

ANNUAL FISHERIES REPORT 2022-23



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SUMMARY OF THE SEASON



Nau mai, welcome to the 2022-23 Annual Fisheries Report for the Nelson Marlborough Fish & Game region.

It has been another busy and rewarding year for staff, there has been lots happening within the region, and also nationally as Fish & Game navigates a period of organisational change.

There was a notable return of non-resident anglers to our shores, and it was great to see our fishing guides prospering in this return market. Significant angler use work was undertaken by staff in light of the incoming Designated Waters management regime (page #22). This is the most important fisheries regulation change for Fish & Game for some years, and it has only been made possible through determined NZC staff and regular input from mostly South Island regions. It will be a busy year ahead effecting this change, and undertaking increased education and compliance on our listed Designated Waters.

As always, the fishing was diverse which is to be expected in a large region with varying geography. There have been some large scale flood events in recent years which have affected trout numbers, though the effects of these events are not always obvious within the first year, post-event. This season was the turn of the Pelorus catchment, and though fishing was much better than expected in the wake of the flood, we will continue to monitor trout numbers here over the next few years. Mostly, our base of anglers, both resident and non-resident, were happy with the season.

Rob Foster, our Hatchery Manager, has done a fantastic job in his time there so far. He has taken to the job like the proverbial, and has shown a natural ability in fish husbandry and hatchery management and is continually improving operations there.

Our hatchery release programme is an important part of our regional strategy to maintain and increase resident anglers, and to date has been very successful in achieving this. Most years, around 5000 'catchable' 1kg+ rainbow trout area liberated into selected, mostly enclosed, waterways, providing an important recreational outlet for many anglers as well as a valued food source.

Staff are always on the lookout for ways to maintain social licence and improve public perception. This is an important area going forward, as is the importance of connecting with local iwi and building a relationship here, working on areas of commonality to achieve better environmental outcomes.

The following pages showcase what our regional Fish & Game staff have been up to over the year. The report highlights a diverse array of work which Fish & Game are involved in: species monitoring, fish releases, backcountry fisheries management, compliance and resource advocacy are just a few. Read on to find out all about it.

A big thanks to our long serving office/financial administrator, Karen Crook, for keeping the wheels turning for this region.

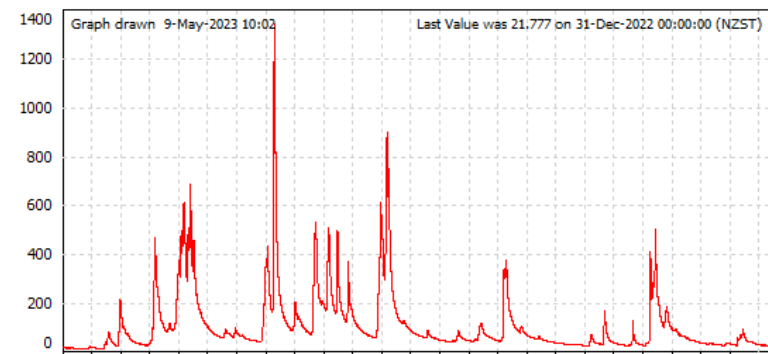
Ngā manaakitanga, the Fish & Game team.

SPECIES MONITORING

MOTUEKA CATCHMENT

It's fair to say the Motueka had another mixed year in terms of fish numbers and the quality of the fishing. A July flood nearing 1400cu at Woodmans Bend caused a number of slips in the valley, and from then onward, periodic rainfall was the norm, meaning the river stayed high until Christmas. Surprisingly, when the river hit normal flows for a short time in November, some terrific fishing was had by anglers, with quality large fish (4-5lbs) regularly taken, and plenty of spirited mediums in the ripples. Fish numbers were excellent in some areas and the early signs were extremely positive, however, the second half of the season saw patchy fishing resume, as it had been in the previous two seasons. Where fish had been in good numbers before Christmas, they were not consistently found afterwards, meaning anglers had to persevere in the same areas with mixed results, or search for the 'pockets' which held good numbers, and where some great fishing could still be had to those who founds these 'hot spots', rather than persevering in the same areas as anglers are known to do.

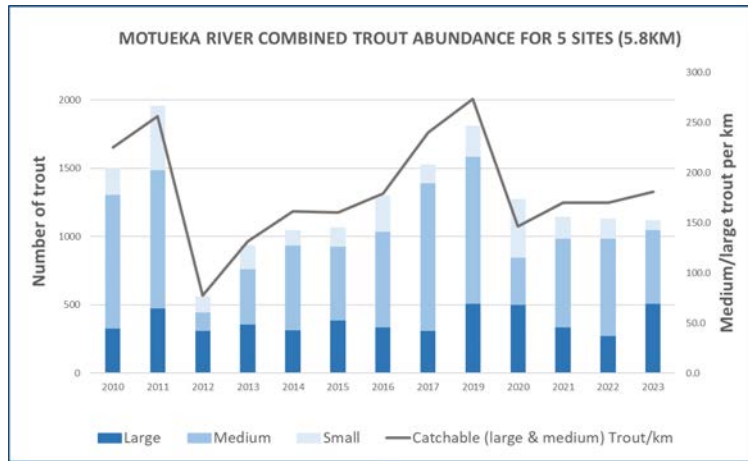
HY Motueka at Woodmans Bend



^ A 1400cu flood in July was the only major event for the season for the Motueka.

The results from the mainstem drift dive show numbers of large fish in the Motueka much higher than the previous two years, though there were a lack of medium and small sized fish, not a surprising result after the huge flood in July 2021 - see Appendix for individual site graphs.

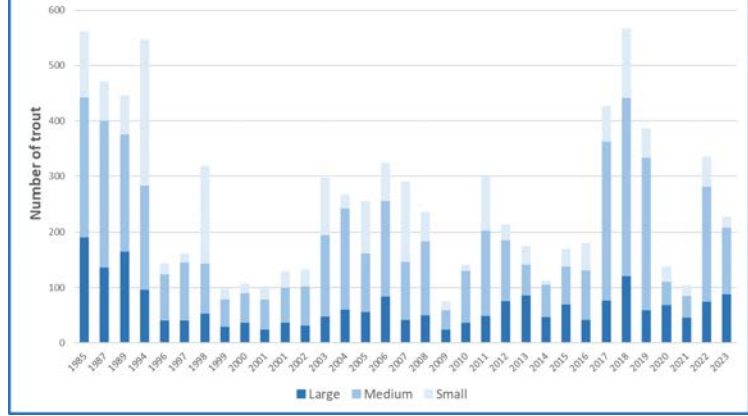
All told across five sites, 513 large and 537 medium fish were counted, which equates to 181 large/medium 'catchable' fish per kilometre. Only 64 smalls were counted across the 5.8 kms of water - see graph at the top of page.



^ The number of large trout increased from last season, though there were fewer medium and small trout.

The dive site at Woodstock has the most records for any site in the region and is deemed to be fairly representative of the fishery. This historical site is, in fact, made up of part of the MacLeans beat and part of the Dove. This year, the Woodstock site showed a respectable count, with 89 large and 120 mediums, though just 18 smalls recorded - see graph below.

MOTUEKA RIVER - AT WOODSTOCK



Hopefully we get a stable winter/spring period which should be beneficial for the Motueka trout population.

v Weesang Paaka with a top Motueka fish. Photo: Jacob Lucas



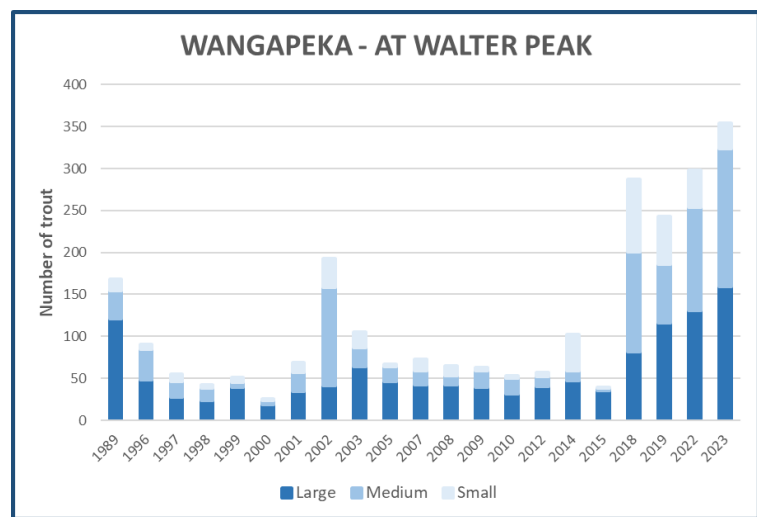
WANGAPEKA RIVER

The Wangapeka River was a regional standout in terms of the fishing it provided anglers. The river largely escaped any significant flood events for the last four years, so it was no surprise that come the start of the season, the river fired straight away, and fished consistently throughout, as it had the past few seasons.



^ Caitlyn Thomas with one of five trout caught on her first day fly fishing on the Wangapeka. Photo: Jacob Lucas

Our drift dive results were again outstanding, with a record count of large and medium fish at Walter Peak (lower site above Motueka confluence), and excellent numbers of large fish at the Chummies Creek site - see graph below,



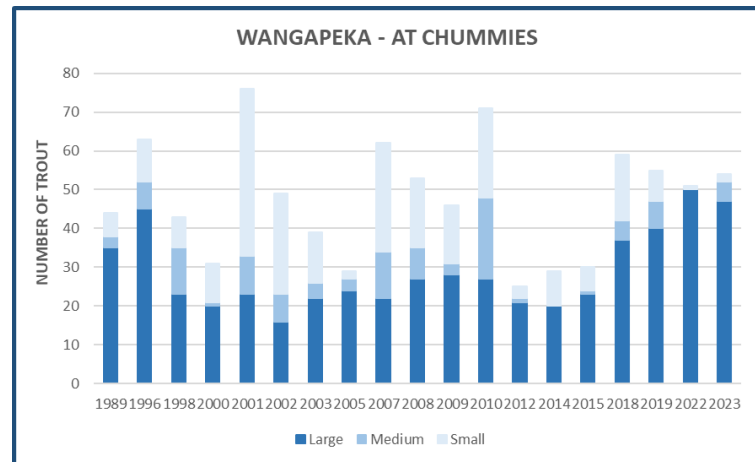
Over 300 large/medium trout were seen at Walter Peak over the 1km site. It had been the opinion of staff that trout pushed into this part of the lower Wangapeka when the Motueka warmed up in summer, though in this case, fish numbers were very high while the Motueka (above Wangapeka) still had good flows and ideal summer temperatures.

The graph above highlights how good the fishing has been in the Wangapeka over the past five years, during a period the river experienced good stability.

While other parts of the region, and even other tributaries in the Motueka, have copped the ire of

some significant rain events, we are fortunate that the Wangapeka has got off lightly with a lack of major flood events in the past five years, and summer low flow stress is less of an issue.

At Chummies Creek, towards the DOC boundary, another great count of large fish was noted, similar to 2021 - see graph below.



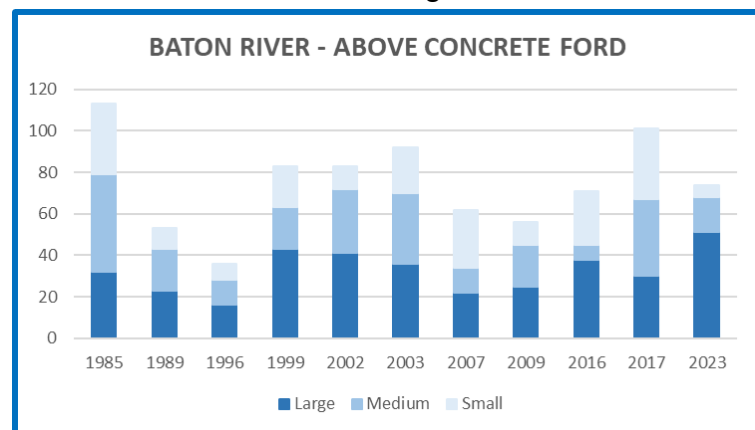
The Wangapeka is a changing landscape, with hops now occupying much of the lower part of the river. Considerable bank stabilisation work has been undertaken by TDC/landowners to prevent erosion at Coal Creek.

As the fishing was good, the Wangapeka received plenty of angler attention - you can read a summary of this on page 22.

BATON RIVER

The Baton was dived on 9 March. Due to a possible gold mining proposal in the upper part of the river, we dived a new location near the proposed mine, and counted 7 large brown trout over the 1km reach. The river here is very stable and clean, though would likely only support a low-medium number of fish.

The lower site above the Motueka confluence was dived, and though water clarity was poor due to sedimentation, a good count was noted, with a record count of around 50 large fish observed.



UPPER MOTUEKA

This year we created a new dive site for the upper Motueka River. Historically two sites have been used, one at Glenrae near the Wangapeka confluence and another below Janson Bridge in the upper part of the river. The new site was created in order to obtain extra data for the new freshwater planning process in this area.

The new site commenced approximately 500m above the Tapawera Bridge and finished 500m downstream of the bridge. We dived it on 3 January with decent flows and water temperature and counted 13 large, 46 mediums and 13 smalls. We then dived it again in late January after a period of no rain, and when there was a significant reduction in flow, as well as higher water temperatures. For this dive we counted 9 large, 27 mediums and 5 smalls.

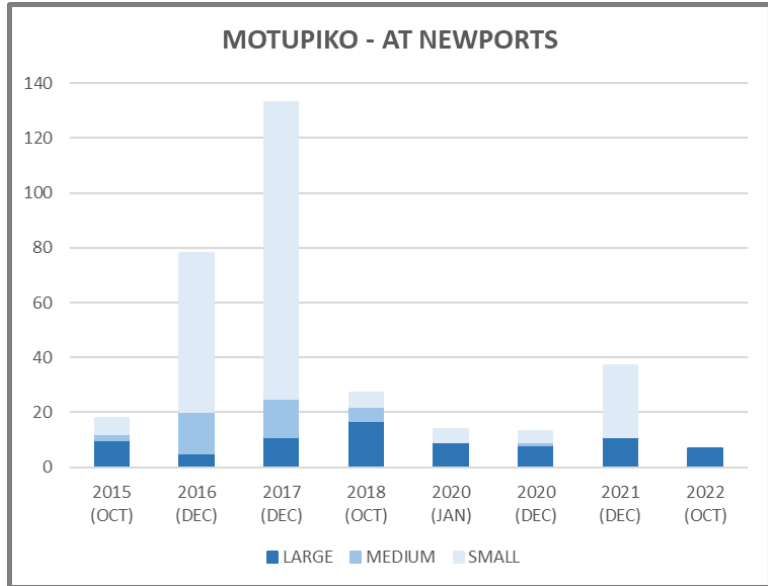
It was obvious the large/medium trout that were seen in the larger pools had moved out with the warmer water temperature. In the earlier dive, 6 large and 12 medium fish were seen in one pool (which had good depth/cover from rock groynes), however the return dive saw just two fish here - most of the fish had moved into very shallow more oxygenated ripples, in fact, some of the fish were stationed in very fast water that even surprised staff. Some fish also likely dropped down to the Wangapeka or Motueka, below the confluence.

MOTUPIKO

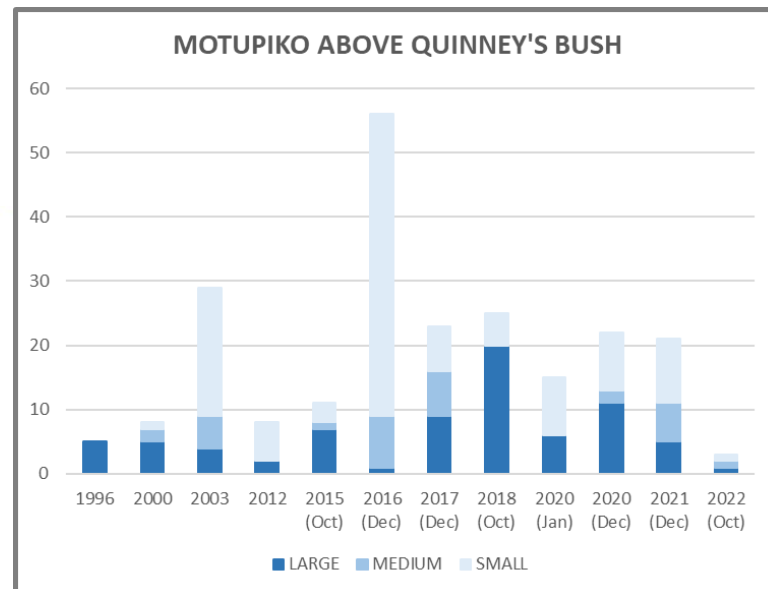
The Motupiko got pummeled by a ~50 year return flood (see graph below), meaning expectations were low for the fishing and the drift dive. The Motupiko is an important spawning tributary for the Motueka catchment, and is also a valuable angling destination, being a favourite early season small stream option for recreational anglers and the guiding industry.



Fish numbers across all size cohorts was very low, with only a handful of poor conditioned large fish and zero medium/small fish - see graph below. The Newport dive is usually very stable, with good numbers of pools. The flood damage here was significant, with pool infilling evident. Being a river well traversed by spawning trout, the upper Motupiko should return to a decent fishery in time if we get a period of stability over several years.

