NELSON MARLBOROUGH
FISH & GAME

ANNUAL FISHERIES REPORT 2023-24

TITLE PAGE

SUMMARY OF THE SEASON

Nau mai, welcome to the 2023-24 Annual Fisheries Report for the Nelson Marlborough Fish & Game region.

It was a year of remarkable stability across the region, with few flood events of note and, as such, many of our regional trout fisheries prospered. Our Fish & Game team have been active throughout the season monitoring sportsfish, including plenty of drift dives, electric fishing surveys and spawning counts - you can read about this fieldwork in the following pages. Considerable effort was spent monitoring native fish - an important area for Fish & Game to be involved in, and some interesting findings were noted from our work here.

The big talking point going into the new season was the introduction of the Designated Waters Licence system, which was introduced to help better manage angler experience on our key pressure-sensitive fisheries. This went reasonably smoothly in terms of how it operated, however it is still too early to gauge its effectiveness at this point. Feedback from some anglers said it worked well on larger multi-day (walk/camp) fisheries, however we still need to look at how effective it has been on smaller, or more accessible, fisheries. The Wangapeka River was recommended to be added into the DW framework for the 2024-25 season by our Fish & Game Council, however this was not approved by the Minister of Hunting and Fishing.

Our R3 (recruitment, Retention and Re-activation) efforts continue, and there is plenty more to be done in this space, including trying to build our base of female anglers. The Waimea Park fishing facility has emerged as a real success story, and within a couple of years has become one of our top fisheries in terms of angler use days, this due to its proximity to an urban area and regular fish releases which lead to a high catch rate. Lake Argyle continues to perform well and attract high angler use as it has done for a number of years since our release programme began and is in fact now our most popular trout fishery.

Our region is getting increasing involved in social licence projects, and it has been great getting buy in from anglers and hunters giving their time for ecological reasons or to help others. Going forward, this is an important area for Fish & Game to be actively involved in, ensuring there is effective media used alongside social licence initiatives to showcase our efforts.

On the RMA front, considerable time and expense has been spent on the Marlborough Environment Plan, mostly advocating for better minimum flow levels. You can read about this and all the other important RMA work in Tasman on page 36.

It has been great to see our local trout fishing clubs prosper and get involved in plenty of interesting events and projects. These clubs are bucking the trend and thriving at a time when many others are fading and social media ‘clubs’ are prevalent.

Finally, thanks again to our hard working Fish & Game Councillors who are striving for the best outcomes for our fishing and hunting resource and our organisation.

Ngā manaakitanga, your Fish & Game team.

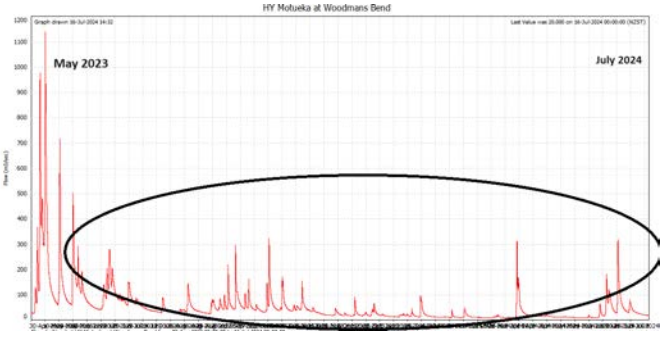
SPECIES MONITORING

A significant proportion of our fieldwork programme is directed towards species monitoring. The primary goal is monitoring the trout population and habitat health, which aligns with our National Fish & Game Organisational Strategy key objective of 'Healthy Species, Habitats, and Ecosystems'. Around 30 rivers per annum are drift-dived in this region along with winter spawning foot counts and electric fishing monitoring.

MOTUEKA CATCHMENT

The Motueka River had an outstanding year in terms of the number of trout in the system and the fishing it provided anglers.

The Motueka River experienced one of the most stable 12-month periods for quite some time, and the stability of the Wangapeka River over the past five years has been one of the key drivers for the high trout population in the Motueka. For the 12 months following mid-May 2023, nil significant flood events occurred with the biggest flood events being minor in nature at around 300 cumecs - see graph below. In addition, regular summer freshes occurred at key times.

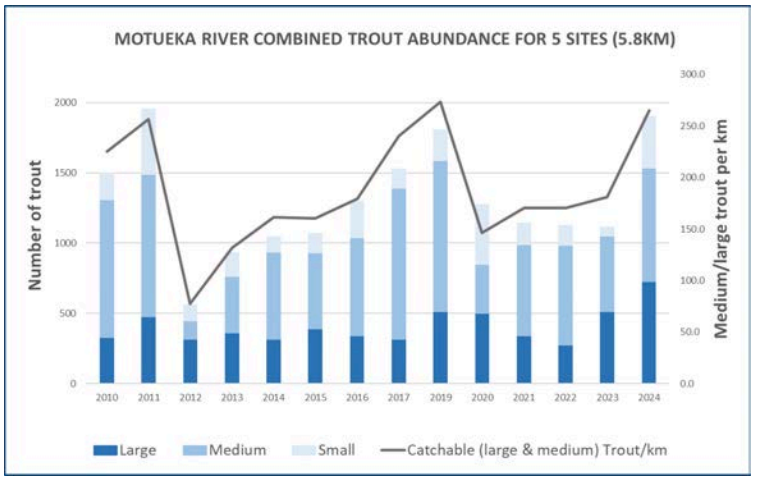


^ The Motueka had one of the most stable 12-month periods in many years.

^ Weesang Paaka with a late season cracker. Photo: Jacob Lucas

As a result, the trout fishery prospered and trout were in great condition at the start of the season so that by the end of the season, fish were in prime condition for spawning. Even through the 2023 winter while the Motueka ran at summer low flow levels, excellent fishing could be had on sunny days with great mayfly hatches and trout feeding off the top. Interestingly, in addition to the trout fishery being in great shape, the Motueka River experienced a phenomenal whitebait run during October 2023, possibly also linked to the stable flows.

The main-stem Motueka was dived over five sites in mid-February during low, warm flows (see Appendix for site specific dive results). It can be seen from the combined graph below that there was a significant increase in fish across all size cohorts which closely mirrors the 2019 peak when the Motueka was last in very good shape - see graph below. Numbers of large-medium 'catchable' fish jumped considerably to 265 fish per/km from 181 the previous year.



^ The 'Mot' had high numbers of fish in all cohorts.

The stability clearly saw good survivability of juvenile fish, and towards the end of the season anglers were reporting an abundance of 'young of the year' fish in the system below the Wangapeka confluence, as they began their life in larger waters from where they were born.

Of course, what really matters is the fishing, and feedback came in thick and fast from delighted anglers who were having a ball right through the season. Once you learn how to fish the Motueka, the fishing becomes easy and anyone wanting to learn more are encouraged to join the Nelson Trout Fishing Club, who hold great mentor days on the Motueka through the season.

WANGAPEKA RIVER

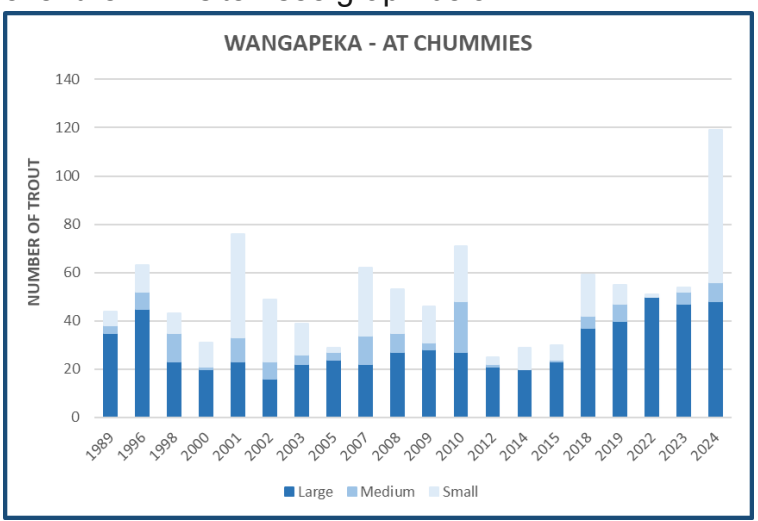
It was pretty much a repeat of the year before on the Wangapeka - it was again one of the best fisheries in the region and this showed in our drift dive data. This river has had an uncanny period of stability owing to the influence of the La Nina period where very few westerly rain events impacted the river.

The majority of 2024 was in a neutral zone between La Nina and El Nino and did not bring any significant flood events. Forecasts predict we are possibly flipping back to a period of La Nina which is dominated by Northerly rain events that have less impact on this catchment (though does have more of an effect on the Motupiko and Upper Motueka).

Anglers, of course, have cottoned onto the excellent state of this fishery, and it was again a busy season on this river, with plenty of attention from resident and non-resident anglers alike - you can read more about this on page 30.

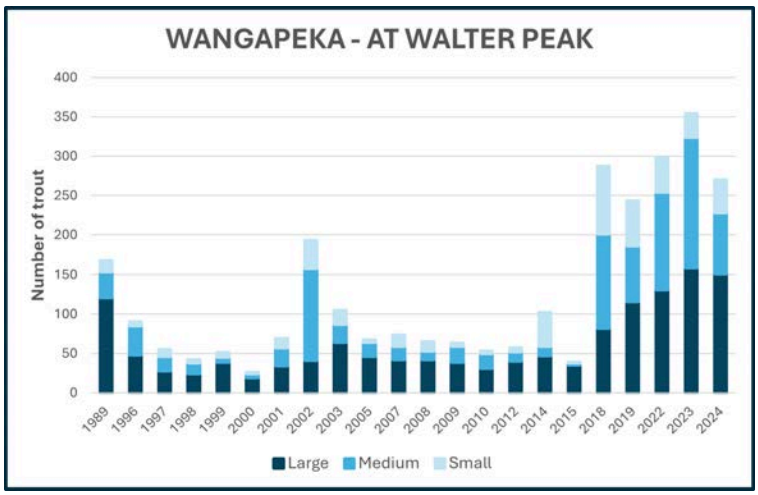
^ *Shona Kelly with a lower Wangapeka brown trout.*

The Wangapeka was dived in early January at Chummies Pool (mid-upper) and Walter Peak (lower). Unsurprisingly, counts at both sites were again outstanding. At Chummies Creek, the count of large fish were similar to previous years, however there was a record count of juvenile fish - 62 'smalls' over the 1km site - see graph below.



This is big fish territory and we usually do not see high numbers of this cohort here, but it is an indication of the state of the fishery and the benefit of a successful recruitment year.

The lower site at Walter Peak was again excellent, and really rivals the main-stem Motueka in terms of fish numbers. 151 large, 77 medium and 42 small fish were in counted over this 1km dive - see graph below.



^ *Wangapeka drift dive results at Walter Peak*

The upper site had lots of algae present, including some didymo, and appeared to have temporarily switched from mayfly to caddisfly domination.

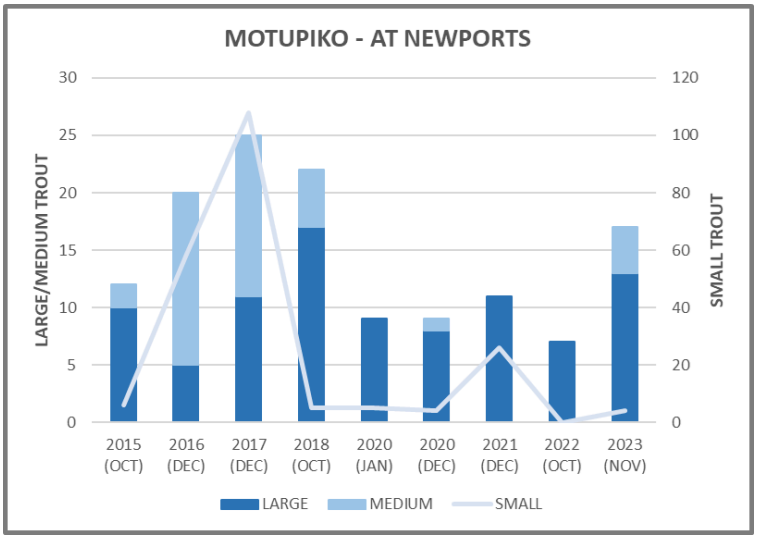
A pod of trout estimated to be in the thousands was observed at the Motueka/Wangapeka confluence in the first days of June. These fish were waiting for a rain event to kick start the spawning run which arrived a week later. When the site was visited later all the fish had gone, presumably up the Upper Motueka/Motupiko. Some of these fish were subsequently observed moving upstream in groups in the lower Motupiko. Large pods of fish were also seen in the mid Motueka during April/May, which bodes well for a successful year of recruitment.

< *Wangapeka drift dive results at Chummies*

MOTUPIKO

The Motupiko trout fishery recovered slightly from a record-low count from the season before. This river has experienced some major flood events recently, including two 50-year floods in consecutive years, which hammered the trout fishery.

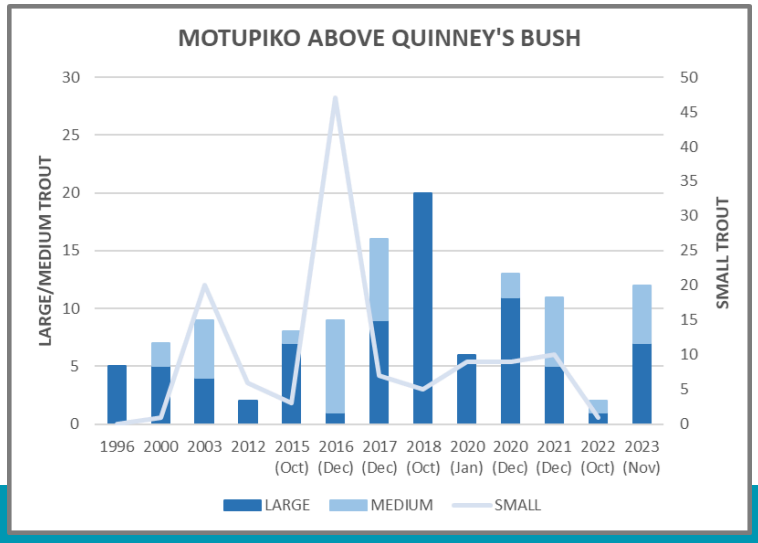
The Motupiko was dived in late November at Newport's (middle) and Quinney's Bush (lower). At Newport's, a respectable count of 13 large, 4 medium and 4 small fish was observed. As the Motupiko is on the pathway of a major spawning run, this fishery bounces back fairly quickly as can be seen in this result, and, given another year of reasonable stability, should start to return some good fishing.



^ Motupiko at Newports

At the much less stable and more modified site above Quinney's Bush, 7 large and 5 medium fish were counted - see graph below. 134 Young of the Year fry (not graphed) were seen on this dive, indicating some possible late spawning within the main-stem. Interestingly, most of the fish were found making use of layered willow for protection.

v Motupiko at Quinney's Bush



Good numbers of dwarf galaxiid fry were also found in backwaters, indicating some recently flow stability which benefits native fish and trout recruitment.

MOTUPIKO SPAWNING COUNT

Foot counts were completed in mid-June on the lower-mid Motupiko. The need for a survey in this reach was twofold; a) because TDC river engineers wanted to undertake river stabilisation works within this part of the river during the spawning window when these activities are generally not permitted; and b) to quantify the amount of main-stem spawning in this lower reach based on observations of young of the year fry during the November drift dive.

The surveyed reach was approximately 16.6 km in length from the Motueka River confluence at Kohatu to above the end of the Y-rated river section, approximately 4.1km upstream of Korere Bridge. The survey was undertaken on June 11th 2024 using three Fish & Game staff and one volunteer. Sixteen trout spawning egg nests (redds), and 150 adult brown trout were observed within the surveyed section. Following significant additional rain/high flows, a follow up check within a bottom section of the survey site on 27/6/24 revealed no new redds and confirmed earlier staff observations that most of the 150 fish encountered during the first survey period were actually trying to move further up the system before they were likely to spawn – the additional rainfall/high flow event had obviously facilitated this.

Based on our current trout spawning record information, the Motupiko River is considered to be the most important Y-rated spawning catchment for the internationally recognised Motueka River trout fishery, protected by the Motueka Water Conservation Order (WCO) as a nationally outstanding brown trout fishery. Trout spawning and rearing within the Motupiko River is a major contributor to the Motueka River brown trout fishery, and the river is listed in schedule 3 of the WCO and is protected for trout spawning from May-October. The lower river unfortunately suffers from low summer flows and high instream temperatures, exacerbated in our view by an inadequate low flow management regime over summer water abstraction, leading to the death of significant numbers of juvenile trout and native fish species every few years when drought conditions affect the region.

MOTUPIKO SPAWNING COUNT CONTINUED....

This is an issue we are hoping to see addressed through the upcoming renewal of the Tasman Resource management plan. We have previously also held significant concern over past river management practices for flood control within this catchment, but it is pleasing to report we are now finding common ground with Tasman River Services Engineering Department, and Taylors contracting. During this survey it was noted that efforts over the last 5 years to address channel maintenance more proactively, while using a wider range of flood erosion control techniques, are now starting to yield a more stable channel alignment while at the same time providing aquatic habitat improvements. Several examples of this are depicted below:

^ *Recently constructed spur groynes with layered willow near water line to assist with summer thermal mitigation of rockwork through both shading and improving instream channel diversity. Photo: Jacob Lucas*

^ *Excellent use of buried in-situ willow material during past erosion repair works – a live willow bank at waterline now exists to stabilise bank area between rock groynes and provide overhead shading for the pool habitat created by rock groyne placement. In addition, fish cover and a terrestrial insect source for aquatic life has also been created. Photo: Rhys barrier*

For the 2024 spawning season the average brown trout redd density for the Motupiko River from around 2 km below Korere bridge down the Motueka confluence did not trigger major concerns for FG over this year's instream winter works activities, however we recommended the results of this survey be incorporated into Council's next year's river works scheduling process. Based on this year's survey information, it would be preferable to avoid any instream works activity upstream of this zone from May-October (as designated within the Motueka Water Conservation Order) each year given the uptick in spawning activity recorded above this location.

We have appreciated the regular contact we receive from Taylors contracting regarding these instream works and if works next year within the Motupiko are again scheduled for beyond June 1st from 2km below Korere bridge downstream, may undertake another spawning count within this important system to ensure this year's observations remain consistent. Once trout redd density starts to climb beyond 2 redds per kilometre, our concerns around the potential cumulative impact of instream works on annual trout recruitment also start to increase.

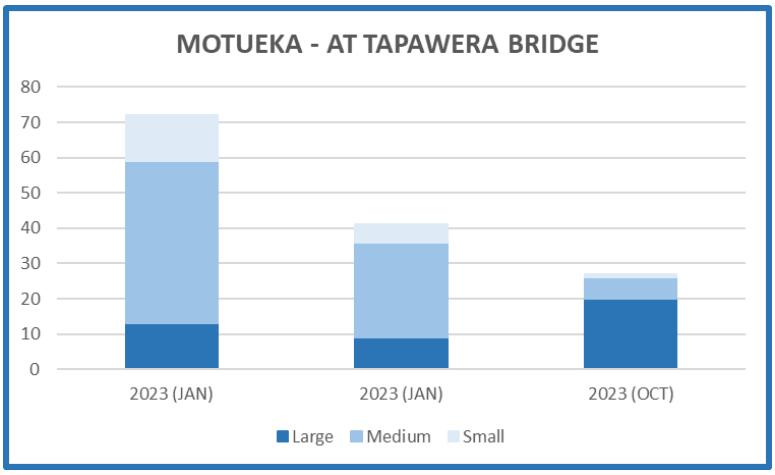
TADMOR SPAWNING COUNT

The first surveyed reach was approximately 10 km in length from the Tadmor-Motueka River confluence up to the Bush end Road bridge across the Tadmor River. This reach was surveyed on June 12th 2024 using 2 Fish & Game staff and one volunteer. Only two trout spawning egg nests (Redds), and 6 adult brown trout were observed within the surveyed section, possibly due to the lower river often running dry during drought years. No migratory pods of fish were observed making their way further upstream up into the Tadmor headwaters, unlike observations within the Motupiko this year.

^ *Tadmor trout redd*

UPPER MOTUEKA

The Upper Motueka at Tapawera was dived in late October - earlier than previously done. 20 large, 6 medium and 1 small were observed over the 1km dive - see graph below. There had been a 6-year return flood in this part of the river that had modified the channel from when it was dived the year before.



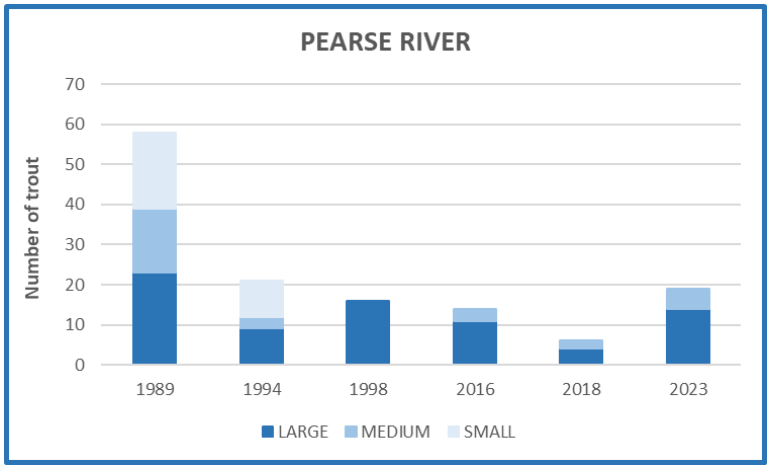
^ *Results from the Upper Motueka drift dive*

This is a new dive site that has been brought in to collect data on this part of the river in order to inform on water allocation matters. It was interesting to observe how fish behaviour was affected by water temperature in the period between both January 2023 dives, with most fish moving from the pools into very fast, more oxygenated ripples as the water heated up.

PEARSE

The Pearse River was dived in early November, with 14 large, 5 mediums and zero small fish seen - see graph below. It was noted that a few of the fish had obvious line/handling marks.

As this was dived early in the season when water temperatures were still low, it would have been interesting to see what the result would have been in January or February when the main-stem Motueka was warm, a time when the Pearse is a common destination for fish seeking thermal refuge in its cooler water temperatures. Our mainstem Motueka dive site, which flows past the Pearse confluence, showed a record count of 216 large fish over the 1km site along with 198 mediums and 68 smalls - probably the best result at this site since monitoring here began. Of note was the fish size and condition, which was excellent through this main-stem dive site.



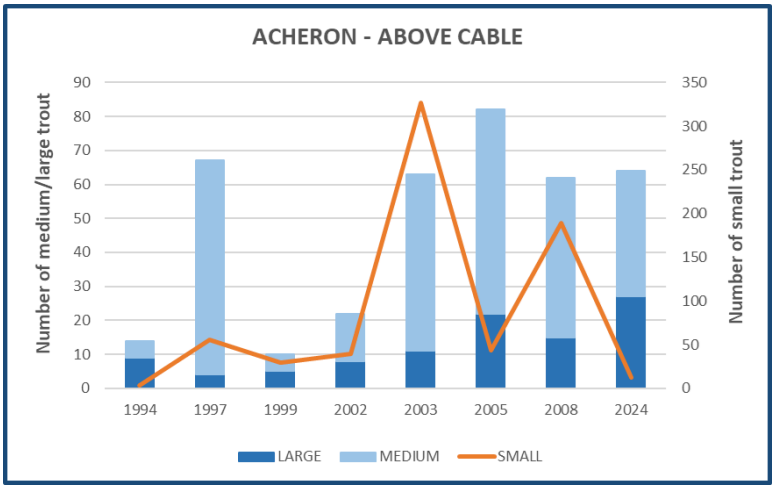
^ *Pearse River drift dive result.*

v Pearse River drift dive. Photo: Jacob Lucas

MOLESWORTH

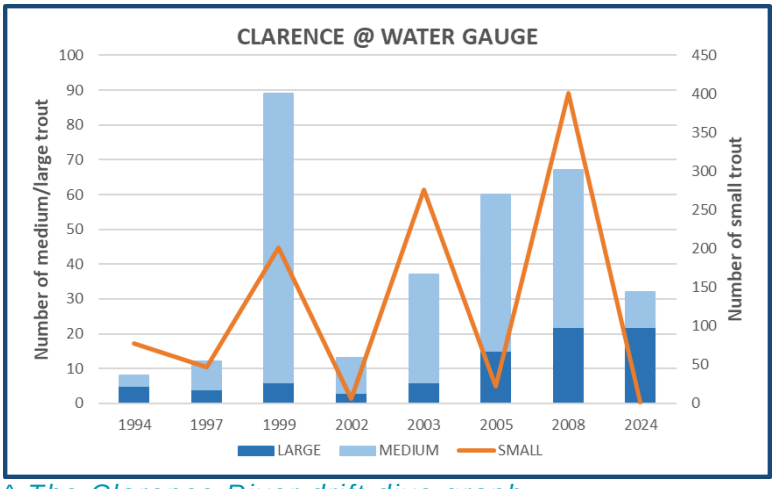
2008 was the last time any Molesworth Rivers had been dived, this was despite more recent attempts that were aborted due to water clarity issues.

