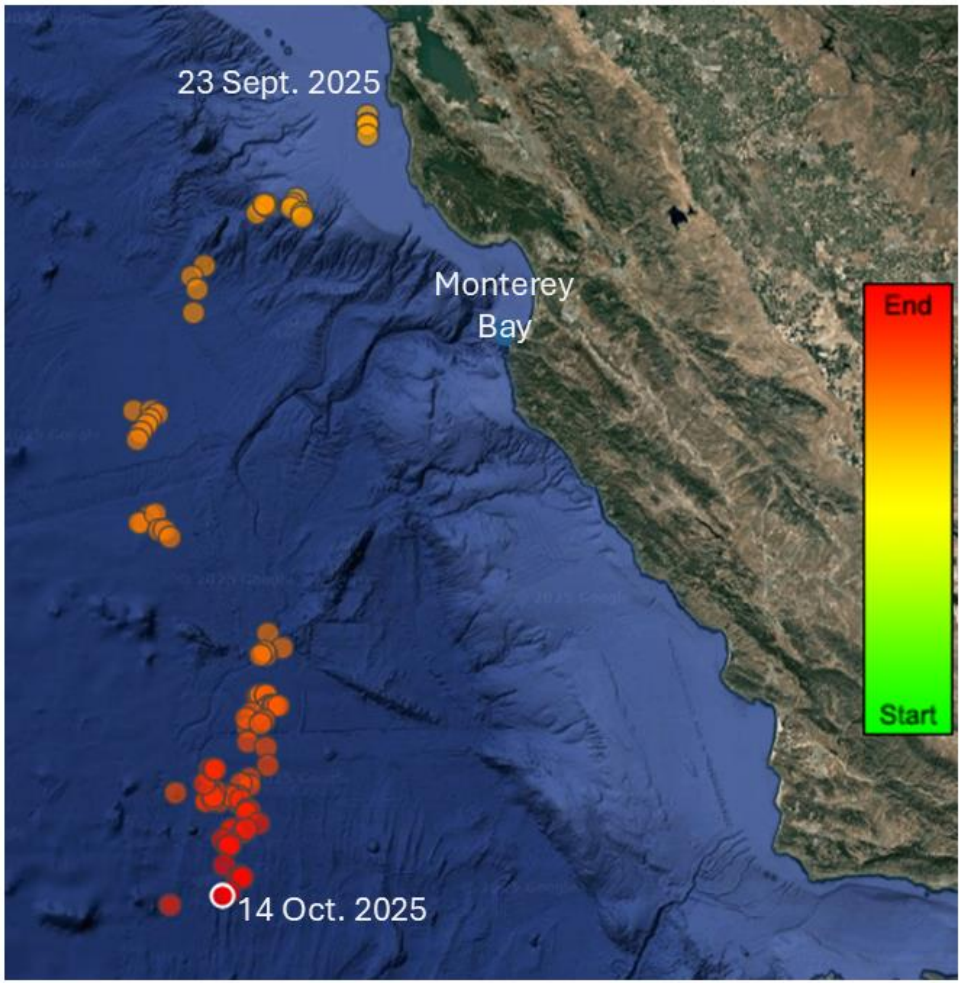

Figure 7. Telemetry track through October 14, 2025, for a male leatherback turtle captured and outfitted with a satellite-linked transmitter near Half Moon Bay, CA on Sept 23, 2025.