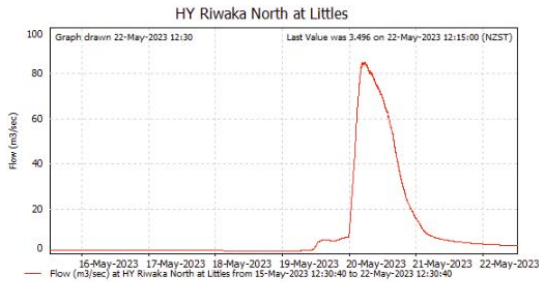


As expected, the Quinney's Bush site was poor for the same reasons, and the worst count on record - see graph below. This part of the river has been highly modified by river engineering and is a tough angling destination compared to the largely unmodified stretch in the upper part of the river. These results are in stark contrast to the nearby Wangapeka as the Motupiko is influenced by Northerly storm events (common during La Nina), while the Wangapeka is influenced by Westerly events. Staff are working directly with Taylors (TDC river contractors) to achieve better habitat outcomes through river control works.

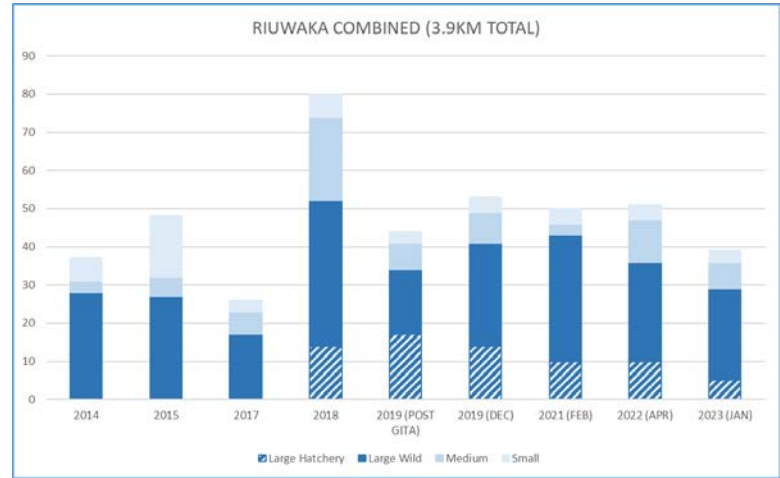


RIUWAKA RIVER

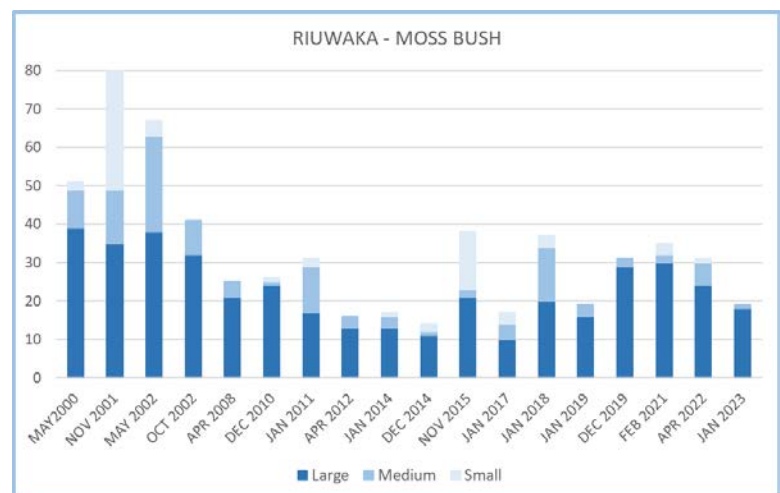
The Riuwaka River had some significant flood events over the past 12 months with multiple northerly rain systems hitting the catchment (one rain system which also flooded Nelson/Rai had the term 'atmospheric river' applied to it). This event saw the Riuwaka reach around 160cu, a 10-year return flood event, with the North Branch receiving an 85cu (40 year return - see graph below) flood event, which will have likely decimated the local koaro population that is currently doing well in this river (see native fish chapter).



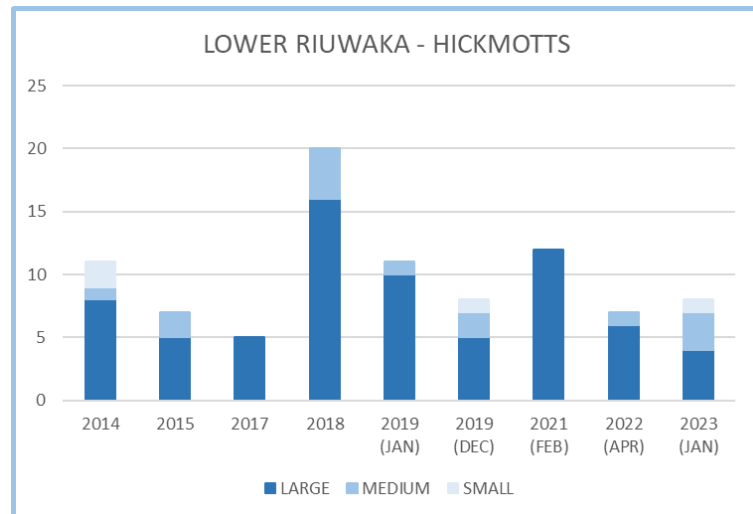
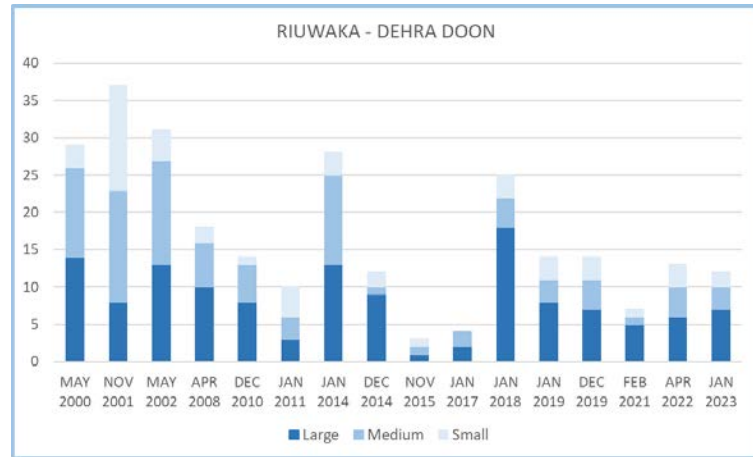
Our annual drift dive was undertaken in mid-January, with below par results across all three sites. The graph below shows that just 29 large trout were counted across all three sites (3.9km total), with five of these being of hatchery origin, showing good survival six years post-release.



The count at the upper site at Moss Bush had 18 large fish, lower than the previous three years - see graph below. Numbers of small/medium fish are typically low in this river as mainstem only spawning limits recruitment.



7 large trout were seen in the Dehra Doon dive site (1km), and the lowest downstream site above the tidal zone at Hickmotts only had four large fish in residence - a disappointing result considering the improving trout habitat within this reach that has been achieved through proactive work with river engineers - see graphs below.



It will be interesting how the Riuwaka fishes in coming years as it deals with environmental stresses such as high impact flood events. A climatic shift away from La Nina to El Nino may reduce the incidences of Northerly direction rain events, the river is well protected from low flow thermal stress. Additionally, with logging occurring apace within the lower Southbranch and mainstem river, the landscape is sure to change within this popular fishery, and we will be monitoring ecosystem health impacts that may occur due to post-harvest erosion.

> Mid-slope failure in the South Branch

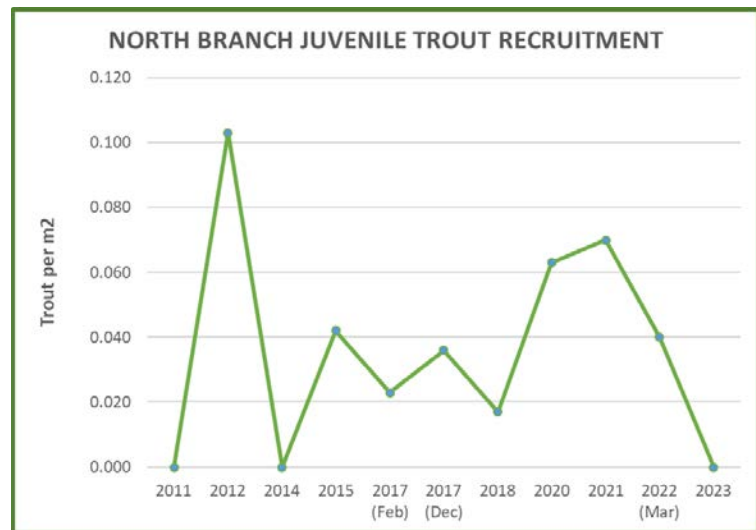


RIUWAKA RIVER - CON'T

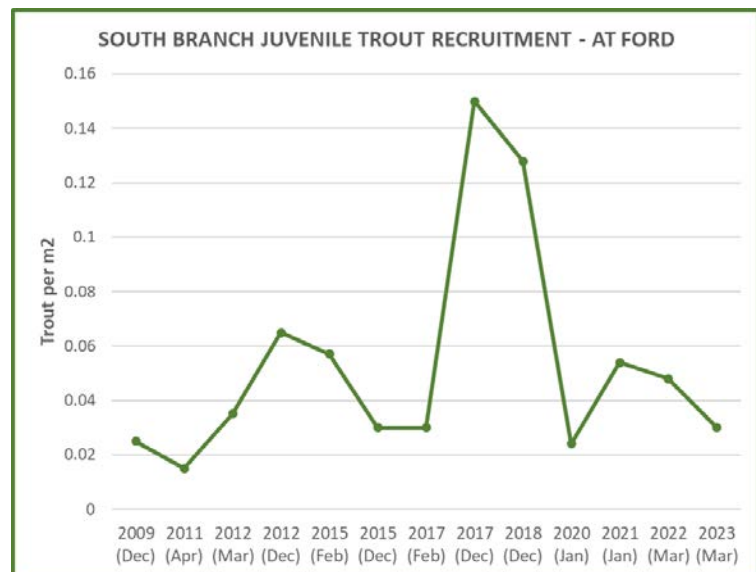
ELECTRIC FISHING SURVEY

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. This year we had assistance from DOC freshwater staff, and going forward we hope to continue to work collaboratively with DOC, and hopefully local iwi, in this area.

In the more stable North Branch, while koaro numbers were very high (see page 16), juvenile trout abundance was poor with zero fish seen - see graph below.



In the South Branch, six juvenile trout were counted at the Ford site (see graph below), and just two fish at the Woolshed site. As mentioned, the South Branch is prone to flooding, and juvenile trout recruitment/abundance is impacted by flood events due to mainstem only spawning.



You can read more about our native fish monitoring in the Riuwaka River on page 16.

> Another South Branch redd, in a identical place to previous years. Note clear felling in the background. - photo Jacob Lucas

WINTER SPAWNING COUNT

The Riuwaka (North & South Branch) were surveyed in July. Six definite redds were seen in the South Branch over the 1.2km reach. Staff had attempted to survey this river earlier, however our efforts were thwarted by a contractor dumping overburden near the road, where a small discharge was leaking into the water causing a significant reduction in water clarity (this was promptly rectified by TDC compliance after F&G staff advised of the issue).

There is a considerable amount of logging taking place immediately adjacent to the river, and we will be monitoring how this will affect juvenile trout production, habitat, and native fish.

The North Branch only yielded two redds, however this river had a significant flood in Autumn which would may have affected spawning here.



^ South Branch redd - most of the fish spawn in edge water here. Photo: Jacob Lucas



BULLER REGION

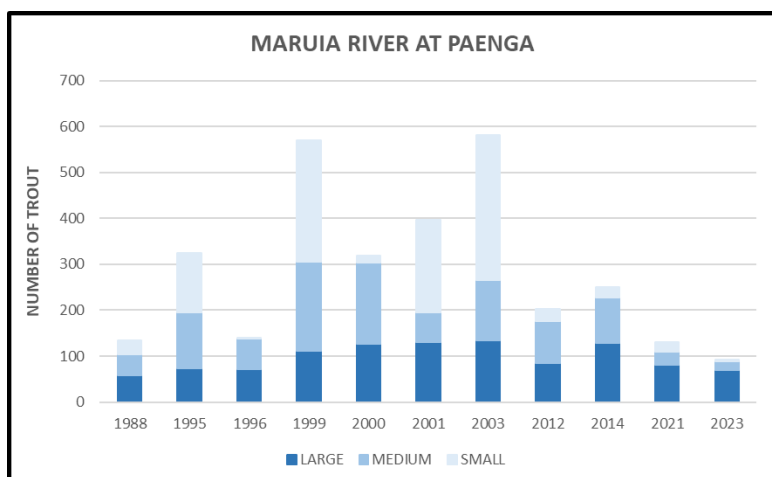
MARUIA RIVER

Angling reports from the Maruia were fair at best, after a huge flood had ripped through the valley the previous year. Over January, this area was also very dry and hot, and water temperatures were reaching stressful levels for fish. One angler noted that by about 1pm, most of the large fish were lying inactive at the bottom of the river, with only occasional feeding fish in the fast oxygenated water. During these times, it is pertinent for anglers to cease fishing for the day, or preferably head to waters with less thermal pressure.



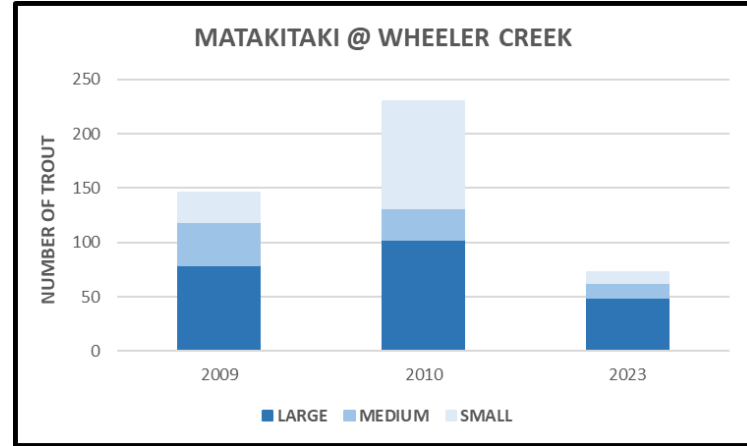
^ Anglers enjoying fishing the mid-Maruia. Photo: Jacob Lucas

The drift dive site at Paenga has in the past been very productive, with some great counts over the 2km stretch. As can be seen from the graph below, overall fish numbers were the lowest of any dive ever undertaken. Expectedly, small fish were absent which is what would be expected after large flood events.



MATAKITAKI RIVER

The Matakaitaki was dived at Wheeler Creek, which is a few kilometres above Horse Terrace Bridge, and in the middle of a popular angling beat. Unfortunately this river had only been dived two times prior, the last time in 2010 during a mouse year, when some fantastic fish were seen.

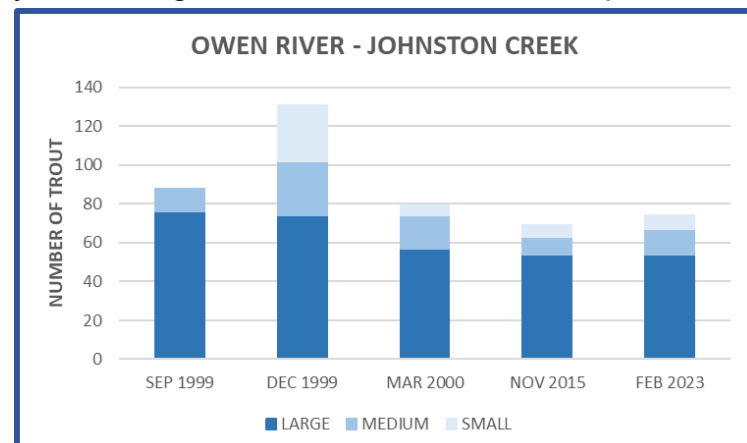


Divers noted fish were showing signs of stress, possibly from angling pressure or warm water temperatures that had existed over summer.

OWEN RIVER

The Owen River generally has quite a stable catchment and is a consistent fishery. Staff had been hearing of some great fishing from the Owen this season, with some really nice fish taken. It is also fairly pressure sensitive, with road access alongside most of it, and trout become difficult to catch as the season progresses. The Owen doesn't appear to suffer from summer thermal stress, and also largely large magnitude floods due to its geographic location.

The Owen was dived in February at Johnston Creek. Besides nearly getting collected by a car load of climbers who were en-route to Murchison, the dive was fairly smooth sailing, and, as the graph below shows, had a similar to count to previous years, though dives here have been infrequent.

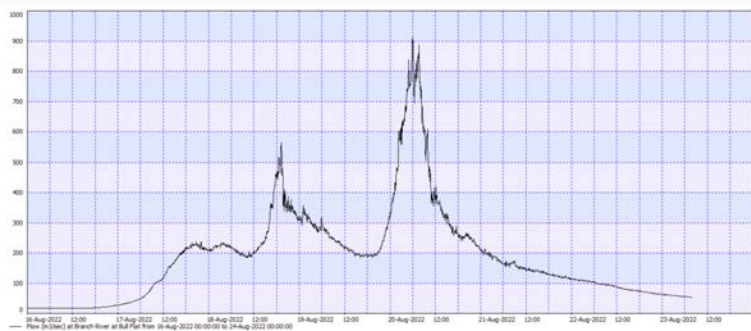


WAIRAU CATCHMENT

BRANCH | LEATHAM

Not much was expected for the Branch & Leatham, after the huge August flood that impacted on Nelson/Rai area also made it over the Richmond Ranges into the South Wairau mountains.

The Branch reached 900cu, an estimated 15-20 year return flood event. The flood did significant damage to the catchment and took out part of the SH63 bridge - see graph below. Road damage was significant up the Branch, and a huge credit must go to DOC for maintaining the roads in this volatile catchment annually for the benefit of recreational users.



Angler reports were patchy, with fish in low numbers through the mid to low reaches, and the condition of fish in the more stable upper reaches was average.

