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Sports Fish and Game Management Plan for Central South Island Fish and Game Region

2022-2032

Central South Island Fish and Game Council
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FOREWORD FROM THE CHAIR

I am pleased to present the Central South Island Fish and Game Council's *Sports Fish and Game Management Plan 2022-2032.*

The Central South Island Fish and Game Region enjoys world-class freshwater sports fishing and game bird hunting opportunities. Within this region, it is the function of the Central South Island Fish and Game Council (**CSIFGC**) under the *Conservation Act 1987* to "manage, maintain, and enhance the sports fish and game resource in the recreational interests of anglers and hunters."

Among its particular functions, CSIFGC is required to prepare, for approval by the Minister of Conservation, a Sports Fish and Game Management Plan "to establish objectives for the management of sports fish and game" within the Central South Island Region.

This *Sports Fish and Game Management Plan* sets out the goals, objectives, and policies that will guide and inform the Council's annual Operational Work Plans over the next ten years. CSIFGC has had regard to the importance of preserving and restoring wetland habitat and water quality, both in the interests of New Zealanders' angling and hunting traditions and the traditions and recreations of non-anglers and non-hunters alike. It has also had regard to the impact that the management proposed is likely to have on other natural resources and other users of the habitat concerned. In planning for the decade ahead, CSIFGC confronts some significant challenges.

Anglers in the Central South Island Fish and Game Region are deeply concerned by the continuing decline of salmon spawning runs. It is now commonplace to hear experienced anglers describe the sea-run salmon fishery as being "in crisis." CSIFGC is seeking to do all in its power to arrest this decline and to improve spawning runs but the limits to CSIFGC's relevant powers are clear. CSIFGC has only limited statutory powers, such as to make recommendations to the Minister regarding season dates, limit bags, and fishing or hunting methods. These powers are not equal to the challenge posed by radically declining spawning runs. In short, CSIFGC cannot "maintain" or "enhance" the fishery when it has no control over factors such as water use and water quality that have a direct impact on the fishery. CSIFGC can and must advocate for our waterways and wetlands wherever decisions are made that affect them.

During the time that this *Sports Fish and Game Management Plan* has been under development, CSIFGC has been involved in a Governance Review initiated by a former Minister of Conservation. Subsequently, CSIFGC has been engaged in discussion and debate regarding the possible implementation of recommendations made in the report to the Minister, including a recommendation for the amalgamation of the Central South Island and North Canterbury regions. While decisions regarding the possible amalgamation of regions or re-definition of regional boundaries are yet to be made, CSIFGC is required to undertake its planning regardless. We anticipate that much or all of the Plan set out below should remain appropriate for the sports fish and game resources within our area, even if regional boundaries are in future redrawn.

Dr. Andrew Simpson

Chair

PART ONE- OVERVIEW

1 PLAN OVERVIEW

The *Conservation Act 1987* requires each Fish and Game Council to prepare a sports fish and game management plan (**Plan**) to establish objectives for the management of sports fish and game birds within the region for which it has responsibility.

This Plan sets out how the Central South Island Fish and Game Council (**CSI Fish and Game Council**) will manage the sports fish and game bird resource in the recreational interests of anglers and hunters in accordance with the *Conservation Act 1987* and the *Wildlife Act 1953*. The goals, objectives and policies contained within the Plan are given effect to through the CSI Fish and Game Council's annual Operational Work Plan and other specific management plans approved by the CSI Fish and Game Council.

This Plan is prepared in accordance with the requirements of section17L of the *Conservation Act 1987* and:

- having regard to the sustainability of sports fish and game birds in the area to which the plan relates; and
- having regard to the impact that the management proposed in the Plan is likely to have on other natural resources and other users of the habitat concerned; and
- including such provisions as may be necessary to maximise recreational opportunities for anglers and hunters.

Nothing in this Plan derogates from any provision in the *Conservation Act 1987* or any other Act, any policy approved under the *Conservation Act 1987* or any other Act, or any provision in any conservation management strategy or conservation management plan or freshwater fisheries management plan.

Term of the plan

The term of this Plan is 10 years from the date of its approval by the Minister of Conservation. This Plan may be reviewed in whole or in part at any time during the term under section 17M of the *Conservation Act 1987*.

The implementation of the Plan will be reviewed during its term and, if necessary, this Plan will be amended subject to section 17M of the *Conservation Act 1987*. Monitoring and any subsequent reviews will ensure that this Plan is implemented efficiently and effectively, so that it best serves and represents the interests of licence holders and allows for appropriate management of sports fish and game bird resources while having regard to any impacts on other natural resources and other users of the habitat concerned.

2 FISH AND GAME COUNCIL ROLE AND RESPONSIBILITIES

Fish and Game councils represent 150,000 anglers and hunters nationally, making their interests and recreational pursuits a valued and considered part of recreation in New Zealand. Across the country, both local and overseas licence holders enjoy some of the most diverse angling and hunting opportunities in the world. These opportunities depend on the effective management of the sports fish and game bird resource that each Fish and Game region is responsible for and on continuing

ecosystem and habitat health — which Fish and Game councils strenuously advocate for but have no authority over.

There are twelve Fish and Game regions throughout New Zealand. Each region's boundaries are defined in the *New Zealand Gazette* (NZ Government, 1990). The CSI Fish and Game Region encompasses the area from the south bank of the Rakaia River in the north to Shag Point in the south and extends westward to include all of the Mackenzie Basin (see map Appendix 1).

The major catchments in the CSI Fish and Game Region include:

1) Upper and Lower Waitaki catchments, which are separated by a series of dams for hydroelectric generation; and
2) Opihi Catchment; and
3) Orari Catchment; and
4) Rangitata Catchment; and
5) Ashburton Catchment.

The thirteenth council, the New Zealand Fish and Game Council (**NZFGC**), coordinates the twelve Fish and Game Councils and provides national advocacy under section 26C of the *Conservation Act 1987*. Each regional Fish and Game Council appoints one of its members to form the NZFGC. The brand name 'Fish & Game New Zealand' is used to represent the thirteen councils collectively.

Fish and Game councils receive no government funding to carry out their legislative responsibilities. Funding for all Fish and Game councils is derived almost exclusively from licence sales (with occasional donations, bequests, etc.). The use of that funding and the roles carried out by Fish and Game councils across the country have a substantial benefit to the wider public, beyond anglers and hunters.

Fish and Game councils have responsibilities conferred by legislation, including both the *Conservation Act 1987* and the *Wildlife Act 1953*. Fish and Game councils interact with a number of other statutory bodies and engage with other legislation, such as the *Resource Management Act 1991,* as set out in Appendix 2.

3 PARTNERS

CSI Fish and Game Council seeks to work in cooperation with its partners and key stakeholders.

Ngāi Tahu

Ngāi Tahu is the iwi that hold rangatiratanga in respect of the rohe that coincides with the CSI Fish and Game Region. Te Rūnanga o Ngāi Tahu (Te Rūnanga), the tribal council, manage global tribal policy and issues. Te Rūnanga is made up of eighteen regional Papatipu Rūnanga that manage issues requiring wider or local consultation and that uphold the mana of their people over the land, the sea and the natural resources. The rūnanga with manawhenua in the CSI Fish and Game Region are:

- Te Rūnanga o Arowhenua; and
- Te Rūnanga o Waihao; and
- Te Rūnanga o Moeraki.

The CSI Fish and Game Council shall recognise and have regard to the following iwi management plans:

- Te Rūnanga o Ngāi Tahu Freshwater Policy
- Te Whakatau Kaupapa: Ngāi Tahu Resource Management Strategy for the Canterbury Region

- Kai Tahu ki Otago Limited Natural Resource Management Plan
- Iwi Management Plan of Kati Huirapa for the area Rakaia to Waitaki
- Waitaki Iwi Management Plan

The CSI Fish and Game Council has explicit obligations it must meet under the Deed of Settlement (the Deed) specific to Ngāi Tahu (1997). Section 12 of the Deed details these obligations as follows:

- to co-opt a person nominated by Te Rūnanga as an additional Member to Council to improve communication and foster decision-making relationships; and
- to appoint Te Rūnanga as the statutory advisor in respect of matters and regulations related to native game birds; and
- to enter into a Memoranda of Understanding from time to time with Te Rūnanga.

The CSI Fish and Game Council shall work in partnership with Ngāi Tahu and Papatipu Rūnanga to give effect to the principles of Te Tiriti and shall undertake consultation as a means to achieve informed decision-making on matters of potential common interest. The CSI Fish and Game Council will work as partners with rūnanga when an action or policy may have a potential impact on indigenous biodiversity including habitats, spawning areas, and the distribution of populations.

The CSI Fish and Game Council acknowledges and recognises the priority placed on Māori cultural values as represented in Part II of the RMA:

- Section 6 Matters of national importance
  - the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga
  - the protection of protected customary rights
- Section 7 Other matters
  - kaitiakitanga
- Section 8 Treaty of Waitangi

Te Papa Atawhai/Department of Conservation

Te Papa Atawhai/Department of Conservation (DOC) operates under the *Conservation Act 1987* and the *Wildlife Act 1953*. In this regard, both DOC and the CSI Fish and Game Council have functions and responsibilities under the same pieces of legislation. Section 6 (ab) of the *Conservation Act 1987* directs DOC to "preserve so far as is practicable all indigenous freshwater fisheries, and protect recreational freshwater fisheries and freshwater fish habitats." This includes freshwater sports fisheries and their habitats.

The CSI Fish and Game Council works collaboratively with DOC on matters related to access, water quantity, water quality, planning, species interactions, and aquatic habitat issues. The Director General of the Department of Conservation or their nominee is entitled to attend and speak at CSI Fish and Game Council meetings (*Conservation Act 1987*, s26ZE).

Regional Councils

The CSI Fish and Game Region spans two regional council boundaries, the Canterbury Regional Council in the north and the Otago Regional Council in the south. Both regional councils have statutory responsibilities under Section 30 of the RMA, and it is within this legislation that empowers the regional councils to make decisions on resource consent applications, to establish regulatory policies

and provisions for water resources, and to manage waterways through gravel abstraction and flood protection activities. All of these activities can impact greatly on sports fish and game bird habitat and engagement with the regional councils is regular and on multiple levels.

Territorial Authorities

There are five territorial authorities in the CSI Fish and Game Region. Territorial authorities have functions and responsibilities under Section 31 of the RMA and the *Local Government Act 2002*. The CSI Fish and Game Council engages with territorial authorities on matters relating to surface water activities, biodiversity, vegetation, and access. The territorial authorities in the CSI Fish and Game Region are:

- Ashburton District Council; and
- Mackenzie District Council; and
- Timaru District Council; and
- Waimate District Council; and
- Waitaki District Council.

