



WEST COAST PRESSURE SENSITIVE FISHERIES REPORT 2021

A Summary of Angler Survey, Drift Diving & Trail Camera Surveillance Results for the West Coast Pressure Sensitive Fisheries, Conducted by Fish & Game West Coast for the 2020/2021 Sports Fishing Season.

Baylee Kersten, Fish & Game Field Officer, July 2021



An angler captured on a trail camera in the Reefton area, March 2021.



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Summary

The Karamea and Mokihinui Rivers have for many years provided excellent angling opportunities for resident and visiting non-resident anglers. Following feedback of an apparent decline in the fishery status, West Coast Fish and Game designated both catchments as a Backcountry Fishery in 2016/17. This requires anglers to obtain a free Backcountry Endorsement, in doing so providing their details for an online survey following the angling season. In conjunction with the angler's survey, drift dives were undertaken through historic dive sites in both catchments. The anglers survey has focused on evaluating fishery usage, commercial guided fishing, access methods and angler satisfaction, while offering anglers currently using the fishery the opportunity to comment on these topics and offer future management suggestions. In more recent years concerns have been raised of the angling pressure around the Reefton area. Being readily accessible and known for large trout the attention of the West Coast Fish and Game Council has been drawn to this area. Larry's Creek, the Waitahu River, and the upper Grey River were drift dived and angling pressure data was collected using trail cameras. This report summarises the back country survey, drift diving and trail camera surveillance results for the 2020/21 season. Staff recommendations are: That council receives this report. That the council reviews the need to have the Mokihinui and Karamea rivers classified as backcountry fisheries. That monitoring work continues in the Reefton area.

Introduction

The rivers of Kahurangi National Park have for decades now been well recognised for providing premium opportunities for anglers within a remote scenic environment. Two of the most notable catchments within the park, are the Karamea and Mokihinui Rivers. During recent seasons feedback has been received by Fish and Game West Coast from several anglers and fishing guides, concerned that these fisheries are not of the quality they were previously. As a result, the West Coast Fish and Game Council has designated the Karamea River catchment upstream from Kakapo River, and Mokihinui River catchment upstream of Rough and Tumble Creek confluence, as Backcountry Fisheries. The Purpose of the designation was to gain details of all anglers entering the area to fish and gather data of angler usage and the fishing experiences of those anglers currently using these fisheries. Concurrently, drift diving surveys have been carried out through two historic drift diving sections within each catchment to examine trout abundance every season since the 2016/17 season.

The Reefton area has always been a popular angling destination, with many productive fishing rivers known to hold the occasional large trout nearby. In more recent times, it is believed the Reefton area has increased in popularity for both resident and non-resident anglers, especially in periods of beech masts. This became increasingly noticeable during the 2019/20 angling season, of which both crowding and unethical behaviour was reported to be occurring on the Reefton rivers. Given the nature of large brown trout and their low angling tolerance, not only is the quality of fishing potentially being jeopardised but the fishery itself. As a result, Larry's Creek and the Waitahu are now again being drift dived at historic sites to assess the fisheries, with the upper Grey River already a currently an active drift dive site. In addition to this, angling pressure in the Reefton area was assessed using trail cameras on Larry's Creek, the Waitahu River and Upper Grey River.

Method

A survey was designed to look at information about of fishery status in each of the catchments and was sent to all anglers that held a backcountry endorsement and provided an email address. A copy of the survey questions is included as Appendix 1. Surveys were structured to distinguish between resident and non-resident anglers, to identify viewpoints from each group, local kiwi anglers and visiting anglers on holiday.

Drift dives were completed between December and February when conditions allowed. The Karamea River was dived adjacent to the Crow River confluence and upstream of the Karamea Bend using six divers. The Mokihinui River was dived downstream of Goat Creek confluence and upstream of the Mokihinui Forks on the North Branch using six divers. The Grey River was dived at Hospital Flat with 6 divers. The upper Larry's Creek site and the Waitahu at Gannons Road was dived with 4 divers.

Trail camera surveillance was carried out on Larry's Creek and the Waitahu by installing three cameras on trees that overlooked attractive stretches of river for angling. The cameras were set on the time lapse function and captured an image every minute between 7am and 7pm. The cameras were operational most the season and typically were serviced once a fortnight in conjunction with compliance. The last camera was set up overlooking the angler access point on the upper Grey, taking a photograph every 5 minutes between 7am and 7pm. Due to the lower photo frequency this camera only required servicing monthly, which was done in conjunction with compliance. The images were then viewed, and it was recorded the number of anglers fishing that section of the fishery or if the access point was occupied.

Where Karamea and Mokihinui Rivers are referred to in this report, unless otherwise stated, this refers to the upper reaches within the designated Backcountry Area.

Results

Backcountry Survey Participation & Angler Demographics

Throughout the 2020/21 season, a total of 1,948 Anglers held West Coast Region Backcountry Fishery Endorsements, those with a current email address were invited to participate in the Backcountry Angler Survey. Please note that in some previous years the survey has been

conducted in conjunction with the Nelson/Marlborough region likely resulting in an increased response. In addition to this, this year with Covid-19 border restrictions, very few non-resident anglers fished in New Zealand this year changing and reducing the survey pool. Of the 1,948 anglers holding a West Coast endorsement 1,925 provided an email address. The number invited to participate was further reduced to 1,879 due to invalid emails and the same email address being provided for multiple licences. The survey had a response of 558 anglers, with 79 answering that they fished the West Coast Backcountry in the 2020/21 season consisting of 7 non-resident anglers and 72 resident anglers (Figure 1). Resident angler region of origin details was gathered. As with previous seasons surveys, a large proportion of resident anglers fishing the West Coast Backcountry Area are licence holders from the Nelson/Marlborough and North Canterbury Regions (Table 1).

Table 1: Location of Origin for Resident Anglers.

Region of Origin	Percentage of Anglers
West Coast	11.11%
Nelson/Marlborough	38.89%
North Canterbury	16.67%
Otago	8.33%
Auckland/Waikato	8.33%
Eastern	5.56%
Northland	2.78%
Hawkes Bay	2.78%
Southland	2.78%
Wellington	1.39%
Central South Island	1.39%

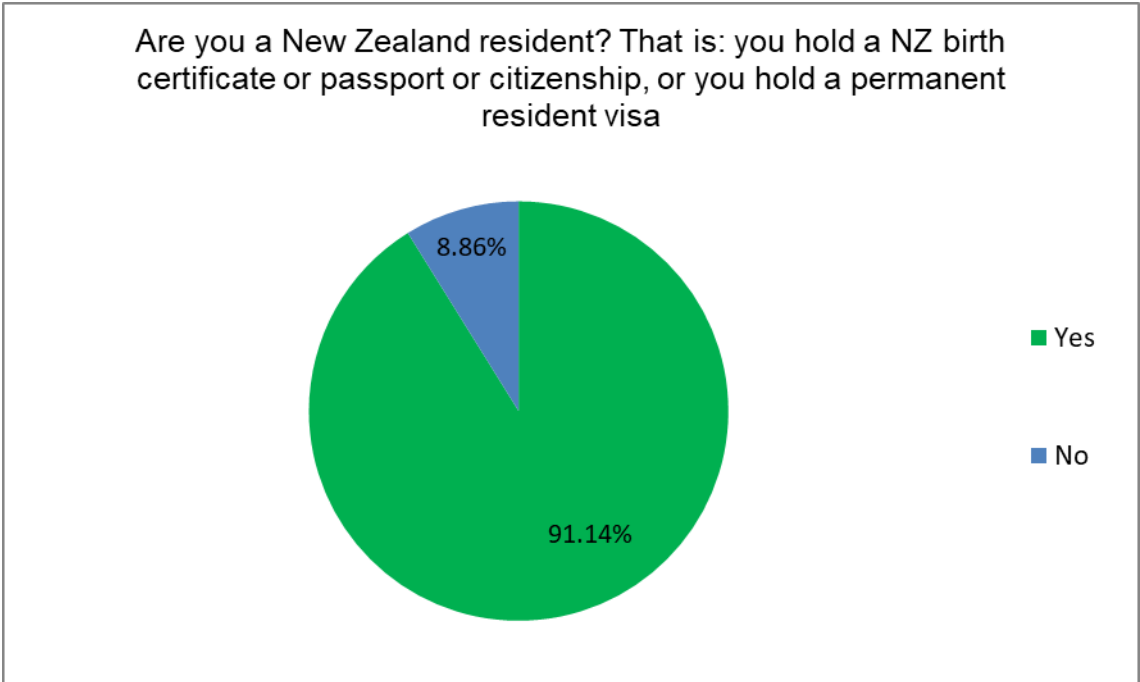


Figure 1: Percentage of Visiting Non-Resident Anglers vs Resident Anglers from the Survey That Fished Within the West Coast Backcountry Area During the 2020/21 Angling Season.

Angler Usage During the 2020/21 Season

Anglers were questioned as to how many trips they made into the West Coast Backcountry Fishery, what was the average length of their stay and what was the total number of days fished in each catchment. Figure 2 shows the percentage of respondents to number of days in the West Coast Backcountry Fishery as a whole. Figure 3 provides answers as to how many nights respondents stayed in the area, while Figure 4 depicts how many days the majority of anglers fished each catchment. Figure 5 presents respondents frequency of encounter with other anglers whilst fishing the West Coast Backcountry. Lastly Figure 6 displays the angling pressure distribution throughout the season in the West Coast Backcountry.

Most entered the backcountry area over only one to three trips, while some anglers made up to 14 trips into the West Coast Backcountry Fishery. There was a smaller percentage that fished 5-12 days total in either or both catchments. The anglers on average fished for longer in the Karamea, with one angler spending 12 days fishing in the Karamea for the season. Anglers encountering other anglers appears to be uncommon with 68% not encountering another angler and 16% encountering anglers on rear occasions.