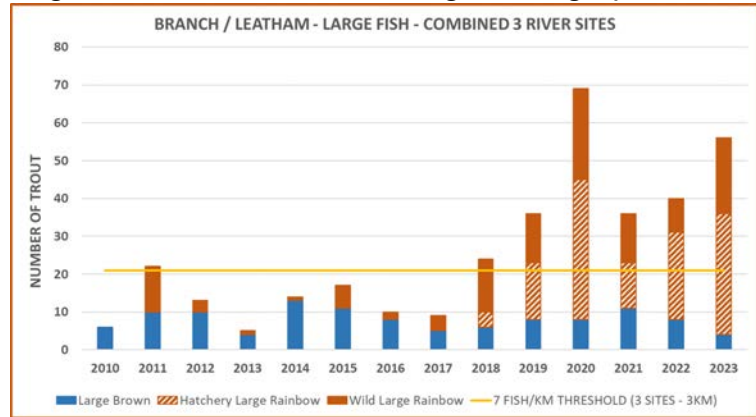
Fish & Game carried out a release of 800 fish in early December, with 600 fish going into the upper half of the Branch and Leatham by air, and 200 by vehicle into the lower Leatham.



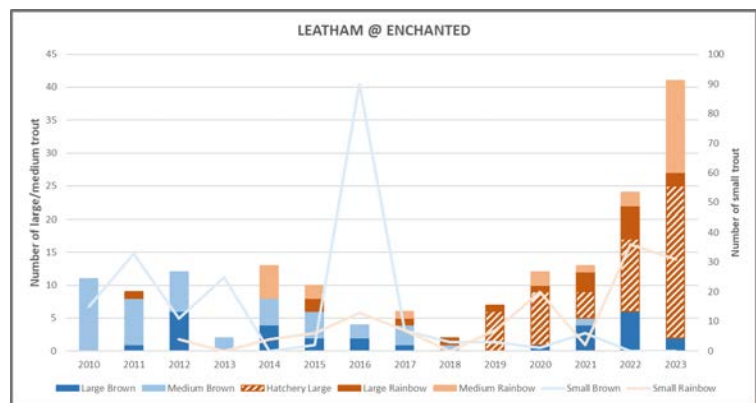
^ Aerial fish release into the Branch/Leatham. Photo: Jacob Lucas

The Branch & Leatham rivers were dived in February, with a good overall count due to the presence of hatchery origin fish, though brown trout numbers were down. The result easily meets the 7 large fish/km threshold which Manawa Energy agrees to maintain, as seen in the graph below.

Over three sites, 56 large fish were counted (4 browns, 20 wild rainbows and 32 hatchery rainbows). It was pleasing to see around 40% of the large rainbows were of wild origin- see graph below.



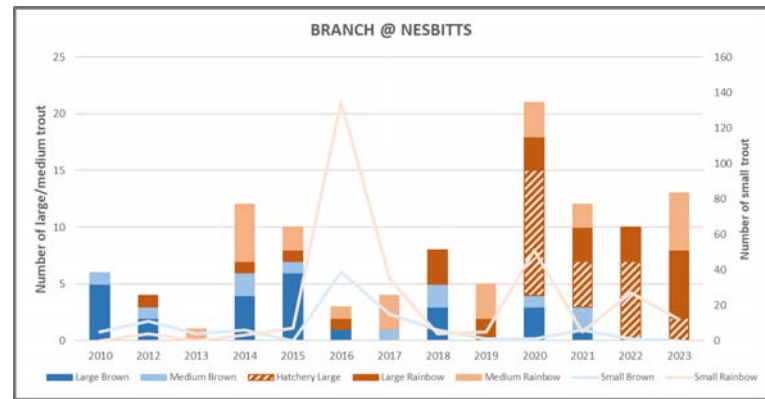
The Leatham site at Enchanted Stream was the most productive, with 41 large or medium fish present, with many of these fish found in the fast whitewater - see the graph below. While hatchery origin fish accounted for around half these fish, it was pleasing to see large and medium wild rainbows, which have not featured as much in previous years within the Leatham. Numbers of juvenile rainbows were also higher than normal.



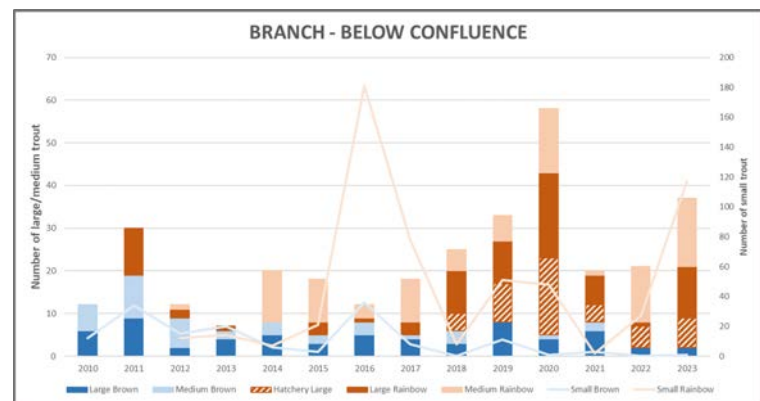
Interestingly, the 2016 spike in juvenile brown trout did not translate to an increase in larger fish subsequent years (this being prior to our increase in rainbow trout release), possibly due to flooding. Of note by anglers was how much the Leatham had changed between seasons due to flood events. This catchment is highly mobile, with pool/run structure changing periodically, meaning the river was largely unfamiliar to those who fish it on a regular basis.

BRANCH | LEATHAM CONT.

In the Branch River, the top site at Nesbitts has also undergone significant change to channel morphology in recent years, with significant pool infilling. Resultingly, this dive site is not as suitable for trout (especially brown trout who prefer access to deep water) as it once was, and for this years' dive only 13 medium/large fish were seen - see graph below.



The final dive of the day was the Branch River, below the Leatham confluence. 19 large rainbows were seen, with just over half of these wild fish - see graph below. Only two large brown trout were evident, though 16 medium rainbows would still provide plenty of enjoyment to anglers, and the number of small fish was very good with over 100 seen occupying the ripples.



The Branch & Leatham is emerging as a R3 success story, and is getting well patronised by anglers of all abilities. Most pleasing to see, is the value placed on it by new anglers, young anglers or family groups, who realise the river is a great stepping stone fishery...a destination with a great chance of success. It was great to see an initiative by F&G Councillor, Guy Gardiner, facilitating fishing trips for new entrant anglers into this catchment.

Rainbows in this catchment have a liking for fast water and are not as pool dependent as browns, and staff try and convey to anglers the need to thoroughly fish even the fastest 'whitewater', which many anglers would consider too quick.



SIX MILE STREAM SPAWNING COUNT

The surveyed reach was approximately 3570m in length from SH63 to the confluence with the Wairau River, approximately 11 km upstream of the Wash Bridge. 29 Redds (of which around 22 were estimated to be salmon redds), 6 brown trout and 13 salmon (8 live, 5 dead) were observed.

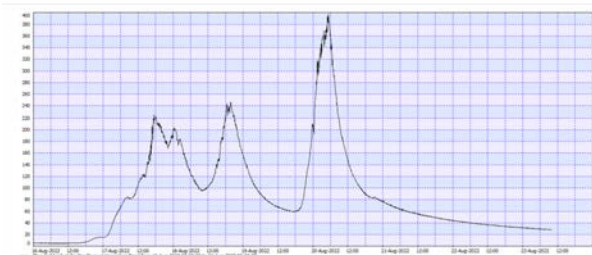
It is a locally important salmon spawning waterway, in our view the 3rd most important in the Wairau catchment, after the Rainbow River Springs and Wairau Mainstem. The stream appears to be particularly important for late spawning salmon, and it was surprising to see salmon still actively spawning - see the Salmon Monitoring chapter for more information.

< v > The Branch / Leatham is a stepping stone fishery popular with new anglers and families. Photos supplied by: Guy Gardiner



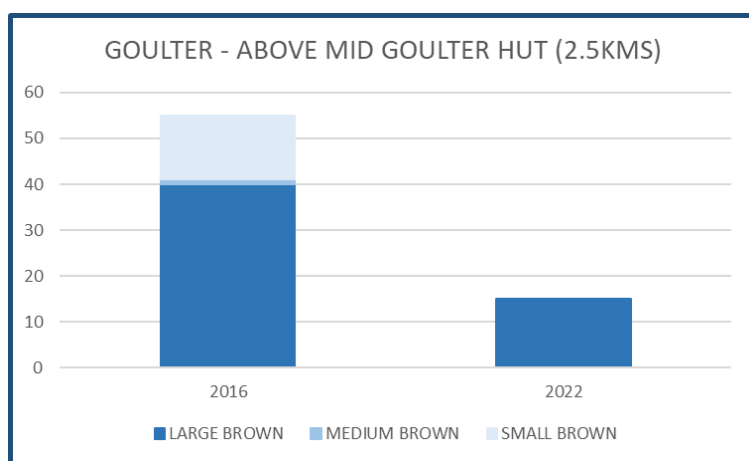
GOULTER RIVER

The Goulter received a 10 year flood event in August, reaching around 400cu. This river has suffered in recent years from significant flood events, and an unstable catchment mobilising large volumes of gravel which has precipitated pool infilling to the detriment of the trout population.

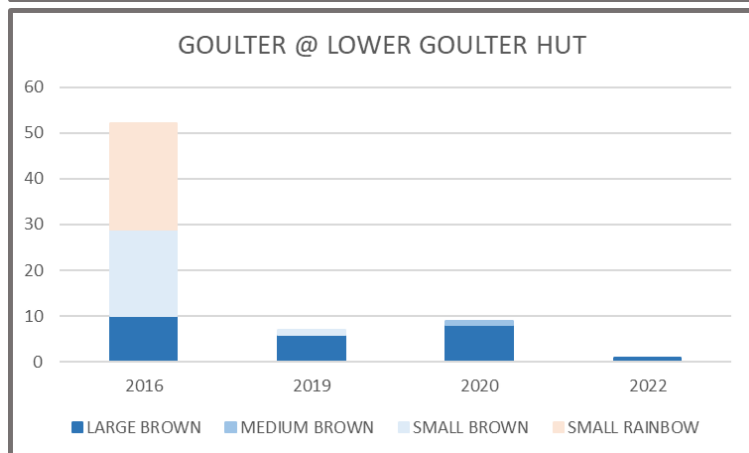
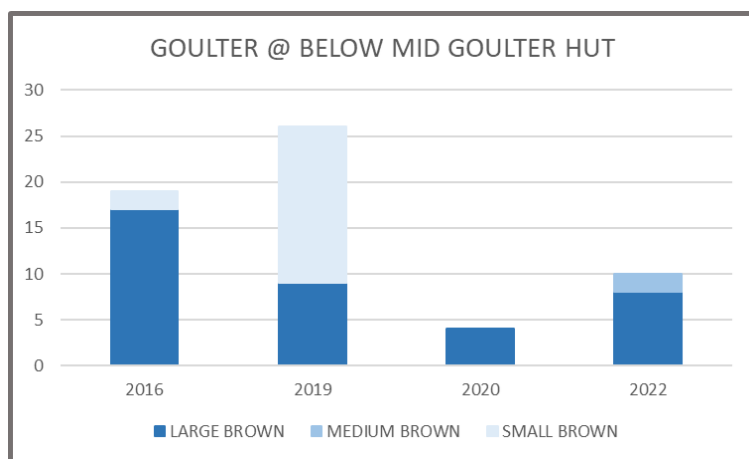


Put simply, this once great trophy trout fishery which received almost too much pressure from anglers is a shadow of its former self, and now receives little attention, with those venturing into this valley often returning in disappointment. Using funds from the backcountry fishery reserves, staff flew into the Goulter in November and carried out three drift dives. The most stable part of the river (above Mid-Goulter hut), looked really good, with A+ water quality and an abundance of invertebrates, however the 2km dive down to Mid Goulter Hut revealed a low trout numbers, and only 15 fish were seen compared to 40 fish in 2016 when it was last dived - see graph.

As an aside, staff have been in touch with a member of the Te Hoiere Project, who have an interest in establishing a predator programme which could lead to re-introduction of whio (blue duck) into the upper Pelorus. Our experience is that the Upper Pelorus River is low productivity in terms of macroinvertebrates as a food source, and have suggested the possibility of the upper Goulter as an alternative which has great stability and high macroinvertebrate biomass.



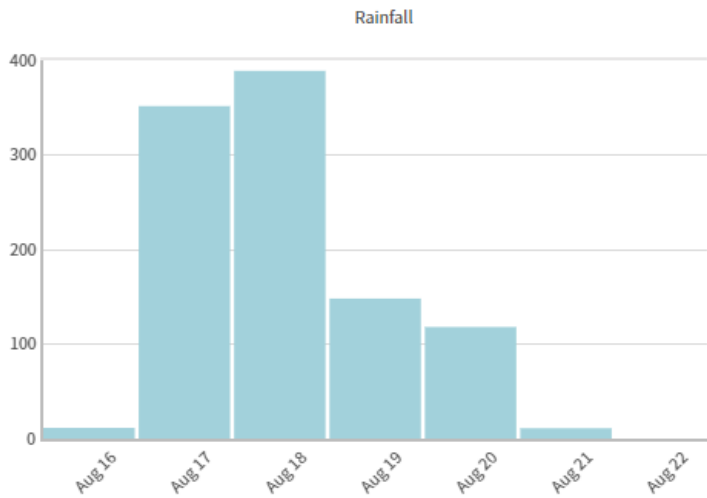
From here things didn't improve much at the two downstream sites, with just 8 large browns seen at the site below Mid-Goulter hut, and a poor showing of just 1 large brown trout seen on the lower dive.



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

PELORUS | TE HOIERE CATCHMENT

There were few expectations for the Pelorus catchment this year due to a ~50 year flood event that tore through this area in August. The amount of rainfall in the area was staggering, with 1000mm of rainfall recorded over 4 days in the Tunakino (tributary of the Rai) - see below graph.

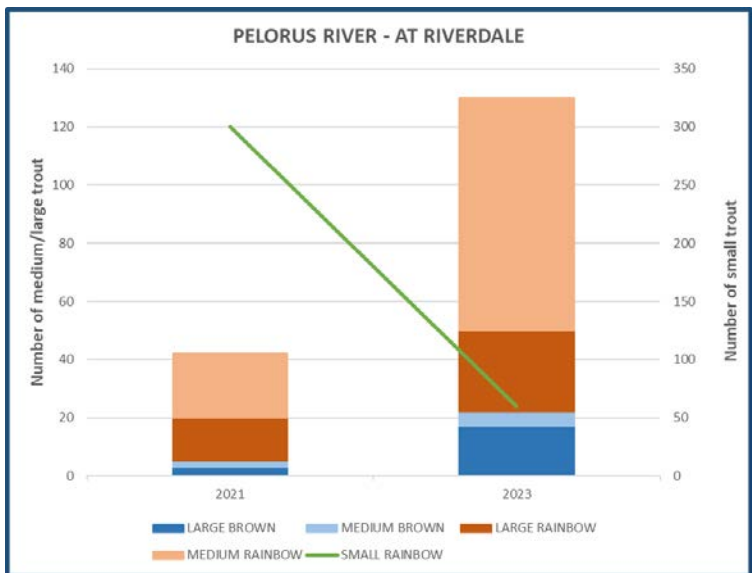


^ Daily rainfall totals in the Tunakino Valley - August 2022
 v The Pelorus Valley was completely flooded



anglers mostly fish, which is below the Rai confluence.

The below graph shows that fish numbers far exceeded expectations, with numbers much higher than when it was first dived in 2021. 17 large browns and 28 large rainbows were counted over the 1km dive, and notably, 80 medium rainbows were also seen - meaning there were 130 'catchable' medium/large fish over the 1km site - in line with Motueka River fish density. Not surprisingly, there was a sharp reduction in small trout, with 60 small rainbows seen compared with 300 juvenile rainbows in 2021, although encouragingly numbers of medium rainbows are well up, highlighting successful transition from small to medium fish and good flood survivability with this cohort.



PELORUS RIVER

A glimmer of hope came in the form of some angler reports from the Pelorus, which suggested there were still a few fish about. A local fishing guide had a successful day on spey gear here, catching good numbers of rainbows in the mid-lower part of the river.

The Pelorus was dived at Rivedale (above Dalton's Bridge) on March 16 - a new site we introduced in 2021. We moved away from the historical site (above Pelorus Bridge / Totara Flat), as fish numbers didn't reflect the nature of the fishery that

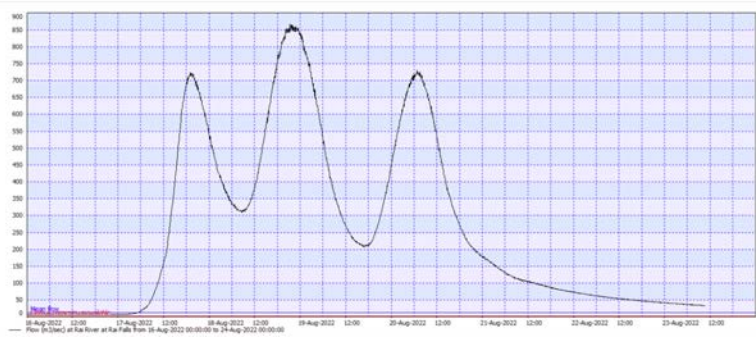
< Jamie Gallant had success drift fishing the Pelorus. Photo: Jamie Gallant

The Pelorus (below Rai confluence) will be a good early season option for the coming year, as this part of the river gets thermally stressed in summer (one of the reasons why Fish & Game have actively opposed further water allocation in the cooler Rai catchment which assists in buffering thermal stress in the lower Pelorus).