New Zealand Walking Access Commission/Ara Hīkoi Aotearoa

The New Zealand Walking Access Commission operates under the *Walking Access Act 2008*. The purpose of the legislation is to provide the public with free, enduring walking access to the outdoors and to establish the New Zealand Walking Access Commission. The Commission is responsible for leading and supporting the negotiation, establishment, maintenance, and improvement of walking access over public and private land and of relevance to the CSI Fish and Game Council, types of access that may be associated with firearms, dogs or motor vehicles. The CSI Fish and Game Council and the New Zealand Walking Access Commission and its advisors both have a statutory responsibility to maintain and improve access; therefore, regular communication between the two agencies is important to achieve successful outcomes.

Conservation Boards

There are two Conservation Boards in the CSI Fish and Game Region. The boards are the community's voice in conservation management in their region. The boards give advice to Te Papa Atawhai/Department of Conservation on local conservation matters and carry out important planning roles such as the development and implementation of the Canterbury (Waitaha) Conservation Management Strategy, the Otago Conservation Management Strategy and the Aoraki/Mount Cook National Park Management Plan. These statutory plans identify and establish objectives for the integrated management of natural and historic resources within the region. Section 6M of the *Conservation Act 1987* requires each Conservation Board to liaise with any Fish and Game Council on matters within the jurisdiction of the Board.

The two Conservation Boards within the CSI Fish and Game Region are:

- Otago Conservation Board; and
- Canterbury/Aoraki Conservation Board.

4 STATUTORY PROCESSES

The CSI Fish and Game Council is one of many statutory agencies that has a role and functions involving environmental conservation and recreation. The CSI Fish and Game Council shares many of the same values as other statutory agencies in terms of conservation and safeguarding ecosystems and habitats.

Often, the advocacy role of the CSI Fish and Game Council as defined in the *Conservation Act 1987* interacts with other statutory agencies in the planning environment. Resource consent applications, local authority plans, and regional plans often require input and submissions from the CSI Fish and Game Council in order to uphold its statutory responsibilities.

The CSI Fish and Game Council will seek to ensure that anglers' and hunters' interests will be recognised in appropriate planning matters as follows:

- consultation under the First Schedule of the *Resource Management Act 1991* on all relevant planning documents; and
- submissions in relevant resource consent and other consent processes to advocate for decisions and conditions that promote sports fish and game bird interests and the interests of anglers and hunters; and
- development of effective protocols with other resource management authorities to manage key environmental impacts; and
- liaison with the Department of Conservation, Canterbury/Aoraki Conservation Board, Otago Conservation Board, and Papatipu Rūnanga (and others) on their planning processes as required.

5 OPERATIONAL WORK PLAN

Each year, regional Fish and Game councils must develop operational work plans that set out and define projects, work programmes, and a budget for the upcoming financial year. The work plan must give effect to the policies set out in an approved management plan and will help achieve the outcomes and objectives of the Sports Fish and Game Management Plan. Some projects are ongoing and require the same work to be undertaken year after year (i.e., monitoring a population) whilst other projects are set for a definite amount of time to achieve a particular goal or purpose (i.e., data collection for a statutory plan change).

6 NON-STATUTORY PROCESSES

Outside of the statutory processes, proactive cooperation with other resource management organisations, iwi, interest groups, anglers, hunters, and the wider community will be used to understand any impacts on other natural resources and other users of the habitat concerned and to realise outcomes for sports fish and game bird management.

Given the large rural landscape of the region, considerable areas of sports fish and game bird habitats are on or adjacent to private land. It is important for the CSI Fish and Game Council to work with landowners and managers to encourage the creation, maintenance, and enhancement of sports fish and game bird habitats on their land and to maintain and enhance access across and onto private land to provide angling and hunting opportunities to licence holders.

In addition to the collaborative engagement by the CSI Fish and Game Council with stakeholders and the wider community, the CSI Fish and Game Council owns and manages All Day Bay and Wainono Reserve for the purposes of enhancing wetland habitat, providing game bird hunting opportunities and enhancing biodiversity values. Both of the sites are protected by QEII National Trust covenants. The CSI Fish and Game Council controls and manages Ealing Springs Reserve under section 29 of the *Reserves Act 1977*. The reserve is dedicated as a Government Purpose (Wildlife Management) Reserve and is managed for the wildlife present on the reserve and its habitat along with recreational game bird hunting opportunities. The management and/or ownership of these areas by the CSI Fish and

Game Council has far-reaching benefits beyond those provided to sports fish, game birds, anglers, and hunters; they also provide diverse habitats for other species, both flora and fauna.

The CSI Fish and Game Council manages the maintenance and biennial grooming of the Aviemore spawning race, an artificial stream channel constructed in 1968 to provide spawning grounds for brown trout, rainbow trout and sockeye salmon in Lake Waitaki.

Resource consents are held by the CSI Fish and Game Council to undertake spawning and habitat enhancement works in both Scotts Creek and Outlet Creek, key spawning areas for lakes Alexandrina and McGregor. The works and management of the area is carried out in conjunction with the Lake Alexandrina Conservation Trust.

The CSI Fish and Game Council holds resource consents related to the upper reaches of Oamaru Creek that maintains the Devil's Bridge Wetland upstream of the weir. The wetland is protected in perpetuity by a QEII National Trust Open Space Covenant and the land is held in a Meikle Family Trust. The CSI Fish and Game Council provides a staff member to the Devil's Bridge Management Committee, contributes funding for maintenance as required, and manages the annual balloting of gamebird hunting sites.

7 CROSS BOUNDARY MANAGEMENT

The management of the sports fish and game bird resource in the CSI Fish and Game Region will have impacts beyond its legislative boundary due to migration patterns, climate, habitat, and angler and hunter participation and use.

The CSI Fish and Game Council will consider the interests of all fish and game licence holders, those of the wider community, and Papatipu Rūnanga when performing any function or exercising any power, particularly in relation to resource management and regulations.

PART TWO- GOALS, ISSUES, OBJECTIVES, AND POLICIES

This Sports Fish and Game Management Plan is guided by the CSI Fish and Game Council's mission statement and six Strategic Goals, as set out below. These establish the Plan's overall management approach and responsibilities under the *Conservation Act 1987* and state the outcomes that CSI Fish and Game Council will work to achieve. Section 26M of the *Conservation Act 1987* gives each of the twelve regional Fish and Game councils the over-arching function to manage, maintain and enhance the sports fish and game resource.

In performing its statutory function, CSI Fish and Game Council has set a number of Strategic Goals to guide the direction of its work. Each of these Goals is associated with specific Objectives and Policies that define how the Goals will be met by actions required to achieve them.

The Plan will be implemented by assigning CSI Fish and Game Council resources and funds to specific projects within each annual Operational Work Plan.

The Objectives underpinning the Goals are not prioritised except that managing, maintaining, and enhancing the sports fish and game bird resource must take priority over maximising recreational angling and hunting opportunities, if those conflicts occur.

MISSION STATEMENT
To manage, maintain, and enhance sports fish and game bird resources on a sustainable basis in the recreational interest of anglers and hunters.

1 SPORTS FISH AND GAME BIRD POPULATIONS

The CSI Fish and Game Region has a wide range of sports fish and game bird species (Appendix 3). The self-sustainability of sports fish and game bird species is threatened by a variety of activities including some over-exploitation by anglers and hunters, threats from disease, reduced spawning and breeding, impacts of climate change and habitat degradation through surrounding land use, pest species, water abstraction and instream works.

CSI Fish and Game Council is required under the *Conservation Act 1987* to manage the sports fish and game bird resource in the recreational interests of licence holders — but CSI Fish and Game Council has no direct control over habitat, which is critical to their management. CSI Fish and Game Council's ability to successfully carry out its statutory functions therefore is severely constrained.

The main methods available to CSI Fish and Game Council to manage the recreational harvest of the sports fish and game bird resource are:

- to recommend to the Minister for Conservation angling and hunting regulations that control open season duration, bag limits, and permitted equipment and methods for angling and hunting; and
- to educate anglers, hunters, landowners and the general public about environmental and species needs; and
- to advocate that decision-makers (such as ECan) make decisions responsive to environmental imperatives.

STRATEGIC GOAL 1
Restore, manage, maintain and enhance the sports fish and game bird species populations in the CSI Fish and Game Region to enable anglers and hunters to enjoy a sustainable and highly valued recreational experience.

1.1 Issues

1.1.1 Anglers, hunters and the general public have justifiably escalating concerns regarding fresh water, fish and gamebirds, recreational opportunities, and the environment generally which CSI Fish and Game Council strives to support but which are outside the power of CSI Fish and Game Council to control.

1.1.2 To make scientifically robust recommendations and to be an effective advocate, CSI Fish and Game Council needs robust data and information on sea-run salmon, trout, land-locked sockeye salmon and canal fishery population dynamics and factors affecting their abundance, including harvest and declines in habitat values and productivity.

1.1.3 The management of sports fish may impact on other resources or resource users and these external effects need to be carefully assessed. The extension of the range of sports fish into areas where populations of indigenous fish exist has the potential to adversely affect those populations and put those values at risk.

1.1.4 Public opinion and legislation are in a state of change regarding the value of sports fish.

1.1.5 The commercialisation of sports fish including farming of sports fish species, the procurement of exclusive rights to the sports fish and game bird resource through riparian land tenure or leasing or the introduction of captive reared mallards by preserves, and the continued interest in angling and game bird guiding that can exclusively capture the resource.

1.1.6 The introduction of new organisms and pest species into waters has the potential to adversely impact on sports fisheries. Didymo is well established in many of the CSI Fish and Game Region's waterways and *Lagarosiphon* continues to be present in Lake Benmore and is actively managed. *Lindavia intermedia* (lake snow) has been discovered around the country and can foul water intake screens and filters and negatively impact recreational values.

1.1.7 The sea-run salmon fishery is in crisis as fewer sea-run salmon return each year and the fishery exhibits a significant downward trend in population size.

1.1.8 There are continuing and growing concerns amongst salmon anglers about the decline in the wild sea-run salmon population and there is a strong desire to see robust management of the species and arrest of its decline.

1.1.9 Salmon hatcheries and salmon farms are cited in some of the literature as having the potential to adversely affect wild sea-run salmon populations if they are not managed appropriately, posing both genetic and biosecurity risks to wild sports fish populations. There are two salmon hatcheries currently operating within the CSI Fish and Game Region on the Rangitata and Waitaki rivers and salmon farms operate in the hydro canals.

1.1.10 The sustainability of the canal fishery is perceived to be at risk due to increasing pressure from New Zealand and international anglers. Ease of access, a "high country" experience, the quality of fish and at times abundance of released farmed salmon, and its ability to produce trophy fish lead to increasing angler pressure. There are concerns amongst anglers about pressure on the canal fishery and a desire to see robust management of the fishery. The health of the fishery needs to be carefully monitored, new fisheries monitoring methods need to be developed, and recommendations made on future management regimes.

