2025/26 Anglers Notice Review of the Central South Island Fish & Game Region

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Introduction

The Central South Island Fish and Game Council (CSIFGC) has a function under s26Q of the Conservation Act 1987 to formulate and recommend to the New Zealand Fish and Game Council conditions (regulations) for fishing seasons. The New Zealand Fish and Game Council has a function under s26Q of the Conservation Act 1987 to co-ordinate Angler Notice preparation and recommendation to the Minister for approval.

In April 2013, the Council resolved that it would implement triennial reviews of the Anglers Notice and between triennial reviews the Council would only consider matters of urgency. This review of sports fishing conditions for the 2025/26 season is a triennial review where non-urgent submissions received over the previous three years are assessed and recommendations made to the May 2025 meeting of Council. Additionally, one matter of urgency is to be considered being the annual review of the sea-run salmon season bag limit.

2025/26 Triennial review of the Anglers Notice of the Central South Island Fish & Game Region.

Central South Island Fish & Game Council's Operational Work Plan objective for the triennial review is to undertake the triennial regulations review with a view to simplifying regulations and increase opportunity for anglers.

Any regulation change proposal of a non-urgent nature formally submitted by members of the public, anglers, Fish & Game Staff and Fish & Game Councillors over the preceding three-year period ending 21 February 2025 were accepted for this review.

Fish & Game staff made written assessments of each regulation change proposal. Proposal and staff assessments were presented on the Fish & Game website for the purpose of receiving feedback from anglers and the public to support the Council's deliberations on each proposal. Feedback was sought for the period 20 March to 27 April

and was advertised on the NZ Fish & Game website, CSIFGC Facebook, CSIFGC Weekly Fishing Report and Reel Life angler's newsletter and by direct email to all (19,268) adult CSI Region fishing licence holders for the 2023/24 and 2024/25 fishing season. Feedback was sought in two formats, a mandatory multi choice question and an optional written response.

Across the 11 regulation change proposals, feedback was received from a small proportion of CSIFGC adult sport fishing licence holder base. Interpretation of the licence holder and public feedback data to represent the angling and interested members of the public potentially affected by the proposals should be considered as unreliable. For example, feedback was received from a range of 8 to 39 individuals per proposal, approximately 0.002% of the database of adult licence holders who were emailed advertising the opportunity to give feedback. Further, considering feedback on a waterway level, the highest level of feedback was 39 responses received for the proposal relating to Lake Opuha/Ōpūaha. This number of individuals is approximately the number of anglers who fish Lake Opuha on Opening day alone and would be a small proportion of the anglers who will be affected by the changes across a single season, let alone the multiple seasons a change may be in place.

In this document CSIFGC staff have presented proposals and their staff assessments, summarised and presented feedback gained from anglers and the public and presented Council's decision options. Staff recommendations of the decision sought by Council have been presented for guidance. Staff recommendations were a team decision, and where a proposal was submitted by a named staff member, that staff member did not vote in deciding the recommendation.

Any regulation changes adopted by CSI Council would be introduced to the Central South Island Regional Regulations (second Schedule) in the 2025/26 sports fishing season unless otherwise stated and subject to Ministerial approval.

Proposal 1: Lake Opuha / Ōpūaha – introducing a winter fishing season

1.0 Submitter: Grant Weston / Angler

1.1 Regulation proposal:

Open season year-round with 2 trout daily bag limit.

1.2 Current regulation:

Open season 1 October – 30 April with 4 trout daily bag limit.

1.3 Council Options:

A. No change / status quo.
B. Introduce 1 October to 30 September (Year-round) open season, with 2 sports fish daily bag limit and fly, spin and bait method permitted.
C. Introduce 1 October to 30 September (Year-round) open season, with 2 sports fish daily bag limit and fly, spin method permitted.
D. Introduce a 'Winter Season' regulation - 1 June to 30 August open season and a 2 sports fish daily bag limit and fly, spin and bait methods permitted.
E. Introduce a 'Winter Season' regulation - 1 June to 30 August open season and a 2 sports fish daily bag limit and fly and spin methods permitted.

1.4 Staff Recommendation:

Option D – that Council introduce a winter season for lake Opuha / Ōpūaha – 1 June to 30 August with a 2 sports fish daily bag limit and fly, spin and bait methods permitted

1.5 Council Decision:

OPTION D – THAT COUNCIL INTRODUCE A WINTER SEASON FOR LAKE OPUHA / ŌPŪAHA – 1 JUNE TO 30 AUGUST WITH A 2 SPORTS FISH DAILY BAG LIMIT AND FLY, SPIN AND BAIT METHODS PERMITTED

Key Justifications for decision: The approved winter season introduces a new season fishing opportunity in wintertime an hour drive of the region's biggest urban centre. The winter season maintains existing values around the event-like 1 October opening day and eliminates potential incompatible interactions with duck hunters on the opening weekend of duck season and during May.

1.6 Supporting information

1.6.1 G Weston's proposal explanation:

"I would like to see Lake Opuha open year-round with perhaps a reduced limit bag of two fish per day. This would encourage anglers to fish the lake during winter and thus avoiding having to travel well into the Mackenzie Country during winter. By having a down country lake available for fishing during winter, families will be able to safely enjoy lake fishing during winter rather than having to risk black ice etc when going further inland. It would also reduce family costs for fuel, especially given the current cost of living crisis".

1.6.2 Staff assessment:

Staff agree with the submitters intention to increase winter fishing opportunities outside of the Mackenzie Basin recognising the financial costs of travel and the time required to travel there. Outside of the Mackenzie Basin and Waitaki Lakes, winter fishing in lakes is restricted only to Lake Hood near Ashburton so any increase in winter lake fishing opportunity closer to centres like Ashburton, Geraldine and Timaru is likely to be a utilised and valued opportunity for anglers.

Based on angler reports and staff observation the Lake Opuha trout fishery is highly productive and sustainable, subject to its current regulations. It appears to be the most popular October 1st opening day fishery in the region and is particularly favoured as a destination by Canterbury-based anglers during the early season months of October, November and December. Many anglers harvest trout from the lake and it is common for experienced anglers to harvest their 4 trout daily bag limit on Opening Day.

A precautionary approach to increasing season length, and therefore catch and harvest, at Lake Opuha during winter can be justified as no regular population or harvest monitoring programmes are in place at the fishery or are planned to be implemented. Any significant negative change in the fishery caused by introducing new regulations may be observed by anglers and staff in the long term and reactionary measures could be undertaken at such a point. The submitters suggested 2 fish daily bag limit year-round is considered a precautionary approach to introducing a year-round season.

Staff offer an alternative proposal to increase opportunity/season length at Lake Opuha whilst maintaining a precautionary approach. Existing "winter season" regulations could be applied as they are for other CSI regional fisheries such as Ōpihi River whereby the "winter season" regulations are more restrictive than those in the "summer season". "Winter season" restrictions proposed are for an open season of June – August only, and a bag limit of two fish. Subject to this alternative proposal, the summer season bag limit regulations would not be altered, maintaining the ability for anglers to harvest four fish per day during the regular summer season.

There are benefits to having a closed season in May and September in accordance with a three month "winter season". In May a break in fishing to rest the fish from angling pressure and temporarily eliminate interaction between duck hunters and anglers who will have different and potentially incompatible activities. Having no fishing in September rests the fishery and supports the social benefits that come from the anticipation and event-like nature of a season opening day on October 1st, the opening of the new summer season that follows a closed period.

One downside to introducing "Winter Season" as opposed to year-round season regulation is that it will increase the complexity of the regulations at Lake Opuha by having two season listings as opposed to one in the regulations guide.

1.6.3 Angler and public feedback

Thirty-nine anglers or members of the public provided feedback (refer to Appendix 1 for full record of feedback). The majority (85%) of submitters preferred outcome was the introduction of winter fishing opportunities, of which it was a nearly even split of preferred outcome the three-month winter season option (41% of votes) versus the year-round season option (44%) (figure 1). Nine written responses were received. In summary, most written responses were positive towards the introduction of winter fishing opportunities however some concern was provided over matters related to the sustainability of the salmon fishery.

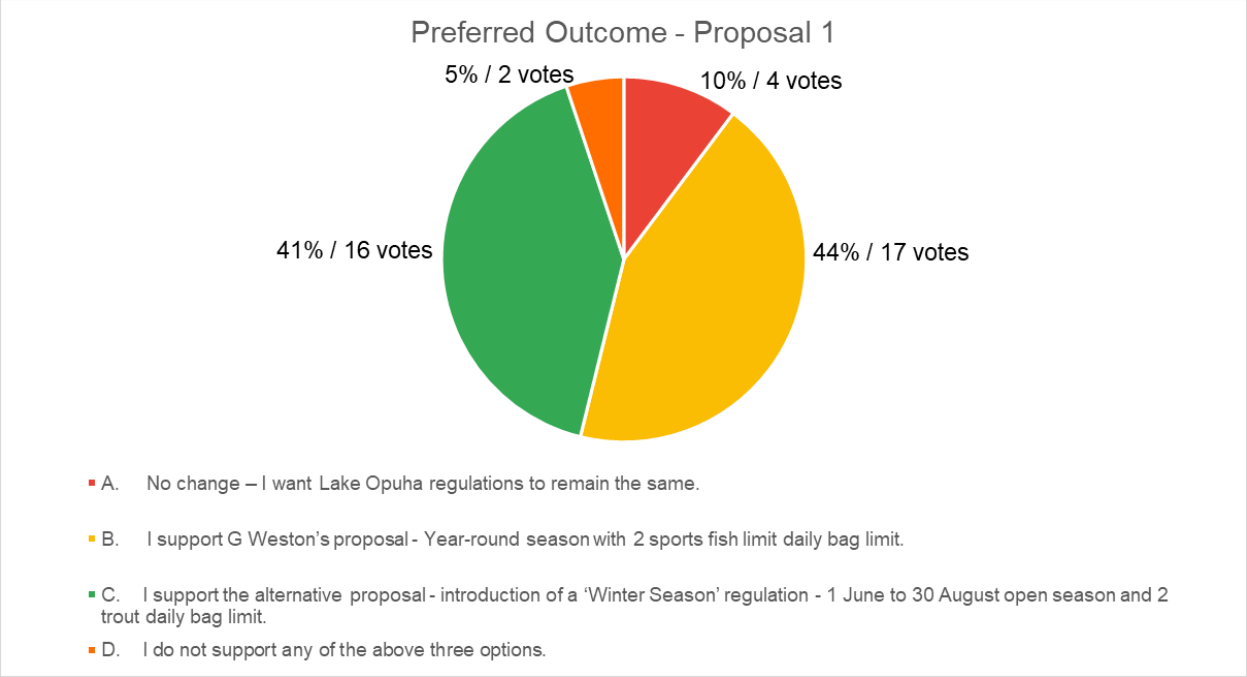

Figure 1: Preferred outcome voted for by licence holder and the public for proposal 1.

Proposal 2: Lake Heron / Ōtūroto – enforcing use of single hooks for welfare of caught and released lake-type salmon

2.0 Submitter: Dean Rattray / Angler

2.1 Regulation proposal:

all fishing in Lake Heron becomes a single hook, single point only fishery to be phased in over a two-year period.

2.2 Current regulation:

No restriction on the number of hooks on an authorised lure used at Lake Heron.

2.3 Council Options:

Subject to Anglers Notice review:

A. No change – status quo.
B. Introduce a regulation to enforce the use of single-hook single-point lures at Lake Heron in the 2025/26 sports fishing season.
C. Introduce a regulation to enforce the use of single-hook single-point lures at Lake Heron in the 2026/27 sports fishing season to allow extra time for publication of the decision.

Outside of Anglers Notice review:

D. That CSI Fish & Game include a project in the 2025/26 operational work plan to advocate for anglers to voluntarily reduce their risk of causing hooking mortality and injury of caught and released lake-type salmon at Lake Heron.
E. That CSI Fish & Game include a project in the 2025/26 operational workplan to assess the feasibility of implementing a well-resourced study into assessing if hook type used can reduce hooking mortality and sublethal injury of small and undersized lake-type salmon at Lake Heron.

2.4 Staff Recommendation – Subject to Anglers Notice

Option A - no change – status quo.

2.5 Staff Recommendation – Outside of Anglers Notice

Option D - that CSI Fish & Game include a project in the 2025/26 operational work plan to advocate for anglers to voluntarily reduce their risk of causing hooking mortality and injury of caught and released lake-type salmon at Lake Heron.

2.6 Council Decisions

OPTION C - INTRODUCE A REGULATION TO ENFORCE THE USE OF SINGLE-HOOK SINGLE-POINT LURES AT LAKE HERON IN THE 2026/27 SPORTS FISHING SEASON TO ALLOW EXTRA TIME FOR PUBLICATION OF THE DECISION.

Key Justifications for recommendation: introduce a regulation that may improve the welfare of caught and released lake-type salmon.

And,

OPTION D - THAT CSI FISH & GAME INCLUDE A PROJECT IN THE 2025/26 OPERATIONAL WORK PLAN TO ADVOCATE FOR ANGLERS TO VOLUNTARILY REDUCE THEIR RISK OF CAUSING HOOKING MORTALITY AND INJURY OF CAUGHT AND RELEASED LAKE-TYPE SALMON AT LAKE HERON.

Key Justifications for decision: An advocacy project holistically covers multiple aspects of catch and release that can impact on fish welfare and is believed will achieve better outcomes for salmon welfare than a regulatory change focussing on one variable.

2.7 Supporting information

2.7.1 D Rattray's proposal explanation:

"*I have fished Lake Heron for many years and once fished with treble hooks if that is what was on the lure that I was using. When using these treble hooks, we were damaging a lot of small/undersized fish while trying to release them and I have seen a lot of damaged fish from this anything from broken jaws to bleeding gills as the small landlock salmon are very aggressive in the lake. We started to use single hooks which means changing hooks over on new lures but in doing so noticed a great change in the fish we were releasing. The use of single hooks the damage to these small or larger fish released has been noticeably minimal. When unhooking a fish on a single hook is so much less stressful not only for the fish but also the angler. I don't have any scientific data on this, but I do have over 30 years' practical experience fishing Lake Heron.*

I see Lake Heron as a very special piece of water that where Sea Run Salmon enter the lake to find their breeding stream to spawn. Also, a very healthy population of Brown and Rainbow Trout. Some of these Salmon may find their way back to the ocean but I believe many do stay in the lake when you catch such an array of different size fish. By using a single hook, I believe there will be a greater chance of a higher survival rate of healthier fish."

2.7.2 Fish & Game staff assessment:

Fish & Game acknowledge the observations and concerns of the submitter and recognise that Lake Heron's lake-type salmon fishery is unique in that small legal size and undersize salmon are subject to relatively high levels of catch and release, mainly around Opening Weekend. For example, a creel survey of 41 anglers identified that 338 salmon were caught and released on Opening Day 2021, but none of those anglers kept their daily bag limit of four sports fish. Recognising this unique fishery and that catch and release can result in hooking mortality and sublethal injury; to promote the ability for anglers to perform a quick and often touch free release, CSI Fish & Game have previously advocated for the voluntary use of single barbless hooks when targeting lake-type salmon.

Nevertheless, this advice was not informed by research and was not intended for regulation.

International research on hooking mortality of salmonids, being the death of fish resulting from catch and release varies in its results, but overall, there is general alignment across research that there are many variables that influence post release mortality of salmonids including water temperature, fish handling time, angler experience, hook type and size, and fishing method. Alike, there are multiple variables that can influence the health of fish that survive catch and release.

In reviewing this submission no hooking mortality or sublethal hooking injury studies were reviewed that are believed to be a parallel of the Lake Heron lake-salmon fishery, whereby, undersize and small Chinook salmon are caught primarily by spin fishing with treble and single hooks while casting from the shoreline. Therefore, it is assessed that the only way to undertake a robust scientific evidence-based assessment of various hook types effects on the survival and health of released undersize or small Chinook salmon at Lake Heron, would be to undertake a bespoke well-resourced research project at Lake Heron. Even so, such an elaborate and detailed research project may not provide definitive results. In other words, we may not be able to predict the impact of enforcing the use of single hooks and therefore have scientific evidence at hand to support a regulation change.

Addressing concern for the welfare and survival of caught and released salmon could be achieved through non-regulatory means. Anglers, as demonstrated by the submitter, can voluntarily choose to use methods and techniques that could possibly reduce hooking mortality and sublethal injury. CSI Fish & Game can play a significant role in educating anglers towards techniques and tackle that may improve the survival and health of lake-type salmon through Lake Heron lake-type salmon specific catch and release advocacy, informed by the latest research and collaborating with local anglers to develop practical techniques. Such a holistic and voluntary approach to minimising potential harm to salmon could have a far greater impact on fish welfare than a regulatory approach to hook type.

The effects of enforcing the use of single hooks with single points could lead to unintended consequences for trout anglers. Studies have shown that treble hooks can have a higher landing rate compared to single hooks. For anglers new to the sport that often struggle to catch fish, the use of treble hooks may be a significant factor in them landing the small number of trout that they manage to hook, therefore treble hooks could support their success and ongoing participation in trout fishing.

The vast majority of trout lures are supplied with treble hooks therefore there could potentially be notable difficulty for anglers to source suitable lures with a single hook or buy a packet of single hooks and retrofit their lures with them. This may make it more difficult for some anglers, especially novice anglers, to comply with the regulations. The submitters suggestion to phase in the regulation over two seasons would help with this potential issue by providing time for advocacy and therefore preparation for Fish & Game

to ensure the regulation is widely publicised and for tackle stores to ensure single hooked lures are readily available.

The introduction of a waterway specific hook regulation for Lake Heron will add to the already complex regulations and may increase the difficulty for anglers to understand and adhere to the regulations. Lake Heron's regulations already include two waterway specific regulations for targeted protection of salmon: the length slot (size) limit for salmon and the part-lake split season to protect congregating sea-run salmon in April.

2.7.3 Angler and Public Feedback

Twenty-seven anglers or members of the public provided feedback (refer to Appendix 2 for full record of feedback). Most (67%) submitters preferred outcome was to enforce the use of single hooks. The only other notable preferred option was in support of non-regulatory Fish & Game advocacy intervention (19%) (refer to figure 2). Twenty-two written responses were received. In summary, most written responses were positive towards enforcing the use of single hooks with commentary around potential benefits for salmon welfare and sustainability.

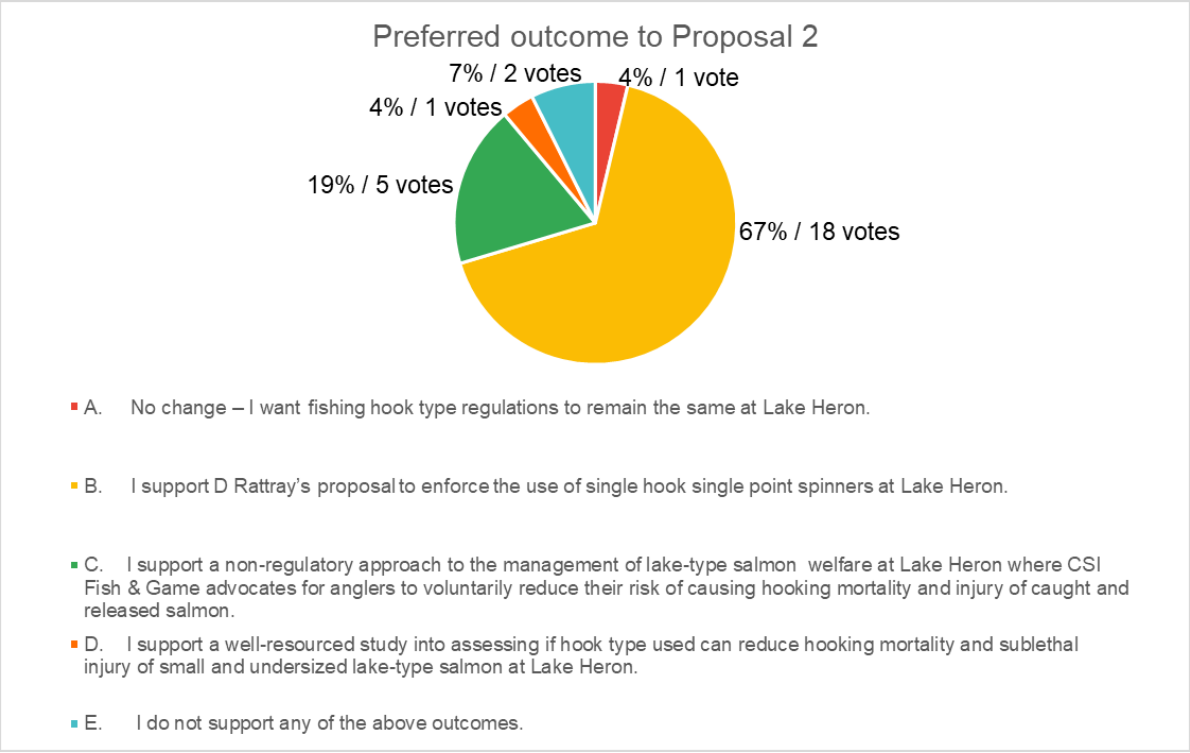

Figure 2: Preferred outcome voted for by licence holders and the public for proposal 2.

Proposal 3: Bells Pond – reducing trout daily bag limit

3.0 Submitter: Anthony Humphreys / Angler

3.1 Regulation proposal:

Bells Pond shall have a daily bag limit of 2 trout.

3.2 Current regulation:

Bells Pond has a daily bag limit of 4 trout.

3.3 Council Options:

A. No change – status quo.

B. Reduce the daily bag limit at Bells Pond from 4 to 2 trout.

3.4 Staff Recommendation

Option A – no change – status quo

3.5 Council Decision

OPTION A – NO CHANGE – STATUS QUO

Key Justifications for decision: maintains opportunity and consistency of regulations with the Waitaki River.

3.6 Supporting information

3.6.1 A Humphreys proposal explanation:

"Having fished Bells Pond for some 35 years I have seen a marked drop off in numbers of fish seen and caught in recent years".

3.6.2 Fish & Game staff assessment:

Bells Pond is a controlling reservoir for the Morven Glenavy Irrigation (MGI) Scheme. The size of the takeable sized trout population is predominantly a function of the number of recolonising fish coming in from the Waitaki River and to a lesser extent direct recruitment from spawning in the intake canal.

On rare occasion MGI's off-season maintenance operations can result in Bells Pond being emptied and the trout population impacted. On years when this occurs, anglers may encounter a lower number of fish than expected and it may take some time for fish to migrate in and return their numbers to match anglers' expectations. The submitters observations of reduced trout number when compared to his 35 years of experience may be related to impacts of operational activities rather than the impacts of trout harvest.

Although only anecdotal/opinion based on sporadic observations while ranging, the harvesting of a third or fourth trout of a daily bag limit is believed to be a rare event at Bells Pond, therefore the harvest of the third and fourth fish in a bag limit is unlikely to

appreciably impact the available fish at Bells Pond. Conversely, it is believed that a reduction in bag limit to 2 trout would not impact on angling opportunity significantly.

Current regulations consider Bells Pond and Bortons Pond (the Lower Waitaki Irrigation Scheme head pond on the south side of the river opposite Bells Pond) to be part of the Waitaki River and therefore share the same sports fish season, bag and methods conditions as the river for consistency, therefore simplicity of regulations. Adopting the proposal may add a small level of complexity to the regulations by the bag limit varying from the adjoining Waitaki River.

3.6.3 Angler and Public Feedback:

Thirteen anglers or members of the public provided feedback (refer to Appendix 3 for full record of feedback). The majority (69%) of submitters preferred outcome was to reduce the daily bag limit at Bells Pond to 2 trout compared to no change (31%) (refer to figure 3). Seven written responses were received. In summary, written feedback was mixed and did not favour a particular point of view about the Bells Pond fishery related trout bag limits.

