West Coast Rock-based Fishing Project YE26 Observation Research Report

Report prepared by
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Executive summary

The YE26 observation programme recorded 487 completed observations across Auckland west coast rock-based fishing locations. The observations show strong coverage across the 19 named sites, with the largest observation counts recorded at Muriwai - Flat Rock, Bethell's - Blowhole, Muriwai - Cave Entrance, and Bethell's – Kauwahaia Island (O'Neils Island).

A total of 457 people were observed on the rocks and 378 were actively fishing. Most people (82%) observed on the rocks were fishing. Of the fishers observed, 193 (51%) were wearing a lifejacket or PFD, 45 (12%) were fishing alone , 102 (27%) were fishing in dangerous conditions , and 121 (32%) were displaying other risky behaviours.

The strongest positive finding is the observed lifejacket wearing rate. Compared with the YE25 report, observed lifejacket use increased from 29% to 51% of fishers. Fishing alone also reduced from 21% in YE25 to 12% in YE26. However, dangerous-condition fishing remains an ongoing concern, with more than one-quarter of fishers observed fishing in dangerous conditions.

Public rescue equipment (PRE) was recorded as in place and ready to use in 93.8% of completed observations. The main gaps were sites or locations where PRE had not historically been installed.

1. Introduction

The West Coast Rock-based Fishing Project has now been operating for more than 20 years, reflecting a sustained partnership between Drowning Prevention Auckland, Surf Life Saving Northern Region, and Auckland Council, to reduce drowning risk among rock-based fishers on Auckland's west coast. Since its inception, the project has used research, on-site education, public rescue equipment, provision of lifejackets, and targeted safety messaging to better understand and respond to the behaviours, environments, and decision-making patterns associated with this high-risk activity.

The YE26 observation programme builds on this long-term evidence base by capturing real-time observations of fisher presence, environmental conditions, lifejacket use, public rescue equipment readiness, and risky behaviours across key west coast rock-fishing locations. A total of 487 completed observations were recorded across Auckland west coast rock-based fishing sites, providing a practical snapshot of where and when people are fishing, what safety behaviours are being adopted, and where further intervention is needed.

These observations help shift the project beyond self-reported attitudes and behaviours by documenting \ actual behaviours on the rocks. The findings provide useful evidence to guide future site monitoring, lifejacket promotion, public rescue equipment maintenance, and targeted safety engagement for the next phase of the project.

2. Data and method

We acknowledge Aurion Mead, the Coastal Safety Officer who collected the data via observations. This report draws on results from these observations. Data was entered into Alchemer using the YE26 Alchemer Observation Survey. A report of this completed survey results was produced by Alchemer and the YE25 West Coast Rock-based Fishing research report was included for comparison. The YE26 Alchemer report provides completed observation totals, site distribution, environmental conditions, PRE availability, fisher presence, and risk behaviour summary counts.

Percentages were calculated as follows: people fishing as a percentage of people observed on rocks; lifejacket use, fishing alone, dangerous-condition fishing, other risky behaviours, and suitable clothing as a percentage of people observed fishing; PRE availability as a percentage of all completed observations.

3. Results

3.1. Observation coverage by site

Observation coverage was well spread across sites. The highest number of observations were completed at Muriwai - Flat Rock (n=36), Bethell's - Blowhole (n=35), Muriwai - Cave Entrance (n=33), and Bethell's – Kauwhaia Island (O'Neils Island) (n=33).

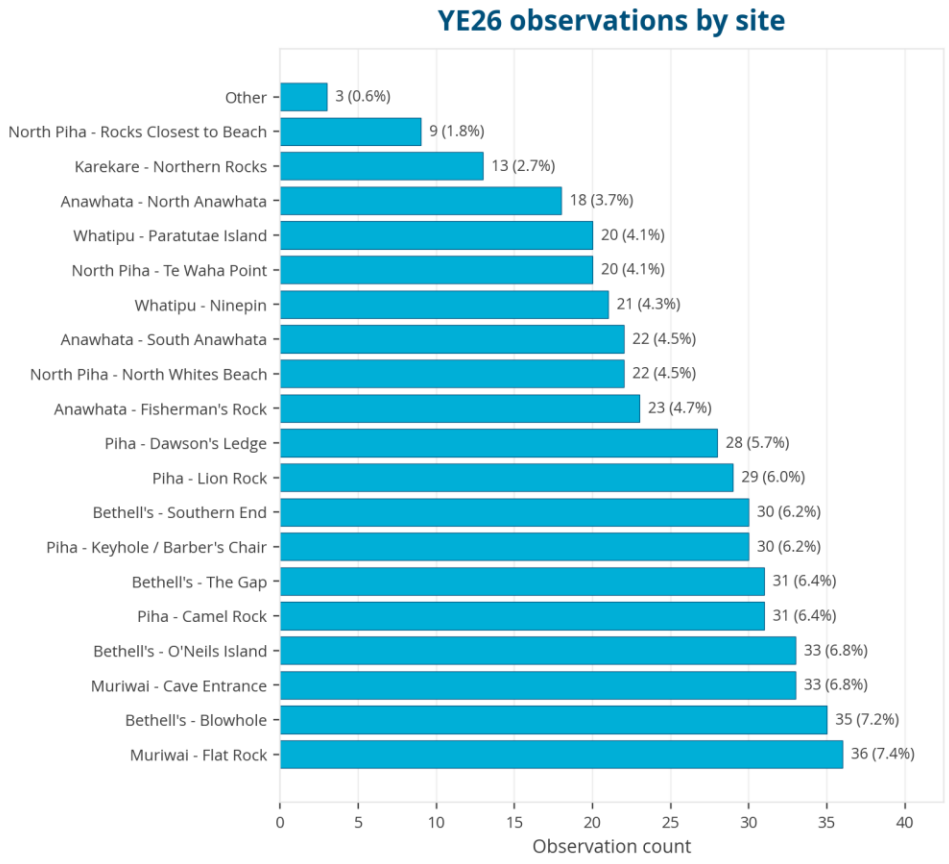

Figure 1 YE26 observations by site.

3.2. Peak visitation by observation time block

The peak observation time blocks were 08:00-09:00 (n=96) and 10:00-11:00 (n=91). Most observations were carried out between 08:00 and 13:00, which aligns with the operational focus on morning and early-afternoon coastal use.