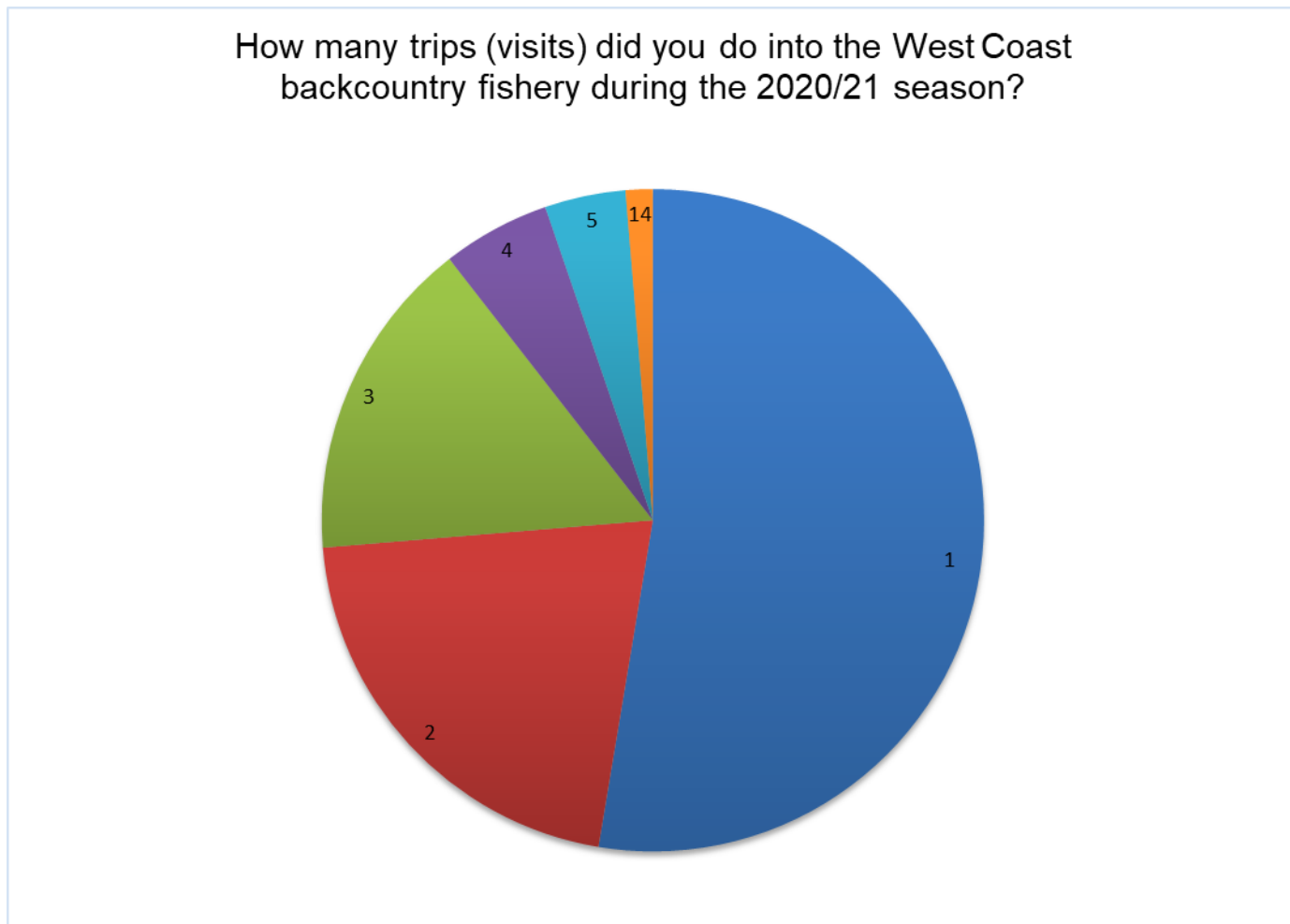


Figure 2: Number of Trips into The West Coast Backcountry Fisheries by respondents.

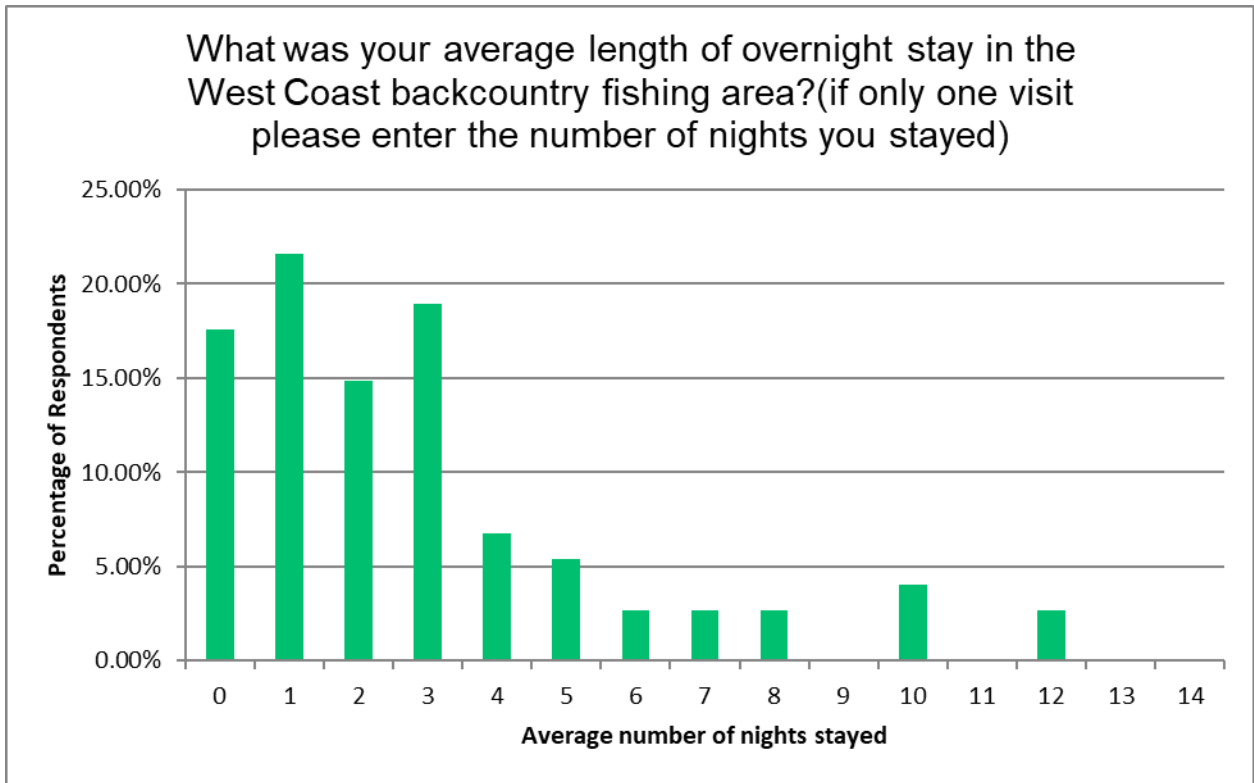


Figure 3: Average Number of Nights Stayed by Respondents.

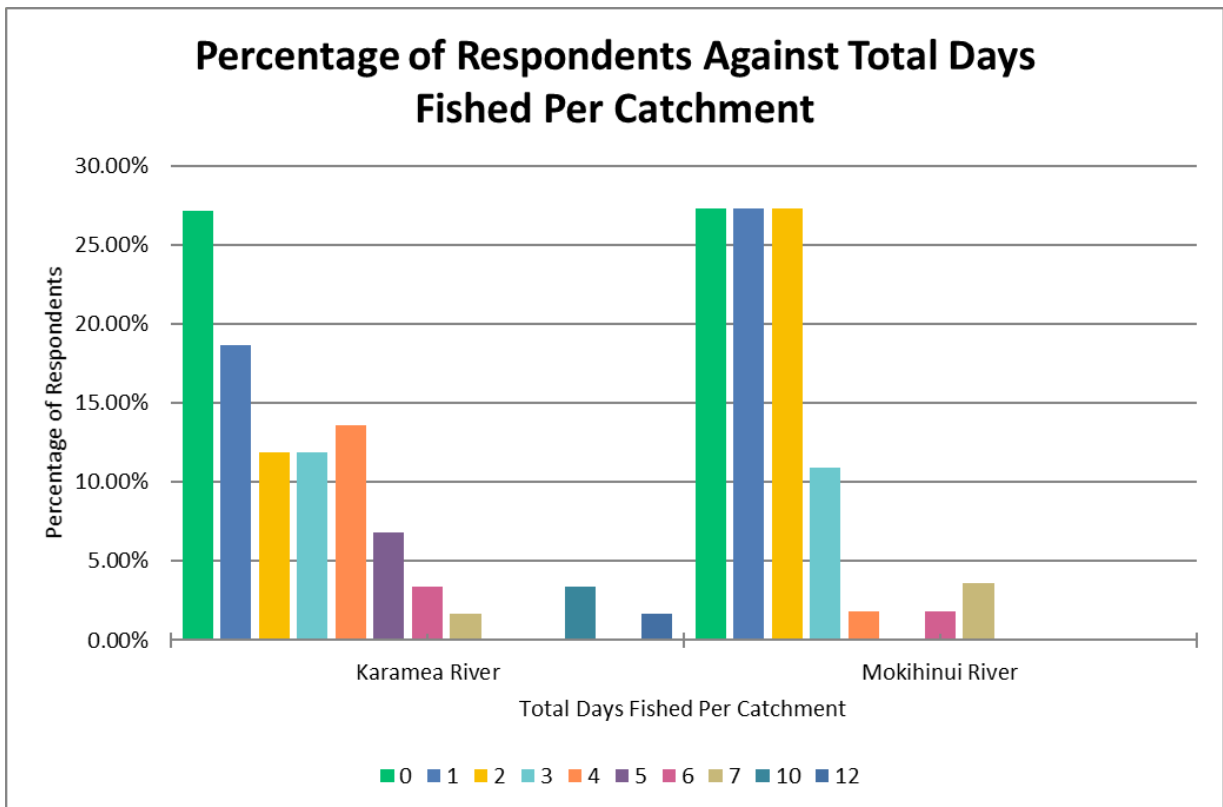


Figure 4: Distribution of Anglers vs Total Days Fished in Each West Coast Backcountry Catchment for the 2020/21 Season.

