



Exploring regulatory changes to increase sea-run salmon spawning

Consultation Document

January 2026 | New Zealand Fish & Game

Contents

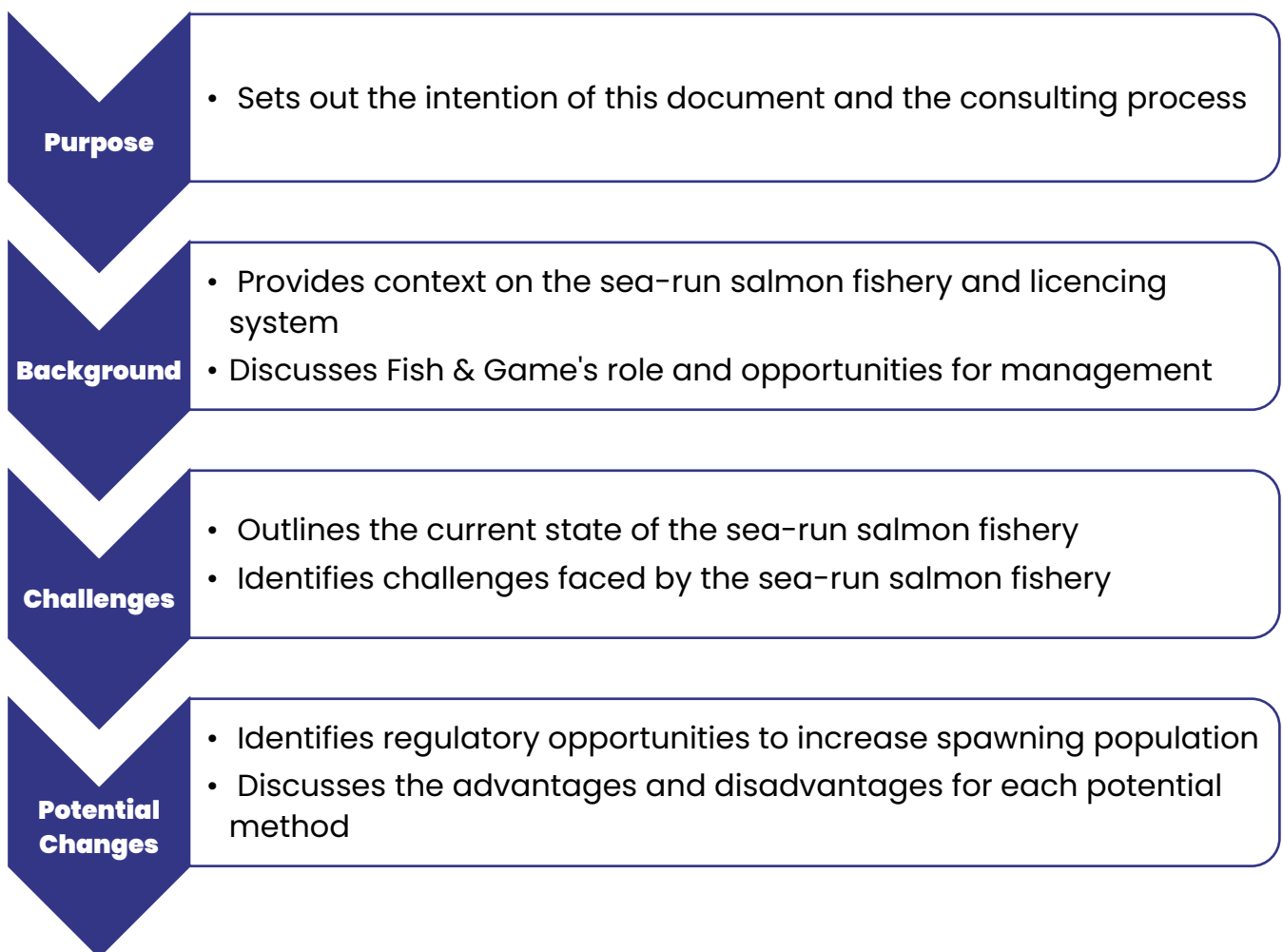
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Purpose of this Document

Fish & Game is seeking feedback on potential regulatory changes that could be implemented to increase the relative size of the spawning salmon population and support the potential of the sea-run salmon fishery to recover. The diagram below summarises the different parts of this document.