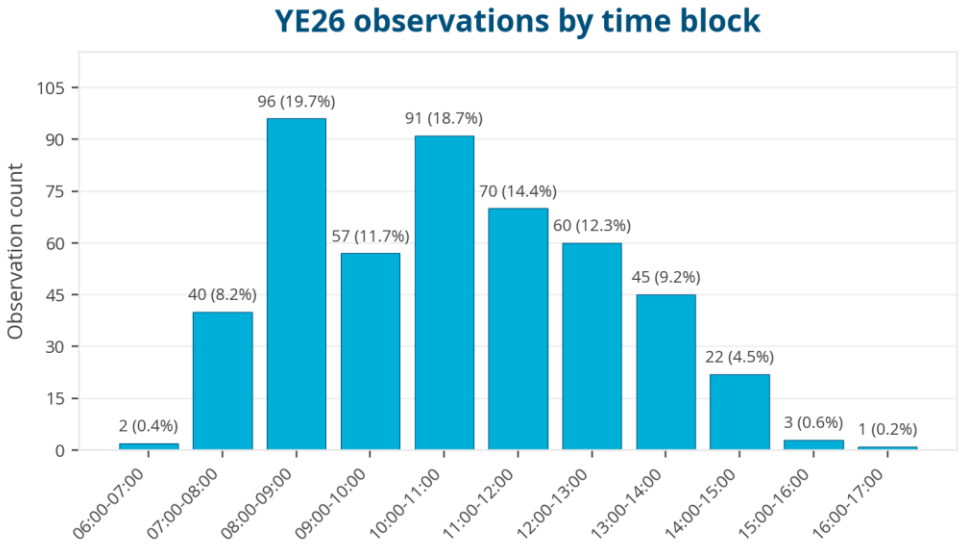

Figure 2 YE26 peak visitation by observation time block.

3.3. Environmental conditions at observation

Weather

Most observations occurred in settled conditions: 48.7% were sunny and 38.0% were cloudy. Rainy, windy, and stormy observations made up a smaller share of the dataset.

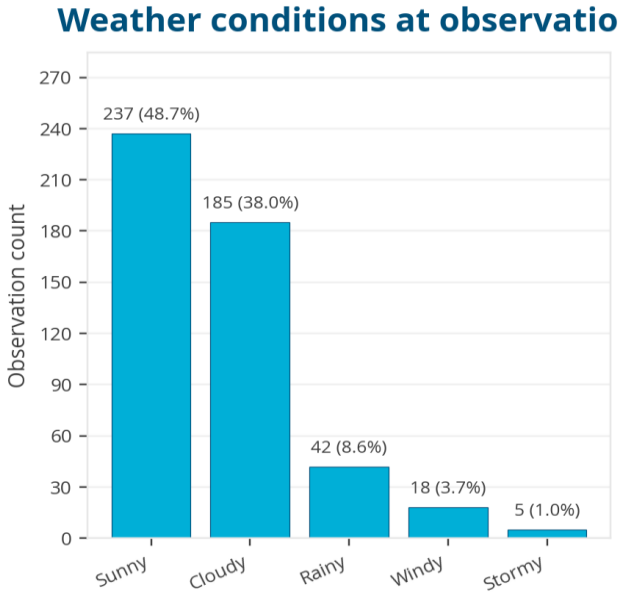

Figure 3 Weather conditions at observation.

Tide

Almost half of observations occurred at low tide or within two hours either side of low tide (46.6%).

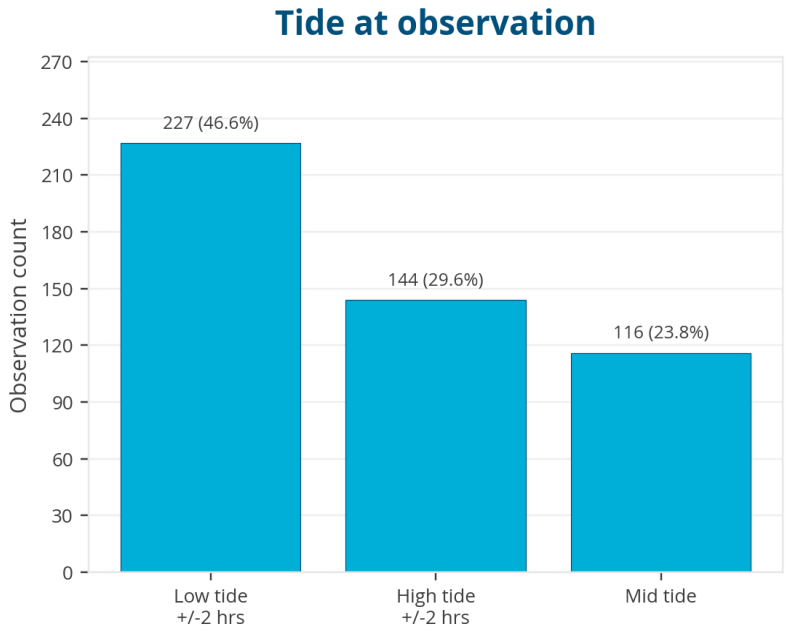

Figure 4 Tide at observation.

Swell

Most observations occurred during lower swell. In total, 73.3% of observations were recorded in 0-2m swell, with 56.3% occurring in 1-2m swell.