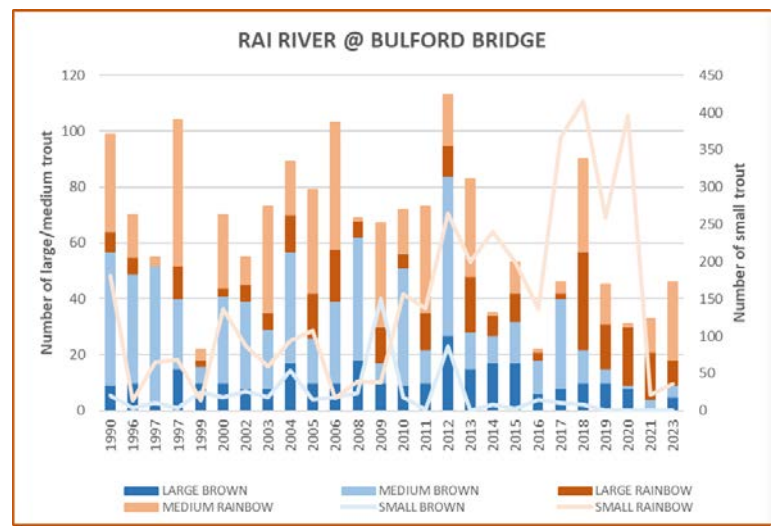


RAI RIVER

The Rai reached 860cu - an approximately 50 year or more return flood event - see graph below.



Our annual drift dive at Bulford Bridge was completed on the same day as the Pelorus, and showed a lack-lustre result, with just 5 large browns and 9 large rainbows, however 28 medium rainbows were counted also, along with just 36 small rainbows - see graph below.

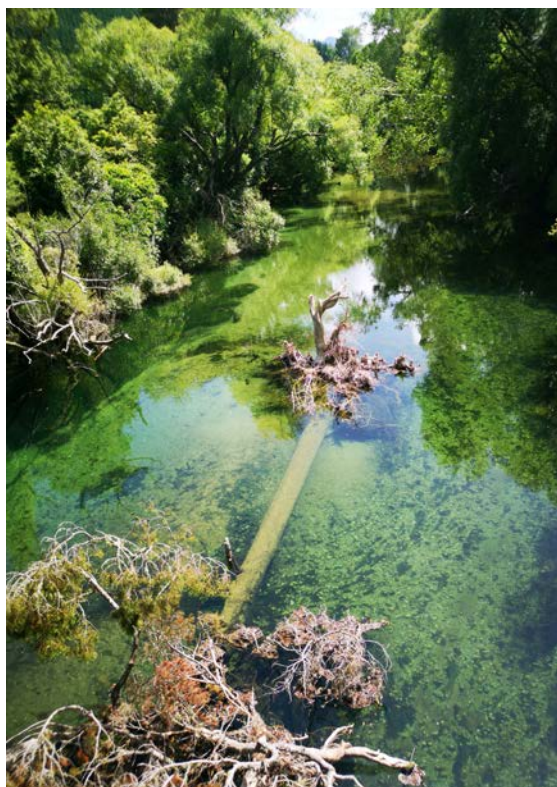
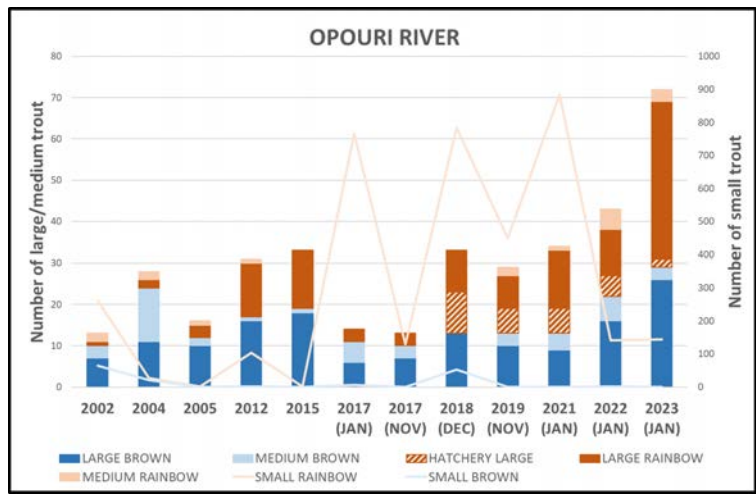


Staff on the dive noted there was an increase in suspended sediment, and a layer of 'fluffy' silt on the substrate - the habitat was not looking great post the August flood, though this should improve for the coming season.

Due to the later time of year this dive (and the 2021 dive) were completed, few small rainbows were seen. Staff believe the normally abundant juvenile rainbow trout population would have dropped down to the Pelorus River, below the Rai confluence.

OPOURI RIVER

This Opouri was dived in mid-January recording a fantastic result - a record count of 26 large browns and 40 rainbows, of which only two were hatchery origin - see graph below. Staff also believe that the low velocity nature of the floodwater in the Rai/Pelorus may have contributed to fish survivability.



^ Opouri River at Carluke Bridge



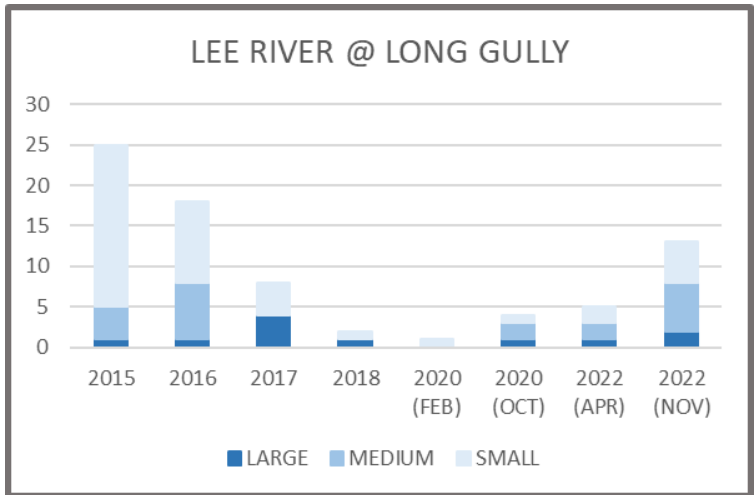
NELSON RIVERS

LEE RIVER

The Lee River had the best count for a number of years, though still low numbers of fish compared to other rivers. Two large, 6 medium and five small trout were counted on this dive - see graph below.

Staff believe that some of the rivers emanating from the Richmond Ranges such as the Lee (Upper Pelorus, Tinline, Wairoa etc), are low productivity rivers and can only sustain limited populations of fish, despite the great looking water. In the opinion of staff, the summer thermal regime, flood behaviour, and substrate are not conducive to high invertebrate production.

It will be interesting to see if the Waimea dam will influence the trout population through reduced flooding and thermal stress potentially leading to a change in the macroinvertebrate productivity of the river, downstream of the dam.



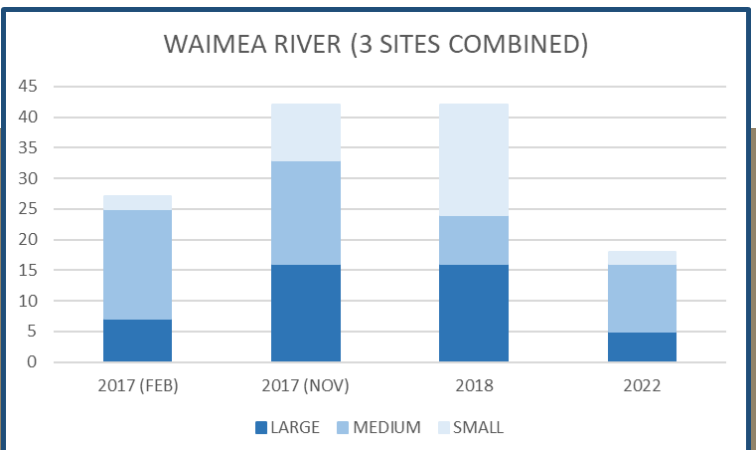
Currently the lower Waimea suffers from low flow summer thermal stress, meaning invertebrate productivity is very limited. It was great to see Taylors/Fulton & Hogan go to considerable lengths to cart gravel from one side of the river to the other. The gravel extraction project, which is adjacent to Waimea Park educational ponds, will remove gravel and create a number of separate ponds over the next 10 years, and turned into a wetlands/public recreation area - see pics below.



^ Temporary bridge over the Waimea River for carting gravel constructed by Taylors / Fulton Hogan

WAIMEA RIVER

A reasonably poor count of fish was observed on the Waimea River. Five large, 11 medium and two smalls were observed by divers - the lowest count of the four occurrences the Waimea has been dived - see graph below.

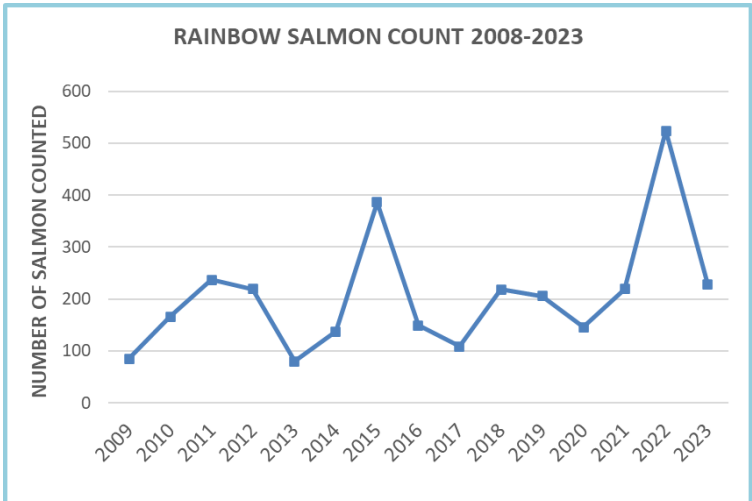


SALMON MONITORING

Periodic reports from salmon anglers suggested that there was a good run of fish in the Wairau this season, though fish size and condition was reasonably poor. Staff therefore expected a very good count in the Rainbow side stream where it is reported that many salmon in the Wairau catchment spawn.

A foot count was undertaken on 30 April, and a total of 228 salmon were observed. It was noted that salmon were in varying stages of the spawning cycle, with a lower than normal abundance of fish in pools (pre-spawning mode). At this stage, staff thought the run may be later, so a subsequent trip was made to the Rainbow two weeks later on 15 May, however fewer fish were observed - see table and graph below.

	Wairau confluence to side stream				Rainbow side stream to fence				Rainbow side stream Inside fence				Total No. Salmon	
	Live	Dead	Total	Redds	Live	Dead	Total	Redds	Live	Dead	Total	Redds	Salmon	Redds
30/04/2023	35	4	40	1	80	2	82	25	104	2	106	32	228	59
15/05/2023	3	5	8	1	55	12	67	62	67	15	82	38	157	101



It is becoming evident that the range of salmon spawning creeks may be increasing. This year, an electric fishing survey of Boulder Creek (Manuka Island), revealed good numbers of salmon smolt present - this was not known to be a salmon spawning site. A 3.5km stretch of Six Mile Creek (which runs near the Rainbow Homestead), was also surveyed for trout in mid-June revealing significant salmon spawning activity, some of it even still occurring at the time indicating a prolonged spawning season. In fact, Marlborough staff member Vaughan Lynn surmised that this may be the 3rd most significant salmon spawning waterway in the Wairau catchment after the Rainbow sidestream and main-stem Wairau - a significant find indeed.



^ Significant salmon spawning activity in Six mile Stream, these photos taken in mid-June.

As mentioned, salmon reports were positive during the season with plenty of fish around, though as the photos below show, size and condition varied considerably. It will be interesting to see if the 2022 peak spawning count translates into a good return of three year old salmon, if sea conditions are favourable.

v Nev and Aidan Gane caught plenty of salmon this season, but fish and condition was variable.

Unfortunately a flight of the Wairau and other salmon spawning waters was not undertaken this year for financial reasons, but angler reports indicated there were a few fish in the mainstem, some of them getting caught inadvertently on fly gear while in pursuit of trout.



NATIVE FISH MONITORING

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

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 adult salmonid release program starting in 2010 as mitigation for the Branch hydro scheme weir salmonid fishery impacts. This work was setup to assess the health of both native fish and brown/rainbow trout recruitment following the commencement of the release program. This work has now been undertaken 6 times by Fish & Game and will be repeated annually for the lifetime of the current Trust Power hydro consent for as long as restocking continues. This year the two regional Department of Conservation freshwater fisheries staff also assisted us with some of the monitoring work.

As can be seen in the Appendix graphs, results of this year's March-April 2023 survey work revealed a similar or increased number of native fish (compared to 2022 results) captured within most mainstem Branch/Leatham sites, with the exception of the most flood exposed site below the confluence of the Branch/Leatham catchments. Juvenile trout levels within mainstem sites appear similar to the 2022 results.

As expected, (due to potential localized cloudburst activity), tributary sites had more variable results, however they were generally not too dissimilar to last year's results.

Interestingly, the Northern galaxiid population within Alan Stream now appears to have fully recovered from a previous catastrophic localized tributary flood event sometime prior to the 2020 sampling period (see graphs in appendix). The rise of the Northern galaxiid population in this tributary appears to have replaced the dwarf galaxiid population previously present, perhaps the larger size of Northern galaxiids precludes co-existence with dwarf galaxiids once a population increase such as this occurs. No trout exist within most of this site due to a in-stream barrier, so there is no confounding affect here.

A comparison of fish densities encountered in the most stable tributary site (Caves Bluff unnamed tributary stream), versus the most unstable tributary site (Greigs Stream), is also enlightening – dwarf galaxiid densities averaged over the 7 years of sampling data revealed an average density of 0.02/m² within the very unstable Greigs Stream, versus 0.52/m² within the much more stable Caves bluffs stream – for dwarf galaxiids, this seven year average is 26 times higher at the much more stable tributary site. Similarly, even the most abundant mainstem monitoring site for dwarf galaxiids (Leatham at Caves bluffs), still had a density 4-5 times lower (0.114/m²) averaged over 7 years, compared to the density of dwarf galaxiids (0.52/m²) in the immediately adjacent stable Caves Stream tributary site.

Density of dwarf galaxiids within the 7 tributary monitoring sites averaged over 7 years ranges from a density of 0.02(Greigs stream), to 0.52 (Caves bluff tributary), galaxiids/m². Mainstem sites by comparison, averaged over seven years, have dwarf galaxiid densities ranging from 0.01(Branch below Leatham confluence), to 0.114 (Leatham at Caves bluffs). Overall, dwarf galaxiid densities tend to be around 3-4 times higher within tributary verses mainstem monitoring sites presumably due to the higher flood induced mortality pressures within mainstem sites. While it could be suggested that the lower mainstem densities may be related to adult trout biomass due to restocking, this is considered unlikely for two reasons. Firstly, some of the less stable



tributary sites have densities a lot lower than the most stable mainstem sites in the presence of stocked trout. For example, a 7-year average dwarf galaxiid density of 0.02/m² exists for Greigs stream (no adult trout) versus 0.114/m² for the Leatham mainstem at Caves Bluffs where released rainbows are regularly encountered (a density 5-6 times higher despite the presence of adult trout). Secondly, almost every mainstem site has recorded a higher galaxiid density during the last 6 years of monitoring than original baseline density data in existence prior to the current re-stocking program commencing.

The overall picture of monitoring results so far, suggest stability tends to be the predominant driver of the density of all fish species within this catchment - generally fish numbers are high at most sites after a precluding fairly stable 12-month period (see 2021 results). In addition, there is a significant difference in stability within all sites with the most stable tributaries supporting far higher fish numbers than the more unstable tributary sites, and mainstem sites supporting 3-4 times lower densities of fish 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 the site immediately below the Branch/Leatham confluence (and therefore exposed to a higher frequency and/or size of floods as both catchments join at this site), generally has the lowest density of all fish species, including juvenile trout, recorded each year.

Distance from tributary recruitment source populations may also perhaps influence native fish recovery times within mainstem sites following flood events.

While we cannot be certain of the exact population drivers with this monitoring work, 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.

OPOURI RIVER | DWARF GALAXIAS

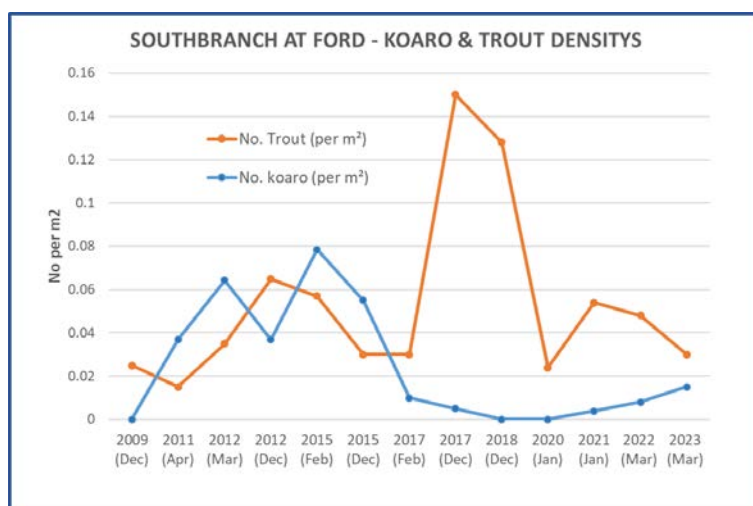
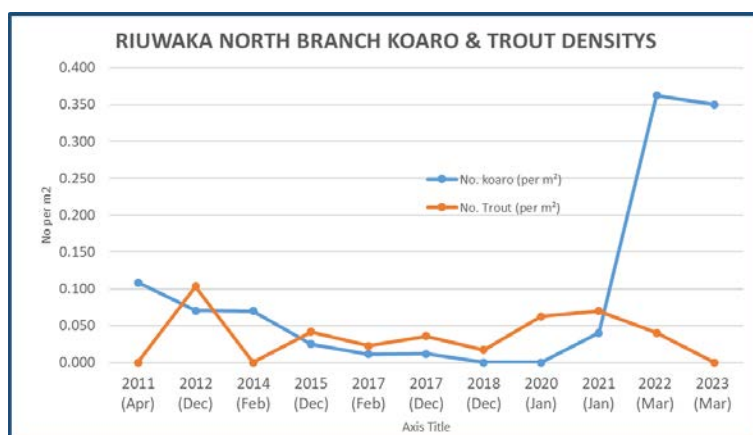
A healthy abundant population of native fish continues to function within the Opouri River within the location of a small number of tagged adult rainbow trout releases undertaken historically for

increasing angler participation/success.