The Acheron and Clarence rivers were dived in mid-March when the river flow was very low at both sites. The graph below shows the trout population to be in fairly similar state than previous dives, with the exception of small fish which were low in numbers.



^ *The Acheron drift dive graph*

In the Clarence River, the number of small fish was very low compared to some years when they are abundant - see graph below. This may be due to the time of year, as previous dives when small fish numbers were high had been completed in January, or possibly due to the very low flows observed in the 2024 dive. Numbers of mediums were also low, which again may be attributed to a later dive and/or low flows, or major flood events in the past year.



^ *The Clarence River drift dive graph*

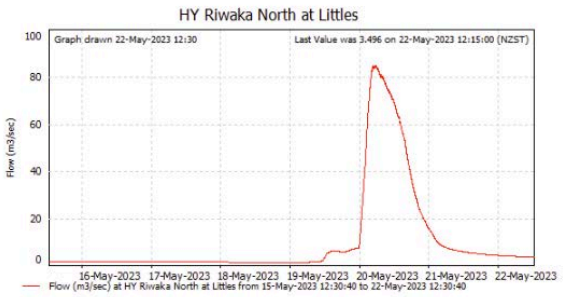
Molesworth Station is a highly valued angling destination and has a diverse range of fisheries. From small rivers to high country tarns, the fishing is always fairly reliable due to the stability of the streams and rivers and good health of the waterways. Here are a few shots from the 2024 season:

^ *Makea Paaka with a couple of great fish caught on his own on the fly rod, watched by his father Weesang and budding angler Griff Lucas. Photo: Jacob Lucas.*

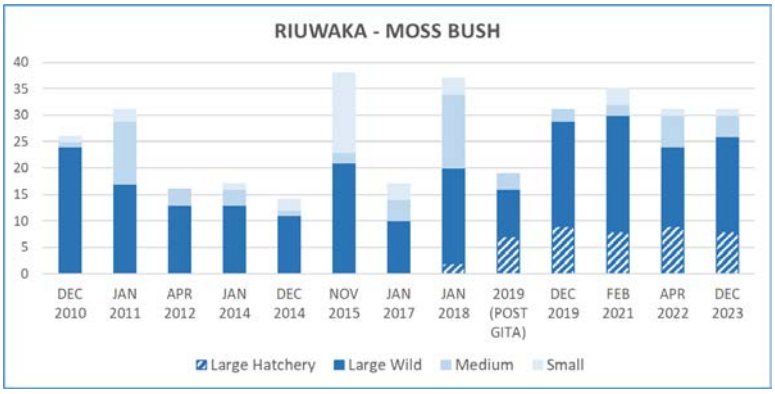
^ *A stunning fish from a Molesworth river. Photo: Jacob Lucas*

RIUWAKA RIVER

The Riuwaka River was dived in mid-December at three sites. At the upper site below the confluence of the North and South Branch (Moss Bush), the significant May flood event had created more pools and improved the habitat in this reach - see flow graph.

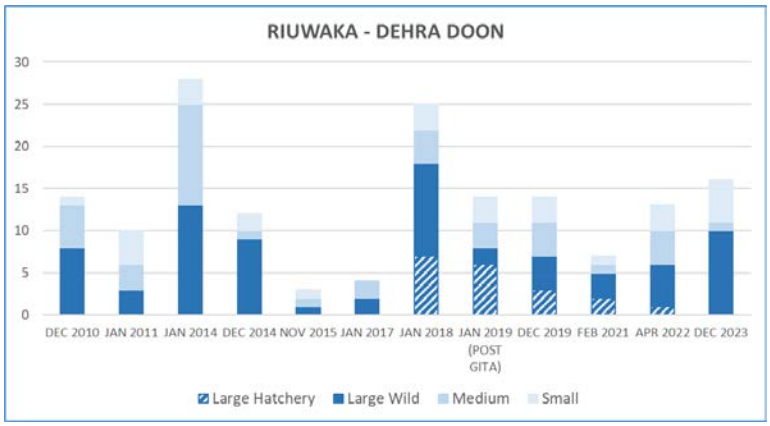


26 large fish were seen, of which 8 were clipped from the 2017 fish release - see graph below. Some clipped fish were starting to show signs of age and will likely perish in the next two years. Only four medium and one small fish were observed which is fairly typical for this river. Note: drift dive records for this site go back to 1985, this is showing recent data.



^ *Riuwaka at Moss Bush - note records for this site go back to 1985.*

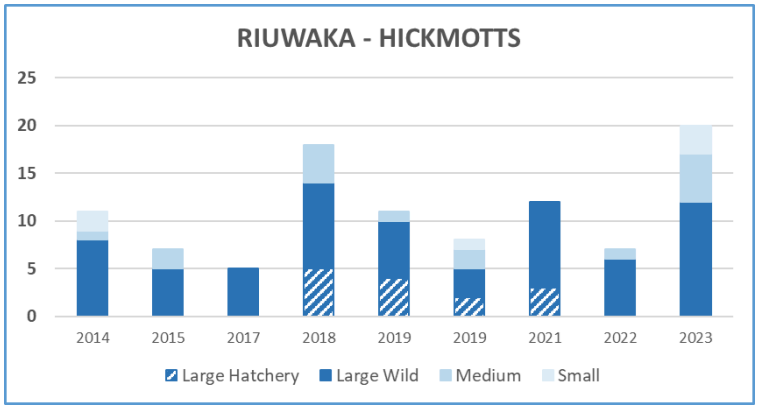
The middle site at Dehra Doon used to be a great stretch of river for angling but has been poor in the past decade or so, and doesn't seem to be improving. High sediment loading from 'leaky' side streams deposit a fine, fluffy silt in this part of the river and trout numbers are much lower than what they used to be. Eight of the fish could not be properly identified as clipped or wild.



^ *Riuwaka at Dehra Doon*

Pre 2010 there were consistently higher numbers of medium sized fish in this part of the river, this size cohort seems to be the most affected.

In the 1km lower dive site which finishes at the top of the tidal zone, an improving count of 12 large, 3 medium and 5 smalls were observed - see graph below. From a fish habitat perspective, this section of the river is getting better over time as willows grow and provide shade, and rocks from dislodged riprap fall into the main channel and create depth and hydraulic diversity which trout need.

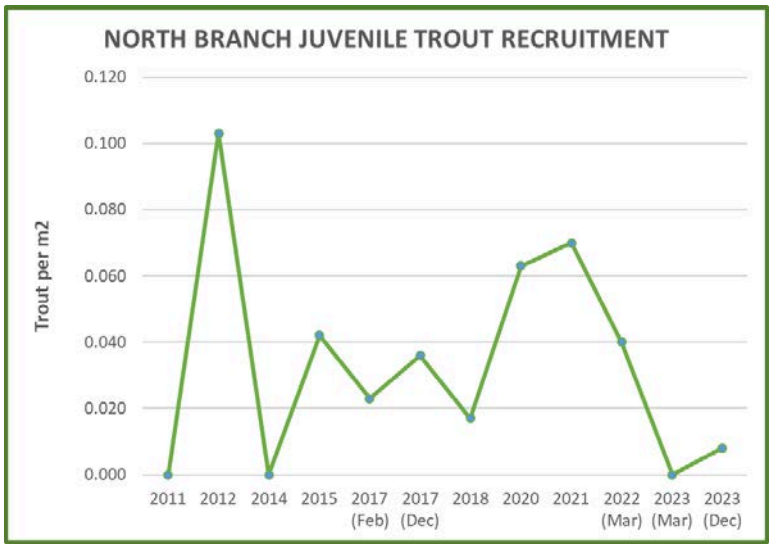


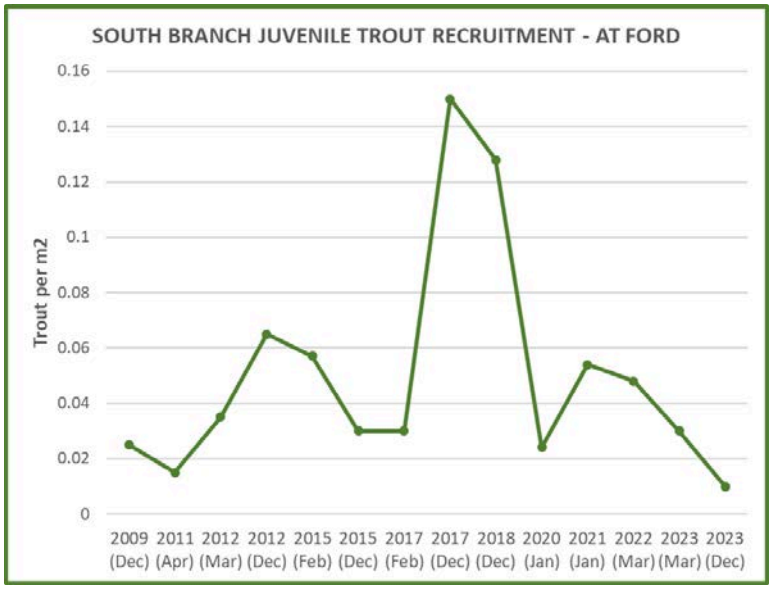
^ *Drift dive results at Hickmotts Recorder*

v Shannon Aram hooked up in the Riuwaka (October 2023). Photo: Jacob Lucas

ELECTRIC FISHING SURVEY

Electric fishing surveys were undertaken in the North and South Branch, with the aim to monitor juvenile trout and native fish abundance, key components of ecosystem health. Only five juvenile trout were seen across all three sites, 2 in the North Branch, 1 at South Branch (ford) and 2 at South Branch (woolshed) - see graphs below.





^ *Riuwaka juvenile trout monitoring results.*

WINTER SPAWNING COUNT

The Riuwaka South Branch was surveyed for spawning fish on 9 July. This river is known to have a later spawning window compared with the Motueka catchment, and on this day, trout were found to be in full swing .

There are fairly limited gravels at this site, however water quality is excellent, and trout do well to locate and make use of small patches of gravel on the edges to fulfil their spawning duties. Redds can be fairly hard to spot, often masked under bankside vegetation.

A fairly normal count of 5 redds were found, as well as a number of spawning fish either holding on redds, or in the process of digging them.

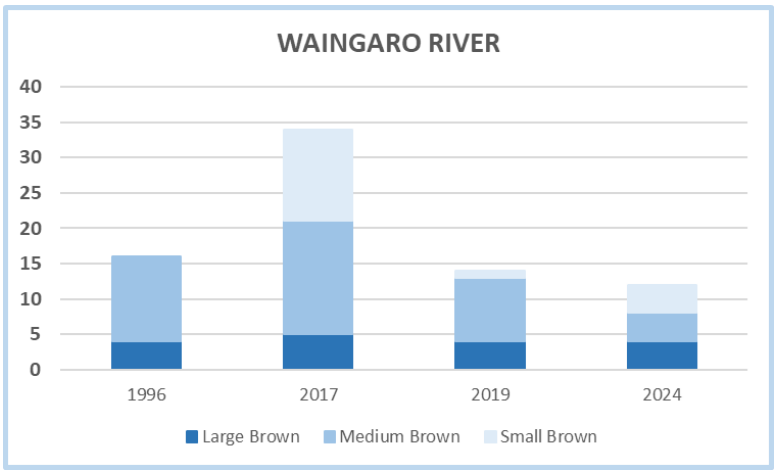
^ *South Branch redds - most of the fish spawn in edge water here. Photos: Jacob Lucas*

GOLDEN BAY

WAINGARO RIVER

Despite excellent looking habitat and good water quality, the Waingaro trout population appears to be continually kept at fairly low numbers due to the volatile flood regime. This is especially so for the nearby Anatoki River, which, along with the Waingaro, is repeatedly in the firing line from rain events, and seems to be impacted by both Westerly and Northerly rain events which frequently hit the area.

The Waingaro was dived in mid-January in what would be considered fairly low flows. Four large, four medium and four small were all that were in residence - see graph below.

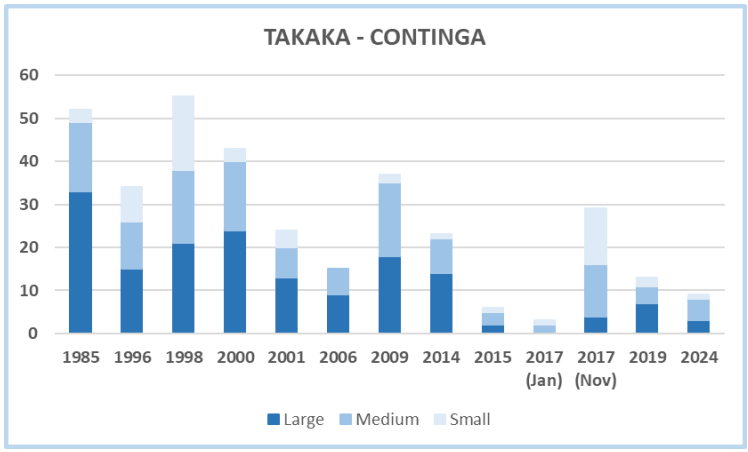


^ *Waingaro River drift dive results*

Divers noted few macroinvertebrates during the count even though the river had been stable for some time. this is possibly another limiting factor for this fishery.

TAKAKA RIVER

The Takaka River was dived on the same day as the Waingaro and only 3 large, 5 medium and 1 small fish were counted - see graph below. All fish were found in shallow water and were very 'jumpy', possibly due to ongoing seal predation which appears to be severely limiting this fishery.



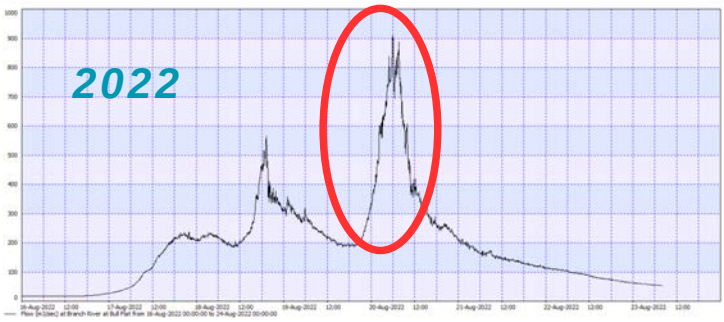
For this coming season, we plan to dive the Upper Takaka River, and will look to also survey the Anatoki and Aorere which have not been completed since 2019.

BRANCH | LEATHAM

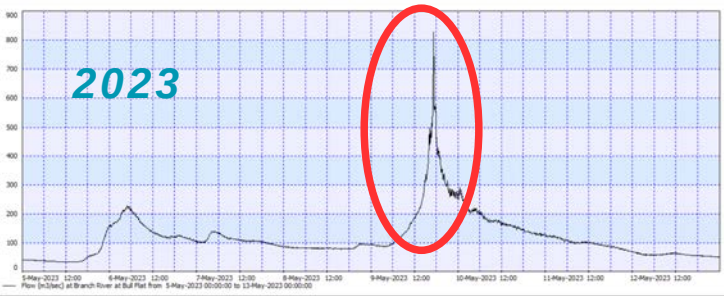
The Branch/Leatham catchment has experienced successive large flood events in 2022 and 2023 which has had an impact on fish distribution, particularly in the mid-lower parts of the rivers.

As with the previous year, anglers had reported significant channel modification and pool loss in the mid-lower reaches, and low numbers of fish, especially during the early part of the 2023-24 season.

Staff believe it is the speed in which the recent 2023 flood came up that was the difference between the two events and possibly why the fishing last season in the mid-lower sections was so poor - see below for both flood graphs, noting the rapid rise in the 2023 flood compared with the 2022 flood.



^ *2022 flood event showing the more gradual rise of the flood*

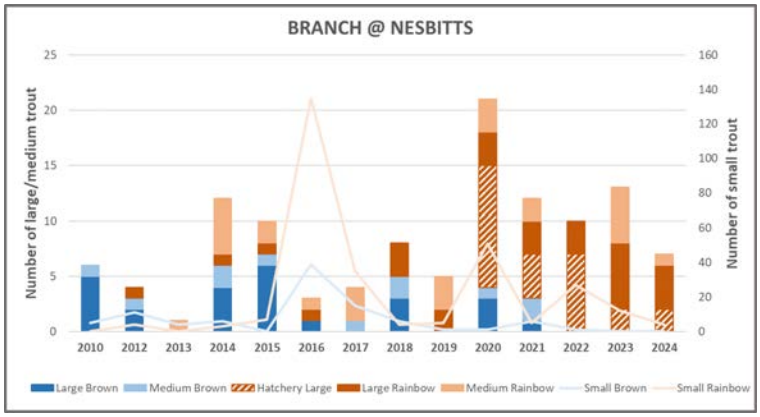


^ *2023 flood event showing the rapid rise of the flood.*

While the mid-lower river was adversely affected by floods, the more stable upper sections were less so and, in fact, exhibited great fishing during the season, with fish already in top condition by October when the season opened up. This was because, after the May flood, there were no floods of note and the river was remarkably stable promoting invertebrate life, and fish maintained good condition through spawning. In fact, over the season, there were some stunning fish getting caught in the upper reaches, many of these ex-hatchery that had doubled in size since release. Previous years have shown fish to generally maintain or more slowly add weight after release.

The Branch was dived in late January at Nesbitt's Creek and below the Leatham confluence. The top site at Nesbitt's has been well documented in previous fisheries reports highlighting pool infilling and habitat loss, and this dive site could not be considered ideal due to the lack of stability and change to the channel from earlier years.

6 large rainbows were in residence over the 1km dive, two of which were of hatchery origin - see graph below. Only 1 medium and 4 smalls were observed, highlighting the effect that the rapidly rising May flood event had on fish in these size cohorts.



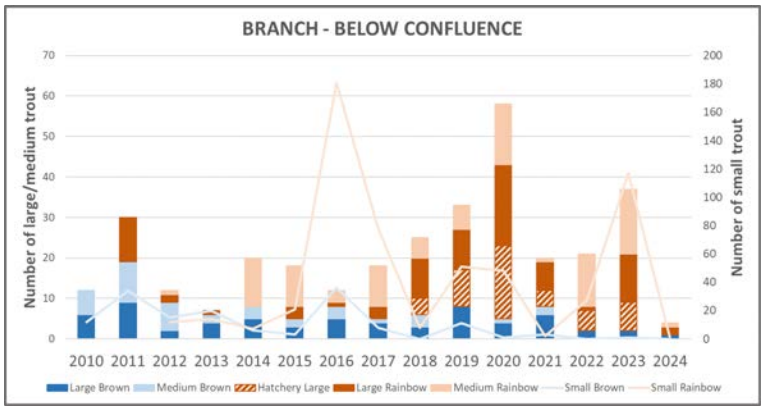
^ *Branch ay Nesbitt's drift dive graph*

As has been the case in the previous three years, no brown trout were seen and it is obvious rainbow trout have pushed out the majority of brown trout from the Branch River. This is somewhat unfortunate, as this river was regarded as a fishery with large brown trout, with some trophy fish found, albeit in fairly low density. However, staff (and the vast majority of anglers who fish this catchment), are supportive of the release programme here as there has been a significant increase in angler use of the Branch and Leatham, including from beginner anglers, and we see this far outweighing any impact the releases have had on the original brown trout fishery, given 95% of wild fish in this region are brown trout dominated.

Unfortunately, the May flood also had a significant impact on the lower Branch site (below Leatham confluence). This site is generally fairly productive, especially during periods of warm water temperature when fish drop out of the lower Leatham into the cooler waters of the Branch, however with the May flood all but wiping out the fish in the mid-lower Branch and Leatham, few fish were found in this site. In fact, a record low count of two large wild rai-

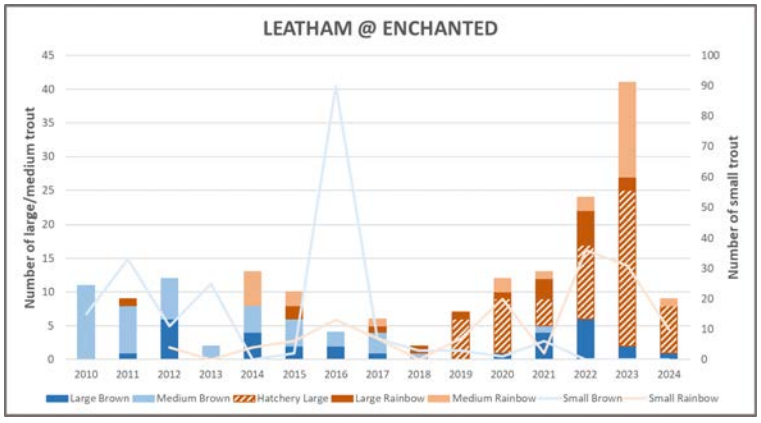
BRANCH | LEATHAM CONT...

bows, one large brown and just one medium and small were observed - see graph below. The fast water ripples throughout this dive site are favoured habitat for small rainbows born the year prior, and again shows the impact of the May 2023 flood.



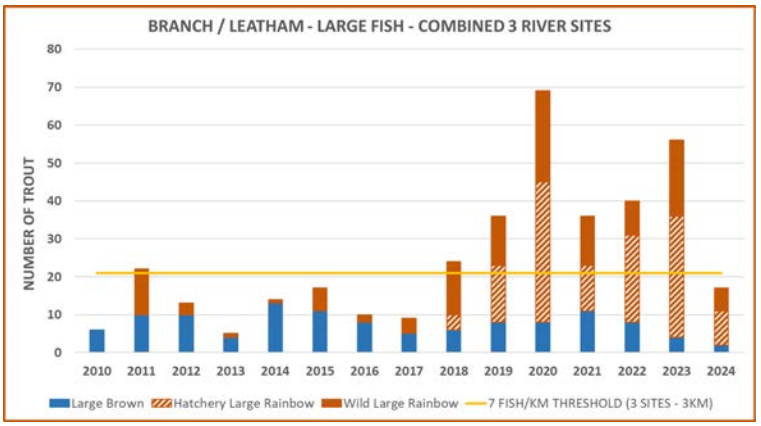
^ *Branch River (below confluence) dive results.*

The Leatham River also showed a reduction in fish with 1 large brown, 7 large hatchery rainbows and a small number of medium and small rainbows - see graph below.



^ *Leatham River dive results (2010-2024)*

The target density of fish as agreed by Fish & Game in partnership with Manaewa Energy (formerly Trustpower) as mitigation for the Branch hydro scheme is 7 large fish per kilometre over three dive sites. This is the first year since the current increased fish release programme commenced in 2017, that this has not been met as can be seen by the yellow horizontal line in the graph below.