What Fish & Game is Seeking Feedback On

Fish & Game is seeking your feedback on a variety of potential regulatory changes to the sea-run salmon fishery within the current management framework, including:

- Reducing season length
- Limiting fishing areas
- Implementing a catch-and-release fishery (0 season bag limit)
- Implementing a temporary season closure

Feedback from this consultation will be integrated into fishery management planning and provided to Fish & Game Councils and the Minister of Hunting & Fishing to support future decision making.

Please note that regulatory changes will only be implemented within the context of the existing framework - when spawning salmon numbers reach the severe management band per the Fish & Game Joint Sea-run Salmon Adaptive Management Strategy¹.



Background

Sea-run salmon, also known as Chinook salmon, are one of New Zealand's most iconic and prized sport fish. Introduced from California in the early 1900s, the salmon are in rivers throughout the South Island, especially in North Canterbury and the Central South Island Fish & Game regions.

What makes sea-run salmon unique is their extraordinary lifecycle. Born in the clean, cool gravels in the headwaters of inland rivers like the Rakaia, Waimakariri, and the Rangitata, juvenile salmon spend their early months in freshwater before migrating out to sea. There, they grow rapidly over 2–4 years, historically reaching impressive sizes, before instinctively returning to the same river they were hatched in, to spawn.

This return journey from the ocean, known as the salmon run, is a once-in-a-lifetime mission for the fish. After re-entering freshwater, the salmon stop feeding entirely, focusing all their energy on reaching upstream spawning grounds. Once they spawn, they die, completing a natural cycle.

Population Decline

Beginning in 1997, the sea-run salmon population on the East Coast of the South Island exhibited a rapid decline to historically low levels. Over the next 20 years the population remained at similar levels, and has shown no sign of prolonged recovery.

During the 2021/22 fishing season, the North Canterbury and Central South Island Fish & Game regions adopted the Fish & Game Joint Sea-run Salmon Adaptive Management Strategy¹, implementing a season bag limit for sea-run salmon in rivers throughout both regions. This constitutes the most significant change to sea-run salmon management in New Zealand since salmon were first introduced.

The objective of the seasonal bag limit was to reduce the proportion of the spawning run that was harvested by anglers each year. Salmon harvested by anglers do not spawn, which means they cannot contribute to the next generation. The goal of limiting how many salmon can be kept by anglers each season is to increase the number of salmon that spawn, and thereby increase the number of salmon in the next generation. The seasonal bag limit has effectively achieved its objective, reducing the proportion of the run harvested from 45% to 15% on the Rakaia, from 57% to 23% on the Waimakariri, and from 35% to 23% on the Rangitata.

However, despite an increased proportion of the run reaching the spawning grounds, the sea-run salmon population has continued to decline, with falling angler catch rates and 2025 spawning estimates reaching another historic low².

¹ Webb, M, and S. Terry. 2020. [Adaptive management strategy for setting North Canterbury and Central South Island sea-run salmon fishing regulations](#). New Zealand Fish & Game.

² Craig, E., N. Dellaway, & H. Sanders Garrick. 2025. 2024-25 Sea-run Salmon Management: Central South Island and North Canterbury regions. North Canterbury Fish & Game.