Unfortunately monitoring work in this system was not undertaken this year as weather events frustrated our ability to complete this – next year it is hoped to survey this stream and perhaps the trout free Kenepuru head stream of similar size to see if any differences in population biomass are obvious.

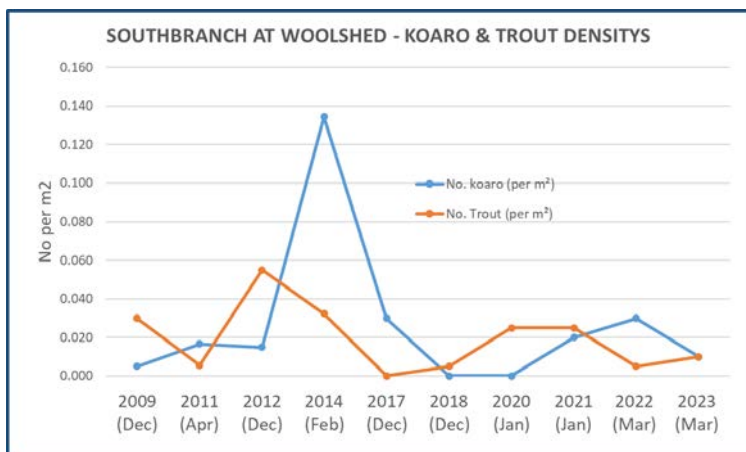
RIUWAKA RIVER

The Riuwaka River has long suffered from poor juvenile brown trout recruitment, likely due to a lack of small stable side streams (all spawning occurs in the more flood prone mainstem of the North/South Branches). The 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 graphs below and table 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 fish population (some of these fin-clipped adult fish were still recorded over 5 years later in the 2022 drift dive), further Riuwaka releases have been discontinued due to Treaty Partner concerns expressed following the 2017 release.



^ Koaro/juvenile trout monitoring results for the Riuwaka North & South Branch


Interestingly, monitoring within the Upper South Branch of the Riuwaka (at the woolshed) recorded peaks and troughs of both trout and koaro that are fairly similar, except koaro population peaks appear to be observed a year later than juvenile trout population peaks – this could perhaps be due to the marine life cycle phase of koaro as opposed to the “in-river spawning” life cycle of trout – when a stable 12 month period occurs, this would benefit survival of both juvenile trout fry, and migrating whitebait which would be entering the river 4-5 months after peak brown trout spawning - see graph below.



^ Koaro/juvenile trout monitoring results for the South Branch Woolshed site

It is possible therefore that the koaro whitebait may not have made it all the way up to the Woolshed monitoring site by the survey date, hence the apparent delay between trout and koaro peaks picked up at the South Branch Woolshed site. In May 2023 a very fast rising 30-year return flood was experienced within the North Branch of the Riuwaka so it will be very interesting to see how well the currently high koaro population was able to weather this significant disturbance event. Given the South Branch did not even reach annual flood level in this event, providing no more large floods occur between now and the 2024 monitoring period, results may provide a very useful insight into flood severity impact on fish populations within this system.

Fish & Game intends 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.

Fortunately low flow thermal impacts are not a big issue in this system due to cool North Branch resurgence water. 



A North Branch Riuwaka koaro.

HATCHERY

RELEASE PROGRAMME

We had another big year of fish releases, commencing just before the new season with releases of 2.5kg average fish into Lake Argyle and Waimea Park. From then onward it was normal rising stock that were released at regular intervals into three waterways - Lake Argyle, Waimea Park and the Branch catchment. The tables below shows that a total of 5776 rainbow trout were released from 28 September 2022 to 22 June 2023. 2629 of these were liberated into Lake Argyle, 2347 into Waimea Park (1312 Adult/Family pond; 1035 Junior ponds), and 800 into the Branch & Leatham.

WAIMEA PARK RELEASES

Date	Species	Av size	New Adults pond	Small Pond	Medium Pond	Large Pond	Total
28/09/2022	Rainbow Trout	2.3kg	105				105
3/11/2022	Rainbow Trout	650grams, 2.3kg	0	23	50	80	153
22/11/2022	Rainbow Trout	800grams	275	0	11	14	300
14/12/2022	Rainbow Trout	950grams	130	15	45	110	300
20/12/2022	Rainbow Trout	1kg	150	10	40	100	300
17/01/2023	Rainbow Trout	1.3kg	150	13	39	100	302
8/02/2023	Rainbow Trout	1.2kg	170	0	0	62	232
24/03/2023	Rainbow Trout	1.4kg	75	5	31	55	166
28/04/2023	Rainbow Trout	1.6kg	100	12	35	55	202
31/05/2023	Rainbow Trout	1.8kg	67	0	29	41	137
22/06/2023	Rainbow Trout	2kg	90	0	20	40	150
TOTAL			1312	78	300	657	2347

TROUT RELEASES (EXCEPT WAIMEA PARK)

Date	Number	Species	Size (av)	Tag/ Fin Clip	Location
28/09/2022	120	Rainbow trout	2.5kg	Fin dipped	Lake Argyle
22/11/2022	300	Rainbow trout	800g	Fin dipped	Lake Argyle
8/12/2022	600	Rainbow trout	950g	Tagged	Branch/Leatham
14/12/2022	300	Rainbow trout	950g	Fin dipped	Lake Argyle
20/12/2022	300	Rainbow trout	1kg	Tagged	Lake Argyle (200tagged)
20/12/2022	200	Rainbow trout	1kg	Fin dipped	Lower Leatham
12/01/2023	600	Rainbow trout	1.1kg	Fin dipped	Lake Argyle
17/01/2023	264	Rainbow trout	1.1kg	Fin dipped	Lake Argyle
8/02/2023	270	Rainbow trout	1.2kg	Fin dipped	Lake Argyle
24/03/2023	100	Rainbow trout	1.4kg	Fin dipped	Lake Argyle
28/04/2023	100	Rainbow trout	1.6kg	Fin dipped	Lake Argyle
31/05/2023	125	Rainbow trout	2kg	Fin dipped	Lake Argyle
22/06/2023	150	Rainbow trout	2kg	Fin dipped	Lake Argyle

TOTAL (LAKE ARGYLE)	2629
TOTAL (BRANCH/LEATHAM)	800
TOTAL (WAIMEA PARK - ADULTS)	1312
TOTAL (WAIMEA PARK - JUNIOR)	1035
TOTAL ALL FISHERIES	5776

The magnitude of these releases demonstrate how popular harvesting hatchery reared rainbows for the table is within these fisheries.

Due to a range of factors, fish size at the start of the new season was much lower than expected, and we were fielding a few grumblings from anglers. Typically, fish size at October would be close to 1kg, however this season they were only averaging 800g. This season we are on track to produce 1kg fish by early October.

HATCHERY UPDATE

Amongst the normal hatchery routine of fish feeding, race cleaning, mowing, hedge trimming, native tree planting/grounds enhancement, our hatchery manager, Rob Foster, has been steadily improving the hatchery facility, including:

- renovated the hydro-wheel with new bearings/chain/adjustments to improve power generation efficiency for this site
- creating a concrete path to the south side of the hatchery house to address mud and slip hazard issues
- headrace settling pond and intake race had weed removed along with the 200m Mill Stream intake race to the fish farm
- improved fish loading techniques
- 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.
- assisting with fish releases
- undertaking some compliance duties



BRANCH/LEATHAM RELEASE

The Branch & Leatham rivers are now regionally important fisheries, catering for a mix of experienced and learner anglers. Along with mitigating the impact of the hydro weir on adult trout numbers, the goal of releases is to also provide an destination where success rates are high, especially for beginner anglers learning to fly fish, or junior anglers in a family group catching fish on spin/softbait gear.

Funded by Manawa Energy, 800 fish were released into the Branch catchment in December. 600 of these were by air using a monsoon bucket, and 200 by vehicle into the lower Leatham.

The aerial release day went well, with 300 fish going into the upper half of both the Branch and the Leatham, and the operation was more efficient this year having two fish tankers loaded up on site, meaning a return trip to the hatchery for more fish was not needed - see pictures of the release.



^ > Branch/Leatham aerial fish release. Photos: Jacob Lucas



R3 | RECRUITMENT, RETENTION, REACTIVATION

This year was basically a continuation of the previous, with R3 efforts largely concentrated on Waimea Park and Lake Argyle fish releases.

WAIMEA PARK

Two seasons in, the new Adult/Family pond at Waimea park has been a resounding success. This would now be one of the regions most popular winter fisheries, and on any given day, a trip down to the pond in the afternoon will see 4+ anglers using the pond, more on weekends.

The most popular technique appears to be bait fishing, followed by softbait/spin fishing. As fish are often found in deeper areas, they are not as easy to see as they are in the junior fishing ponds. Staff get regular positive feedback from anglers about this resource, validating our efforts here.

Likewise, the junior ponds next door have been popular as a fishery outside of organised Kids Fishing Out events. The Sports Fishing For Youth Charitable Trust is now in it's 11th year and has again done a fantastic job of maintaining the ponds in a good state, as well as running many organised events for junior anglers and charity groups. Since its inception, the Trust have put 3,500 kids through organised fish out events.

It has been great to see see the Trust now using the ponds for elderly members of the community. Being easy to access, and wheel chair friendly, they are a perfect option for mobility restricted people. This is also a good growth area for Fish & Game, and in this region we have found that efforts in retaining older anglers have been well rewarded. You can take a read of the Trust's excellent annual report in the Appendix. Summerset in The Sun was one such retirement village that contacted the Nelson office about fishing at Waimea Park, and purchased a number of day licences for some of their residents, who had a great day at the ponds.



< It is great seeing the ponds getting used by elderly members of the public.

TAGGED FISH COMP

The Lake Argyle tagged fish comp was another success, and again generated a fair bit of hype over the summer holiday period. As always, 200 tagged trout were released into the lake just before Christmas, with some great prizes up for offer, including 2 x \$500 Henderson's vouchers, rod/reel sets, free licences, and lure packs.

As with previous years, around 80% of the tagged fish were caught and reported and, pleasingly, both \$500 vouchers were claimed.



> Sue Tindale from Auckland with a tagged Lake Argyle trout

LAKE ARGYLE

The Lake Argyle fishery, created through regular releases of catchable trout, is now a self propelling R3 machine. It ticks all the boxes of recruitment, retention and re-activation, and is now one of our regions most popular fisheries, which will be highlighted in the soon to be released National Angler Survey. Fish & Game will continue to carry out regular releases here, with the aim to release 2000+ catchable fish per season into the hydro reservoir.

RIVER FISHING TECHNIQUES

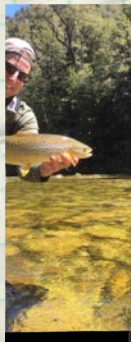
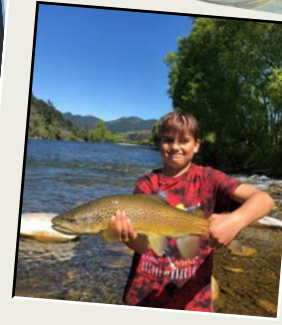
This summer we hope to run a series of instructional days on river fishing, focusing initially on the Motueka River - one of the regions best (but tricky) fisheries. We also plan to create a 'how to' video on fishing the Motueka, as many anglers struggle to catch fish on this river, despite it generally having a good population of trout.



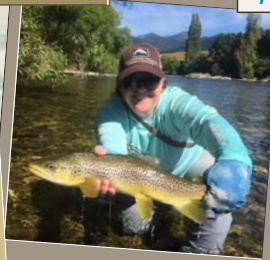
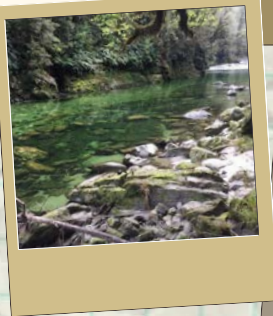
R3 PICS/FEEDBACK



"Thanks to Fish & Game for setting up the Waimea Park ponds, to make fishing easy for people with disabilities so we can all catch a fish" Brian



"I just wanted to send you this shot of my son Scott Barnes (5yr) and Ria with his first trout that he caught by himself at Lake Argyle on Father's Day morning. We just wanted to thank Fish and Game for making this possible."



Good Evening Team,
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,

BACK COUNTRY FISHERIES

DESIGNATED WATERS

There has been a fair bit of work from NZC and regional staff in regards to the incoming Designated Waters (DW) management regime.

With the new DW proposal coming in for the coming 2023-24 season, our aim this season was to get some angler use data on current backcountry designated fisheries, as well as possible future rivers that may be worthy of inclusion.

The Nelson Marlborough Fish & Game Council provided for an increase in spending to obtain angler use and fish monitoring data, and asked staff undertake survey work on the Travers, Upper Wairau, Goulter, Upper Matakītaki and Wangapeka Rivers, along with any other waters staff thought would be useful.

The below table provides a summary of any work undertaken for the Designated Waters proposal. We have good existing data on the Travers, Upper Wairau and Goulter fisheries, however we were light on data for the Matakītaki and D'Urville in terms of angler use information.

While it was recognised early on that existing backcountry designated fisheries could be moved into the DW framework, the Wangapeka River was identified as a good candidate due to the pressure it receives from non-resident anglers, and considerable effort was spent here during the season to obtain angler use data. This river was mooted as inclusion in the 'backcountry fisheries' framework in 2017, however was not included then as the Council did not wish to promote the river


which may essentially increase angler use. In retrospect, the decision not to include the Wangapeka has been counterproductive and perhaps it should have been there from the start.

After collating all available data, the NMF&G Council decided to include five rivers in the DW proposal and draft Anglers Notice, while dropping the Goulter. The five rivers were the Travers, Wangapeka, Upper Wairau, Upper Matakītaki and D'Urville.

However, the Conservation Minister did not approve any additional rivers that were not in the existing Backcountry Endorsement licence system, and unfortunately this meant the Wangapeka and D'Urville rivers could not be included in the DW regime.



^ Allan Ferguson with a solid mid-Wangapeka fish.

We will continue to obtain data on fisheries that warrant possible inclusion in the DW framework going forward, including the Wangapeka and D'Urville rivers, with the aim that if they have the data to warrant inclusion, the NMF&G will try and add these in the future. 

SUMMARY OF DESIGNATED WATERS DATA COLLECTION

	Angler use monitoring / compliance	Drift Dive completed	Comments	Recommendation to include in DW proposal?	Approved in anglers notice / DW framework
Wangapeka	✓	✓	Good angler use data showing greater than 50% non-resident use. Excellent drift dive result, showing healthy fishery.	✓	✗
Travers	✓	✗	Valuable angler use information collected by Water Taxi operator. Good data from previous years camera work. Known to have greater than 50% non-resident angler use.	✓	✓
Upper Wairau	✓	✗	Not dived due to water clarity. Some angler use work done here, though this was ad-hoc and only early and late season.	✓	✓
Matakītaki	✗	✓	No angler use monitoring data collected. Dive completed above Horse Terrace Bridge.	✓	✓
Goulter	✗	✓	Drift dive completed in November 2022. Fishery in very poor health which mirrors angler feedback in recent years - staff recommend to not include in DW proposal	✗	✗
D'Urville	✗	✗	NMF&G Council recommended this fishery be included based on wild and scenic values	✓	✗

It will be interesting to see how the DW system goes in its first year, especially with two fewer rivers that were recommended. The NMF&G Council felt that there should be enough Designated Waters for the system to be effective, with a minimum of four rivers thought to be a good starting point.

Feedback from the resident regional angling community has been mostly favorable, though a common thread which has been coming through is in regard to compliance.

Staff and voluntary rangers will have an increased presence on our gazetted DW waters, and also on rivers which are on the periphery, and require some more robust data.

Most regional fishing guides (and many foreign anglers) were contacted during the 2022-23 season via staff and voluntary rangers during compliance duties, so there is an expectation that this will be the case going forward.

While we expect a high level of compliance with guided non-resident anglers, we are also hopeful this will be the case with non-guided non-resident anglers, however we will be making our compliance team aware of possible loopholes some non-resident anglers may take to circumvent the regulations in order to avoid regional limits on the number of days DW rivers can be fished, or the daily licence cost to fish these rivers.

We plan to survey resident and non-resident anglers at the close of the season to seek feedback, and

also use this platform to communicate and seek submissions on future possible rivers that warrant inclusion.

BACKCOUNTRY DRIFT DIVES

Staff carried out a drift dive of the Goulter River in order to determine the health of the fishery. Feedback from anglers in recent years had been very poor for this river, and our last dive in 2020 had mirrored angler feedback. Things certainly had not improved when we dived it in November 2022, and as a result, staff recommended that the Goulter not be included in the DW framework until at what point the fishery improves.

The Matakītaki (above Horse Terrace Bridge) was dived, which had not been surveyed for some time. Though fish numbers were lower than in previous dives, the fishery still looked in good shape, with decent numbers of fish present. Fish were, however, showing signs of stress - some having visible 'catch marks', and some looking in average condition, possibly due to the low summer water levels, combined with angling pressure.

The Wangapeka was also dived at two locations, showing the fishery to be in excellent shape. Unfortunately the Upper Wairau could not be dived due to the wet summer and water clarity.