1.1.11 There appears to be an increasing trend for anglers choosing to catch and release rather than harvest fish, which can have consequences on the health, survival and future catchability of fish and increase the number of fish caught by an angler (as the bag limit might not be achieved).

1.1.12 The management of "special" fisheries such as the Ahuriri River and the Upper Ōhau River requires careful monitoring and recommendations made on future management regimes due to increasing angling pressure arising from their relatively close distance to a population centre as well as the offering of a unique world-class "trophy" fishery.

1.1.13 The full effects of climate change on the sports fish and game bird resource are unknown but predictions indicate that there will be rising sea temperatures, less

snowfall, more extreme rainfall events and hotter, drier summers in the east. The realisation of these predictions and the impacts they will have on the resource requires acknowledgement of climate change when making management decisions.

1.1.14 Aoraki Mount Cook National Park is within the CSI Fish and Game Region. Aoraki is New Zealand's highest mountain and is highly significant to Ngāi Tahu as their most sacred mountain. The national park is a key place where New Zealand's land and freshwater biodiversity is maintained. Both sports fish and indigenous fish inhabit Aoraki Mount Cook National Park.

1.2 Objectives

1.2.1 The current quality, population and harvest of the sea-run salmon, trout, land-locked sockeye and canal fisheries are understood and recorded.

1.2.2 Research is undertaken to inform sustainable sports fishery management.

1.2.3 Decision-makers have regard to the effects of fish and game management activities on other natural resources and resource users.

1.2.4 Highly valued trout fisheries in the CSI Fish and Game Region are identified, enhanced and maintained.

1.2.5 Areas of the trout fishery that are declining in quality are identified and interventions are implemented to stem or reverse the decline.

1.2.6 Highly valued sea-run salmon fisheries in the CSI Fish and Game Region are identified, enhanced, and maintained.

1.2.7 Areas of the valued sea-run salmon fishery, which are declining in quality, are identified and interventions are implemented to reverse the decline, consistent with the CSI Fish and Game Council's Prioritisation Principles (Appendix 5).

1.2.8 Areas of the canal fishery that are declining in quality are identified and interventions are implemented to stem or reverse the decline.

1.2.9 Anglers' harvests are monitored and regulated to support the sustainability of the canal fishery.

1.2.10 Areas of the trout fishery experiencing high rates of catch and release practice are targeted by media and communication promoting best-practice catch and release.

1.2.11 The current quality, population, and harvest of game birds in the CSI Fish and Game Region are understood and recorded.

1.2.12 Sports fish and game bird populations are sustained at levels to provide for angler and hunter satisfaction.

1.2.13 The introduction of any new pest fish species into the CSI Fish and Game Region is opposed and actions are taken to assist in their eradication.

1.2.14 Any adverse effects of sports fish on indigenous fish species within Aoraki Mount Cook National Park are understood and measures are identified to minimise the effects.

1.3 Policies

It is the policy of CSI Fish and Game Council to:

1.3.1 Achieve sustainability of sports fish species through:

a) ensuring the sustainability of the resource has precedence over opportunity/utilisation (i.e., opportunity/utilisation is dependent on sustainability)

b) adopting a precautionary management approach for fish populations in the absence of reliable information or where information is uncertain

c) ensuring management decisions are based on the best available information

d) not allowing the absence of information to be used as a reason for failing to adopt management measures.

1.3.2 Prioritise sports fish and game bird species management activities through:

a) population trend monitoring

b) angler and hunter harvest and surveys

c) identification of species management threats and opportunities

d) assessments of the effectiveness of species management activities.

1.3.3 Draft regulations and recommendations that:

a) manage angler and hunter harvest at sustainable levels

b) provide for appropriate angling and hunting opportunities

c) encourage and promote ethical behaviour and sportsmanship

d) enable all licence holders fair and equitable access to the resource.

1.3.4 Stock salmonid fish stocks through the planned release of species, only in waterbodies where:

a) sports fish species are already present, and

b) habitat is deemed suitable, and/or

c) limitations on natural spawning and/or rearing habitat limit adult sports fish populations below their carrying capacity.

1.3.5 Liaise with Ministry of Primary Industries, Department of Conservation and Papatipu Rūnanga over freshwater fisheries management issues.

1.3.6 Liaise with licence holders and angling and hunting organisations over sports fish and game bird monitoring and management issues.

1.3.7 Maintain a current and historical database of sports fish species, population monitoring, trends and harvest.

1.3.8 Prohibit the liberation of sports fish stocks in waterbodies that remain sports fish free and that are inhabited solely by indigenous fish species.

1.3.9 Support hatchery releases of salmon into the lower Rangitata and Waitaki rivers to maintain put and take fisheries that provide for salmon angling opportunities

and supplement angler catch of adult salmon as per current hatchery management plans and where releases are low risk to wild sea-run salmon populations.

1.3.10 Assist landowners to manage situations where there is conflict between game birds and agricultural production.

1.3.11 Support efforts to prevent accidental transmission of unwanted aquatic organisms under the *Biosecurity Act 1993* into, or between, waters in the CSI Fish and Game Region.

1.3.12 Salvage and relocate stranded fish where such action is valuable for research purposes or cost effective in the interests of anglers and the public.

1.3.13 In relation to coarse fish:

a) oppose the introduction of any new coarse fish species

b) encourage removal of newly established coarse fish species from waterways

c) consider closing a fishery where that species has been introduced illegally

d) advocate the retention of established designated coarse fisheries.

1.3.14 Assist and support efforts to eradicate any new pest fish species discovered in the CSI Fish and Game Region.

1.3.15 Work in partnership with rūnanga and the Department of Conservation to identify areas where adverse effects on indigenous fish by sports fish is occurring and assist in their protection.

2 HABITAT

Restoration, management, maintenance, and enhancement of streams, rivers, lakes and wetlands is undertaken by CSI Fish and Game Council to support the health and well-being of water bodies and freshwater ecosystems. The health of these waterbodies as habitats for sports fish and game bird species is critical to the health of the resource as the distribution and abundance of sports fish and game bird species is largely dependent on the quality and extent of their habitats. Water quality, water quantity, flow regimes, and natural characteristics (i.e., riparian cover, sinuosity) determine the health of ecosystems and habitats.

The work undertaken by CSI Fish and Game has benefits beyond those for sports fish and game birds. Work includes assisting with ecological monitoring of waterbodies including hāpua, advocating through resource management legislation for the health and well-being of waterbodies and ecosystems, undertaking restoration works that benefit indigenous species, and participating in a number of advisory and catchment groups that seek to protect biodiversity and ecosystem health.

Sports fish and game bird species include and co-exist with many native species and occupy similar habitat. Threats to the integrity and extent of natural habitat utilised by sports fish and game bird species can also constitute threats to indigenous species. Activities that can have adverse effects on habitat include:

- intensification of land use including forestry, dairy farming, intensive farming, and urban development
- riparian and indigenous vegetation clearance
- nutrient and sediment discharges to waterways including non-point source pollution
- river protection and flood control works
- water abstraction and over-allocation
- wetland drainage and modification of wetland vegetation
- ineffective fish screens or the absence of fish screens
- introduction of pest or nuisance organisms (i.e., didymo, *Lagarosiphon*)
- vehicles and jetboats in riverbeds during spawning season

Section 7 of the *Resource Management Act 1987* (**RMA**) requires particular regard is given to a number of important matters including, but not limited to, kaitiakitanga, intrinsic values of ecosystems, maintenance and enhancement of the quality of the environment, the protection of the habitat of trout and salmon, and the effects of climate change.

Resource managers have largely failed to give these matters particular regard to uphold the purpose of the RMA and to safeguard the life-supporting capacity of water and ecosystems. The decisions made by resource managers have significant ramifications on the ability of CSI Fish and Game Council to effectively carry out the prescribed statutory functions under the *Conservation Act 1987*.

The CSI Fish and Game Council can only advocate for greater habitat protection, as the control and management of water and land resources lies with private interests and statutory agencies.

Advocacy is undertaken through both statutory and non-statutory processes and may include:

- RMA resource consent application process
- district and regional policies and plans
- legislation affecting resource management
- policies, plans and strategies developed under other Acts

- raising public awareness
- participating in catchment groups and other strategic groups.

An important component of the CSI Fish and Game Council's advocacy activities is the development and maintenance of co-operative relationships with those agencies and stakeholders that have a responsibility or interest in habitat, such as: regional and district councils, Department of Conservation, Ngāi Tahu and Papatipu Rūnanga, Crown Research Institutes, and other conservation, farming, recreation and community groups.

STRATEGIC GOAL 2
Restore, manage, maintain and enhance sports fish and game bird habitat within the CSI Fish and Game Region.

2.1 Issues

2.1.1 Licence holders would like to see the restoration and enhancement of degraded habitats.

2.1.2 Non-point source pollution and sediment are serious issues affecting water quality and habitat. The intensification of farming and changes to land use continue to degrade and threaten the health of waterbodies.

2.1.3 Wetlands throughout the CSI Fish and Game Region have been lost or degraded through drainage, sedimentation, stock damage, surrounding land use, and vegetation removal or modification.

2.1.4 River protection and flood control works and river engineering activities can have adverse effects on fish and game bird habitats, if not managed appropriately. The management of riparian areas and natural character is important and can aid in maintaining and/or enhancing habitats and recreational amenity values if carried out appropriately.

2.1.5 Many rivers in the CSI Fish and Game Region are fully allocated or over-allocated for water abstraction resulting in degraded habitat, adverse impacts on migration and spawning success, poor amenity values, and angler and hunter dissatisfaction.

2.1.6 Inadequate fish passage and barriers can adversely affect fish migration necessary to support different life stages such as spawning and rearing, feeding, and finding refuge.

2.1.7 Climate change is likely to alter the hydrological patterns across the CSI Fish and Game Region, which could have adverse effects on water quantity, water quality and habitat. A strategic approach and consideration of the effects of climate change needs to be included in decision making processes.

2.1.8 Sea-run salmon spawning habitat has deteriorated over time due to surrounding land use pressures, stock access, poor water quality, insufficient water quantity, invasive plant species and instream works.

2.1.9 The spread of pest and nuisance plant species such as didymo, *Lagarosiphon* and *Lindavia intermedia* (lake snow) can have adverse effects on sports fish habitat and the recreational fishery.

2.1.10 Hydroelectricity generation in the Waitaki catchment has been established since the 1930s and makes up about 25% of renewable energy generation in New Zealand. However, dams and weirs associated with hydroelectric generation can adversely affect fish passage by blocking upstream and downstream migration, unnatural flows fluctuate downstream of dams affecting geomorphological processes, pest plant species can become established, and weed growth is difficult and costly to manage.

2.1.11 Gravel extraction within riverbeds can adversely affect habitat and recreational amenity if not managed appropriately.