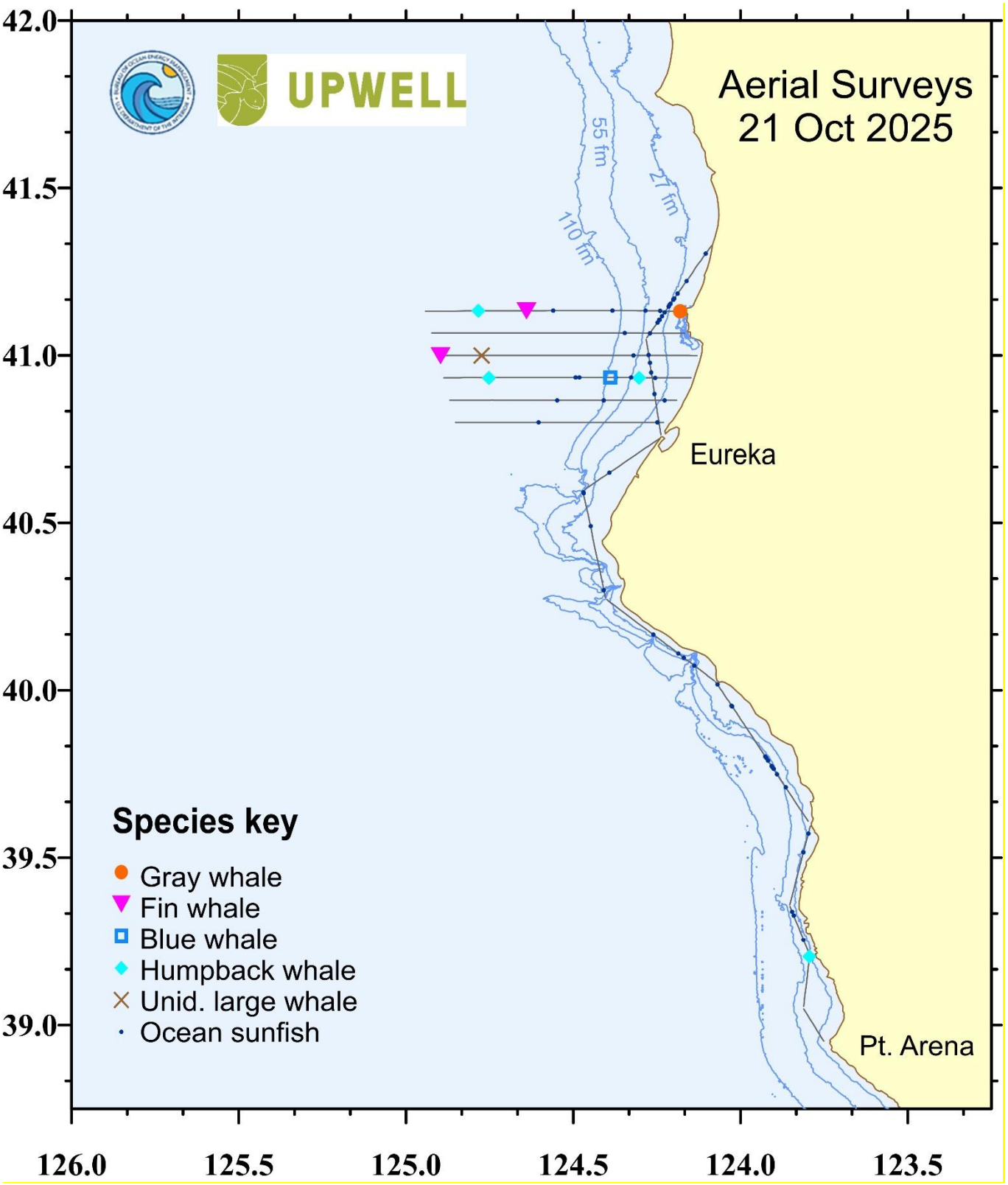

Figure 8. Aerial survey track lines and observations of cetaceans and large ocean sunfish (molas), October 21, 2025.

D. 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 October 1-7, 2025. The seven-day average

number of humpback whales-per-half-day trip during October 1-7, 2025, was 9.4, with a peak of 22 humpback whales observed on a morning trip on October 2, 2025 (Figure 9 ~~8~~). Three blue whales were observed during August 2025, and one blue whale was observed on 15 September 2025, but none have been observed since.