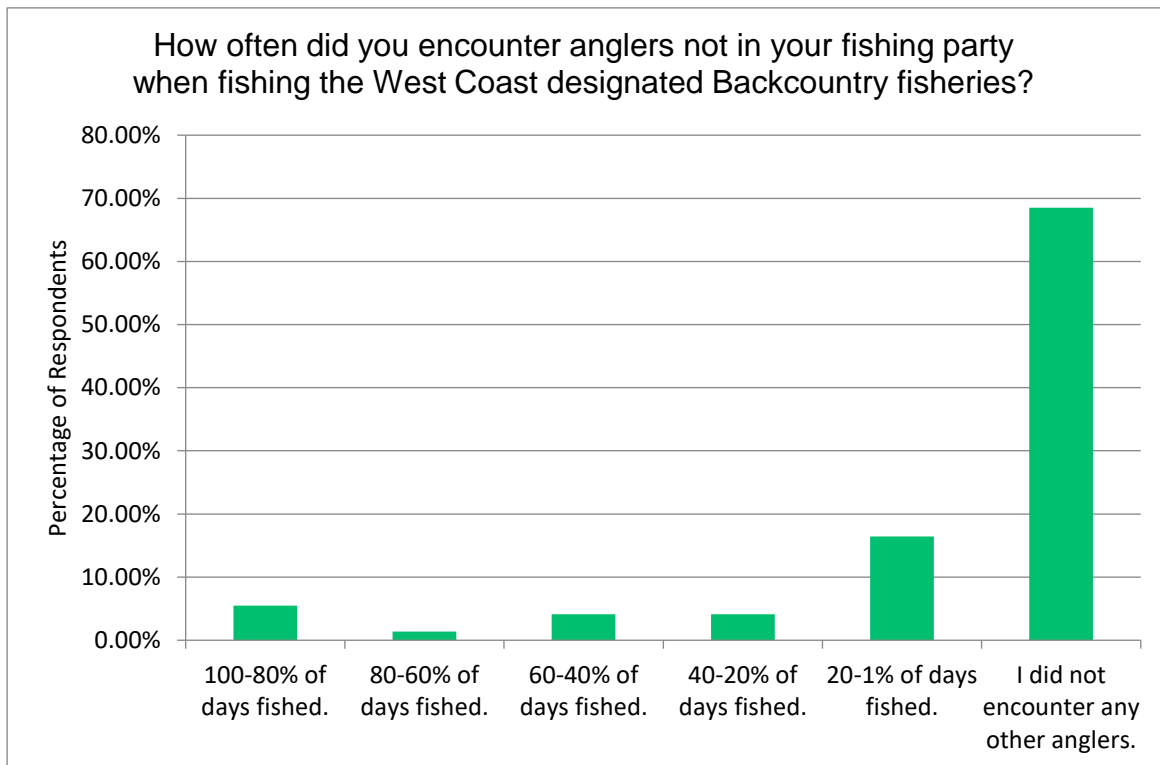


Figure 5: Frequency of Encountering Other Anglers in the West Coast Backcountry

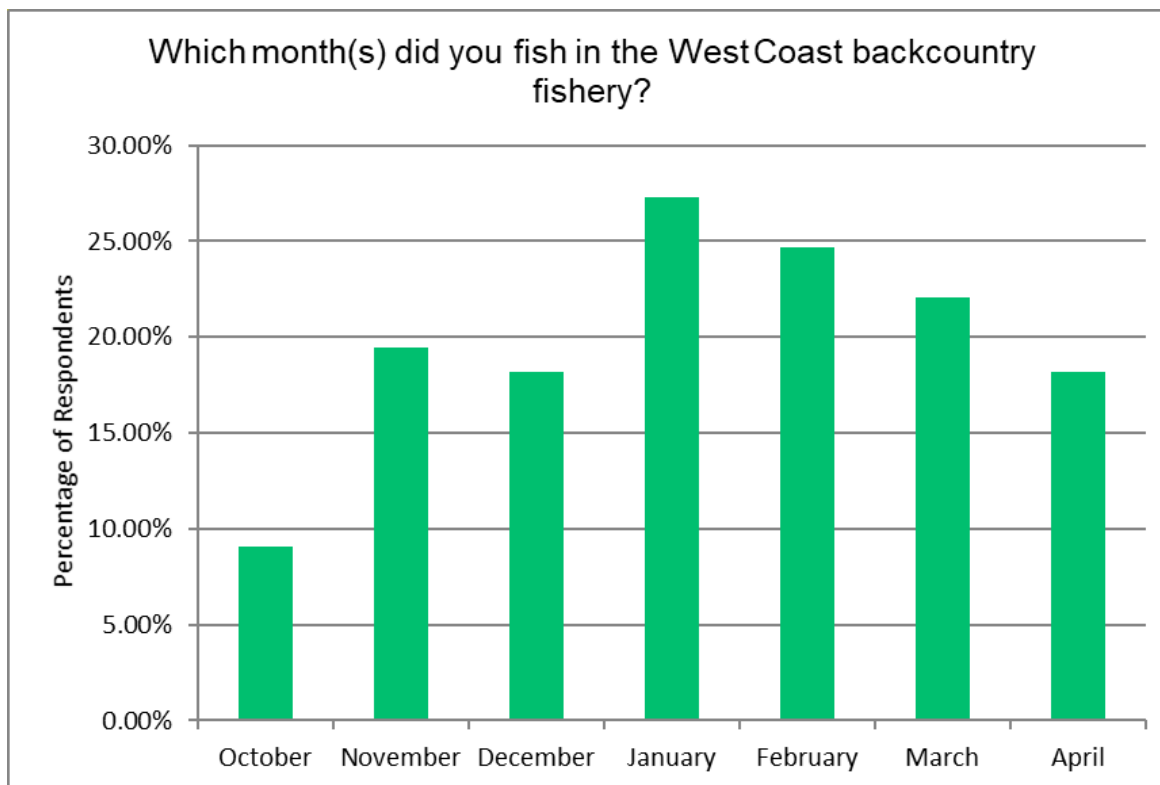


Figure 6: Angling pressure distribution throughout the season in the West Coast Backcountry. (Note some respondents have answered to more than one option).

Commercial Guides

During the survey respondents were asked if they were fishing guides. As shown in Figure 7 below, approximately 4% of those surveyed were fishing guides. Survey respondents were asked if they were guided into the Backcountry, please refer to Figure 8. The four that answered yes were resident anglers, being 5% of respondents.

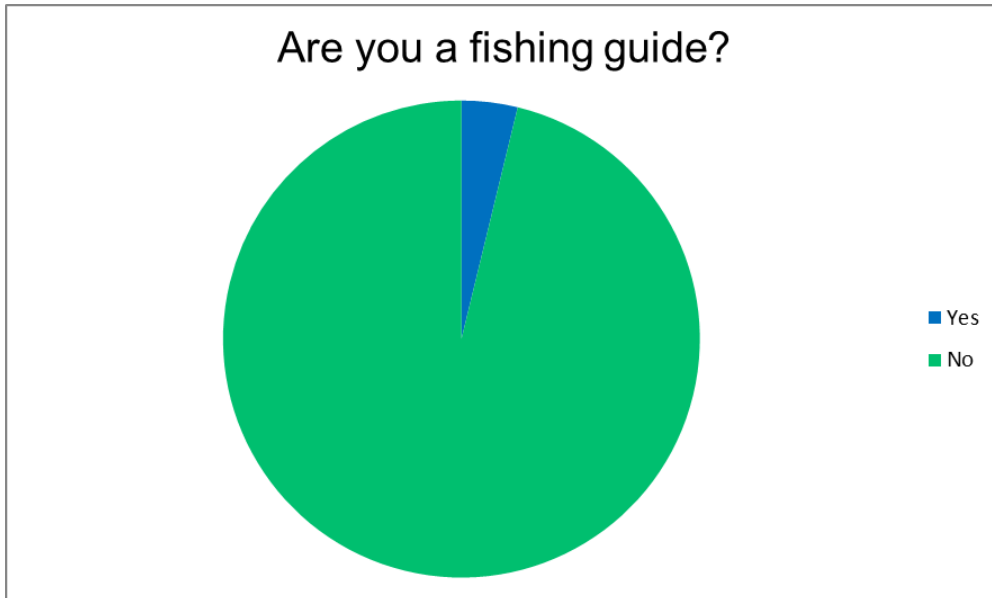


Figure 7: Percentage of Respondents That Fished in The West Coast Backcountry Fishery Area During the Survey Period That Are Fishing Guides.

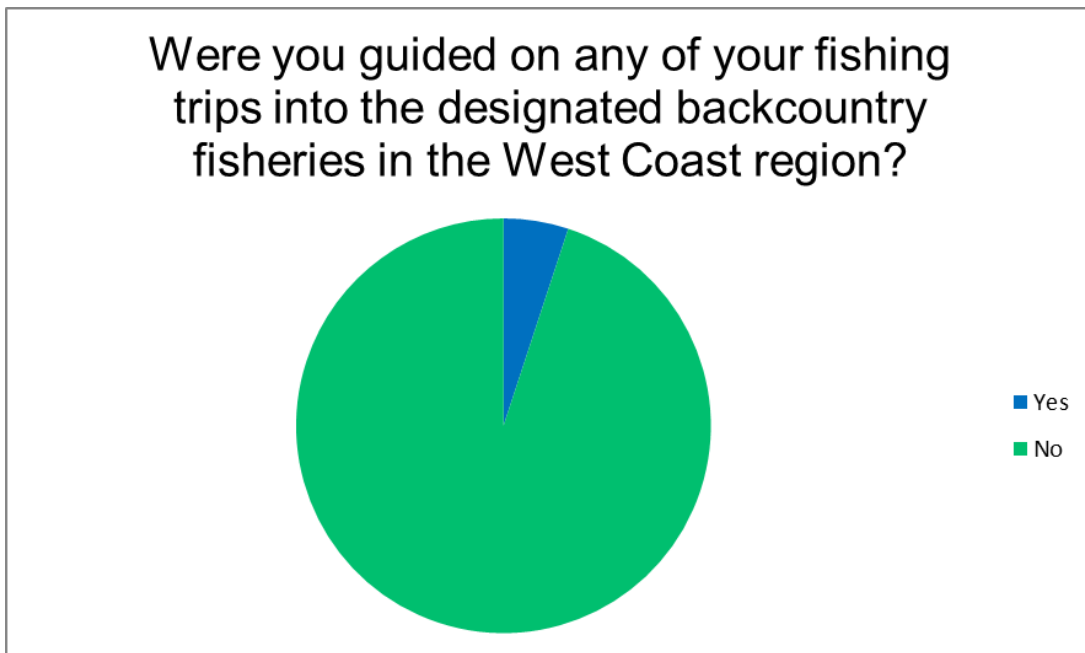


Figure 8: Percentage of respondents that fished in the West Coast Backcountry fishery area during the 2020-21 season that were guided.

Backcountry Access Methods

Anglers surveyed were asked if they used helicopters as a means of access to determine the level of helicopter usage. As shown in Figure 9 below, just over a quarter, 26.58% flew in. This is down from last year's portion of 45.31% and can't be contributed to the lack of non-residents as nearly 50% of resident angler respondents flew into the backcountry last season. In terms of helicopter use to each of the individual fisheries, as shown in Figure 10, nearly twice as many anglers used helicopters to access the Karamea catchment than the Mokihinui.