2.2 Outcomes

2.2.1 The current quality of waterways and wetlands that are sports fish and game bird habitats is understood and recorded.

2.2.2 The CSI Fish and Game Council is an effective advocate for water quality and quantity that is maintained at, or improved to, a standard that sustains healthy fish and game bird habitats and overall ecosystem health.

2.2.3 Selected projects are undertaken that restore, protect, and maintain spawning habitats to a high quality.

2.2.4 Habitat of the valued sea-run salmon fishery that is declining in quality are identified and interventions are implemented to reverse the decline, consistent with the CSI Fish and Game Council's Prioritisation Principles (Appendix 5).

2.2.5 Habitat of the trout fisheries that are declining in quality are identified and interventions are implemented to stem or reverse the decline, consistent with the CSI Fish and Game Council's Prioritisation Principles (Appendix 5).

2.2.6 Wetlands owned by the CSI Fish and Game Council are actively managed to maintain and enhance habitat and wetland values and are valued by licence holders.

2.2.7 Sports fish species can access spawning grounds and undertake migration to access a range of habitats necessary to support different life stages, recognising any potential adverse effects on indigenous fish populations.

2.3 Policies

It is the policy of CSI Fish and Game Council to:

2.3.1 Promote the maintenance, protection, and enhancement of sports fish and game bird habitat through RMA planning processes and public advocacy including:

a) resource consent application processes

b) regional and district policy and plan development

c) legislation and policy development under other Acts

2.3.2 Promote community awareness of habitat issues and advocate for the protection, maintenance, and enhancement of habitat and amenity values on private and publicly owned lands through:

a) liaison with agencies and community groups

b) media releases and advocacy

c) involvement in collaborative community-based processes.

2.3.3 Seek appropriate action by agencies directly responsible where non-compliance with resource management, conservation or other laws, and the plans and policies written under these laws is detected.

2.3.4 Maintain cooperative professional relationships with the Department of Conservation, tangata whenua, regional councils, district councils, conservation and recreation NGOs, hunting and angling clubs, community groups and resource user groups to share information, understand and have regard to the impact that the management of sports fish and game birds has on other natural resources and other users of the habitat, and to advocate for the protection, restoration and enhancement of sports fish and game bird values.

2.3.5 Advocate and support the protection, enhancement and restoration of headwater wetlands and spring-fed systems.

2.3.6 Seek restoration and enhancement of sea-run salmon spawning and rearing areas.

2.3.7 Identify and remediate fish passage barriers where it is practical to do so in consultation with the Department of Conservation and any appropriate working groups, recognising any potential adverse effects on indigenous fish populations.

2.3.8 Seek restoration and enhancement of trout spawning and rearing areas.

2.3.9 Participate and cooperate with other agencies to publicise and assist with measures to prevent, reduce, or eliminate adverse effects of harmful organisms and to give effect to Te Mana o te Wai.

2.3.10 Develop the potential of wetlands owned or managed by the CSI Fish and Game Council as healthy ecosystems, habitats and hunting areas and to contribute generally to improved wetland management in the CSI Fish and Game Region.

3 ANGLER AND HUNTER PARTICIPATION

Angler and hunter participation comprises:

- participation in angling and hunting as recreational activities, and
- participation in fish and game management as key stakeholders in the CSI fish and game resources.

Participation in both aspects is enabled by access to the resource (both in terms of public access to waterways, wetlands and other habitats, and access to a balanced range of fishing and hunting licences and opportunities), and by anglers and hunters being well informed about and contributing to fish and game management initiatives, voting in council elections, and standing as candidates.

The management of sports fish and game birds is funded through licence revenue; therefore, CSI Fish and Game Council has an obligation to identify and respond to the needs of its licence holders. Success in meeting these needs can often be determined by how well the CSI Fish and Game Council can meet the needs of the recreational angler and hunter.

Landowners also play an important role in developing the game bird resource and providing hunting opportunities through access. The growing number of irrigation storage ponds in the CSI Fish and Game Region often provide suitable game bird habitat. There is also growing recognition of the importance of wetland systems and an increasing interest in restoring natural habitats. The investment in restoration activities and the goodwill of landowners in providing access for fishing and hunting opportunities is an important component of licence holder participation.

STRATEGIC GOAL 3
To satisfy anglers' and hunters' expectations and maximise their opportunities for participation by access to a sustainable resource and encouraging their participation in fish and game management, as key stakeholders in the sports fish and game bird resource.

3.1 Issues

3.1.1 Anglers and hunters want good value and choice of licence options to suit their recreational pursuits.

3.1.2 Licence holder engagement and participation in sports fish and game bird management issues is perceived as being in decline.

3.1.3 Regulations must be clear and simple to understand and provide for diverse and equal opportunities for licence holders.

3.1.4 Regulations must be underpinned by scientific research of sports fish and game bird populations and a precautionary approach needs to be applied where the science is not clear.

3.1.5 Angling pressure (driven by high participation levels at targeted waterways, user density, social media and new angling methods) are impacting on the quality of recreational experiences, in some locations. The upper Waitaki fisheries including

the hydro canals may require more active management to avoid conflicts between users and to maintain the recreational amenity of the fishery.

3.1.6 Poor water quality can adversely impact angler and hunter satisfaction and can be a risk to public health.

3.1.7 Historical access sites are being compromised and lost to the establishment and growth of nuisance vegetation such as gorse, willows, alders and blackberry.

3.1.8 Public access to the fish and game resource is increasingly restricted, due to changes within the community such as:

a) changes of land use

b) concern over health and safety requirements

c) hardening of attitude towards private property rights and concerns around security of property.

3.2 Outcomes

3.2.1 The views of licence holders are understood and valued.

3.2.2 Participation in sports fish angling and game bird hunting is managed sustainably and is promoted by the CSI Fish and Game Council.

3.2.3 Licence options are provided to meet the needs of all anglers and hunters.

3.2.4 Anglers and hunters participate actively in fish and game management.

3.2.5 Anglers and hunters value the region's fish and game resources, support the activities of the CSI Fish and Game Council, and are encouraged to participate in hands-on activities to support and improve the resource.

3.2.6 Participation in angling and hunting opportunities is undertaken and enjoyed by diverse cultures and is gender inclusive to foster a love for the outdoors and an appreciation for the sport.

3.2.7 Licence holders are engaged and participate in CSI Fish and Game Council elections.

3.2.8 Anglers and hunters have easy access to information about CSI Fish and Game Council activities, the sports fisheries and game bird resources, opportunities, and habitats.

3.2.9 Awareness and access to the game bird resource is promoted and the number and knowledge of hunters grows.

3.2.10 Anglers and hunters have access to areas appropriate for sports fish angling and game bird hunting.

3.2.11 Angler and hunter ethics are encouraged and anglers and hunters are recognised as responsible resource users.

3.2.12 Public access to rivers, lakes and wetlands and land is maintained and improved where necessary.

3.2.13 Regulations respond appropriately to pressure on the resource where that threatens or adversely affects the quality of recreational experience.

3.3 Policies

It is the policy of CSI Fish and Game Council to:

3.3.1 Advocate for angler and hunter access to the resource to promote angling and hunting opportunities and participation.

3.3.2 Respond to licence holder enquiries to understand their views and to provide them with up-to-date information and resources to promote their enjoyment of the sport.

3.3.3 Undertake proactive public relations communications and activities to provide information on the sports fish and game bird resources, opportunities, and habitats by:

a) producing Fish and Game NZ magazine supplements

b) providing material for electronic newsletters

c) providing material for Fish and Game NZ's website and social media sites

d) providing media releases

e) promoting fishing and hunting in media coverage and advertising

f) providing speakers to events and meetings

g) undertaking angling and hunting workshops

h) approving and engaging in fishing competitions

i) providing speakers to schools and youth groups and service clubs

j) organising and running a children's fishing day.

3.3.4 Update and publish angler access pamphlets to provide information on access to the resource to promote angler opportunities.

3.3.5 Maintain and install access signs to promote angler and hunter access to the fish and game resource.

3.3.6 Undertake works to establish and maintain access to increase opportunities for anglers and hunters to access the sports fish and game bird resource.

3.3.7 Encourage licence holders with diverse backgrounds and skills to participate in CSI Fish and Game Council elections as voters and candidates.

3.3.8 Ensure CSI Fish and Game Council activities and processes are open and accessible to encourage maximum angler and hunter participation.

3.3.9 Undertake regular reviews of licence options and actively seek improvements in line with the expectations of the regional users.

3.3.10 Establish where necessary controlling mechanisms for access to, and use of, fisheries to protect pressure sensitive fisheries and preserve quality recreational experiences.

3.3.11 Negotiate, maintain, and improve public access opportunities across private land as far as practicable and to recognise the impact that informal access arrangements can have on landowners and their farming operations.

4 PUBLIC RELATIONS

CSI Fish and Game Council advocates strenuously for the protection of our natural resources for the recreational enjoyment of all New Zealanders. Streams, rivers, lakes, and wetlands are valued for both their recreational opportunities and their roles in healthy and diverse ecosystems. The interactions between the CSI Fish and Game Council, iwi, and stakeholders seek to foster support for the work carried out by the CSI Fish and Game Council, as the benefits of healthy ecosystems and habitats extend beyond fish and game values bringing benefits to the wider community.

STRATEGIC GOAL 4
Public awareness and support for Fish & Game NZ nationally and the role the CSI Fish and Game Council contributes towards protecting and enhancing recreational opportunity and New Zealand's natural and physical resources, is maximised.

4.1 Issues

4.1.1 The effectiveness of CSI Fish and Game Council advocacy is greatest when there is support from the wider public including Government, iwi, local authorities, and landowners.

4.1.2 Cooperative, professional relationships with diverse sector groups including farmers, tourism interests, irrigation schemes, and power companies is necessary to achieve fish and game management objectives. Acceptance of and support for recreational angling and hunting will continue to be influenced by the attitudes and conduct of anglers and hunters towards other recreational users and the wider public.

4.1.3 The methods by which the CSI Fish and Game Council communicates with licence holders and the wider public will continue to develop. Online communications such as websites, social media and email are becoming more important as the readership rate of traditional media, such as newspapers and physical mail, is declining.

4.1.4 Some parts of the wider community might not have a good understanding of recreational harvesting and its importance in recreation and conservation work (for example, anti-hunting groups protesting for prohibitions on game bird hunting). CSI Fish and Game Council will endeavour to inform the public about the wider benefits arising from its work.

4.1.5 A lack of consultation between iwi, stakeholder groups, and licence holders can result in unresolved conflicts or misunderstandings.

4.1.6 CSI Fish and Game Council's efforts as the statutory advocate for freshwater habitat in the recreational interests of anglers and hunters may occasionally be in tension with the interests of other groups for example, when conservation and the protection of habitat and natural resources entails limits on economic growth.