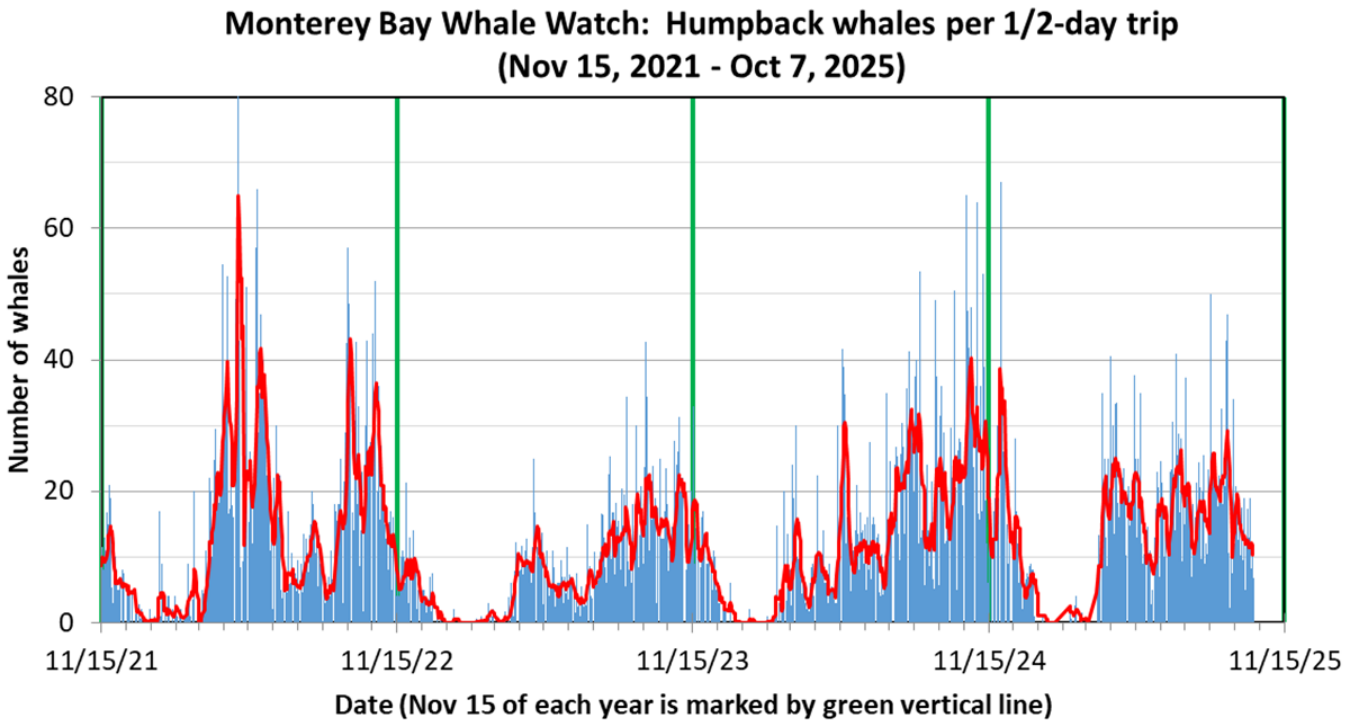

Figure ~~9~~8. Standardized number of humpback whale sightings for Monterey Bay Whale Watch from November 15, 2021 – October 7, 2025. The y-axis is the number of whales per half-day trip; the thin blue bars are the average daily whale numbers, and the red line is a 7-day running average to make the patterns 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. Historic patterns and current Actionable Species migration: §132.8(d)(6) and (11)

Data provided by: Point Blue Conservation Science, Jess Morten (NOAA ONMS & CMSF), and Monterey Bay Whale Watch (processed by Karin Forney: Upwell)

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

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

Table 7 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 October 16, 2025.

Fishing Zone	Number of humpback whales sighted	Number of blue whales sighted
Zone 3	54	0
Zone 4	18	0
Zone 6	19	0

A. NOAA ONMS & CMSF Aerial Survey (Fishing Zone 6)

NOAA Office of National Marine Sanctuaries (ONMS) and the California Marine Sanctuary Foundation (CMSF) aerial survey team conducted a flight in Fishing Zone 6 on September 30, 2025, and observed 26 humpback whales (Figure 10 ~~9~~).