You can see the results of these dives in the earlier Species Monitoring chapter of this report.



Goulter River drift dive. Photo: Jacob Lucas



FARM CLEAN UP EVENTS

Fish & Game, with the help of some volunteers from the Nelson Trout Fishing Club, assisted a nearby landowner with a farm clean up in Kokorua, removing large amounts of debris from the fences and paddocks.

Incidentally, we had been on the same farm earlier in the year when another flood had caused similar damage to fence lines.

The assistance was greatly appreciated by the landowner, who had the misfortune of two large scale flood events within one year, and helps form positive relations between anglers and the rural sector.

We were also in preparation for a riparian clean up of the upper Maruia River in the wake of a large flood in 2022, however we were not needed in the end as the job was kindly done by local kayaking/rafting groups.

Thought is now being given to a Motueka River riparian clean up event.

v > Giving farmers a hand. Fish & Game and Nelson Trout Fishing Club on a farm at Kokorua. Photos: Jacob Lucas



ACCESS

Annual access work continues across the region. With over 200 formal access points in the region, it is a significant undertaking to get around all of the access points for clearing/spraying and replacing signage. Access points are also continually changing due to flood events and the likes, and it is always an issue when the printed pamphlets reflect old information.

In light of this, staff have been working on a new online access tool (which is part of a national digital access initiative), where it will be easier to update/manage access information, however it does require a shift in thinking from anglers to use the online tool. While we will still retain printed access pamphlets (which also have an R3 component) for some of our more popular fisheries, we hope in time there will be a shift to the online tool.

v New access track for Rocky River (Motueka) access point. Photo: Jacob Lucas



MOTUEKA CATCHMENT COLLECTIVE

The Motueka Catchment Collective was initiated in 2020 by concerned landowners in the Tapawera area with a strong collective desire to weave the communities in the Motueka catchment together, ensuring the wellbeing of the freshwater system and connected environment. The group has now expanded to include the entire Motueka Catchment from its headwaters to the sea, and has recently received MPI funding to the tune of \$870,000 for conservation initiatives and the likes, including the hiring of a full time catchment coordinator. Besides landowners, the MCC involves many others, including iwi, forestry companies, TDC, Tasman Bay Guardians & Weedbusters, to name a few. There has been fantastic leadership shown by Landcare Trust in the past few years, who have been successful in generating a lot of interest and positive grassroots environmental outcomes within this important fishery.

Prior to the funding, the catchment had already had a number of educational events, as well as numerous planting days. They have coordinated the purchase of many thousands of native trees on behalf of landowners who wish to carry out restorative plantings on their land.

Fish & Game are involved with this group, and sit on a number of thematic groups that will help steer the direction of the work. We assisted with a public drift diving/river health open day at MacLeans Reserve.

The real value however, comes from the landowners and locals who use and love this catchment, who all have a part to play and who, in the words of the MCC hope to *"encourage interest in the freshwater ecosystems, weave Mātauranga Māori knowledge and science together to generate a wave of enthusiasm to promote guardianship"*.

Photo: Jacob Lucas



FARMERS FOR WHIO

In light of all the conservation initiatives happening in the Motueka Valley, Fish & Game now have a practical involvement in pest management in this catchment, and are assisting Farmers for Whio with a trap line in the Baton Valley.

The title says it all for Farmers for Whio, who are made up of a group of landowners who run trap lines on their properties, with the aim to protect whio (blue duck) that live there, and help with community efforts to see the whio range expand. Farmers for Whio have a network of over 500 traps, which need to be checked each month.

We will be seeking anglers to get involved with this project, and may possibly look to assist Farmers for Whio to expand the pest operation to other parts of the Motueka catchment where whio live.

We believe it is important for Fish & Game, and anglers themselves, to get involved in positive public good and conservation initiatives such as this, in order to maintain our social licence around the management of introduced species, and enhance the value of our organisation in the eye of the general public, who may not be anglers or hunters.

> *Stoats are the main problem when it comes to whio.* Photo: Jacob Lucas



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.

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 this year we have also had activity within the hunting space in the form of our appeal on the Marlborough Environment Plan status of hunter maimai within riverbeds.

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

MARLBOROUGH PLAN

Following the release of Marlborough Environment Plan (MEP) decisions, Fish & Game had to lodge a formal appeal to the Environment Court as our concerns around low flow and water allocation management were not addressed by the plan hearing decision panel.

The largest issue of concern within the present plan decisions relate to the provision for allocation of a lot more water out of trout fisheries of interest to Fish & Game, with inadequate assessment or provision for flows to protect instream values. Related to this allocation of new water, are the likely flow-on effects of more intensive land-use arising from access to new water, and likely increased nitrate leaching rates in catchments such as the Rai and Kaituna Rivers, which are already above levels deemed to be optimum for aquatic ecosystem health.

The following topics provide a summary of where things are currently at (August 2023) in relation to the Marlborough plan appeals process.

WATER QUALITY

- F&G sought a suite of considerable amendments to the MEP, focusing on requiring comprehensive work (including limit setting) to be undertaken, and more stringent rules for managing land uses affecting water quality.
- Marlborough iwi are putting their advocacy effort into the new freshwater planning process, so were generally not involved, apart from Ngai Tahu.
- F&G allied with Ngai Tahu, Environmental Defence Society (EDS), Forest and Bird (F&B), Department of Conservation (DoC).
- Marlborough District Council (MDC) provided evidence to suggest water quality is not an issue in Marlborough.
- The F&G appeals were mostly resolved to the extent they could be without going to a hearing. A hearing was not necessary because of the low risk to water quality ahead of the next plan change process (to be notified before Dec 2024).

WATER QUANTITY, FLOW & ALLOCATION

- F&G sought substantial amendments to the MEP, focusing on requiring comprehensive work (including reviewing of the allocation and flow regime requiring further work/research to be undertaken or relied on).
- MDC considers its allocation and flow regime gives effect to the NPSFM 2017, including the concept of Te Mana o Te Wai, and considers the framework is sufficient to protect the mauri of water, protect ecosystem health, and protect the habitat of trout and salmon. F&G do not agree with this position (and nor do Ngai Tahu in respect of Te Mana o Te Wai and protecting mauri). EDS and F&B support F&G. DoC advised that MDC do need to update the current regime in its entirety. The main water users (primarily wine industry) agree with MDC's position.
- F&G allied with Ngai Tahu, EDS, F&B, DoC. These groups all supported F&G. However, none of these allies were prepared to go to court on their own appeals.
- continued next page...

- Iwi (apart from Ngai Tahu) did not engage, and confirmed they would not be engaging in this appeal process. Rather, they will engage in the next plan change process. Ngai Tahu would likely have pursued appeals to court had other Iwi been involved.
- Manawa Energy were involved and had their own appeal points, focused on securing rights for their existing hydro schemes.
- The particular concern for F&G is the allocation and flow regime for the Wairau. In short, the MEP allocation and flow regime enables unused allocated water (paper allocation) to be reallocated and used. If all the allocated but unused water is reallocated and used then the Wairau will become over allocated, and this will be very difficult to claw back. F&G's position is largely reliant on a comprehensive Cawthron Report that MDC commissioned but have failed to produce or refer to.
- Like for water quality, F&G chose to not pursue its appeal points on the basis the plan framework is interim and does not give effect to the National Policy Statement for Freshwater Management (NPSFM). Some specific amendments to the plan were agreed to clarify / reinforce the point that the MEP does not give effect to the NPSFM and that the allocation and flow regime cannot be relied on.
- Until the next plan change is notified there is a risk MDC will approve resource consents for new water takes from the Wairau that will result in overallocation. F&G will be focused on opposing any such resource consent applications and decisions for new Wairau Class A water. F&G have support from Ngati Toa who have written to MDC opposing further new water takes from the Wairau and other waterbodies prior to the 2024 freshwater planning process.
- MDC thinks the MEP provisions more or less give effect to the NPSFM, except that they are waiting on Iwi to inform MDC otherwise. F&G, Ngai Tahu, EDS, F&B, DoC, have informed MDC the plan does not give effect to the NPSFM, and that much more work is required to justify the water related provisions (including the freshwater values / indicators of health).
- No party is going to take MDC to a court hearing over the MEP. Rather, all parties are more focused on the next plan change, which needs to be notified by the end of 2024.
- Until the plan change is notified, F&G will likely oppose various resource consent applications or decisions, in order to hold MDC to account and prevent overallocation and degradation of the quality of water in some particular rivers.

NEXT STEPS

- F&G to remain in good faith collaboration with parties / stakeholders.
- Be clear what is required to give effect to the NPSFM, including engaging team of experts and references together to clarify what is required to:
 - Protect ecosystem health of waterbodies (e.g. instream flow studies for each waterbody)
 - Protect habitats of trout and salmon
- Clarify F&G's position on the relationship between policy 9&10 of the NPSFM (in relation to prioritising habitat protection)
- Focus on Iwi, for example to get understanding of what is required to protect the mauri of waterbodies and to get Tangata whenua cultural indicators of freshwater health into the MEP framework.
- Oppose resource consents as required.

SUMMARY

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

MARLBOROUGH RESOURCE CONSENTS

To maintain our appeal position on water allocation and minimum flows within the Marlborough Environment Plan (MeP), we continue to submit in opposition to Marlborough resource consents, mainly renewals of existing water permits. To date we have managed to resolve these through agreement of appropriate conditions with the applicants which ensure consistency with our MeP appeal.

Applications for new water within the Kaituna and Rai and Wairau (Class A only), have been opposed by Fish & Game and currently remain on hold. Two applications by Delegats Ltd to convert Class B water into Class A water have been opposed by F&G. Granting of these consents would potentially undermine the upcoming 2024 freshwater planning process so Fish & Game will need to continue to vigorously oppose these applications in the interim, including if necessary, funding any consent decisions to be appealed to the Environment Court.

TASMAN DISTRICT COUNCIL PLANNING AND CONSENTS

We understand Tasman District Council are continuing to undertake hydrological monitoring work to inform the upcoming Tasman Resource Management Plan (TRMP) review scheduled to occur in 2024, which will need to be consistent with the Governments 2020 National Policy Statement for Freshwater Management and Te mana o Te Wai principles. Fish & Game hope to see the Council consider more appropriate minimum flow levels within the Upper Motueka catchment particularly within the lower Motupiko River.

Good habitat outcomes continue to be achieved through a shift in standard practice within river repair works throughout Tasman as a result of earlier Fish & Game Environment Court engagement. Use of rock groynes wherever possible is also assisting in returning pools to heavily engineered Rivers. These gains are however being offset somewhat by an ever-increasing number and size of flood events the region has been experiencing.

A number of written approvals relating to proposed flood protection works in the Maruia catchment as well as written approvals for minor alterations to goldmining consents were processed. Erosion repair

solutions were devised for protection of the Wangapeka Hop Gardens, during a site meeting between FG staff, landowners and TDC consenting staff. There have also been several Affected Party Approvals given to forestry companies wishing to build bridges/culverts over streams entering into spawning waters. Staff also attended several Upper Motueka Catchment Collective meetings on the topic of river management.

PROACTIVE ENGAGEMENT WORK

There has recently been interest within the Baton River Community to seek an amendment to the existing Motueka Water Conservation in order to include the Baton River as providing contributing waters to the nationally outstanding Motueka trout fishery the WCO protects.

Staff continue to liaise regularly with the Motueka Catchment Collective about local conservation initiatives, including participation in a recent community outreach event at Macleans picnic area. Nelson Marlborough Fish & Game continue to no longer participate in the Pelorus catchment project, a recipient of significant Government funding. The project involves collaboration between Iwi, DOC, NGOs, landowners, and Local and Central Government agencies. Fish & Game unfortunately had to resign from this project due to the looming conflict with some catchment landowners over the proposed new Class B water allocation under the Marlborough Environment Plan. Hopefully this will be resolved through the 2024 freshwater planning process, at which point we can re-engage with this worthwhile project.

The region submitted on the Governments national policy statement on indigenous biodiversity and provided feedback to NZC for its submission on this document.

Nationally, advocacy on a range of fronts continues in an attempt to get the habitat of trout and salmon specifically recognised and provided for within the Natural Built and Environment Act (NZBEA) (the Government's proposed replacement of the RMA). There has been recent success here due to Fish & Game's advocacy efforts, one of which was mobilising anglers to send thousands of emails to politicians which achieved the desired result.



COMPLIANCE

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

All told, 460 licence checks were completed meaning our compliance target of 10% was easily met.

Due to the incoming Designated Waters regime, we wanted to obtain angler use data on current (backcountry designated waters) and possible future Designated Waters via our compliance efforts. While we did not undertake as much compliance/angler use monitoring in the Upper Wairau and Matakītiki as we wished, staff undertook weekly trips to the Wangapeka River, which was earmarked for possible inclusion into the Designated Waters regime. As a result, around 30% of licence checks were on existing 'Backcountry Fisheries' and other pressure sensitive fisheries, mostly the Wangapeka - see table below.

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. Of course, Lake Argyle features heavily in our compliance efforts, with 196 licence checks here. Our most active voluntary ranger, Steve Ngatai, does a fantastic job here, regularly visiting Argyle and keeping an eye on things.

NON-COMPLIANCE

It was a great result that no anglers were found to be fishing without a licence, and there were only a few minor issues that were resolved with warnings, namely these were for fishing with two rods, or a misinterpretation of the daily bag limit - all instances were taken with an educational approach.

OUR COMPLIANCE TEAM

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

COMPLIANCE SUMMARY

Total licence checks		%
Total on backcountry designated fisheries	33	7.2%
Total other backcountry	110	23.9%
Total lowland fisheries (except Lake Argyle)	121	26.3%
Total Argyle	196	42.6%
TOTAL	460	
Total Non-Resident anglers	94	20.4%
Total non-compliant	0	0.0%

William and Samuel Clark, Lake Rotoroa



NELSON TROUT FISHING CLUB


2022-23 SEASON SUMMARY - BY TONY ENTWISTLE

Another season is under wraps and while it will be remembered as a testing season weather-wise, Nelson Trout Fishing Club members shared in a wide range of activities and caught their fair share of trout.

Following significant flooding damage to fences and pastures, club members once again teamed up with Nelson-Marlborough Fish and Game staff to help farmers in the Rai-Pelorus catchment this time, to clear fences and paddocks of flood debris. The Club sees helping like this as an integral part of giving back to the farming community who generously allow anglers to cross through their properties to access fishing waters, and extends a big thank-you to those members who pitched in to help.

The Club again featured a full programme with a range of excellent guest speakers, the Annual Winter Dinner, Quiz Evening, early season fly-casting and river skills instruction, club trips to the Wairau Hatchery and several fun BBQs.

There's no doubt that trout fishing was tough at times, especially in the early season, mostly due to high river flows from regular heavy rains. However, as the season progressed and conditions became more favourable, many members did enjoy good success on our local rivers and further afield. The Motueka, Wangapeka, Pelorus and Baton Rivers, all produced good numbers of well-conditioned trout at different times as the season progressed. While nymphing is generally the most productive all-round technique, it was encouraging to see some good daytime mayfly hatches, which produced some excellent dry fly fishing. Both the Cicada and Passionvine Hopper seasons were relatively short, but intense enough to also encourage free rising trout for the short period while they were on.

The Nelson Trout Fishing Club welcomes new members, whether you are new to trout fishing or already experienced anglers. For more information check out our website at [Nelson Trout Fishing Club](#) or contact the Club Secretary. 



Top: Double hookup for Cian and President Don.

Middle: Five pound fish for Mary Bolland

Bottom (left): Brown trout on the dry fly for Jas Cannon

Bottom (right): Gary, Mike and Cian, dry fly success on the Motueka River

LICENCE INFORMATION

REGIONAL INSIGHTS

The Nelson Marlborough region had another relatively strong year in terms of fish licence sales. While adult whole season resident licence categories showed a 4% decrease in sales, overall Fish LEQ's (full licence equivalents) showed an increase of 14.9% due to the influx of returning non-resident anglers, post-covid travel restrictions. All told, the increase in LEQ's from 3,315 to 3,924 equates to a dollar value of \$87,939 - a significant boost for a small region.

The table below shows resident licence categories to be similar or slightly lower than the 2021-22 season. While we significantly increased our resident licence sales over the past 6 years, and even more so during the covid era due to domestic tourism, it is possible we have plateaued slightly due to people travelling more overseas, and also the current high cost of living which kiwi's are experiencing. It is encouraging, however, to see ongoing growth of junior whole season and day licences, helped no doubt by our put and take fisheries.

NATIONAL INSIGHTS

Nationally, Fish LEQ's increased by 2.2%, no doubt because of the return of overseas anglers. Most South Island regions showed an increase in LEQ's, with Nelson Marlborough and the West Coast region having the largest increases due to a proportionally higher number of overseas anglers. It is likely, however, that overall resident licence sales nationally declined from the previous year.

As an aside, it is clear from looking at both regional and national long break licence sales, that this is a category that is not popular with anglers. Only 10 were sold in this region, and 319 nationally.

> *The Travers River is a significant drawcard to overseas anglers. Photo: Jacob Lucas*

NON RESIDENT DATA

The data highlights how important non-resident licence sales are to this region. 580 whole season non resident licences were sold (valued at \$145,000), along with 566 day licences (\$19,810), equating to a total value of \$164,810, meaning non-resident licence sales bring in around 30% of this region's fish income.

This season, Nelson Marlborough region had the 3rd highest number of whole-season non-resident licences across New Zealand (Otago: 742; Southland 721), though we had the 4th highest non-resident LEQ figures at 684 LEQ's (CSI: 757; Southland 930; Otago 1,277). This likely highlights the importance that our current 'backcountry fisheries' are to non-resident anglers and the guiding industry, which require a whole season licence to fish.