Indicator Rivers Sea-run Salmon Escapement

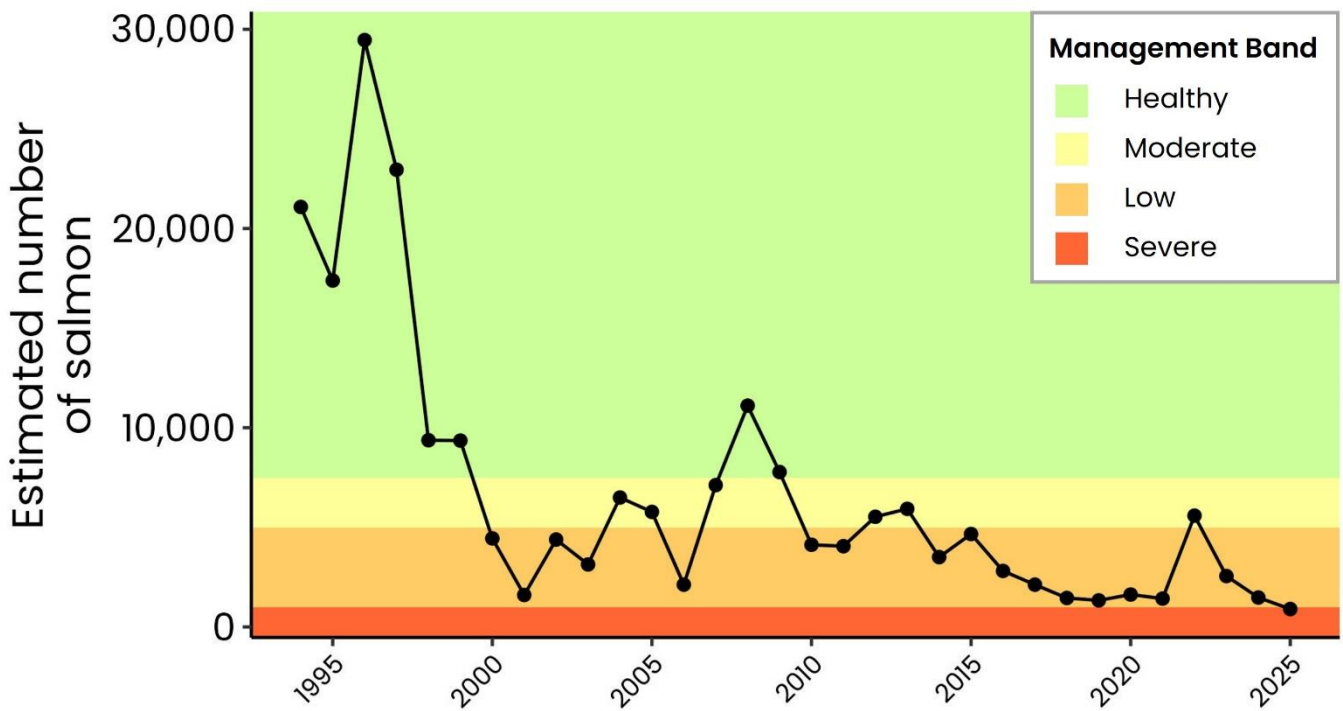


Figure 1. The estimated number of salmon spawning across the three major indicator rivers (Rakaia, Rangitata, and Waimakariri) used to evaluate sea-run salmon population, with shading to represent the various management bands listed in the Joint Sea-run Salmon Adaptive Management Strategy.

Scope of Regulations

The sea-run salmon licence and associated regulations apply only to salmon in listed sea-run salmon waters within the North Canterbury and Central South Island regions of Fish & Game, depicted in Figure 2. The North Canterbury region extends from just south of the Conway River to the south bank of the Rakaia River. The Central South Island region spans from the south bank of the Rakaia River to Shag Point. Some popular sea-run salmon rivers include the Waiau Uwha, Hurunui, Waimakariri, and Rakaia in North Canterbury, and the Ōpihi, Rangitata, and Waitaki in Central South Island. Salmon harvested from lakes or the Central South Island canals are not subject to sea-run salmon regulations.



Figure 2. The North Canterbury and Central South Island regions of Fish & Game. The sea-run salmon adaptive management strategy and associated regulations apply only to sea-run salmon in rivers within these two regions.

Implementing Regulation Change

Changes to the sea-run salmon season bag limit are guided by the size of the salmon spawning population on three indicator rivers. Under the Fish & Game Joint Sea-Run Salmon Adaptive Management Strategy, sea-run salmon management enters the severe management band (Figure 1) at approximately 20% of the average spawning population over the 32-year period 1994 – 2025, henceforth referred to as the historic average.

Implementation of further regulation changes would be based on similar thresholds relative to the historic average. Fish & Game are exploring regulation options for the potential thresholds of 0–5%, 5–10%, and 10–20% of the historic average spawning population (Table 1).

Table 1. The historic average spawning population, severe management band threshold, and potential thresholds at 5, 10, and 20% of the historic 32-year average spawning populations.