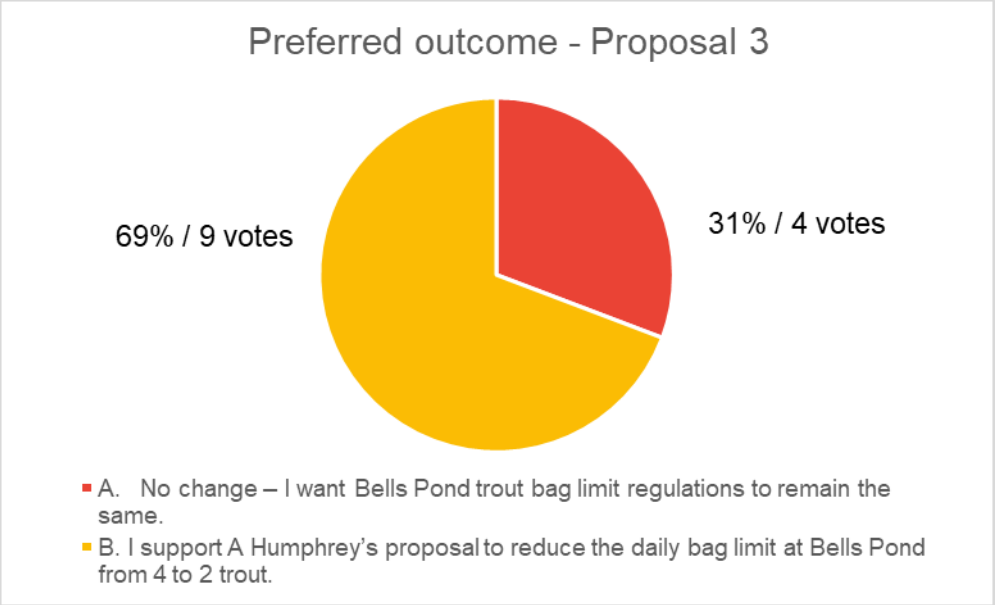

Figure 3: Preferred outcome voted for by licence holders and the public for proposal 3.

Proposal 4: Rangitata River / Rakitata – introducing an April trout season upstream of Turn Again Point

4.0 Submitter: Chris Bell / Angler

4.1 Regulation proposal:

Rangitata River/ Rakitata upstream of Turn Again Point about 12km above the gorge, excluding tributaries - Trout: 1st Oct-30th April, Fly Only (or Fly and Spin), bag limit 2 trout.

4.2 Current regulation:

Rangitata River / Rakitata and tributaries upstream of Turn Again Point is closed for all sports fishing during April.

4.3 Council Options

A. No change – status quo.

B. Introduce a fishing season for trout in April at the upper Rangitata River with fly-only method and a 2 trout daily bag limit.

C. Introduce a fishing season for trout in April at the upper Rangitata River with Fly and Spin methods and a 2 trout daily bag limit.

4.4 Staff Recommendation

Option – A – no change – status quo

4.5 Council Decision

OPTION A – NO CHANGE – STATUS QUO

Key Justification for decision: Maintains current full protections for spawning salmon in April justified under the current salmon crisis.

4.6 Supporting information

4.6.1 C Bell's proposal explanation:

"I am not completely sure of the correct text in this situation, however it would include any appropriate wording that could allow for the potential to fish just the mainstream of the Rangitata/ Rakitata River (not any tributaries) upstream of Turn Again Point, for an extra month until the end of April. This could allow for any fishing techniques which Fish and Game felt was appropriate to not allow for the targeting of Salmon in the main Rangitata/Rakitata River.

I understand that Fish and Game always wants to be inclusive of all techniques where possible and that they don't want to discriminate against any anglers having the

opportunity to be able to fish as much water as possible, however I remember that in the past there have been exclusions of certain techniques such as use of live baits and spinning tackle, in some instances making some waters fly fishing only. I am not necessarily suggesting that this be the case here but instead that the legislation could perhaps be altered to allow for the use of only small light single hook/barbless?? trout spinners/soft plastics, or to not allow the use of streamer flies with large hooks on fly rods (just allowing nymphs and dry flies). Ultimately any methods that would allow for this section of the river which traditionally more consistently remains low/clear enough to fish during the late season would be excellent! This would fall in line with other rivers such as the Waimakariri, Hurunui, Waiau in nearby North Canterbury where salmon fisheries are still protected while trout fishing can still occur until the end of April. Such a change would be in line with Fish and Game wanting to where possible increase angler opportunity, and if done in a careful and appropriate way should have no effect on the sensitive Central South Island salmon fishery!"

4.5.2 Fish & Game staff assessment:

It is acknowledged that a back country trout fishing opportunity goes unutilised in the upper Rangitata in April due to the overriding protection of sea-run salmon and that an appreciable opportunity exists to provide for trout fishing in April. The balance to consider is whether trout anglers should be given this opportunity at the risk, if any, of negatively impacting sea-run salmon spawning via the accidental catch of salmon just prior or during spawning.

The submission has some historical context. "Council trialled a fly only, catch and release season above Turn Again Point during March and April in 1996/97 and 1997/98. The March – April trout season extension was revoked because of "excessive use by anglers, illegal activity, possible high incidence of repeat capture of trout and accidental hooking of salmon." This occurred at a time when the fishery was in relatively good health when compared to the post 2001 error when the salmon fishery experience its first 'population crash'.

In the 2002/03 season a trout fishing season extension for the month of March, with Fly and Spin method and 2 trout daily bag limit, was introduced upstream of Turnagain Point and including tributaries and remains current. The 2002/03 introduction of the March trout season was justified as being appropriate based on an assessment of:

i) the distribution of spawning within the catchment, and
ii) timing of salmon entry to spawning grounds.

The key difference between 2002/03 and today is that the Rangitata salmon fishery has now been declared 'in crisis' with numerous years of depressed population since around 2018 and no 'bounce back' to historic 'healthy' fishery levels. Further, in 2024 the Rangitata River experienced its lowest salmon run on record. In terms of regulation introduced to counteract the 'salmon crisis', since 2021/22 the season bag limit has been in place to support a higher proportion of the run reaching the spawning ground.

If the 2002/03 assessment criteria was applied in the context of the C Bell's proposal, the impact of trout angling on salmon would be similar in March in the mainstem and tributaries (what is currently permitted) when compared with just the main stem in April (what is proposed). This is because during both months, pods of salmon may be accidentally fished for and caught by trout anglers in the mainstem, and that a small number of actively spawning fish may be accidentally fished for and caught in the tributaries in March and in the mainstem in April.

There is little evidence at hand to suggest that the current March trout fishing season causes harm to salmon, therefore it can be reasoned that the opening of an April trout season in the mainstem only, to both fly and spin angling, would be at worst adding an addition negligible or minor negative impact to salmon spawning.

Considering the submitter has put forward to make the April season fly only or fly and spin, it is assessed that a fly-only season would have a lower risk to salmon when compared to the current March trout season which permits both spin and fly. Spin fishing is a more effective and popular method for salmon fishing, by its natures is more prone to accidental salmon catches than fly fishing and is within the skill level of the majority of licence holders. Fly fishing can be an effective salmon fishing method in the hands of an anglers with specialist salmon gear and expertise; however these anglers are rare, and it would be expected they would infrequently fish the April season targeting trout with such methods that would be used to target salmon intentionally.

Introducing an April trout season to the regulation will add to the complexity of the regulations by introducing an addition fourth listing of season regulations prescribed to the Rangitata River.

Regarding the submitters suggestion of alignment of regulations/opportunities with North Canterbury's salmon rivers, the Rangitata River is most appropriately compared to the Rakaia River based on spawning ground entry timing and fish distribution within the catchment. The Rakaia shares the current protection of the Rangitata River with a universal closure of sports fishing in the upper rivers main stem and tributaries in April.

With the 2024 Rangitata salmon run being the lowest on record, and the 2024 spawning numbers thresholds to maintain a 2 salmon season bag only being narrowly met, it is acknowledged that there is a likelihood that with any further decline in the salmon populations from 2024 levels that subject to establish management thresholds, further restriction may be placed on salmon harvest, for example, a reduction to a 1 salmon season bag limit. It could be considered counter intuitive or counterproductive to open a new fishing season that could potentially pose a minor risk to salmon spawning production during a time when anglers may be facing further restriction on their opportunity to catch and harvest salmon.

4.6.3 Angler and Public Feedback

Twenty anglers or members of the public provided feedback (refer to Appendix 4 for full record of feedback). Equal numbers of angler supported the introduction of an April trout

season as opposed. Of those supporting the April trout season, 9 voted for it to be fly-only methods while 1 angler voted for both fly and spin. Eleven written responses were received. In summary, feedback predominantly suggested the opportunity the new season would create is not worth the risk of impacting the salmon fishery.

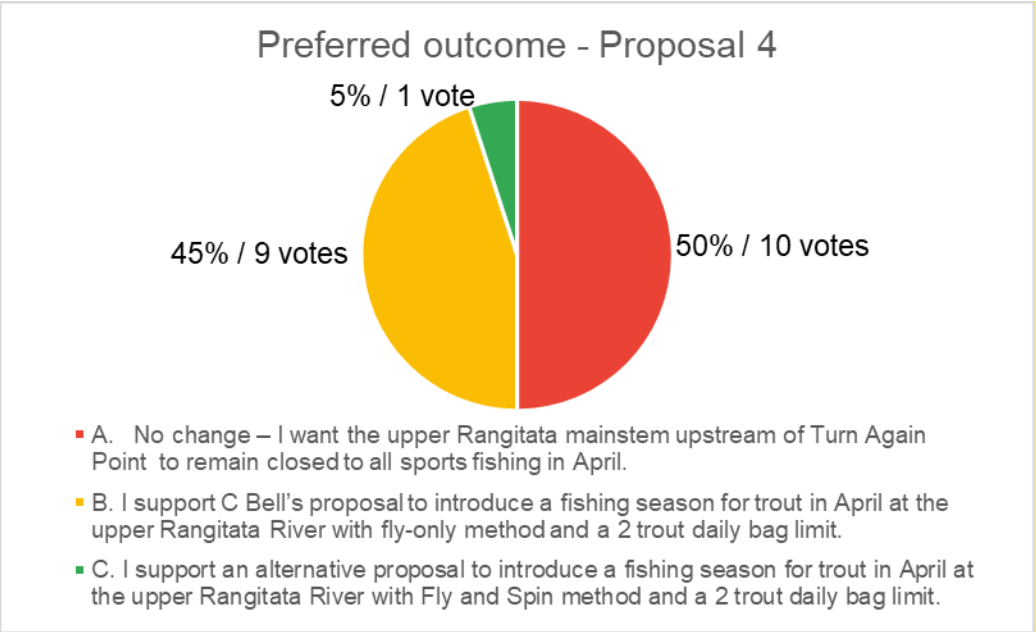

Figure 4: Preferred outcome voted for by licence holders and the public for proposal 4.

Proposal 5: Bait fishing – permitting restricted use of a portion of fish as bait

5.0 Submitter: Blake Harper / CSI Fish & Game staff member

5.1 Regulation proposed (second schedule):

'In bait fishing waters a portion of fish may be used, excluding trout, salmon, and fish ova (eggs).

5.2 Current regulation (first schedule): "Bait" means: Natural fish, excluding fish ova, or any portion of a fish, or shellfish (mollusc), except where stated otherwise in the Second Schedule of this notice.

5.3 Council Options:

A. No change – status quo.

B. Introduce a regulation to permit a portion of fish to be used as bait, excluding trout, salmon and fish ova.

5.4 Staff Recommendation:

Option B - introduce a regulation to permit a portion of fish to be used as bait, excluding trout, salmon and fish ova.

5.5 Council Decision:

OPTION B - INTRODUCE A REGULATION TO PERMIT A PORTION OF FISH TO BE USED AS BAIT, EXCLUDING TROUT, SALMON AND FISH OVA.

Key Justifications for recommendation: simplifies 'fish' bait regulations and increases options and availability of fish bait options.

5.6 Supporting information

5.6.1 Fish & Game staff assessment:

The first schedule/national fish bait regulation prohibiting the use of a portion of fish, such as fishing with half an anchovy, results in inadvertent offending and minimises the practical use of fish as bait. The processing of inadvertent offending by rangers makes up an appreciable component of the ranging team's operational capacity, which takes time and resourcing away from rangers to detect and process intentional offending and offending of higher risk to sustainability.

Rangers currently issue offence notices to anglers fishing with portions of fish, with the most common portion of fish being half an anchovy or a small strip of salmon. While some anglers knowingly disregard this regulation and choose to use a portion of fish as bait, usually salmon, it is evident that a significant number of anglers inadvertently offend. Anglers, often with extensive sea fishing experience and minimal freshwater fishing experience, take a practical measure and cut their fish into portions to be a

suitable size to fit onto their relatively small trout-size bait hook. Fish & Game staff recognise a large whole anchovy is very challenging to put on a single hook due to its size, often requiring anglers to wrap multiple loops of line or bait elastic around it for it to remain on the hook.

Anecdotal evidence suggests that anglers who are found to be using half an anchovy do not have significantly increased catch rates compared to legal baits at the canals. This indicates that permitting the use of certain fish, such as anchovy, is unlikely to result in harvesting and sustainability issues. In contrast, a portion of salmon (typically a small strip of salmon) appears to be a very effective bait, with rangers anecdotally observing a notable increase in catch rate compared to legal baits. Outside of the canal fishery the use of a portion of fish is likely to be infrequent and not lead to appreciable increases in catch.

The time and resourcing spent issuing offence notices, seizing equipment, and subsequent case processing for inadvertent offending that provides no appreciable catch advantage, such as fishing with a portion of anchovy, could be better spent by rangers in the detection of intentional offences, and for offences that are of greater potential impact to the fishery and its management, such as anglers using a portion of salmon as bait, or those exceeding the bag limit.

This proposed regulation change will continue to prohibit anglers from using portions of salmon and trout, and fish ova. Allowing anglers to use portions of salmon and trout as bait would complicate the enforcement of bag limits, as anglers would likely possess trout and salmon caught pursuant to previous bag limits/previous trips and intended as bait, alongside fish caught pursuant to their current trip/current bag limit, making it difficult for rangers to accurately assess the number of fish caught pursuant to their daily bag limit. Furthermore, anglers may become more inclined to harvest undersized salmon to use as bait, given the effectiveness of illegally portioned salmon bait in the canals. Moreover, the effectiveness of using salmon, or fish eggs, may cause sustainability concerns in the canals, as it would most likely lead to an increase in catch rates which could result in overharvesting. Additionally, allowing the use of trout and salmon as bait would have the undesirable moral implication of expanding the reasons to harvest trout and salmon beyond its fundamental purpose – providing sustenance for the angler and their family members.

Permitting anglers to fish with a portion of fish, such as anchovy, in the CSI region aligns with the intent of the triennial review to simplify regulations and increasing opportunity where possible. The regulation proposed is reasoned to offer a simpler and easier to understand wording than the current first schedule definition.

The proposed regulation would allow all types of fish to be used as bait excluding trout and salmon, and notwithstanding laws of the agencies such as the Ministry of Primary Industries. The proposed regulation would dramatically increase the bait options readily available to be used as fish bait in the CSI Region. Examples are fish bait products commonly available at tackle stores and petrol stations such as pilchard, trevally and

mackerel. Examples of self-source-able fish include kahawai, common smelt and yellow eyed mullet.

Overall, the proposed regulation should increase angler compliance with bait regulations and increase the usability and availability of fish bait. This is hoped to support participation and enjoyment of sports fishing and redirect compliance efforts towards detecting intentional offending and unsustainable practices. However, maintaining the prohibition of portions of salmon, trout and fish ova is essential to prevent bag limit complexity and potential overharvesting.

Fish & Game rangers will need to be observant for any new bait options available due to the proposed regulation that could lead to unsustainable harvest, at which time the regulations would need to be reviewed.

5.6.2 Angler and Public Feedback

Twenty-nine anglers or members of the public provided feedback (refer to Appendix 4 for full record of feedback). The majority of submitters (76%) voted to support the proposal for a portion of fish to be used legally of bait (Figure 5). Nine written responses were received. In summary, feedback was split between those who valued the intent of the proposal and those with opposition to the use of bait at the canals or in general.

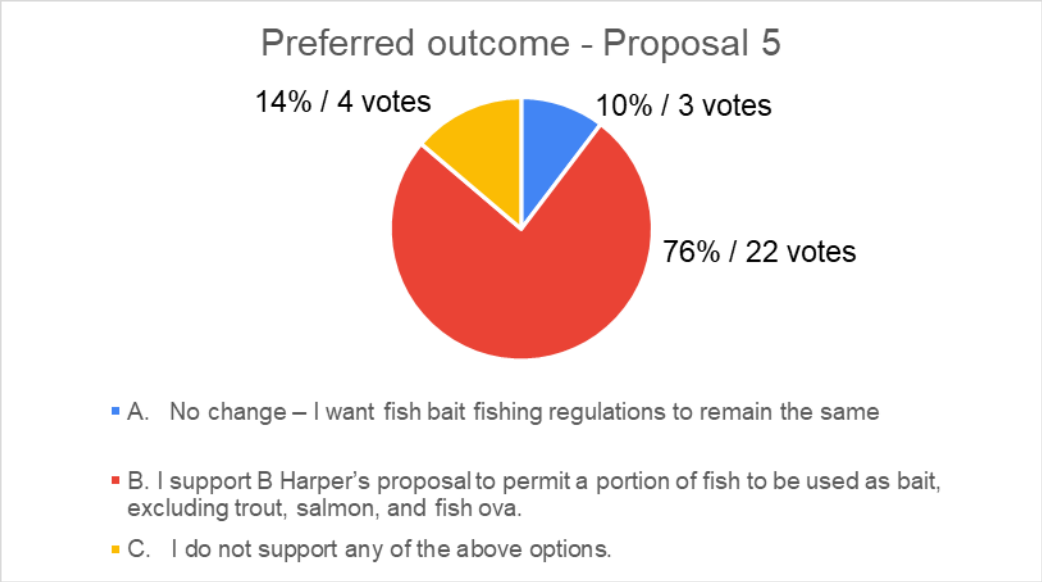

Figure 5: Preferred outcome voted for by licence holders and the public for proposal 5.

Proposal 6: Scented artificial lures (bait) – permitting restricted use in spin fishing waters

6.0 Submitter:

Blake Harper / CSI Fish & Game staff member

6.1 Regulation proposed (Second Schedule):

'Scented artificial lures may be used in waters where spin fishing is permitted, when actively fished so as to imitate a bait fish.

6.2 Current regulation (First schedule):

"Bait" means: Any scented lure, soft bait and other synthetic imitations with chemical attractant properties, except where stated otherwise in the Second Schedule of this notice.

6.3 Council Options:

A. No change / status quo.
B. Introduce new regulations to permit the use of scented artificial lures in water where spin fishing is permitted, when actively fished so as to imitate a bait fish.

6.4 Staff Recommendation:

Option B - introduce new regulations to permit the use of scented artificial lures in water where spin fishing is permitted, when actively fished so as to imitate a bait fish.

6.5 Council Decision:

OPTION B - INTRODUCE NEW REGULATIONS TO PERMIT THE USE OF SCENTED ARTIFICIAL LURES IN WATER WHERE SPIN FISHING IS PERMITTED, WHEN ACTIVELY FISHED SO AS TO IMITATE A BAIT FISH.

Key Justification for recommendation: creates opportunity at 46 additional waters for spin-style anglers to utilise and enjoy popular modern scented soft baits that imitate bait fish.

6.6 Supporting information

6.6.1 Fish & Game staff assessment:

An opportunity exists for CSI Fish & Game to join the efforts of five other Fish & Game regions to increase anglers' opportunity and satisfaction by permitting a specified use of scented artificial lures (bait) in all waters where spin fishing is permitted. This proposed regulation change aligns with the goals of the triennial regulations review, which highlights simplifying regulations and increasing opportunity to sports fishing where possible.

Ensuring angler success is crucial for retaining licence holders. Research on new and reactivated anglers by Otago Fish & Game identifies lack of success is a major driver of dissatisfaction. Scented soft baits are highly effective lure for anglers targeting trout in

some waterways and when fished with the correct technique can potentially improve catch rates and overall satisfaction.

Scented artificial lures AKA scented soft baits come in a variety of designs with many of the most popular designs imitating bait fish. Scented soft baits that are designed to imitate bait fish function as spinners when actively fished, albeit with a scent attractant.

Five out of 12 Fish & Game regions have recognised the popularity of scented artificial lures and have permitted the use of scented artificial lures (bait) in waters where spin fishing is permitted, as long as they are actively fished to imitate a bait fish.

The proposed regulation change would apply to 46 of CSI's fisheries, including the Ahuriri River, upper Ōhau River, Lake Alexandrina and Tengawai River/Te Ana-a-wai.

Both the Southland and North Canterbury Fish & Game regions provide a successful precedent, having permitted scented soft baits in waters where spin fishing is permitted with minimal negative feedback and no concerns for sustainability. Apart from a small number of objections from fly fishing purists, most Southland anglers appreciate the simplified regulations and improved fishing opportunities (pers. comm Southland Fish & Game). North Canterbury Fish & Game has received positive feedback from their anglers, which has supported the use of the latest innovations in fishing soft baits (pers. comm North Canterbury Fish & Game).

Due to the variety of soft lures available, which include both scented soft baits and unscented soft plastic options, the ability for anglers to comply with regulations has become challenging. Under the current regulations soft plastics, such as unscented rubber or silicone lures, fall under the definition as spinners, while scented soft baits are classified as bait. These legal distinctions are often overlooked by anglers, as soft baits and soft plastics imitating bait fish look the same, are fished the same, and are stored together in a tackle box. It can be difficult for anglers, and rangers alike, to determine the use of bait vs spinner. Many anglers simply disassociate scented soft baits that imitate fish from being bait. By expressly permitting the use of scented soft baits in spin fishing waters, fishing and adhering to the regulations will be simpler and more enjoyable by decreasing fear of inadvertent offending, increasing lure options and possibly improving catch rate across 46 waters of the CSI Region. Increases in harvest, if any, is not anticipated to impact on sustainability of fisheries.

6.6.2 Angler and Public Feedback

Twenty-one anglers or members of the public provided feedback (refer to Appendix 6 for full record of feedback). Most submitters (77%) voted to support the proposal to introduce the restricted use of scented soft baits in spin fishing waters. Six written responses were received. In summary, feedback either agreed with the logic of the proposal or was outside the scope of the proposal.

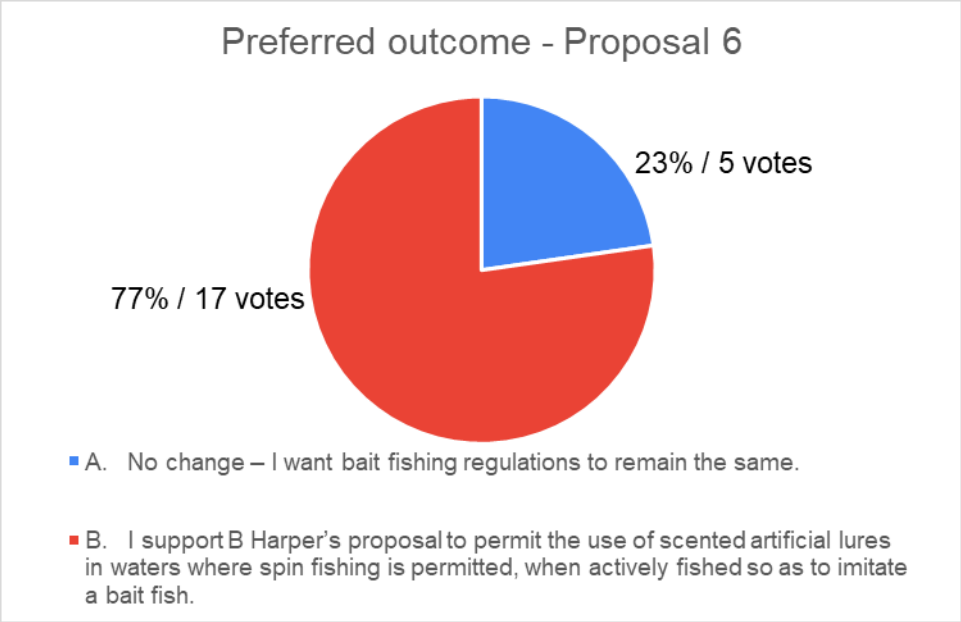

Figure 6: Preferred outcome voted for by licence holders and the public for proposal 6.