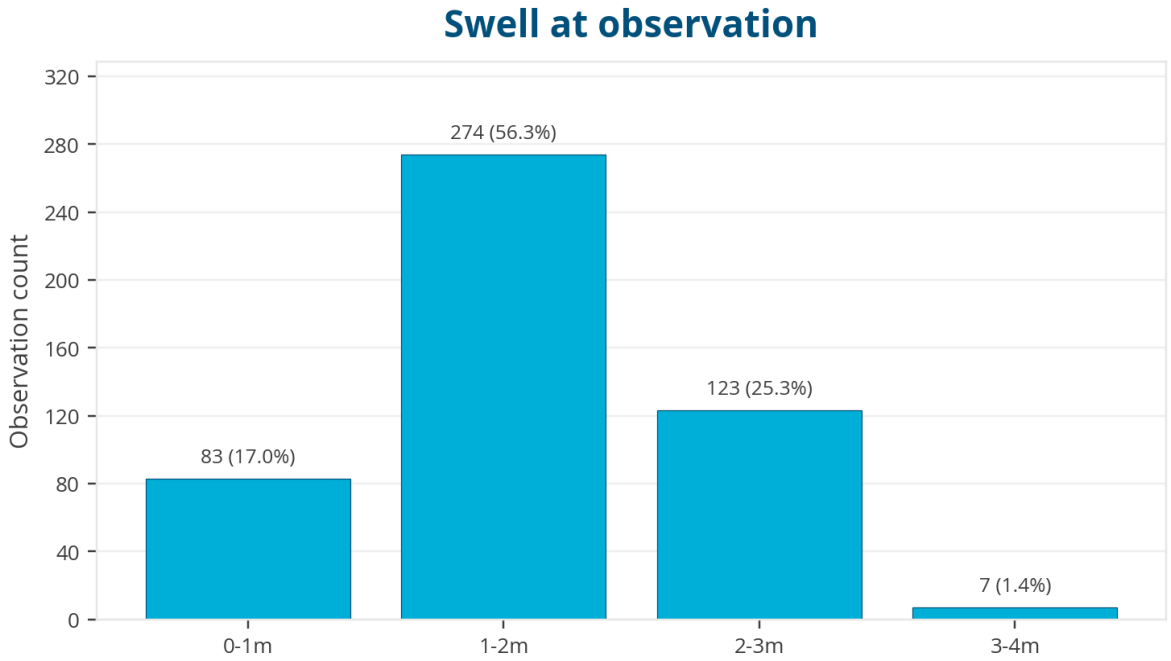

Figure 5 Swell at observation.

Wind direction and strength

Offshore wind was recorded in 44.8% of observations and onshore wind in 36.6%. Most observations were recorded in calm/light, light/gentle, or moderate/fresh breeze conditions.

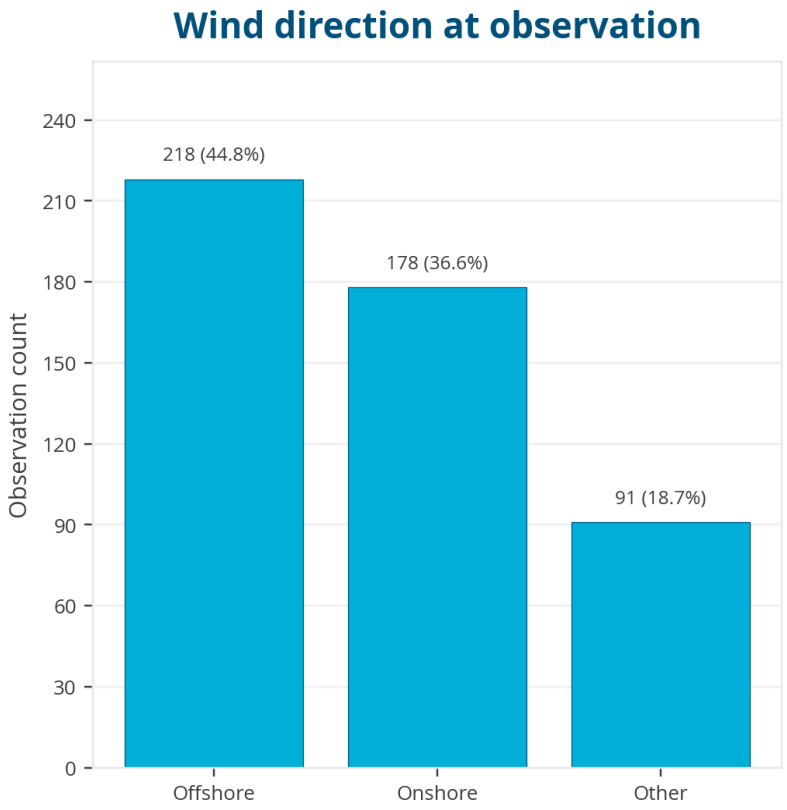

Figure 6 Wind direction at observation.

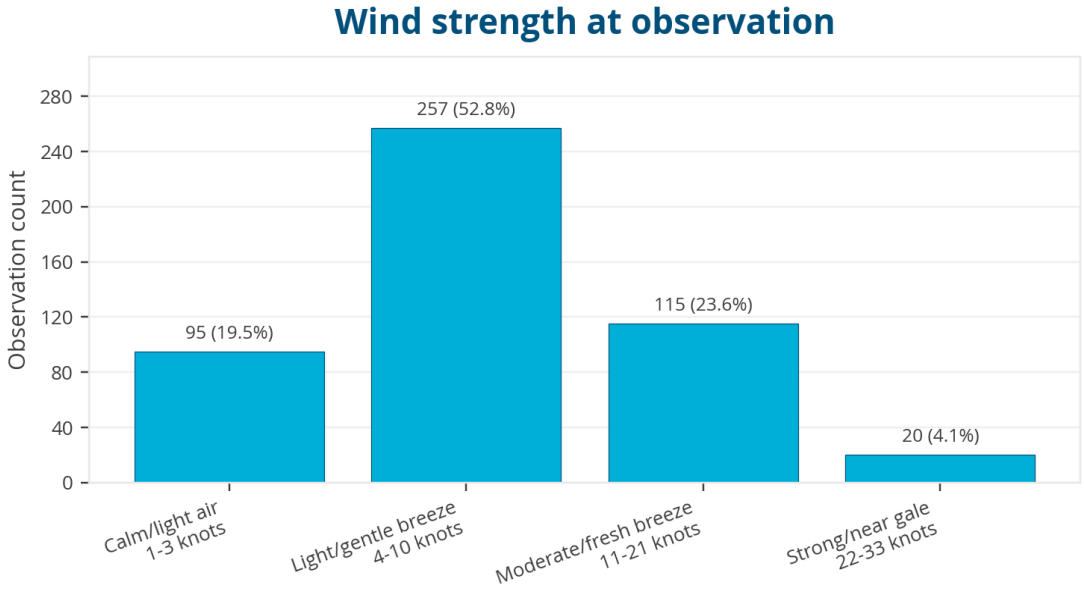

Figure 7 Wind strength at observation.

3.4. Presence of fishers and observed behaviours

Presence of fishers in the area

The fisher-presence question recorded fishers in the area in 84 observations and no fishers in 192 observations. The Alchemer summary for this question totals 276 responses, so these figures should be interpreted as the valid responses for this specific question rather than all 487 completed observations.