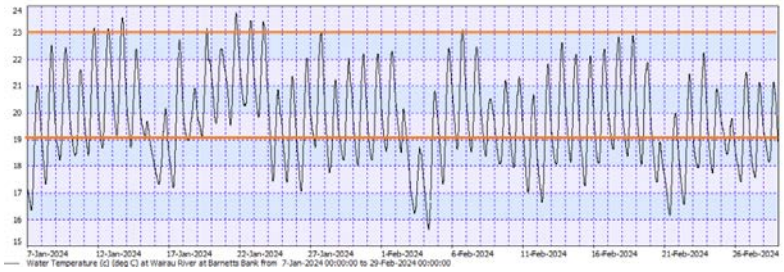
^ *Combined drift dive results over three sites.*

A release of fish in both the mid-Branch and mid-Leatham was undertaken in December which was hoped to provide some ready-to-catch fish for anglers (see page 21 for more information). We had mixed reports from this release, hearing only occasional feedback from anglers about the success of these releases, though when staff visited the Branch River at May Stream during March, it was obvious there were plenty of fish still occupying the run where they were released.

WAIRAU RIVER

Four sites were dived for the Wairau River over two days in late February. The river was in the middle of a sustained period of low, warm flows and on some days during January, the peak water temperature was nudging 24 degrees as can be seen by the below temperature graph.

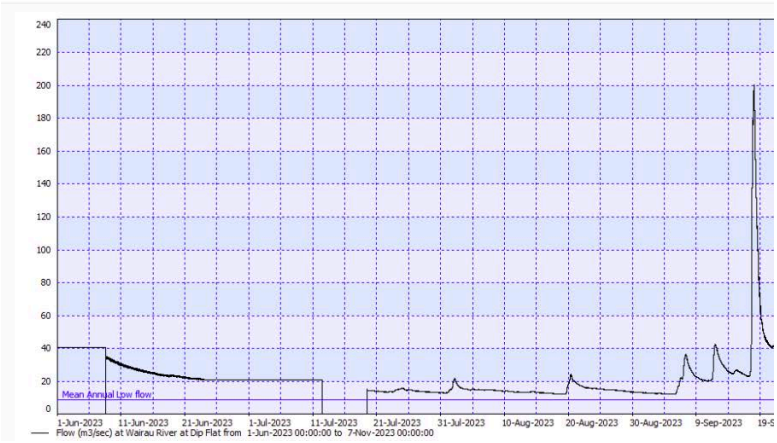
The majority of time throughout this period could be considered within the stress range for trout, and there is little doubt trout were either doing it fairly tough or had found cooler water areas within the catchment, either in deep groundwater refuges or cooler tributary inputs.



^ *Wairau River summer water temperatures were in the stress range for trout (orange lines)*

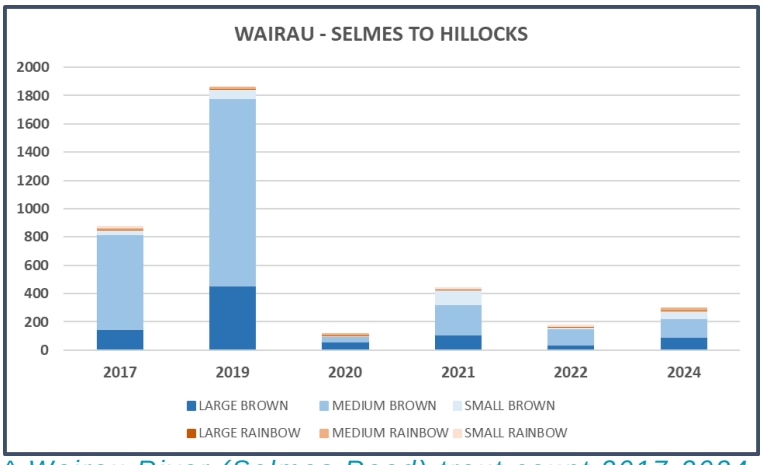
Fishing-wise the Wairau had mixed reports, with some great fishing over the winter of 2023 during a period of low, stable flows - see hydro graph below.

Many anglers struggled in the warmer summer months, however on occasion found good patches of fish in areas that provided some relief from the warm water temperatures and did well.



^ *Wairau River river flow over the 2023 winter period.*

The lowest site at Selmes Road is still fairly new as a dive site, being favoured from the historical Rock Ferry site. It has now been dived six times, although we did not manage to complete this dive in 2023. For this dive, a fairly low count was observed - see graph.



^ *Wairau River (Selmes Road) trout count 2017-2024*

The river had changed from the 2019 dive when a large count was found at this site, contributed by the river passing through the point where the Waikakaho joins the Wairau, providing deep cold water input, and many fish were found here as well as in several other deep water pools, seeking thermal refuge in cooler waters. A severe drought period following the 2019 dive count plus some large magnitude floods (including a 100 year return event in July 2021) in subsequent years have likely contributed to the Wairau salmonid population still remaining depressed at this site.

One adult salmon along with 132 salmon smolt were seen on this dive. With the low flows and high water temperatures, there is little doubt salmon behaviour would have been affected, although to what extent we do not know. You can read more about salmon monitoring on page 18.

Although staff field regular reports of increasing rainbow trout getting caught, we still have been a bit perplexed in the low number of rainbows seen during this dive and others in recent years.

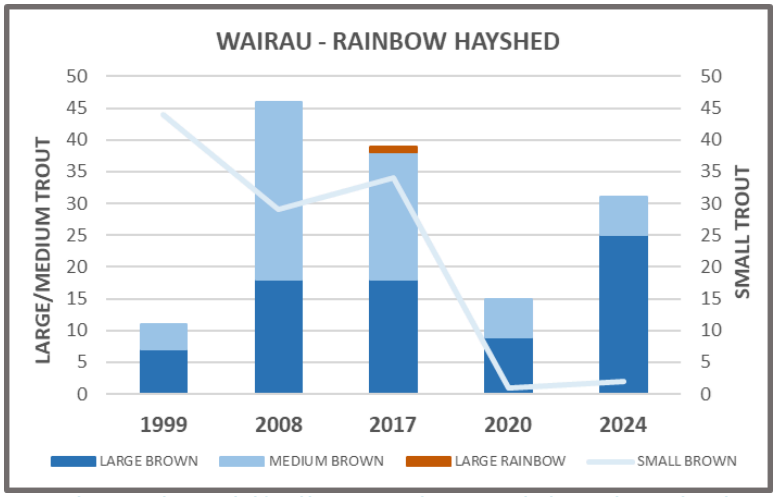
Margie Kaat with a 7lb brown trout, taken in better years before the Goulter declined.

Based on the frequent reports of rainbow trout being caught, especially around the Branch confluence where most of the rainbows originate from, we decided to dive a new site this year, starting at the lower Branch hydro canal, through the Goulter confluence and exiting 1900m downstream.

Disappointingly, few fish were seen here, however this may have been due to the warm water temperature and lack of thermal refuge options, the run being typified by fast, shallow water.

Just 10 large and 6 medium browns were seen. Zero large/medium rainbows were seen, and just 4 small, rainbows. 97 salmon smolt were counted and no adult salmon.

During the same week, two sites in the Upper Wairau were dived. The upper site just below the Rainbow River confluence was decent in terms of numbers of large fish, with 25 large, 6 medium and 2 small trout counted - see graph below.

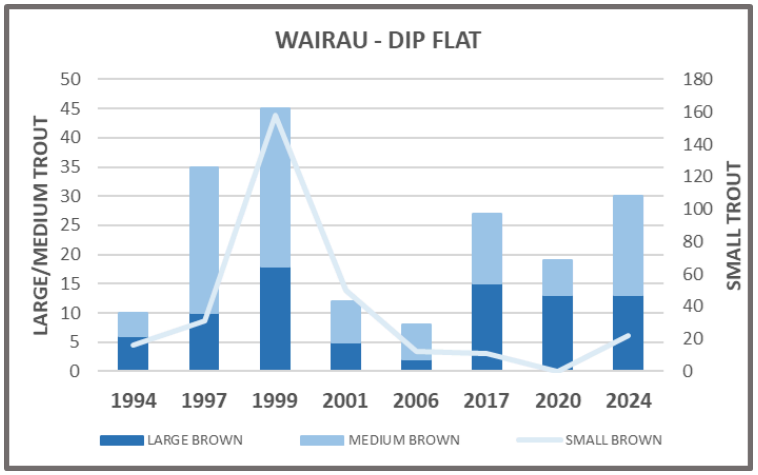


^ *Wairau River drift dive result at Rainbow hayshed*

This is a respectable count of large fish when compared with previous years, although the dive is 2km and dives are fairly infrequent. We hope to undertake more regular drift dives in the Upper Wairau over the coming years to monitor the trout resource in this Designated Water fishery.

Interestingly, quite a few fish were seen in pools where rock groynes had been placed to stabilise the river.

Another site at Dip Flat was dived with a more diverse range of fish seen, 13 large, 17 medium and 22 small brown trout - see graph below. No large salmon were spotted at either of the upper sites.

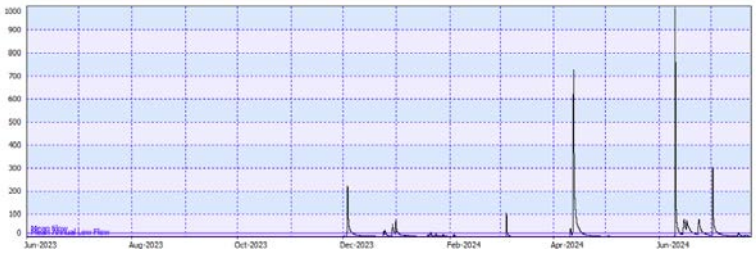


^ *Wairau River drift dive result at Dip Flat*

^ *A pod of post-spawning brown trout from the Wairau catchment - August 2024.*
Photo: Jacob Lucas

PELORUS | TE HOIERE CATCHMENT

Like many other fisheries, the Pelorus catchment had a stable year with no significant flood events - see below graph.

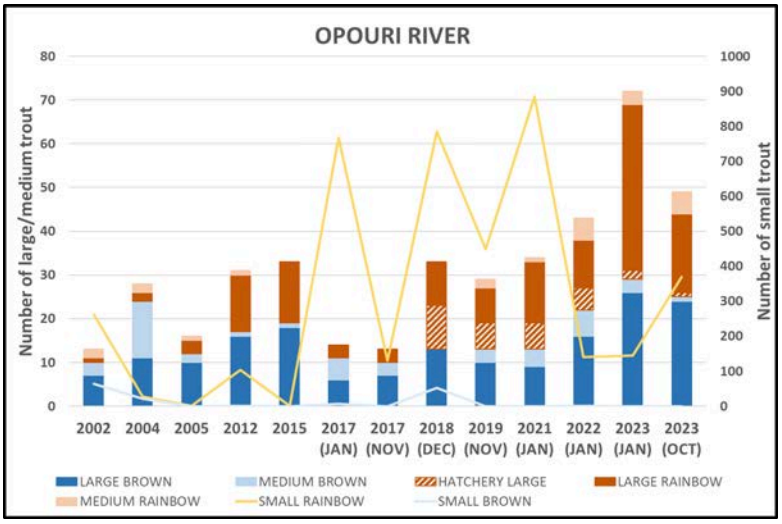


^ *Pelorus River flows - June 2023-July 2024*

After the massive August 2022 flood and a tumultuous 2021, this was a welcome change and should benefit this catchment and trout fishery.

OPOURI RIVER

The Opouri River was dived in late October after a stable year with no significant floods. Like previous years, it was again a very good count, made notable by a higher than normal number of brown trout. 24 large browns were seen along with 18 wild rainbows and 1 tagged rainbow from an earlier fish (note tag colours have now faded or have a layer of slime attached so it is difficult to identify tag colour and year of release). A reasonable count of 370 small rainbows were observed - see graph below.



^ *Opouri River dive results.*

The mainstem Opouri River offers very good spawning gravels at most pool tail-outs and shallow riffles provide an ideal nursery environment for young trout before they out-migrate in late summer/autumn to the Pelorus River.

ELECTRIC FISH MONITORING

While electric fishing in the Opouri is more targeted for native fish monitoring (see page 27), we also monitor juvenile trout. The Opouri River was electric fished in February, only one juvenile fish was found across two sites (200m2 total) - see table below. This is not entirely unusual as it was late in the season most young fish have likely out-migrated downstream to the Pelorus.

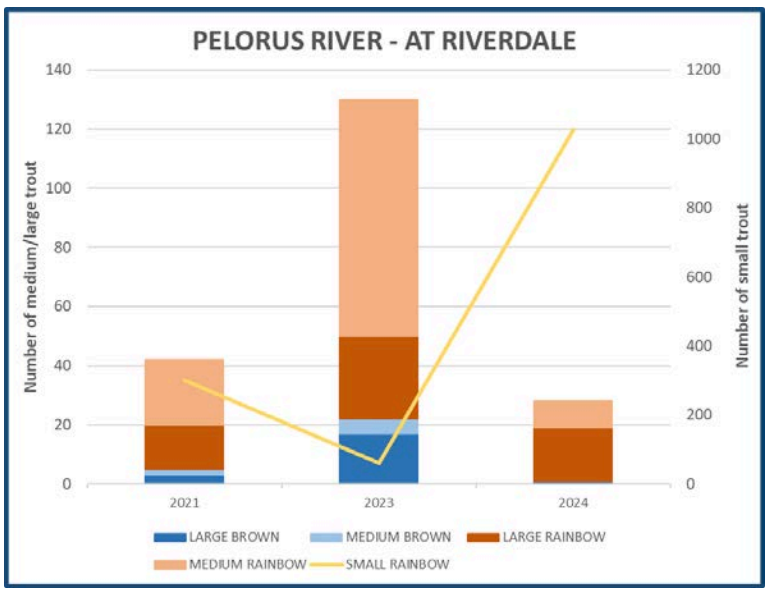
OPOURI RIVER ELECTRIC FISH MONITORING

Year	Location	Area Sampled (m2)	No. of juvenile trout	No. of trout (per m2)
Dec-18	Opouri at Tunakino Bridge	75	5	0.07
Nov-19	Opouri at Tunakino Bridge	100	4	0.04
Jan-21	Opouri at Tunakino Bridge	130	0	0.00
Mar-22	Opouri at Tunakino Bridge	75	0	0.00
Feb-24	Opouri at Tunakino Bridge	100	1	0.01
Dec-18	Opouri at Ronga Confluence	56	1	0.02
Nov-19	Opouri at Ronga Confluence	100	4	0.04
Jan-21	Opouri at Ronga Confluence	120	3	0.03
Mar-22	Opouri at Ronga Confluence	80	0	0.00
Feb-24	Opouri at Ronga Confluence	100	0	0.00

PELORUS RIVER

The Pelorus River was dived at Riverdale in late March at a flow that was below M.A.L.F. This was the last dive site for the season and we only had three people for the dive, however due to the very low flows we managed to cover the river well.

Although this was only the third time this site has been dived, a lower count of large fish was noted, with 1 large brown and 18 large rainbows. Very few medium sized fish were in residence, perhaps influenced by the large August 2022 flood, although a staggering number of small fish were seen in shallow ripples, with over 1000 found over the 1km dive - see graph below. This is possibly due to a mix of the stable conditions, and also later than normal time of the year which the dive was completed, allowing more time for juvenile fish to out-migrate from spawning waters to the main-stem river.



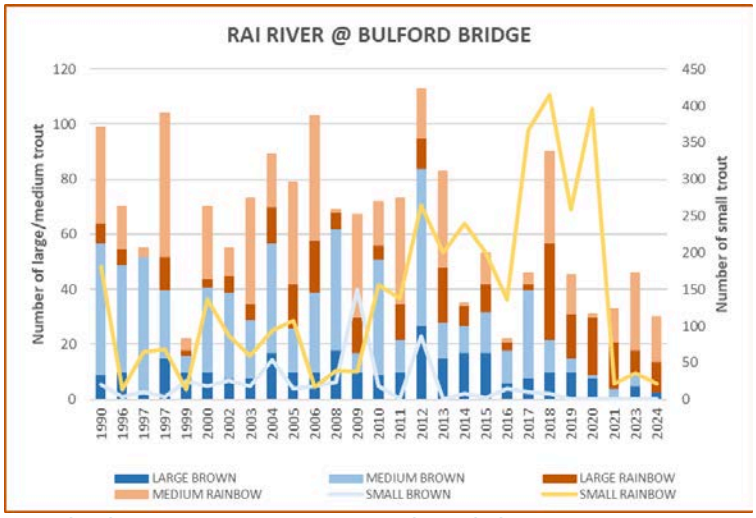
^ *Pelorus River trout count - at Riverdale*

RAI RIVER

The Rai River was dived in late March, it was great to have three Ngati Kuia representatives join us on the dive, they have an interest in environmental matters within Te Hoiere catchment and enjoyed seeing the river from an underwater perspective.

At the time of the dive, and from our experience in previous years, the Rai was not in great shape ecologically due to a high sediment load and a substrate covered with fine, fluffy silt.

The fish count was fairly low with 3 large browns, 11 large rainbows and a low count of medium and small fish - see below.

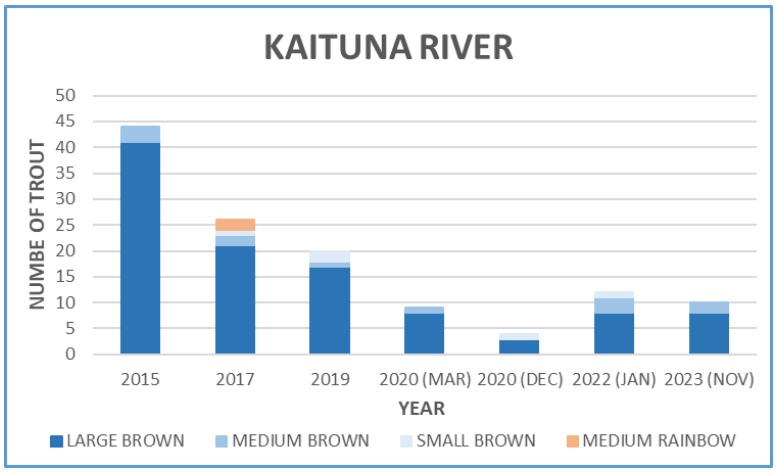


^ *Rai River trout count - at Riverdale*

One angler confirmed the presence of a seal in the Rai in July 2024. There was a seal in the Rai/Opouri during the winter of 2023 also, although the dive result in the Opouri was still very good.

KAITUNA RIVER

The Kaituna was dived in late November and was almost a mirror of the previous dive in terms of trout numbers. A total of just 8 large and 2 medium browns were seen on the dive, a far cry from 2015-2017 period before seals had a devastating impact - see graph below.



^ *Kaituna trout count - at Riverdale*

Seals aside, there has also been significant pool infilling from recent floods. This river is prone to regular flooding that covers the farmland in the lower 1km of the river, though velocities are generally low which favours trout survivability.

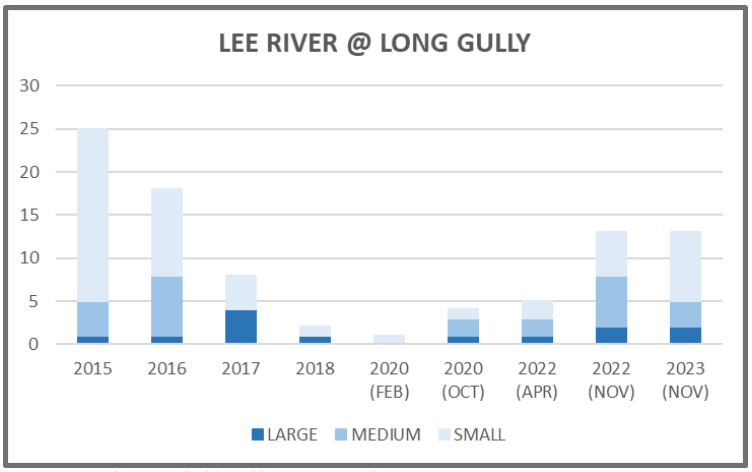
Some of the trout observed in the 2023 dive had damaged caudal areas or stunted or black tails.

NELSON RIVERS

LEE RIVER

The Lee River was dived in mid-November and had another reasonable count for what this river has been accustomed to with 2 large, 3 medium and 8 small brown trout in residence. Visibility was reasonably poor offering less than ideal counting conditions. Some fine sediment was noted in pools, and there was more gravel in the runs. Good numbers of mayfly and sandy-cased caddis were present, perhaps biologically responding to the Lee Dam.

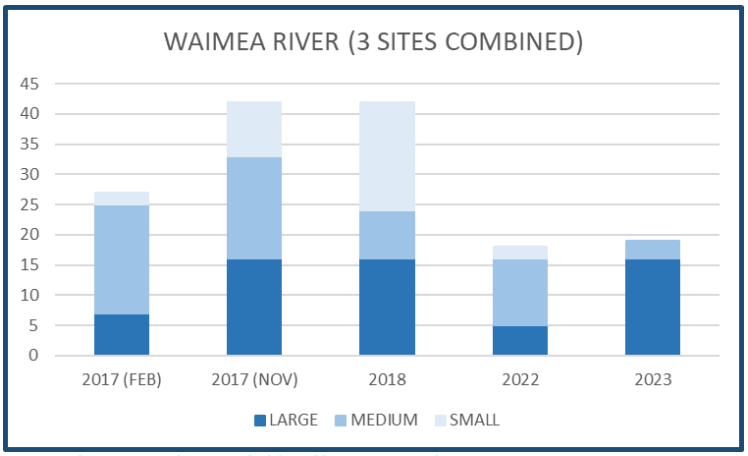
This was the first year a dive had been undertaken while the dam was in place and operational (at the time filling up the reservoir). We watch with interest in the following years to see how the dam will affect fish numbers in the Lee.



^ *Lee River drift dive results.*

WAIMEA RIVER

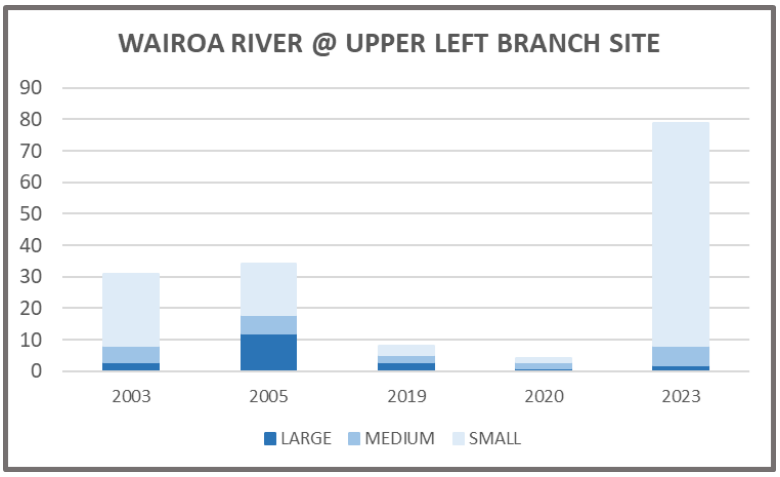
The Waimea River is dived at three short sites and was completed in mid-December. It was good to see an improvement on the 2022 dive with more large fish in residence though only 3 medium and zero small fish were seen - see graph below. Huge numbers of smelt and yellow eyed mullet were observed along with one large eel.



^ *Waimea River drift dive results.*

WAIROA RIVER

The Wairoa River (Left Branch site) was dived in mid-December. It was last dived in 2020 when a low count of trout were noted. For the 2023 dive, 2 large, 6 medium and a record 71 smalls were observed - see graph below. The high number of small fish reflects stability within the catchment.