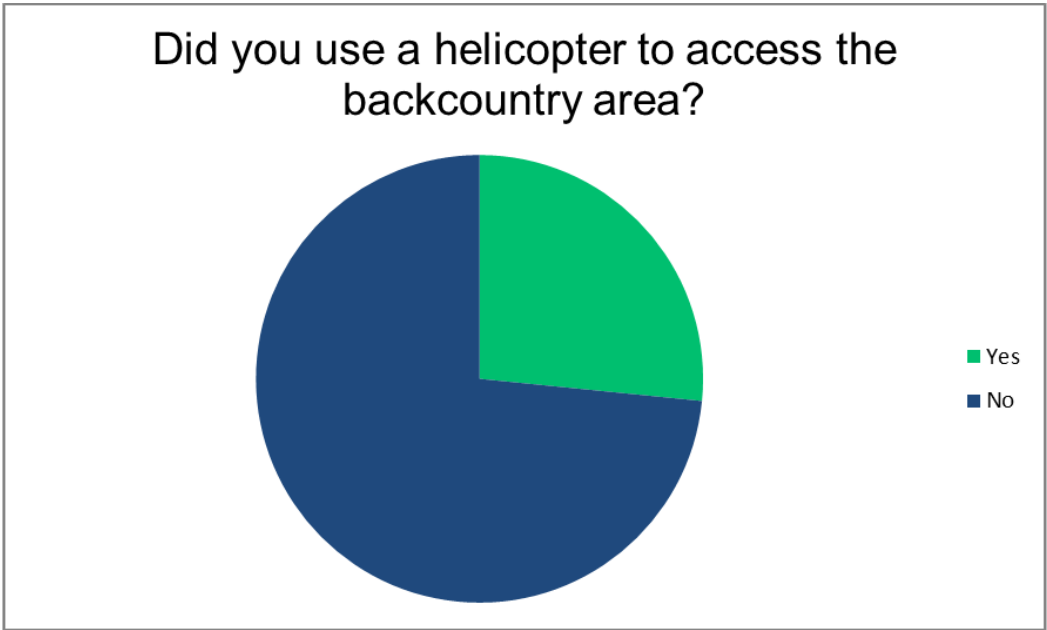


Figure 9: Percentage of Survey Respondents Accessing the West Coast Backcountry Fisheries Via Helicopter 2020/21 Season.

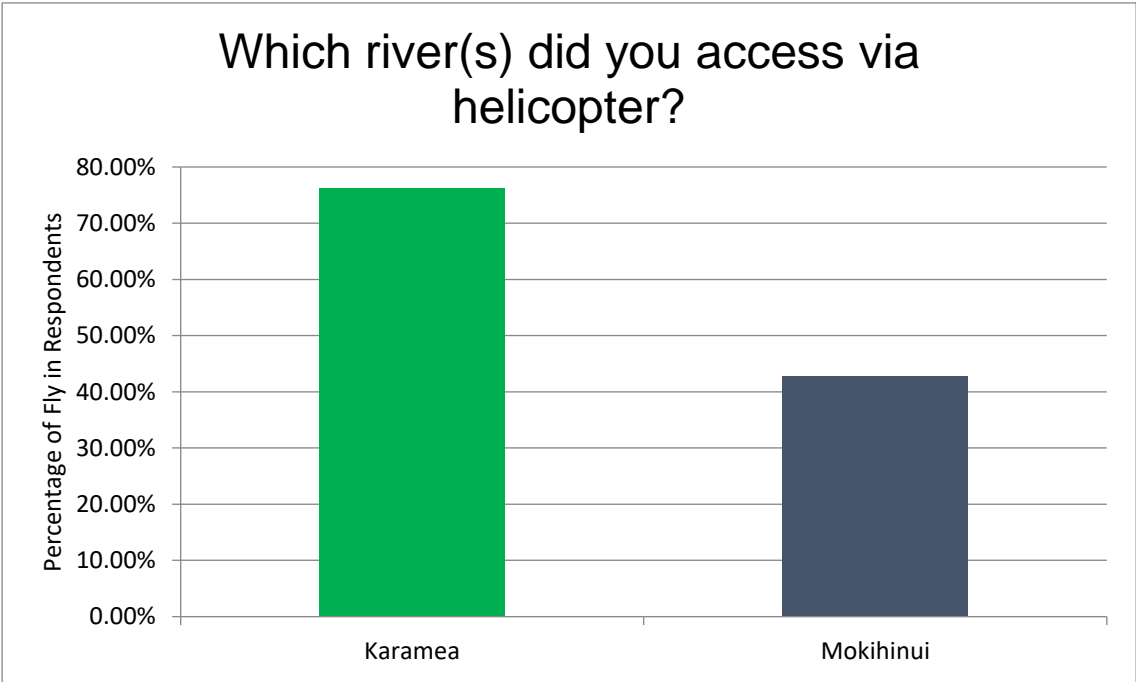


Figure 10: Percentage of Fly in Survey Respondents Accessing Each Catchment by Helicopter

Distribution of Usage Within and outside of the Kahurangi Wilderness Area

Respondents were asked if they fished within the Kahurangi Wilderness area. The majority of anglers from the survey, 70%, fished outside of the wilderness area.

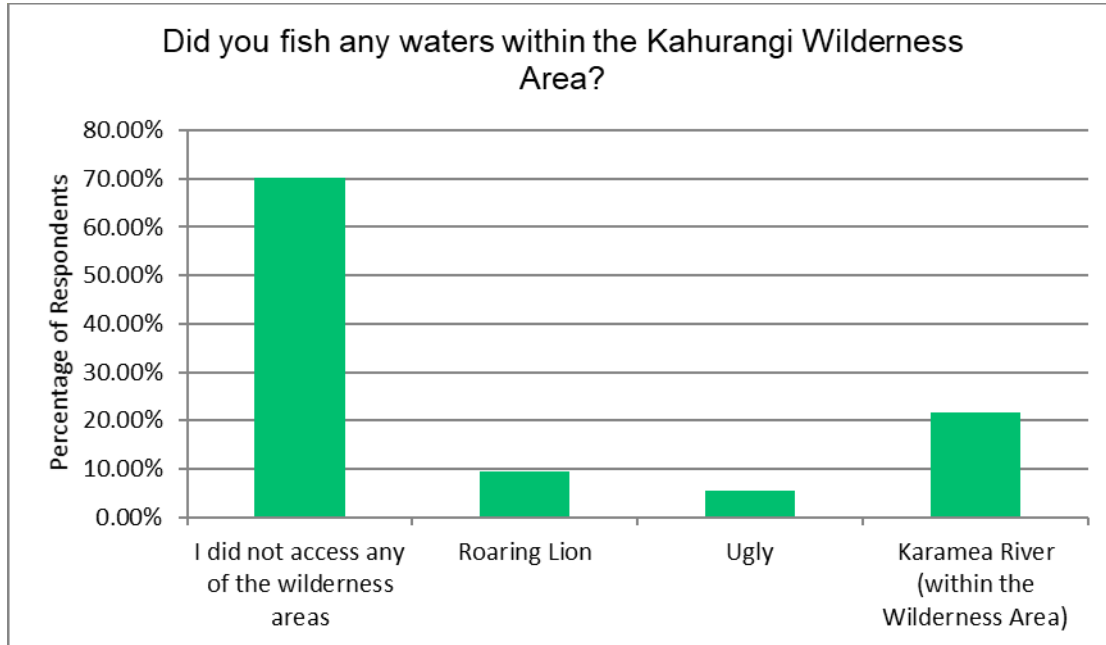


Figure 11: Angler Usage Within and Outside of The Kahurangi Wilderness Area. (Note some respondents have answered to more than one option)

Trout Caught/Kept

Results were gathered from anglers as to how many trout they caught in total from each of the Backcountry catchments, see Figure 12 below. Figure 13 shows how many trout were kept by anglers from each catchment. While a high number were caught from each catchment with some anglers catching 20+ fish, most anglers chose to release their trout. Over both catchments 80-90% of respondents kept no trout regardless of the number of days fishing.