4.2 Objectives

4.2.1 The historical, spiritual, cultural and traditional relationship of Ngāi Tahu and Papatipu Rūnanga with their lands, water, mahinga kai and other taonga, and the mana and tangata whenua status which results from that relationship is recognised as a Treaty Partner. Te Tiriti o Waitangi is given effect to and mātauranga Māori is respected and acknowledged.

4.2.2 The views of stakeholders are understood, considered and valued.

4.2.3 The CSI Fish and Game Council is an effective advocate on behalf of anglers and hunters.

4.2.4 Cooperative, professional relationships with iwi, government departments, local authorities, landowners, community groups, stakeholders and diverse sector groups are developed and maintained.

4.2.5 Angling and hunting is viewed as a legitimate and beneficial recreational activity and is recognised as playing a role in conservation work.

4.2.6 The general public has a good understanding of the wider benefits of the CSI Fish and Game Council's work and the ecological benefits to other aquatic and wildlife communities and habitat resulting from the protection and enhancement of sports fish and game bird habitat.

4.2.7 Communication methods stay current with technological advances to enable licence holders and stakeholders access to current and relevant information.

4.2.8 A sound and constructive relationship with New Zealand Fish and Game Council and with other Fish and Game Councils is maintained.

4.3 Policies

It is the policy of CSI Fish and Game Council to:

4.3.1 Promote its role and activities to the public through media, including the overall benefits of participating in angling and hunting as a recreational sport and as playing a role in conservation work.

4.3.2 Engage in opportunities to address sector or interest groups on sports fish and game bird matters.

4.3.3 Kōrero with iwi and rūnanga on Te Mana o te Wai, Te Oranga o te Taiao, resource management and matters managed by CSI Fish and Game Council.

4.3.4 Liaise on fish and game matters, environmental protection and resource management with government departments, local authorities, landowners, community groups, stakeholders, and diverse sector groups.

4.3.5 Liaise with New Zealand Fish and Game Council and other regional Fish and Game Councils over the co-ordination of public awareness activities and advocacy.

4.3.6 Engage with licence agents to understand their views and provide support and information to them in their frontline contact with licence holders.

4.3.7 Engage in educational opportunities to showcase instream ecosystems and habitats and the work undertaken by CSI Fish and Game Council.

5 COMPLIANCE

Promoting compliance by anglers and hunters is an integral part of sports fish and game bird management. Compliance extends beyond law enforcement and prosecutions and includes actively encouraging the public and licence holders understanding and acceptance of regulations, to ensure sustainable sports fish and game bird populations.

Managing compliance with regulations is the only activity that CSI Fish and Game Council can control to manage sports fish and game bird populations; the remainder of functions designated under the *Conservation Act 1987* that relate to habitat involve an advocacy role.

Regulations are necessary to:

- protect threatened and sensitive resources from over-harvest
- enable equitable access and opportunity to all licence holders
- establish and maintain ethical standards that promote opportunity and diverse techniques while precluding unfair advantage.

STRATEGIC GOAL 5
Regulations are recommended that are accurate, appropriate and provide for recreational opportunities to a sustainable fish and game resource and there is a high level of compliance that reflects acceptance of the need for sports fish and game bird hunting regulations within the CSI Fish and Game Region.

5.1 Issues

5.1.1 Management of the sports fish and game bird resource requires ongoing compliance monitoring at a regional level that serves as an effective deterrent. The vast geographical area can make resourcing difficult and honorary rangers must be relied on at times.

5.1.2 Licence holders expect that compliance with angling and hunting regulations will be strictly enforced; however, prosecution of offences through the courts is costly and results are variable.

5.1.3 Anglers and hunters have a range of preferences as to the way they wish to pursue their chosen sports. Regulations need to be established that are fair and equitable and do not create advantages over other users.

5.1.4 Changes to the sports fish or game bird resource or population may require changes to regulations to ensure the population remains sustainable. This may include lowering bag limits or changes to the angling or hunting season.

5.1.5 Compliance training for warranted officers is necessary to meet health and safety requirements and to keep abreast of new legislation or regulations; however, training requires funding, which may not be sufficient to carry out trainings at optimal levels.

5.2 Objectives

5.2.1 Regulations are recommended to the New Zealand Fish and Game Council to govern angler and hunter activities that are simple, understandable and enforceable.

5.2.2 CSI Fish and Game Rangers, both staff and volunteers, are managed at levels appropriate for effective compliance monitoring and enforcement.

5.2.3 CSI Fish and Game Council is perceived as professional, consistent and fair in carrying out compliance monitoring and enforcement activities.

5.3 Policies

It is the policy of CSI Fish and Game Council to:

5.3.1 Review angling and hunting regulations and:

a) assess for relevance, clarity and simplicity

b) liaise with other regions to seek consistency between regions

c) ensure the sustainability of the sports fish and game bird resource, recognising that sustainability of the resource must come before maximising opportunity

d) consider matters of urgency annually with a general review of regulations on a triennial basis.

5.3.2 Recommend regulations to the New Zealand Fish and Game Council that:

a) manage angler and hunter harvest at sustainable levels using information based on the best available data at the time

b) provide for appropriate angling and hunting opportunity

c) encourage and promote ethical behaviour and sportsmanship

d) enable all licence holders fair and equitable access to the resource.

5.3.3 Support CSI Fish and Game Rangers involved in compliance monitoring by providing appropriate training, equipment, information, and support.

5.3.4 Monitor changing trends and fishing methods particularly where these border on compliance issues and investigate and take appropriate action to clarify, or where necessary, regulate such activity.

5.3.5 Uphold regulations through prosecution by acting in accordance with CSI Fish and Game Council policy to undertake prosecution where there is sufficient evidence.

6 ADMINISTRATION

The CSI Fish and Game Council is judged by its licence holders and the public on its ability to administer its statutory functions in a cost effective, efficient, and professional manner. Administration covers a number CSI Fish and Game Council functions including licensing, reporting and planning, and Council business. At a national level, this involves working with New Zealand Fish and Game Council and other regional Fish and Game Councils to achieve national objectives for fish and game management.

From a regional perspective, it involves the management and administration of regional Fish and Game Council business to deliver the service expected by its licence holders and the local community. Therefore, communication, accountability, accessibility to the decision-making process and the fostering of participatory democracy are important elements of the system.

STRATEGIC GOAL 6
The CSI Fish and Game Council performs its statutory functions in accordance with all applicable laws and to the highest standards of public body governance.

6.1 Issues

6.1.1 The CSI Fish and Game Council has a substantial workload across a range of functional areas and depends entirely on licence sales for its operational budget.

6.1.2 The CSI Fish and Game Council is a levy paying region and must optimise licence sales to balance licence holder desire for flexibility and lower licence costs with the need to generate income to carry out activities and responsibilities at both the regional and national level.

6.1.3 The CSI Fish and Game Council has limited staff and resources to undertake the workload that covers promoting angling and hunting, managing the sports fish and game bird resource and responding to resource management issues. Investment in habitat restoration and advocating in the resource management space requires funding above and beyond the day-to-day operational costs of CSI Fish and Game. The inability to undertake this type of work limits CSI Fish and Game's opportunities to engage in and undertake meaningful work that supports the statutory functions as set out in the *Conservation Act 1987*.

6.1.4 Revenue in the CSI Fish and Game Region is generated solely through the sale of hunting and fishing licences. The sale of licences in the region is related to the quality, diversity and extent of fish and game resources within the region and the level of licence holder satisfaction. Events beyond the control of the CSI Fish and Game Council such as natural disasters, resource management decisions, climate change, or global pandemics affecting travel can take a toll on licence sales and therefore, revenue generated. This can have repercussions on the ability of CSI Fish and Game Council to maintain or enhance the sports fish and game bird resource.

6.1.5 Climate change is already happening in New Zealand and could have a profound impact on the environment, economy, and future generations of New Zealanders. The CSI Fish and Game Council takes responsibility for its actions and must do its

part to help reduce emissions to meet the goal of net-zero emissions of greenhouse gases by 2050 and reduce waste.

6.2 Objectives

6.2.1 The CSI Fish and Game Council is financially sustainable and retains sufficient reserves to fund important projects as they are identified.

6.2.2 The satisfaction of licence holders, derived through the health of sports fish and game bird populations and their habitats, is realised through the sale of licences.

6.2.3 The management structure of CSI Fish and Game Council is appropriately sized and adequately resourced to deliver the Operational Work Plan, protect sports fish and game bird resources and to support and engage licence holders.

6.2.4 An effective and efficient licencing and revenue collection system is in place.

6.2.5 The CSI Fish and Game Council takes responsibility for its actions and commits to helping New Zealand meet its 2050 net-zero emission target.

6.3 Policies

It is the policy of CSI Fish and Game Council to:

6.3.1 Meet New Zealand's targets to address climate change, make efforts to purchase supplies that produce low amounts of waste and/or are recyclable; office systems will move primarily to paperless where possible; and, where practicable, meetings will be held online rather than face to face.

6.3.2 Actively liaise and cooperate with the New Zealand Fish and Game Council and other regional Fish and Game Councils to ensure they are fully informed of the views and aspirations of anglers and hunters in the CSI Fish and Game Region and to provide for coordinated and consistent policy both inter-regionally and nationally.

6.3.3 Ensure licences are available to agents and participants.

6.3.4 Cooperate with regional Fish and Game Councils in the sharing of information and resources.

6.3.5 Complete all statutory accounting and reporting requirements per legislative requirements.

PART THREE- RESOURCE SUMMARY

The sports fish and game bird resource within the CSI Fish and Game Region provides a spectrum of recreational opportunities to anglers and hunters locally, nationally, and to those who visit from overseas.

1 CENTRAL SOUTH ISLAND FISH AND GAME REGION

The CSI Fish and Game Region provides diverse opportunities for angling and hunting, from coastal and lowland streams, to wetlands, extensive glacial fed lakes, hydro canals, and alpine rivers. The self-sustaining resource is a significant contribution to recreational amenity within the region and brings economic benefit to communities.

The CSI Fish and Game Region extends from the south bank of the Rakaia River in the north to Shag Point in the south and includes all the Mackenzie Basin. The Waitaki catchment is the largest catchment in the region. Aoraki/Mt Cook and the mountains of the Southern Alps dominate the Waitaki catchment. Flows of ice, water and eroded rock have formed the glacial lakes and braided rivers of the Mackenzie and Ahuriri basins. The continuing uplifting and weathering of the mountains by rain, snow, and ice provides constant flows of water and gravel down the river and tributaries. The tributaries join the flow from the mountains and provide connections to wetlands, springs, and aquifers before flowing onward to the sea. The Waitaki River reaches widths of up to one kilometre before meeting the Pacific Ocean north of Oamaru.