River	Historic Average Spawning Population	Severe Band Population Threshold	20% Threshold	10% Threshold	5% Threshold
Waimakariri	1,152	250	230	115	58
Rakaia	2,670	550	534	267	134
Rangitata	2,013	400	403	201	101

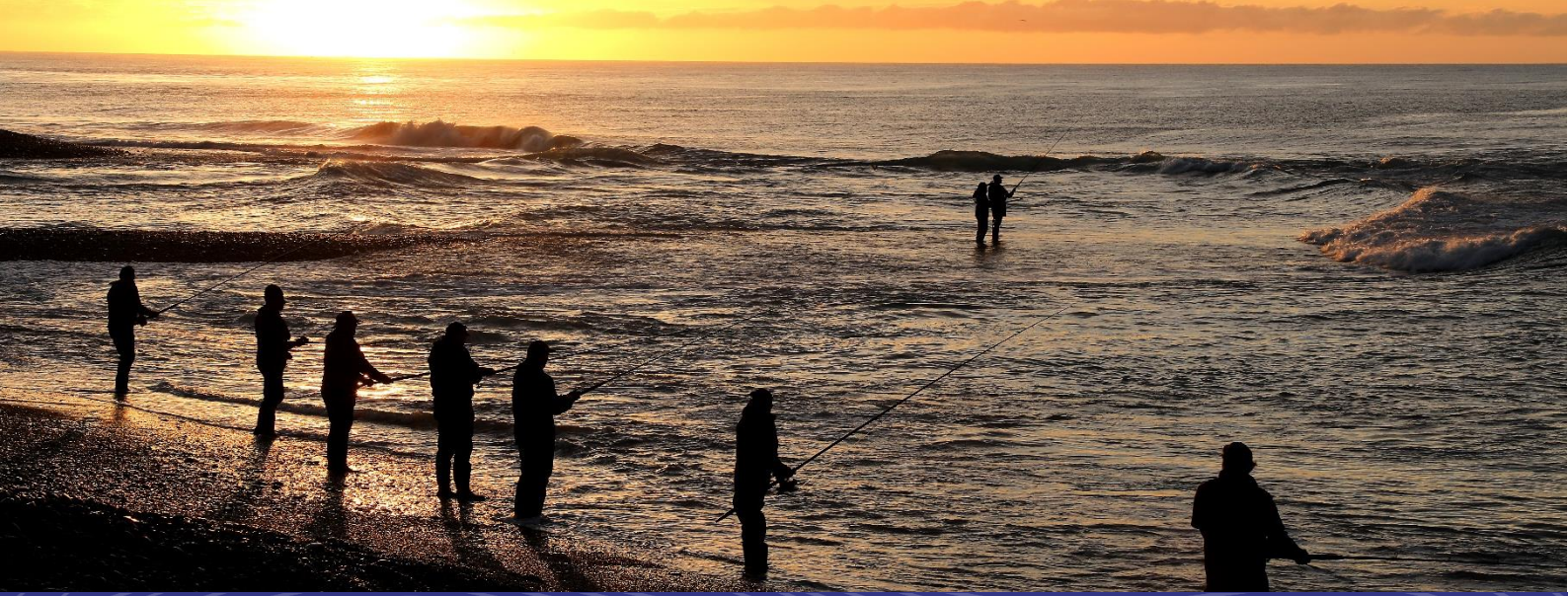
Role of Fish & Game

Established by the Conservation Act of 1987, Fish & Game New Zealand has a statutory responsibility to manage, maintain and enhance freshwater sports fish and game birds and their habitats in the best long-term interests of present and future generations of anglers and hunters.

The methods used by Fish & Game to manage the wild sea-run salmon populations include harvest management, population monitoring and research, environmental advocacy, and education and outreach.

There are a number of factors that influence the salmon life cycle and population dynamics that are beyond the control or statutory function of Fish & Game. To effectively manage the species, Fish & Game focuses instead on the things that can be influenced.

The primary way Fish & Game can influence the sea-run salmon fishery is by changing the harvest rate through fishing regulations. This consultation focuses specifically on measures Fish & Game may take to change sea-run salmon harvest through fishing regulations.



Challenges

Recent data and assessments have increased concern about the health of salmon populations in our managed waters. During the 2024/25 fishing season, sea-run salmon harvest reduced by approximately 60%³. Additionally, the number of fish observed during annual spawning surveys reached a historic low, triggering a bag limit reduction in accordance with the Fish & Game Joint Sea-Run Salmon Adaptive Management Strategy.