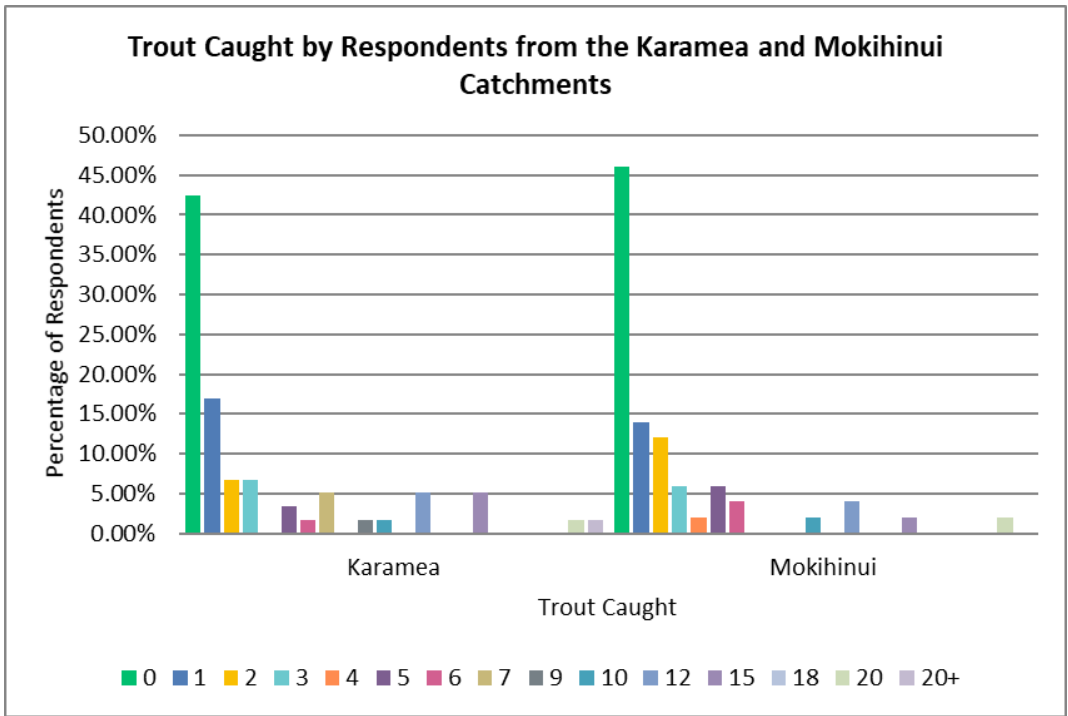


Figure 12: Total Trout Caught in West Coast Backcountry Fisheries by Respondents

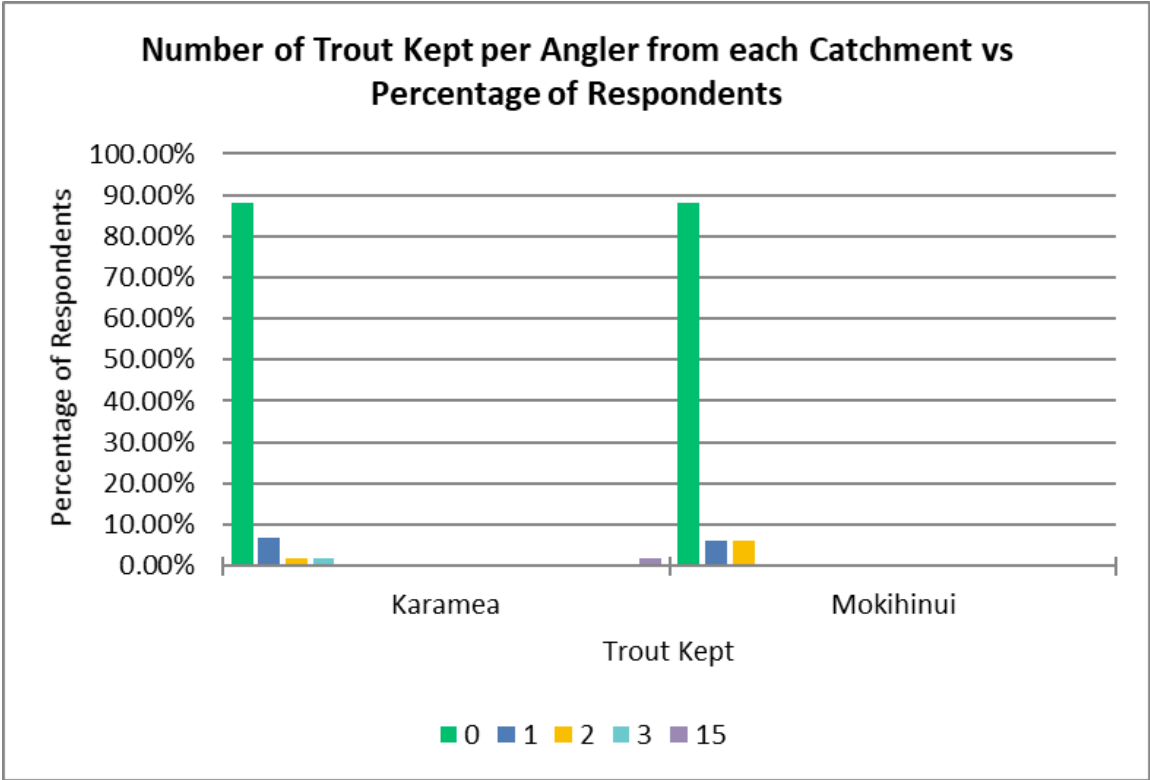


Figure 13: Total Trout Kept by Survey Respondents from Each West Coast Backcountry Catchment

Angler Satisfaction

Previous backcountry angler surveys have found that angler satisfaction is not simply a derivative of the number of trout caught, but a combination of the fishing experience, scenic environment, sense of remoteness, pristine environment, large trout seen and positive angler interactions. As part of the survey anglers were asked to rate their backcountry fishing experience on a scale of 1-5, with options for very satisfied, satisfied, neutral, dissatisfied and very dissatisfied, along with an option for not fishing that catchment.

Figure 14 below represents how anglers viewed their experience in each West Coast catchment during the 2020/21 season. Table two is the same data, but with the removal of the *I did not fish this river* proportion of participants and consists of also the data collected over the previous four seasons. To identify what may be impeding a positive backcountry experience, survey participants were asked *Which of the following most limited your satisfaction when fishing the West Coast backcountry fisheries?* For those anglers who choose other and specified, I have summarised their responses into six categories, please refer to Table 3 below.

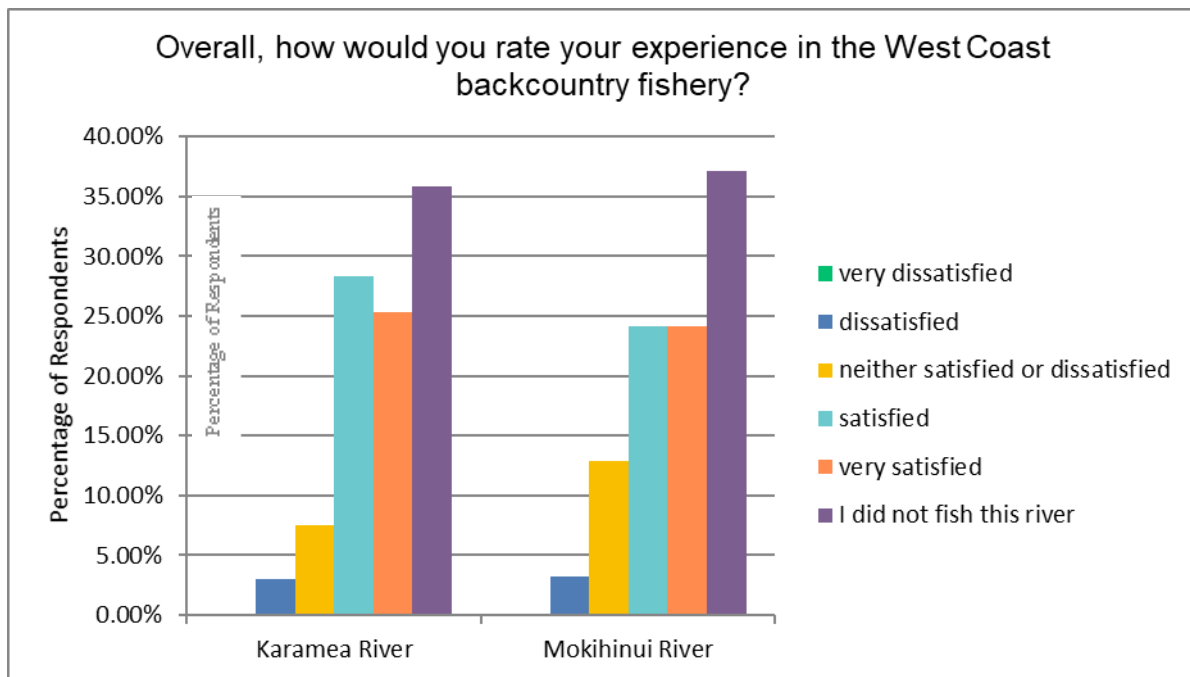


Figure 14: Angler satisfaction within the West Coast Region back country catchments 2020/21.

Table 2: Table of Angler Satisfaction Within the West Coast Region Backcountry Catchments over the last five seasons.

		Experience Rating - Percentage of Respondents		
		Very Dissatisfied / Dissatisfied	Neither Satisfied nor Dissatisfied	Satisfied/ Very Satisfied
Karamea River	2020-21	4.65%	11.63%	83.72%
	2019-20	4.29%	14.29%	81.42%
	2018-19	4.00%	9.05%	86.95%
	2017-18	14.40%	10.94%	74.66%
	2016-17	11.50%	16.95%	71.55%
Mokihinui River	2020-21	5.00%	20.00%	75.00%
	2019-20	9.84%	20.00%	70.49%
	2018-19	12.12%	9.10%	78.78%
	2017-18	22.60%	5.41%	71.99%
	2016-17	21.20%	15.30%	63.50%

Table 3: Table of what most limited angler satisfaction in the West Coast Backcountry fisheries.

Answer Choices	Responses 2020-21		Responses 2019-20		Responses 2018-19	
The size of the trout.	0.00%	0	4.67 %	5	6.06 %	4
The number of trout.	21.92%	16	18.10 %	19	10.61 %	7
How challenging the trout were to catch.	15.07%	11	6.67 %	7	21.21 %	14
Coming across other anglers.	8.22%	6	11.43 %	12	12.12 %	8
Coming across people not fishing - loss of wilderness experience.	0.00%	0	2.86 %	3	4.55 %	3
Weather conditions/river flows.	15.07%	11	16.19 %	17	21.21 %	14
Nothing limited satisfaction	27.40%	20	29.52 %	31		
Other (please specify)						
<i>Other - Nothing limited satisfaction</i>	5.48%	4	0.95 %	1	12.12 %	8
<i>Other - Hut/river crowding issues</i>	0.00%	0	2.86 %	3	4.55%	3
<i>Other - Wildlife complaints (insects/birds)</i>	4.11%	3	1.90 %	2	4.55%	3
<i>Other - Didymo</i>	1.37%	1	0.00%	0	1.52%	1
<i>Other- Helicopters</i>	0.00%		3.81%	4	1.52%	1
<i>Other- Everything</i>	1.37%	1	0.95%	1	1.52%	1
Total	100%	73	100%	105	100%	66

Pressure Sensitive Fisheries Drift Diving Results 2021

The following graphs and observations were obtained from the West Coast Drift Dive Report 2021 composed by G Newton 2021.

Mokihinui River: (South Branch site)

This season the dive at the Mokihinui South Branch on 3 February 2021 resulted in a count of 7 small/km, 4 medium/km and 41 large/km. Numbers of fish were about average and the number of large fish very similar to that recorded historically.

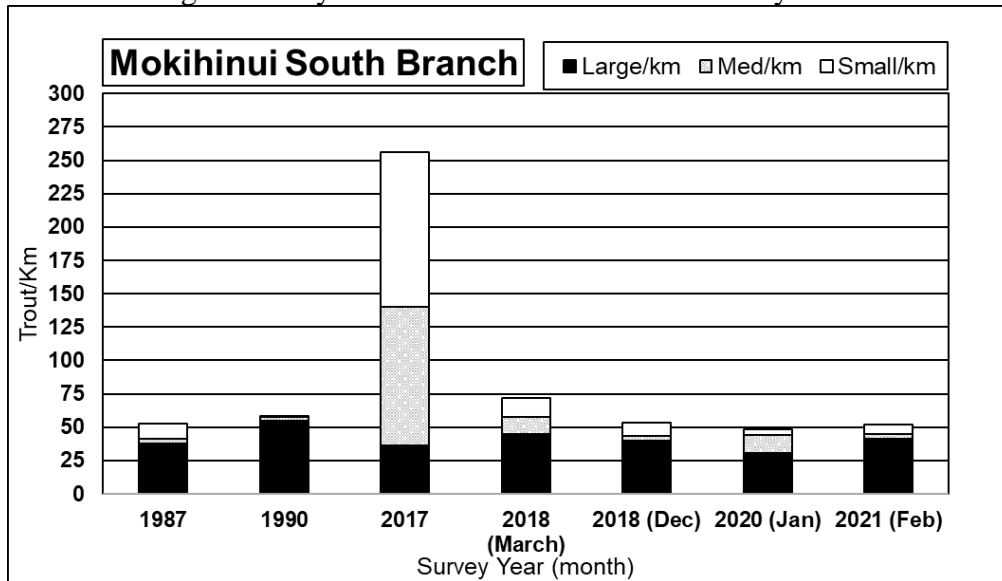


Fig 15. Number of Brown Trout recorded during drift dive surveys at the Mokihinui River, South Branch 1987 - 2021.