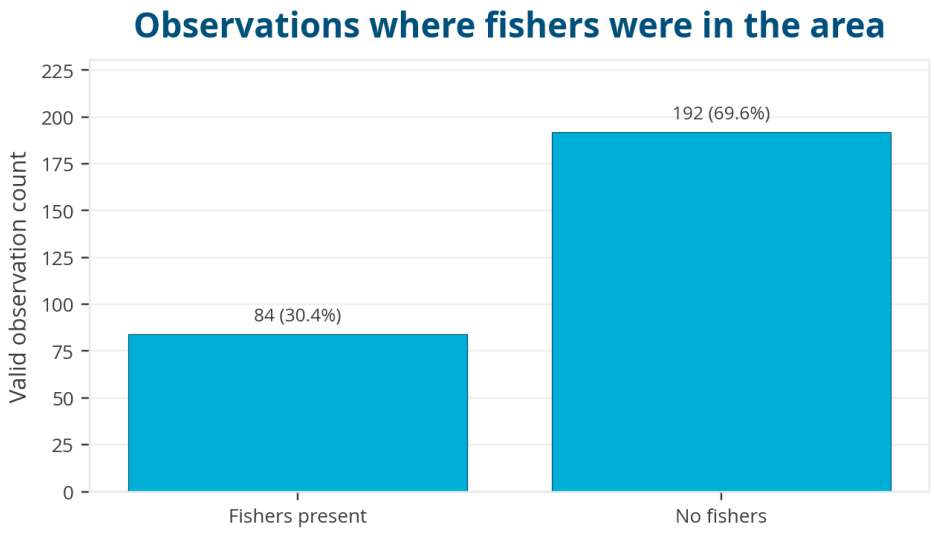

Figure 8 Observations where fishers were in the area.

Across Q12 numeric observations, 457 people were observed on the rocks and 378 were fishing. Lifejacket wearing was observed for 193 fishers, representing 51% of fishers observed fishing. Suitable clothing was lower, with 114 fishers (30%) recorded as wearing suitable clothing including footwear.

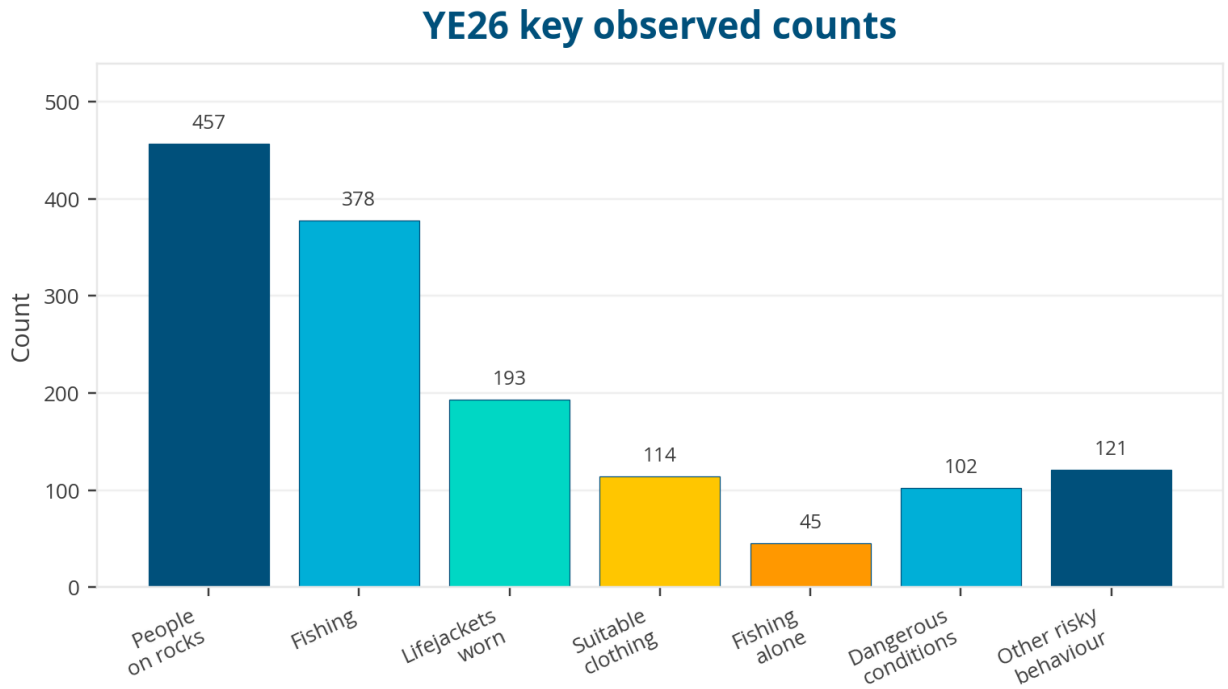

Figure 9 YE26 key observed counts.

Specific risk behaviours

Specific risk behaviours were also recorded in the observation report. The most common named risk behaviour was having backs to the ocean (n=44), followed by climbing down rocks to retrieve tackle (n=32), and consumption of alcohol or other drugs (n=13).

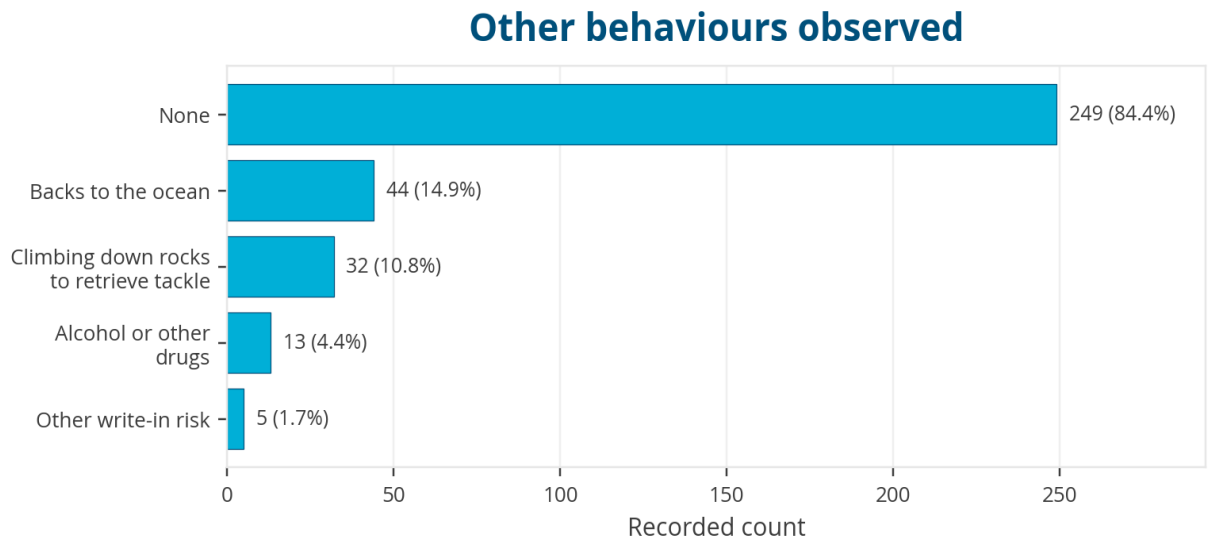

Figure 10 Other behaviours observed during YE26 observations.