The alpine areas of the region are prone to prevailing nor-west winds and are the predominant source of water. To the east, the Mackenzie Basin is prone to hot summers and cold winters and droughts are not uncommon. In recent times, intensification of land use throughout the basin has sparked intense debate due to the sensitivity of the landscape, defined by moraines and extensive glacial outwashes once dominated by tussock grasslands and expansive uninterrupted views to the surrounding mountains.

The glacial fed lakes above Lake Benmore Dam and their tributaries are becoming increasingly known for their sockeye salmon runs. Sockeye salmon numbers have increased dramatically over the last fifteen years in the upper Waitaki Catchment and it is thought that sockeye salmon have the potential to act as bio indicators of the quality of water in the Waitaki lakes. The lakes are also important rainbow and brown trout fisheries and offer anglers both shore and boat fishing opportunities.

Rainfall rapidly declines with distance from the mountains. Coastal areas can see southerly weather patterns, which do not bring high rainfall or temperatures. Conversely, easterly storms can generate large floods in the foothills and result in high flows in lowland waterways. The Kakanui, lower Waitaki, Opihi, Orari and Ashburton catchments are examples of watersheds that can be affected by this type of weather system. Despite this, rainfall in the east is low and drought occurs in most of the east because of low and sporadic rainfall, high rates of evapotranspiration associated with wind and temperature, and low soil moisture. Water harvesting and storage are dominant features in the eastern part of the region and if managed appropriately, can reduce the pressure on rivers during times of low flow and when water requirements are high for stock and crops. However, high flows are important for ecosystem health and maintenance of natural character; therefore, the allocation of high flows for irrigation and storage must be considered and carefully managed.

The Waitaki, Opihi, Orari, Rangitata, and Ashburton rivers are traditionally known for their considerable salmon runs but in recent times, returning sea-run salmon numbers have dwindled

dramatically and are just shadows of their former glory. The lowland country of these catchments is intensively farmed while the hill country is either extensively farmed or planted in exotic forest for harvesting. Given the intensive nature of agriculture in the lowland areas, many of the waterways are considerably degraded, adversely affecting the sports fishery and recreational amenity. The Waitaki Power Scheme impedes fish passage past the dams and controlled flows diminish the natural hydrographs of the river and contribute to didymo and periphyton growth in the rivers. Contaminants such as nitrogen, phosphorus, E. coli, and sediment are of particular concern. Land use change in the high country is having adverse effects on the environment as areas once extensively grazed by sheep are becoming intensified and irrigated. Many of the spring-fed systems in the high country are under continual threat of degradation due to surrounding land use pressures and indigenous vegetation clearance. Whilst regional plans manage farming activities by way of farm environment plans, fencing, and nutrient concentration limits, water quality to date has not seen adequate improvements.

Over 90% of wetlands in New Zealand have been lost. Many wetlands in the CSI Fish and Game Region have been drained for agricultural production and continue to be drained. Low-lying and flat, wetlands readily store and slowly release surface water, rain, snowmelt, and flood waters. Wetland plants trap water, slowing the flow of floods, then gently release them over surrounding plains. In places like Canterbury where water is in high demand, wetlands play a critical role in recharging groundwater aquifers, and maintaining stream flows during dry spells.[1] Wetlands slowly filter contaminants and are highly diverse, important habitats for game birds and indigenous flora and fauna.

Ō Tū Wharekai (Ashburton Lakes/Upper Rangitata River) is one of the best examples of an inter-montane wetland system remaining in New Zealand. The area contains diverse wetland habitats including the braided upper Rangitata River and the twelve lakes that make up Ō Tū Wharekai. The Hakatere Conservation Park, centred on Ō Tū Wharekai, was opened in October 2007 and is managed by the Department of Conservation. The area is nationally important for wildlife and there are a number of threatened plants found there.[2] The area provides game bird habitat as well as diverse fishing opportunities. Ō Tū Wharekai is of immense cultural significance to Ngāi Tahu Whānui, being an important seasonal mahinga kai area and a major travelling route between the settlements on the eastern coast of Te Waipounamu (the South Island) and those on Te Tai Poutini (the West Coast). However, most of the lakes in Ō Tū Wharekai are now exhibiting signs of degradation and do not meet water quality outcomes as stipulated in the Canterbury Land and Water Regional Plan. The CSI Fish and Game Council works with the Department of Conservation, Te Rūnanga o Arowhenua, the Upper Rangitata Landcare Group, territorial authorities, the Lake Clearwater hut owners, landowners, and many interested licence holders to manage the area for sports fish and game birds, address matters around recreational access and to advocate for water quality and healthy ecosystems and habitats.

Wainono Lagoon, a wetland of historical, cultural, recreational, and environmental significance, is highly degraded in terms of water quality. Surrounding land use has adversely impacted the health of the lagoon and surrounding waterways. The CSI Fish and Game Council has recently lowered the stop bank on its property adjoining Wainono Lagoon to enhance and expand the wetland area; it now adds to the surrounding lagoon ecosystem and increases game bird habitat and recreational opportunities for hunters.

[1] https://www.doc.govt.nz/news/stories/2013-and-earlier/loss-value-and-protection/, accessed 18 January 2019.

[2] https://www.doc.govt.nz/parks-and-recreation/places-to-go/canterbury/places/o-tu-wharekai-wetland/, accessed 01 July 2019.

2 SPORTS FISH POPULATIONS

The CSI Fish and Game Region contains brown trout, rainbow trout, brook char, chinook salmon, sockeye salmon, perch, and tench (Appendix 3). Historically, a wide range of stocking programmes was undertaken; however, that outlook has changed, and the CSI Fish and Game Council has moved to investing resources into improving spawning, breeding, and rearing habitats both on the ground and through the resource management and planning process. Some stocking is still undertaken in accordance with policy. This job is not easily achieved as habitats are under continuous threat through land mismanagement, insensitive riparian land use, abstraction, and instream works.

3 GAME BIRD POPULATIONS

The CSI Fish and Game Region has long maintained a healthy game bird population with a variety of game bird species for hunters to enjoy (Appendix 3). On an annual basis, CSI Fish and Game staff conduct game bird population surveys to continue to understand population distribution and trends within the region.

4 RESOURCE USE

The CSI Fish and Game Council issues hunting and fishing licences to the public who wish to participate in hunting and angling opportunities. Annually, the CSI Fish and Game Council issues approximately 17,000 fishing licences and 2,500 game licences.

The region is largely a rural population base with the biggest centres being Ashburton, Timaru and Oamaru; however, the region experiences high tourist numbers especially in the Mackenzie District.

The National Angling Survey (NAS) conducted every seven years gives an indication as to angler effort in the region and identifies the waterways most fished using the measurement of 'angler days.' An 'angler day' equates to one angler visiting a lake or river on one day, irrespective of the number of hours fished. Since the first survey was completed in 1994/95, total effort has increased in the CSI Fish and Game Region from approximately 165,000 to 300,000 angler-days as shown in the last survey conducted in 2014/15.

A distinctive long-term trend captured by the NAS is the steady decline in effort on lowland river fisheries such as the Ashburton, Orari and Opihi rivers. Some of the decline in effort may be related to declining water quality and habitat degradation. The decline in effort on the lowland waterways has been partially offset by a large increase in effort on the Upper Waitaki hydroelectric canals.[3]

The Upper Waitaki hydroelectric canals in the Mackenzie Basin are considered the biggest freshwater fishery in the country. In the 1994/95 National Angler Survey, the canals sustained 5,500 angler-days; the 2014/15 survey indicates 88,730 angler-days were spent at the canals.[4] The lakes in the Waitaki catchment including Aviemore, Benmore, Ōhau, and Tekapo have also seen remarkable increases in use and angling effort over that same period. In 2014/15 Lake Benmore was the most fished lake in any Fish and Game Region and Lake Aviemore was the fourth most fished lake.

The lowland streams and rivers, coastal areas, wetlands, and ponds are popular destinations for game bird hunters in the region.

[3] National Angler Survey 2014/15, July 2016, p6.
[4] ibid, p40.

CSI Fish and Game staff undertake an annual game bird harvest survey to monitor game bird harvest, effort, and the average hunter's season bag for each game bird species across the region. Mallard/grey duck are the most sought-after game bird in the region representing on average 87% of the hunter season bag, followed by paradise shelduck. Black swan, pukeko, and shoveler contribute approximately one to two percent of the total harvest and make up the remainder of the game bag. There has been some data to suggest that declines in game bird harvest is perhaps more related to changes in habitat rather than a decrease in game bird numbers. Annual population surveys suggest the key game bird species appear to be moving from traditional hunting areas (i.e., riverbeds, small ponds) on to un-hunted large irrigation ponds and flooded paddocks when available.

Upland game (California quail, chukar, and pheasant) are hunted by a small but dedicated group of game bird hunters that highly value the resource. Upland game distribution across the region can be patchy and is largely determined by suitable habitat being available for each of the species. Chukar hunting within the region is by permit only and involves a diary scheme that details location, hunter effort, number of birds observed and harvested. Chukar diary returns show low harvest; however, many hunters return annually suggesting they place value on the experience provided irrespective of success.

5 SPORTS FISH AND GAME BIRD RESOURCES

The sports fish and game bird resources in the CSI Fish and Game Region are made up of species populations and the habitats that they rely on for spawning, breeding, rearing, and survival into adulthood. The resources can be impacted by changes to habitat (both enhancement and degradation), climate change, user participation, changes to distribution, and changes in attitudes to angling and hunting. Assessing the resource must include habitat values, sports fish and game bird population characteristics, and angling and hunting amenity and attributes.

6 RESOURCE ASSESSMENT AND RECREATIONAL OPPORTUNITY SPECTRUM FOR ANGLING AND HUNTING

Recreational Opportunity Spectrum (ROS)

A resource assessment coupled with a recreational opportunity spectrum (ROS) provides a comprehensive assessment of the resource and assists in the planning and management of the recreational opportunities it provides. It is a means of identifying the state of the resource and determining the diversity of recreational opportunities for an area and the environmental needs. The resource assessment and ROS detailed in this Plan (Appendix 4) classifies the resources in the region including the risks to the resource and recognises the diversity of recreational angling and game bird hunting opportunities in the CSI Fish and Game Region, classifying them on a spectrum that is based on key characteristics.

The named waterways included in the assessment were identified through the National Angling Survey (NAS) conducted by NIWA once every seven years. The NAS provides a reliable and comparable long-term reference point for the use of sports fishery resources by anglers, but the number of waterways enjoyed by licence holders in the CSI Fish and Game Region is larger again than the number of named waterways because waterways with very low use are unlikely to be captured by the survey methodology.

The popularity of fisheries and hunting locations can change through time due to habitat enhancement or degradation, access, regulations, and pond development.