Mokihinui River (Below Gorge)

This season the dive at the Mokihinui North Branch site below the gorge on 3 February 2021 resulted in a count of 4 small/km, 8 medium/km, and 16 large/km. Numbers of fish were similar to the count done in December 2018 and marginally above last year's count.

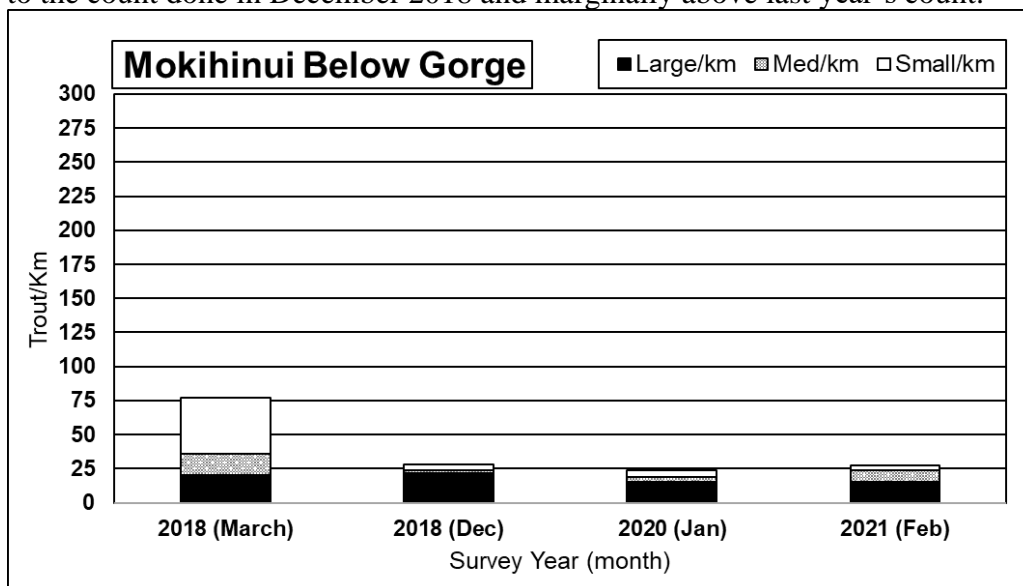


Fig 16. Number of Brown Trout recorded during drift dive surveys at the Mokihinui River, North Branch below gorge 2018 -2021.

Karamea River (Upstream of Crow)

This season the dive at the Karamea River upstream of the Crow on 19 February 2021 resulted in a count of 58 small/km, 24 medium/km, and 51 large/km. Numbers of fish were above last season and very similar to 2017, 2018 and 2019.

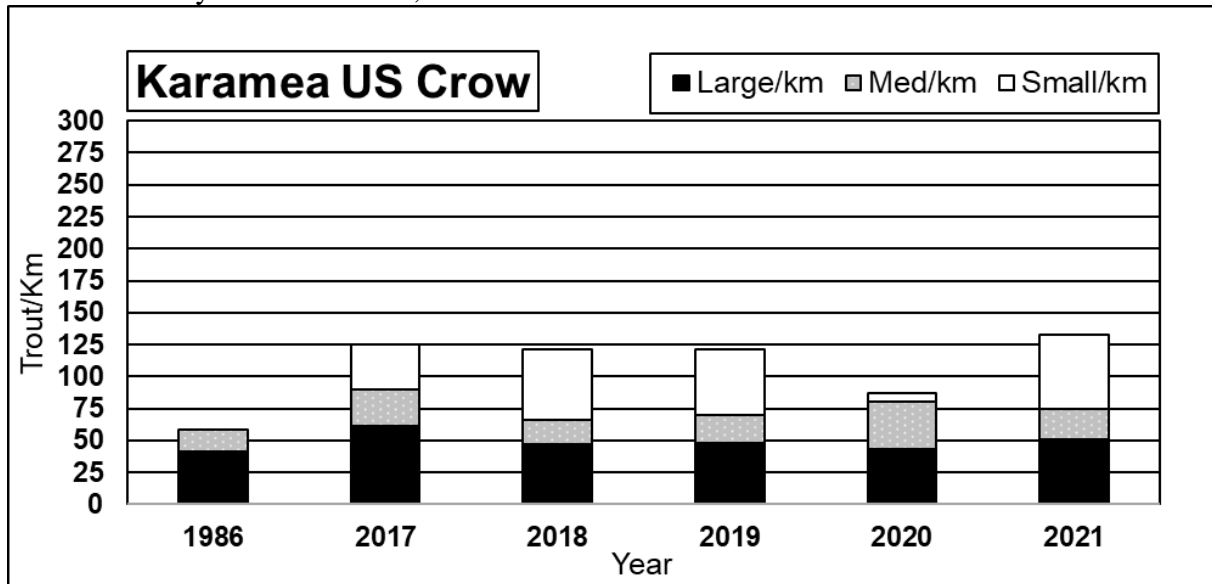


Fig 17. Number of Brown Trout recorded during drift dive surveys at the Karamea River, upstream of Crow 1986- 2021.

Karamea River (Downstream of Crow)

This season the dive at the Karamea River downstream of the Crow on 19 February 2021 resulted in a count of 13 small/km, 8 medium/km, and 30 large/km. Numbers of fish were remarkably similar to those recorded last season.

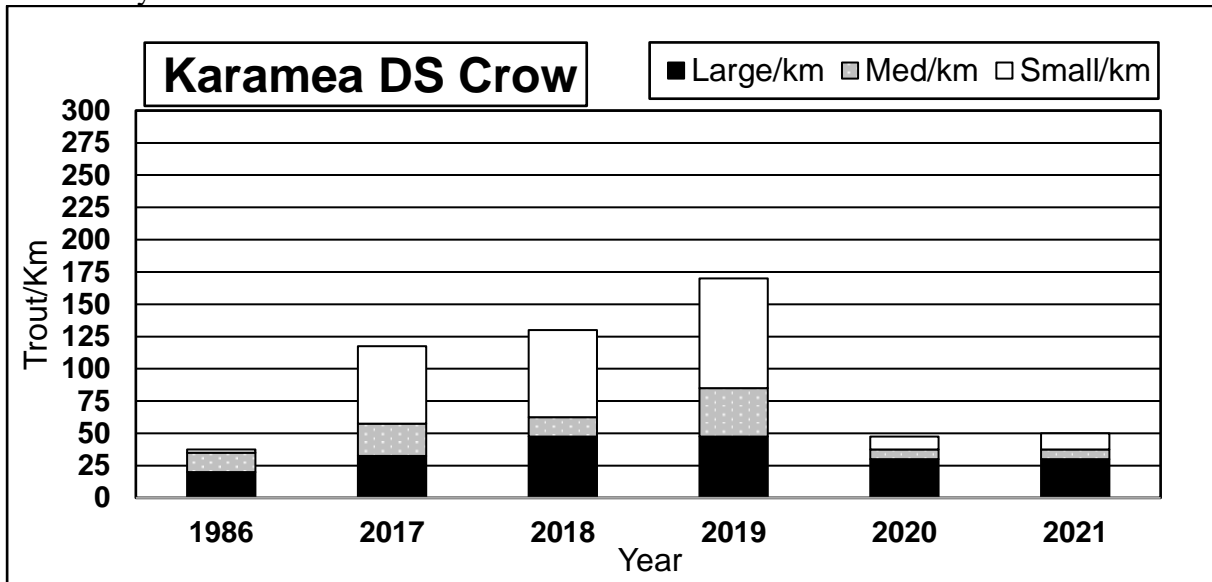


Fig 18. Number of Brown Trout recorded during drift dive surveys at the Karamea River, downstream of Crow 1986 - 2021.

Karamea River (Karamea Bend)

This season the dive at the Karamea Bend on 19 February 2021 resulted in a count of 9 small/km, 4 medium/km, and 23 large/km. This site has slowly declined in numbers, particularly large fish, since counts began although the last two seasons counts show an improvement.

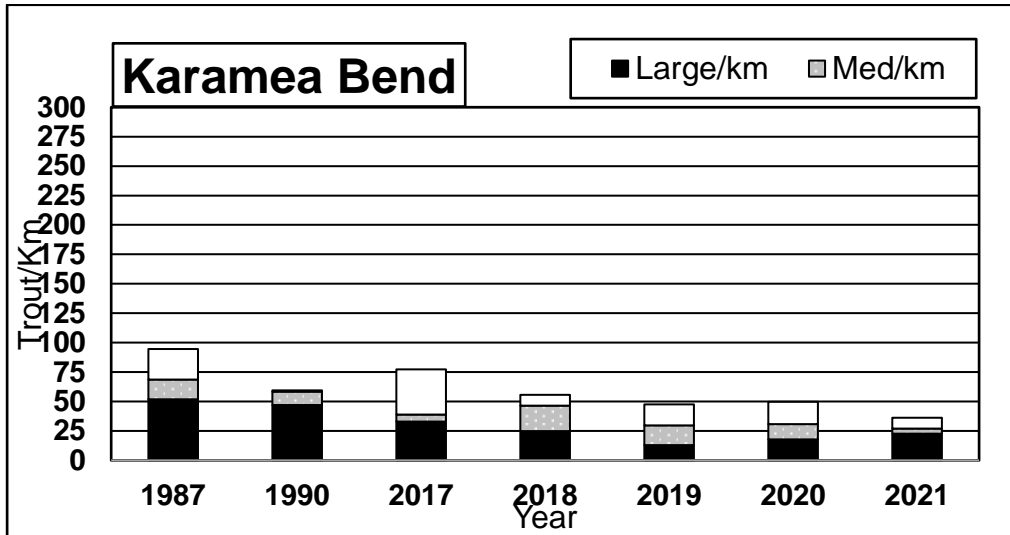


Fig 19. Number of Brown Trout recorded during drift dive surveys at the Karamea River, bend 1987 -2021.

Larry's Creek

This season the dive at Upper Larry's Creek on 14 January 2021 resulted in a count of 22 small/km, 6 medium/km, and 8 large/km. Numbers of small fish were above average while numbers of large fish were below average.