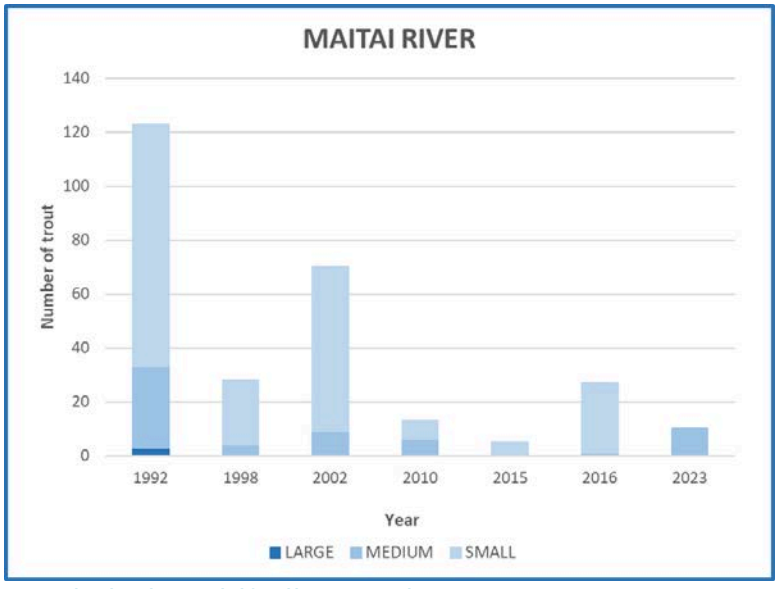


^ *Wairoa River (left branch) drift dive results.*

MAITAI RIVER

The Maitai River is only sporadically dived as it is not considered a high-use trout fishery. It was dived at the site above Pole Ford Bridge in early October - the first dive of the season.

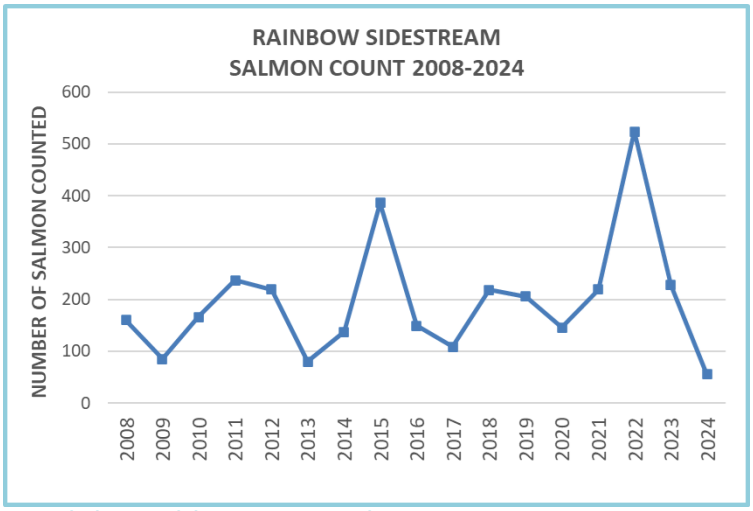
This site is considered small fish territory, and lived up to this with just 10 medium fish seen - see graph below. The Maitai likely has more large trout in the lower part of the river which make use of the tidal area to access more food resources.



^ *Maitai River drift dive results.*

SALMON MONITORING

In correlation with salmon angler reports this summer (which were few and far between, with the few fish hooked by anglers being relatively small and in poor condition), returning salmon spawning counts in the headwaters of the Wairau were not only down on the past 15 or so years, but fish size and condition was also poorer than average. Low river levels and warm temperatures no doubt didn't help with the run, with the likes of the Six-mile stream being too low to provide sufficient water depth to even provide fish passage during the spawning season.

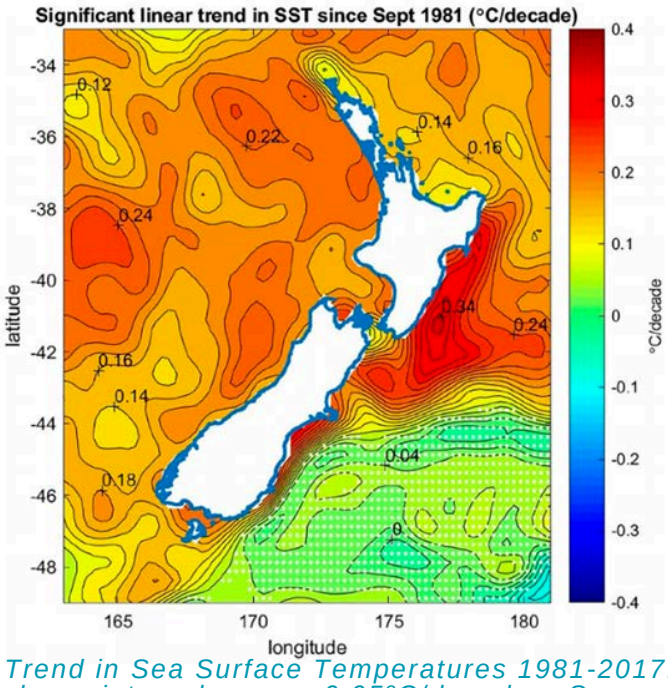


^ *Rainbow side stream salmon count 2008-2024*

As can be seen from the graph above, compared to 2022 where 524 spawning salmon were counted, this year only 55 were seen. The reduction in numbers this season may be able to be explained by the occurrence of a large flood in 2021 which exceeded 5000m3, which may have had an impact on the juvenile salmon smolt survival. Salmon size and condition however is more likely to be impacted by what is happening during their time at sea.

A look at sea surface temperatures, doesn't paint a very positive picture long term for salmon, however, may explain why the Wairau & Clarence (and West Coast) salmon runs have generally been faring better in recent times compared to the traditionally more recognised east coast salmon runs. Long term trends show the areas off both the Wairau and Clarence River mouths have shown comparatively less of an increase in sea surface temperatures since 1981 compared to the more recognised salmon fisheries of the likes of the Rangitata, Rakaia, Waitaki etc.

A Stats NZ report - Sea-surface temperature: Data to 2023 shows between 1982 and 2023 the East Coast South Island had the highest average rate of coastal sea-surface warming (0.34 degrees Celsius per decade) - see graphic below.

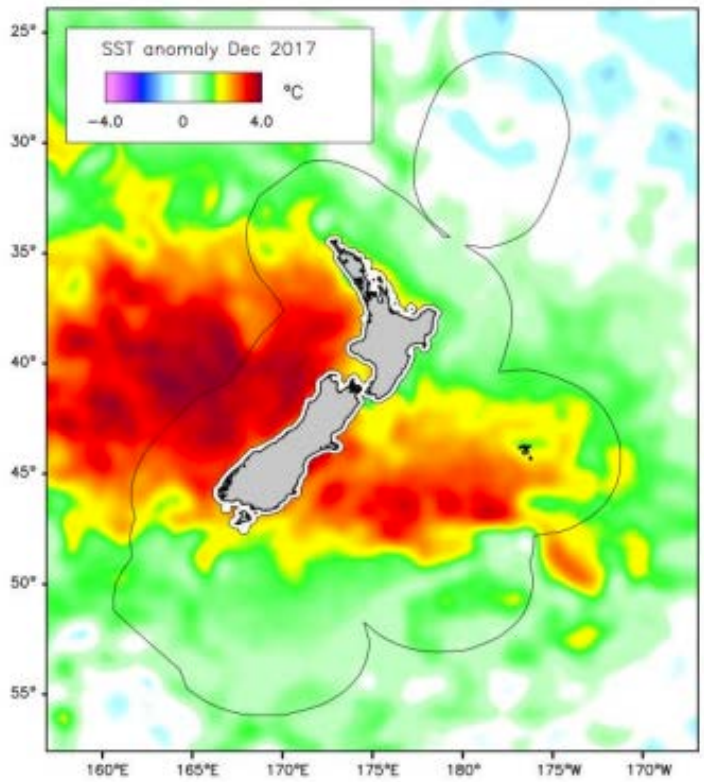


^ *Trend in Sea Surface Temperatures 1981-2017. Colour intervals are 0.05ºC/decade. Source: Ocean temperature change around New Zealand over the last 36 years, P Sutton & M Bowen; January 2019, NZ Journal of Marine and Freshwater Research 53(3):1-22.*

To further exacerbate long-term warming, New Zealand's 2017 "marine heat wave" in December 2017 to January 2018 was unprecedented in the satellite Sea Surface Temperature record (since 1981). The ocean warming seems to have been due to an extended period of very low winds which led to warming of the surface ocean, but which did not extend very far through the water column (NIWA, unpublished data).

Parts of the Tasman Sea region were up to 4°C warmer than normal in December 2017. In the coastal data based on a much shorter period of data (2002–2018), anomalies were more pronounced in January 2018 than in December 2017 and characterised by negative anomalies in chl-a (likely lower productivity) along the west coast of South Island and to the west of Stewart Island. (Satellite indicators of phytoplankton and ocean surface temperature for New Zealand Prepared for Ministry for the Environment June 2019).

While the marine heat wave didn't affect the waters where the Nelson/Marlborough Regions salmon fisheries are likely to occupy as badly as the West Coast and South Island East Coast salmon fisheries, the Wairau River returns in 2017 (and the subsequent three-year return period in 2020) were poorer years and may indicate there was some effect as a result of the warmer ocean temperatures - see below graphic.



^ *Oceanic scale Sea Surface Temperature anomaly (relative to baseline 1981–2018). Source: Satellite indicators of phytoplankton and ocean surface temperature for New Zealand Prepared for Ministry for the Environment June 2019*

Given the numerous variables that can affect salmon survival and growth, it's anyone's guess what next season will bring. One thing in their favour though, is that they are highly productive and just because they may have had a low spawning run this year, it does not necessarily mean next year or in three years' time (when the majority of this years spawning will return) there will be any correlation with this seasons run size. It only takes a one-or two percent increase in survival rates to make a massive difference.

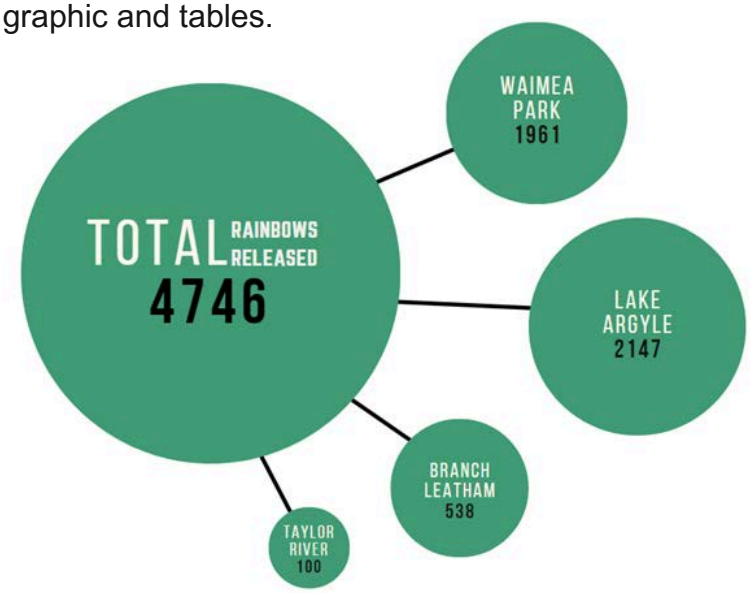
One thing for sure though, is that while you can catch a trout on a dry fly you won't catch as salmon on a dry lure!

^ *An aerial view of the Rainbow salmon side stream - the key spawning site in the Wairau catchment. Photos: Jacob Lucas (2018)*

HATCHERY | RELEASES

RELEASE PROGRAMME

It was another decent year of fish releases, with a total of 4,764 1kg + rainbows released. The majority of these went to Lake Argyle (2147), with 1961 released at Waimea Park. Two riverine releases were undertaken, one into the Branch/Leatham (see more on next page) and a smaller release into the Taylor River for a whanau fishing event - see below graphic and tables.



2023-24 TROUT RELEASES (EXCEPT WAIMEA PARK)

Date	Number	Size	Location
20/09/2023	21	5 kg+	Lake Argyle
20/09/2023	200	1 kg	Lake Argyle
19/10/2023	500	1.1 kg	Lake Argyle
19/10/2023	43	3 kg	Lake Argyle
1/11/2023	100	1.2kg	Lower Leatham
8/11/2023	250	1.2kg	Lake Argyle
21/11/2023	220	1.3kg	Lake Argyle
21/11/2023	238	1.3 kg	Branch River (May & Alan)
19/12/2023	200	1.4kg	Lake Argyle - tag comp
19/12/2023	200	1.4kg	Leatham (Caves Hut)
19/12/2023	31	3-5kg	Lake Argyle
11/01/2024	100	1.5kg	Taylor River
2/02/2024	153	1.8kg	Lake Argyle
1/03/2024	158	2.0kg	Lake Argye
15/04/2024	151	2.2kg	Lake Argyle
8/05/2024	150	3 kg	Lake Argyle
14/06/2024	70	3 kg	Lake Argyle

TOTAL (LAKE ARGYLE)	2147
TOTAL (BRANCH/LEATHAM)	538
TOTAL	2785

2023-24 WAIMEA PARK RELEASES

Date	Av size	Adults pond	Junior Ponds	Total
20/09/2023	1kg	250	50	**300**
19/10/2023	1.1kg	169	131	**300**
1/11/2023	1.2 kg	140	110	**250**
21/11/2023	1.2kg	150	100	**250**
19/12/2023	1.4kg	130	70	**200**
2/02/2024	1.8kg	100	50	**150**
1/03/2024	2kg	110	38	**148**
15/04/2024	2.2kg	50	97	**147**
8/05/2024	3kgs	112	37	**149**
13/06/2024	3kgs	67	0	**67**
	TOTAL	1278	683	1961

HATCHERY UPDATE

Amongst the normal hatchery routine of fish feeding, race cleaning, mowing, grounds maintenance and koura farm operations, listed below are some of the other outcomes progressed by our hard-working hatchery manager:

- Successful annual production of 5000 1kg+ fish - this includes stripping fish, egg fertilisation and incubation, hatching/rearing fry, successfully transitioning smolt into adult fish, while maintaining a hygienic, disease-free hatchery. Weekly race cleaning is a physically demanding task which Rob has excelled at.
- This year we are providing North Canterbury FG 800 1kg fish for the Groynes Take a Kid Fishing event, to assist in meeting the spiralling cost of fish food over the last few years.
- Koura farm infrastructure maintenance.
- Staff have also provided advice and technical information to FG Eastern Region who are looking to investigate opportunities for some koura rearing within their hatchery infrastructure to aid with iwi relationship building within Eastern Region.
- Undertaking compliance duties at Lake Argyle and Nelson Lakes.
- Mill Stream willow removal above/below hatchery intake.
- Fish tanker maintenance/repairs and tanker fish loading for releases.
- Fish & Game tandem trailer and boat motor repairs.
- Annual headrace weeding/flax trimming work.
- Assessment of repairs/upgrade to the existing hatchery house to provide to Manawa Energy.

> Hatchery manager, Rob Foster, putting down eggs into an incubation jar - these will be fish for the 2025-26 season.

BRANCH/LEATHAM RELEASE

Always of interest to anglers and staff, the Branch & Leatham riverine releases are an enjoyable and rewarding experience.

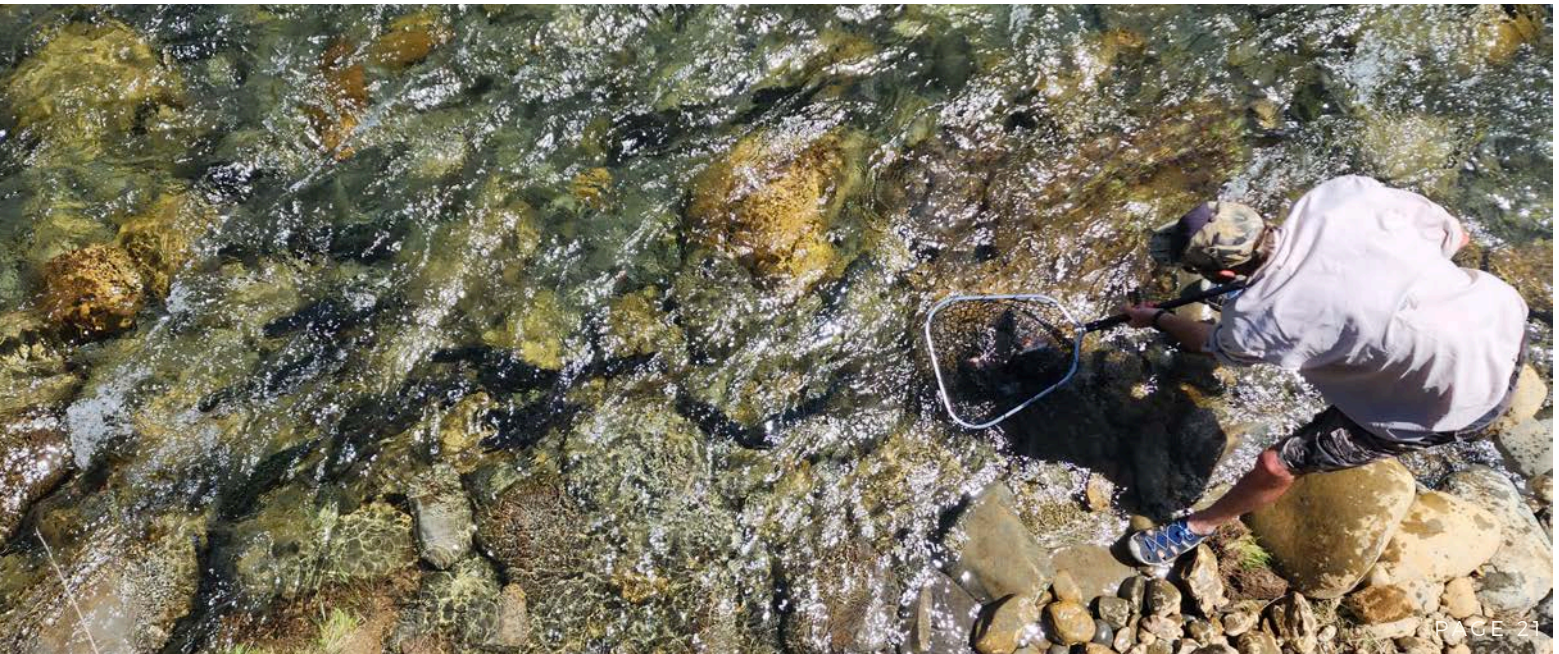
This year due to budget constraints we opted for a vehicle release rather than a helicopter. The major limitation of this is the difficulty of getting the tanker far enough upstream. Previous releases that have placed fish in the upper half of each river seem to work best, with fish holding in the system for longer. In November a release into the Branch was carried out and due to the bridge across the Leatham and road upgrade, we managed to easily get the tanker to May's Stream to deposit 110 fish, then onto Alan Stream to put the remaining 128 fish. These are the only two places where the road gets close enough to the river to carry out a release (except near Grieg's Hut).

^ *Rainbows just released into the Branch River. Photo: Jacob Lucas*

In the Leatham, an earlier release of 100 rainbows was carried out in the lower 5kms in early November, then in mid-December, the team managed to get the tanker up to Caves Hut, where 200 trout were released.

We did not receive much angler feedback from these liberations, however several anglers reported some great fishing following the releases, as would be expected.

^ *Lawson Davey releasing rainbows into the Leatham (top), and the Fish & Game team watching some of the liberated rainbows in their new home (lower). Photos: Jacob Lucas*



R3 | RECRUITMENT, RETENTION, REACTIVATION

R3 (Recruitment, Retention and Reactivation) is important for Fish & Game to retain and grow our base of anglers. Fish & Game nationally now has this as one of its core strategic objectives to ensure future organisational strength and financial viability.

In this region, R3 has been a priority work area and has been successful at increasing resident licence growth over the past 7 years. At the heart of it is our active hatchery program and R3 initiatives around this.

WAIMEA PARK

Waimea Park fishing activity went up another notch this season, with the popularity of the family/adult pond now very evident and recognised through the National Angler Survey as one of the regions top 5 fisheries in terms of angler use days.

At the junior-only ponds, it has been a busy year of organised events, with multiple kid's fishing days run by the Sports Fishing for Youth Trust - see page 45 for an update from the Trust.

Additional events were held with assistance from Fish & Game staff, notably Salisbury School (who had a successful and enjoyable experience at the ponds and are keen to return again), a Waimea College fishing class, Tamaha Sea Scouts, and Parklands School Taumata Kahuki bi-lingual class, who all caught a fish – some of which were smoked up to eat along with having a BBQ.

^ Parklands School Taumata Kahuki class at Waimea Park, Photo: Jacob Lucas

LAKE ARGYLE

2,147 catchable rainbows were released into Argyle over the duration of the season which certainly kept anglers entertained at one of our most important and high use fisheries. In amongst the liberations were plenty of trophy fish which add intrigue to the destination and are a huge bonus to anglers when caught - see below pics, one of which made the Rod & Rifle magazine.

^ (L) Bradley Bishall's social media post showcasing a huge Argyle trophy; and Victor Rieter with a 17lb rainbow.

Lake Argyle, now our regions most popular trout fishery (according to the National Angler Survey), is a self propelling fishery. After a few years of releases with targeted media, we now let the fishing do the talking. Argyle has become a fishing destination in its own right, attracting plenty of attention from locals as well as those outside the region.

TAGGED FISH COMP

The Henderson's Lake Argyle tag comp was another success, with 85% of tags reported and all major prizes won. This comp is a major hit with many anglers and we will look to running it again for the 2024-25 season.

< Winners of the 2 x $500 Henderson's vouchers.

TAYLOR RIVER WHANAU FISHING DAY

A day to bring the community together and encourage healthy eating was the focus of a family/whanau fishing day on the Taylor River over the summer.

Around 30 enthusiastic anglers attended the event, who were supported by 'guides' from Fish & Game and the Marlborough Freshwater Anglers Club. Fishing on the day was challenging, though it wasn't from lack of trout in the river.

Plenty of trout were in plain view, though they had a lot of lures thrown at them and became hard to catch. Now that these new anglers have seen the fish on offer and have been taught new skills to catch them, we hope they will return to the Taylor River and other great waterways in the region, and become future anglers.

The unique situation provided by the Taylor River makes fishing available on foot or cycle after school and over the weekends for our young folk. In a nutshell, we want to get families, and especially children, outdoors and active and off their screens and devices.

We are hoping to run similar events in the future. Thanks to Marlborough Primary Health, Te Piki Oranga and Marlborough Hunting and Fishing who generously donated fishing gear, including new rods which participants could take home.

MOTUEKA VALLEY HOME SCHOOL FISHING DAY

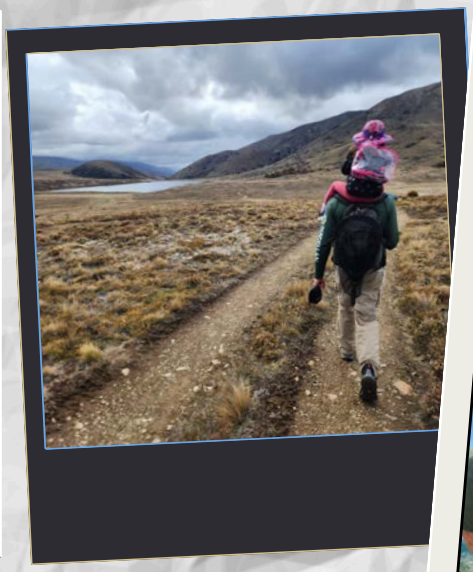
A fishing day was held on the Motueka River with kids and parents from a home-schooling programme within the Motueka Valley in attendance. An educational permit was provided, meaning licences were not required on the day. Fish & Game frequently issues educational permits to schools in similar circumstances.

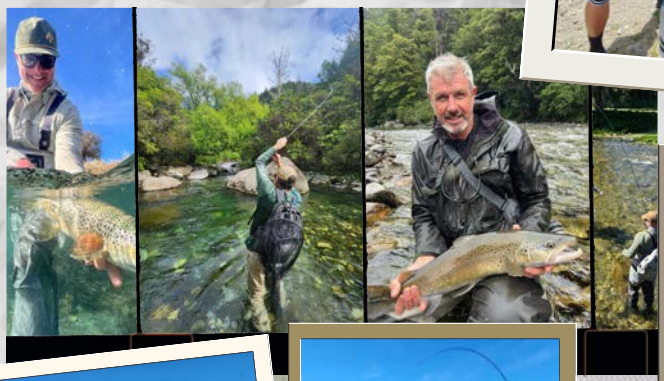
The river was low and more suited to swimming (which the kids did anyway), however, lures and softbaits were thrown with enthusiasm. Plenty of follows were seen as is often the case for summertime spin fishing, and the only fish hooked were by targeting ripples with a bubble and fly set-up.