3.5 Site specific data

Lifejacket use varied substantially across the observed fishing sites, ranging from none to all lifejacket wearing as seen in Figure 11. The two sites with the greatest fisher exposure - Muriwai–Flat Rock (38%, *n* = 88) and Whatipu - Paratutae Island (31%, *n* = 71) recorded comparatively low lifejacket-wearing rates. Whatipu - Ninepin recorded an even lower wearing rate of 16% (*n*=50), identifying it as a priority location due to its' relatively high fisher exposure. In contrast, wearing rates were substantially higher at the main Piha sites of Piha - Camel Rock (90%, *n*=42) and Piha–Keyhole/Barber's Chair (83%, *n*=24). Several lower-volume sites recorded 100 per cent lifejacket use, including Bethells - Southern End (*n*=15), Bethells - The Gap (*n*=15), Karekare - Northern Rocks (*n*=9), and Bethells - Blowhole (*n*=9). Very low lifejacket rates were also identified at several less frequently observed sites, including Piha - Dawson's Ledge (29%, *n*=7), Anawhata - Fisherman's Rock (17%, *n*=6), and North Piha - Rocks closest to the beach (0%, *n*=5).

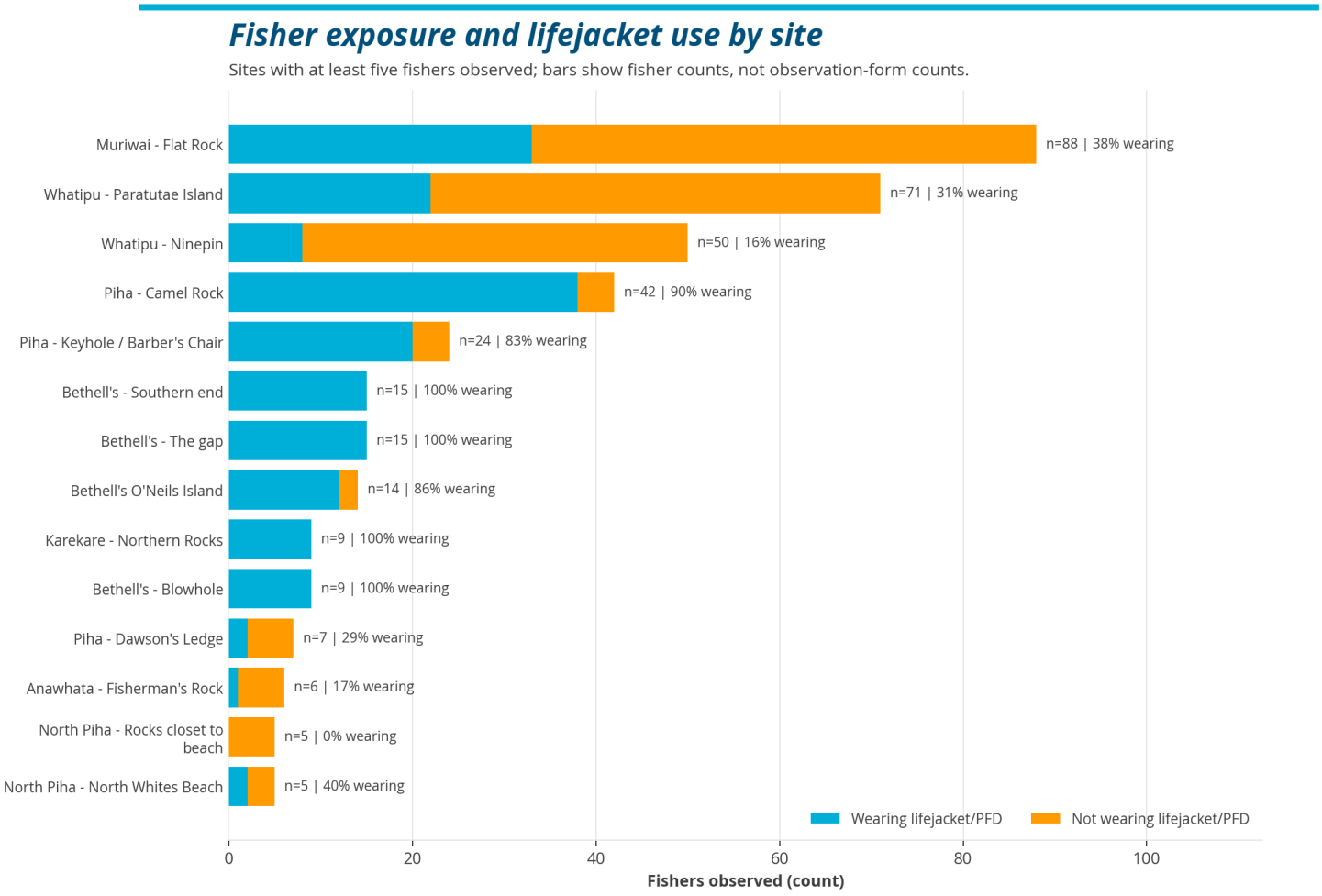

Figure 11 Fisher exposure and lifejacket use by site.

Risk-related behaviours varied considerably across sites, with fishing in dangerous conditions and other risky behaviours representing the most prominent concerns, as shown in Figure 12. As these categories overlap, the same fisher may have been recorded in more than one category. At Muriwai – Flat Rock, fishing in dangerous conditions and other risky behaviour were each recorded among almost one-half (43%, *n=38)* of the 88 fishers observed, however, fishing alone was less common occurring among only a small group of observed fishers (9%, *n*=8). At Whatipu – Paratutae Island, the three risky categories were more evenly distributed: fishing in dangerous conditions (23%, *n*=16), other risky behaviour (21%, *n*=15), and fishing alone (16%, *n*=11). Whatipu – Ninepin was notable for the prevalence of other risky behaviour, which was recorded in almost one-half the 50 fishers observed (42%, *n*=21).