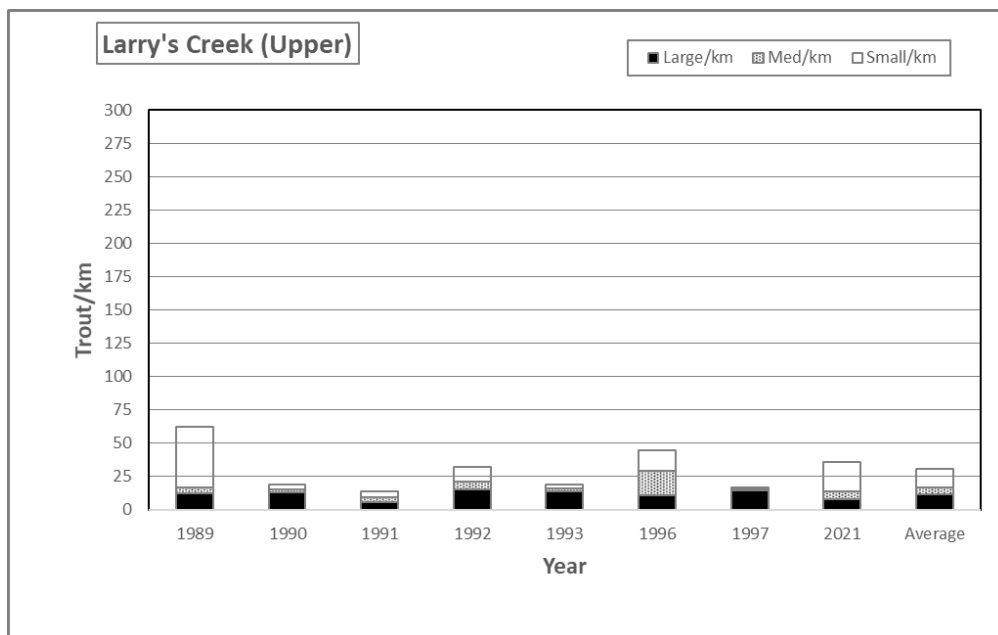


Fig 20. Number of Brown Trout recorded during drift dive surveys at the Upper Larry's Creek site 1989 - 2021.

Waitahu River (Gannons Bridge)

This season the dive at the Waitahu River on 14 January 2021 resulted in a count of 9 small/km, 1 medium/km, and 9 large/km. Numbers of small and medium fish were well below average although the number of large fish were above average.

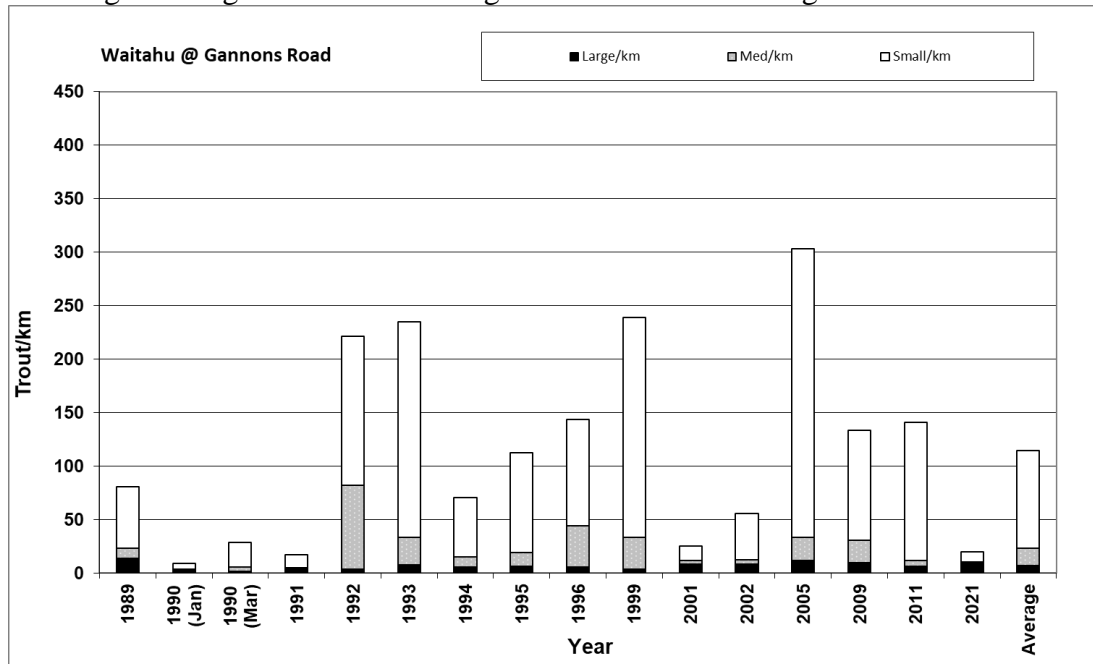


Fig 21. Number of Brown Trout recorded during drift dive surveys at the Upper Larry's Creek site 1989 - 2021.

Grey River (Hospital Flat)

This season the dive at Hospital Flat on 2 December 2020 resulted in a count of 4 small trout/km, 8 medium trout/km and 13 large trout/km. Number of fish were below average and compared to last season there was a decline in the number of large fish.

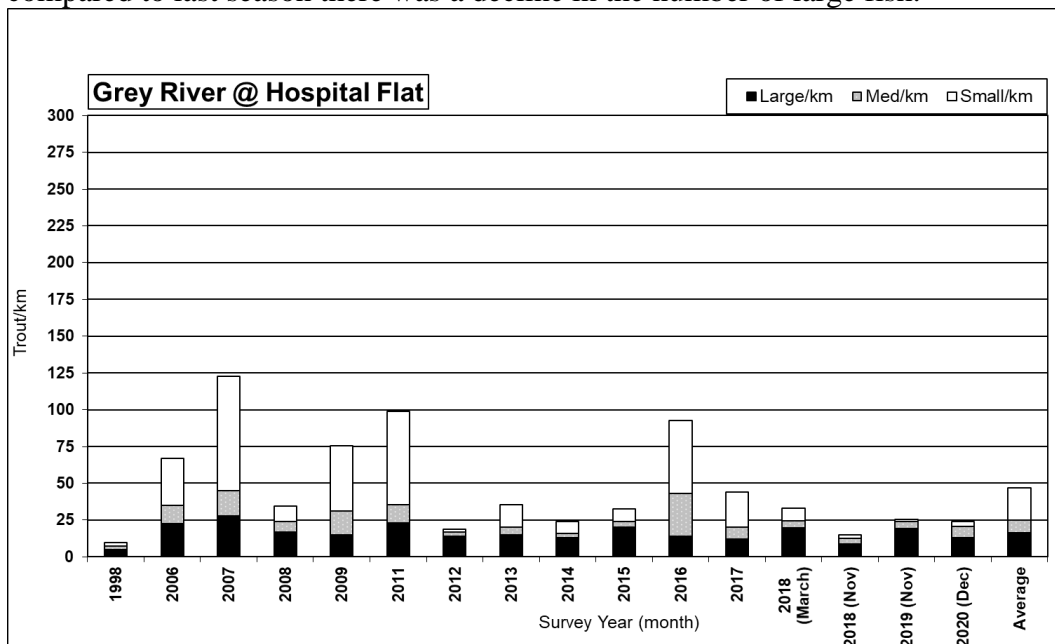


Fig 22. Number of Brown Trout recorded during drift dive surveys at the Upper Grey River, Hospital Flat 1991-2020.

Drift Diving Summary

Karamea/Mokihinui

Dives completed upstream of the Crow River confluence in the Karamea River resulted in higher numbers of trout than observed in 2020, particularly smaller fish showing successful recruitment occurred. Numbers downstream of the Crow confluence appear stable although down on the 2017-19 period. Further downstream at the Karamea Bend, trout numbers appear to have stabilised following a period of slow decline at this site, particularly larger fish.

The dive completed in the South Branch of the Mokihinui was up on last season returning to average levels, particularly for larger fish. The dive was completed in the North Branch site for just the fourth time, results were much like last year.

Overall, there appears to be little evidence to suggest perceived high angler usage is impacting on trout numbers within the designated backcountry fisheries. While there is fluctuation across the sites and by year most sites still have similar trout numbers to those observed when they were first dived 1986-87. Continued diving in these fisheries may eventually show trends but a fish catchability study similar to that undertaken by Young and Hayes (2004) may give a better indication of perceived changes in the fishery.

Larry's/Waitahu

This season sites historically dived in the Larry's and Waitahu catchments were monitored in response to high angler use identified and quantified by trail camera monitoring (Baylee Kersten pers. comm). These sites are readily accessible and have much higher occupancy rates compared to the Karamea/Mokihinui BC Fisheries and should continue to be dived for a minimum of three years to gain a better understand of fish numbers comparative to historic levels.

Upper Grey River

The number of large fish observed at Hospital Flat in the Upper Grey River has declined following the 2019 beech mast event. This is in contrast to the Inangahua count and could potentially be linked the site being more heavily utilised by anglers in the last two seasons post beech mast. Monitoring in the Upper Grey Catchment this season has shown continued steady occupancy by anglers even in the absence of Non-residents.

Trail Camera Surveillance Results 2021

Trail cameras were installed and serviced fortnightly in conjunction with compliance in the Reefton area. Cameras were installed during October on Larry’s Creek, the Waitahu River, and the upper Grey River. Three cameras overlooked attractive pools where anglers were likely to fish increasing the likelihood of getting captured on camera. The upper Grey’s camera was set up to capture anglers’ vehicles parked at the angler access sign at Hospital Flat.

Table 4: Results of Trail Camera Surveillance on the Reefton Rivers

	Number of days anglers/Vehicle observed	Days Captured	Percentage of the season captured (%)	Occupancy percentage (%)
Upper Larry Creek	37	142	66.98	26.06
Mid Reaches Larry Creek	31	151	71.23	20.53
Waitahu River	13	176	83.02	7.39
Upper Grey River	50	163	76.89	30.67

Angling pressure favoured the early season on Larry Creek, with early to mid-season being very popular. Following the first 12 weeks (late October – early January) the Upper Larry’s Creek site was at 40% occupancy and from then on occupancy reduced bringing down the average. This may also be influenced by weather as there was frequent poor weather in March and April, likely reducing anglers’ motivation. The Waitahu and Upper Grey were relatively consistent through the season with only a slight spike in the summer.

All 24 anglers checked at Larry’s Creek, Waitahu and the Upper Grey River this season were compliant. From informal discussions with anglers during compliance checks it became clear that many anglers were motivated to fish the area due to the border restrictions reducing non-resident angling pressure. As much as the data does not capture the role that non-resident anglers play on these fisheries, there appears to have been an increase in resident angler usage this season which likely replaced some of the missing non-resident angling pressure. No other themes were identified from compliance this season, although most anglers were happy and crowding issues were never raised.