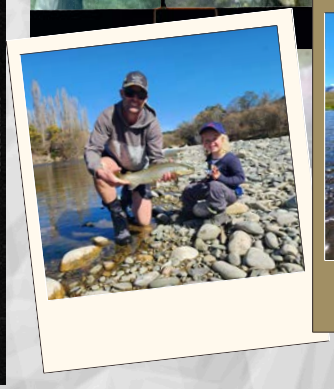
^ Spin fishing the Motueka River with a group of home-schooled kids and their parents. Photo: Jacob Lucas

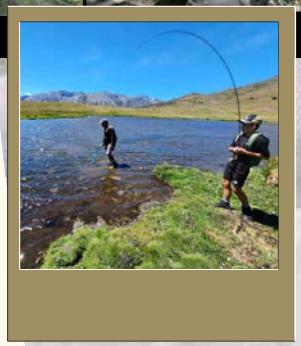
v Taylor River whanau fishing day. Photos: Jacob Lucas

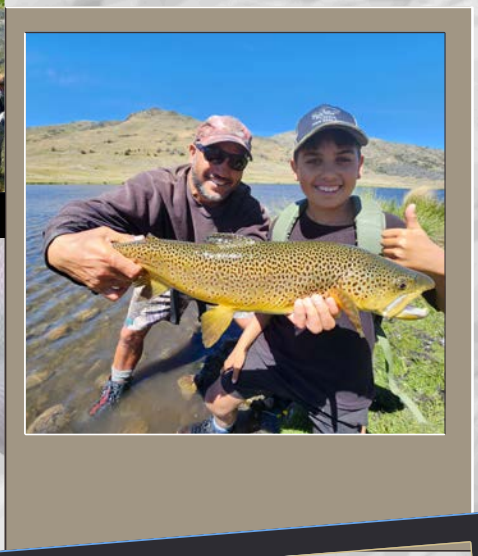
THE SEASON IN PICTURES











PAGE 24

NATIONAL ANGLER SURVEY SUMMARY

Fish & Game New Zealand commissioned NIWA to undertake a National Angler Survey (NAS) for the 2021-22 season. The NAS has been completed by F&G/NIWA four other times in 1994/95, 2001/02, 2007/08 and 2014/15.

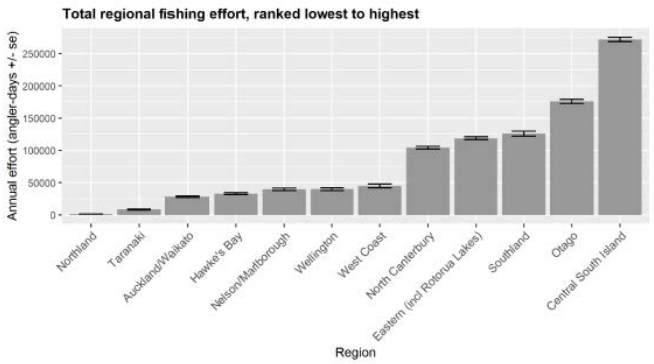
NATIONAL PERSPECTIVE

Nationally, the 2021-22 period saw a decline in total angler-days, however, as the survey was taken during covid international travel restrictions, international angling pressure still had not fully returned to pre-covid levels, so this may contribute towards a lower total number of days. The Auckland-Waikato region was also affected by a regional lockdown during this survey period. Total national usage for the 2021-22 season was 991,700 angler-days, the lowest of all five surveys.

A concern nationally is from the North Island, which has shown a considerable reduction in angler-days since 1994/95. Around 23% of total angler effort is in the North Island despite having 3/4 of the population. Around 77% of effort is in the South Island, which has a much lower population, however is more popular with foreign anglers.

Nationwide, approximately 38% of total annual usage was allocated to lakes during the 2021-22 season, with the remainder allocated to rivers (including canals).

According to the survey results, CSI region has a staggering 27.4% of total angler-days, mostly due to the popularity of the canal fishery, a salient reminder of just how popular hydro scheme fisheries can be. Otago region has 17.7% of angler-days, Southland (12.6%) and Eastern 11.9% - see graphic below.



Other interesting findings show that 1.9% of the total population brought trout fishing licences that year (3.5% of males). Broken down into islands, 0.7% of North Islanders (1.3% of males) bought fishing licences; in the South island 5.7% of the population purchased a licence (10.3% males); and it's clear that trout fishing is more ingrained in rural South Island society, for example there is a 14.7% licence uptake in CSI (25.8% males); and 9.6% in Southland (17.3% males).

NELSON MARLBOROUGH PERSPECTIVE

Long-term trends in angler use days indicate this region has held fairly steady since 2001/02, though there has been a reduction of around 6,000 angler-days from the 1994/95 survey, however noting the 2021-22 survey was during travel restrictions for non-resident anglers.

The total estimated effort within the Nelson/Marlborough region during 2021-22 was 39,630 (+/- 1,720) angler-days, distributed across 77 waterbodies, equating to 4% of total national angler-days. An estimated 27% of use was on lakes and 73% on rivers.

According to survey results, Lake Argyle was the regions most popular fishery with an estimated 14.5% of angler-days. The Motueka and Wairau fisheries were the next highest, however as the rivers are broken down to a lower and upper reach for the purposes of the survey, the entire main-stem Motueka (above Wangapeka - 5.9% and below Wangapeka - 9.2%) accounted for 15.1% use, followed by the Wairau with 14.9% (excluding tributaries). Waimea Park was the next highest with an estimated 4.6% of total use.

The Branch and Leatham Rivers have gone from very low use (<200 days in each river in the past four surveys) to over 700 days in each river in 2021-22 (this would be higher in more recent years as non-residents were absent in 2021-22).

Some of the findings have raised eyebrows, for example the main-stem Waimea River we believe has been over stated in terms of angler use at 1,584 +/- 403 angler-days, where there has possibly been some confusion from survey participants between the river and Waimea Park ponds (which we believe may be higher than it's estimation of 1,802 +/1 405 days).

NATIVE FISH MONITORING

Monitoring of both native fish and juvenile trout using electric fishing is undertaken within the Branch/Leatham, Riuwaka, and Opouri Rivers. This monitoring work has two primary purposes, firstly, to monitor any potential effects of current or past regional trout releases on native fish species (relative to the impacts of flooding or other factors), and secondly to also try and determine what the specific salmonid population limiting factors within these fisheries are.

The work is also very helpful for Fish & Game staff liaison with DOC, Council, Treaty partners, and the wider community when the topic of trout interaction and predation on native fisheries is discussed. It is considered crucial monitoring work to support the national Fish & Game strategy, specifically the strategic priorities around public perception and legitimacy of Fish & Game and having mana whenua connected with the work we do.

The Branch/Leatham above the hydro weir is currently the only catchment where riverine salmonid releases are undertaken annually within this region, as part of our contract agreement with Manawa Energy.

BRANCH/LEATHAM STUDY

An intensive multi-day sampling trip is undertaken within this fishery annually over 15 separate locations within the catchment, mainly utilizing historic sites originally surveyed prior to the Trust Power (now Manawa Energy) adult salmonid release program starting in 2010 as mitigation for the Branch hydro scheme weir salmonid fishery impacts. This work was set up to assess the health of both native fish and brown/rainbow trout recruitment following the commencement of the release program.

This survey work has now been undertaken 7 times by Fish & Game and will be repeated annually for the lifetime of the current Manawa hydro consent for as long as restocking continues. This year two regional Department of Conservation freshwater fisheries staff, and two Marlborough District Council freshwater staff also assisted us with some of the monitoring work.

As can be seen in the Appendix graphs, results of this year's March 2024 survey work revealed a significantly increased number of native fish and juvenile trout captured within most sites. This reinforces the Fish & Game view that flood size and frequency appear to be 'the master-variable' in terms of determining annual productivity of both the native fish and trout populations within this catchment. This year staff also analysed historic E-fishing records (see Table in Appendix - page 42) that exist for the Leatham catchment both pre and post the hydro scheme being commissioned in 1983.

It is comforting to note that the density of galaxiid species at all monitoring sites this year (except for the site below the SH63 bridge which lies well below the hydro scheme and has no baseline data) surpasses the maximum galaxiid density encountered within the Leatham (0.138 m2) prior to the hydro scheme construction and subsequent adult trout restocking program, although these original records were collected from sites within the Leatham that do not overlap with our current monitoring sites (we only have one or two years 'pre-restocking' baseline surveys for the majority of our current 15 monitoring sites, the data for which was generally collected after the scheme was commissioned).

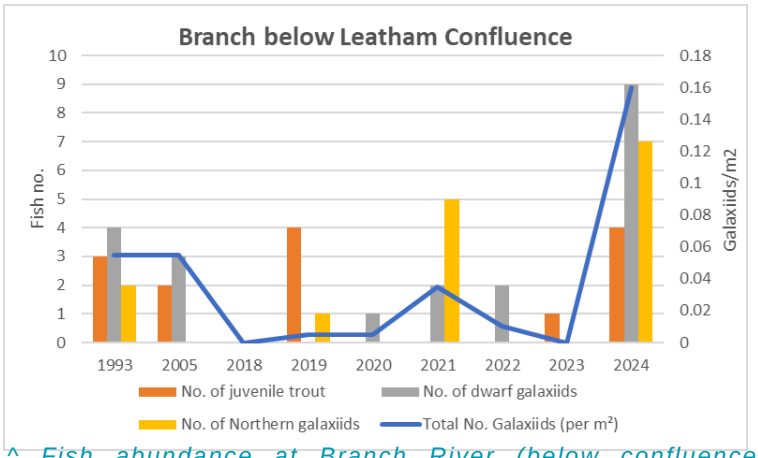
This historic pre/post scheme data indicates a collapse in Leatham brown trout recruitment levels following the commissioning of the hydro scheme, which now appears to have been partially rectified through Manawa Energies adult trout restocking program, albeit with a shift to a rainbow rather than brown trout dominated fishery, something long-time anglers have also observed within the catchment. All of our existing 15 monitoring sites bar one revealed a significant increase in galaxiid densities compared to baseline 'pre-restocking' density data that we hold for these sites. Bobs Stream tributary did not show an increase, however the original baseline record for this site is considered to potentially be inaccurate due to a likely data recording error.

The overall picture of monitoring results so far, suggest stability tends to be the predominant driver of galaxiid and trout densities within this catchment - generally fish numbers are high at most sites after a precluding fairly stable 12-month period which is what occurred prior to this year's sampling results.

In addition, there is a significant difference in stability within all sites with the most stable tributaries supporting far higher fish densities than the more unstable tributary sites, and mainstem sites supporting lower overall densities of all fish species than tributary sites on average.

It is presumed this is related to the size of the waterway/magnitude of flood events, which appears supported by the fact that with a lack of floods prior to this year's sampling work, the 6 mainstem sites recorded a far higher density of galaxiids than previous records apart from the mainstem Leatham site which was not far off the previous recorded high recorded in 2021. Of particular interest, the site deemed to be most flood impacted (below Branch/Leatham confluence) showed close to a 3-fold density increase against all previous records including the 3 baseline records in existence for this site prior to monitoring

beginning - see graph below. This appears to validate the view that abiotic flood frequency and size factors are the primary drivers of native fish densities in this catchment, with the impact of adult salmonid restocking on native fish population health yet to be signalled.



^ *Fish abundance at Branch River (below confluence), showing a significant increase in trout and galaxiids which staff believe is due to river stability.*

The goal of the monitoring program is simply to ensure both Northern and dwarf galaxiids within the entire catchment retain healthy population levels, and no long-term declines potentially attributable to trout restocking are able to be detected over time. So far there is no evidence that annual restocking is causing population biomass reductions of the native fish species present within this catchment, relative to salmonid densities present prior to the restocking program being initiated.

OPOURI RIVER | DWARF GALAXIAS

A healthy abundant population of native fish continues to function within the Opouri River, however there appears a notable decline in population density of dwarf galaxiids collected over the 2022 and 2024 years – low densities recorded in 2024 are of concern and may have been related to the drought that occurred last summer, which saw part of the Opouri dry up again while irrigation continued - one of the many issues we are seeking to resolve through Marlborough's new freshwater plan (see RMA chapter) - see table below.

OPOURI RIVER ELECTRIC FISH MONITORING

Year	Location	Area Sampled (m2)	No. of juvenile trout	No. of trout (per m2)	No. of dwarf galaxiids	No. galaxiids (per m2)	Other fish
Dec-18	Opouri at Tunakino Bridge	75	5	0.07	68	0.91	5 upland bully
Nov-19	Opouri at Tunakino Bridge	100	4	0.04	100	1.00	28 upland bully; 1 SF eel
Jan-21	Opouri at Tunakino Bridge	130	0	0.00	142	1.09	150 upland bully; 1 LF eel
Mar-22	Opouri at Tunakino Bridge	75	0	0.00	54	0.72	11 upland bullies
Feb-24	Opouri at Tunakino Bridge	100	1	0.01	61	0.61	73 upland bullies
Dec-18	Opouri at Ronga Confluence	56	1	0.02	108	1.93	3 upland bully
Nov-19	Opouri at Ronga Confluence	100	4	0.04	144	1.44	66 upland bully
Jan-21	Opouri at Ronga Confluence	120	3	0.03	109	0.91	70 upland bully; 2 LF eel
Mar-22	Opouri at Ronga Confluence	80	0	0.00	57	0.71	11 upland bullies
Feb-24	Opouri at Ronga Confluence	100	0	0.00	37	0.37	38 upland bullies

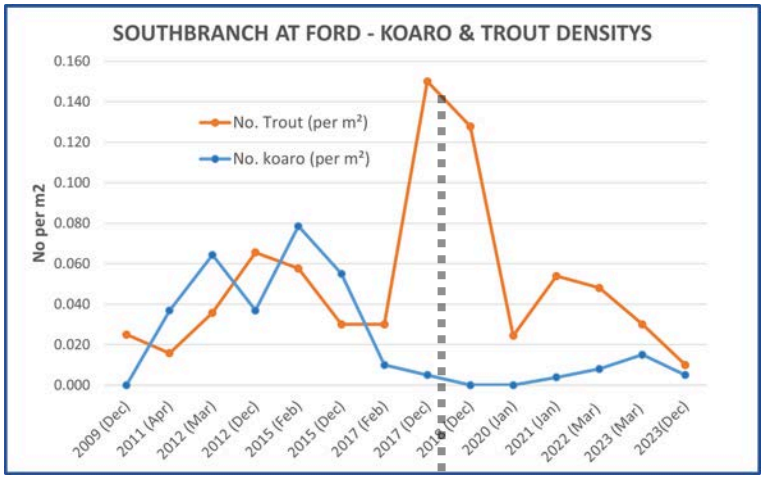
RIUWAKA RIVER

The Riuwaka River has long suffered from poor juvenile brown trout recruitment, likely due to a lack of small stable side streams for both spawning and juvenile trout rearing (all spawning occurs in the larger North and South Branches which also support adult fish). Trout spawning foot counts (see Riuwaka spawning count - page 9) also indicate peak brown trout spawning in this catchment occurs a month later than most other systems in the region, perhaps due to colder average water temperatures meaning the timing of spawning is delayed as it takes longer for winter water temperature drop to occur in this system.

While moderate numbers of trout fry can be encountered through electric fishing, survival of these fish through to yearling size appears to be challenging based on drift dive and electric fishing data – normally yearling brown trout tend to grow within smaller tributary streams and migrate to larger systems with adult salmonids when they are a better size to cope with the predation pressures exerted by shags, longfin eels, and adult trout within these larger systems. This river has been the subject of significant monitoring effort for over a decade, with annual electric fishing surveys in the North & South Branches to monitor recruitment of juvenile trout and along with this, native fish numbers - see Table on page 42 within the Appendix for monitoring results.

It has also been the recipient of one brown adult trout release back in 2017. While this release was successful in boosting the adult brown trout population (some of these fin-clipped adult fish were still recorded over 6 years later in the 2023 drift dive), further Riuwaka releases have been discontinued due to Treaty Partner concerns expressed following the 2017 release – future adult trout population enhancement effort for this system will instead focus on trying to improve habitat within the lower river for both adult salmonids and longfin eels as required erosion protection works are carried out.

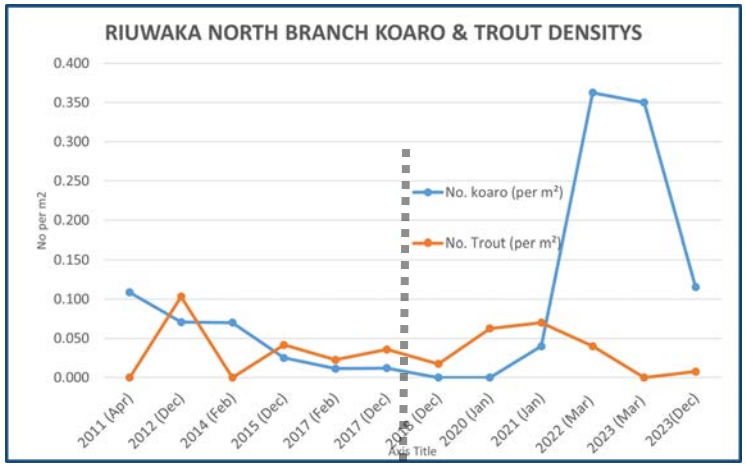
The juvenile trout and koaro graphs below show a significant collapse of the koaro fishery at all three sites for two years following Cyclone Gita, with trout spawning recruitment not faring as badly, perhaps due to differences in their life-history.



^ *South Branch (at ford) koaro and trout densities*

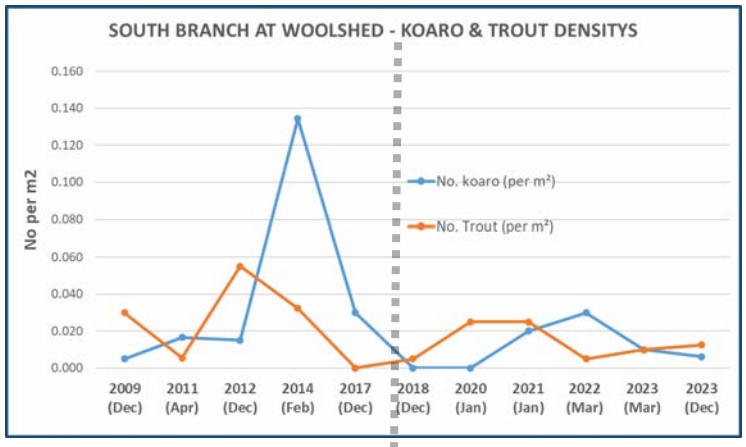
It appears that despite the extreme environmental impact of the Cyclone, some adult trout still survived and managed to spawn following this event, perhaps due to their ability to survive out in Tasman Bay when washed out in a flood, before migrating back up into the river once the flood had abated.

It is encouraging to see the high level of koaro encountered within the North Branch site in recent years, however the South Branch sites have still not yet reached previous monitoring peaks encountered - see graph below.



^ *North Branch koaro and trout densities*

CYCLONE GITA



^ *Soiuth Branch (at woolshed) koaro and trout densities*

CYCLONE GITA

However, due to the limited number of monitoring sites (3), it is difficult to tease out specific drivers of population biomass for both native fish and trout within this system, although it certainly appears that the koaro population was more adversely impacted by Cyclone Gita than the trout population.

Fish & Game intend to continue annual monitoring within this Awa-Tapu waterway, which is of great cultural significance to Iwi, as it gives us useful information on the likely future challenges that increased flooding will bring to both native fish and trout population health within Aotearoa.

BACK COUNTRY FISHERIES

DESIGNATED WATERS

The 2023-24 season was the first year the Designated Waters (DW) system was implemented. In this region, we have three Designated Waters: Travers, Upper Wairau and Upper Matakitaki. These rivers essentially got 'automatic' inclusion into the DW framework as they were existing Backcountry Fisheries, however, the Nelson Marlborough Council decided not to include the Goulter River in the DW framework due to low fish numbers the river was experiencing at the time, and on the premise that it could be added in the future if necessary.

As this was the first year, staff wished to have an increased presence in DW fisheries for compliance purposes and to monitor angler use. This was achieved on the Travers and Upper Wairau.

Overall, there was mostly positive feedback about the DW system from Nelson Marlborough anglers. For example, we believe fewer non-guided non-resident anglers were using the Travers, partly due to the cost barrier. This was certainly the case from our compliance trips there, and also feedback from the Water Taxi operator who has a very good handle on what is happening up there angler-wise. Positive reports came through for the Upper Matakitaki, where feedback from anglers mentioned less usage and more catchable fish.

Very favourable reports came in from other fisheries outside of this region such as the Karamea River catchment on the West Coast and the Hope catchment in North Canterbury. These are multi-day fisheries that have an international reputation and attract a good percentage of walk or fly in angling from non-guided, non-resident, anglers.

It was anticipated that Fish & Game would survey all anglers about their thoughts and experiences on the Designated Waters framework (the first year in), however this did not eventuate as regions decided to seek specific feedback on future DW fisheries and were cautious of 'survey fatigue' with many anglers invited on multiple occasions to participate in surveys by various regions. It is likely for the incoming season, an angler displacement survey may be undertaken for selected pressure-sensitive fisheries.

All told, it appeared resident and non-resident anglers easily adjusted to the system, though there were a few technical issues with the licence system that were uncovered and needed rectifying, mostly this was from when non-resident anglers tried to purchase a licence on the day they wanted to fish, and were unable to due to a flaw in the licence system.

^ A perfect fishing day in the Travers. Photos: Jacob Lucas

COMPLIANCE

Compliance-wise, there were no issues found with anglers not holding DW licences which was very pleasing.

Multiple trips were made up the Travers to undertake compliance, and it was evident that there was less pressure on the river than past ranging seasons. There were some days throughout the season when the river got very busy, namely on the likes of Opening Day and New Year's Day, though this was mostly from Kiwi anglers. Reportedly, there were over 20 anglers on the Travers on Opening Day who all had the same idea on the same day - an unusual occurrence as noted by an experienced ranger and regular at this river.

Two interactions of note were recorded by rangers, one was from a European angler who was seen carrying a rod on the Travers walking track. When asked if he was fishing the river, he informed the ranger he did not want to pay the DW licence fee so was waiting to get to the Sabine before he started fishing. Another was an American angler in the Upper Wairau who was seen without a rod up the Rainbow on a sunny day. When asked about it, he said he had 4 x DW licences commencing the following day and was just scoping the river out. He was kicking himself for not starting that day as fish were clearly seen feeding in brilliant fishing conditions.

WANGAPEKA ANGLER USE MONITORING & SURVEY

The Wangapeka is one of the regions most important fisheries. Staff were busy collecting angler use data in the 2022-23 season in order to support adding this river as a Designated Water fishery. This was reported in the previous Annual Fisheries Report, however our recommendation to introduce the Wangapeka River for the 2023-24 season was not approved by the Minister of Conservation.

We again collected angler use data this season in order to apply to include the Wangapeka as a DW for 2024-25, and staff spent 16 days on this river, as well as additional compliance work from voluntary rangers.

To obtain supporting data, a short survey was sent to around 6000 licence-holders who had purchased a licence for the Nelson Marlborough region. The survey asked for feedback on including the Wangapeka River in the DW framework. 182 people responded, which included non-resident anglers, Nelson Marlborough licence-holders and those who reside in other regions who purchased a Nelson Marlborough DW licence.

The key question was whether they supported or did not support the Wangapeka as a future DW fishery. If licence-holders elected their support for including the Wangapeka a DW fishery, four options were then presented as a starting point for the DW boundary, from the Motueka confluence up to where the Conservation estate begins.