Proposal 7: Bait fishing – introducing a regulation to clarify offence of bait fishing with salmon farm and trout hatchery fish feed pellets

7.0 Submitter: Rhys Adams / CSI Fish & Game Staff

7.1 Regulation proposed:

No angler shall use as bait any feed pellet used for the rearing of trout or salmon.

7.2 Current regulation:

The use of fish feed pellets is interpreted to be prohibited based on the definition of fish bait excluding the use of any portion of fish.

7.3 Council Options:

A. No change – status quo.

B. Introduce a regulation that explicitly prohibits the use as bait any feed pellets used for the rearing of trout and salmon.

7.4 Staff Recommendation

Option B - introduce a regulation that explicitly prohibits the use as bait any feed pellets used for the rearing of trout and salmon.

7.5 Council Decision

OPTION B - INTRODUCE A REGULATION THAT EXPLICITLY PROHIBITS THE USE AS BAIT ANY FEED PELLETS USED FOR THE REARING OF TROUT AND SALMON.

Key Justification: Simplifies a regulation by making it readily understandable.

7.6 Supporting information

7.6.1 Fish & Game staff assessment:

The regulation submitted aims to provide a simple and explicit CSI Region regulation to clarify CSI Fish & Game's intent to prohibit the use feed pellets used for the rearing of salmon and trout, as bait.

The canal fishery is supported by the direct and indirect inputs from salmon farms. Some canal trout and salmon consume salmon farm feed pellets, in their original state and possibly partly digested state by way of faeces produced by farmed salmon.

Historically, prohibiting the use of salmon farm feed pellets as bait has been a precautionary approach by CSI Fish & Game to manage concerns that their use as a legal bait could be so effective that it leads to unsustainable harvest of trout and salmon. CSI Fish & Game have interpreted that any bait containing a portion of fish is illegal to use subject to the first schedule definition of "natural fish" bait excluding the use of any portion of fish. Salmon farm and trout hatchery feed pellets contain portions of fish such as fish meal and fish oil, therefore are interpreted to contain a portion of fish and be

illegal. It is believed that the interpretation (definition) for fish bait was written prior to the development of salmon farming in the canals therefore was not written with the intent to prohibit the use of salmon farm and trout hatchery feed pellets.

It is reasoned that where practicable, Fish & Game should design/redesign regulations to be simple and clear in their intent, requiring little, if any interpretation. In the case of CSI Fish & Game intending to prohibit salmon farm and trout hatchery feed pellets as bait, anglers have no regulation at hand that is clear and comprehensible to this effect. It is therefore argued that for CSI Fish & Game to be acting in the best interests of its licence holders should introduce the proposed fit-for-purpose regulation in the CSI Region / Second Schedule Regulations.

The proposed regulation intends to only prohibit the use of commercially sourced feed pellets used by salmon farms, trout hatcheries etc for the purposes or rearing salmonids and would not affect the use of imitation feed pellets that are interpreted to be legal bait by CSI Fish & Game subject to the First Schedule definitions of a bait being a scented lure, soft bait or synthetic imitation with chemical attractant properties.

Fish & Game rangers will need to be observant for any imitation pellet bait options that become available that could lead to unsustainable harvest, at which time the regulations would need to be reviewed.

7.6.2 Angler and Public Feedback

Nineteen anglers or members of the public provided feedback (refer to Appendix 7 for full record of feedback). Most submitters (90%) voted to support the proposal to introduce an explicit regulation around the prohibited use of feed pellets as bait. Five written responses were received. In summary, written feedback was mixed and included comments outside the scope of the proposal.

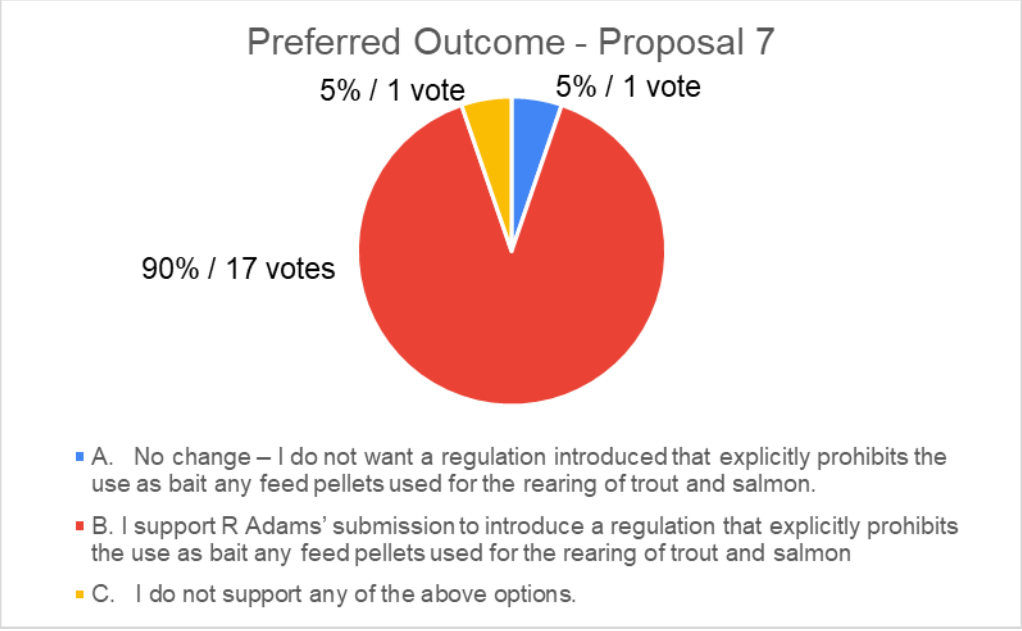

Figure 7: Preferred outcome voted for by licence holders and the public for proposal 7.

Proposal 8: Upper Ahuriri River Catchment – introducing a November season opening date

8.0 Submitter: Hamish Stevens / CSI Fish & Game staff member

8.1 Regulation submission:

All waters of the Ahuriri River Catchment shall open on the 1st Saturday in November.

8.2 Current regulation:

1. "Lower River" regulations: Ahuriri River and tributaries downstream from Longslip Creek Opening 1st Saturday in November, and 2. "Upper River and Lagoons" : Ahuriri River, tributaries and Lagoons opening 1st Saturday in December.

8.3 Council Options

A. No change – status quo.

B. All waters of the Ahuriri River Catchment shall have an open season of 1st Saturday in November – 30 April.

8.4 Staff Recommendation

Option B - all waters of the Ahuriri River Catchment shall have an open season of 1st Saturday in November – 30 April**.**

8.5 Council Decision

OPTION B - ALL WATERS OF THE AHURIRI RIVER CATCHMENT SHALL HAVE AN OPEN SEASON OF 1ST SATURDAY IN NOVEMBER – 30 APRIL.

Key Justifications for recommendation: Simplifies the regulations and provides an additional month of fishing opportunity.

8.6 Supporting information

8.6.1 Fish & Game staff assessment

By opening the entire Ahuriri River Catchment in November the season length regulations will be simplified and a month of additional fishing opportunity will be gained.

The current season length opening date for the upper section of the Ahuriri river and Lagoons is anomalous for the CSI Fish & Game region with other "high-country river, tarns and lagoons" of the region in the area opening in November.

The current December opening is believed to be historically tied to landowner related matters and potential impacts on allowing angler access with no relation to fishery sustainability. All current landowner / land managers in the upper valley were contacted to communicate the intent to open the river in November Opening with all being neutral to the proposed change.

Currently, December attracts relatively low angler use in the upper valley, apart from Opening Weekend. It is uncertain how the addition of the month of November will impact angling pressure but it is expected to be relatively low. If the upper river was to share an opening day with neighbouring waterways there may be a reduction in pressure on opening weekend as opposed to the current unique opening date for the upper river.

November is typically a month of windy and wet spring weather in the upper Valley with many days of high flows and unfishable conditions. However, these adverse conditions may still offer spin fishing opportunities. In November the river is predicted to receive relatively low angling pressure , however, the tarns, lagoons and ponds will offer fishable water when the river is too high to fish and may attract a notable amount of angling.

A November opening for the upper valley is not predicted to cause sustainability issues for with the river or tarns or lagoons as most anglers practice catch and release and, at least for the river, the trout population is substantial. The November opening will maintain the protection of rainbow trout spawning.

8.6.2 Angler and Public Feedback

Nineteen anglers or members of the public provided feedback (refer to Appendix 8 for full record of feedback). Most submitters (91%) voted to support the proposal to introduce a November opening for all waters of the Ahuriri River Catchment (figure 8). Seventeen written responses were received. In summary, written feedback heavily supported the proposal and its logic. A minor amount of feedback cover consideration of why to keep status quo and some feedback was out of scope of the proposal.

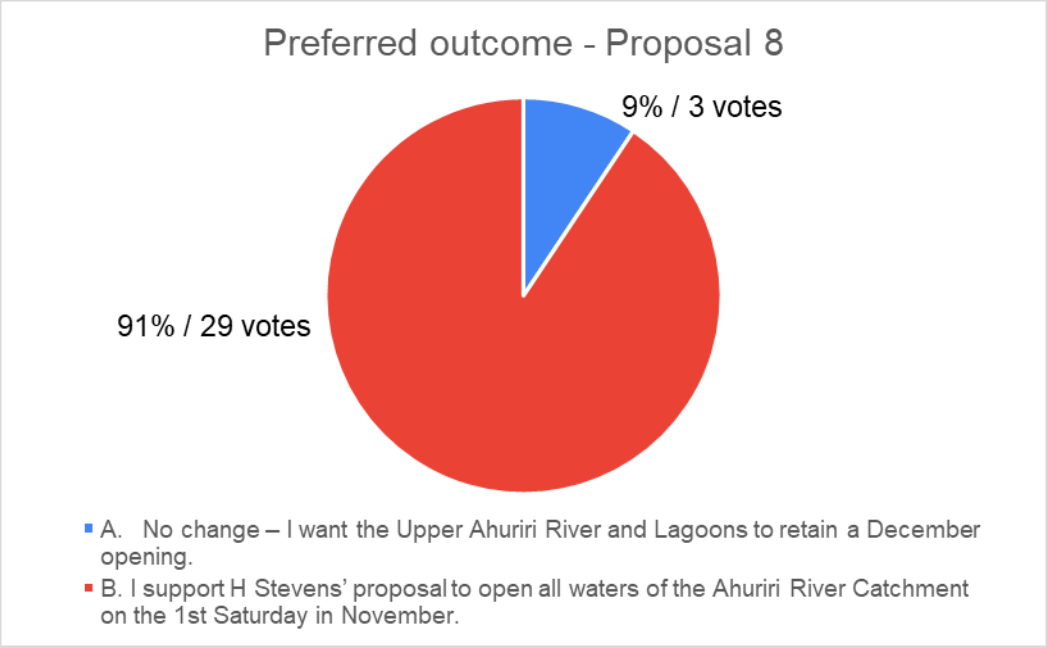

Figure 8: Preferred outcome voted for by licence holders and the public for proposal 8.

Proposal 9: Awakino River / Te Awakinonui – introducing an open season

9.0 Submitter: Rhys Adams / CSI Fish & Game Staff member

9.1 Regulation proposed: Awakino River shall have an open sports fishing season:

Trout: 1st Saturday in November – 30 April, Fly and Spin Methods and daily bag limit of 2 trout.

Salmon: 1st Saturday in November – 31 March, Fly and Spin Methods.

9.2 Current regulation: Awakino River is closed to sports fishing.

9.3 Council Options

A. No change – status quo.

B. Introduce an open season for the Awakino River/ Te Awakinonui 1st Saturday in November – 30 April with 2 trout daily bag limit and fly and spin methods permitted. Designate as a sea-run salmon water. Introduce a sea-run salmon fishing season from 1st Saturday in November to 31 March and fly and spin methods permitted.

9.4 Staff Recommendation

Option B - introduce an open season for the Awakino river/ Te Awakinonui 1st Saturday in November – 30 April with 2 trout daily bag limit and fly and spin methods permitted. designate as a sea-run salmon water. introduce a sea-run salmon fishing season from 1st Saturday in November to 31 march and fly and spin methods permitted.

9.5 Council Decision

OPTION B - INTRODUCE AN OPEN SEASON FOR THE AWAKINO RIVER/ TE AWAKINONUI 1ST SATURDAY IN NOVEMBER – 30 APRIL WITH 2 TROUT DAILY BAG LIMIT AND FLY AND SPIN METHODS PERMITTED. DESIGNATE AS A SEA-RUN SALMON WATER. INTRODUCE A SEA-RUN SALMON FISHING SEASON FROM 1ST SATURDAY IN NOVEMBER TO 31 MARCH AND FLY AND SPIN METHODS PERMITTED.

Key Justification for recommendation: Increases opportunity for anglers.

9.6 Supporting information

9.6.1 Fish & Game staff assessment:

The Awakino River, a tributary of the Waitaki River near Waitaki Dam, is the only natural river/stream that is permanently closed to sports fishing in the CSI Fish & Game Region.

There is no current justification for full protection of the resident or spawning population of trout in the Awakino River. Historic justification of the closure (per comms former Fish & Game / Acclimitisation society staff) is believed to be based on a former irrigation dam

structure near SH83 Bridge causing fish to congregate and be subject to overfishing or poaching. The dam structure no longer exists that caused this concern.

During the proposed open trout season of November to April it is believe that the river will offer a minor fishery with relatively low numbers of adult trout. Post-spawn rainbow trout will likely offer the most valued fishing opportunity in the lower reaches during early season as they migrate back to the Waitaki River.

No trout population sustainability concerns are likely to arise in the Awakino River or the Waitaki River because of having an open season due to the minimal additional catch and harvest that will occur within the expansive interconnected lower Waitaki River trout fishery.

Awakino River is a noted spawning water for rainbow trout and therefore a requires a November opening date in fitting with the nearby Hakataramea River. Chinook salmon are not believed to spawn in this river but it is possible and would likely occur in May after the trout season has closed.

9.6.2 Angler and Public Feedback

Eight anglers or members of the public provided feedback (refer to Appendix 9 for full record of feedback). all submitters (100%) voted to support the proposal to introduce an open season for the Awakino River. Three written responses were and in summary all written feedback supported the proposal.

Proposal 10: Lake Alexandrina / Takamana – introducing a winter season brown trout bag limit

10.0 Submitter: Rhys Adams / CSI Fish & Game staff

10.1 Regulation proposal: 'Winter Season' daily bag limit – 2 sports fish, max 1 brown trout.

10.2 Current regulation: 'Winter Season' daily bag limit – 2 sports fish, zero brown trout.

10.3 Council Options

A. No change – status quo.

B. Introduce a bag limit of max 1 brown, subject to the existing 2 sports fish daily bag limit at Lake Alexandrina during the winter season.

10.4 Staff Recommendation:

Option B - introduce a bag limit of max 1 brown, subject to the existing 2 sports fish daily bag limit at Lake Alexandrina during the winter season.

10.5 Council Decision:

OPTION B - INTRODUCE A BAG LIMIT OF MAX 1 BROWN, SUBJECT TO THE EXISTING 2 SPORTS FISH DAILY BAG LIMIT AT LAKE ALEXANDRINA DURING THE WINTER SEASON.

Key Justification for recommendation: provides for the legal harvest and utilisation of fatally injured brown trout. Spawning surveys are in place to assess if any additional harvest that occurs impacts on brown trout numbers.

10.6 Supporting information

10.6.1 Fish & Game staff assessment:

The "zero brown trout" daily bag limit for the winter season at Lake Alexandrina permits brown trout to be targeted and caught but not kept. Therefore, catch and release of brown trout is enforced and harvesting a brown trout caught during the winter season is an offence.

Unfortunately, the practice of catch and release is not foolproof and inevitably over time a small proportion of brown trout catch will die due to physical and physiological harm caused by being caught and released. In effect, a zero-bag limit inevitably removes a small number of brown trout from the population over time, although it may be at negligible levels that does not appreciably impact on fishery sustainability or angling opportunity.

Outside the limitations of fishery crisis, or in the case of a very low populations with severely limited spawning habitat, a zero-bag limit is not justifiable in the submitters opinion as it inevitably leads to unutilised losses from the fishery. Loses from the fishery

caused by anglers defensibly should be for the purpose of harvest and utilisation of the resource for food.

The rationale of the existing zero-bag limit can be summarised that there is evidence / anecdote that brown trout populations when compared to rainbow are higher value, and lower in population. This high value and cautious approach to brown trout management is evident with Lake Alexandrina's summer season regulations of '4 trout including a maximum of 1 brown trout'. The daily bag limit of 1 brown trout in the summer season and zero in the winter are the only examples of these daily bag limits in the CSI Region.

Lake Alexandrina's two spawning creeks, Scott's and Outlet, have been enhanced to improve the availability and quality of spawning habitat and are monitored annually. Spawning monitoring is relatively intensive, targeting monthly surveys from May to November. Monthly spawning monitoring for May, the peak month of brown trout spawning activity, reveals a highly variable numbers of live trout (58 – 216) were present in the creeks on the survey dates between the years of from 2016 to 2024. Statistical analysis (R^2=0.03) reveals there is no clear trend towards an increasing or decreasing brown trout spawning population over the period therefore it can be considered stable.

It is suggested that with spawning enhancement in place and monitoring revealing no concern for the population that it is appropriate to introduce a daily bag limit of 1 brown for the winter season at Lake Alexandrina. The goal of introducing a bag limit is to provide the legal opportunity for brown trout harvest during the winter season. More specifically, the provision of a bag limit is intended to allow the legal harvest of brown trout caught that are intended for release but are injured. It is the submitters reasoning that any fish injured should be harvested and utilised where legal to do so. Key injuries to note being those to the gills, eyes and oesophagus which are known to be associated with a high hooking mortality rate. In the unlikely instance that the introduction of the 1 brown trout bag limit causes an unsustainable harvest and a long-term decline in the populations then monitoring is in place to detect and react to the occurrence, amending the regulations with such evidence.

10.6.2 Angler and Public Feedback

Fifteen anglers or members of the public provided feedback (refer to Appendix 10 for full record of feedback). It was a nearly even split between those who voted to support the proposal to introduce a max 1 brown trout bag limit in the winter season (53%) and those who wanted no change (47%) (Figure 10). Seven written responses were received. In summary, written feedback was mixed with comments against the proposal being most dominant. Some comments were beyond the scope of the proposal.

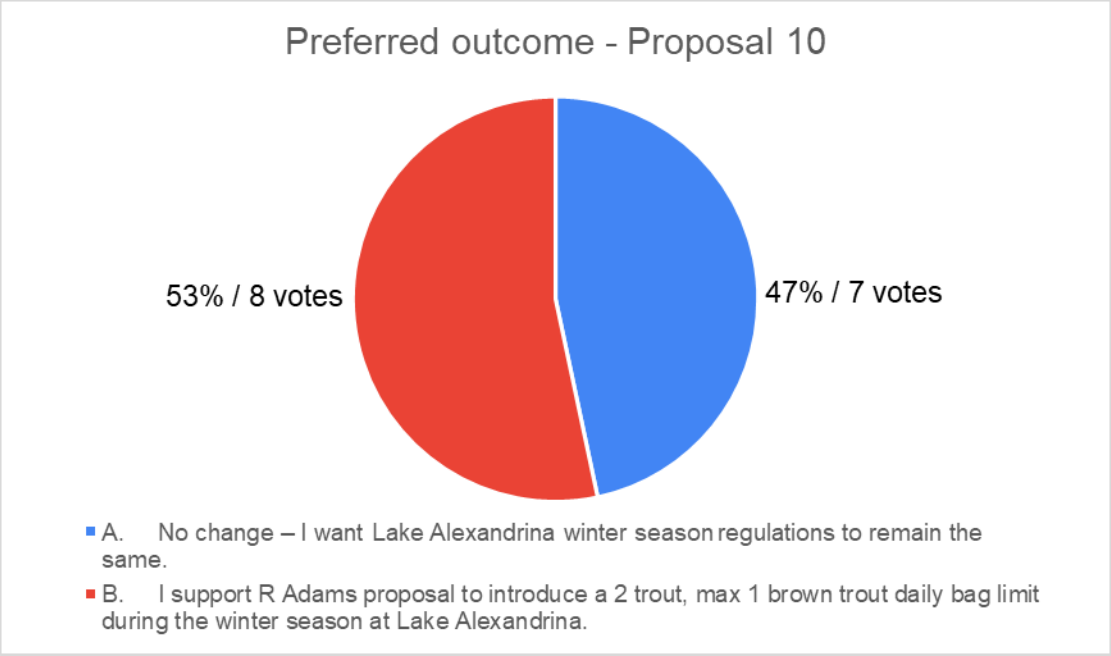

Figure 10: Preferred outcome voted for by licence holders and the public for proposal 10.

Proposal 11: Canal fishery – introducing a universal bag limit across interconnected waters

11.0 Submitter:

Rhys Adams / CSI Fish & Game Staff

11.1 Proposed regulations:

That the daily bag limit is a universal "2 sport fish" for all waterways that have direct connectivity to the Mackenzie Basin hydro canal fishery:

- Upper Ōhau River - 2 sports fish daily bag limit.
- Wairepo Arm - 2 sports fish daily bag limit.
- Kelland Pond – 2 sports fish daily bag limit.

11.2 Current regulation:

- Upper Ōhau River - 2 trout, 2 salmon daily bag limit.
- Wairepo Arm - 2 trout, 2 salmon daily bag limit.
- Kelland Pond – 2 trout, 2 salmon daily bag limit.

11.3 Council Options

A. No change – status quo.

B. Introduce a 2 sports fish bag limit for upper Ōhau River, Wairepo arm and Kelland Pond.

11.4 Staff Recommendation

Option B - introduce a 2 sports fish bag limit for upper Ōhau river, Wairepo arm and Kelland pond

11.5 Council Decision

OPTION B - INTRODUCE A 2 SPORTS FISH BAG LIMIT FOR UPPER ŌHAU RIVER, WAIREPO ARM AND KELLAND POND

Key Justifications for recommendation: Simplifies regulations by bringing them in to line with the bag limits of their interconnected waterways.

11.6 Supporting information

11.6.1 Fish & Game staff assessment:

This submission seeks to simplify canal fishery regulations by making them consistent across all the canal fisheries interconnected waters.

The fish that support the popularity of the canal fishery are trout of exceptional condition and/or size and Chinook salmon. These 'canal fish' can be targeted and caught in the canals and their interconnected fishery. The interconnected fisheries are those without physical barriers to fish migration and are all associated with the Ōhau B Canal.

When the bag limit was changed to 2 sports fish across all canals for the purpose of simplifying the formerly complex regulations with their bag limit /slot limit combination, Lake Ruataniwha was also included recognising its interconnection with Ōhau B Canal and that 'canal fish' are caught there too. This submission continues that sentiment by seeking to make a consistent and therefore simplified daily bag limit of 2 sports fish across all interconnected canal fishery waters where 'canal fish' can be targeted.

Angling opportunity may be slightly impacted, but alternative options are available without the need for extensive travelling. For example, currently an angler can achieve their 2 sports fish daily bag limit by keeping 2 salmon at Ōhau B Canal and then without delay move a short distance (0-5 mins drive) to Wairepo Arm and catch and keep 2 trout subject to the higher 2 trout and 2 salmon daily bag limit. Under the proposed regulations of the submission the same angler, after keeping 2 salmon at Ōhau B Canal would not be able to fish a Wairepo Arm for the remainder of that day but could move (5-15min drive) to nearby waters with a higher bag limit such as lakes Benmore, Ōhau or Pūkaki and continue to fish for two more sports fish subject to their respective 4 sports fishing daily bag limits.

The likely outcome of the proposed regulation change would be of a small reduction in harvest of 'canal fish' across the interconnected fishery and a small increase of harvest of fish at waterways with 4 sports fish daily bag limits, but not at levels predicted to impact either sustainability or harvest opportunity at any waterway.