Key characteristics when considering ROS:

1. Settings- the combination of social, resource, and managerial conditions that give value to a place. The setting is considered based on the following attributes:
    a. access; and
    b. non-recreational resource uses and compatibility; and
    c. on-site management; and
    d. social interaction; and
    e. acceptability of visitor impacts; and
    f. level of regulations.
2. Activities- the specific activities undertaken such as spin fishing, fly fishing or game bird hunting and should consider potential users and their expectations.
3. Experiences- the experience is derived from a combination of the activity chosen by the recreational user and the setting, which is managed as far as possible. The experience can include challenge, risk, solitude, and companionship.

The CSI Fish and Game Council has a goal to satisfy the expectations and maximise opportunities for angler and hunter participation through sustainable and wise management of the region's sports fish and game bird resources. Achievement of this goal requires a good understanding of the needs and preferences of licence holders in order to actively manage settings for user experiences. Recreational users engage in an activity within a particular setting with the outcome being an experience and benefit to that user. By managing for certain setting characteristics, specific recreation experience opportunities and beneficial outcomes will be provided.

The five broad categories below represent an opportunity spectrum:

1. Urban
    - Setting is within or adjacent to an urban area
    - Duration of activity is relatively short
    - Access is easy by road and travel is short
    - User encounter rates are relatively high
    - Water is man-made or highly modified
    - Experience is characterised by open space but within a built or modified environment
2. Rural
    - Setting is rural and modified by farming activity
    - Duration of activity may be short or long but is commonly up to a day
    - Access is relatively easy by road
    - User levels can be high and encounter rates are moderate
    - Fishable water area is extensive
    - Game bird hunting (waterfowl) opportunity is extensive
    - Experience is characterised by feelings of being away from urban areas
    - Experience is associated with companionship or family recreation activities, such as swimming
    - A variety of fishing methods are employed
    - Catch rates and size of fish are average
3. Natural
    - Setting is not greatly modified and unmodified remnants are common

- Duration of activity is usually longer and commonly over 4 hours
- Access is easy by road, track or boat and travel distance is relatively long
- Location is usually distant from centres of population
- Use is commonly associated with camping, swimming, and the use of huts or holiday houses
- User encounter rates are moderate
- Water is little modified and catch rates/size of fish are average or better
- Fishable water area is extensive
- Game bird hunting opportunity is less extensive but more diverse and can include upland game
- Experience is characterised by scenic beauty and is commonly associated with family activities such as boating, picnicking, and walking

4. Backcountry
    - Setting is largely unmodified natural landscape and human intrusion is limited
    - Duration of activity is usually longer and commonly over 4 hours
    - Access is by gravel road, walking track, boat or aircraft and travel distance is relatively long
    - Location is usually distant from centres of population
    - Use is commonly associated with camping, swimming, and the use of huts or holiday houses
    - User encounter rates are low
    - Water is little modified and catch rates/size of fish are average or better and can include trophy trout
    - Fishable water area is limited
    - Game bird hunting opportunity is very limited
    - Experience is characterised by scenic beauty and feelings of solitude and is commonly associated with activities such as tramping and camping
    - Access methods can impact on the experience of others

5. Remote
    - Setting is natural landscape with very little human intrusion
    - Duration of activity is usually long and involves more than a day
    - Access is by foot, aircraft or jet boat and travel distance is long
    - Location is remote from centres of population
    - Use is commonly associated with camping, tramping and hunting
    - User encounter rates are low
    - Water is clear and size of fish is larger than average
    - Fishable water area is limited and pressure sensitive
    - Experience is characterised by scenic beauty and feelings of peace and solitude
    - Access methods can impact on the experience of others

The following criteria are considered in assessing the significance of fisheries, hunting areas, and fish and game bird habitats within the CSI Fish and Game Region. The significance of a fishery or game bird resource is not equivalent to the quality or value of that resource. This may be the case where a locally significant fishery can be high, medium or low quality or value depending on its condition, character or specific fishery characteristics or attributes. For example, easily accessible rivers located close to population centres afford fishing opportunities that encourage high angler use despite the lower

quality of scenery, lack of solitude and generally smaller fish that characterise some of the rivers. Conversely, the attraction of solitude, scenery and larger fish can outweigh the effort involved in travelling long distances and negotiating more difficult access in order to fish the more remote rivers.[5]

A habitat, fishery, or hunting area needs to meet one or more of the significance criteria to be ranked as nationally, regionally, or locally significant. Habitat significance may be reviewed in light of new information.

1. Nationally significant
    - Habitat, fishery or hunting area is recognised as outstanding in a National Water Conservation Order or is denoted as high significance in a decision from a public process or in a published technical report or statutory plan
    - Backcountry fishery in an area designated as an outstanding natural landscape in a district plan or within public conservation land and recognised as outstanding in national terms
    - Fishery sustaining 5,000 or more angler visits per year as published in the National Angler Survey
    - Hunting area sustaining more than 500 hunter visits per year
    - Habitat, fishery or hunting area with more than one exceptional attribute as determined by formal angler or hunter surveys
    - Wetland habitat of 400 hectares in area or more
    - High level of use by international anglers
    - High level of use by resident anglers from outside the Region
    - Fishery or hunting area has significant attributes identified by survey or community consultation
    - Habitat that provides spawning, breeding, and rearing areas for a nationally significant fishery or game habitat
    - Habitat that provides a migratory pathway or corridor for a nationally significant fishery or game bird habitat

2. Regionally significant
    - Habitat, fishery or hunting area is recognised as regionally important in a decision from a public process or in a published technical report or statutory plan
    - Backcountry fishery in an area designated as an outstanding natural landscape in a district plan or within public conservation land
    - Fishery sustaining between 2,000-5,000 angler visits per year
    - Hunting area sustaining between 150 to 500 hunter visits per year
    - Habitat, fishery or hunting area with at least one exception attribute as determined by formal angler or hunter surveys
    - Wetland habitat over 40 to 400 hectares in area
    - Noticeable level of use by international anglers
    - Noticeable level of use by resident anglers from outside the Region
    - Degraded habitat with potential for restoration to meet one or more of the above criteria
    - Fishery or hunting area has significant attributes identified by survey or community consultation

[5] NZ Ministry of Agriculture and Fisheries, *The Relative Value of South Canterbury Rivers to South Canterbury Anglers: A Preliminary Report*, 1982, Report 17, Wellington.

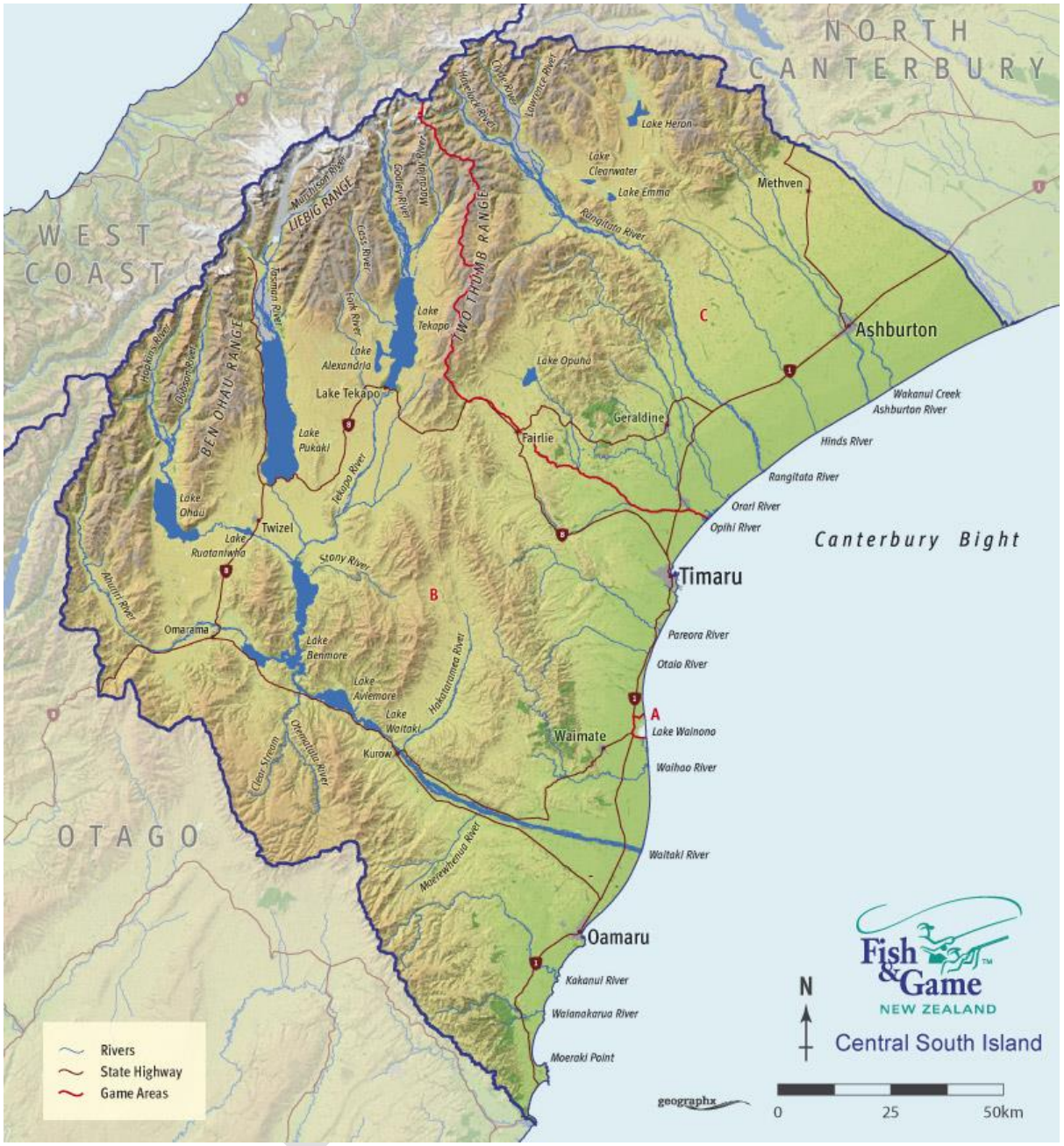
- Habitats that provide spawning, breeding, and rearing areas for a regionally significant fishery or game bird habitat

3. Locally significant
    - Habitat, fishery or hunting area is recognised in surveys including the National Anglers Survey, in a decision from a public process or in a published technical report or statutory plan
    - Fishery sustaining up to 2,000 angler visits/year
    - Hunting area sustaining up to 150 hunter visits per year
    - Habitat fishery or hunting area that is close to a centre of population (within a 45-minute drive)
    - Degraded habitat with potential for restoration to meet one or more of the above criteria
    - Fishery or hunting area has significant attributes identified by survey or community consultation
    - Habitats that provide spawning, breeding, and rearing areas for a locally significant fishery or game bird habitat
    - Habitat that provides a migratory pathway or corridor for a locally significant fishery or game bird habitat

In terms of assessing significance, the waterways listed include their tributary streams in the catchment above the named river, lake, stream, or wetland because of the part they play in providing habitat areas for particular life stages of sports fish and game bird species.