A summary of the survey results shows that:

- 78.5% of respondents supported including the Wangapeka as a DW fishery
- 56% supported the starting point to be from the Motueka River confluence
- 72% of respondents had fished the Wangapeka within the past five years.
- Nearly half (46.4%) of non-resident respondents supported the proposal

This information was given to the Minister (now Minister of Hunting and Fishing, Todd McLay), however, along with all other proposed DW's from other regions, was declined for this season, as it was stated, among other points, that he wanted the objectives of the DW regime to be more clearly defined by Fish & Game.

While disappointing, it means Fish & Game need to come up with more detailed policy and criteria to provide the Minster more clarity on the framework for future DW inclusions.

SOCIAL LICENCE INITIATIVES

In the current age, having a favourable public perception is very important for any organisation. Pursuant to one of our key national strategic priorities, this region gets involved in a number of social licence projects to retain and enhance Fish & Game's public perception and legitimacy, within the eyes of the wider New Zealand population.

MOTUEKA RIVER CLEAN UP DAY

A Motueka River Clean-up day was held, with assistance from the Nelson Trout Fishing Club. This was a great day out, with a large trailer load of rubbish removed from public areas, road verges and fishing access points. All told, 20 large bags of rubbish, hundreds of bottles and cans, 2 mattresses, a lawnmower and a heap more were taken out of the valley and into landfill.

There was some positive media generated after the event took place, and is great for social licence purposes. We hope to carry out future efforts like this in other catchment areas. Thanks again to members of the Nelson Trout Fishing Club who assisted on the day and are always willing to lend a hand with similar initiatives.

^ *Tony Entwistle and Don Clementson removing rubbish in the Motueka Valley. Photo: Gebhard Krewitt*

^ *Lawson Davey cleaning up near Woodstock. Photo: Gebhard Krewitt*

FARMERS 4 WHIO TRAPPING

It's over a year since Fish & Game have been maintaining the Skeet trap line as part of the Farmers 4 Whio trapping network. Farmers 4 Whio are doing great work in the Motueka catchment, with an aim to see whio flourish within farm environments, mostly in the Western tributaries of the Motueka.

Getting involved in conservation projects like this are excellent for social licence reasons and help achieve one of the key national policy objectives, especially when Fish & Game (and licence-holders) undertake great work for the benefit of conservation or the public good which may not relate specifically to game or sportsfish.

The Skeet trap line has 59 traps on it (nearly 6kms) and heads through farmland and into native forest, and is checked each month.

It has been great to have buy-in from the Nelson Trout Fishing Club, who are now running another trapline in the Baton Valley, with management assistance from Fish & Game.

This line runs alongside the picturesque Baton River and volunteers are frequently peering into the river looking for trout. Hopefully this coming season they will be enjoying some trout fishing here after the traps are cleared.

It is worth mentioning that Fish & Game, with help from gamebird hunters, has been running a trapline for the past 8 years at Rabbit Island. This project ties in with the Battle for the Banded Rail trapping network.

^ *A stoat caught on the Skeet trapline - July 2024. Photo: Jacob Lucas*

MOUTERE NATIVE FISH RESCUE

Fish & Game assisted DOC/Tasman Bay Guardians with a native fish salvage of the Moutere catchment. Mostly these were tuna (eels), that had become stranded in small pockets of residual water.

It's fair to say there would have been significant fish kills within this catchment due to the river drying up before a salvage was made.

Plenty of tuna were salvaged and released into a nearby stream that had good flows.

^ *Releasing tuna rescued from the drying Moutere River to a healthy waterway (lower). Photos: Jacob Lucas*

COOKING FOR CHARITY

While more related to game bird hunting, Fish & Game are also involved in a cooking for charity programme, where game bird meat is supplied by hunters and cooked into ready-to-eat meals on three occasions each year.

The meals are then delivered to Te Piki Oranga and distributed to people in need.

PARA WETLAND UPDATE

Though again more related to game bird hunting, it is worth noting that progress continues at Para Wetland, one of the region's most important remaining wetland areas. At 105 hectares, this is a nationally significant lowland wetland, and we have now been trying to restore this site for around 20 years, and having spent over $1 million to date (including staff time). Much of the restoration work has involved willow tree control and the planting and maintenance of thousands of native trees. Although Para is popular with game bird hunters, it has become more of a social licence project, with huge benefits to native species as well as improving water quality.

ANGLERS HELP WITH O.M.B

Members of the Nelson Trout Fishing Club joined Fish & Game staff and other members of the public to tackle Old Man's Beard in the Motueka Valley.

OMB is widespread in this area, however it was a patch of important remnant native forest that the group helped control OMB on. The iconic area, known as Haycocks Bush or the 'tree tunnels' also happens to run alongside one of the best fishing beats on the Motueka, and is well known to any local angler.

The group made good a good start on the pest vines along the 1.5km corridor length of trees, however there is much more to be done - many more return trips are needed and there will also be funding for professional contractors to tackle some of the other undesirable weeds as well as OMB.

^ *Members of the Nelson Trout Fishing Club before tacking Old Man's Beard at Haycocks Bush in the Motueka Valley.*

GENERAL

MOTUEKA CATCHMENT COLLECTIVE

It's been a big year for the Motueka Catchment Collective (MCC). The MCC received $870,000 in funding courtesy of MPI over three years to build capacity and expand reach with the aim to enhance freshwater wellbeing in the catchment. Six thematic groups have been established, most of which Fish & Game either have an interest or active role in. These groups meet regularly to help achieve objectives they have set themselves, with a strong emphasis on education and grassroots conservation projects which the public and valley residents can achieve.

While F&G have an interest in the River Management and Biodiversity & Restoration thematic groups, we play an active role in the River Access & Recreation and Pest Management groups.

Of interest to anglers will be the formation of new picnic areas at a number of sites in the Motueka Valley. We hope to have these established by the summer, and there is potential for Fish & Game and the Nelson Trout Fishing Club to assist in these, either financially and/or through volunteer labour to maintain them, with an opportunity to promote the Club and freshwater fishing.

> MCC workshop on planting the right plant in the right place to ensure its survival. Photo: MCC

< MCC workshop on how to collect native seeds at a farm near Tadmor. Photo: MCC

The Pest Management group is actively interested in weed and predator control. On the predator side, the aim is to create a backyard trapping movement, tying in with the great work already underway by Farmers 4 Whio.

With just one year of funding left, the key to the entire project is to ensure that the conservation work continues without funding, and in that respect, it will be an important final year. Luckily, grassroots conservation efforts are being enthusiastically driven by passionate landowners who want to better the environment, and we should be confident this will continue, with the MCC now in a position to seek outside funding for important projects, if required.

TBG SNORKEL EVENT

Fish & Game assisted with a Tasman Bay Guardians snorkel event at MacLean's Reserve (Motueka Valley). The aim of the day was to connect people with the river, and educate on river health and the life that can be found there. This site is ideal to view trout, and plenty were seen on the day. Fish & Game staff were there to speak to people about the river, and showcase one of our most common trout monitoring tools - drift diving.

^ An aerial view of some divers in action. Photo: MCC

GUIDES MEETING 2023

A biannual meeting with Nelson Marlborough Professional Fishing Guides was held in September. The meeting is always well attended by our local fishing guides, and provides a good avenue for discussion between Fish & Game and the guides, and within the guides group.

The majority of the meeting was discussing the incoming (at the time) Designated Waters Licence. We will look to hold another meeting in 2025.

LEE VALLEY DAM - SITE VISIT

Fish & Game staff were given a tour of the new Lee Valley dam in December as the dam was in the process of filling up. Filling was very slow due to the lack of rain over winter/spring, however, by the time the drought really took hold it had fortunately filled sufficiently to release additional water to the Waimea River so irrigators could maintain their watering regime.

^ F&G staff getting a tour of the Lee Valley dam. Photo: Jacob Lucas

RAINBOW SIDE STREAM FENCING

Thanks to the help of several enthusiastic volunteers and Fish & Game staff, the Rainbow River salmon spawning stream fence has been all but repaired. This is the most important salmon spawning site in the Wairau catchment and was installed by the Acclimatisation Society to protect this key spawning water prior to Fish & Game The fence had seen better days, with broken wires and had collapsed in places allowing stock to enter, but is now close to being stock proof again.

^ Stock proofing the upper section of the Rainbow side stream fence. Photo: Jacob Lucas

ACCESS UPDATE

Besides maintaining most F&G angler access points, the main access priorities have been for the Branch River, where active logging has seen restrictions placed on mid-week access. Staff have been in regular contact with the logging operator for updates on progress of a mid-week access arrangement when anglers enquire, trying to arrange mid-week access on behalf of them.

Staff also provided feedback to a major forestry company through their Forest Stewardship Certification process about Public Easement Access (PAE) to trout fisheries.

We also have regular contact with the Walking Access Commission about access issues that arise.

MORE WETLAND CREATION

Though not strictly related to trout fishing, wetlands are an important tool for improving water quality, and Fish & Game are active in this space for water quality and waterfowl habitat reasons.

This summer in conjunction with Landcare Trust and funding from Westpac, Fish & Game Officer Lawson Davey has assisted with a couple of demonstration projects in the Moutere Catchment to showcase what can be done under the Tasman District Council permitted activity rules, and how cheaply wetlands can be constructed in the right location.

In conjunction with Annette Litherland from Trust, Lawson helped select appropriate sites and worked with the Council to confirm the sites didn't need consents as well as providing technical advice & oversight of the wetland construction projects.

One wetland cost $4,700 in digger time which used a contractor. The second one the landowner built it himself using his digger at a cost of $600 in diesel. Mahana School will be helping with planting it up.

^ Mahana School planting out Rose Road wetland. Photo: Lawson Davey.

COMPLIANCE

Staff and volunteer rangers had a pretty active compliance season, covering a good mix of local and backcountry waters.

All told, 479 licence checks were completed meaning our compliance target of 10% was easily met.

As can be seen in the table below, around 26% of checks were on DW or other backcountry fisheries, 46% at Lake Argyle or Waimea park, and the remainder at other lowland fisheries such as the Motueka, Wairau, or Nelson Lakes.

Around 20% of anglers encountered by rangers were non-resident, with most of these coming from backcountry waters such as the Upper Wairau and Wangapeka rivers. This was a similar percentage to last year also.

COMPLIANCE SUMMARY

Total licence checks		%
Total on DW fisheries	34	7.1%
Total other backcountry	92	19.2%
Total lowland fisheries (except Lake Argyle)	157	32.8%
Total Argyle	124	25.9%
Total Waimea Park	72	15.0%
TOTAL	**479**	
Total Non-Resident anglers	75	19.6%
Total non-compliant	4	0.8%

NON-COMPLIANCE

Four people were found fishing without a licence over the duration of the season. One was found at the Wairau Diversion and was put through the Iwi Community panel (ICP). A 17 year old spin fisher was caught at the Motueka River without a licence and was issued a warning letter due to age. Two foreign spin anglers were also found spin fishing the Wangapeka without a licence over summer, and enforcement action was initiated.

Overall, this is still a very high level of compliance at less than 1% of anglers breaking the rules.

OUR COMPLIANCE TEAM

Thanks as always to our teams of voluntary rangers: Jim Anderson, Steve Ngatai, Nick King, Weesang Paaka, Jean Willis, Lee Crosswell & Jack Kingsborough.

Long time voluntary ranger, Paul Watts, has decided to hand in his warrant. Paul has been a very effective ranger for us, often in challenging circumstances dealing with fishers at the Wairau Diversion. He has a great knowledge of the legislation and has been involved in a number of successful prosecution cases over the years.

RMA ADVOCACY

Resource Management advocacy, while not valued or understood well by many licence holders, remains one of our key avenues to achieve improved Local Authority management and retention of the 'natural capital' that supports the fish and gamebird resources, pursuant to our statutory advocacy functions as laid out in our 10-year Sports Fish & Game management plan. This advocacy directly supports one of the five key strategic priorities within Fish & Game's national organisational strategy - Healthy Species, Habitats, and Ecosystems.

While Fish & Game are directly responsible for the population health of the fish and gamebird species we are required to manage, Local Authorities are responsible for the health of their habitat. Much resource management work within the Nelson Marlborough Region often focuses on water quality and quantity issues, which tend to affect salmonids more than gamebirds, however we sometimes also engage on planning activity within the hunting space, usually around retention of hunting access to public areas.

Unfortunately, resource management advocacy is often an adversarial lengthy process costing licence holders considerable staff time and funding resources for legal assistance and the like.

NELSON CITY COUNICL FRESHWATER REGIONAL PLAN DEVELOPMENT

Staff reviewed stage one of this plan which appeared to be fairly good in terms of aspirational vision statements and included recognition and provision for Fish & Game values.

ECAN REGIONAL POLICY STATEMENT

The region liaised with our national NZFGC planner Helen Brosnan, and Nth Canty/CSI staff over the ECAN Regional policy statement review – our involvement in this process is peripheral as only a small part of the Nelson Marlborough region falls into the ECAN area – our initial observations were the policy statement focussed only on native fish and indigenous ecosystem health, with little if any recognition of salmonids and their habitat within the new draft Regional Policy statement, despite the existence of several water conservation orders protecting salmonids within the ECAN area, an outcome that seems to be prevalent amongst many Local Authority planning processes recently. A comprehensive submission has been produced by Helen in conjunction with regional staff planning input from North Canterbury and Central South Island which has covered off this region's interests on behalf of licence holders.

M.D.C FRESHWATER REGIONAL PLAN

F&G (and other parties) resolved during environment court mediation to amend the MEP to clarify that it is "interim", does not give effect to the NPSFM 2020, is subject to change, and that any resource consent application that might affect water quality needs to take full account of the NPSFM requirements.

With the assistance of the New Zealand Fish & Game planning staff, the region then lodged a submission on the development of Marlborough's new freshwater plan which will ultimately replace the Marlborough Environment Plan. Utilising "Save the Wairau" funding we received, Fish & Game also commissioned an ecological review of the existing Wairau minimum flow and allocation framework, to support this new freshwater planning process.

We have also met with the Mayor and Environment Committee Chair to outline the overallocation risk that now presents itself to the Council with the new freshwater plan now not being required to be notified until 2027 due to the recent change of government (under the previous government all freshwater plans were legally required to be notified by the end of 2024). If the Council now sticks to the interim MeP framework between now and the new plan being notified, overallocation of water within key fisheries of interest to Fish & Game, including the Wairau, is a significant risk in our view. Tasman District Council ended up having to build the Lee Dam at a price tag in excess of $200 million, to fix historic overallocation within the Waimea basin, so we are hoping Marlborough does not go down this pathway also between now and their new freshwater plan being notified.

MARLBOROUGH RESOURCE CONSENTS

To maintain our appeal position on water allocation and minimum flows within the Marlborough Environment Plan (MeP), now to be resolved through the next freshwater planning process, we continue to submit where appropriate on Marlborough resource consents. Applications for new water within the Kaituna, Rai, and Wairau, have been opposed by Fish & Game. A recent application by Delegats Ltd to convert 40 l/s of Wairau Class B water into Wairau Class A water has unfortunately been processed by Marlborough District Council staff as a non-notified consent, based on legal advice deeming Fish and Game not to be an affected party to these applications now the MeP appeal on these matters has been deferred until the new freshwater plan is developed.

Granting of these consents undermines the upcoming 2024 freshwater planning process in our view, and

potentially opens the flood gate for a tsunami of new water applications. Fish & Game is exploring what avenues are potentially open to it to avoid this outcome and have notified our relevant Treaty partners over the potential ramifications of this decision.

Staff also provided input on resource consent applications for stream erosion repair works within Top Valley & Waikakaho Streams to ensure habitat considerations were incorporated. Fish & Game were also consulted with in relation to some river remediation works being undertaken within the Opouri River which we assisted the landowner with.

TASMAN DISTRICT COUNCIL PLANNING AND CONSENTS

The manager worked with NZC planner Helen Brosnan to prepare a FG submission on phase 2 of the development of TDC's new freshwater plan – on behalf of anglers we are seeking TDC acknowledge the degraded state of the Upper Motueka/Motupiko, Tadmor, Dove, Stanley Brook and Wai-iti Rivers, in terms of summer low flow stress, and seek they quantify irrigation take contribution to this situation and explore long term options for resolution, including a review of their current low flow management, in particular irrigation cut off triggers. Staff also managed to engage some licence holders to input to TDCs initial public consultation round for development of their new freshwater plan. The initial aspirational vision statement for Tasman's plan aimed for indigenous freshwater ecosystems to be thriving, which while we we support, unfortunately by default ignores the high salmonid values many of Tasman's rivers hold including those protected by Water Conservation Orders (similar to the draft ECAN regional policy statement). The manager and NZC planner also met with the TDC planning and hydrology team about societal expectations around sustainable minimum flows – currently in our view the Motupiko River is over allocated and the existing rationing triggers are far lower than accepted general practice elsewhere within NZ – we are urging TDC to undertake some modelling/review work to quantify the relative role of irrigation take on the frequency of river drying within the lower Motupiko, and adverse instream conditions within the Upper Motueka above the Wangapeka confluence. The manager has attempted to reach out to relevant Treaty partners regarding these concerns also.

Staff met with a Council consultant who had been engaged by Tasman District Council to undertake a review of the Waimea River Park Management Plan (2010). The current plan is excellent in terms of delegating responsibility to appropriate gamebird hunting activity within the berm lands to FG, and we would like to see this remain – there is also an opportunity for us to suggest we partner again with TDC and the gravel companies to develop one or two new wetland areas to be balloted for gamebird hunting now the original Challies Island Wetland has become too busy for safe hunting, and waterfowl nesting has also declined significantly due to high public access/dog walking adjacent to this site. Ongoing support from Tasman District Council for the very popular Waimea adult fish out pond, and Tasman Sports fishing for youth junior ponds, will also be sought through the management plan review process.

A resource consent for an infiltration gallery next to the Motueka River as a replacement source for the Dove Valley water scheme was assessed, along with some instream work applications including a small recreational gold mining operation.

PROACTIVE ENGAGEMENT

Ongoing liaison with TDC Rivers staff and Taylors contracting occurred over erosion repair works within the Wai-iti, Motupiko, and Upper Motueka, including some targeted trout spawning survey work (see page 4), to ensure requested winter works were not likely to damage annual trout recruitment output. Staff also visited a number of flood erosion repair sites with Taylors contracting to view some innovative new approaches in this area designed to improve river channel diversity while still achieving river control goals.

^ Improving channel diversity within the lower Motupiko through use of alternative approaches to riprap – in this case rock groynes interplanted with matsudana willow poles from TDC's nursery. Photo: Rhys Barrier

Nationally, advocacy on a range of fronts on behalf of licence holders continues by NZ Fish and Game council staff in an attempt to get the habitat of trout and salmon specifically recognised and provided for within proposed government legislation changes. A recent private members bill to include the Game Animal Council and Fish & Game representation is one example of this work.

NELSON TROUT FISHING CLUB

ACTIVE YEAR FOR THE NELSON TROUT FISHING CLUB - BY TONY ENTWISTLE

The Nelson Trout Fishing Club enjoyed another active year. Blessed with stable river conditions throughout the 2023-24 season, local trout populations boomed, and were the best the Nelson-Marlborough Fish & Game region has produced for several years. Both trout numbers and the condition of the fish were exceptional. This presented bountiful fishing opportunities for club members right through the season, with regular posts in the club newsletter reflecting members' success on the water.

The pre-season casting clinic at Saxton field and the following river skills morning at the Appleby Bridge were well attended, where both club members and some members of the public, took the opportunity to refresh their fly-casting skills. Club fishing trips included club mentoring days on the Motueka River, and an enjoyable away-trip to Lake Brunner.

In addition to the excellent fishing opportunities throughout the season, club members also enjoyed a wide range of other activities during the year. Club nights featured a great range of guest speakers, covering topics as diverse as pack-rafting, Nelson Bay snapper populations and local trout fisheries, along with a fantastic cooking demo at Nelson College, and the popular AGM quiz.

Annual events like the club's Christmas BBQ and mid-winter dinner were again well supported. This year's guest dinner-speaker was former Chief Executive of NZF&G, Bryce Johnson, who gave an engaging and fun talk on many of the 'more interesting' moments experienced over his years while leading Fish and Game. The annual auction of surplus fishing gear and tackle held in September once again raised a good profit for the club. Each year the club donates a significant amount of this profit to charitable causes, including the likes of, The Sport Fishing for Youth Trust, Westpac Rescue helicopter, Coastguard NZ, Casting for Recovery and St. John's Ambulance.

In early April, in conjunction with 'Women on the Fly NZ', the club helped sponsor a successful evening event exclusively for women interested in fly-fishing. Leigh Johnson, the heart of WoTF, and Corina Jordan, current CEO of NZ F&G, spoke to an audience of 25 women from as far afield as Kaikoura, Blenheim and Golden Bay, (and even a couple of ladies visiting from Te Anau), on the opportunities and difficulties faced by women wanting to get started in fly-fishing. It was clear that fishing clubs generally, will have an important role in helping more women become involved in trout fishing going-forward, and the Nelson Trout Fishing Club is keen to explore ways that it can help in this regard.

Many club members also helped the Sport Fishing for Youth Trust, with several busy junior angler fishing days at the Waimea Park educational fishing ponds, on a significant clean-up of rubbish alongside the Motueka River, and the monitoring of a new trapline for pests in the Baton Valley.

The Nelson Trout Fishing Club welcomes new members, whether you are new to trout fishing or are already experienced anglers. For more information check out our website at Nelson Trout Fishing Club or contact The Club Secretary: secretary@nelsontroutfishingclub.com.

^ Mark Jowsey (left) has benefitted from Club mentor days on the Motueka. here Tony Entwistle (right) provides valuable insight to this fishery. Photo: Gebhard Krewitt.

Top: Mary Bolland is an active Club member and is seen here enjoing success on the Motueka River. Photo: Michael Stevenson

M.F.A.C UPDATE

AN UPDATE OF THE MARLBOROUGH FRESHWATER ANGLERS CLUB - BY CAREY CUDBY (TREASURER)

We began the 23/24 season on the back of two high flood event years. The August 2021 flood had a higher recorded flow than the previous best in 1984, which took-out the Branch Hydro Dam embankment. Added to this, the current season was reputedly the driest year in 94 years. The winter period prior to 1 October saw low flows and little rain and resulted in grey weed growth in the Wairau River, the first I have witnessed since I arrived in Blenheim in 2002. Challenging times for the fishery.

TROUT FISHING

Trout fishing, predominantly in the Wairau River, was affected by low winter flow and grey weed. Although low, flows were stable, and this resulted in reasonable success rates and greater opportunities to pursue a good abundance of pre-spawners. Flushing flows prior to Christmas saw the return of good wading conditions and clear water, with adult fish gaining condition very quickly, I suspect feeding at night as the daytime temperatures increased markedly towards Christmas. For those lucky enough to be on the river during a rise, with swallows in abundance, life was good. As with most rivers the Wairau's runs are not all equal and an angler must put in time to gain the knowledge of where and when to fish.

From Christmas until April we had two periods of rain, one of which was enough to discolour the river and some of its tributaries. Water temperatures increased, green weed established itself and wading was hazardous. Fishing was best conducted before 10am and it was always a hot trip home. That being said, it was a great season for those who ventured forth and stuck at it. On an average day, with due diligence, one would always catch and release the odd fish - but when the swallows were on the feed it was always a memorable day. I believe it is truly amazing, given the weather events of previous years, and with this year being the driest, how the river continues to produce some amazing well-conditioned fish.

SALMON

This year's salmon count was very low (50). Those fish that were caught, with few exceptions, were generally < 8lbs. Photos show fish lacking condition. I observed a school of 23 salmon in the lower Wairau just before our second rainfall after Christmas. These fish would not have had time to make passage to the Rainbow before the official count was made. My theory is that, because of the low flows and heat, fish stacked up, waiting for their opportunity to make their run, which they did comparatively late this season.