11.6.2 Angler and Public Feedback

Thirty-three anglers or members of the public provided feedback (refer to Appendix 11 for full record of feedback). Most submitters (88%) voted to support the proposal (figure 11). Seven written responses were received. In summary, written feedback was mixed with comments supporting the proposal being dominant.

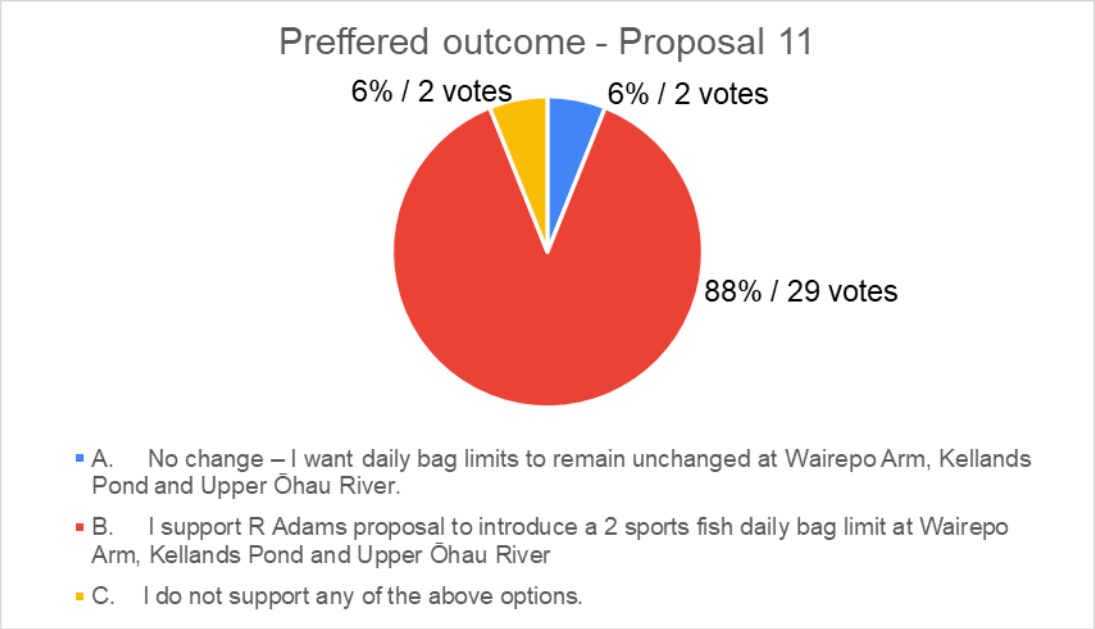

Figure 11: Preferred outcome voted for by licence holders and the public for proposal 11.

2025/26 review of urgent matters for the Anglers Notice of the Central South Island Fish & Game Region.

Urgent matter 1: Annual review of sea-run salmon bag limit and justification.

1.0 Submitter: Central South Island and North Canterbury Fish & Game staff.

1.1 Current regulation:

Season bag limit of 2 salmon subject to "low' spawning populations management threshold (refer to table 2).

1.2 Staff Recommendation – Anglers Notice:

That the sea-run salmon season bag limit for 2025/26 for the CSIFG and NCFG regions complies with the threshold management strategy and the 2021 threshold management bands and be based on the final estimates of the combined Waimakariri, Rakaia and Rangitata sea-run salmon spawning population size available no later than 23 June 2025, as follows-

i. combined spawning population size between 1,200 and 5,100 fish – retain 2 fish season bag limit
ii. combined spawning population size of less than 1,200 fish – implement 1 fish season bag limit

1.3 staff recommendation – outside of Anglers Notice:

CSIFG staff engage with NCFGC staff to prepare a paper for their respective councils by march 2026 presenting season and area restriction options to be applied within the 'severe' spawning population management band.

1.4 Council Decisions – Anglers Notice:

THAT THE SEA-RUN SALMON SEASON BAG LIMIT FOR 2025/26 FOR THE CSIFG AND NCFG REGIONS COMPLIES WITH THE THRESHOLD MANAGEMENT STRATEGY AND THE 2021 THRESHOLD MANAGEMENT BANDS AND BE BASED ON THE FINAL ESTIMATES OF THE COMBINED WAIMAKARIRI, RAKAIA AND RANGITATA SEA-RUN SALMON SPAWNING POPULATION SIZE AVAILABLE NO LATER THAN 23 JUNE 2025, AS FOLLOWS-

i. COMBINED SPAWNING POPULATION SIZE BETWEEN 1,200 AND 5,100 FISH – RETAIN 2 FISH SEASON BAG LIMIT
ii. COMBINED SPAWNING POPULATION SIZE OF LESS THAN 1,200 FISH – IMPLEMENT 1 FISH SEASON BAG LIMIT

1.5 Council Decision – Outside of Anglers Notice:

CSIFGC STAFF ENGAGE WITH NCFGC STAFF TO PREPARE A PAPER FOR THEIR RESPECTIVE COUNCILS BY MARCH 2026 PRESENTING SEASON AND AREA

RESTRICTION OPTIONS TO BE APPLIED WITHIN THE 'SEVERE' SPAWNING POPULATION MANAGEMENT BAND.

1.6 Staff assessment

Spawning – Current State

Spawning population estimates in CSIFG and NCFG regions for the Waimakariri, Rakaia and Rangitata rivers are calculated using Area Under the Curve methodology. This requires up to five aerial surveys of live spawners in important spawning streams and identifies the duration and peak of spawning by charting the individual live fish counts over time.

At 14 May 2025, two to four of five planned aerial surveys have been completed. From these surveys an estimated 1,036 sea-run salmon spawned in the Waimakariri, Rakaia and Rangitata compared to 1,452 in 2023/24 and 2,555 in 2022/23 seasons (Table 1 and Figure 1).

The sea-run salmon spawning population size over the past three seasons, started in the moderate population band in 2021/22 and moved into the low population band in 2022/23 and 2023/24. The 2024/25 estimate of 1,036 wild salmon would be the lowest spawning estimate on record and would see a move to the 'Severe' spawning population management band of less than 1,200 fish. Within the 'Severe' management band a reduction of the season bag limit would be justified, and further season length and restriction may be considered. The sea-run salmon season bag limit would reduce from two to one across the CSIFG and NCFG Regions (Table 2).

CSIFGC and NCFGC have not had the opportunity to consider options for season length and area restriction within the 'Severe' band. Once the 2024/25 spawning and harvest monitoring is complete CSIFG and NCFGC staff will have the opportunity to model the potential harvest reductions and increased spawning that could result from various season length and area restrictions options within the 'Severe' population management band.

At 14 May, salmon spawning population counts are provisional and in the unlikely event of an unpredictable late and significant-sized run, could remain in the 'low' population band and not require change. Further recommendations have been provided to Councils covering the range of possible final spawning population estimates. These recommendations enable staff to make recommendations to NZFGC within deadlines and with respective Regional Council approval.

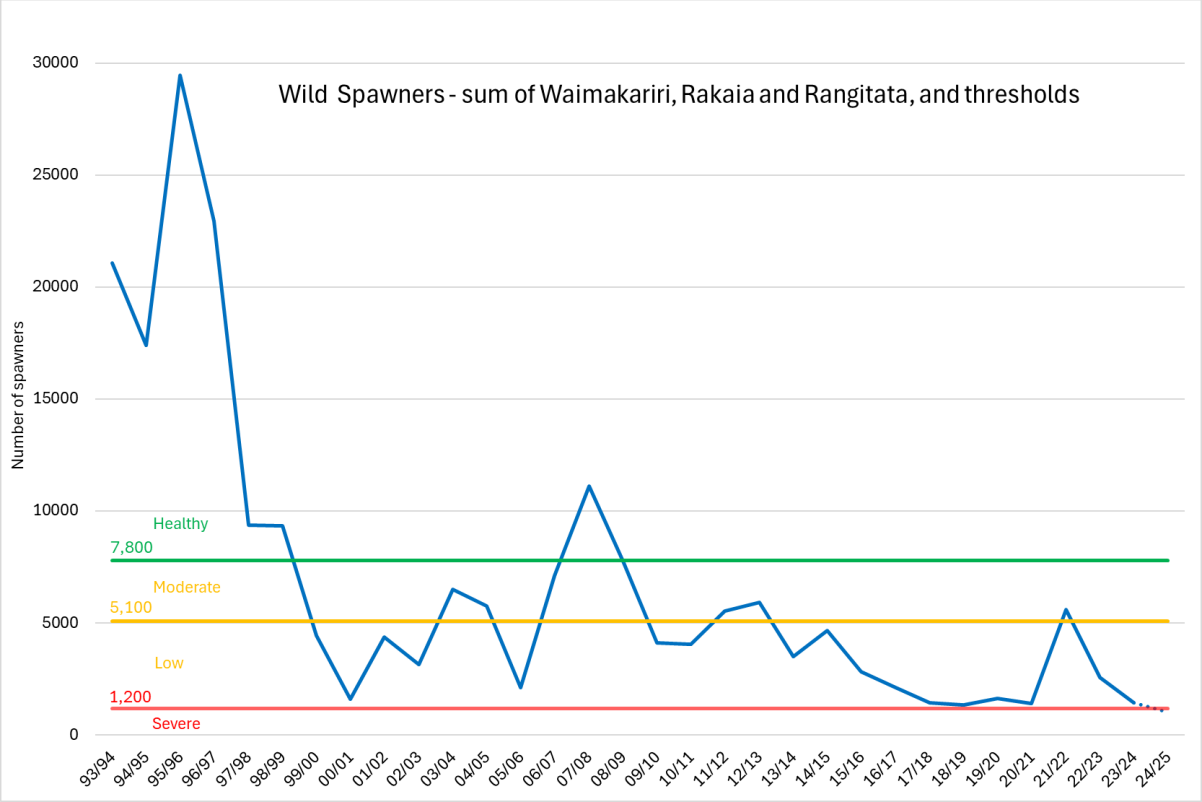

Figure 1. Annual spawning population size for combined Waimakariri, Rakaia and Rangitata rivers' wild sea-run salmon fisheries and thresholds and management bands introduced in 2021/22 for implementing season bag limits. The 2024/25 data are provisional awaiting final spawning estimates in June.

Table 1. Estimated annual wild sea-run salmon spawning population sizes for the Waimakariri, Rakaia and Rangitata rivers and total spawning, harvest and run size for the rivers combined, 1993/94 to 2024/25. Total spawning estimates for 2024/25 are not currently available with figures provided predicted from incomplete surveys (*).

Season	Wild Spawners				Wild Harvest	Wild Run
	Waimakariri	Rakaia	Rangitata	Total	Total	Total
93/94	1,418	13,586	6,077	21,081	11,485	32,566
94/95	3,637	9,810	3,941	17,388	8,884	26,272
95/96	5,845	15,262	8,352	29,459	18,783	48,242
96/97	3,651	11,833	7,467	22,951	16,593	39,544
97/98	2,308	4,196	2,870	9,374	6,494	15,868
98/99	1,718	4,401	3,236	9,355	8,951	18,306
99/00	555	2,204	1,686	4,445	5,774	10,219
00/01	252	855	497	1,604	1,415	3,019
01/02	1,511	2,280	597	4,388	1,705	6,093
02/03	1,007	1,472	659	3,138	3,318	6,276
03/04	1,417	3,204	1,876	6,497	2,811	9,308
04/05	2,488	2,152	1,135	5,775	3,931	9,706
05/06	489	1,123	512	2,214	1,879	4,003
06/07	2,384	2,673	2,062	7,119	3,434	10,553
07/08	3,105	4,313	3,690	11,108	7,941	19,049
08/09	1,117	3,945	2,714	7,776	5,073	12,849
09/10	1,408	1,817	901	4,126	3,790	7,916
10/11	1,610	1,538	905	4,053	2,531	6,584
11/12	1,107	2,813	1,610	5,530	3,599	9,129
12/13	1,457	1,430	3,042	5,929	4,445	10,374
13/14	858	1,366	1,283	3,507	3,158	6,665
14/15	859	2,140	1,666	4,665	4,226	8,891
15/16	743	1,015	1,055	2,813	2,021	4,834
16/17	741	837	545	2,123	2,538	4,661
17/18	344	537	573	1,454	781	2,235
18/19	312	619	403	1,334	1,328	2,662
19/20	456	734	437	1,627	888	2,515
20/21	316	711	397	1,424	774	2,198
21/22	548	3,217	1,823	5,588	897	6,485
22/23	671	1,332	552	2,555	705	3,260
23/24	327	878	247	1,452	423	1,875
24/25	237*	720*	79*	1,036*	Unavailable	Unavailable

Background

At their respective May 2021 Council meetings, the Central South Island and North Canterbury Fish and Game Councils received a joint staff report recommending introduction of a season bag limit for sea-run salmon (provided as **Appendix 1**). The report recommended the season bag limit be set at two fish for the 2021/22 season and provided the justification for this through application of a Threshold Management

Strategy to a salmon population model developed from the previous 25 years of spawning population size estimates.

In May 2021 the CSIFG and NCFG Councils resolved -

> **That CSIFG Council and NCFG Council adopt for their regions the sea-run salmon population model that combines salmon populations for the Waimakariri, Rakaia and Rangitata rivers as one harvest management unit and applies the harvest management scenario that has 5%, 20% and 40% harvest reduction targets and season bag limits for healthy, moderate and low spawning population management bands, respectively.**

The salmon population model applied to historical harvest and spawning records identified the potential benefits to the combined spawning populations of the Waimakariri, Rakaia and Rangitata rivers from application of the recommended threshold regime.

The model identified clear and simple links between spawning population size, level of harvest control required and season bag size to be applied (Table 2).

Table 2. The 2021 threshold management bands: combined Waimakariri, Rakaia and Rangitata rivers sea-run salmon spawning population management bands, the season bag limits to be applied to each band and the expected improvement in spawning population size.

Management Band	Spawning population size	Season Bag Limit	Harvest reduction	Increased spawning
Healthy	> 7,800	8	4%	3%
Moderate	5,101 to 7,800	4	16%	11%
Low	1,200 to 5,100	2	35%	23%
Severe	< 1,200	1 + possible season and area restrictions	56% +	37% +

It was accepted that three thresholds were sufficient to categorise the health of the salmon spawning population. Fewer thresholds were unlikely to provide a timely and strong enough reaction to avoid the fishery falling to the lowest band where there could be justification to close the fishery. More than three thresholds may have resulted in harvest conditions being changed too frequently with little opportunity for the spawning population to stabilise in reaction to a period of stable harvest.

Three thresholds provide for an upper threshold above which the fishery can be considered healthy and where a minimum of harvest conditions would apply. Across the 26 years of spawning population information the 75th percentile was selected as the threshold above which the fisheries were considered to be healthy. The 75th percentile means the level at which 25% of the annual spawning counts were exceeded since 1994.

For the Waimakariri, Rakaia and Rangitata rivers the 75th percentiles are 1,700 and 3,800 and 2,300 fish, respectively, a total of 7,800 fish.

The moderate and low thresholds delineate two bands where there would be active and increasing application of controls on harvest to try to avoid the fishery falling into the severe management band. The moderate threshold corresponds to the median or middle value of the 26-year spawning records for the Waimakariri of 1,400 spawners, Rakaia 2,200 spawners and Rangitata 1,500 spawners, to total 5,100 fish. The low threshold was recommended to be at the 5th percentile for recorded spawning population size in each of the rivers over the last 26 years. This was the level that 95% of spawning records exceeded and corresponded to 250 in the Waimakariri, 550 in the Rakaia, and 400 in the Rangitata. These individual river spawning population sizes sum to 1,200 fish and the lowest recorded combined spawning population size between 1994 and 2020 was 1,330 fish in 2019.

The threshold strategy targets the spawning population size of wild salmon for two reasons – first, it is from the spawning population generally three years earlier, that provides the next generation of adult returns and second, annual in-season estimates of live fish on the spawning grounds made from repeat aerial counts for the current season are available in May and can be accommodated within New Zealand Fish and Game Council (NZFGC) and Minister of Conservation deadlines for Anglers Notice recommendations for the following season. Using spawning population size as the guide for harvest management ensures decisions are made on the most up-to-date information. Total salmon run size estimates are not available until completion of angler catch surveys in July – too late for consideration in the Anglers Notice.

It is the intent of the threshold management strategy that if the combined Waimakariri, Rakaia and Rangitata spawning population drops below a threshold, harvest regulations will immediately become more restrictive to promote spawner survival the following year. Conversely, if the spawning population exceeds the next highest threshold and enters a higher management band, the spawning population would be required to remain above that threshold for three consecutive seasons before harvest conditions would be relaxed. Three successive seasons above the threshold would confirm that the increased spawning population was more likely to indicate a true population increase and not just a single year event. In effect a population decrease requires urgency while a population increase requires certainty. Basing an increase of the season bag on the average of the last three years spawning populations being above the threshold does not afford certainty that the population can sustain harvest from a higher season bag. One very good spawning year and two poor years taken as an average could exceed a higher threshold however it would not be justified to take such population variation as indicative of a true population increase.

Appendices

Appendix 1 – Feedback for proposal: 1 Lake Opuha / Ōpūaha – introducing a winter fishing season

Submitters	(multi choice) Please select your preferred outcome to proposal 1.1	Do you have a brief comment to make about the proposal to provide winter fishing opportunity at Lake Opuha?
Lyndon Forrest	A. No change – I want Lake Opuha regulations to remain the same.	No written feedback provided.
ken Lloyd	A. No change – I want Lake Opuha regulations to remain the same.	opuha often suffers severe degradation over the summer period and a time trout are in spawn mode it would be negligent and go against sensible management practice, the fishery should always come first
Matthew Hall	A. No change – I want Lake Opuha regulations to remain the same.	There are lowland winter fishing opportunities without Lake Opuha. This is a storage lake for irrigation and power generation and depending on the year, both water quantity and arguably quality can be hugely compromised and at times the alarm bells are ringing. I say let the lake recover over winter months and let's not molest fish that are resident in a compromised an autumn and early winter habitat. We can then all share in an abundant resource and an excellent spring and early summer fishery.
Ron Logan	A. No change – I want Lake Opuha regulations to remain the same.	Please do not have winter fishing on Lake Opuha. It is a fragile fishery due to the extremely low tides at times.
Daniel Isbister, Peter Boyce, Josh Morton, Marcel van Leeuwen.	B. I support G Weston's proposal - Year-round season with 2 sports fish limit daily bag limit.	No written feedback provided.
Paul Centofanti	B. I support G Weston's proposal - Year-round season with 2 sports fish limit daily bag limit.	This fishery, including the rivers, holds a huge number of brown and rainbow trout. So it is both beneficial to the angler to introduce year round season and a decrease in the daily limit, thus prolonging the available trout for other anglers.
Archie Nelson	B. I support G Weston's proposal - Year-round season with 2 sports fish limit daily bag limit.	Lake opuha is a great fishery. Lots of fish in the lake and is definitely sustainable if there is a 2 fish bag limit. Also may mean that there is less pressure on the canals what is a good benefit. Would love it to be all year round
David Reilly	B. I support G Weston's proposal - Year-round season with 2 sports fish limit daily bag limit.	Great proposal as this resource is underutilised due to the closed season
Martin Clements	B. I support G Weston's proposal - Year-round season with 2 sports fish limit daily bag limit.	Our club, Canterbury Fly Fishing club (currently 134 members) full support the proposal. Lake Opuha is a great winter fishery, and we think it would be great to have it open for some great rainbow trout fishing
Giles Ferguson	B. I support G Weston's proposal - Year-round season with 2 sports fish limit daily bag limit.	I agree with a year round season. Ophua struggles with low levels and warm water during the summer. A winter season would give me more opportunity to fish it.
Richard Horrell	B. I support G Weston's proposal - Year-round season with 2 sports fish limit daily bag limit.	Anyone Who "needs" four fish in one day could ask a friend along and they can keep 2 each....
Barrie Wood	B. I support G Weston's proposal - Year-round season with 2 sports fish limit daily bag limit.	Grants submission would benefit many down country anglers as stated, and would encourage anglers to be more selective about harvesting any fish caught. Hopefully anglers will be educated on the subject of correct handling proceedures.

Nicholas Moody	B. I support G Weston's proposal - Year-round season with 2 sports fish limit daily bag limit.	Strongly support a year round season. Preserving an opening day event is not worth it to lose fishing in September. September is one of the best fishing months in the Canterbury foothills and plains. As our climate is warming and drying, the fishing seasons need to start earlier to match this new reality. In Victoria, Australia, the season begins first Saturday in September, and our climate is becoming more arid like theirs.
Bonnie Ede	B. I support G Weston's proposal - Year-round season with 2 sports fish limit daily bag limit.	I believe the lake could sustain year round fishing with a reduced bag limit. Would be great for the Fairlie community to have those year round and the financial benefits they bring to the town
Frank Cross	B. I support G Weston's proposal - Year-round season with 2 sports fish limit daily bag limit.	Year-round fishing at Lake Opuha is a good idea. I have two suggestions for amendments to the year-round proposal. First, I would suggest a stand-down period of (say) the first 10 days in May, to allow uninhibited shoreline activity for duck hunters at this busy time. Another suggestion would be to prohibit fishing in the mouths of the North & South branches of the Opuha river for the months of June and September; this would allow uninhibited access for spawning brown and rainbow trout (respectively) as they move up those waters to spawn (and would limit handling damage to any gravid trout caught at these times). Possibly a regulation such as: "No Fishing Within 50 Metres of the Flowing Sections of the Opuha Rivers During the Months of May and September".
Anne Valentine	B. I support G Weston's proposal - Year-round season with 2 sports fish limit daily bag limit.	We regularly fish at Opuha and would welcome the opportunity to have winter fishing there.
Lance Gill	B. I support G Weston's proposal - Year-round season with 2 sports fish limit daily bag limit.	All lakes should be open all year round.
Hunter Wilson	B. I support G Weston's proposal - Year-round season with 2 sports fish limit daily bag limit.	Would be great
Maryana Hamilton, Christopher Leathers, Garry Parker, Kevin Payne, Dean Rattray, Linn koevoet, David Saunders, Graeme Marshall	C. I support the alternative proposal - introduction of a 'Winter Season' regulation - 1 June to 30 August open season and 2 trout daily bag limit.	No written feedback provided.
Paul Ormandy	C. I support the alternative proposal - introduction of a 'Winter Season' regulation - 1 June to 30 August open season and 2 trout daily bag limit.	Suggest try a winter season as a trial, see what happens to fish stocks and reassess G Weston's proposal in eg 2 or 3 years
Anthony Steel	C. I support the alternative proposal - introduction of a 'Winter Season' regulation - 1 June to 30 August open season and 2 trout daily bag limit.	I don't fish Lake opuha but I fish N and S rivers a fair bit in Summer stock seems plentiful indeed maybe too plentiful as fish are not huge. So good idea
Caelan Church	C. I support the alternative proposal - introduction of a 'Winter Season' regulation - 1 June to 30 August open season and 2 trout daily bag limit.	I think this is a great idea. Currently fishing options in Central South Island are limited to Lake Hood and the Mackenzie country. A point I would like to add is that the Lake Hood fishery is also restricted during algal blooms which in some instances warnings are only lifted in June/July. Further restricting the viable fishing opportunities of the region..