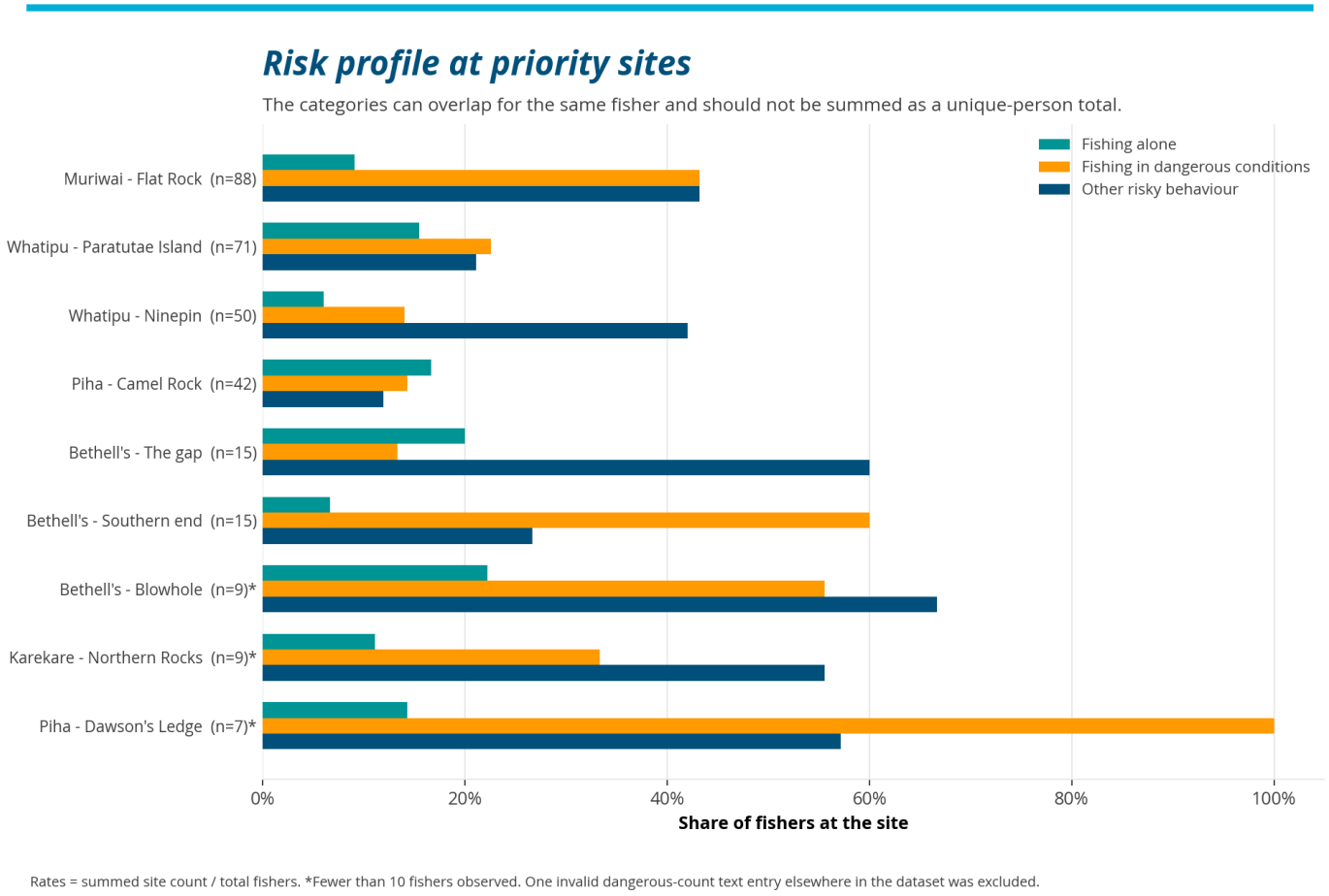

Figure 12 Risky behaviours observed on site.

Specific risky behaviours were most frequently recorded at the higher-exposure sites, particularly Muriwai - Flat Rock, Whatipu - Paratutae, and Whatipu – Ninepin as seen in Figure 13. The values represent the number of observations on which each behaviour was selected rather than the number of individual fishers. Behaviours may also have co-occurred on the same observation. Muriwai - Flat Rock recorded the highest overall number of behaviour observations (*n*=88) and fishing with backs to the ocean was recorded on 12 observations, climbing for tackle on 8 occasions, and alcohol or drug use on 4 occasions. At Whatipu - Paratutae (*n*=71), backs to the ocean was recorded on 6 occasions, climbing for tackle on 5 occasions, and alcohol or drug use on 3 occasions. Whatipu - Ninepin (*n*=50) recorded 7 occasions of fishers having their backs to the ocean and 7 occasions of climbing for tackle, while alcohol or drug use was recorded on 2 occasions. Overall, having backs to the ocean was the most frequently recorded specific behaviour, followed by climbing for tackle. These behaviours were concentrated most strongly at Muriwai - Flat Rock, Whatipu - Paratutae, and Whatipu - Ninepin, suggesting that site-specific education should reinforce not turning backs to the ocean.