CLUB ACTIVITY

The Club was actively involved in a range of events this year:

- We held a casting clinic on the Taylor River. That was well-attended and netted a new member or two.
- We've hosted regular trips to Lake Argyle, which has provided an invaluable opportunity for tuition for fishers new to freshwater angling. While the secrets of fishing the lake still provides a challenge, there are fish to be caught for those that persevere.
- We supported a Nelson Marlborough Fish & Game initiative that introduced people to the art of freshwater angling on the Taylor River. Guy Gardiner, MFAC Committee Member and F&G Councillor, organised it, and the event was supported by Marlborough Primary Health, Te Piki Oranga and Marlborough Hunting and Fishing - who generously donated fishing gear, including new rods which participants could take home.
- We made submissions to the Marlborough District Council on Wairau River Catchment – Environmental Outcomes.
- We made a donation to the Federation of Freshwater Anglers Association's legal proceedings against Ecan, which is seeking to ensure that Ecan, in their role as the Regional Local Authority, enforce the conditions laid down in the Rakia River Water Conservation Order.

ACCESS

The dry hot year has posed problems for any access close to or adjacent to plantation forests or publicly accessed parks and reserves. Access to the boat ramp side of Lake Argyle was closed and only recently re-opened, there is evidence of open fires having been lit in the campground and given the proximity to the forest the road closure was the obvious decision. It will be a happy day when the public facilities are restored for this Lake.

Wairau river access has been barred at several access points close to Blenheim as the result of river bed and river embankment vandalism performed by a minority section of the 4 wheel-drive fraternity. Other closures have occurred because of the fire hazard risk.

The amount of litter accumulating at some of the more popular spots such as the Wairau Diversion and the Bar, and overstaying by some campers, has seen some DoC sites closed. If we want to keep access open then we, as the general public, need to improve our attitude towards public amenities or risk losing them.

LICENCE INFORMATION

REGIONAL INSIGHTS

Considering the economic downturn and cost of living crisis, our licence sales remain fairly strong. 4,343 LEQ's (full licence equivalents) were sold over the 2023-24 season, which was on par with the previous season's figure of 4,356 LEQ's - see table below. Considering sliding participation in the North Island and the economic situation most people are in, holding steady on sales is a good outcome.

Family licences are the most popular with around 1,500 sales sold, which has also been the case for the past few years. Whole-season licences dipped slightly, however Loyal Senior licences, Local Area and resident day licences increased, likely due to people having less disposable income and preferring to stay within the region or pay only for the days they fish.

With the Designated Waters Licence system in place for this season, resident anglers were required to buy a $5 licence to fish any of our three DW fisheries. 1,856 resident DW licences were sold in this region, and 590 DW day licences were sold to non-resident anglers over the season.

Non-resident licences make up 26% of total LEQ's (and income from fish sales), this is a considerable amount and likely the highest percentage in the country. This region, being a holiday destination and offering good fishing prospects, attracts plenty of visitors, so has a high number of guided and non-guided anglers. Looking at the New Zealand Professional Guides Association website, we are a region with one of the highest numbers of guides operating in order to cater for this market.

Overall, since our hatchery-supported put and take fishery program was initiated around 7 years ago, the region has now transitioned from needing an annual grant from the national Fish & Game funding system, to this year paying a $108k levy to support the wider organisations funding needs.

NATIONAL INSIGHTS

Nationally, Fish LEQ's were down -1.6% overall, however due to a modest licence fee increase of $3 the organisation ended up monetarily in the positive. With the exception of Wellington, Auckland-Waikato and Northland, every other region showed a small decrease in licences sales compared with the 2022-23 season.

Regarding Designated Waters licences, 11,568 resident season DW licences were sold nationally along with 2,771 non-resident day DW licences.

The poorest performing licence is the Long Break (9 day) licence, which only sold 410 licences this season and 217 in 2022-23, and some thought should be given around retaining this licence offering, or not.

NON-RESIDENT LICENCE DATA

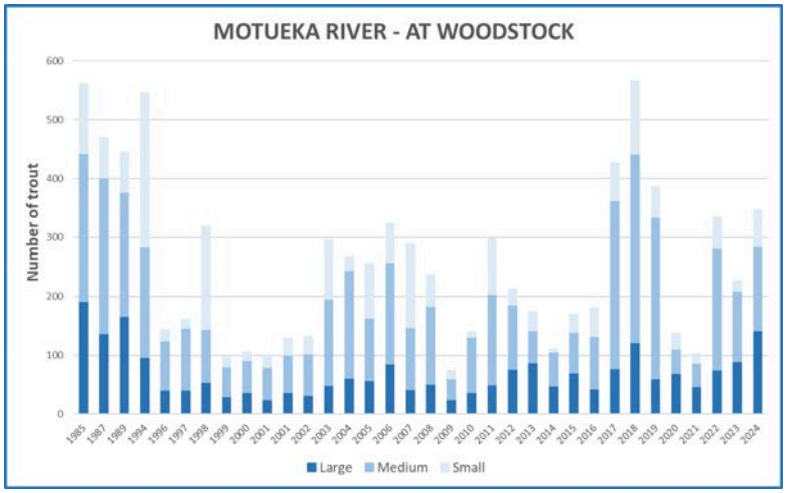
Nelson Marlborough regions sold 551 whole season non-resident licences and 578 non-resident day licences. Otago Region, unsurprisingly, sells the most non-resident licences, followed by Southland, with North canterbury and Nelson Marlborough roughly on par.

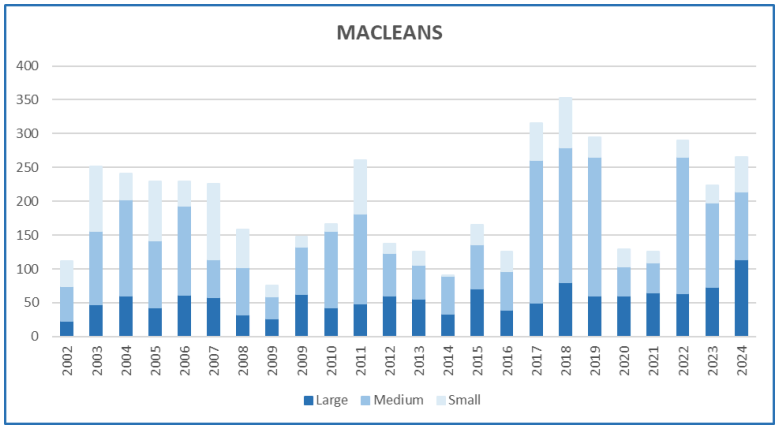
Nationally, 4,371 adult whole season non-resident licences were sold alongside 11,964 adult non-resident day licences. This equates to 10,435 LEQ's - around 14.5% of total fish LEQ's (and fish licence income) - this is higher than the 2022-23 season's figure of 9,823 LEQ's which is pleasing to see and possibly shows non-residents use is slowly returning to pre-covid levels.

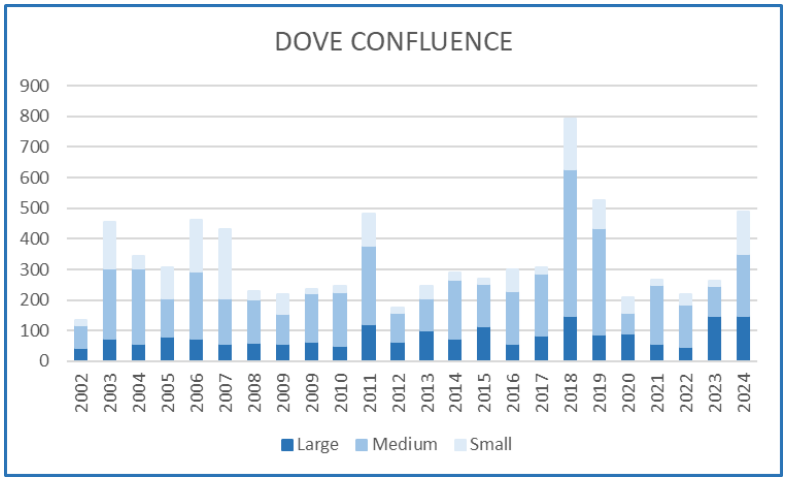
	RESIDENT CATEGORIES										NON-RESIDENT CATEGORIES				
	Whole season Adult	Family	Loyal Senior	Local Area	Winter	Long Break	Short Break	Day	Junior Whole Season	Junior Day	Whole Season NR	Day NR	Junior NR Whole Season	Junior NR Day	Fish LEQ
2022-23	769	1529	332	172	122	10	103	703	269	145	580	569	13	3	4,356
2023-24	736	1485	363	222	125	16	125	789	296	196	551	578	9	9	4,343

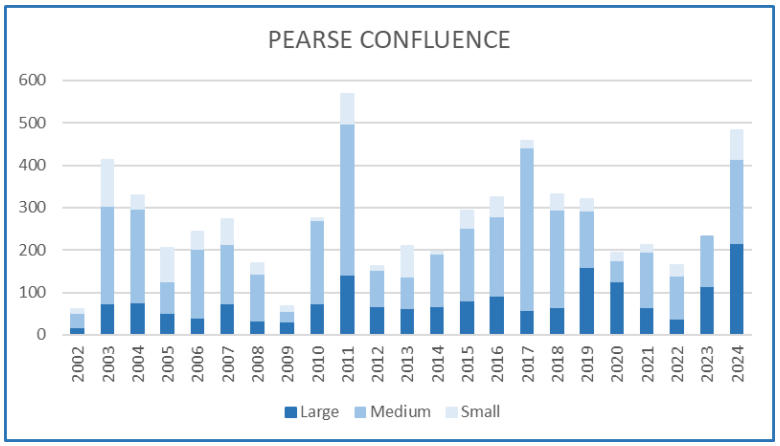
APPENDIX

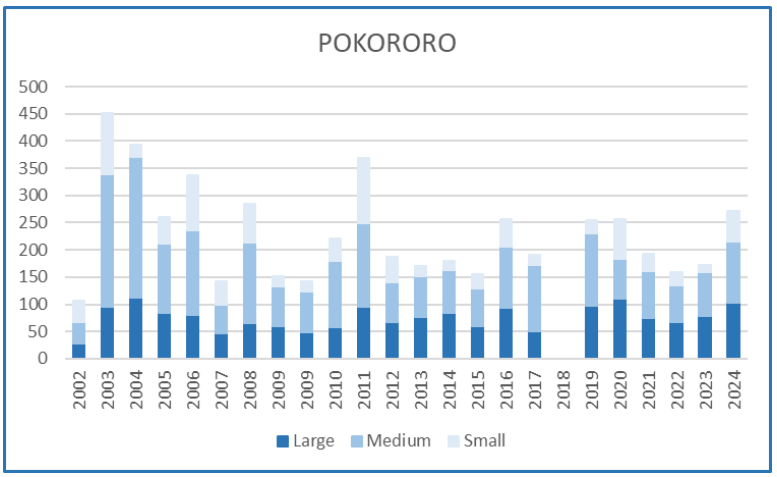
MOTUEKA DRIFT DIVE RESULTS- INDIVIDUAL SITES

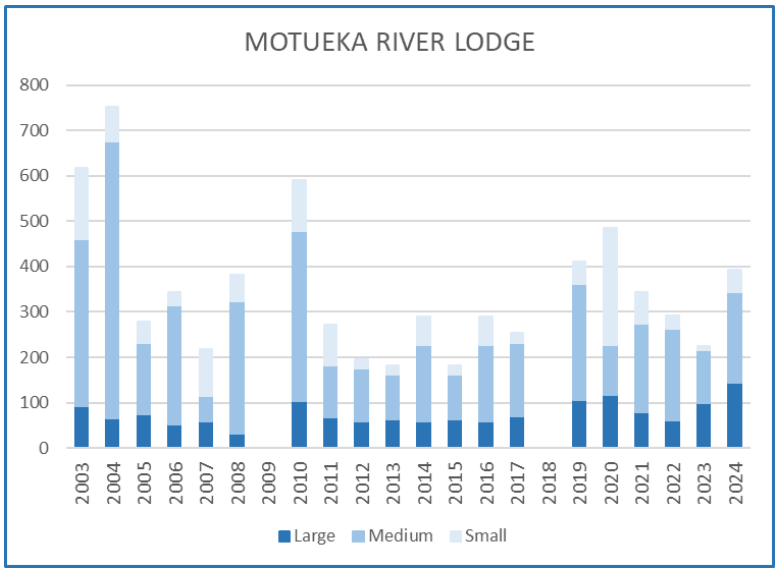












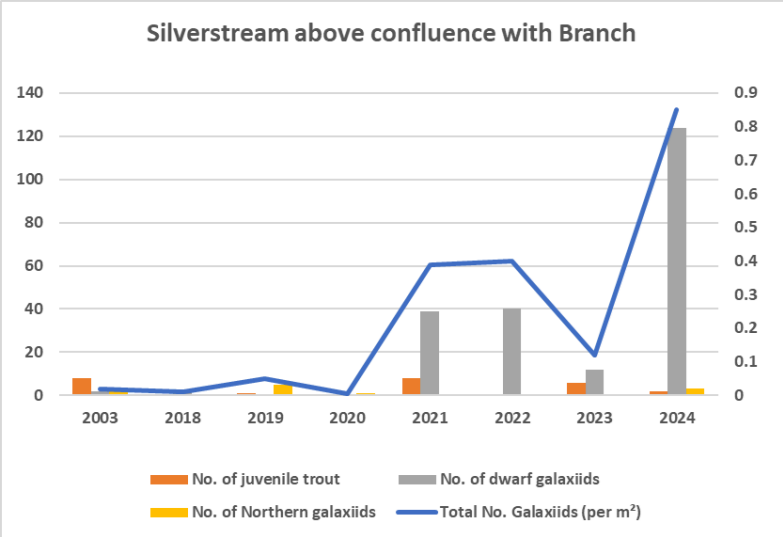
NATIVE FISH MONITORING - DATA

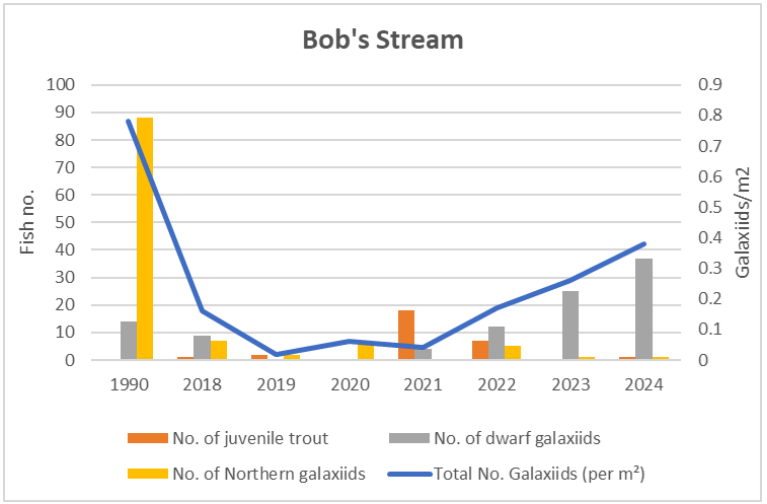
Year	Location	Area Sampled (m^2)	No. of juvenile trout	No. of dwarf galaxiids	No. of Northern galaxiids	Total No. Galaxiids (per m^2)	Comments
1978	Leatham - enchanted stream	100	9 bt	10 ?	0?	0.1	25 LF eel
1978	Leatham @ Caves?	200	3 bt	2?	0?	0.01	Mainstream between Caves /Barbers
1978	Leatham @ Barbers?	200	11 bt	25 ?	0?	0.125	5 LF eel
1978	Leatham d/s of Enchanted	200	16 bt	25 ?	0?	0.125	5 LF eels
1979	Leatham - Enchanted stream	80	2 bt	0	0	0	Near old hut. 5 upland bullies
1979	Leatham d/s Enchanted	100	14bt	2?	0?	0.02	7 LF eels, moderate upland bullies
1979	Leatham u/s of Enchanted	150	0	5?	0?	0.033	Numerous upland bullies
1979	Leatham 3 km u/s of Caves hut	150	7 bt	abundant fry	0	?	5 LF eels, upland bullies
1980	Leatham d/s of Enchanted	100	6 bt	numerous	0?	?	numerous LF eels, upland bullies
1980	Leatham u/s of Enchanted	150	20bt	numerous	0?	?	numerous LF eels, upland bullies
1980	Leatham u/s of Little Caves stm	150	8 bt	0	0	0	
1981	Leatham - Enchanted stream	60	0	2?	0	0.033	Numerous upland bullies
1981	Leatham - Enchanted stream	120	20bt	1?	0?		Near old hut. 20+ LF eels, numerous upland bullies
1981	Leatham - Little Caves stm	30	0	0	0	0	Numerous eels/upland bullies
1981	Leatham bet. Caves/Barbers	130	5 bt	18 ?	0?	0.138	Hydro built 1983
1984	Leatham - Enchanted stream	60	15rt	0	0	0	3 LF eel, moderate upland bullies
1984	Leatham - Enchanted stream	40	2rt	0	0	0	3 LF eel
1984	Leatham - Enchanted stream	?	1bt, 2rt				
1986	Leatham d/s Barbers hut	80	2 bt	numerous	?	?	1 lf eel
1986	Leatham - Enchanted stream	150	5 bt	numerous ?	?	?	1 lf eel numerous upland bullies
1989	Leatham u/s Spaniard flat	30	0	0	0	0	1 LF eel
1989	Leatham unnamed trib opp. Barbers	15	0	0	abundant	?	
1989	Leatham @ Barbers ford	50	0	abundant?	0?	?	
1989	Leatham - Littve Caves stm	30	0	0	0	0	1 LF eel, 2 upland bullies
1989	Leatham - Boulder stm @ ford	30	0	0	0	0	
1989	Leatham - Homestead ck	20	0	0	0	0	5 upland bullies
1989	Leatham - Enchanted stm	30	0	abundant?	0?	?	moderate upland bullies
1978	Upper Wairau - Rainbowside stm	50	52	30	0	0.6	5 LF eel - competitive work for Leatham study
1978	Upper Wairau - Connors ck	?	16	numerous ?	0?	?	Numerous bullies
1980	Upper Wairau - Rainbowside stm	150	60	numerous ?	0?	?	
1980	Upper Wairau - Connors ck	100	16	numerous ?	0?	?	Numerous bullies

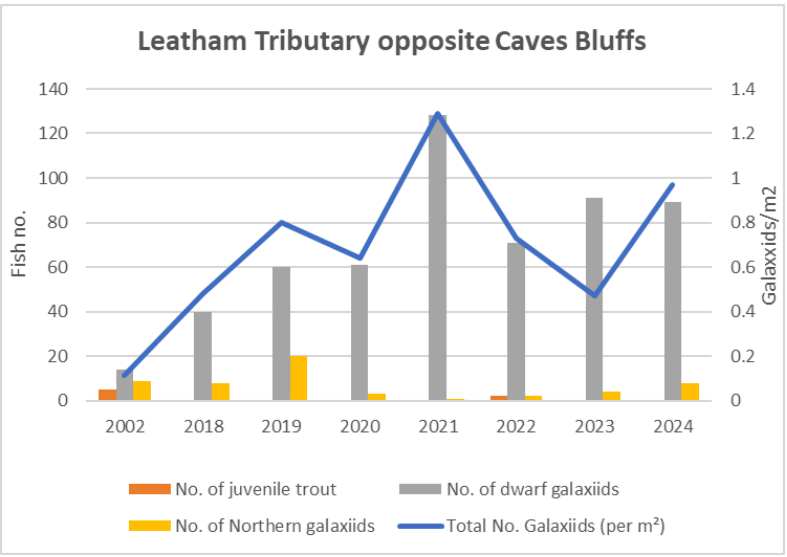
Riuwaka juvenile trout and native fish monitoring

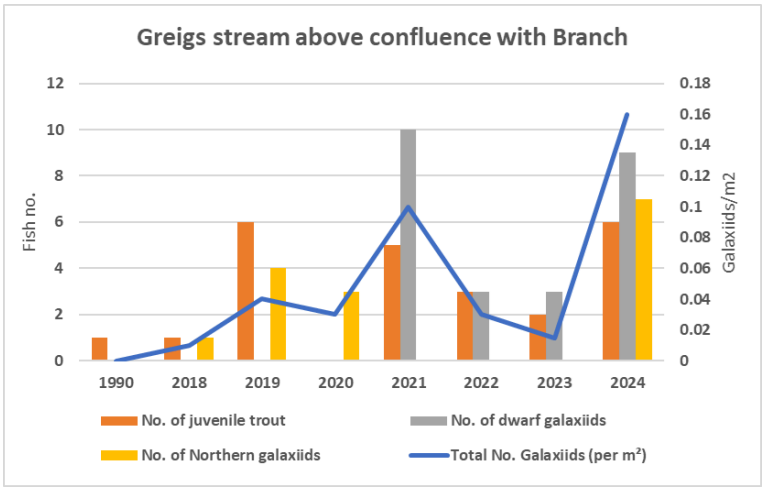
Year	Location	Area Sampled (m^2)	No. of juvenile trout	No. Trout (per m^2)	Comments
Dec-09	South Branch (Ford)	200	5	0.025	1 LF eel, 1 upland bully
Apr-11	South Branch (Ford)	190	3	0.016	7 Koaro, 6 LF eel, 1 upland bully
Mar-12	South Branch (Ford)	140	5	0.036	9 Koaro, 8 LF eel
Dec-12	South Branch (Ford)	244	16	0.066	9 Koaro, 6 LF eel, 7 koura, 3 upland bully
Feb-15	South Branch (Ford)	191	11	0.058	15 Koaro, 5 LF eel. Stable Spring
Dec-15	South Branch (Ford)	200	6	0.030	11 Koaro, 10 LF eel.
Feb-17	South Branch (Ford)	200	6	0.030	2 Koaro, 8 LF eel
Dec-17	South Branch (Ford)	200	30	0.150	1 Koaro, 2 koura, 15+LF eel
Dec-18	South Branch (Ford)	266	34	0.128	0 Koaro, 6 LF eel, 2 koura - post Gita
Jan-20	South Branch (Ford)	246	6	0.024	2 lf eel
Jan-21	South Branch (Ford)	260	14	0.054	1 koaro, 26lf eel 2 koura
Mar-22	South Branch (Ford)	250	12	0.048	2koaro, 7LF eel, 1 koura
Mar-23	South Branch (Ford)	200	6	0.030	3 koaro, 4 LF
Dec-23	South Branch (Ford)	200	2	0.010	1 koaro, 1 LF eel
Dec-09	South Branch (Woolshed)	200	6	0.030	1 Koaro, 5 LF eel
Apr-11	South Branch (Woolshed)	180	1	0.006	3 koaro
Dec-12	South Branch (Woolshed)	200	11	0.055	3 Koaro, 2 LF eel
Feb-14	South Branch (Woolshed)	186	6	0.032	25 Koaro, 6 LF eel, 2 sjk possibly sighted?
Dec-17	South Branch (Woolshed)	200	0	0.000	6 Koaro, 8 LF eel
Dec-18	South Branch (Woolshed)	200	1	0.005	zero natives - Cyclone Gita?
Jan-20	South Branch (Woolshed)	80	2	0.025	zero natives - Cyclone Gita?
Jan-21	South Branch (Woolshed)	200	5	0.025	4 koaro, 8 lf eel
Mar-22	South Branch (Woolshed)	200	1	0.005	6 koaro, 4 LF eel
Mar-23	South Branch (Woolshed)	200	2	0.010	2 koaro, 1 LF
Dec-23	South Branch (Woolshed)	160	2	0.013	1 koaro
Apr-11	North Branch	230	0	0.000	25 Koaro, 1 LF eel
Dec-12	North Branch	184	19	0.103	13 Koaro, 3 koura
Feb-14	North Branch	157	0	0.000	11 Koaro, 16 LF eel, 10 year return flood
Dec-15	North Branch	120	5	0.042	3 Koaro, 1 SF eel, 1 LF eel,
Feb-17	North Branch	177	4	0.023	2 Koaro, 12 LF eel
Dec-17	North Branch	168	6	0.036	2 Koaro, 7 LF eel
Dec-18	North Branch	115	2	0.017	1 LF eel
Jan-20	North Branch	80	5	0.063	5 LF eel, 1 koura
Jan-21	North Branch	100	7	0.070	4 Koaro, 6 LF eel
Mar-22	North Branch	100	4	0.040	29 Koaro, 5 LF eel, 1 koura
Mar-23	North Branch	100	0	0.000	28 koaro, 1 LF
Dec-23	22/12/2024	130	1	0.008	15 koaro, 4 LF eel, 1 koura