John Roche	C. I support the alternative proposal - introduction of a 'Winter Season' regulation - 1 June to 30 August open season and 2 trout daily bag limit.	Having a lake fishery closer to ChCh open in the winter will be fantastic !!
Allan Dawson	C. I support the alternative proposal - introduction of a 'Winter Season' regulation - 1 June to 30 August open season and 2 trout daily bag limit.	I support a 2 trout bag limit all year round - not just through the Winter season
Patrick Jones	C. I support the alternative proposal - introduction of a 'Winter Season' regulation - 1 June to 30 August open season and 2 trout daily bag limit.	Seems like a no brainer to me, would be great to have a winter fishery closer to Timaru
Lindsay Prattley	C. I support the alternative proposal - introduction of a 'Winter Season' regulation - 1 June to 30 August open season and 2 trout daily bag limit.	I have previously walked a shoreline in August on a beautiful day, as I would in October, November or December. The cruising browns were plentiful and feeding well. Opuha is an excellant spotting and casting lake for the avid fly fishermen.
David Chambers	C. I support the alternative proposal - introduction of a 'Winter Season' regulation - 1 June to 30 August open season and 2 trout daily bag limit.	That eliminates interaction with duck shooting
Clark Stanger	D. I do not support any of the above three options.	winter season yes maybe . single hooks to be used only, no bait fishing at all. fly or artificial baits spin only. bag limit in winter 1 fish
Luke Macleod	D. I do not support any of the above three options.	season should stay the same with a reduced bag limit of 2 fish given the volatility of water levels in the lake, if it's fished year round with a 4 bag limit and we get a bad summer it could be detrimental to the fish stocks

Appendix 2 – Feedback for proposal: 2 Lake Heron / Ōtūroto – enforcing use of single hooks for welfare of caught and released lake-type salmon

Submitters (all)	(multi choice) Please select your preferred outcome to proposal 2.1	Do you have a brief comment to make about D Rattray's proposal to enforce the use of only single hook single point lures at Lake Heron to manage the welfare of caught and released small and undersize lake-type salmon?
Mike Radford	A. No change – I want fishing hook type regulations to remain the same at Lake Heron.	I think the question of Treble versus single is a question for all regulation and is not unique to Salmon or Trout or any particular fishery for that matter. Research costs a lot of money. Higher fees will only put anglers off. Do not waste money of research. Spend it on improving the fish numbers in other ways. In my opinion, Keep regulations simple, understandable and do not have different regulations for different areas.
Darryl Foster, David Melhuish, Scott Ammerman, Lance Gill, Paul Centofanti	B. I support D Rattray's proposal to enforce the use of single hook single point spinners at Lake Heron.	No written feedback provided.
Maryana Hamilton	B. I support D Rattray's proposal to enforce the use of single hook single point spinners at Lake Heron.	Having seen the damage a treble hook can do to a fish, and the difficulty of removing them in such cases, I strongly support the use of single hooks over trebles at all times and in all places.
Paul Ormandy	B. I support D Rattray's proposal to enforce the use of single hook single point spinners at Lake Heron.	Yes. I'm catch and release and have unfortunately mangles small fish with treble hooks in the past. Single-hook soft baits appear to b very successful so IMHO trebles are barbaric and not necessary.
Karin Rattray	B. I support D Rattray's proposal to enforce the use of single hook single point spinners at Lake Heron.	Totally agree with this option as it is less detrimental to the fish
Clark Stanger	B. I support D Rattray's proposal to enforce the use of single hook single point spinners at Lake Heron.	should be carried out everwhere that a freshwater licence is required
Linn koevoet	B. I support D Rattray's proposal to enforce the use of single hook single point spinners at Lake Heron.	in support of Mr Rattrays request. I take it that the submitter is suggesting barbless single hooks.
Caelan Church	B. I support D Rattray's proposal to enforce the use of single hook single point spinners at Lake Heron.	I think it is a great idea. Salmon commit to takes on the lure and often take all three hooks at once. Removal of the trebles can also be difficult (especially if the fish takes all three hooks) and has the potential for serious injuries around the jaw (even if you are careful), even more so for smaller fish with smaller bones and cartilage. Before I switched to single hooks, I had to release several fish that I would not have let go had they been the correct size. This should mitigate that, and maybe prop up the salmon stocks as well.
Marcus Reveley	B. I support D Rattray's proposal to enforce the use of single hook single point spinners at Lake Heron.	I support single hook use. However further protection of these salmon is required. These fish are Rakaia salmon and should be treated as such with the same season bag limit. Remove daily limit. The title of lake type salmon is misleading they are rakaia salmon.

Richard Horrell	B. I support D Rattray's proposal to enforce the use of single hook single point spinners at Lake Heron.	I have ticked Mr Rattray's proposal . As I feel it would a difficult thing to work with but if it is in the regulations. You will get a higher uptake than if it is voluntary. Signs at the gate to the south "high bank" and the camping ground and next the Doc sign near the cattle yards.
Nicholas Moody	B. I support D Rattray's proposal to enforce the use of single hook single point spinners at Lake Heron.	I appreciate the research of staff and acknowledge that it would be good to have more science to inform decisions. However, let's follow the precautionary principle and and do everything we can to protect salmon stocks, given the crisis Chinook salmon are experiencing in their sea-run form, and our incomplete knowledge of the connection between the land-locked and sea-run salmon populations of Lake Heron, and the declining water quality of Lake Heron which is placing further pressure on these fish.
NZ Salmon Anglers Association	B. I support D Rattray's proposal to enforce the use of single hook single point spinners at Lake Heron.	The 'Mellish Stream Salmon Age and likely Freshwater Residency Patterns' report (10/05/2021) identifies that of the 68 spawning fish tested, only one stayed in the lake for its entire life. The rest, at some stage, left the lake and spent varying amounts of time at sea before returning to the lake. So, the L Heron salmon are 98-99% sea-run salmon, and we believe they should be managed as such. The report also states that Mellish Stream, a tributary of L Heron, supports up to 25% of the Rakaia Salmon Spawning, so a significant amount The NZSAA encourages CSI to take a more active approach to protecting these unique fish. 1. We support the use of single hooks being mandatory in L Heron 2. We request this be upgraded to only allowing the use of barbless single hooks (we believe this would be appropriate considering the high number of fish (338) being caught and released as indicated by the staff report on opening day 2021 and is also in line with recommendations from the 2017 Salmon Symposium) 3. We further request that since these fish are 'Sea run Salmon' that the bag limit should be reduced to at least match the adult Sea run Salmon bag limit (currently two fish per season) 4. We would encourage CSI to create 'put and take' type fisheries to provide opportunities for young anglers as alternatives to targeting L Heron salmon. We draw CSI's attention to the last paragraph of the Mellish Stream report. 'From a fisheries perspective, it seems prudent to manage the Lake Heron population conservatively under the assumption that fish living within the lake may eventually contribute to a significant portion of the wider Rakaia fishery.'
Lindsay Prattley	B. I support D Rattray's proposal to enforce the use of single hook single point spinners at Lake Heron.	I support single hook as it also assists with trout release, not just salmon.
Michael Bruce	B. I support D Rattray's proposal to enforce the use of single hook single point spinners at Lake Heron.	Single hook is a start. But all spin hooks should be barbless too, fly fishing isn't killing our salmon. Spinning anglers are (I spin fish and have witnessed these terrible practices first hand)

David Chambers	B. I support D Rattray's proposal to enforce the use of single hook single point spinners at Lake Heron.	Maybe use of single hooks on all lakes
Christopher Leathers	C. I support a non-regulatory approach to the management of lake-type salmon welfare at Lake Heron where CSI Fish & Game advocates for anglers to voluntarily reduce their risk of causing hooking mortality and injury of caught and released salmon.	No written feedback provided.
Anthony Steel	C. I support a non-regulatory approach to the management of lake-type salmon welfare at Lake Heron where CSI Fish & Game advocates for anglers to voluntarily reduce their risk of causing hooking mortality and injury of caught and released salmon.	Hopefully double hooks still permitted in lake steam and rakaia where only trout are caught. My experience is that single barbless hooks can cause fish mouths to rip and fish to get off. That's mainly in UK Atlantic salmon. May not be relevant.
Matt Jones	C. I support a non-regulatory approach to the management of lake-type salmon welfare at Lake Heron where CSI Fish & Game advocates for anglers to voluntarily reduce their risk of causing hooking mortality and injury of caught and released salmon.	No study needed it's a well known fact, lets get done.
Patrick Jones	C. I support a non-regulatory approach to the management of lake-type salmon welfare at Lake Heron where CSI Fish & Game advocates for anglers to voluntarily reduce their risk of causing hooking mortality and injury of caught and released salmon.	I can see a single hook rule impacting novice anglers disproportionately and tying up a lot of ranger time
Matthew Hall	C. I support a non-regulatory approach to the management of lake-type salmon welfare at Lake Heron where CSI Fish & Game advocates for anglers to voluntarily reduce their risk of causing hooking mortality and injury of caught and released salmon.	Dean has a point, in fact three of them if trebles are used and I agree they can become imbedded in a fish and hard to remove without pressure on gill cage and irreparable bleeding. The issue I have is many trebles are size 6 or 8 hooks and the barbs are small and with care can easily be removed in most instances (not always though) The issue with a single hook and perhaps soft baits the hook size is 2 or 4 with a much larger barb (almost a spear) and this imbedded in a jaw can be equally hard to remove. Now if I was a fish and was silly enough to take a bait it is not so much hook size or the number of barbs that would be life threatening it is the gentle procedure on release that is life defining!

David Dirks	D. I support a well-resourced study into assessing if hook type used can reduce hooking mortality and sublethal injury of small and undersized lake-type salmon at Lake Heron.	I feel asthough I dont have enough eperience however I think that the damage of our fish does need to be stopped and if this is a step in the right direction then so be it.
Ken Lloyd	E. I do not support any of the above outcomes.	the taking of salmon is a digrace, at a time whn the salmon sports fishery is on its knees this water is the last bastion and part of the rakaia migration process, show some leadership before some one does it for you
Kevin Belcher	E. I do not support any of the above outcomes.	Since the sea run salmon population is in crisis there should be the same rules applied to the salmon in lake heron and its tributaries "ie a salmon harvest card" with a two bag season limit.Because the salmon in lake Heron should be considered as part of the sea run salmon cycle and not as land" locked salmon" as is the case in lake Coleridge.

Appendix 3 – Feedback for proposal: 3 Bells Pond – reducing trout daily bag limit

Submitters (all)	(multi choice) Please select your preferred outcome to proposal 3.1	Do you have a brief comment to make about A Humphreys' proposal to reduce the daily bag limit to 2 trout at Bells Pond?
Eric Graynoth	A. No change – I want Bells Pond trout bag limit regulations to remain the same.	No written feedback provided.
Christopher Leathers	A. No change – I want Bells Pond trout bag limit regulations to remain the same.	It was good that he spoke up.
Linn Koevoet	A. No change – I want Bells Pond trout bag limit regulations to remain the same.	being a regular traveller along side bells pond and observing the numbers of anglers fishing, predominantly bait (Families) and fly, this is a well used fishery, and indicates a good chance of catching a fish.
Patrick Jones	A. No change – I want Bells Pond trout bag limit regulations to remain the same.	Keep the regs simple, it's an interconnected fishery after all
Warren Robertson, Luke Macleod, Craig Hill, Marcel van Leeuwen, Lance Gill, Paul Centofanti	B. I support A Humphries' proposal to reduce the daily bag limit at Bells Pond from 4 to 2 trout.	
Blair Chamberlain	B. I support A Humphries' proposal to reduce the daily bag limit at Bells Pond from 4 to 2 trout.	I fish bells pond a number of times per season living locally and over past 4-5 years have noticed a lot more people fishing the pond. I believe this is due to social media posts from anglers that have had good success there. I support the lower limit but it needs to be well signposted on roads into pond
Paul Ormandy	B. I support A Humphries' proposal to reduce the daily bag limit at Bells Pond from 4 to 2 trout.	In stillwaters trout a're usually full of snails and not the best eating quality anyway so don't see the point of taking any trout but 2 is better than 4!
Yutong Wu	B. I support A Humphries' proposal to reduce the daily bag limit at Bells Pond from 4 to 2 trout.	Bell's Pond has been a great fishery for anglers of all skill levels and ages. I agree that there has been a decline in the number of trout at Bell's Pond, even though I have only fished there for three years. I can still manage to catch one or two nice rainbow trout, but it takes longer than in previous seasons. I would hate to see such a beautiful and peaceful fishery disappear...

Appendix 4 - Feedback for proposal: 4 Rangitata River / Rakitata – introducing an April trout season upstream of Turn Again Point

Submitters (all)	(multi choice) Please select your preferred outcome to proposal 4.1	Do you have a brief comment to make about C Bell's proposal to provide a trout fishing season in the Rangitata River's mainstem upstream of Turn Again Point in April?
Luke Macleod, Richard Horrell	A. No change – I want the upper Rangitata mainstem upstream of Turn Again Point to remain closed to all sports fishing in April.	No written feedback provided.
Anthony Steel	A. No change – I want the upper Rangitata mainstem upstream of Turn Again Point to remain closed to all sports fishing in April.	On this one, salmon (rare and in crisis) will be endangered by the proposal. The question is how much? I can't easily comment on that but I can comment with years of experience fishing for Atlantic salmon in UK that salmon are far more likely to take a fly/lure just before spawning - up river - so I'm thinking these rare salmon will be more likely caught in April than March. I would not risk them for a few trout angling opportunities in April. Cost high: benefit low. There are other places to trout fish. Thank you for allowing me an outsider to comment
Linn Koevoet	A. No change – I want the upper Rangitata mainstem upstream of Turn Again Point to remain closed to all sports fishing in April.	The protection of the wild salmon spawning run is not negotiable, considering the salmon fishery is in crisis.
Jerry Walton	A. No change – I want the upper Rangitata mainstem upstream of Turn Again Point to remain closed to all sports fishing in April.	My suggestion is that the March 0pen period for trout include salmon. With the later salmon run now happening, closing the salmon season at the end of February denies one any chance of catching a salmon up there.
Donald Tilson	A. No change – I want the upper Rangitata mainstem upstream of Turn Again Point to remain closed to all sports fishing in April.	I believe in Fish and Games opinion that the wild Salmon fishery is now at crisis point but i would suggest it is close to the point of no return . Any Salmon hooked accidently is simply not acceptable as they would more than likely die and be lost to the spawning grounds ,we cannot afford to let this happen. We already have enough rules and regulations for our staff to administer ,lets keep it simple so everyone can understand them . Lets hope common sense prevails .
Matthew Hall	A. No change – I want the upper Rangitata mainstem upstream of Turn Again Point to remain closed to all sports fishing in April.	Over the years I have caught brown trout at the river mouth that have been tagged in high country waters. The species colonize Canterbury rivers and in fishing above Turn Again Point in April carries the risk of targeting spawners in what river wide is a very fragile fishery. OK because of distances to travel the Upper Rangitata may be under utilized from a recreational angling perspective but have some consideration for the species. Let's not get carried away and target a few trophy spawners and blindly forget about their progeny holds the key to the future
Nicholas Moody	A. No change – I want the upper Rangitata mainstem upstream of Turn Again Point to remain closed to all sports fishing in April.	I am generally in support of increasing fishing opportunities, however now is not the time to do anything that may negatively affect sea-run salmon populations.

Lindsay Prattley	A. No change – I want the upper Rangitata mainstem upstream of Turn Again Point to remain closed to all sports fishing in April.	I do not support this submission, I am in support of saving as many salmon as we can. This would only affect the "honest fisherman". As it was I was below Turn Agin Point in March and personally witnessed 3 jet boats with rods go above the Point, where no boating is allowed after February, and they had rods out the back of their boats on the way back down. This was witnessed by my colleague but we were too far to be able to get ID's and pictures for prosecution. Furthermore, I object to the 2 trout limit that snuck in somewhere in the last few years. We need to take predatory trout out of the area that will dine on salmon smolt! There is a bloody healthy trout population and they taste awesome in the smoker!!
David Chambers	A. No change – I want the upper Rangitata mainstem upstream of Turn Again Point to remain closed to all sports fishing in April.	My concern is how they going to access the area mmm jet boat??? Considering the state of salmon fishery. Be better if no fishing above turn around point from end of February Then be no excuse for any one to be fishing or jet boating in that area
Peter Munro, Mason Gardener, Lyndon Forrest, Daniel Isbister, Graeme Marshall, Bonnie Ede	B. I support C Bell's proposal to introduce a fishing season for trout in April at the upper Rangitata River with fly-only method and a 2 trout daily bag limit.	No written feedback provided.
Kevin Payne	B. I support C Bell's proposal to introduce a fishing season for trout in April at the upper Rangitata River with fly-only method and a 2 trout daily bag limit.	There are so few salmon the odds of messing with them is about zero Trout anglers don't really give a monkeys arse about targeting old spawning salmon Please create opportunity for anglers
Paul Centofanti	B. I support C Bell's proposal to introduce a fishing season for trout in April at the upper Rangitata River with fly-only method and a 2 trout daily bag limit.	Good assessment comments from both the submitter and fish and game.
Patrick Jones	B. I support C Bell's proposal to introduce a fishing season for trout in April at the upper Rangitata River with fly-only method and a 2 trout daily bag limit.	The added complexity to the rules is minimal at best
Lance Gill	C. I support an alternative proposal to introduce a fishing season for trout in April at the upper Rangitata River with Fly and Spin method and a 2 trout daily bag limit.	No written feedback provided.

Appendix 5 - Feedback for proposal: **5** Bait fishing – permitting restricted use of a portion of fish as bait

Submitters	(multi choice) Please select your preferred outcome to proposal 5.1	Do you have a brief comment to make about B Harper's proposal to allow a portion of fish to be used as bait excluding trout, salmon and fish ova?
Darryl Foster, Richard Horrell, Lance Gill	A. No change – I want fish bait fishing regulations to remain the same	No written feedback provided.
Peter Mcleod, Blair Chamberlain, Graeme Bell, Arno bynevelt, Christopher Leathers, Dean Rattray, Linn Koevoet, Daniel Isbister, Grant Payne, Craig Hill, Graeme Marshall, Patrick Jones, David Melhuish, Matthew Hall, Stuart Anderson, Marcel van Leeuwen, Steve Hancock	B. I support B Harper's proposal to permit a portion of fish to be used as bait, excluding trout, salmon, and fish ova.	No written feedback provided.
Rajiv Siram	B. I support B Harper's proposal to permit a portion of fish to be used as bait, excluding trout, salmon, and fish ova.	I think this is a great idea. This will give us options to use biat this is more easily available. Will help kids have a better chance of catching.
Paul Centofanti	B. I support B Harper's proposal to permit a portion of fish to be used as bait, excluding trout, salmon, and fish ova.	Good assessment and justification to allocate resources better elsewhere, instead of the work required for minor infringements.
Gavin James	B. I support B Harper's proposal to permit a portion of fish to be used as bait, excluding trout, salmon, and fish ova.	I think this is a long overdue change
Donald Paton	B. I support B Harper's proposal to permit a portion of fish to be used as bait, excluding trout, salmon, and fish ova.	I fully concur with this proposal. From a fishers point of view securing anchovy to the hook is definitely frustrating and often you are left with a portion only after a hit or 2 .I also agree with the sentiment that a part fish as bait doesn't seem to make for a higher catch rate,but many would like to be able to fish with this proposal being adopted.
David Folley	B. I support B Harper's proposal to permit a portion of fish to be used as bait, excluding trout, salmon, and fish ova.	Whole baits in some cases are to big for small hook fishing
Clark Stanger	C. I do not support any of the above options.	bait fishing should be for years of junior license holders and thats all it should be for

Luke Macleod	C. I do not support any of the above options.	Bait fishing in fresh water should be banned
Ken Lloyd	C. I do not support any of the above options.	bait fishing should be limited to junior anglers only, are large proportion of offenses committed are by bait fisherman treat a world class fishery with respect not as a cash cow
Paul Massie	C. I do not support any of the above options.	Bait fishing in canals should be made illegal. Only spin and fly fishing should be allowed.

Appendix 6 - Feedback for proposal: 6 Scented artificial lures (bait) – permitting restricted use in spin fishing waters

Submitters (all)	(multi choice) Please select your preferred outcome to proposal 6.1	Do you have a brief comment to make about B Harper's proposal to permit the use of scented artificial lures in waters where spin fishing is permitted, when actively fished so as to imitate a bait fish?
Darryl Foster, Luke Macleod, Lindsay Prattley	A. No change – I want bait fishing regulations to remain the same.	
Maryana Hamilton	A. No change – I want bait fishing regulations to remain the same.	If you're going fishing to catch fish, you're not fishing. Too much emphasis is placed on catching fish all of the time rather than on the enjoyment and conservation of the environment. If you're bored when you don't catch any fish, you're doing it wrong!
Kevin Payne	A. No change – I want bait fishing regulations to remain the same.	Howdy.Does this include scented artificial eggs & worms? The mortality of fishing these kinds of baits is not sustainable. Rivers like the Tengawai numbers of trout have dropped significantly since the introduction of spin fishing was introduced this will not help maintain healthy fish numbers Why not focus on maintaining & enhancing our precious trout instead of harvesting? Cheers
Dean Rattray, Linn Koevoet, Craig Hill, Brendan McGillicuddy, Gavin James, Graeme Marshall, Josh Morton, Stuart Anderson, David Folley, Marcel van Leeuwen, Rex Maheno, Christopher Leathers	B. I support B Harper's proposal to permit the use of scented artificial lures in waters where spin fishing is permitted, when actively fished so as to imitate a bait fish.	
Yutong Wu	B. I support B Harper's proposal to permit the use of scented artificial lures in waters where spin fishing is permitted, when actively fished so as to imitate a bait fish.	I fully agree with this proposal. Scented and unscented soft plastics are sometimes hard to differentiate, mainly due to unclear or missing manufacturer labels. Some brands do not explicitly mention 'scented' on their product packaging but instead use terms such as 'attractant,' 'flavour,' or more scientific terminology like 'amino acid,' which can confuse anglers. By passing this proposal, anglers would no longer need to worry about whether their soft plastics classify as bait, and the range of options to choose from would be much wider. I personally believe that the catch rate would remain similar with the use of scented soft plastics, meaning it would not negatively impact the fishery.
Patrick Jones	B. I support B Harper's proposal to permit the use of scented artificial lures in waters where spin fishing is permitted, when actively fished so as to imitate a bait fish.	Very logical ammendment to the rules and makes staying legal easier when moving between F+G regions with the same box of softbaits

Anthony McCleary	B. I support B Harper's proposal to permit the use of scented artificial lures in waters where spin fishing is permitted, when actively fished so as to imitate a bait fish.	Very sensible
Lance Gill	B. I support B Harper's proposal to permit the use of scented artificial lures in waters where spin fishing is permitted, when actively fished so as to imitate a bait fish.	Soft baiting is the most popular way to fish today and in 95% of cases they are retrieved like a lure.

Appendix 7 - Feedback for proposal: 7 Bait fishing – introducing regulation to clarify offence of bait fishing with salmon farm and trout hatchery fish feed pellets

Submitters	(multi choice) Please select your preferred outcome to proposal 7.1	Do you have a brief comment to make about R Adams' proposal to introduce a new regulation to explicitly present that it is an offence to use as bait any feed pellet used for the rearing of trout and salmon.
Arno bynevelt	A. No change – I do not want a regulation introduced that explicitly prohibits the use as bait any feed pellets used for the rearing of trout and salmon.	No written feedback provided.
Blair Chamberlain, Peter Mcleod, Craig Shelley, Graeme Bell, Dean Rattray, Linn Koevoet, Brendan McGillicuddy, Paul Centofanti, Graeme Marshall, Stuart Anderson, David Folley, Marcel van Leeuwen, Lance Gill, Kapeel Singh	B. I support R Adams' submission to introduce a regulation that explicitly prohibits the use as bait any feed pellets used for the rearing of trout and salmon	No written feedback provided.
Marc Leary	B. I support R Adams' submission to introduce a regulation that explicitly prohibits the use as bait any feed pellets used for the rearing of trout and salmon	It is not clearly specified what is or isn't correct bait. Apparently can use fish, anchovies and crustaceans but as a whole and not pieces. My question is how is the justified as it makes no difference half or while bait. What's to say a sports fish has taken half the bait before reeling in and presenting to officers what's on the hook. Bait fishing rules for sports fish needs to be very clear and explained. We only want to follow the rules and it's not easy when not clear. Thanks
Christopher Leathers	B. I support R Adams' submission to introduce a regulation that explicitly prohibits the use as bait any feed pellets used for the rearing of trout and salmon	Good call
David Reilly	B. I support R Adams' submission to introduce a regulation that explicitly prohibits the use as bait any feed pellets used for the rearing of trout and salmon	bait should be banned
Clark Stanger	C. I do not support any of the above options.	again theres no need to change rules to allow more unsustainable harvest . i believe they regulations regarding bait fishing in general need to looked at a lot harder . example single hooks only , areas that you can bait fish only in or better yet junior licence holders only . adults as licence holders really only need bait to harvest more ,more often.