These observations are part of a broader pattern affecting salmon across New Zealand, with commercial operations, such as NZ King Salmon, recently announcing harvest reductions due to stressed fish with suppressed appetites⁴.

Climate Change and Ocean Warming

New Zealand's marine environment is experiencing unprecedented change. According to NIWA's 2025 research, New Zealand waters are warming significantly faster than the global average⁵. This accelerated warming has resulted in a cascade of effects throughout marine ecosystems. Additionally, marine heatwaves, which can

³ Craig, E., N. Dellaway, & H. Sanders Garrick. 2025. 2024–25 Sea-run Salmon Management: Central South Island and North Canterbury regions. North Canterbury Fish & Game.

⁴ "NZ King Salmon reduces harvest due to small, 'stressed' fish." NZ Herald/The Country, 3 June 2025.

⁵ Pinkerton, M. 2025. Ecosystem change since first human settlement and current state. NIWA presentation to Environmental Defence Society, Auckland, 12 May 2025.

devastate fish populations and disrupt food webs, are increasing in both frequency and intensity around New Zealand⁶.

These global environmental pressures create significant challenges for wild fisheries. Increasing temperatures impact phytoplankton production, the foundation of the marine food web, altering the food webs from historic norms and resulting in increased year-to-year variability⁵. Changes to ocean temperature and associated changes in primary productivity have caused changes in species distributions. Commercial catch data demonstrates a poleward shift of multiple species including John Dory, Leatherjacket, and Kingfish⁵. Finally, ocean instability increases the risk of rapid environmental shifts known as regime changes, which may result in catastrophic declines in fish stocks⁷.

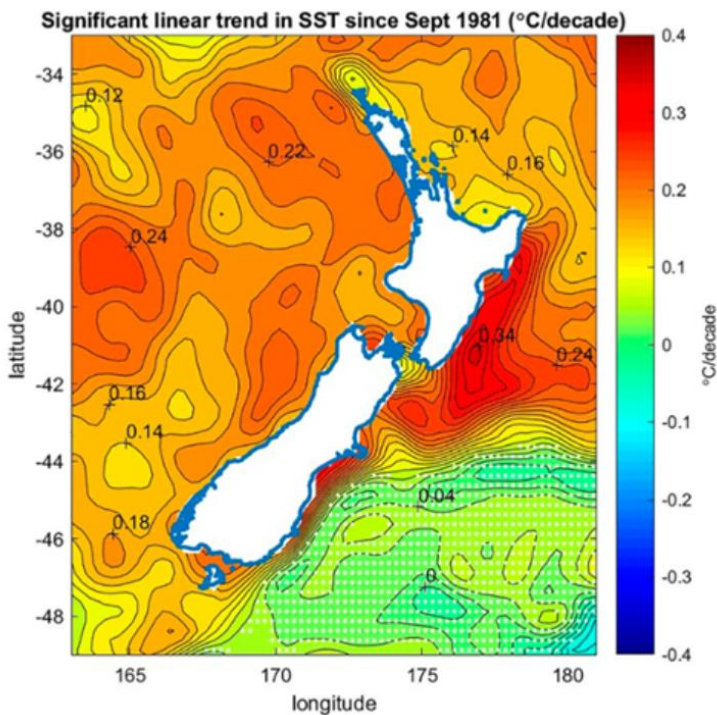


Figure 4. The linear trend in New Zealand sea surface temperatures 1981–2017. Contour intervals are 0.02°C/decade. Sourced from research by NIWA and the University of Auckland⁷.

⁶ Ministry for the Environment & Stats NZ. 2019. New Zealand’s Environmental Reporting Series: [Our marine environment 2019](#). Available from www.mfe.govt.nz and www.stats.govt.nz and Ministry for the Environment & Stats NZ. 2022. New Zealand’s Environmental Reporting Series: [Our marine environment 2022](#). Retrieved from environment.govt.nz.

⁷ Sutton, P.J. and Bowen, M., 2019. Ocean temperature change around New Zealand over the last 36 years. *New Zealand Journal of Marine and Freshwater Research*, 53(3): 305–326. <https://doi.org/10.1080/00288330.2018.1562945>

In salmon, these changes to ocean conditions are likely to cause decreased growth rates, increased competition for food resources, and potentially increased mortality. This is evident in the returns from the annual Rakaia Salmon Fishing Competition, which has reported a declining trend in the average size of sea-run salmon caught since 1996 (Figure 3).