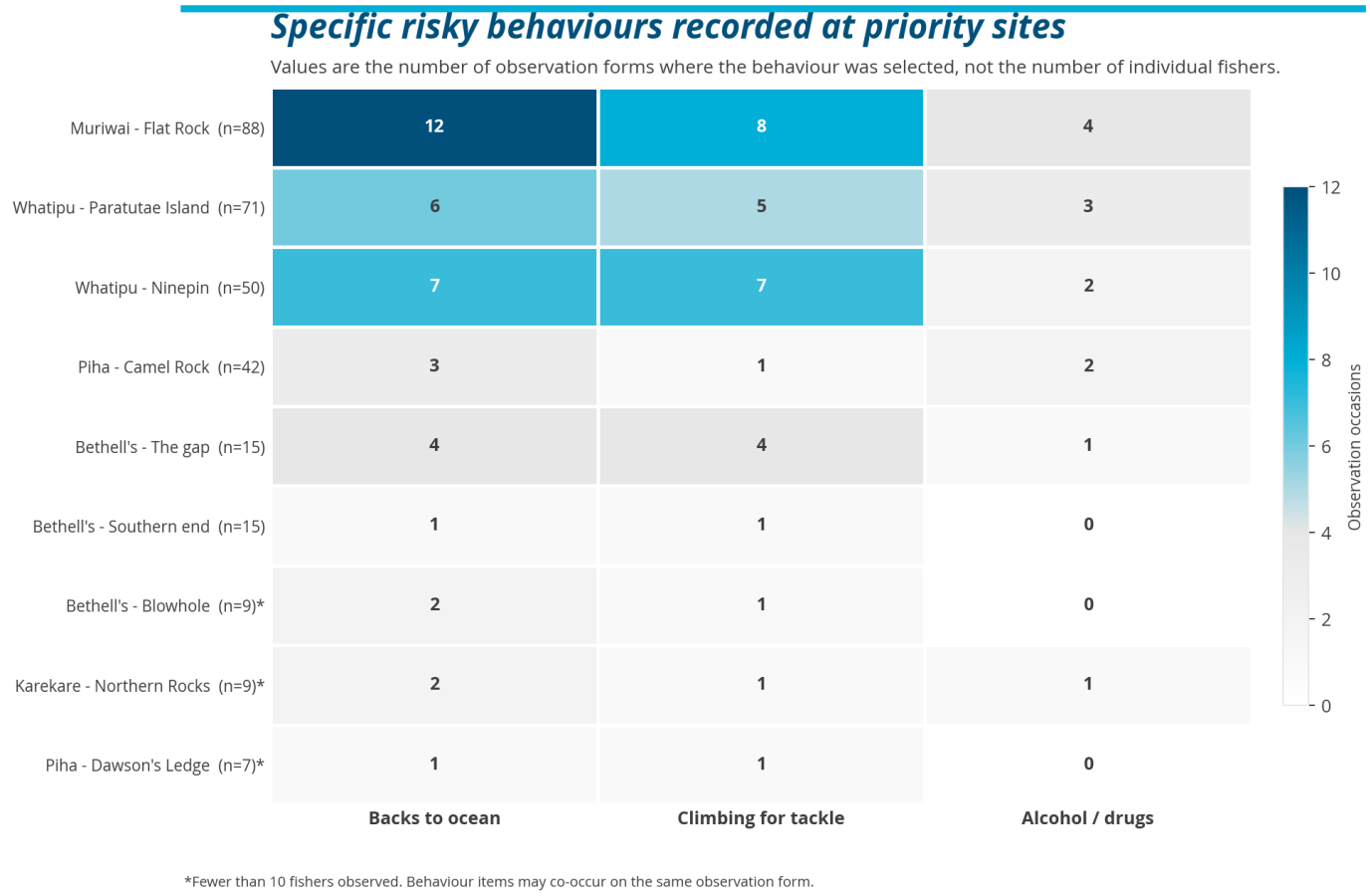

Figure 13 Risky behaviours recorded at sites.

3.6 Open text

Open-text responses added important context to the quantitative observation data. Observer comments show that the Coastal Safety Officer regularly intervened by offering lifejackets, advising fishers not to enter hazardous areas, and in some cases successfully convincing people to leave and return another day. However, the comments also highlight persistent high-risk behaviour, including fishing on the edge of rocks, ignoring surges, accessing exposed areas during high tide, and fishing despite warnings or dangerous conditions. Positive examples were also recorded, including repeat fishers consistently wearing lifejackets and families using lifejacket stations for the first time, suggesting that on-site equipment and direct engagement can support safer behaviour.

Open-text risk examples

- *Accessing Blowhole during high tide and large surges*
- *Climbed onto a rock that would soon be cut off by the tide*
- *Climbing down front of rocks to get crabs and mussels*
- *Engaged in carpark; could not comment on behaviour*
- *Standing on edge of rocks with waves washing over on incoming tide*

Direct safety intervention by Coastal Safety Officer

- *"Gave LJ, encouraged to leave the rocks but was not successful."*
- *"Gave 4 lifejackets out, encouraged not to fish in the dangerous conditions today. Was ignored."*
- *"Managed to convince them to leave after educating on the dangers of fishing in these conditions without lifejackets."*
- *"Convinced them to leave and come back another day due to adverse conditions."*

These show that the Coastal Safety Officer role was not just observational — it involved active risk reduction.

Lifejacket uptake and lifejacket hub use

- *"Engaged with this fisherman last week, good to see him back out and making use of the lifejackets provided."*
- *"All wearing station lifejackets."*
- *"Family fishing trip at Bethell's gut, dad, two kids and uncle/grandpa. First time fishing, very grateful for Lifejacket station."*
- *"Running out of lifejackets on busy days. Lots more people starting to fish around Fallen Rocks at Piha."*

These are useful because they show the lifejacket hub/station model is being used, but also that demand may exceed supply at busy times.

High-risk behaviour

- *"Fishing on the very edge of the rocks with no regard for surges, wet up to their waists within five minutes. Ignored all safety messaging."*
- *"13 people taking photos close to edge with tide surging over."*
- *"Accessing Blowhole during high tide and large surges."*
- *"Standing on edge of rocks with waves washing over on incoming tide."*
- *"Climbed out a rock that will soon be cut off by the tide."*

These are strong examples of real-time exposure to wave, tide and edge risks.

Fishing despite warnings or poor conditions

- *"Gave LJ, advised to not go fishing due to tsunami warning."*
- *"Good to see no one out with the Tsunami warning in place."*
- *"Good to see fishers staying away from such a big surf."*
- *"Swell is pumping all week, hoping to keep seeing low numbers till the swell drops."*

These show both positive and concerning responses to environmental risk.

Repeat fishers and local knowledge

- *"2 wearing lifejackets fish here consistently, have engaged multiple times."*
- *"Local helmet wearing fishers."*
- *"Repeat fishers alongside two new guys, fishing through the tide."*

These could support using frequent fishers as potential safety champions.

PRE and rescue equipment issues

- *"Fishing further out along Te Waha, about 100m away from PRE."*
- *"Noted Lifering and bag was moved 100m further around the island with a large group of fishers. Advised to replace it when they finish fishing."*
- *"Lifejacket box is damaged after cyclone."*
- *"LJ Hub Restocked."*

These support recommendations around PRE visibility, maintenance, placement, and regular auditing.

3.7 Public Rescue Equipment

PRE was recorded as in place and ready to use in 457 observations, equivalent to 93.8% of all completed observations. Only one observation recorded PRE as not ready/in place. A further 29 observations were recorded as other, mostly because PRE did not exist at that location.