Appendix 8 - Feedback for proposal: 8 Upper Ahuriri River Catchment – introducing a November season opening date

Submitters (all)	(multi choice) Please select your preferred outcome to proposal 8.1	Do you have a brief comment to make about H Stevens' proposal to opening all waters of the Ahuriri River Catchment on the 1st Saturday in November?
David Reilly	A. No change – I want the Upper Ahuriri River and Lagoons to retain a December opening.	No written feedback provided.
Luke Macleod	A. No change – I want the Upper Ahuriri River and Lagoons to retain a December opening.	Plenty of water to fish below this section and allows for less pressure on a great fishery
Clark Stanger	A. No change – I want the Upper Ahuriri River and Lagoons to retain a December opening.	since the last csi report today actually, since its stated in the report as the ahuriri river is a sensitive fishery, then how is it good or what benifit to open it earlier than starting as it does. its obviously shut november due to spawning not being finished as well as fish recovery from spawning. those fish from the lake also wont be moving back to the lake till end november at the earlist. fish and game really needs to wake up regarding protection of the resources we pay for. clearly fish and still havnt learnt anything.
Blair Chamberlain, Darryl Foster, Peter Munro, Steve Levitt, Lyndon Forrest, Eric Graynoth, Graeme Bell, Christopher Leathers, Linn Koevoet, Daniel Isbister, Jerry Walton, Kerry Linkhorn, Graeme Marshall, Graeme Marshall, Patrick Jones, David Melhuish, Don McEwan	B. I support H Stevens' proposal to open all waters of the Ahuriri River Catchment on the 1st Saturday in November.	
Marcus Corr	B. I support H Stevens' proposal to open all waters of the Ahuriri River Catchment on the 1st Saturday in November.	I Totally agree that the current rule means the river gets slammed on opening in December. If the upper section of the Ahuriri shared an opening date with all the other high country rivers in November, the pressure would be spread out.
Paul Ormandy	B. I support H Stevens' proposal to open all waters of the Ahuriri River Catchment on the 1st Saturday in November.	This should take some pressure off the rest of the river during November. It can get very busy lower down.
Anthony Steel	B. I support H Stevens' proposal to open all waters of the Ahuriri River Catchment on the 1st Saturday in November.	Sensible to simplify if no damage predicted.

Mason Gardener	B. I support H Stevens' proposal to open all waters of the Ahuriri River Catchment on the 1st Saturday in November.	I agree that the opening weekend mayhem is to be avoided. Having it open in November so anglers can cover multiple fisheries will be a much more pleasant start to the season, and I see this having little to no impact on the fishery itself.
Chris de Joux	B. I support H Stevens' proposal to open all waters of the Ahuriri River Catchment on the 1st Saturday in November.	The two separate opening dates adds to confusion, I have witnessed people fishing the upper Ahuriri in November.
Paul Centofanti	B. I support H Stevens' proposal to open all waters of the Ahuriri River Catchment on the 1st Saturday in November.	Good assessment and the conditions don't usually suit anglers so there shouldn't be too much pressure.
Stephen Carey	B. I support H Stevens' proposal to open all waters of the Ahuriri River Catchment on the 1st Saturday in November.	About bloody time
Allan Dawson	B. I support H Stevens' proposal to open all waters of the Ahuriri River Catchment on the 1st Saturday in November.	I support the alignment of the opening days with the rest of the Mackenzie river openings - this will avoid confusion and inadvertent breaches by anglers unfamiliar with the detailed regulations
Adam Frimel	B. I support H Stevens' proposal to open all waters of the Ahuriri River Catchment on the 1st Saturday in November.	I definitely support this regulation change if only to make it easier to interpret the regulations on the Ahuriri catchment as a whole, one date opening day. I would also propose that the upper Ahuriri section (above long slip creek) is in massive need of a beat system to improve angling experience, especially during peak use times. This maybe an entirely different conversation, but I think it should be considered, and the angling community should be allowed input on the beat system proposal.
Nicholas Moody	B. I support H Stevens' proposal to open all waters of the Ahuriri River Catchment on the 1st Saturday in November.	It's a no brainer. Great initiative thanks Hamish!
Lindsay Prattley	B. I support H Stevens' proposal to open all waters of the Ahuriri River Catchment on the 1st Saturday in November.	I support this based n Hamish's particular mention of the weather leading to challenging conditions. Over the last 10 years there has been less and less bluebird days during this time to enjoy the best of the area, thereby regulating the fishing pressure.
Matt de Torres	B. I support H Stevens' proposal to open all waters of the Ahuriri River Catchment on the 1st Saturday in November.	November March & April should be open to NZ resident licensed anglers only.
Lance Gill	B. I support H Stevens' proposal to open all waters of the Ahuriri River Catchment on the 1st Saturday in November.	Open the section below the highway bridge in October please and close it end of May.

Appendix 9 - Feedback for proposal: **9** Awakino River / Te Awakinonui – introducing an open season

Submitters (all)	(multi choice) Please select your preferred outcome to proposal 9.1	Do you have a brief comment to make about R Adams' proposal to provide an open season for sports fishing in the Awakino River?
Paul Ormandy, Linn Koevoet, Daniel Isbister, Lance Gill, Christopher Leathers	B. I support R Adams' proposal to provide an open season for sports fishing on the Awakino River.	No written feedback provided.
Paul Centofanti	B. I support R Adams' proposal to provide an open season for sports fishing on the Awakino River.	Excellent another river to fish. Great idea.
Allan Dawson	B. I support R Adams' proposal to provide an open season for sports fishing on the Awakino River.	This seems a logical change given the historic reasoning (an irrigation dam) behind the closure of this waterway is no longer present.
Patrick Jones	B. I support R Adams' proposal to provide an open season for sports fishing on the Awakino River.	Would prefer to see it as fly only but any open fishery is better than none

Appendix 10 - Feedback for proposal: 10 Lake Alexandrina / Takamana – introducing a winter season brown trout bag limit

Submitters	(multi choice) Please select your preferred outcome to proposal 10.1	Do you have any feedback you would like to provide regarding the proposal to allow for the daily bag limit of 1 brown trout during the Lake Alexandrina Winter fishing season.
Daniel Isbister, David Chambers, Paul Centofanti	A. No change – I want Lake Alexandrina winter season regulations to remain the same.	No written feedback provided.
Jeremy McCully	A. No change – I want Lake Alexandrina winter season regulations to remain the same.	Leave the browns alone they only targeted on the edges and theres bugger all there as it is dont allow winter bag. Ban trebble hooks fix alot of the problem.
Murray McFarlane	A. No change – I want Lake Alexandrina winter season regulations to remain the same.	I would prefer no winter fishing, give them a break!!
Julian Price	A. No change – I want Lake Alexandrina winter season regulations to remain the same.	Brown trout numbers relative to Rainbow trout are very low and according to Fish and game/Acclimatization society fish diary analysis of tagged fish they continue to decrease. Due to earlier spawning times brown trout spawning success is impacted by rainbow trout disturbing the spawning area and spawning success for Brown trout is negatively impacted. The fishery is trending towards a single fish type being Rainbows only. The variable fish count at spawning doesn't necessarily indicate stable fish numbers. Due to the low numbers relative to Rainbows by the time the brown trout numbers show a year-on-year downward trend the fishery will not be able to recovery due to a loss of critical mass. Without stocking Brown trout are barely hanging on.
Lindsay Prattley	A. No change – I want Lake Alexandrina winter season regulations to remain the same.	I do not support this proposal, fish are recovering from spawning and are not in the best condition for keeping. There are plenty of other lakes available for keeping of brown trout at this time of year, particularly if the aforementioned Lake Opuha season is allowable. Having said that, i respect the 'honest fisherman" whom would keep one in the above mentioned scenarios, however I don't want to encourage others who could take advantage of it. It would also increase the targetting of the browns in winter season, which, if I recall correctly, was introduced with the emphasis on the rainbow fishery.
Peter Munro, Christopher Leathers, Linn Koevoet, Patrick Jones, Peter Boyce, Lance Gill	B. I support R Adams proposal to introduce a 2 trout, max 1 brown trout daily bag limit during the winter season at Lake Alexandrina.	No written feedback provided.
Maryana Hamilton	B. I support R Adams proposal to introduce a 2 trout, max 1 brown trout daily bag limit during the winter season at Lake Alexandrina.	There is no point in targeting, catching and releasing fish that will die due to injuries anyway, so this policy change makes perfect sense.

Nicholas Moody	B. I support R Adams proposal to introduce a 2 trout, max 1 brown trout daily bag limit during the winter season at Lake Alexandrina.	This is a wise proposal to preserve our social license to fish. Thanks Rhys

Appendix 11 - Feedback for proposal: 11 Canal fishery – introducing a universal bag limit across interconnected waters

Submitters	(multi choice) Please select your preferred outcome to proposal 11.1	Do you have a brief comment to make about the proposal to introduce a 2 sports fish daily bag limit at Wairepo Arm, Kellands Pond and Upper Ōhau River.
David Folley	A. No change – I want daily bag limits to remain unchanged at Wairepo Arm, Kellands Pond and Upper Ōhau River.	No written feedback provided.
Chris de Joux	A. No change – I want daily bag limits to remain unchanged at Wairepo Arm, Kellands Pond and Upper Ōhau River.	From my observations over time very few people fish Wairepo Arm and Kellands ponds, early season fishing on the upper Ohau can be productive at times. You state in your last paragraph that harvest rates will change very little under both scenarios, why change something that isn't broken.
Matthew Muir, Maryana Hamilton, Blair Chamberlain, Peter Mcleod, Darryl Foster, Peter Munro, Craig Shelley, Keith Smettem, Eric Graynoth, Christopher Leathers, Dean Rattray, Linn Koevoet, Daniel Isbister, Craig Hill, Yutong Wu, Brendan McGillicuddy, Jerry Walton, Richard Horrell, Graeme Marshall, Nicholas Moody, Peter Boyce, Marcel van Leeuwen, Kapeel singh, Lance Gill, Arno bynevelt	B. I support R Adams proposal to introduce a 2 sports fish daily bag limit at Wairepo Arm, Kellands Pond and Upper Ōhau River	No written feedback provided.
Paul Ormandy	B. I support R Adams proposal to introduce a 2 sports fish daily bag limit at Wairepo Arm, Kellands Pond and Upper Ōhau River	Makes sense to standardize.
Don Paton	B. I support R Adams proposal to introduce a 2 sports fish daily bag limit at Wairepo Arm, Kellands Pond and Upper Ōhau River	Makes sense to have all attached waters the same limit.

Suzanne Atkinson	B. I support R Adams proposal to introduce a 2 sports fish daily bag limit at Wairepo Arm, Kellands Pond and Upper Ōhau River	Agree that they form the same 'fishery', therefore the same regulations makes perfect sense
Paul Centofanti	B. I support R Adams proposal to introduce a 2 sports fish daily bag limit at Wairepo Arm, Kellands Pond and Upper Ōhau River	Simplicity is the key for canals.
Graeme Bell	C. I do not support any of the above options.	the upper ohau river should be a total closed river as is observed by overseas fisherman who will not fish it and nor will many locals, it is the main spawn area for ruataniwha and many fish are being killed during spawning and eggs trampled all for more spawning revenue ,i and many others are against this ,in tasmania you would do a stint in jail I wonder why the only place left a little productive is fishing the point from midnight to four am in morning taking away more big spawning fish, that also will only last so long,what then?
Patrick Jones	C. I do not support any of the above options.	If the current rules don't threaten sustainability of the fishery and you want it simplified make it a blanket 4 sports fish limit. 3 if you want to be more cautious, does the same thing without limiting angler opportunity

Appendix 12 – CSIFG and NCFG Regions sea-run salmon 2021/22 Angler Notice Review

The once famous sea-run salmon fisheries of Canterbury and North Otago that account for almost 90% of all sea-run salmon caught in the South Island, now have less than 10% of the numbers seen in the 1990's. In November 2017 the Central South Island (CSIFG) and North Canterbury (NCFG) Fish and Game Councils organised a Salmon Symposium for the angling community and other stakeholders to consider ways to address the sea-run salmon crisis. From the Symposium it was clear that to kick-start the recovery of the sea-run fishery we needed to initially focus on what is within our direct control.

Current harvest controls, including the daily bag limit, are not precise enough to control excessive harvest by highly successful anglers while also maintaining opportunity for all anglers. In 2019, the two Fish and Game Councils unanimously endorsed a four sea-run salmon season bag across all of their region's sea-run salmon fisheries at the soonest possible time. The season bag policy was approved by the Minister of Conservation in February 2020 and awaits approval by Cabinet. This process has been delayed as a result of Covid-19 and the hoped for introduction of the season bag for the 2020/21 season was not achieved.

Another initiative from the Salmon Symposium was the formation of the New Zealand Sea-run Salmon Committee comprising a group of stakeholders focussed on addressing the crisis. This Committee has supported the season bag limit and development of spawning targets in a proposed threshold management strategy as priority actions to assist recovery of the fishery.

The National Sea-run Salmon Committee has been in recess since February 2020. It is important that the consultative and consistent approach to salmon management continues as developed by CSIFG and NCFG councils at a joint meeting in May 2020.

The purpose of this joint CSIFG and NCFG staff report is to recommend to the respective Councils, that consistent sea-run salmon angling conditions be applied across the two regions for the 2021/22 Anglers Notice (AN) based on current salmon population trends and application of the threshold management strategy. Recommendations are provided for two scenarios – one with and one without a season bag, supplemented with background and supporting information.

Recommendation for Anglers Notice 2021/22

EITHER OPTION 1, 2 or 3 -

OPTION 1

If the Freshwater Fisheries Regulations are not amended to permit a season bag limit to be implemented for the 2021/22 season –

1.1 CSIFG Council and NCFG Council recommend for their regions -

1.1.1 Retention of a daily bag limit of one sea-run salmon, and

1.2 CSIFG Council recommends-

1.2.1 for the Waitaki River, that the open season for sea-run salmon

fishing shall be from 1 December to 31 March, and

1.2.2 for the Ashburton, Orari and Opihi rivers and the Rangitata River below Turn Again Point, that the open season for sea-run salmon fishing shall be from 1 December to the last day of February, and

1.2.3 for the Rangitata River and tributaries above Turn Again Point, that the open season for sea run salmon fishing from 1 December to 31 January, and

1.2.4 for Lake Heron, that the sport fishing season shall be from the 1st Saturday in November to 30 April and the minimum length for salmon killed shall be 250mm and the maximum length shall be 450mm [unchanged] **and**

1.2.5 for Lake Stream, that the sea-run salmon season remains closed [unchanged]**, and**

1.2.6 for remaining sea-run salmon fisheries listed in the AN for CSIFG Region there shall be an open season for sea-run salmon fishing from 1 December to the last day of February, and

1.3 NCFG Council recommends –

1.3.1 for the Waimakariri River downstream of Staircase Stream, that the open season for sea-run salmon fishing shall be from 1 December to 31 March, and

1.3.2 for the Waimakariri River upstream of Staircase Stream confluence, that fishing for sea-run salmon is not permitted, and

1.3.3 for the Rakaia River downstream of the Coleridge tailrace confluence, that the open season for sea-run salmon fishing shall be from 1 December to the last day of February, and

1.3.4 for the Rakaia River upstream of the Coleridge tailrace confluence, that fishing for sea-run salmon is not permitted, and

1.3.5 for the Ashley River downstream of Ashley Gorge Bridge, Avon River downstream of the Barbadoes Street Bridge, Cam River from Kaiapoi River confluence to Smith Street Bridge, Heathcote River, Hurunui River below the South Branch confluence, Lee Stream, Saltwater Creek, Tentburn outfall, and Waiau River downstream of Hope River confluence, that the open season for sea-run salmon fishing shall be from 1 December to the last day of February, and all other parts of these rivers shall remain closed for sea-run salmon fishing.

OR –

<u>OPTION 2</u>

If the Freshwater Fisheries Regulations 1983 are amended to permit a season bag limit to be implemented for the 2021/22 season,

2.1 CSIFG Council and NCFG Council recommend for their regions-

2.1.1 a season bag of two sea-run salmon, and

2.1.2 there be no daily bag limit for sea-run salmon, and

2.2 CSIFG Council recommends -

2.2.1 for the Waitaki River downstream of a line running beneath the power lines across the river at the Stonewall, that the open season for sea-run salmon fishing shall be from 1 October to 30 April, and

2.2.2 for the Waitaki River between the Waitaki Dam and a line running beneath the power lines across the river at the Stonewall, or in any tributary of that part of the river, that the open season for sea-run salmon fishing shall be from 1 October to 31 March, and

2.2.3 for the Rangitata River below Turn Again Point, that the open season for sea-run salmon fishing shall be from 1 October to 30 April, and

2**.2.4 for the Rangitata River and tributaries above Turn Again Point, that the open season for sea-run salmon fishing shall be from 1 October to last day of February, and**

2.2.5 for the Ashburton, Orari and Opihi rivers, that the open season for sea-run salmon fishing shall be from 1 October to 30 April, and

2.2.7 for Lake Heron, that the sport fishing season shall be from the 1st Saturday in November to 30 April and the minimum length for salmon killed shall be 250mm and the maximum length shall be 450mm [unchanged]**, and**

2.2.7 for Lake Stream that the sea-run salmon season remains closed [unchanged]**, and**

2.2.8 for remaining fisheries listed in the AN for CSIFG Region with sea-run salmon fisheries, there shall be an open season for sea-run salmon fishing from 1 October to 30 April, and

2.3 NCFG Council recommends –

2.3.1 for the Waimakariri River downstream of Staircase Stream, that the open season for sea-run salmon fishing shall be from 1 October to 30 April, and

2.3.2 for the Waimakariri River upstream of Staircase Stream confluence, that fishing for sea-run salmon is not permitted, and

2.3.3 for the Rakaia River downstream of the Coleridge tailrace confluence, that the open season for sea-run salmon fishing shall be from 1 October to 30 April, and

2.3.4 for the Rakaia River upstream of the Coleridge tailrace confluence, that fishing for sea-run salmon is not permitted, and

2.3.5 for the Ashley River downstream of Ashley Gorge Bridge, Avon River downstream of the Barbadoes Street Bridge, Cam River from Kaiapoi River confluence to Smith Street Bridge, Heathcote River, Hurunui River below the South Branch confluence, Lee Stream, Saltwater Creek, Tentburn outfall, and Waiau River

downstream of Hope River confluence, that the open season for sea-run salmon fishing shall be from 1 October to 30 April, and all other parts of these rivers will remain closed for sea-run salmon fishing,

OR –

<u>OPTION 3</u>

If the Freshwater Fisheries Regulations 1983 are not amended to permit a season

bag limit to be implemented for the 2021/22 season,

3.1 CSIFG Council and NCFG Council recommend for their regions-

3.1.1 retain all sea-run salmon conditions as they were for 2020/21.

A simple interpretation of these recommendations is that if the season bag is not able to be implemented then alternative combinations of season and area controls are needed to obtain the equivalent increased level of restriction on harvest that a two-fish season bag would have introduced (Option 1). All sea-run salmon fisheries should have a 1 December season opening applied. The Waitaki and Waimakariri salmon runs are characterised as late run rivers and current March closures and daily bag limit of one sea-run salmon achieve the equivalent harvest restriction as a two-fish season bag limit. The Rakaia and Rangitata rivers and all other sea-run salmon fisheries require a closure of the season at the end of February and retention of a one-fish daily bag limit to achieve the equivalent harvest restriction as a two-fish season bag limit. The upper Rangitata River season will close one month earlier than at present in common with the reduction in season length for the remainder of the river.

If a season bag limit is available (Option 2) it should be implemented across both regions at a limit of two sea-run salmon. A season bag of two is considered a sufficiently increased restriction on harvest that a daily bag limit of one and reduction of the open season outside 1 October to 30 April are not required except for protection of upper river spawning areas.

If the season bag is not available, season conditions for sea-run salmon fishing should remain as for 2020/21 (Option 3).

<u>Supporting Staff Assessment</u>
<u>Background</u>
Salmon entering rivers to spawn are either caught by anglers and removed from the river or avoid anglers and continue upriver to spawn. The sum of angler catch and the number of salmon spawning therefore provides an estimate of the total run of salmon returning to fresh water.

The Waimakariri, Rakaia, Rangitata, and Waitaki rivers and more particularly the first three, have annual monitoring programmes for spawning, angler catch and run size that are robust, have been undertaken for 26 years and have generally been consistent in methodology. Based on these rivers' contribution to the CSIFG and NCFG sea-run salmon fishery and their on-going population monitoring programmes, it is sensible to use them as indicators of the status and trends across the CSIFG and NCFG fishery to justify introduction of management actions and for showing fishery response to those actions.

Spawning in the Waimakariri, Rakaia and Rangitata rivers occurs in a few well defined and stable spring streams in their upper reaches while spawning in the Waitaki River occurs in the

70km of mainstem below the Waitaki Dam. It is almost impossible to undertake repeat live fish counts to estimate the spawning run size for the Waitaki as occurs in the three other rivers. As a consequence Waitaki run size estimates require a further assumption in converting redd (nest) counts to live fish. For this reason, and that consistent annual redd counts for the Waitaki only began in 2013, the Waitaki spawning and run size estimates are not yet extensive or robust enough for contribution to a cross-region sea-run salmon spawning population database.

Monitoring of wild salmon in the Waimakariri, Rakaia and Rangitata rivers provides a record of annual angler catch, spawning population size, total run size and trends across 26 years. These fisheries, including the Waitaki for its shorter period of record, show very similar population trends, either increasing or decreasing together on an annual basis and they all share the current critically low state (Figure 1).

The similarity in trends across the four rivers and particularly for the Waimakariri, Rakaia, and Rangitata rivers, indicate the significance of the reduction in salmon numbers that occurred around 1998 to 2001, the absence of improvement since that time, and also strongly suggests that salmon survival in these rivers is very likely controlled by common influences when salmon are in a common environment. If the Waimakariri, Rakaia and Rangitata sea-run salmon fisheries are subject to the same principal population controls this provides strong support for consistent management and consideration of them as one harvest management unit.