Discussion

This year survey was a fantastic opportunity to see how an absence of non-resident anglers and guiding influenced the angling experience in the West Coast Backcountry Fisheries. The absence of non-resident anglers appears to have motivated resident anglers, with an estimated increase of resident anglers from last year by 29%. Despite the increase of resident anglers, the net effect was an estimated 35% reduction in angling pressure this season in the West Coast Backcountry Fisheries.

Given the change in the survey pool, with non-resident anglers having very little representation as well as resident anglers who wouldn't typically fish the West Coast Backcountry being surveyed, results of previous surveys could border on not being comparable. Although this aside it appears there was no significant changes in the results. A survey carried out by the South Island regions; the *2021 NZ Backcountry Rivers Satisfaction Survey*, had 41% of anglers report an increase of satisfaction on the previous year's fishing in backcountry fisheries. The West Coast didn't follow this trend being similar to the previous two years when it came to angler satisfaction. Likely a result of already elevated satisfaction levels, already low encounter rates, and environmental variables playing a larger role in fishing experiences than in other regions.

Looking at the responses for average nights stayed and total days fished, most anglers tended to stay and fish between one and four days, with very few staying longer than six days. This is similar to previous years. Although there was a drop in day trips, likely due to just under half as many anglers utilising helicopters. This was likely furthermore reduced by a lack of guiding in the catchments, where it is not uncommon for fly in guided day trips to occur.

The drop in helicopter utilisation and the increase in resident usage is likely the result of those who are not willing to pay for a helicopter deciding that the fishing justifies the walk or bike in with the reduced angling pressure we are currently experiencing. Highlighting the importance of angler perception of our remote backcountry fisheries and their utilisation despite their typically being low angling pressure anyway. This was confirmed by the *2021 NZ Backcountry Rivers Satisfaction Survey* and comments left during the *West Coast Backcountry Survey*.

Angler satisfaction was similar to the last two years. Although not significant, there was a slight improvement on last year in all areas and there was a reduction in dissatisfaction compared to the 2018/19 survey results. Non-resident anglers are typically more easily satisfied than the lofty standards residents hold. Furthermore, expectations likely further increase for non-helicopter anglers if there is a great physical demand to reach the fishery such as the case with our backcountry fisheries. Therefore, it was pleasing to see that there wasn't a reduction in satisfaction despite the likely high expectations, indicating the fisheries are in good shape. Although when asked what limited satisfaction the number of and how challenging the trout were to catch saw an increase on previous years. This is likely due to unrealistic expectations of these additional motivated resident anglers who potentially may not have the skills to catch large brown trout in clear water.

The trail camera surveillance was very insightful again this year when it comes to angling pressure. Furthermore, it provided the opportunity to carry out observations on angling behaviour. Such as, it was positive to see that very few anglers were identified fishing the same beat in subsequent days, an issue that was raised last season. What also came as a surprise from the upper Grey River trail camera was the common occurrence of anglers fishing for two hours or less, despite the lengthy travel to reach the access point.

The cameras did also raise some concerns when it came to angling pressure and angling experiences, with crowding appearing to be an issue at times. This was captured especially well by the camera on the mid reaches of Larry's Creek. One weekend saw four angling parties fish the same beat. To further expand on that weekend, the parties were between one and four anglers resulting in a total of eight anglers fishing that one beat. Although this severity of crowding was a one-off occurrence, which was just bad luck/timing for the anglers involved, it likely wasn't a positive experience for those involved.

The upper Larry's Creek camera was positioned 1.5 km upstream from the car park, so was a significant distance upstream. The Waitahu camera was also very remote being above the swing bridge, approximately 6 km upstream if not using a 4WD. After seeing the frequency of anglers fishing the upper Grey River beat for short periods, it's likely the start of these beats were occupied significantly more than the anglers captured.

Lastly the upper Grey River camera occupancy is much higher than the other cameras but doesn't mean angling pressure is higher. The number recorded is the days the access point was occupied, but there is likely to be usage from other recreational parties such as rafters. Furthermore, vehicles were park there for multiple days (believed to be rafters), greatly increasing occupancy. It was hoped that data would be collected on anglers captured fishing vs occupancy of access point, but unfortunately the camera position at Larry's Creek top access point, despite being well hidden went missing on its first set.

With continued positivity coming from the West Coast Backcountry fisheries consideration should be given to whether it is considered necessary to have them as backcountry fisheries. The data being collected during the lack of non-resident anglers is valuable, but this data has also been collected by other regions where significant issues have been identified and that data likely provides more insight. Furthermore, as shown by the increase in resident usage, anglers are likely hesitant to travel into the Mokihinui and Karamea if they believe they are crowded. West Coast Fish & Game reinforces the idea there is an issue by having them classed as backcountry fisheries. This likely deflects anglers to more accessible locations, that potentially are under significant pressure when our backcountry fisheries if anything appear to be underutilised.

As for the Reefton area, the data from the cameras suggests that the area is receiving significant pressure and for short periods appears to be crowding currently. There is currently no management system available in New Zealand that I believe will improve the fisheries but instead likely will only draw unwanted attention to them. Current pressure from resident anglers was substantial given the rear opportunity of believed reduced angling pressure, but outside of a beech mast year I believe the pressure this year is likely similar to what is experienced with non-resident anglers present. With still some uncertainty of the future of non-resident anglers and still unknowns about the Reefton fisheries, monitoring without intervention should continue for the next year or two to make a more informed management decision.

Staff Recommendations

- That council receives this report.
- That the council reviews the need to have the Mokihinui and Karamea rivers classified as backcountry fisheries.
- That monitoring work continues in the Reefton area.

References

Newton, G. (2021). Drift Diving Results 2021.

Trotter, H. (2021). 2021 NZ Backcountry Rivers Satisfaction Survey. Unpublished data.

Unwin, M.J. (2016). Angler usage of New Zealand lake and river fisheries: results from the 2014/15 National Angling Survey.

Appendices

Appendix 1: Questions Asked During Backcountry Angler Survey 2020/21

Q1: During the 2020/21 fishing season did you fish a backcountry designated fishery within the West Coast region? That is: the Karamea or the Mokihinui river catchments (including tributaries)

Q2: Are you a New Zealand resident? That is: you hold a NZ birth certificate or passport or citizenship, or you hold a permanent resident visa

Q3: Which Fish and Game Region do you hold your fishing licence with? (If unsure, please select the region where you live)

Q4: Are you a fishing guide?

Q5: Were you guided on any of your fishing trips into the designated backcountry fisheries in the West Coast region?

Q6: Did you use a helicopter to access the backcountry area?

Q7: Which river(s) did you access via helicopter?

Q8: How many trips (visits) did you do into the West Coast backcountry fishery during the 2020/21 season?

Q9: Please enter the total number of days you fished in Karamea or the Mokihinui River and/or its tributaries.

Q10: Which month(s) did you fish in the West Coast backcountry fishery?

Q11: Did you fish any waters within the Kahurangi Wilderness Area? if so, which rivers? This link gives you access to the wilderness area map.<http://www.doc.govt.nz/Documents/about-doc/role/policies-and-plans/kahurangi-map3.pdf>

Q12: What was your average length of overnight stay in the West Coast backcountry fishing area? (if only one visit please enter the number of nights you stayed)

Q13: In total for the season, approximately how many fish did you land from each designated backcountry fishery you fished?

Q14: In total for the season, approximately how many fish did you keep from each designated backcountry fishing area?

Q15: How often did you encounter anglers not in your fishing party when fishing the West Coast designated Backcountry fisheries?

Q16: Overall, how would you rate your experience in the West Coast backcountry fishery?

Feedback

Q17: Which of the following most limited your satisfaction when fishing the West Coast backcountry fisheries?

Q18: Have you got any further comments you would like to make on your backcountry fishing experience?

Appendix 2: All Angler Feedback/Comments from West Coast Backcountry Survey 2020/21 Season:

While not the most successful trip for fish landed, enough large fish were seen and often spooked. The area creates a real incentive to improve my fishing to be more successful on the next walk in.
Thank you COVID. How wonderful to fish our iconic rivers with no overseas anglers and guides displacing me. I never normally fish the Karamea or Mokihinui precisely because too many overseas anglers and guides flog the shit out of them.
no
No
The fishing in the area of the Cambelltown hut in the wanganui river is not worth fishing.
No
What a beautiful part of the world. Let's continue to look after and protect it!
The remoteness made the effort and expense worthwhile
The Crow hut looked like a helicopter fishing hut. If I was fishing seriously and walked in, it would be pretty disappointing to find heli fishers there. Need something for everyone including no-fly areas.
A very good few days after walking in from Flora. Not seeing other anglers enhanced the experience. Perhaps help DoC to reduce the seriously bad wasp population? I would hope the nature of the fishery stays as it was this season without heavy influx of anglers particularly via helicopter in seasons to come when borders open. I believe chopper free angling zones should seriously be considered to help reduce future pressure.
good river to fish.
No
Heli free days / weekends would be great
Also, a limited amount of days foreigners can fish the backcountry. It was finally a great season again, without too much traffic and guides
Enjoyed the solitude, peace and quiet.
No
I only fished on my exit from riding the ghost rd. One hour of pleasure on day 3 fishing the Mokohinui. I know where to go next time.
Stern river appears to have didymo
No
Low fish numbers in the Crow river was disappointing
I caught my biggest fish yet. What a fantastic place to go.
The fish the I caught & released were in reasonably good fighting condition and when feeding weren't to hard to hook up on... but on that not no oversea tourist had been on the rivers either. So made life a little easier....
Beautiful, stunning, unforgettable fishing experience.
Good work guys and girls! Pretty good all around experience.
No
Great trip, clear and low water but very few fish in the Karamea, and none we could sight (or catch) up the Crow. The four in our party are experienced anglers but only caught a total of three medium fish in the Karamea over the two days and none in the Crow after a full days fishing on the third day.
Best 10 days alone I've had.
It's definitely one of best places to fish in New Zealand .
tight lines 🤝
The only reason we fished this river is that due to the lockdown we had a chance to get in without being jumped by guides and overseas anglers. Wouldn't bother in an ordinary year.
Nil

Feedback

Great fun
No
Didn't miss the non resident anglers and their lack of cultural understanding
We should be creating more wilderness areas, guide free areas and helicopter free areas. Non NZ citizens should be charged more for fishing licenses
Karamea, Leslie and Crow were fished on this trip. Crow was fished for 2 consecutive days from Crow Hut by other fishermen prior to us, who had helicoptered in. That created a difficult and demanding experience for us, after a long walk from Flora. This is a big amazing river catchment. Fish numbers were good but difficult to catch.