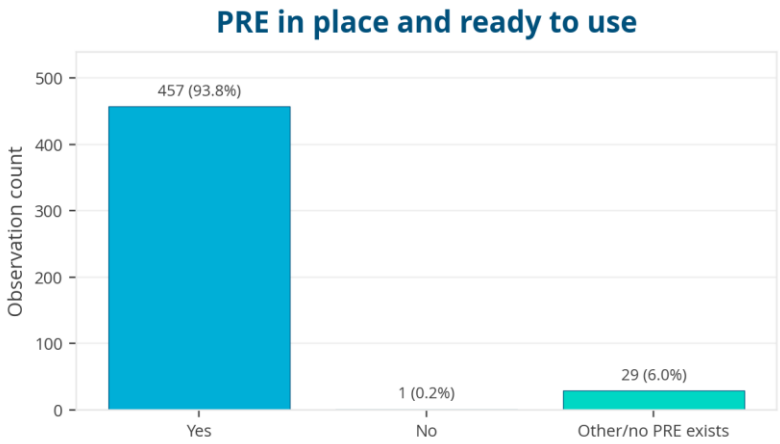

Figure 14 PRE in place and ready to use.

4. YE25 and YE26 comparison

YE26 should be compared with YE25 carefully because the observation periods and data structure differ. However, the direction of change is useful. The strongest improvement is observed in lifejacket use, increasing from 29% in YE25 to 51% in YE26. Fishing alone also reduced from 21% to 12%. Dangerous-condition fishing remained similar, changing from 29% to 27%. PRE remained strong in both years.

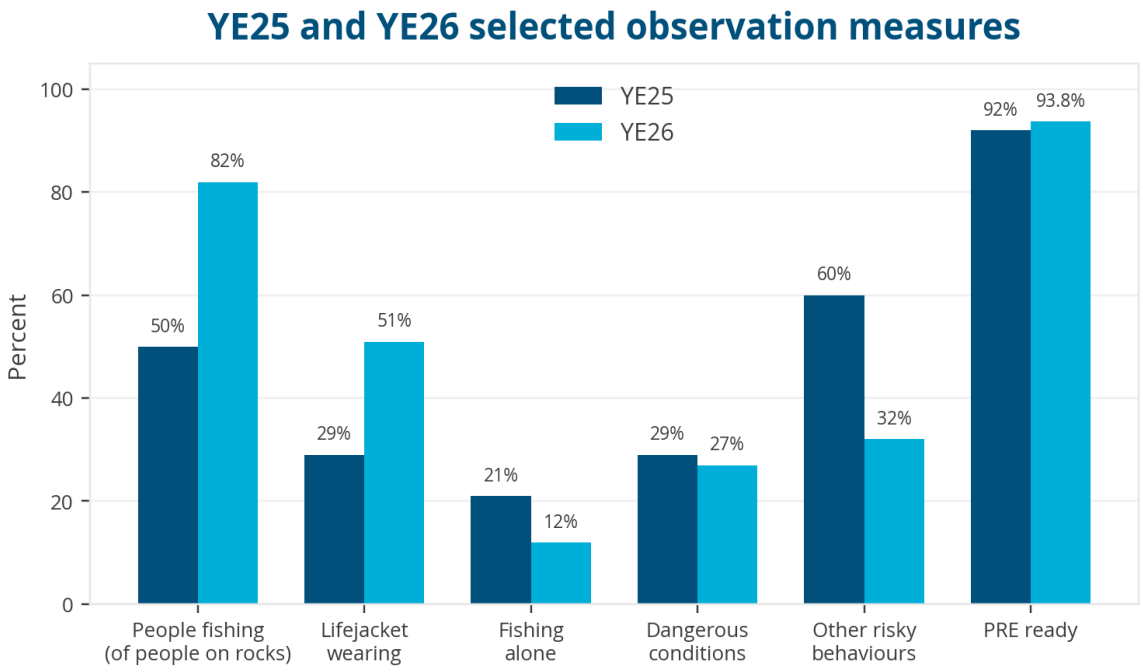

Figure 15 YE25 and YE26 selected observation measures.

5. Discussion

The YE26 observations show meaningful progress in several protective behaviours. More than half of observed fishers were wearing lifejackets, which is a substantial improvement on the YE25 observed rate. Fishing alone was also less common than in YE25. These shifts suggest that the increased focus on on-site engagement, lifejacket hubs or stations, and direct safety messaging may be influencing behaviour at the point of activity.

Despite these improvements, risk remains evident. More than one-quarter of fishers were observed fishing in dangerous conditions, and almost one-third were recorded as displaying other risky behaviours. Specific behaviours such as turning backs to the ocean, climbing down rocks to retrieve tackle, alcohol or other drug use, and standing on surge-exposed edges show the ongoing need for direct, site-specific intervention.

The site distribution also indicates that some locations continue to require regular monitoring because they attract relatively high observation counts. Muriwai - Flat Rock, Bethell's - Blowhole, Muriwai - Cave Entrance, Bethell's - O'Neils Island, and Piha - Camel Rock were among the most frequently observed sites. However, the current extract does not allow site-level behaviour analysis. Obtaining a raw row-level export should be a priority for the final analysis so that risk can be linked to specific venues and time blocks.

6. Recommendations

1. **Maintain and strengthen lifejacket access:** The observed increase in lifejacket wearing is a major positive result. Continue lifejacket hubs or station access and ensure high-use sites have adequate supply during peak periods.
2. **Prioritise dangerous-condition decision-making:** Dangerous-condition fishing remains common. Messaging should emphasise clear go/no-go prompts linked to swell, tide, surges, and wave washing across rocks.
3. **Target edge-risk behaviours:** Continue direct prompts about keeping eyes on the ocean, not climbing down rocks for tackle, avoiding surge zones, and avoiding alcohol or other drugs while fishing.
4. **Keep PRE audits and visibility high:** PRE readiness is strong. Continue regular audits, replacement protocols, and signage so fishers know where equipment is and how to use it.
5. **Use peak observation periods for engagement:** The busiest observation periods were 08:00-09:00 and 10:00-11:00. Deployment can continue to prioritise morning and early-afternoon periods, with flexibility for seasonal and weather-driven variation.
6. **Continued brand, retailer and fishing community engagement:** Continue working with fishing brands, retailers, clubs and community leaders to normalise safe fishing practices. Consistent promotion of lifejacket use, appropriate clothing, suitable footwear and essential safety equipment at the point of purchase, trusted fishing networks, influencers and ambassador social media channels. This will help position these behaviours as a standard part of preparing for every fishing trip.