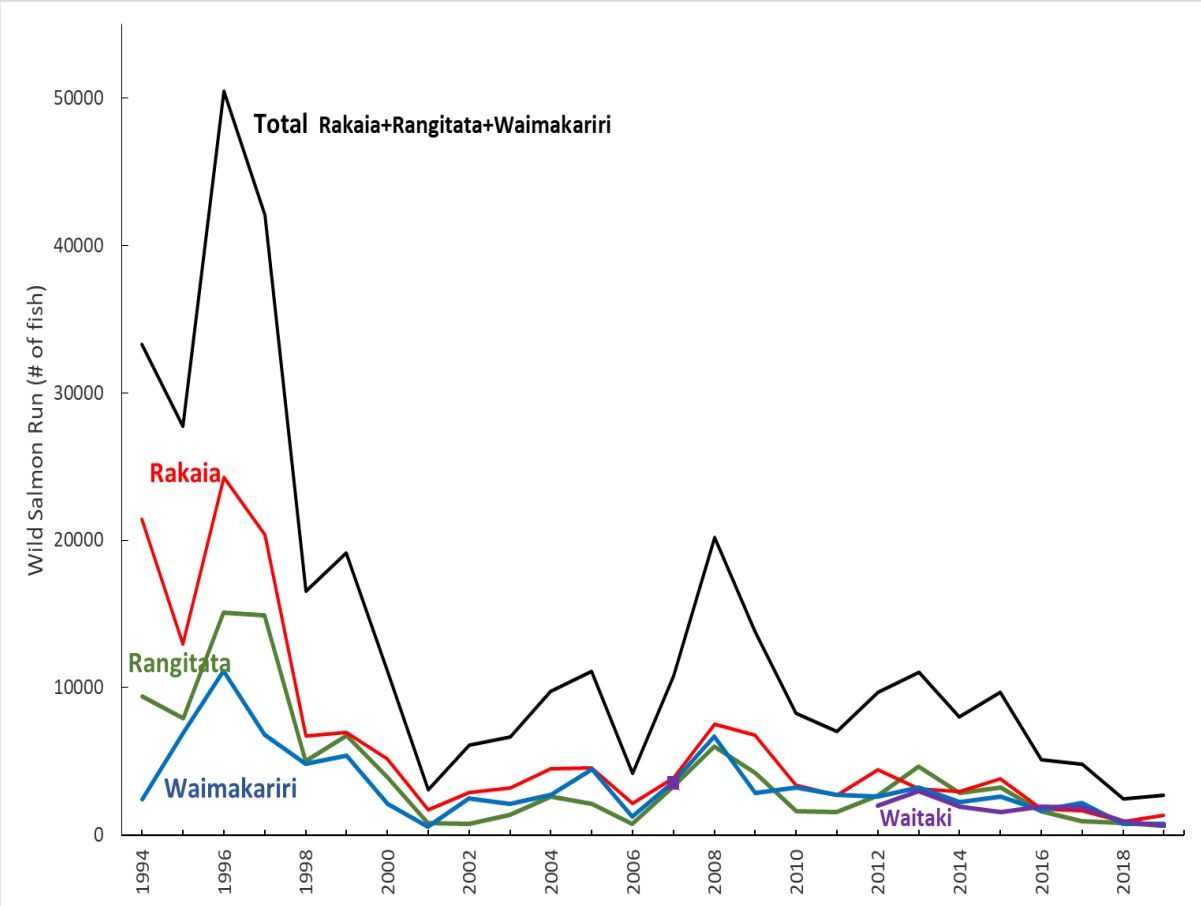

Figure 1. Estimated wild salmon returning to the Rakaia (red), Rangitata (green), and Waimakariri (blue) rivers for 1994 to 2019, Waitaki River (purple) 2007 and 2012 to 2019, and total combined for the Rakaia, Rangitata and Waimakariri (black), 1994 to 2019.

A longer period of record for redd counts in the same reaches of Deep Stream and Deep Creek in the upper Rangitata River since 1957, might suggest salmon population decline has been occurring for longer than just the last 20 years (Figure 2). These reach counts represent between 60% and 80% of the total redd counts for those streams in years when total counts were undertaken and these two streams in turn account for greater than 90% of all known Rangitata River salmon spawning.

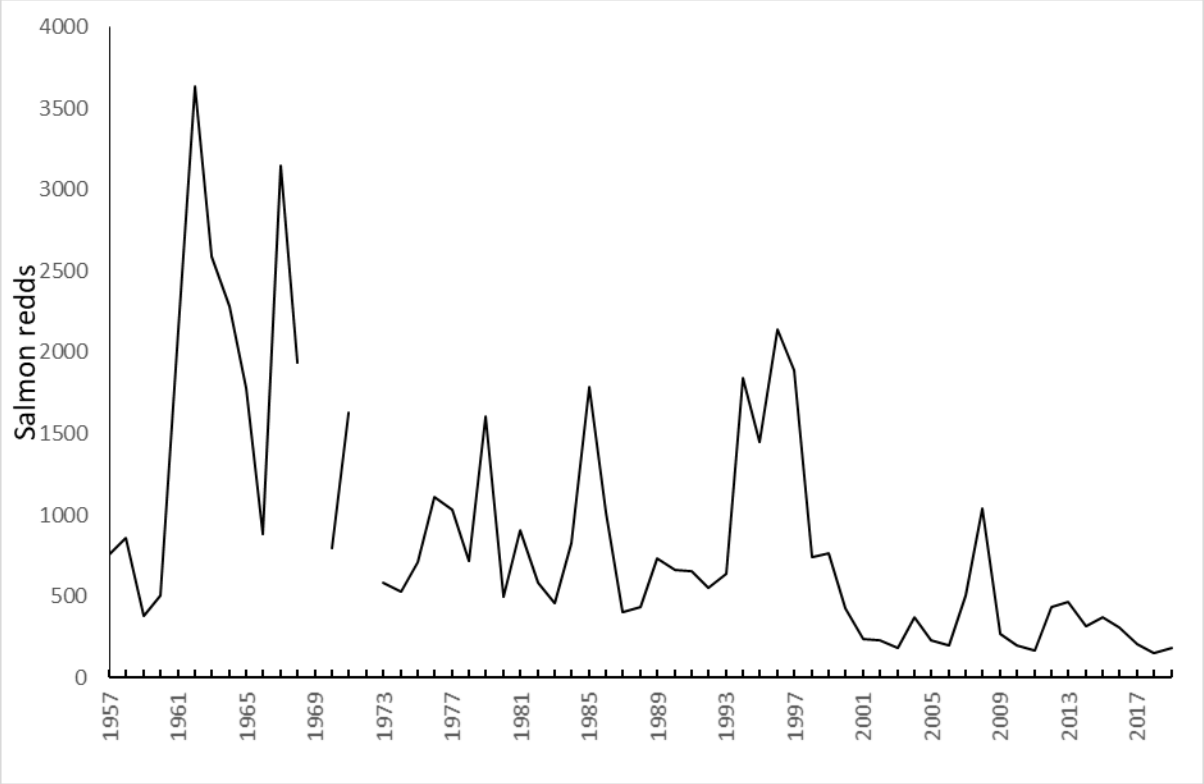

Figure 2. Salmon redd counts in consistently surveyed reaches of Deep Stream and Deep Creek in the upper Rangitata River, 1957 - 2019.

Where Fish and Game can make a difference and where we do have direct control is in the freshwater environment and in particular, regulation of angler catch. Since 1994, angler catch of all salmon returning has averaged 38% for the Rakaia and Rangitata and 54% for the Waimakariri and with a range from a high of 74% in the Waimakariri in 1999/00, to a low of 12% in the Rangitata in 2003/04. While these figures suggest a priority order for harvest control, the CSIFG and NCFG councils should agree to manage angler harvest of the salmon fishery as a whole with consistency and transparency. The similarity of each river's track in Figure 1 supports harvest management of these rivers as a single entity.

A priority identified by the National Sea-run Salmon Committee for improved sea-run salmon management was to manage angler harvest to ensure that each year there are sufficient wild spawners remaining to increase or at least maintain the population size of the next generation of adult returns. This could be achieved by setting thresholds for spawner numbers based on the 26-year historical spawning population range and minimum acceptable spawning population size. Between the thresholds there would be defined spawning population bands each with a different level of harvest regulation associated with it. These regulations would increase the number of fish that survive to spawn when the population is in a low population band or relax angling restrictions when the population is healthy.

The threshold strategy targets the spawning population size of wild salmon for several reasons – it is from the spawning population in any year that the next generation of adult returns are produced, and annual spawning population monitoring programmes are the earliest available measure of the salmon population. Each year the estimates of live fish on the spawning grounds made from repeat aerial counts are available in May and can be accommodated within New Zealand Fish and Game Council (NZFGC) deadlines for Anglers Notice recommendations for the following season. Using spawning population size as the guide for harvest management ensures decisions are made on the most up-to-date information. Total salmon run estimates are not available until completion of angler catch surveys in July – too late for consideration in the Anglers Notice.

This strategic approach increases the transparency of how and why harvest regulations are set and avoids the ad hoc regional reviews of individual fisheries that can produce inconsistencies in regulations. This approach requires –

1. The setting of thresholds based on spawning population targets,
2. The magnitude of change in harvest required to achieve a spawning population target, and
3. The conditions in the Anglers Notice that will be applied to achieve the spawning population target –
    3.1. without a season bag limit (Option 1)
    3.2. with a season bag limit (Option 2)
4. Retain current 2020/21 conditions (Option 3)
5. Future Harvest Management - threshold management and application of the season bag limit

The following review considers the magnitude of changes needed in angler harvest to achieve levels of spawning population response, and the season bag limits or alternative conditions required to achieve spawning population targets. This information supports the agreement of CSIFG and NCFG councils at a joint meeting in May 2020 for development of a strategic approach to salmon harvest management across the two regions and introduction of a season bag limit.

1. Thresholds

It is proposed that three thresholds are sufficient to categorise the health of the salmon spawning population. Fewer thresholds are unlikely to provide a timely and strong enough reaction to avoid the fishery falling to the lowest band where there could be justification to close the fishery. More than three thresholds may result in harvest conditions being changed too frequently with little opportunity for the spawning population to stabilise in reaction to a period of stable harvest.

Three thresholds provide for an upper threshold above which the fishery can be considered healthy and where a minimum of harvest conditions would apply. Across the 26 years of spawning population information the 75th percentile has been selected as the threshold above which the fisheries are considered to be healthy. The 75th percentile means the level at which 25% of the annual spawning counts were exceeded since 1994. For the Waimakariri, Rakaia and Rangitata rivers the 75th percentiles are 1,700 and 3,800 and 2,300 fish, respectively (Table 1).

Table 1. Salmon spawning population thresholds representing healthy, moderate, low, and severe management bands based on 26 years of population records for the Waimakariri, Rakaia, and Rangitata rivers and combined total for all three rivers.

Management Band	Waimakariri	Rakaia	Rangitata	Total, 3 rivers
Healthy	>1,700	>3,800	>2,300	>7,800
Moderate	1,401 to 1,700	2,201 to 3,800	1,501 to 2,300	5,101 to 7,800
Low	250 to 1,400	550 to 2,200	400 to 1,500	1,200 to 5,100
Severe	<250	<550	<400	<1,200

The moderate and low thresholds delineate two bands where there would be active and increasing application of controls on harvest to try to avoid the fishery falling into the severe management band. The moderate threshold corresponds to the median or middle value of the 26-year spawning records for the Waimakariri of 1,400 spawners, Rakaia 2,200 spawners and Rangitata 1,500 spawners. The low threshold is recommended to be at the 5th percentile for recorded spawning population size in each of the rivers over the last 26 years. This is the level that 95% of spawning records exceed and corresponds to 250 in the Waimakariri, 550 in the Rakaia, and 400 in the Rangitata. These individual river spawning population sizes sum to 1,200 fish and the lowest recorded combined spawning population size between 1994 and 2020 was 1,330 fish in 2019.

One of the aims of setting thresholds and application of restrictions in the higher bands is to avoid complete fishery closure. It is recommended that below the low threshold, in the severe management band, while the fishery may not be closed, restrictions would be very severe e.g. a one fish season bag limit in addition to season and area restrictions.

2. Magnitude of change for a spawning population response

In theory a reduction in harvest produces a corresponding increase in the spawning population that, with all other things remaining equal should produce more juvenile salmon going to sea and an increase in adults returning. The increased returning run produces more fish to spawn, subject to harvest conditions in place at that time, and over generations the benefit of having more spawners compounds on an approximate three-year cycle. For simplicity this process assumes all fish return at three years of age. Generally three-year old fish make up 60% to 90% of adult returns in any year.

To identify the level of response by the salmon population to changed harvest conditions a salmon population model has been developed. The model uses actual annual year-class survival rates from the 26-year salmon run record to generate a return run size for each year. In turn, each year's return run over the 26 years was harvested at a known rate to generate the angler and spawning components of each returning run. So, for any given harvest rate or change in harvest rate in year 0 that results in a change to the number of spawners in year 0, the model calculates a different return run size in year 3 following application of the year-class survival rate for that year from the actual returns in the 26-year record. In this way, if a proposed harvest management regime had been implemented in the 1993/94 season and maintained for the next 25 years, the model tracks the annual changes in the number of salmon that spawn, are caught by anglers and the total run size.

Many scenarios have been run through the model for each of the three rivers and for the combined rivers. Scenarios attach various harvest levels to each of the spawning population threshold bands in Table 1, to understand the contribution that harvest management can have in restoring salmon run size and then managing the fishery to maintain runs in the healthy band.

Modelled levels of restriction on angler catch ranged from 5% to 70% and could be a flat rate across all management bands or variable with increasing restriction as the population declined.

All scenarios retained a minimum 5% restriction in the healthy threshold band to exert some control on excessive harvest rates even when numbers were above the healthy threshold. Flat rate scenarios produced significant gains more quickly than variable scenarios but at the cost of greater impact on anglers when it was least required. The greatest benefit to the spawning population occurred in scenarios with the highest levels of harvest restriction balanced against the increased hardship imposed on anglers. The scenarios that generated the greatest benefit for least hardship were those where restriction increased as the need for stronger action was required to address a declining spawning population trend into the moderate to severe management bands.

Overall the scenario that assigned a 5% reduction in harvest to the healthy band, 20% reduction to the moderate band and 40% reduction to the low band had the least impact on anglers of the variable regime scenarios modelled and generated significant long-term increases in spawning, angling and total run population sizes (Table 2).

Table 2. Total number of salmon spawning, caught by anglers and run size across the period 1993 to 2018 under actual (historic) harvest conditions and modelled with harvest restrictions of 5%, 20%, and 40% applied from 1993/94 at individual thresholds for each river.

			Waimakariri	**Rakaia**	**Rangitata**
Total spawners		Actual 1994 - 2018	42,029	96,802	58,950
		Scenario 5% 20% 40% applied	86,668	132,373	82,579
		% Change	+106%	+ 37%	+ 40%
Total harvest		Actual 1994 - 2018	45,518	59,033	30,800
		Scenario 5% 20% 40% applied	71,509	62,658	32,423
		% Change	+ 57%	+6%	+ 5%
Total salmon run		Actual 1994 - 2018	87,547	155,835	89,750
		Scenario 5% 20% 40% applied	158,177	195,031	115,002
		% Change	**+ 80%**	**+ 25%**	**+ 28%**

In the period 1993/94 to 1998/1999 for the Waimakariri, Rakaia and Rangitata rivers under the 5% 20% 40% scenario, spawning numbers were in the healthy management band so modelled harvest restriction would be only 5%. Over that period there were sufficient gains made so that by 2001/02 the modelled spawning populations remained above the low threshold where the historical actual spawning runs were closer to the severe management band.

From 2000/01 onwards when actual salmon runs remained low, the modelled scenario applied 20% and 40% harvest restrictions when justified. The modelled scenario produced more spawning fish that generated more fish returning and a further increase in the number of fish spawning - a compounding benefit. These restrictions made significant differences to the

modelled number of fish returning to the Waimakariri River (Figure 3). Between 2000/01 and 2017/18 the historical actual spawning population in the Waimakariri River was in the low band (between the red and orange horizontal threshold lines in Figure 3) in 14 seasons. Yet under the proposed 5% 20% 40% regime it would have been in that band only 3 seasons.

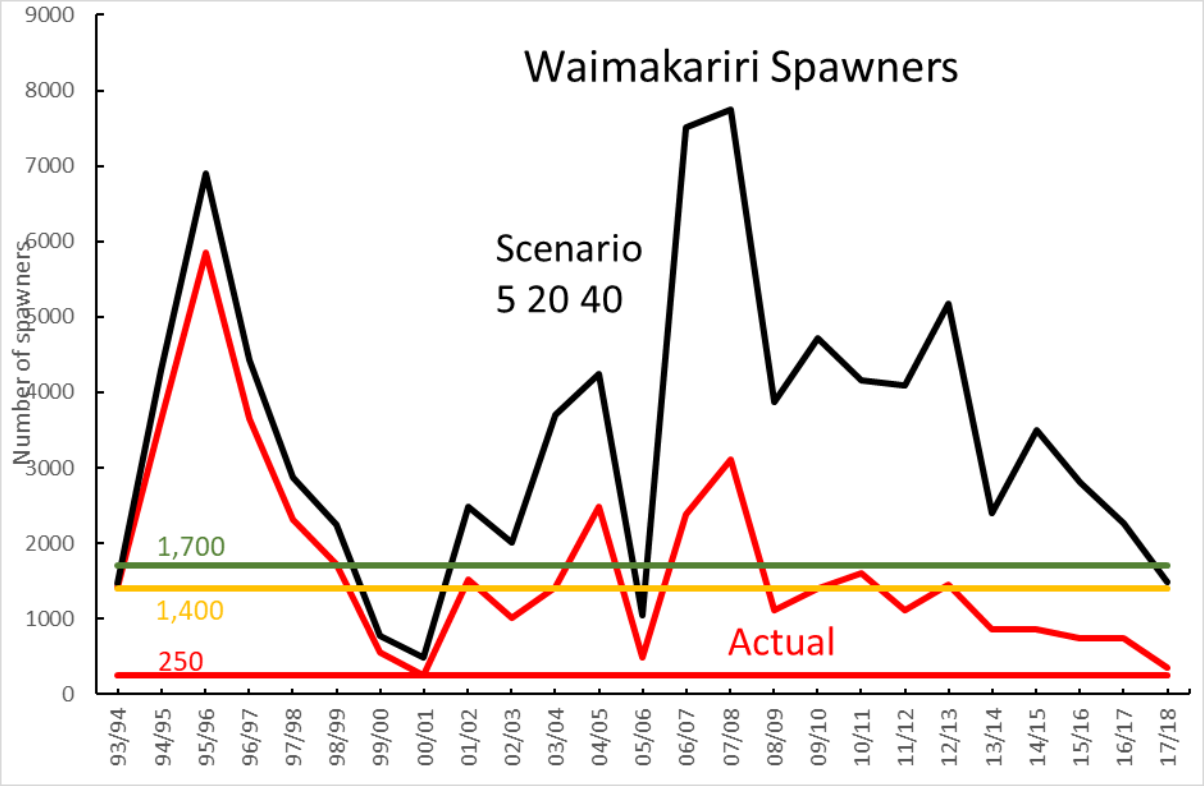

Figure 3. Actual historical (red) and modelled (black) annual spawning population size for the Waimakariri River if management thresholds had been applied since 1994. Horizontal lines represent the healthy (green), moderate (orange) and low (red) management thresholds.

Consideration of harvest management for the salmon fisheries of the Waimakariri, Rakaia, and Rangitata rivers has so far focused on their individual fisheries over the last 26 years and modelled responses to harvest thresholds specific to each river. This has not considered management of the fishery as a whole. As reported earlier the consistency observed over the last 26 years in run-size dynamics across these three rivers points towards management of their harvest as a single population. A season limit bag introduced across the CSIFG and NCFG sea-run salmon fisheries, even if based on population size and trends in the three fisheries, would be almost impossible to implement and manage if these fisheries continued to have their own thresholds and bag limits.

To avoid these complications an alternative process that sums the individual river thresholds plus spawning, catch and total run size, is proposed as the mechanism for applying changes to harvest conditions in response to management bands being breached. This appears to offer a simple and at least equally effective mechanism as individual river-based regimes to manage harvest in the CSIFG and NCFG sea-run salmon fisheries (Figure 4).

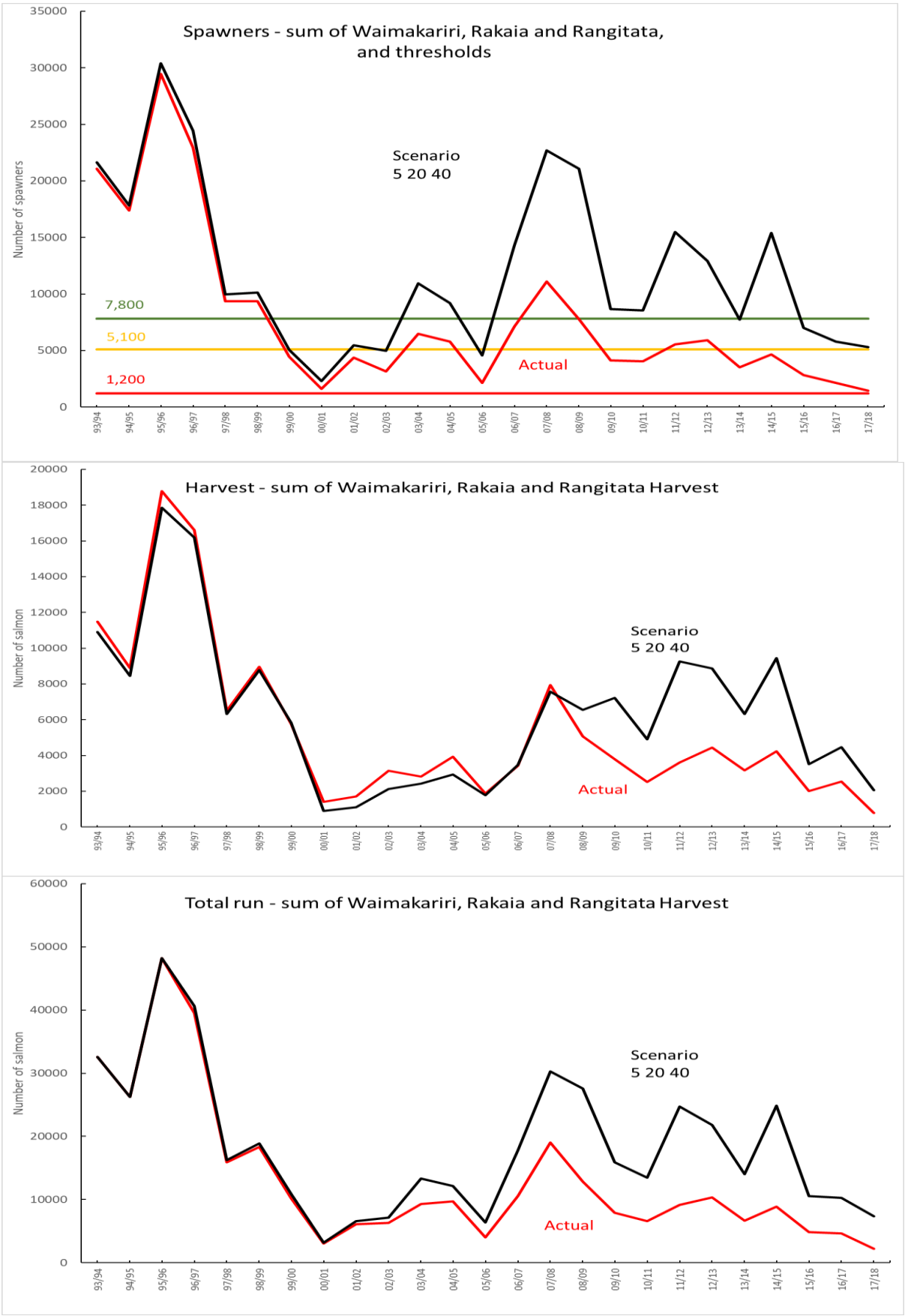

Figure 4. Annual spawning population size, angler harvest and total run size for actual historical combined Waimakariri, Rakaia and Rangitata fisheries (red line) and modelled population sizes (black line) if proposed management thresholds had been in place since 1994.

When the summed thresholds and spawning populations model was compared to the more complex model that provided for individual fisheries responses it was found the individual fisheries model provided more intense regulation with more frequent regulation changes. The individual fisheries model produced a worse result across the three fisheries. The summed thresholds and populations model provided 3,000 (1%) more spawners and 9,200 (6%) more fish available to the angler than the individual fishery response model over the 26-year period. Fishing conditions required changing only four times under the summed model compared to six times under the individual model.

In summary, the salmon population model that combined the three salmon populations for the Waimakariri, Rakaia and Rangitata rivers as one harvest management unit and applied the management scenario that had 5%, 20% and 40% harvest reduction targets for healthy, moderate and low management bands respectively, would have had the least impact on anglers of the scenarios trialled and generated significant long-term increases in spawning, angling, and total population sizes. If the preferred scenario had been applied in 1993/94, then in the poor salmon years experienced from 2000/01 to the present, the model predicted increased spawning that produced stronger returning adult runs that also would have meant more fish available to anglers. The combined population model was predicted to create a simpler management regime and a more positive outcome than the individual fisheries model.

3. <u>Conditions in the Anglers Notice to be applied to achieve the spawning population target with and without application of a season bag limit</u>

Joint CSIFG and NCFG Councillor and Staff meetings in 2019 discussed standardising sea-run salmon fishing conditions across the regions and the need to improve wild salmon spawning numbers. A result of this process was agreement in principle to a threshold management regime based on salmon spawning population targets and introduction of additional daily bag limit and season length restrictions for the 2019/20 season. These were predicted to reduce harvest across the two regions by about 18%.