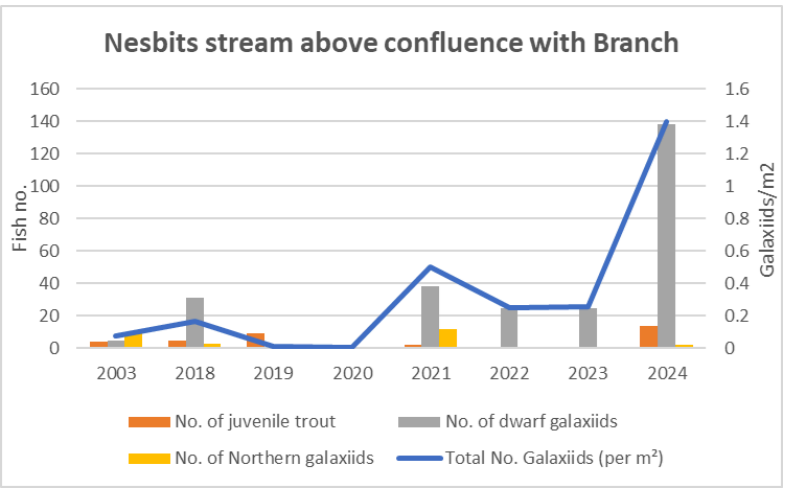
BRANCH/LEATHAM NATIVE FISH GRAPHS - TRIBUTARY SITES

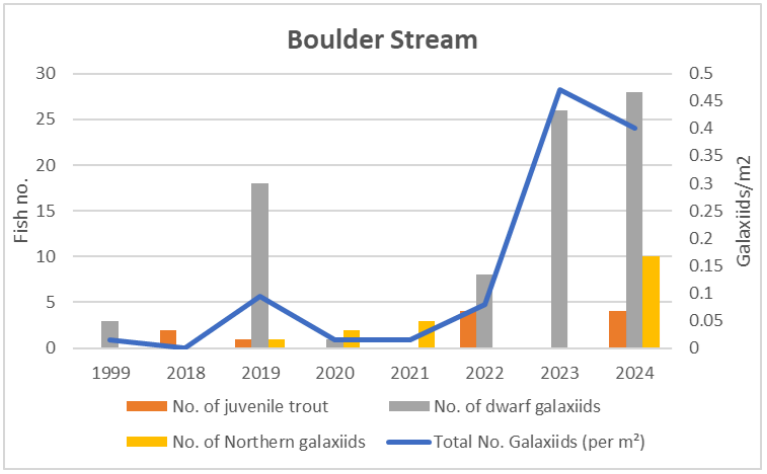


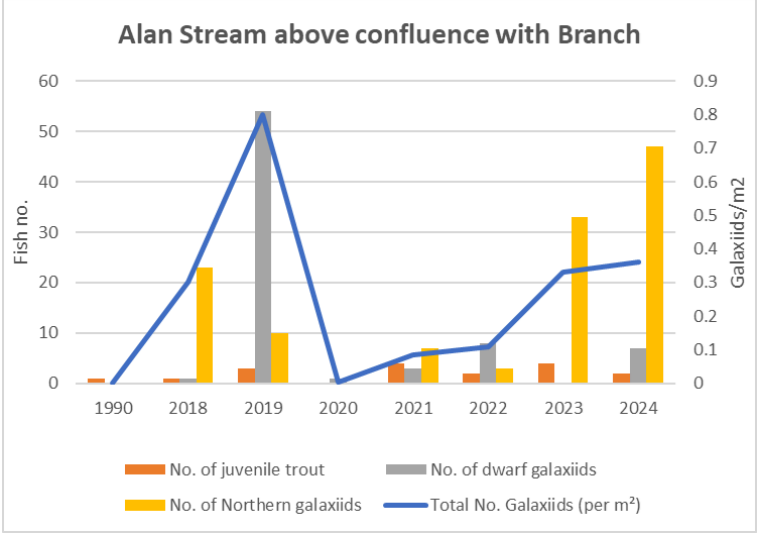




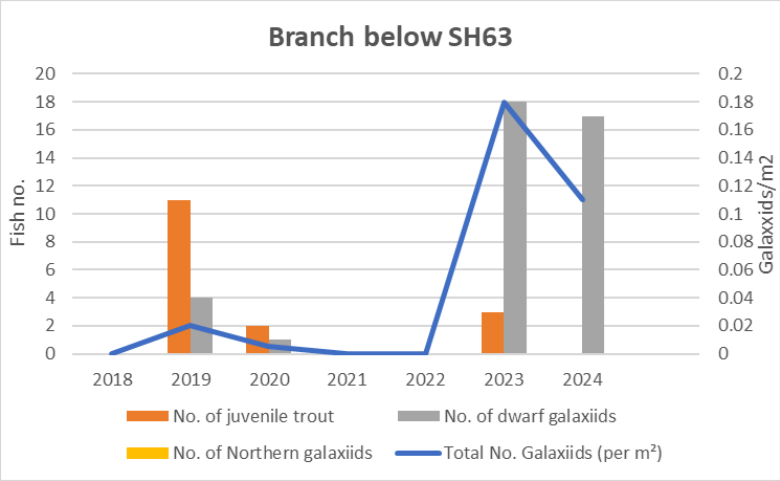


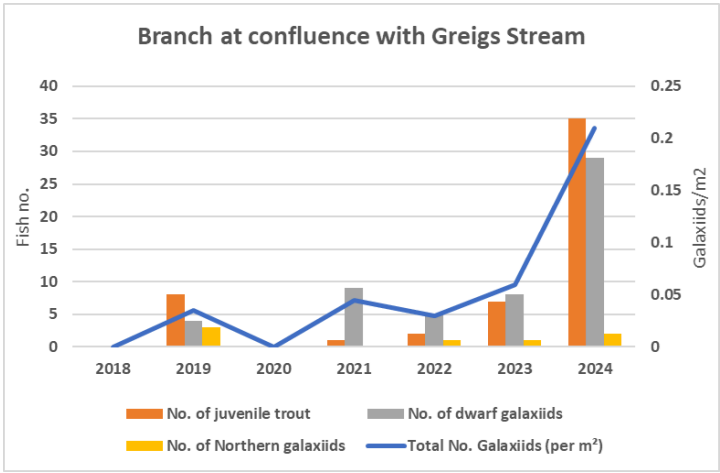


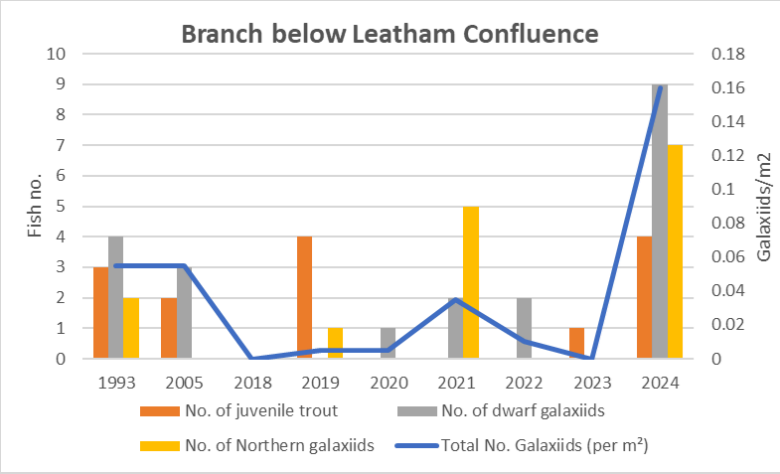


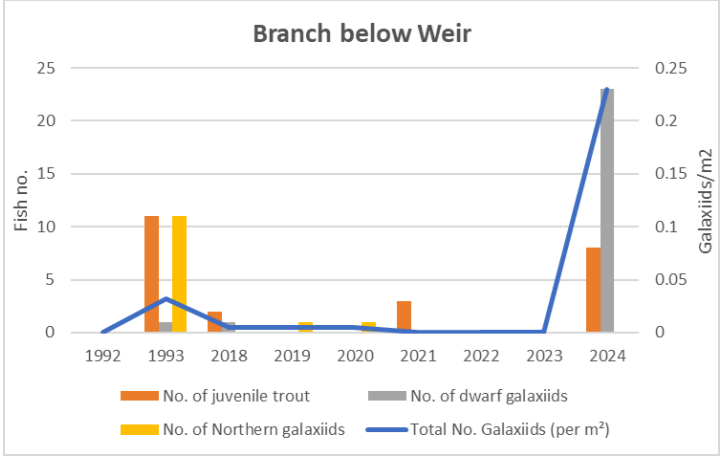


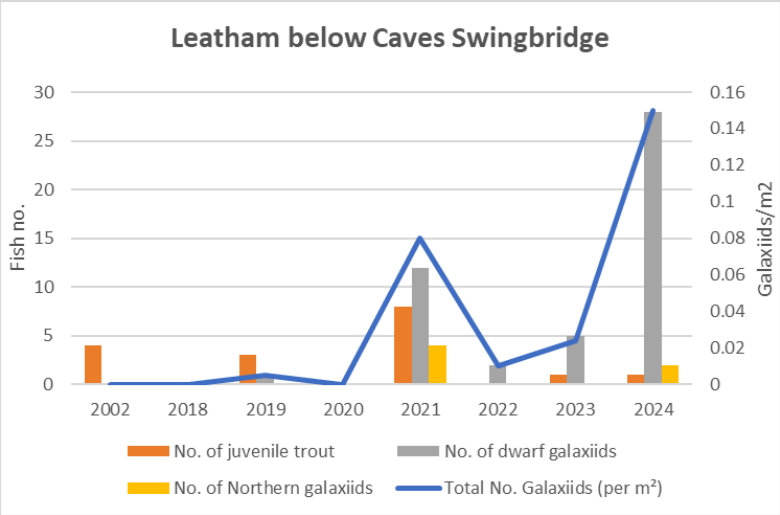
BRANCH/LEATHAM NATIVE FISH GRAPHS - MAINSTEM SITES

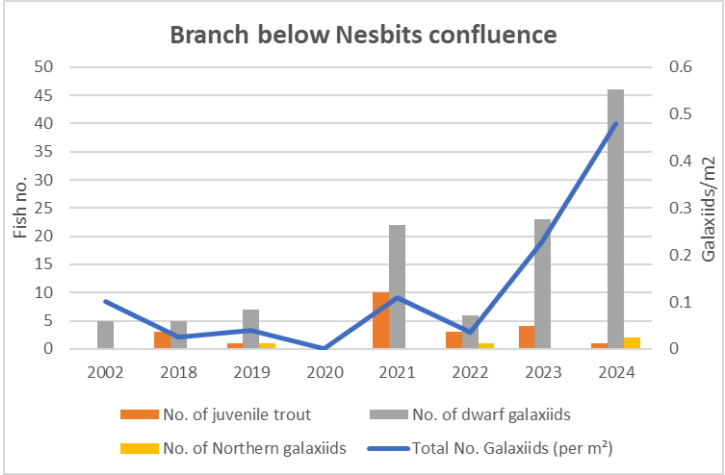


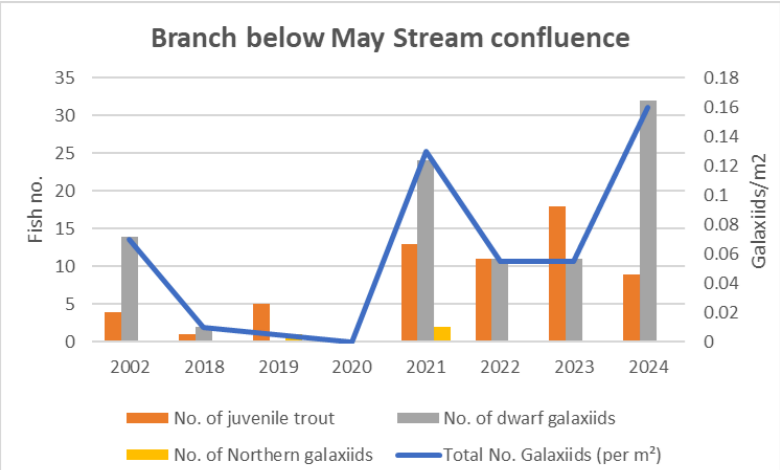


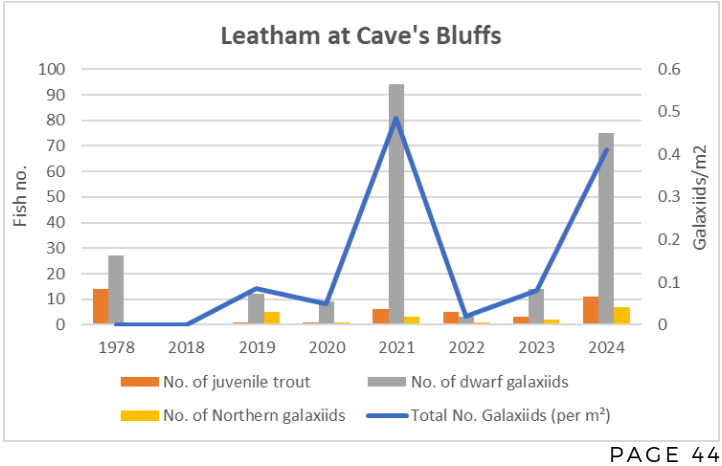












SPORTS FISHING FOR YOUTH CHARITABLE TRUST - ANNUAL REPORT - BY IAN KEARNEY

"This is such an awesome community asset that you guys have set up for kids. My kids love going there and catching a trout. I have also taken their friends there as well to catch their first fish. The amount of joy I seen on my kids, their friends and other kids faces fishing there is immense. Thanks to everyone involved in putting this asset together for our communities' kids and making it easy for families to take kids fishing".
Facebook , Seamus Van Lent 1 st January 2022

The Trust's original objective was to provide youth with the opportunity to go fishing, enjoy the outdoors, and hopefully develop an appreciation of the outdoor environment. We provide youth with the opportunity to learn how to fish with the assistance of an experienced fisher and with good equipment being provided. We also wanted children to be able to see the fish in the water in a natural environment and have a good chance of catching the fish they saw.

Last year our usual guided fish out days were limited due to the impact of Covid however we regularly stocked the ponds and encouraged young fishers to attend with their families. Over the last year the ponds have had heavy patronage during the periods of the year they are open for family use and all of the guided fish out days were booked out well in advance. The above quotation, together with the regular increase in youth and family licences issued by Fish and Game, indicates that we are achieving our original objective.

We thank our supporters and sponsors for enabling us to provide this well used community facility.

THIS SEASON

The Trust's twelfth fishing season was fortunately free of Covid disruptions. We stocked the ponds throughout the winter and spring of 2023 as well as over the summer. Fishing at the ponds has become a popular family activity year around. There are also individual youth who became very regular fishers during holiday breaks and at weekends. It is also noticeable just how popular the ponds are on sunny winter Sunday afternoons for fathers and grandparents with their off spring.

Youth participation in fishing continues to rise. Fish and Game advise that youth and family licence sales are strong. The ponds were very popular for family groups

With the passing of the Covid pandemic we were able to offer guided fish out days in April/May 2023 and in November/December 2023. We were also able to offer guided fishing opportunities to groups such as scout and cub groups, casting for recovery, several school groups, special needs groups, and youth groups, and groups of elderly fishers.

This year we again assisted some elderly to fish at the ponds. We are aware of fishers who, due to their advanced years, were no longer able to scramble up and down riverbanks to pursue their interest in fishing. We hosted a group mainly 80 years old plus at the ponds in April 24 and they had a very enjoyable and successful afternoon. We will continue this in the future.

> Elderly fishers at the pond

We anticipate continuing to have fish out days to introduce youth to trout fishing with the next fish out days being in November December 2024. We are planning a number of guided fish out days for various groups in May and June 2023 including school groups, the casting for recovery ladies and other fish out days for either supporter or special needs groups. In providing these guided fish out days we believe we are achieving our objectives and, as one parent said:

"the opportunity to attend free kids fishing events has not only given us another great family time activity but it is something that kids can endeavour to do for a long time, if not a lifetime, we hope"

We had a good reliable fish supply during the season. We were able to stock the ponds every few weeks with rainbow trout generally around 1.5kg in weight with a few larger fish up to 3kgs. The ponds are now well-stocked with trout and will provide excellent fishing for family groups over the winter. >>

It appears that the fish are thriving in the ponds and the supply of cold groundwater during the summer ensures a healthy environment for the fish. We were particularly pleased to see how well the fish thrived during the current drought conditions We believe this regular influx of cold ground water creates a good growing environment for the fish and for the invertebrates which the trout feed on.

^ *A guided kids fishing day at Waimea Park.*

We are confident of the fish supply for the coming season. We are grateful to the support of the Rata Foundation which enables the Trust to purchase suitable fish. Nelson Marlborough Fish and Game deliver the fish from the hatchery and assist us in lots of other ways. This year Fish and Game included in the stock a number of fish that had been their breeding stock. These fish, up to 5 kg in weight , provided a great thrill for the fortunate young fishers who hooked one.

Each year we have a number of community groups who use the ponds . One of these groups is Fostering Kids NZ whose regional coordinator has written:

"The sports fishing for youth team are incredible with their kindness and support in the event is made very easy for our families. We have some very traumatized and challenging children in care and to see them beaming with pride and achievement after their catch is something special to witness"

Denise Green, Upper South Island regional coordinator, Fostering Kids NZ

We have had strong support from sponsors such as Hunting and Fishing who provide us with equipment, Kilwell who donated our fishing rods, as well as supporters who have donated fishing gear over the year. The Nelson trout fishing club have been great supporters of the ponds over the years and most of our guides are members of the club. The club also supports the Trust with donations and equipment from time to time. This year we installed two BBQ's at the ponds. The BBQ's were donated by Tony's engineering at Brightwater and the concrete for the bases was donated by Allied Concrete limited. We really appreciated this assistance to provide additional facilities at the ponds. This year we also had a number of rods and reels donated by Brian Moyse , these enabled us to replace some of our older gear and were much appreciated.

^ *Volunteers installing a BBQ*

We get considerable assistance from Nelson Fish and Game staff who assist with administration and organizational matters on fish out days and other matters relating to the management of the ponds and from Marina at Beon Numeri Limited who provide accounting services.

The ponds surrounds are maintained by Community Services workers who are supervised by Corrections Department staff. They do a great job in caring for and maintaining the access road edges, the fishing ponds and the car park area. They also keep the picnic areas and the banks well mowed. Many of the parents attending fish out days make complimentary comments on the state of the grounds and pond surrounds.

We are also fortunate to have Jimmy's Bait Company provide us with pellets to use as bait. The availability of these bait pellets makes the managing of fish out occasions easier and safer. Jimmy has also been one of our most regular supporters and a guide since the ponds were first constructed.

This year we also received a donation from the Nelson Trout Fishing Club. This donation enabled us pay for Trustee insurance and public liability insurance as well as assist with operating costs.

Hi, I just wanted to say a HUGE thanks to the amazing group of guys you had at the kid's fishing ponds today (05/05/24). Our son (13) and daughter (5) had a blast and kept chatting about it at home as we ate our delicious trout. Our son has autism and if the guide noticed any difference with him he certainly didn't let it phase him as he showed patience and kindness teaching him plenty of tips and techniques which finally led to the triumph of catching his own trout. Then the man gutting our fish basically gave our kids an awesome science lesson as he

explained the process and the anatomy of the fish. This all meant a great deal to us, a fantastic experience, cheers! Dave and Sam.

THE SITE AND FACILITIES

The site and facilities are now well-established. The planting which was carried out by the NMIT horticulture students five years ago is now well-established and we are discussing with them further planting in the coming year. The walking tracks and access around the ponds which were improved with support from Pub Charity and the Network Tasman Trust and provide easy and safe access for young fishers.

The access to the ponds via Challies is working well. It is however noticeable that the access road along the edge of the ponds, which is shared by a local farmer and anglers visiting the nearby Fish and Game pond, experiences considerable use and can develop potholes over time. This track has recently been graded by Taylors Contracting and made much more usable. We are considering moving the access to our ponds to a location much closer to Challies road to reduce the traffic on the existing track. This access point was contemplated when the ponds were originally formed and we are now awaiting funding to enable the work to be carried out.

We have had an increasing problem with weed growth in the ponds over the years. With support from Pub Charity, we have a regular weed management program. The ponds are fed by groundwater and unfortunately the groundwater in this location has a very high nitrogen level. This does appear to be stimulating weed growth and over past summers weed became a significant inhibitor to the use of the ponds in pite of the weed removal program. We were experiencing significant weed growth within six weeks of the contractor removing the weed from the ponds. Over the last two years our contractor used a new method of weed removal using two people which has proved to be very successful and enabled good fishing to be provided in the big pond over the summer. We will continue with this method even though it is somewhat more expensive than our previous method.

^ *Weed removal is an ongoing problem*

The water supply to the ponds as from groundwater which flows through the surrounding gravel in the river berm. The level of the water in an individual ponds varies depending on the water level in the nearby Waimea River. The culvert system between the ponds is designed to function when the ponds have a reasonable level of water over the winter and through until October/November. The water level then drops over the summer and can be up to 1 m below the culvert level in a dry February. However, the fact that the water is supplied underground through the gravels means that the incoming water remains cool and fishing over the summer is not unduly affected by warmer water. It was noticeable that there has been no fish mortality or signs of stress during the extended summer drought that we are having.

That said during floods in the river the water level will rise to a level which makes the ponds difficult to fish. This happens every 2 to 3 years. Below is a photo of the ponds following a flood in the river in July 2021. As you will note the water level is well above the level of the disabled fishing platforms and the three ponds become one. The ponds were at a similar level on May 10th 2023 following a week of heavy rain and caused the cancellation of at least one event. It takes 4 to 5 days for the water level to drop down to a safe fishing level.

^ *Ponds flooded with water level above the disabled fishing platforms*

Our toilet facilities which are provided with assistance from Tasman District Council are used by fishers and also popular with walkers and cyclists using the river berm park. With the opening of the nearby Fish and Game Pond these facilities had been experiencing increased demand however the Tasman District Council have now built some public toilets at the end of Challies Road , about 100 meters from the ponds. These are a welcome public amenity.

THE FUTURE

The Trust's original objective was to provide youth with an opportunity to partake in the outdoor activity that would encourage then to develop a knowledge and an understanding of the outdoor environment. We believe the ponds and supporting infrastructure provide an excellent facility, suitable and safe for family and children's fishing activities. Over the twelve years we have provided almost 4000 children with the challenge and the thrill of catching trout in an outdoor environment. The ponds are also used for special needs groups, the disabled, and now the elderly who otherwise would not have the opportunity to have the experience of "going fishing".

It is also pleasing to see the ponds so well used by both families and by groups of youngsters fishing on their own during the holiday periods and on weekends. We believe we have developed a good understanding of the fish management and how to extend the family fishing opportunities. We believe that the use of the ponds for family fishing experiences has increased with the improved access via Challies Road and the availability of opportunities for parents to fish at the nearby Fish and Game pond.

""Sports fishing for youth Trust you are amazing for providing this opportunity for young people" Big Bros Big Sisters"

"Just wanted to say thanks for all that you do with the ponds. Myself and a mate have taken our 3,3,5 and 6yo girls to the ponds over the last few days. There were varying levels of enthusiasm from the girls, until today when both our oldest managed to land a bloody decent trout each. Now they both want to know when we are going fishing again! A father's dream. Thanks again,"

Report by Ian Kearney, Chair of Sports Fishing for Youth Charitable Trust