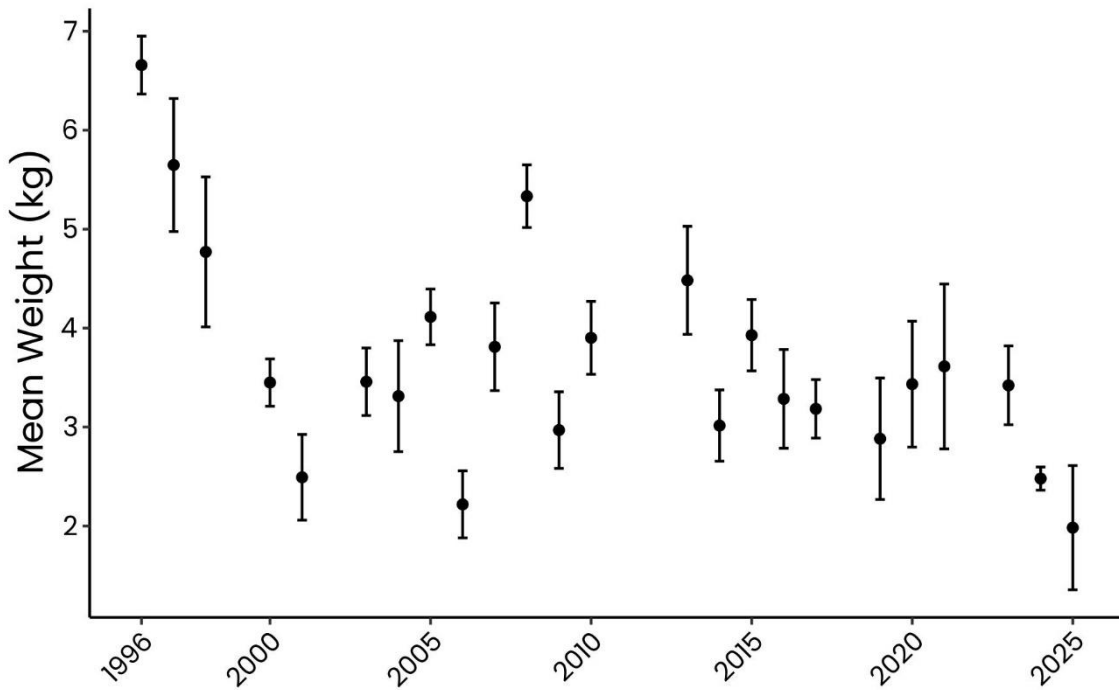


Figure 3. The mean weight of sea-run salmon caught during the annual Rakaia Salmon Fishing Competition.

River Health

Salmon require a specific set of environmental conditions to thrive, including temperature, water quality, and minimum flows. While historically, conditions throughout much of the South Island were ideal to support robust salmon populations, many rivers are facing environmental challenges. As one example, the Rakaia River, a popular salmon fishing river, has experienced a number of changes including⁸:

- Reductions in river flow from historical levels,
- Changes in flood flow patterns with faster floodwater recessions,
- Poor water take and fish screening infrastructure,
- Increases in fine sediment deposition,
- And decreased water depths.

These changes reduce habitat quality for salmon, and are likely to negatively impact the wild run.

Other Challenges

The negative impacts of increasing ocean temperatures, increasing instability in the marine environment, and river habitat degradation on salmon populations have been well documented globally. However, because salmon have a complex, migratory life cycle, it is difficult to identify all possible factors impacting their survival. As such, there are likely additional challenges not listed here that are contributing to the decline of the run.

⁸ Affidavit of Rasmus Michael Gabriellsson in support of application for declarations on behalf of North Canterbury Fish and Game Council and Environmental Defence Society, Environment Court ENV-2023-CHC, 20 December 2023.



Potential Regulatory Changes

The primary way Fish & Game can influence the sea-run salmon fishery is by changing the harvest rate through fishing regulations. There are a number of regulatory changes that can reduce harvest to benefit the salmon spawning population. Each of these regulatory changes may have a different impact on overall harvest and the angling experience.