The 18% reduction remained short of the 40% considered by the two Councils to be necessary given the state of the fishery and it was agreed that introduction of a season bag limit was the next step towards achieving the required control on harvest. Both Councils agreed to seek a four fish season bag limit for the 2020/21 season as an entry level to implementing a season bag, with recognition that the current state of the fishery justified a two fish season bag limit and this would likely be implemented in the second year – the 2021/22 season.

The season bag policy was approved by the Minister of Conservation in February 2020 and awaits approval by Cabinet. This approval has been delayed as a result of Covid-19 and the hoped-for introduction of the season bag for the 2020/21 season was not achieved. There remains uncertainty of legislative support for a season bag for sea-run salmon for the 2021/22 season.

As of 5 May 2021, early spawning survey information for the 2020/21 season sea-run salmon run across the CSIFG and NCFG regions indicates that the 2020/21 spawning population are very likely to be similar in size to those of 2019/20. Recommendations agreed in 2019 by the two Fish and Game Councils that the level of harvest restriction needed for the 2021/22 season of 40%, remain valid. Councils must consider two options for achieving that level of control on harvest – one without a season bag limit, and one with a season bag limit.

3.1 Review of angling conditions if a season bag limit **cannot** be in place for 2021/22 (Option 1)

The 2020/21 Angler Notice recommendations of CSIFG and NCFG councils to NZFGC were to retain the one fish daily bag limit, implement a four fish season bag limit, and apply an open season of 1 October to 31 March.

It was estimated that a four fish season bag and a one fish daily bag would reduce season harvest across all fisheries by 16% and 10% respectively. The impact of the one-fish daily bag limit was based on angler harvest surveys undertaken across a number of years in the 1990's for CSIFG fisheries. Across those survey years regional season harvest of sea-run salmon ranged from 2,900 to 7,100 fish and at that time reduction of the daily bag limit from two fish to one fish was estimated to reduce harvest compared to a two-fish limit by 15% in a good fishing season and 10% in a poor fishing season. The designation of a poor season in the 1990's was considerably different to the poor seasons seen recently where CSIFG regional harvest has been less than 1,000 fish. It is very likely that the impact of a one-fish daily bag limit on current harvest is less than the estimated 10%.

For most CSIFG and NCFG sea-run salmon fisheries loss of April for angling was estimated to reduce harvest by about 5% due to the earlier salmon runs in those rivers where peak angling occurs in January, February, and March and accounts for about 90% of season harvest. Application of the April closure would have greater impact on season harvest in the Waitaki and Waimakariri fisheries due to their later salmon runs and April angling sustaining a higher proportion of season harvest.

Differential impact of April closure on Waitaki salmon anglers compared to other CSI Fish and Game Region salmon fisheries has been shown in 14 years of catch records available since April season closure was first implemented in the CSIFG Region in 2006/07. Although at introduction it was estimated that the April closure would reduce Waitaki harvest by 27%, monitoring in the 15 seasons since its introduction has indicated the average annual reduction in harvest has been 37% with a range of 6% to 73%.

NCFG staff contend that the Waimakariri River sustains a similarly late salmon run to that of the Waitaki River. While there is no specific information available for the Waimakariri on the monthly distribution of season harvest, there is timing and duration information available for spawning from annual repeat live spawner counts (Figure 5). A comparison of timing of the peak spawning counts in spawning streams in the Rakaia, Rangitata, Waimakariri, and Hakataramea rivers since 1993/94 supports the contention that there is similarity in later timing of the salmon runs for the Waimakariri and Waitaki compared to the Rakaia and Rangitata. There is most commonly a month (30 days) difference in the timing of peak spawning between the paired spawning runs. Other smaller rivers in the CSIFG and NCFG regions with sea-run salmon runs e.g. Hurunui and Opihi, are considered to have early salmon runs comparable in timing to those of the Rakaia and Rangitata rivers.

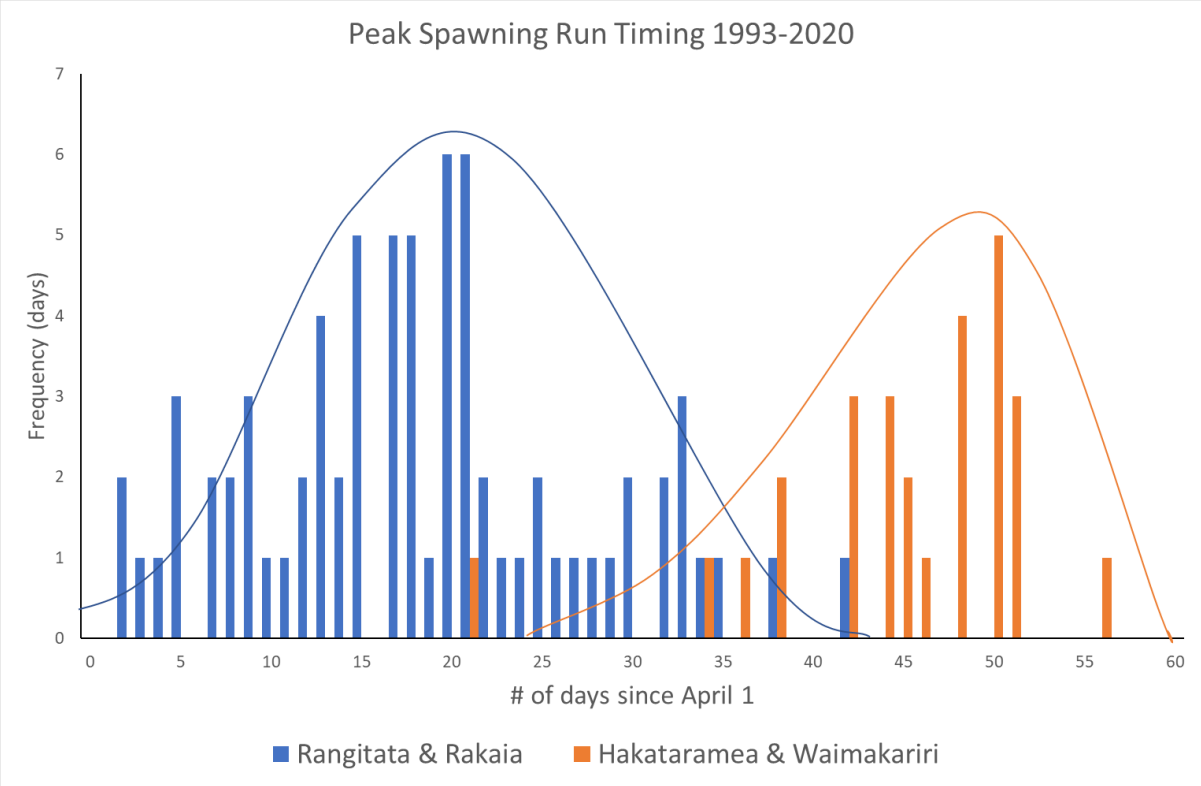

Figure 5. Frequency of timing of annual peak spawning from annual repeat live counts of salmon in spawning tributaries of the Rakaia plus Rangitata and the Waitaki (Hakataramea River) plus Waimakariri from 1994 to 2020.

Since the season bag limit condition could not be implemented for the 2020/21 season, the estimated harvest reduction was 15% (5% for April closure and 10% for 1-fish daily bag) for the Rakaia, Rangitata and all other CSIFG and NCFG salmon fisheries relative to fishing conditions that applied for 2005/06 when both regions last had similar angling regulations (Table 3). The exceptions to the 15% level of reduction were the Waitaki and Waimakariri rivers where the estimated reduction in harvest was 47%, being 37% for April closure plus 10% for 1-fish daily bag.

Table 3. Sea run salmon angler harvest restrictions applied since 2005/06 as a baseline and their estimated impact on CSIFG and NCFG sea-run salmon fisheries, excluding long term river specific area restrictions e.g. Rangitata River above Turn Again Point and NCFG Western Zone closures.

Season	**Region**	**Conditions**	**% harvest reduction (summed all measures)**
2005/06	CSI & NC	2-salmon/day, Oct-Apr season	0%
2006/07 to 2018/19	CSI	2-salmon/day, Oct-Mar season	average 37% for Waitaki 5% for all other rivers
	NC	2-salmon/day, Oct-Apr season	0%
2019/20	CSI & NC	1-salmon/day, Dec-Mar season	average 47% for Waitaki & Waimakariri 18% for all other rivers
2020/21	CSI & NC	1-salmon/day, Oct-Mar season	average 47% for Waitaki & Waimakariri 15% for all other rivers

In producing these estimates of impact on harvest from the combination of different angling conditions, the individual components have been summed. In reality the total impact on harvest of a number of compounding conditions is likely to be less than a simple sum of the parts when compliance with some conditions may also limit the opportunity for anglers to fulfil other conditions. Also most of the information on daily bag limits comes from seasons with better runs than at present and restrictions on daily capture are likely to be less effective in years with smaller runs.

Combined spawning populations in the Waimakariri, Rakaia, and the Rangitata rivers in the three most recent seasons ranged from 1,330 to 1,630 fish, have been the lowest since live fish counts began in 1993, and likely to be the lowest ever. These levels are slightly above the severe spawning population threshold of 1,200 fish (Table 1). In the last three years the Waitaki River has sustained the three lowest redd counts from 16 spawning counts conducted since 1976.

Returns of sea run salmon to CSIFG and NCFG rivers for the 2020/21 season are predicted to be historically low based on available angler catch records and aerial spawning counts conducted up to early May. Final spawning counts will not be completed until June and harvest estimates will not be completed before July. If early indications are accepted that 2020/21 salmon runs will be on par with the previous three years, then there is strong justification for immediately seeking the approximate 40% reduction in harvest from its level in 2005/06, as agreed by CSIFG and NCFG in 2019.

If the season bag is not available for implementation for the 2021/22 season and the target for harvest reduction remains at a level of approximately 40% relative to harvest pre-2005/06 as forecast at the 2020 joint CSIFG and NCFG council meeting, then additional season and area closures from those that operated for the 2020/21 season must be considered (Table 4).

Table 4. Impact of a one-fish daily bag limit and contribution to sea-run salmon harvest by month and river area for CSIFG and NCFG fisheries. Monthly contribution to harvest was sourced from five years of CSIFG angler diary records 1987 to 2006, and area contribution to harvest was sourced from three years of combined CSIFG and NCFG email and telephone surveys, 2018 to 2020.

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Condition	**Application**	**Contribution to harvest**
Daily limit bag	1 fish per day	10% reduction all rivers
Closed period	October + November	0% Waimak & Waitaki, 3% all other rivers
	December	1% Waimak & Waitaki, 11% all other rivers
	January	8% Waimak & Waitaki, 30% all other rivers
	February	14% Waimak & Waitaki, 29% all other rivers
	March	40% Waimak & Waitaki, 22% all other rivers
	April	37% Waimak & Waitaki, 5% all other rivers
Area		
Waimakariri	Mouth to SH1	66%
	SH1 to Gorge Br	26%
	Above Gorge Br	8%
Rakaia	Mouth	25%
	Tidal limit to SH1	35%
	SH1 to Gorge Br	24%
	Gorge Br to Coleridge	16%
Rangitata	Mouth, surf & lagoon	50%
	Tidal limit to SH1	16%
	SH1 to Arundel Br	10%
	Arundel Br to Gorge	6%
	Gorge & above	18%
Waitaki	Mouth & tidal reach	13%
	Tidal to SH1	34%
	SH1 to Stonewall	41%
	Above Stonewall	12%
Waiau	Mouth & tidal reach	40%
	Tidal to SH1	8%
	SH1 to Hanmer Br	44%
	Above Hanmer Br	8%
Hurunui	Mouth & tidal reach	83%
	Tidal to SH1	4%
	SH1 to Mandamus Br	5%
	Above Mandamus Br	8%
Ashburton	Mouth & tidal	100%
Orari	Mouth & tidal reach	100%
Opihi	Mouth to SH1	92%
	Above SH1	8%

Distribution of harvest by month for the Waitaki River is considered applicable to the Waimakariri River. For all other rivers, the monthly distribution of harvest is considered to be represented by that for CSIFG rivers as discussed previously.

In 2020/21, all CSIFG and NCFG sea-run salmon rivers with season conditions of a one fish daily bag limit and an October to March season, except for the Waitaki and Waimakariri rivers, have been estimated to have reduced harvest by 15% on average from pre-2006 levels. The proposed combination of a one fish daily bag and further restrictions on open season availability, except for the Waimakariri and Waitaki rivers, could reduce harvest by approximately 40% from pre-2006 levels –

- October and November closure for all sea-run salmon fisheries except for the Waimakariri and Waitaki rivers, saves 3%, and
- March and April closure for all sea-run salmon fisheries except for the Waimakariri and Waitaki rivers, saves 27% (22% March + 5% April), and
- Daily bag limit of one fish saves 10%.

In addition, and specifically for the Rangitata River, it is proposed that the open season above Turn Again Point shall be from 1 December to 31 January. The saving in harvest from the February closure in the Rangitata above Turn Again Point is estimated to reduce the effective season in this reach by approximately half and saves 1% of whole season/whole river harvest. This closure is recommended to ensure that reaches above and below Turn Again Point are consistent in their opening date and both reaches loose one month at the end of their respective seasons.

In the Waitaki and Waimakariri rivers the April closure already restricts harvest by an estimated 37% on average. Since introduction of the April closure in the CSIFG Region in 2006/07, the annual reduction in harvest in the Waitaki River has ranged from an estimated 6% to 73% determined by the timing of the run. The current daily bag limit of one fish adds a further 10% to the harvest restriction total. To achieve the targeted 40% reduction in harvest for the Waitaki and Waimakariri rivers it is recommended that current (2020/21) season conditions remain in place –

- a daily bag limit of one sea run salmon, and
- upriver spawning protections, and

a new condition be added –

- an open season for sea run salmon fishing from 1 December to 31 March.

The recommended later opening of 1 December brings consistency of the season starting date across all CSIFG and NCFG sea-run salmon fisheries. The Waitaki and Waimakariri late runs mean the unavailability of October and November will make negligible difference to angler opportunity to fish for or catch salmon in these rivers. The 31 March season closure retains the status quo for these two rivers.

These assessments have focused on the Waimakariri, Rakaia and Rangitata rivers for which we have consistent live fish spawning counts and a large angler population to target for estimating harvest. The Waitaki River has similarly reliable harvest estimates but the wide distribution of mainstem spawning removes our ability to estimate the annual spawning population size in terms of fish numbers.

The remaining CSIFG and NCFG sea-run salmon fisheries have lower levels of precision for estimates of catchment spawning, salmon angler use of river reaches and season distribution of angler effort. We know that run timing in these rivers is similar to the Rakaia and Rangitata and that their season harvest will be affected to a similar extent by the proposed reduction in season length. The remaining rivers are also characterised by having a substantially higher proportion of season harvest at their river mouths. This confined distribution provides little opportunity to introduce practical and effective harvest restrictions targeting river reaches. Setting sea-run salmon fishing season conditions for these rivers modelled on extensive Rakaia River and Rangitata River records is considered appropriate.

3.2 Review of angling conditions if a season bag limit **can** be in place for 2021/22 (Option 2)
A season bag limit provides a simple and fair method for implementing significant control on angler catch instead of compounding a number of less significant area and season restrictions. Implementing a season bag enables just one condition to be applied to achieve a saving on harvest to meet the spawning target. This is particularly important when a 20% or greater improvement in spawning population size is required and where numerous combinations of season length, area closures and possibly method restrictions, would otherwise be required.

Further support for avoiding significant restriction of the length of the open season is provided by recent scientific evidence that timing of entry to the river and run upstream for individual salmon may be genetically programmed. This would support spreading angler harvest across the whole of the salmon run rather than confining high harvest to a shorter period of the run that may target salmon that are naturally predisposed to return at that time. Removal of these fish in a concentrated period of the run could impact on the overall resilience of the salmon population.

In May 2020 CSIFG and NCFG councils considered introduction of a season bag limit of four sea run salmon with an associated 16% reduction of harvest. Both Councils agreed that a four salmon limit was sufficient for the first year with a season bag in operation (Table 5).

Table 5. Impact of various season bag limits on 909 successful salmon anglers who caught 2,028 sea-run salmon across all CSIFG and NCFG sea-run salmon fisheries in the 2018/19 season and potential stock saved that could have improved spawning in the Waimakariri, Rakaia and Rangitata rivers in 2019.

Season bag limit	**Successful anglers achieving bag size**	**Number of salmon saved**	**Proportion of total harvest saved**	**Potential increase in Waimak, Rakaia, Rangitata spawning**
20	0%	0	0	0
10	2%	37	2%	1%
8	4%	81	4%	3%
6	7%	153	8%	5%
5	12%	211	11%	7%
4	17%	313	16%	11%
3	26%	460	23%	15%
2	45%	689	35%	23%
1	100%	1,100	56%	37%
0	0	2,028	100%	66%

A 40% reduction in harvest from its level in 2005/06 is almost completely achieved with introduction of a season bag set at two fish. The estimated 35% saving from a two fish season bag does not require any additional season or area restrictions so the season could return to October to April. This provides a fairer outcome particularly for Waitaki and Waimakariri anglers than the current April closure that in combination with a one fish daily bag is estimated to create a 47% reduction in harvest on those rivers (Table 3).

The Rangitata River would retain its closure of the season above Turn Again Point from the end of February and the upper river closed fishery status for NCFG fisheries would also remain. Conditions that prevent angling for salmon on the spawning grounds after the end of March would be reintroduced for the Waitaki River and tributaries above the Maerewhenua River or at the more effective and practical demarcation at the powerlines across the river at the Stonewall.

A two fish season bag limit also negates the need for a daily limit of one fish. If an angler is able to catch two fish in one day and in so doing end their season or an angler decides to keep one fish on each of two days, the impact on the fishery is the same. The only instance when having both a one fish daily limit and a two fish season bag reduces harvest, would be if an angler catches one fish and would have gone on to catch a second on the same day but was prevented by the daily limit and the angler does not catch a second fish for the remainder of the season. The incidence of such an event is unknown but likely to be minor compared to the overall benefit of having a season bag.

It is recommended that if a reduction in season harvest of sea-run salmon in the order of 40% from pre-2006 levels is to be achieved in the CSIFG and NCFG sea-run salmon fisheries and the season bag limit for sea-run salmon is able to be implemented for the 2021/22 season that–

1. the season bag limit shall be two fish, and
2. there be no daily bag limit for sea-run salmon, and
3. for all CSIFG and NCFG sea-run salmon fisheries other than the Waitaki River that the open season shall be 1 October to 30 April except that existing upriver spawning protection zones and season closures will remain as for 2020/21, and
4. for the Waitaki River downstream of a line running beneath the power lines across the river at the Stonewall, the open season for sea-run salmon fishing shall be from 1 October to 30 April, and
5. for the Waitaki River between the Waitaki Dam and a line running beneath the power lines across the river at the Stonewall, or in any tributary of that part of the river, the open season for sea-run salmon fishing shall be from 1 October to 31 March.

The recommendations for the boundary of the March/April open season contained in recommendations 4. and 5. that are specific to the Waitaki River, are not the same as existed immediately prior to 2006 but do revert to the upstream limit that applied prior to 1995/96. Prior to 1995/96 the upstream boundary for the early season closure was “a line running beneath the power lines across the river at the Stonewall”. In the period from 1995/96 to 2005/06 the upstream boundary for the April open season was the mouth of the Maerewhenua River which was approximately 7km upstream from the powerlines at the Stonewall. In 1995 the decision was made to move the upriver demarcation point upstream –

"*Council considered that spawning salmon having migrated this far up the Waitaki River should be accorded greater protection in their preferred spawning ground. These are believed to be found above the Maerewhenua River junction."*

In 2009 CSIFG began annual aerial salmon redd counts for the entire lower Waitaki River Catchment that concentrated on identifying the contributions of individual side streams and main river braids. This survey has covered nine years and knowledge of salmon spawning distribution far exceeds that available to CSIFG Council in 1995. The recent continuous record indicates that annually between 3% and 16% and an average of 10% of all lower Waitaki salmon spawning occurs in the reach of river between powerlines at the Stonewall upstream to the mouth of the Maerewhenua River. The contribution of this reach to catchment spawning deserves the protection afforded by siting the boundary for the upriver March closure of the open season at the downstream end of the reach, at the Stonewall powerlines. The powerlines are also far easier to recognise in the river for anglers and for compliance monitoring. Above this boundary the season for sea-run salmon would finish at the end of March and below this boundary the season would finish at the end of April.

4. Retain current 2020/21 sea-run salmon fishing conditions (Option 3)

Retaining current rules for one more year, while awaiting the ability to introduce a season bag limit, is a less preferred but legitimate option.

Without a season bag limit the most significant additional control on harvest proposed under Option 1 is the use of season length restrictions. Reduction in the season length for sea-run salmon angling may cause significantly increased and concentrated angler effort and harvest pressure on the condensed angling season. Option 2, introduction of a season bag limit, provides for season length to revert to its historical October to April period.

Scientific studies overseas have demonstrated that run timing of adult salmon migration into freshwater is a genetic trait. One possible outcome of fishing area regulation changes aimed at reducing overall salmon harvest pressure, while awaiting the ability to implement a season bag limit regulation, could be increased pressure on the core component of the wild salmon run.

In discussions on salmon management some Fish and Game staff and Dr John Hayes from Cawthron Institute have cautioned against implementing regulation changes for extended periods that may increase selective harvest pressure. This could further undermine the recovery of our weakened wild salmon populations. Concerns raised are based on scientific publications made by salmon experts like Professor Tom Quinn from Washington University, who was a key presenter at the 2017 sea run salmon symposium in Ashburton.

In the short-term (1-2 years) it is unlikely that additional season length restrictions recommended as Option 1, will cause significant negative long-term consequences. However, for the reasons stated above, season length restrictions should no longer be seen as a permanent option for maintaining annual catch limits.

In considering the recorded state of the sea-run salmon fishery for the last three years and its likely population level for the 2020/21 season yet to be completed, CSIFG and NCFG staff do not recommend the retention of current 2020/21 season conditions for sea-run salmon harvest (Option 3). However, it is important to consider the precautionary principle and be aware that if anglers change their behaviour, an increase in the concentration of angler pressure could

occur. Thus if the CSIFG and NCFG Councils agree to implement reductions of season length (Option 1) while awaiting the ability to implement an annual catch limit, continued investment should be maintained in detailed monitoring to determine if any changes of salmon angler behaviour and harvest pressure occur.

5. Future Harvest Management - threshold management and application of the season bag limit

A range of sea-run salmon season bag sizes can be applied to season harvest to achieve a range of spawning targets. The salmon population model applied to historical harvest and spawning records identified the potential benefits to the combined spawning populations of the Waimakariri, Rakaia and Rangitata rivers from application of the recommended threshold regime (Figure 3).

There are clear and simple links between spawning population size, level of harvest control required and season bag size to be applied (Table 6).

Table 6. Season bag limit to be applied for the following season determined by the combined spawning population size for the Waimakariri, Rakaia and Waitaki rivers in the season immediately past and the expected improvement in spawning population size for the next season.

Management Band	**Spawning population size**	**Season Bag Limit**	**Harvest reduction**	**Increased spawning**
Healthy	> 7,800	8	4%	3%
Moderate	5,101 to 7,800	4	16%	11%
Low	1,200 to 5,100	2	35%	23%
Severe	< 1.200	1 + possible season and area restrictions	56% +	37% +

Recommendation outside the Angler Notice Process

4.0 That CSIFG Council and NCFG Council adopt for their regions the sea-run salmon population model that combines salmon populations for the Waimakariri, Rakaia and Rangitata rivers as one harvest management unit and applies the harvest management scenario that has 5%, 20% and 40% harvest reduction targets and season bag limits for healthy, moderate and low spawning population management bands.

As the period of continuous salmon population monitoring for the Waitaki River Catchment increases and its precision improves, this river will be considered for addition to the combined population model.