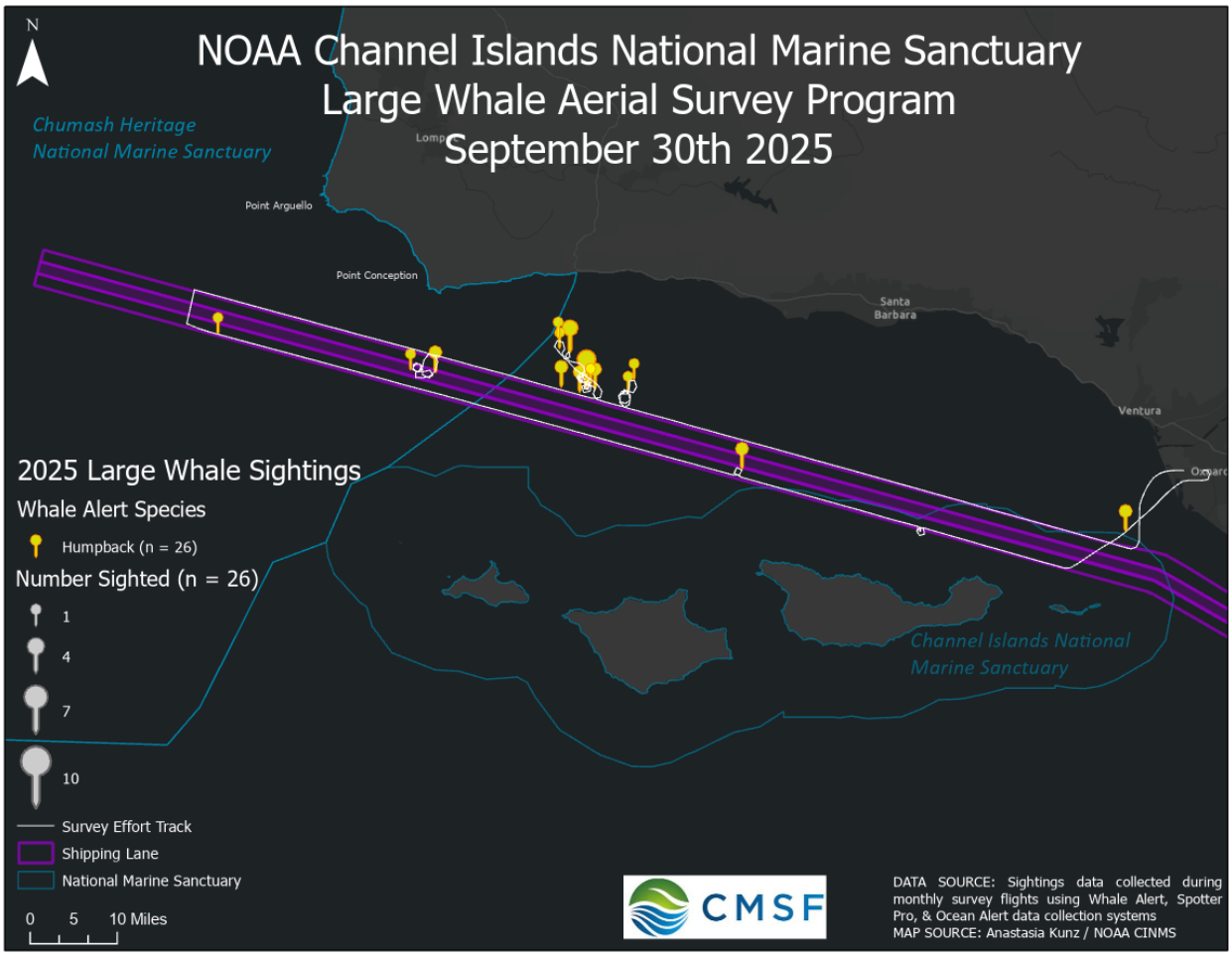

Figure 10 ~~9~~. Map of NOAA ONMS and CMSF aerial survey conducted in Fishing Zone 6 on September 30, 2025.