This section discusses some of the possible regulatory changes Fish & Game may explore to improve the quality of the salmon fishery.

Reducing Season Length

The season for sea-run salmon currently runs from 1 October – 30 April annually. However, harvest is not consistent across the season. For example, fifty percent of salmon harvest since the initiation of the season bag limit in 2021/22 has occurred in the months of February and March (Table 2). As such, Fish & Game may reduce harvest by reducing season length.

Reducing season length may limit anglers' ability to fish during times that have personal intrinsic value. For example, anglers may have annual fishing outings with friends and family or personally catch more salmon at specific times of year. Depending on the month or months chosen to exclude from the fishing season, some anglers may no longer be able to fish during these valued times. However,

reducing season length provides an opportunity to reduce harvest while maintaining the maximum available river reaches to fish.

Table 2. Proportion of sea-run salmon harvest attributed to each month since the 2021/22 the fishing season.

Month	Proportion of Salmon Harvest
October	0.1%
November	0.9%
December	4.2%
January	19.2%

Month	Proportion of Salmon Harvest
February	20.6%
March	29.2%
April	25.8%

Limiting Fishing Areas

Another tactic that could be employed to reduce harvest is to limit sea-run salmon fishing to specific reaches of the river. In this case, Fish & Game must strike a careful balance between reducing harvest, maintaining adequate physical space for anglers to fish, and selecting regulations that are easy to remember and follow. Potential reduction to harvest varies by river, depending on the landmarks used to delineate open fishing areas (Table 3).

Depending on which landmarks are selected to delineate open fishing areas, this tactic may result in anglers being unable to fish for salmon in their favourite fishing spot. Additionally, if the landmarks selected vary by river, the resulting regulations will be more complicated and may deter some anglers from fishing for sea-run salmon. However, limiting fishing areas, as opposed to reducing season length, provides a longer fishing season which may insulate fishing opportunity against poor weather conditions during years with increased flooding or drought, which can result in reduced fishable flow days.

Table 3. The proportion of reported salmon harvest that occurred on each reach of the three indicator rivers since the introduction of the sea-run salmon licence in 2021/22.

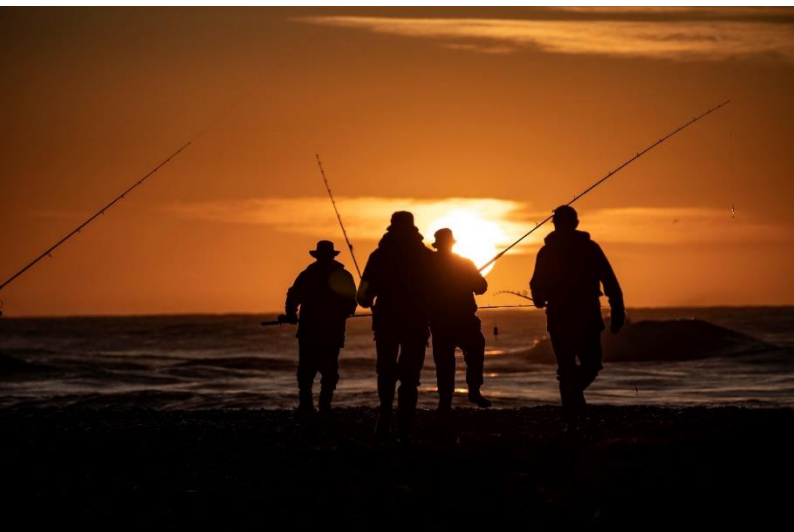
River	Reach	Proportion of Harvest
Rakaia	Mouth	30.8%
	Above tidal reaches to SHI	17.4%
	SHI to gorge bridge	31.5%
	Above gorge bridge	10.5%
	Unspecified	9.8%
Waimakariri	Mouth	27.1%
	Above tidal reaches to SHI	36.2%
	SHI to gorge bridge	16.2%
	Above gorge bridge	9.1%
	Unspecified	11.4%
Rangitata	Mouth and lagoon	40.8%
	Above lagoon to SHI	2.8%
	SHI to Arundel Bridge	9.1%
	Arundel to bottom of gorge	15.0%
	Gorge and above	20.6%
	Unspecified	11.8%

Catch-and-Release Fishing

Another tactic that could be employed to reduce harvest is to implement a catch-and-release salmon fishery. In a catch-and-release system, anglers would be permitted to fish for salmon, but would not be allowed to harvest salmon.