Nationally, non-resident sales jumped from 652 in 2021-22 to 6,095 LEQ's in 2022-23, with the return of international travel. The six non-resident licence categories (adult, junior and child) account for \$1,461,111 in sales - again, a significant portion of the national fish sales for the organisation of around \$8.9 million.

As of this season, the non-resident levy (difference between resident whole season and non-resident whole season) will not be retained in respective regions. With the Designated Waters system coming into effect, the regions will just retain the DW day licence fee (\$40 per day) to help manage Designated Waters.

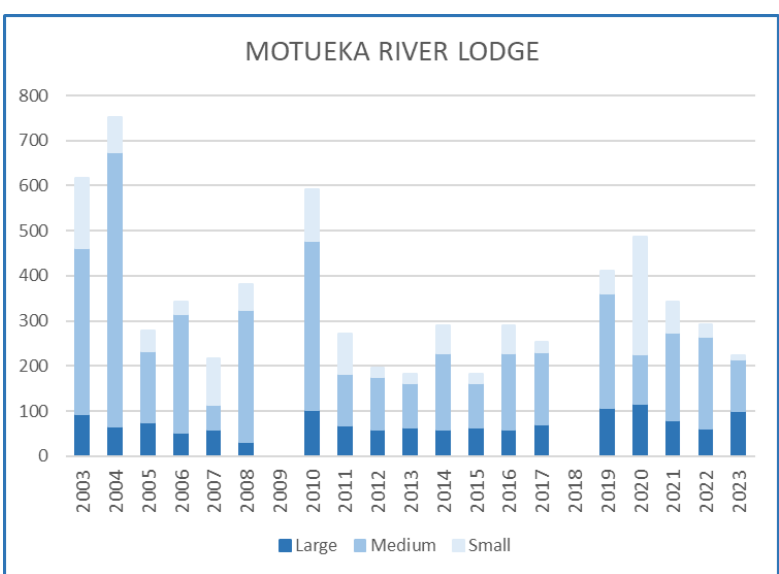
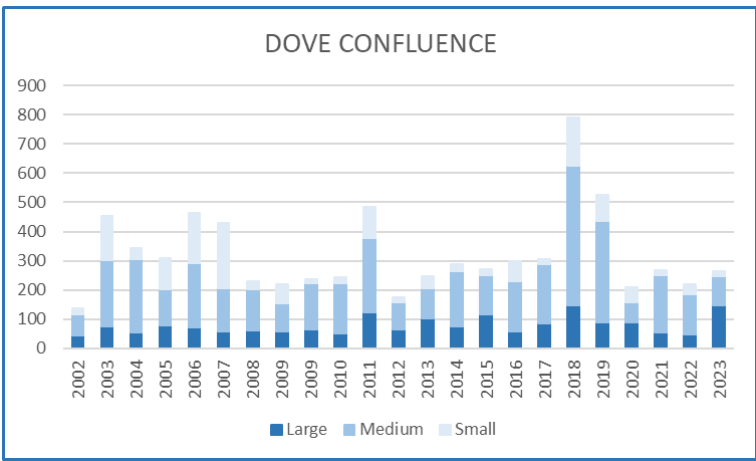
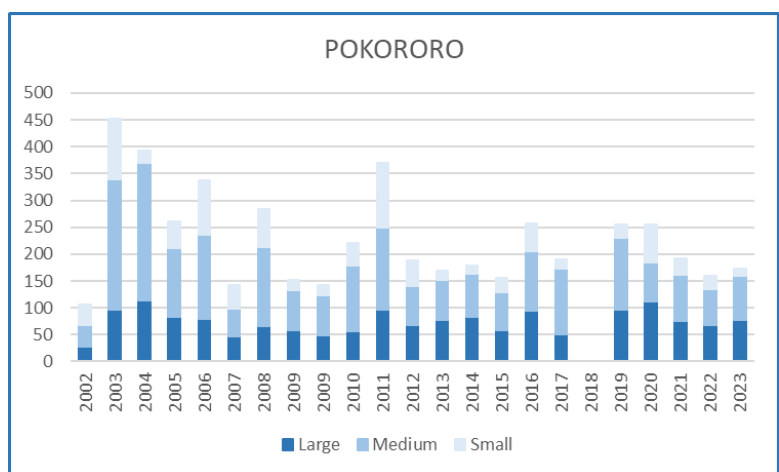
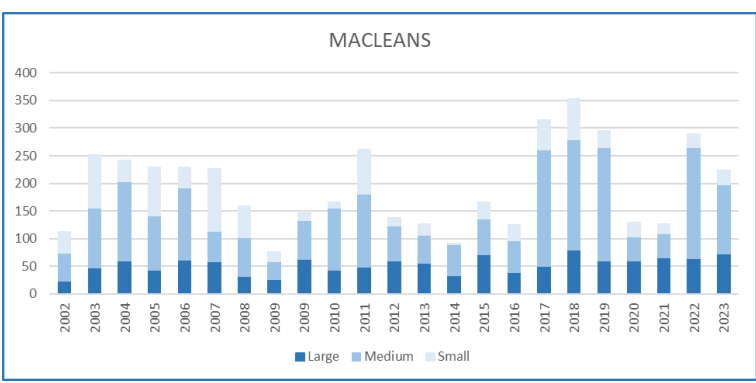
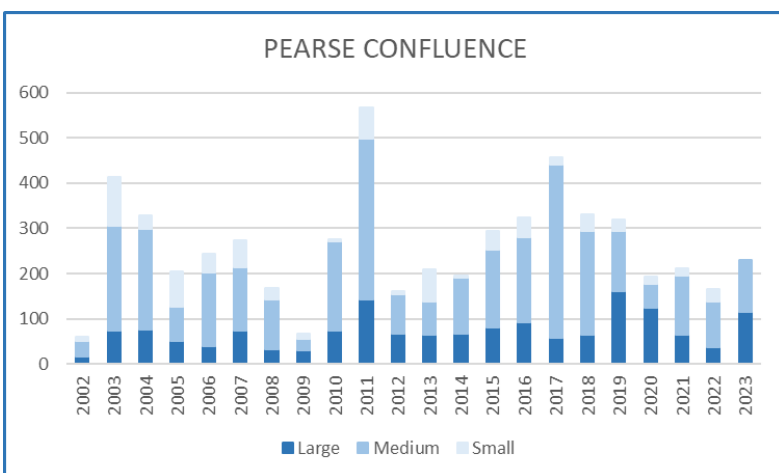
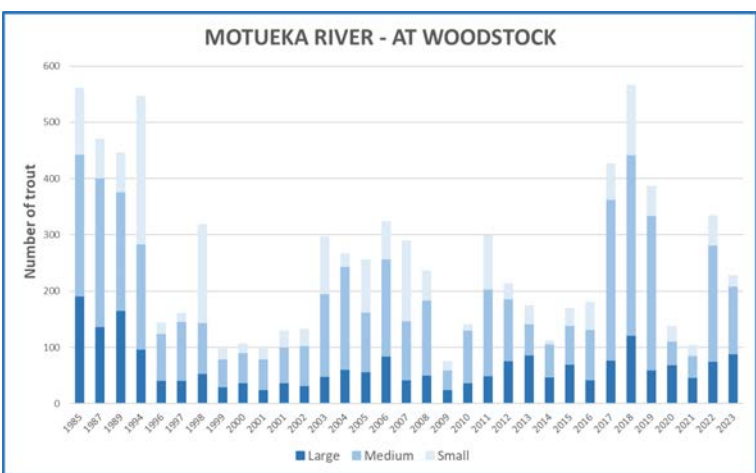


NELSON MARLBOROUGH LICENCE SALES

	RESIDENT LICENCE CATEGORIES										NON-RESIDENT CATEGORIES				Fish LEQ
	Family	Whole Season	Loyal	Local Area	Winter	Long Break	Short Break	Day	Junior Whole Season	Junior Day	Non-Res Whole Season	Non-Res Day	Non-Res Junior	Non-Res Junior Day	
		Adult	Senior								203	153	7	125	
2021-22	806	1588	323	203	153	7	125	692	249	113	33	21	4	3	3415
2022-23	769	1529	332	172	120	10	103	697	269	142	580	566	13	3	3924

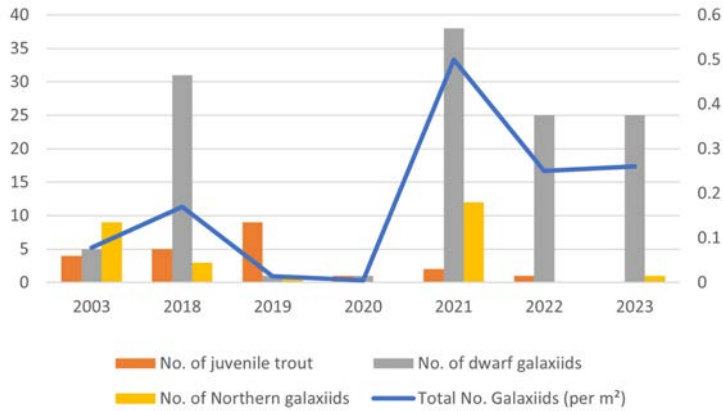
APPENDIX

MOTUEKA DRIFT DIVE RESULTS- INDIVIDUAL SITES

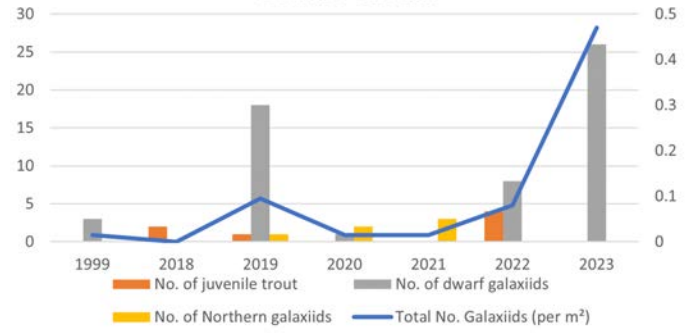


BRANCH/LEATHAM NATIVE FISH GRAPHS - TRIBUTARY SITES

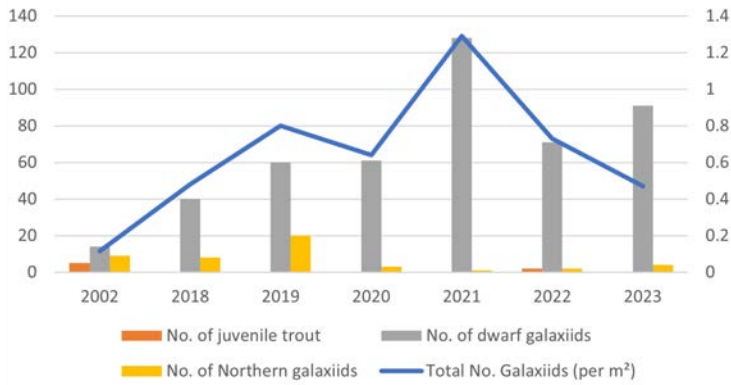
Nesbits above confluence with Branch



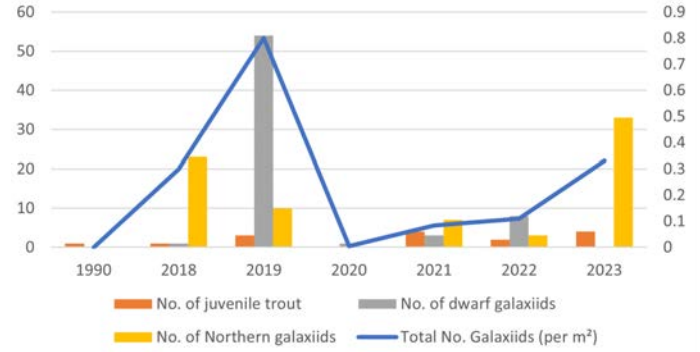
Boulder Stream



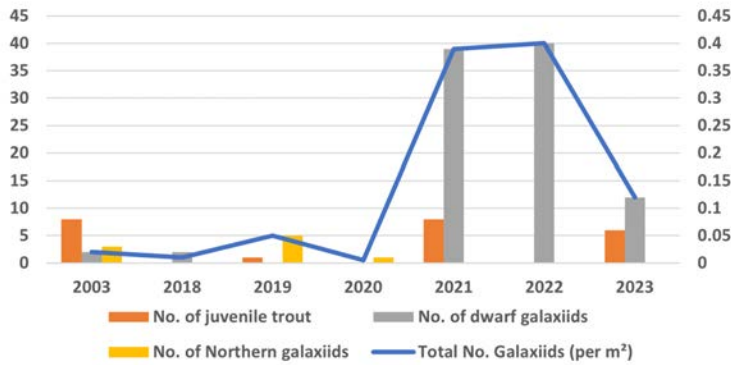
Leatham Trib. opposite Caves Bluffs



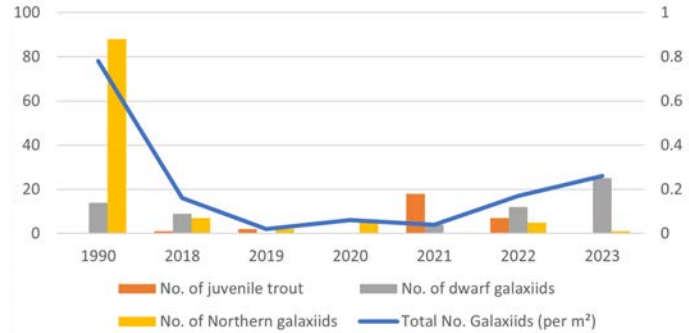
Alan Stream above confluence with Branch



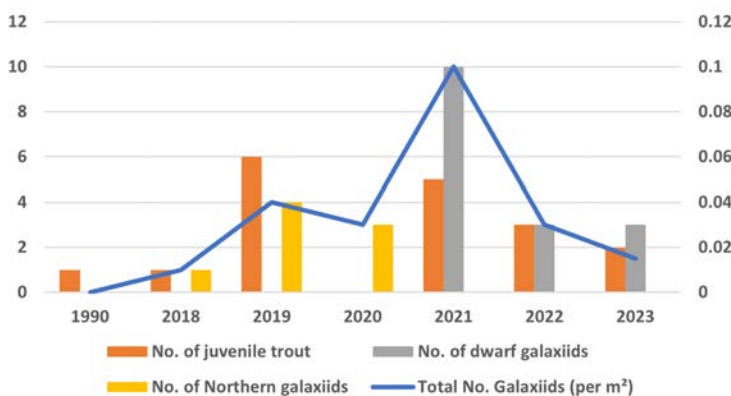
Silverstream above confluence with Branch