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 lower than the historical average for this time of year (Figure 11 ~~10~~).

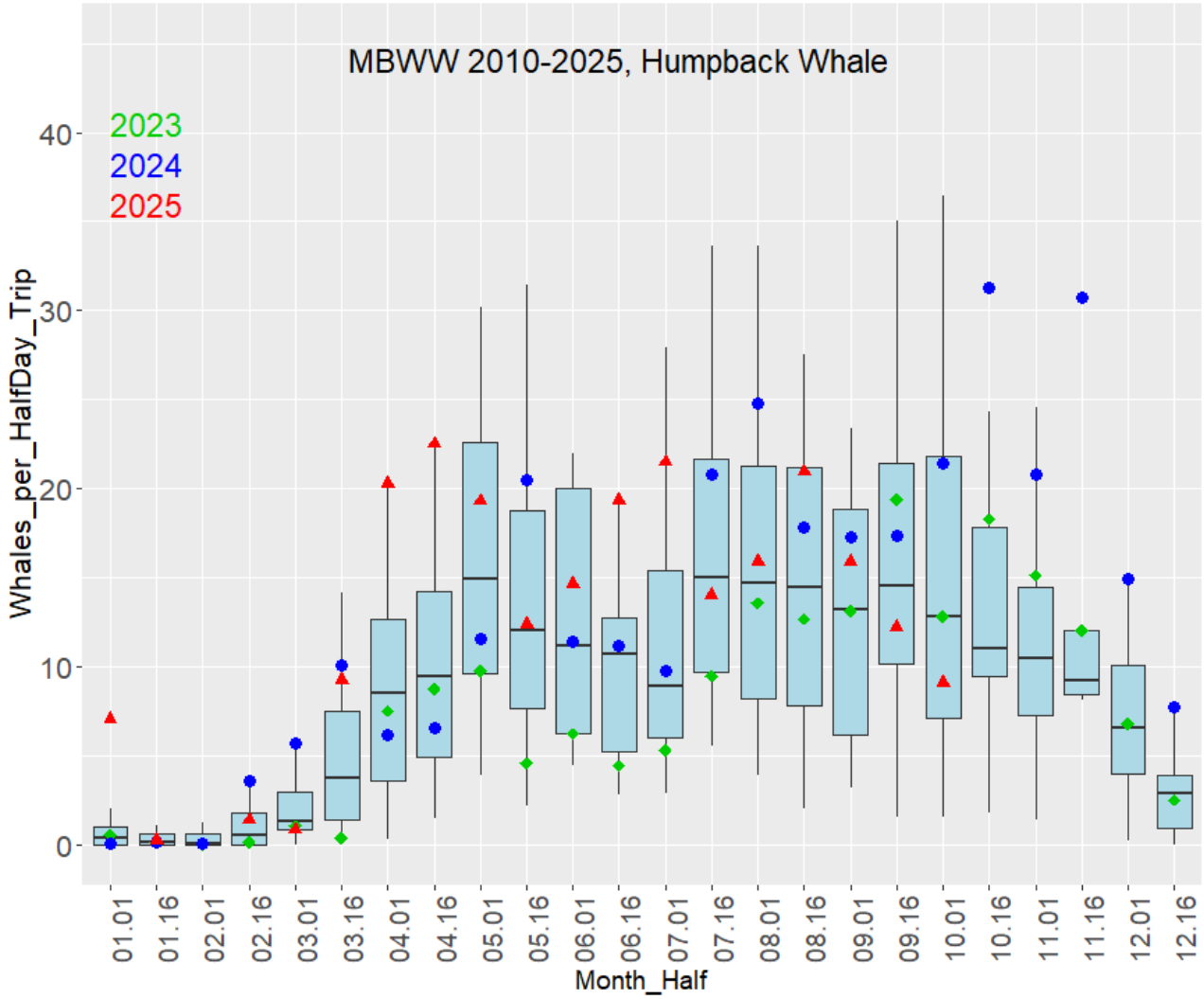

Figure 11 ~~10~~. Historical Monterey Bay Whale Watch data for 2010-2025, summarizing the average and variation in the number of humpback whales per half-day trip on a semi-monthly basis (1st-15th, 16th- end of month). This boxplot follows standard statistical practice in that the black horizontal line 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. Whale Watch 2.0 (*All Fishing Zones*)

Visit the NOAA Coastwatch Habitat Suitability Map to see latest data from August 3, 2025.