Under the current licencing system, anglers are permitted to catch-and-release salmon until they harvest their one seasonal bag limit. While many anglers do not harvest salmon, allowing them to continue fishing throughout season, a small proportion of anglers do meet their seasonal bag limit at which point they must cease fishing for sea-run salmon. Under a catch-and-release fishing regime all anglers would be permitted to catch-and-release salmon throughout the season.

While a catch-and-release fishery would eliminate legal angler harvest, the process of catch-and-release causes stress to fish and can result in fish mortality. In salmonids, the rate of mortality caused by catch-and-release fishing is highly variable and is dependent on environmental conditions at the time of catch and



treatment of the fish during the catch and release process. In particular, dragging a salmon onto shore, touching a salmon's gills, or holding a salmon out of water for longer than necessary increase the likelihood that a salmon will not survive following release.

However, when compared to a closed fishery, a catch-and-release fishery maintains opportunity for anglers to

target and catch salmon. Sustained fishing opportunity maintains the relationship between anglers and their traditions, and ensures anglers continue to connect to the intrinsic and cultural values of the river. Additionally, a catch-and-release fishery may afford a high level of salmon spawning protections without requiring area or season length restrictions.

Temporary Season Closure

The final tactic that could be employed to reduce salmon harvest is to temporarily close the sea-run salmon fishery, with the intention to reopen the season once the run has recovered. Any temporary closure would be paired with a formal plan outlining specific recovery thresholds which would trigger the reopening of the fishery.

This method would eliminate legal angler harvest of sea-run salmon and reduce catch-and-release mortality to that caused by unintentional bycatch. However, under a closed fishery, anglers may become disconnected from the intrinsic and cultural values of sea-run salmon and the river. Maintaining boots on the river helps maintain the angling tradition.



Consultation Questions

The first three questions will ask you to rank your preference for the use of the various harvest management regulations described in the previous section, based on a potential threshold that may be used to measure the success of the salmon population.

Question 1

River	Spawning population 10–20% of historic average
Waimakariri	115 – 230 spawning fish
Rakaia	267 – 534 spawning fish
Rangitata	201 – 403 spawning fish

When the sea-run salmon population is between 10 and 20% of historical levels, please rank the following potential harvest management tools in order from your most preferred (1) to your least preferred (5).

- Temporarily close the sea-run salmon fishery
- Reduce sea-run salmon season length
- Limit sea-run salmon fishing to specific river reaches
- Introduce catch and release only regulations
- Keep the regulations the same

Question 2

River	Spawning population 5–10% of historic average
Waimakariri	58 – 115 spawning fish
Rakaia	134 – 267 spawning fish
Rangitata	101 – 201 spawning fish

When the sea-run salmon population is between 5 and 10% of historical levels, please rank the following potential harvest management tools in order from your most preferred (1) to your least preferred (5).

- Temporarily close the sea-run salmon fishery
- Reduce sea-run salmon season length
- Limit sea-run salmon fishing to specific river reaches
- Introduce catch and release only regulations
- Keep the regulations the same

Question 3

River	Spawning population 0–5% of historic average
Waimakariri	0 – 58 spawning fish
Rakaia	0 – 134 spawning fish
Rangitata	0 – 101 spawning fish

When the sea-run salmon population is less than 5% of historical levels, please rank the following potential harvest management tools in order from your most preferred (1) to your least preferred (5).

- Temporarily close the sea-run salmon fishery
- Reduce sea-run salmon season length
- Limit sea-run salmon fishing to specific river reaches
- Introduce catch and release only regulations
- Keep the regulations the same

Question 4

When making decisions about season length reductions, Fish & Game staff will consider both the impact of selected season on salmon harvest and angler preference. An angler's most personally valued month for sea-run salmon fishing may be when they are able to spend the most time fishing for sea-run salmon, when they have had the most success sea-run salmon fishing, or when they are able to spend time fishing with family and friends.

Which month is most important to **your personal** sea-run salmon fishing experience?

- a. December
- b. January
- c. February
- d. March
- e. April

Question 5

Are there any other factors that Fish & Game should consider when thinking about implementing regulations aimed at reducing sea-run salmon harvest?