Bob's Stream

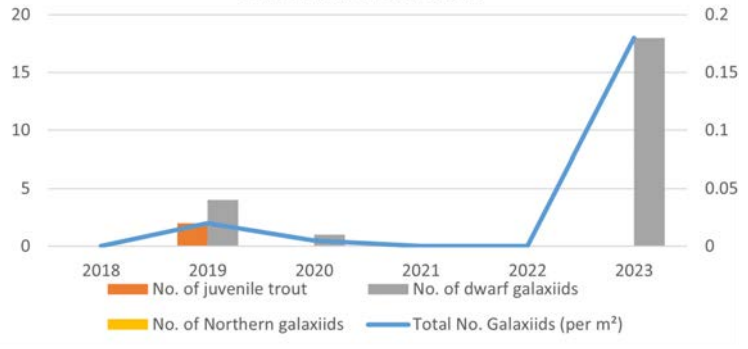


Greigs above confluence with Branch

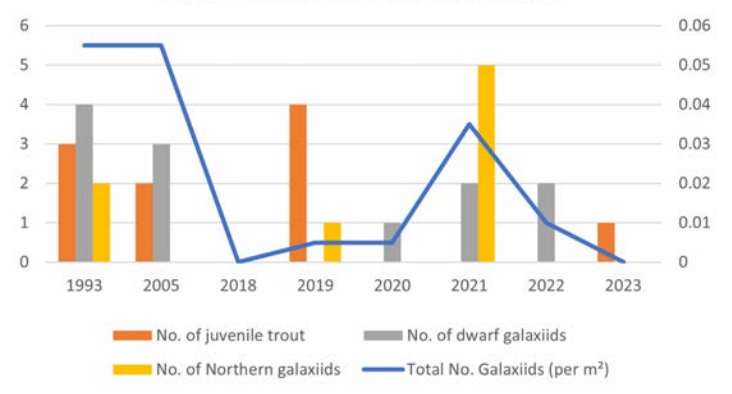


BRANCH/LEATHAM NATIVE FISH GRAPHS - MAINSTEM SITES

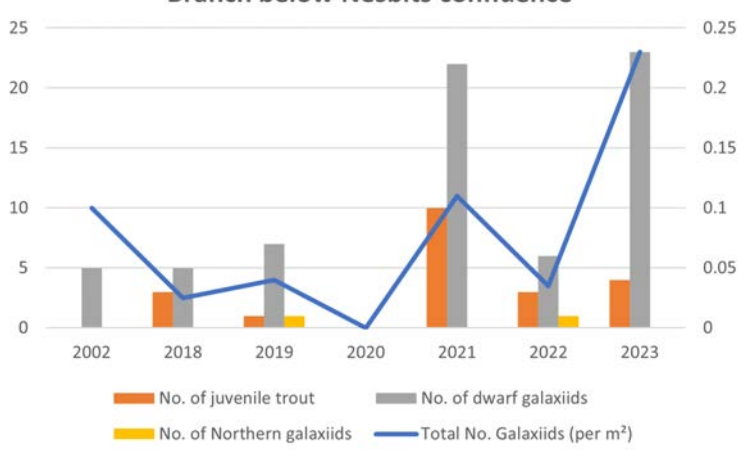
Branch below SH63



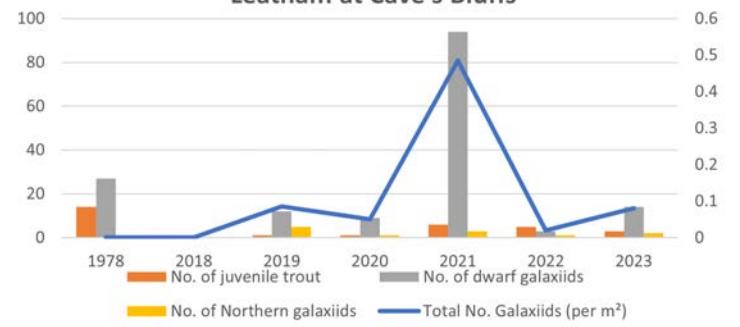
Branch below Leatham Confluence



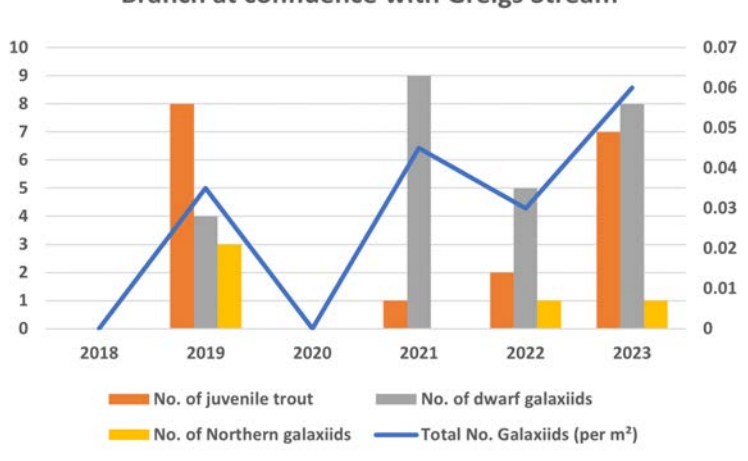
Branch below Nesbits confluence



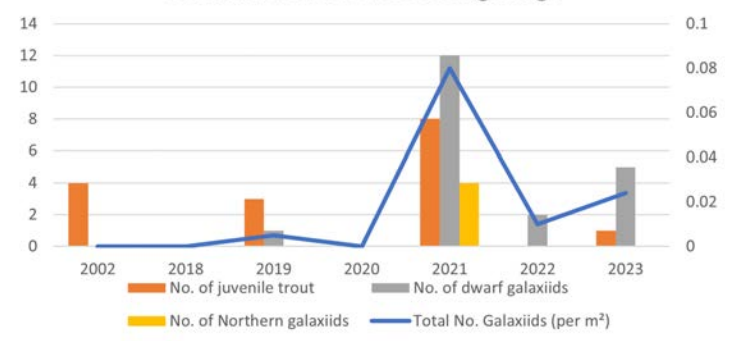
Leatham at Cave's Bluffs



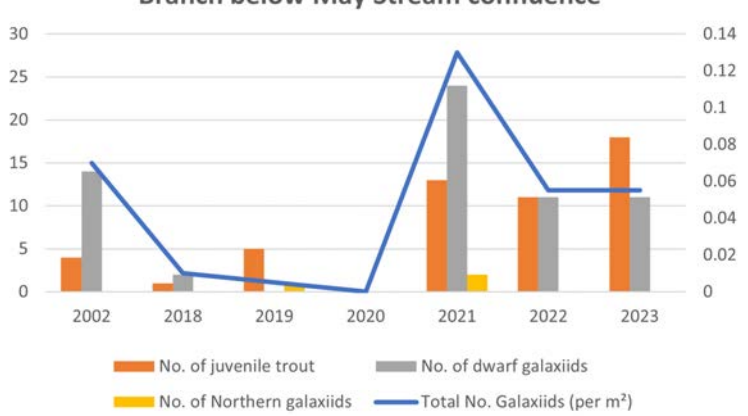
Branch at confluence with Greigs Stream



Leatham below Caves Swingbridge



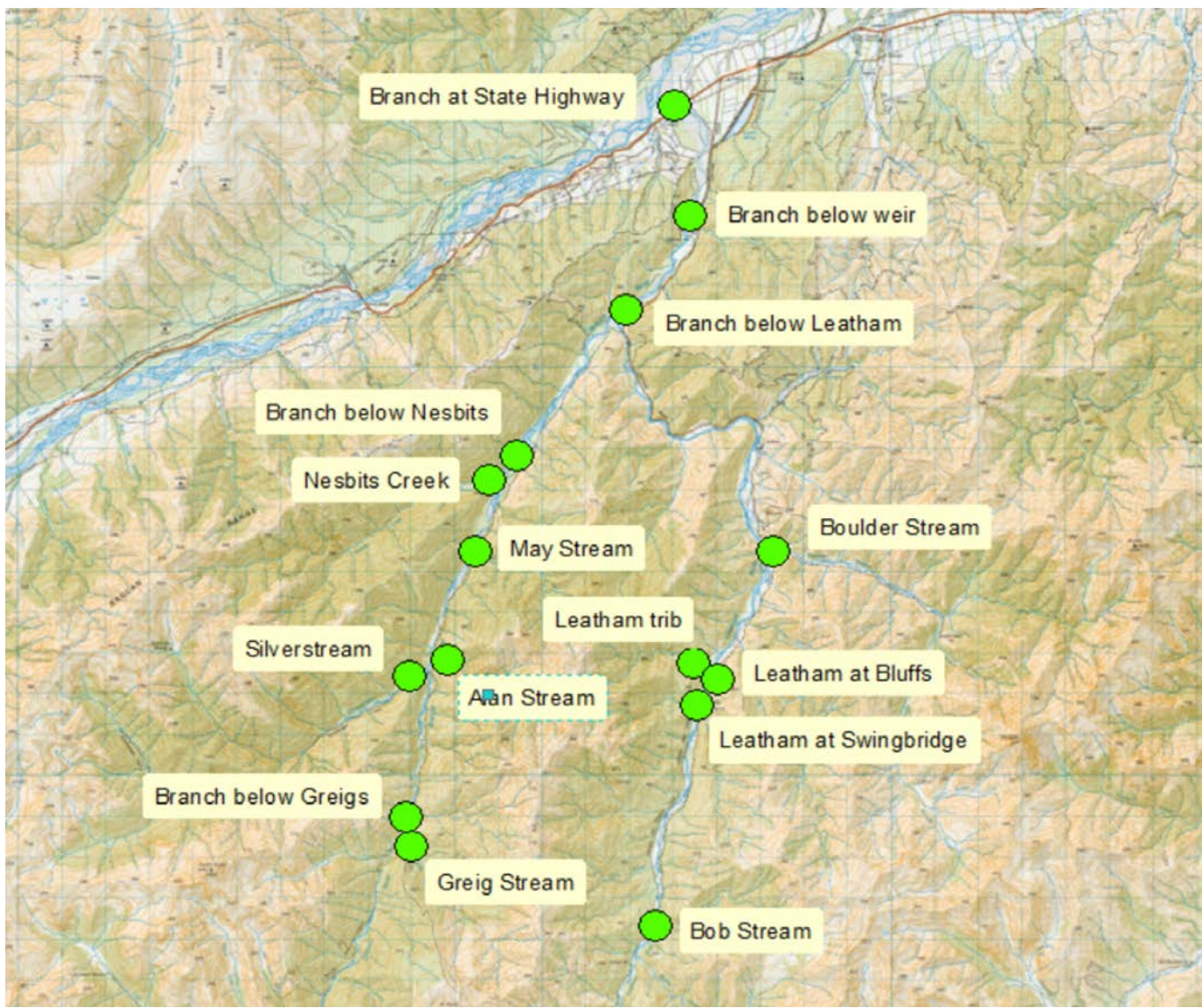
Branch below May Stream confluence



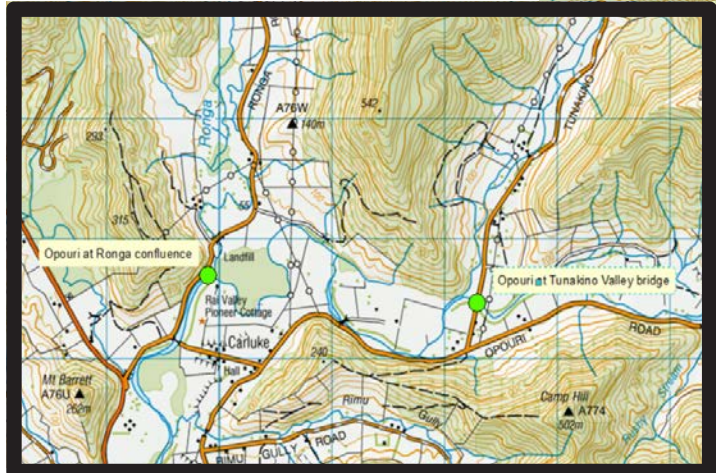
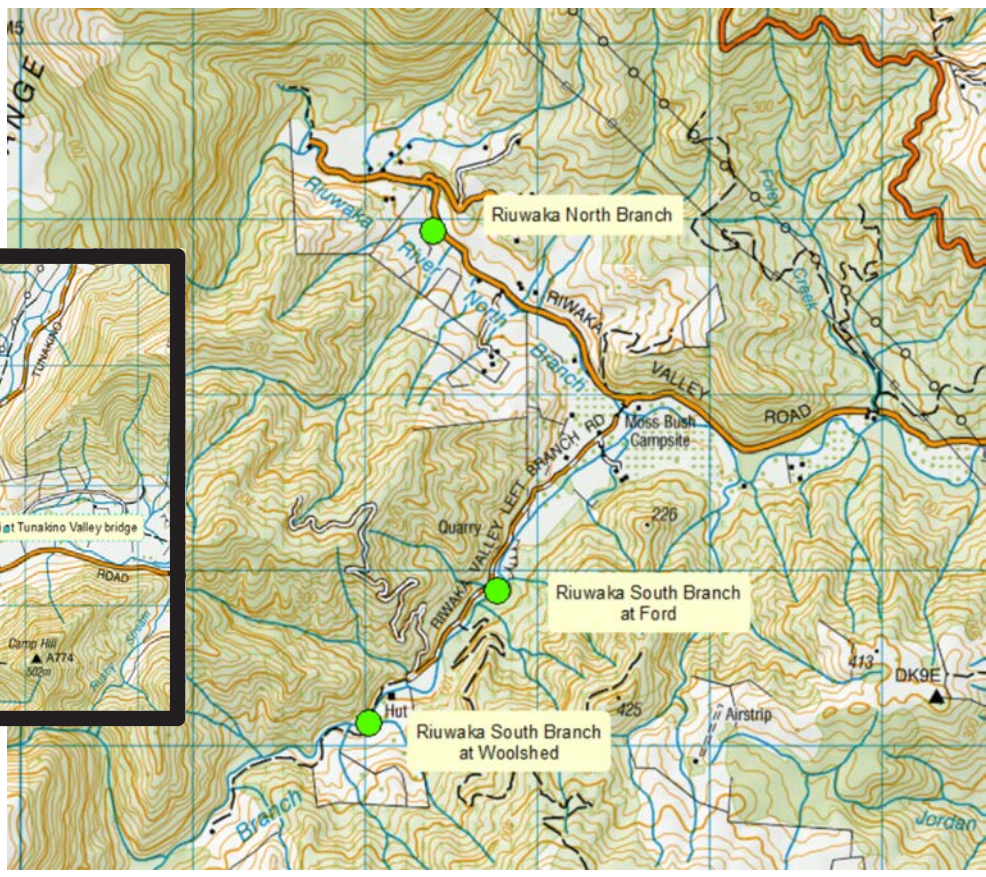
Riuwaka juvenile trout and native fish monitoring

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 LFeel, 1 upland bully
Apr-11	South Branch (Ford)	190	3	0.016	7 Koaro, 6 LFeel, 1 upland bully
Mar-12	South Branch (Ford)	140	5	0.036	9 Koaro, 8 LFeel
Dec-12	South Branch (Ford)	244	16	0.066	9 Koaro, 6 LFeel, 7 koura, 3 upland bully
Feb-15	South Branch (Ford)	191	11	0.058	15 Koaro, 5 LFeel. Stable Spring
Dec-15	South Branch (Ford)	200	6	0.030	11 Koaro, 10 LFeel.
Feb-17	South Branch (Ford)	200	6	0.030	2 Koaro, 8 LFeel
Dec-17	South Branch (Ford)	200	30	0.150	1 Koaro, 2 koura, 15+ LFeel
Dec-18	South Branch (Ford)	266	34	0.128	0 Koaro, 6 LFeel, 2 koura - post Gita
Jan-20	South Branch (Ford)	246	6	0.024	2 lfeel
Jan-21	South Branch (Ford)	260	14	0.054	1 koaro, 26lfeel 2 koura
Mar-22	South Branch (Ford)	250	12	0.048	2koaro,7LFeel,1 koura
Mar-23	South Branch (Ford)	200	6	0.030	3 koaro, 4 LF
Dec-09	South Branch (Woolshed)	200	6	0.030	1 Koaro, 5 LFeel
Apr-11	South Branch (Woolshed)	180	1	0.006	3 koaro
Dec-12	South Branch (Woolshed)	200	11	0.055	3 Koaro, 2 LFeel
Feb-14	South Branch (Woolshed)	186	6	0.032	25 Koaro, 6 LFeel, 2 sjk possibly sighted?
Dec-17	South Branch (Woolshed)	200	0	0.000	6 Koaro, 8 LFeel
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 lfeel
Mar-22	South Branch (Woolshed)	200	1	0.005	6 koaro, 4 LFeel
Mar-23	South Branch (Woolshed)	200	2	0.010	2 koaro, 1 LF
Apr-11	North Branch	230	0	0.000	25 Koaro, 1 LFeel
Dec-12	North Branch	184	19	0.103	13 Koaro, 3 koura
Feb-14	North Branch	157	0	0.000	11 Koaro, 16 LFeel, 10 year return flood
Dec-15	North Branch	120	5	0.042	3 Koaro, 1 SFeel, 1 LFeel,
Feb-17	North Branch	177	4	0.023	2 Koaro, 12 LFeel
Dec-17	North Branch	168	6	0.036	2 Koaro, 7 LFeel
Dec-18	North Branch	115	2	0.017	1 LFeel
Jan-20	North Branch	80	5	0.063	5 LFeel, 1 koura
Jan-21	North Branch	100	7	0.070	4 Koaro, 6 LFeel
Mar-22	North Branch	100	4	0.040	29 Koaro, 5 LFeel, 1 koura
Mar-23	North Branch	100	0	0.000	28 koaro, 1 LF

MAPS OF NATIVE FISH E-FISH SITES



Above: Branch/Leatham sites
 Right: Riuwaka River sites
 Below: Opouri River sites



SPORTS FISHING FOR YOUTH CHARITABLE TRUST - ANNUAL REPORT

"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 eleventh fishing season was fortunately free of Covid disruptions . We stocked the ponds throughout the winter and spring of 2022 as well as over the summer. Fishing at the ponds has become a popular family activity year around. There are also a number of individual youths who became very regular fishers during holiday breaks and at weekends.

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 over the summer and on sunny winter days.

With the passing of the Covid pandemic we were able to offer guided fish out days in April/May 2023 and in November/December 2022. 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.

This year for the first time we also assisted some of the elderly to fish at the ponds. We were aware that there were a number of fishers who due to their advanced years, when 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 March 2023 and they had a very enjoyable and successful afternoon.

We will be doing this regularly 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 2023 . 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 1kg in weight with a few larger fish up to 3kgs. We had very few problems with predation by shags during the season as the 1kg size >>

appears to be too large for them. This size also provides the kids with a good challenge. 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 supplier of cold groundwater during the summer ensures a healthy environment for the fish. At our fishout day in April 2022 one of our young fishers caught a 4.6kg trout (10lb), most of the guides were very jealous. By our reckoning this trout had been in the ponds at least two years.



^ Konrad with the largest trout (4.6kg) caught at the ponds

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.

In December 2022 we were again able to offer a fish out day to Fostering kids New Zealand, who have their annual Christmas party at the ponds. The party and fish out day at the ponds is the highlight of their annual program. Unfortunately, the fishing was unusually difficult on that day.

The regional coordinator for Fostering Kids NZ 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 and volunteers over the season. 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. They also support the Trust with donations and equipment from time to time. We look forward to their involvement in the coming fishing season.

We get considerable assistance from Nelson Fish and

Game staff who provide assistance with administration and organizational matters on fish out days and other matters relating to the management of the ponds.

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 in spite of the occasional presence of wasp nests. 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 Findex, the major local accounting firm. This donation enabled us pay for Trustee insurance and public liability insurance as well as assist with operating costs.

THE SITE AND FACILITIES

The site and facilities are now well established. The planting which was carried out by the NMIT horticulture students three 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 Lion Foundation and the Network Tasman Trust and provide easy and safe access for young fishers.

The new 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 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 spite of the weed removal program. We were experiencing significant weed growth within six weeks of the contractor removing the weed from the ponds. In the last year our contractor used a new method of weed removal which 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 is from groundwater which flows through the surrounding gravel in the river berm. The level of the water in 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. Incidentally there are also a number of youths who have identified the spots in the ponds where the cooler water is flowing in and where the trout tend to congregate during hot spells.

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 and 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 about 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

The 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 are experiencing increased demand as these are the only toilet facilities in this locality.

THE FUTURE

The Trust's original objective was to provide youth with an opportunity to partake in the outdoor activity that would encourage them 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 ten years we have provided over 3,500 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.

"Had a fab morning and caught a lovely fish. Really appreciated the helpers and all the advice. Such an awesome thing that you guys do. Thanks so much."

*"Good Evening Team,
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