II. Fishing Season dynamics: §132.8(d)(7)

A. Domoic Acid and Quality Testing

Data provided by: California Department of Public Health, California Department of Fish and Wildlife

- Samples have been collected from Trinidad (Fishing Zone 1), Crescent City (Fishing Zone 1), and Monterey (Fishing Zone 4) and have submitted to the California Department of Public Health (CDPH) with results through October 10, 2025, posted on the CDPH domoic acid website.
- Results from Trinidad (Trinidad Head and Lagoons) and Crescent City (George Reef and Klamath River) have exceeded the action level for viscera. Additionally, Lagoons, Trinidad Head and George Reef have also exceeded the action level for meat. Additional testing for all four locations will be required.
- Quality testing logistics are still being finalized but may be impacted by domoic acid results. Crab quality criteria only affect Fishing Zones 1 and 2.

CDPH California Department of Public Health

CDPH SUMMARY OF DOMOIC ACID LEVELS IN CRAB — **SEPTEMBER 1, 2025 - OCTOBER 10, 2025**

PORT	COLLECTION SITE	SAMPLE COLLECTION DATE	CRAB TYPE VISCERA	INDIVIDUAL SAMPLE RESULTS (FDA ACTION LEVEL >30 PPM)						AVERAGE LEVEL (Information Only)	PERCENT OF SAMPLES EXCEEDING ACTION LEVEL
BMA - B - Trinidad	Trinidad Head	9/24/2025	Dungeness Crab	180	79	13	49	19	10	58.3	50%
BMA - B - Trinidad	Lagoons	9/24/2025	Dungeness Crab	17	9.7	19	21	12	130	34.8	17%
BMA - A - Crescent City	Klamath River	9/25/2025	Dungeness Crab	29	31	23	25	18	3.1	21.5	17%
BMA - A - Crescent City	George Reef	9/25/2025	Dungeness Crab	11	51	100	31	8	68	44.8	67%
BMA - G - Monterey	Monterey Bay	10/1/2025	Dungeness Crab	<2.5	<2.5	9.5	7.6	<2.5	3.4	3.4	0%

Figure 12 ~~11~~. CDPH summary table showing domoic results from samples collected between September 1, 2025, and October 10, 2025. Crescent City and Trinidad samples in both locations are showing at least one crab with domoic acid concentrations in the viscera exceeding federal action level.

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

A. MBARI Krill Model

No new data. Visit the MBARI website to see latest data from July 2025.

IV. Ocean conditions: §132.8(d)(9)

A. El Niño/Southern Oscillation (ENSO) Diagnostic

As of October 9, 2025, La Niña conditions are present and favored to persist through December 2025-February 2026, with a transition to ENSO-neutral likely in

January-March 2026 (55% chance). Please visit the NOAA ENSO Diagnostic webpage for more information.

B. Large Marine Heatwave Tracker

As of September 2, 2025, the current marine heatwave is the 4th largest marine heatwave in the Northeast Pacific region since monitoring began in 1982. If the current heatwave follows the pattern of past events, we can expect slight increases in heatwave coverage in the coastal EEZ region in the coming days, followed by a gradual contraction and withdrawal from the coast during October to November. Please visit the NOAA Marine Heatwave Tracker webpage for more information, but note it is not being updated due to lack of federal appropriations.

C. Habitat Compression Index

No new data. Visit the NOAA Habitat Compression Index webpage to see latest data from April 2025.

V. 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.

VI. 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.

VII. 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 Impact Score FAQ.