APPENDICES

APPENDIX 1- MAP OF CENTRAL SOUTH ISLAND FISH AND GAME REGION



APPENDIX 2- LEGISLATION

Conservation Act 1987

The establishment, functions, powers, and responsibilities relating to Fish and Game Councils are contained within Part 5A of the *Conservation Act 1987*. Sections 26Q-26Z detail the functions, responsibilities, and powers to be administered by all regional Fish and Game councils.

The overarching function of the CSI Fish and Game Council as set out in section 26Q is to '*manage, maintain, and enhance the sports fish and game resource in the recreational interests of anglers and hunters.'* Specific functions include:

- assess and monitor sports fish and game populations; and
- assess and monitor angler and hunter success and satisfaction; and
- assess and monitor the condition and trend of ecosystems as habitats for sports fish and game; and
- maintain and improve access; and
- maintain hatchery and breeding programmes, where required for stocking ore restocking the sports fisheries and game habitat; and
- provide information on sports fish and game and promote angling and hunting; and
- ensure compliance with angling and hunting regulations and promote ethical standards; and
- represent the interests and aspirations of anglers and hunters in the statutory planning process, including advocating for their interests in habitats; and
- implement Fish and Game national polices.

Sections 26ZI-ZR of the Act outlines restrictions, offences, and penalties related to sports fisheries, some of which are regulated by CSI Fish and Game Council.

Regulations pertaining to the management of the sports fish and game resource can be made under sections 48 and 48A of the *Conservation Act 1987* that relate to fish and game management. The Angler Notice prepared each year for each Fish and Game region under the provisions of section 48A sets out the conditions under which a current licence holder may fish for sports fish in the area to which the notice relates.

Freshwater Fisheries Regulations 1983 are made under the *Fisheries Act 1983* but apply mainly to the *Conservation Act 1987*. Fish species legally declared as sports fish in New Zealand waters are listed in Schedule 1 of the *Freshwater Fisheries Regulations 1983* and are the statutory responsibility of Fish and Game Councils (Appendix 3).

Section 4 of the *Conservation Act 1987* governs the CSI Fish and Game Council's relationship with Te Rūnanga o Ngāi Tahu so as to give effect to the principles of the Treaty of Waitangi.

Wildlife Act 1953

The Wildlife Act 1953 includes provisions that relate to game bird management that:

- enable the Minister of Conservation to declare an open season for game and the conditions controlling the taking of game; and
- allow the Director-General of the Department of Conservation to authorise the Council to take game for certain purposes; and
- details the appointment and powers of rangers; and

- sets out game bird hunting offences and penalties; and
- defines the wildlife species legally declared to be 'game' in Schedule 1 and therefore managed by Fish and Game councils (Appendix 3).

Wider legal context and relevant legislation

In addition to the *Conservation Act 1987* and *Wildlife Act 1953* in which Fish and Game councils operate under, there are other pieces of legislation that further define the environment and context in which the CSI Fish and Game Council must operate.

Resource Management Act 1991

The *Resource Management Act 1991* (**RMA**) is the primary piece of legislation in New Zealand that sets out the framework and provisions for guiding resource management. Fish and Game Councils take an interest in and advocate for the protection of habitat as set out in the *Conservation Act 1987*.

Part 2 sets out the purpose of the RMA as promoting the sustainable management of natural and physical resources. Sustainable management is defined as:

> *managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while*
>
> - *sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations; and*
> - *safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
> - *avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

Section 6 details 'Matters of national importance' and requires all persons exercising functions and powers under the RMA, in relation to managing the use, development, and protection of natural and physical resource, must provide for a specified list of matters of national importance. Those matters particularly relevant to Fish and Game councils and their statutory responsibilities include:

- the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development; and
- the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development; and
- the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna; and
- the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers.

Section 7 of the RMA outlines 'Other matters' that all persons exercising functions and powers under it shall have particular regard to. The matters of particular interest to Fish and Game councils are:

- the efficient use and development of natural and physical resources; and
- the maintenance and enhancement of amenity values; and
- intrinsic values of ecosystems; and
- maintenance and enhancement of the quality of the environment; and

- the protection of the habitat of trout and salmon; and
- the effects of climate change.

Part 9 details the procedures and purpose of Water Conservation Orders (WCO). The purpose of a WCO is to recognise and sustain outstanding amenity or intrinsic values of waterways. Having met the test of outstanding, any WCO approved will contain provisions necessary to protect those outstanding values. In the CSI Fish and Game Region, there are three catchments that are protected by WCOs: National Water Conservation (Ahuriri River) Order 1990, Water Conservation (Rangitata River) Order 2006, and National Water Conservation (Rakaia River) Order 1988.

National Policy Statement for Freshwater Management 2020

The *National Policy Statement for Freshwater Management 2020* (**NPS-FW**) states Te Mana o te Wai as a foundational concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. It protects the mauri of the wai. Te Mana o te Wai is about restoring and preserving the balance between the water, the wider environment, and the community. It is relevant to all freshwater management in Aotearoa New Zealand.

The hierarchy of obligations in Te Mana o te Wai is prioritised as follows:

a) first, the health and well-being of water bodies and freshwater ecosystems
b) second, the health needs of people (such as drinking water)
c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

Freshwater Fisheries Regulations 1983

The *Freshwater Fisheries Regulations 1983* is the primary legislation governing, amongst other things:

- the issue and enforcement of sports fish licences, and the distribution and use of fees; and
- the taking of fish from or near fish traps; and
- storage, smoking, and canning of sports fish; and
- fish passage provisions; and
- fishing competitions; and
- transfer and liberation of sports fish; and
- offences against the regulations outlined in the Freshwater Fisheries Regulations 1983 and penalties.

Local Government Act 1974

The *Local Government Act 1974* contains directions to territorial authorities regarding maintenance and accessibility of local roads along waterways, including unformed legal roads, and section 342 and Schedule 10 outlines the procedure for the stopping and closing of roads.

Local Government Act 2002

The *Local Government Act 2002* contains, amongst other matters, a directive to implement a long-term plan. These plans provide a long-term focus for the decisions and activities of the territorial authority. Matters in a long-term plan that the CSI Fish and Game Council may take an interest in can relate to stormwater management, stockwater schemes and biodiversity.

Walking Access Act 2008

The purpose of the *Walking Access Act 2008* is to provide the New Zealand public with 'free, certain, enduring, and practical walking access to the outdoors (including around the coast and lakes, along rivers, and to public resources) so that the public can enjoy the outdoors.'

The *Walking Access Act 2008* established the New Zealand Walking Access Commission who, when considering its priorities for negotiating walking access over private land, must take into account access around rivers and lakes as well as to sports fish and game resources (s11). This mandate closely aligns with the function of Fish and Game councils 'to maintain and improve the sports fish and game resource by maintaining and improving access.'

Biosecurity Act 1993

The *Biosecurity Act 1993* is administered by the Minister for Primary Industries and provides the legal framework to exclude, eradicate and effectively manage pests and unwanted organisms throughout New Zealand.

Public Works Act 1981

If any land is held for any public work under this or any other Act, local authorities may grant a lease or tenancy of the land or a licence to occupy the land on such terms and conditions as he or it may think fit under section 45. This could include an activity such as grazing.

Crown Pastoral Land Act 1998

The *Crown Pastoral Land Act 1998* provides the legislative framework for the administration of pastoral leases in the high country. The CSI Fish and Game Council is active in this area as a large part of the CSI Fish and Game Region is or has been affected in some way or another by tenure review. The CSI Fish and Game Council takes great interest in matters relating to access, hunting opportunities, and land use intensification, which could have adverse effects on water quality.

National Parks Act 1980

Aoraki Mount Cook National Park is the only national park within the CSI Fish and Game Region and is managed under the *National Parks Act 1980*. Whilst the sports fishery within the current park boundaries is not significant, the lower reaches of the rivers that flow from the park have some of the most important sockeye spawning waters in the country.

Reserves Act 1977

The *Reserves Act 1977* provides for the preservation and management of areas possessing:

- recreational use; and
- wildlife; and
- indigenous flora or fauna; and
- environmental and landscape amenity; and
- natural, scenic, scientific or other special features or values.

Section 2 of the *Reserves Act 1977* declares Fish and Game councils to be a local authority, which enables them to exercise the powers and functions of a local authority under the Act. The CSI Fish and Game Council could be appointed to carry out day to day control and management of reserves for wildlife management. Additionally, section 77 recognises Fish and Game councils as covenanting bodies.

There are a number of reserves in the CSI Fish and Game Region administered under the *Reserves Act 1977*. The Lake Alexandrina Scenic Reserve was established under section 19 (1)(a) of the *Reserves Act 1977* and is an important trout fishery.

Ngāi Tahu Claims Settlement Act 1998

Te Kerēme, the Ngāi Tahu Claim, was lodged with the Waitangi Tribunal in 1986. The Ngāi Tahu Deed of Settlement was signed at Takahanga Marae, Kaikoura, in 1997. The resulting *Ngāi Tahu Claims Settlement Act 1998* appoints Te Rūnanga o Ngāi Tahu as a statutory advisor to the CSI Fish and Game Council. Te Rūnanga o Ngāi Tahu may provide advice to the CSI Fish and Game Council on the conditions for hunting seasons for native game birds and the preparation of those parts of draft sports fish and game management plans which relate to native game birds. The CSI Fish and Game Council must have particular regard to that advice.

The *Ngāi Tahu Claims Settlement Act 1998* defines native game birds as the following species (s 77):

- Maunu/Pārera (Grey duck- *Anas superciliosa*); and
- Pākura/Pūkeko (Pūkeko- *Porphyrio porphyrio*); and
- Pūtakitaki (Paradise shelduck- *Tadorna variegata*); and
- Tētē (Shoveller- *Anas rhynochotis*).

The *Ngāi Tahu Claims Settlement Act 1998* sets out areas and waters within the CSI Fish and Game Region that Ngāi Tahu has cultural associations with. The *Ngāi Tahu Claims Settlement Act 1998* recognises these as 'Statutory Acknowledgements' or 'Deeds of Recognition' when they relate to public conservation land. Those recognised in the CSI Fish and Game Region are as follows:

- Aoraki/Mount Cook; and
- Hakataramea River; and
- Hakatere (Ashburton River); and
- Hekeao (Hinds River); and
- Kakaunui River (Kakanui River); and
- Lake Ōhau; and
- Lake Pūkaki; and
- Mahi Tīkumu (Lake Aviemore); and
- Matakaea (Shag Point); and
- Ō Tū Wharekai (Ashburton Lakes); and
- Ōrakipaoa Wetland; and
- Pouerua (Saltwater Lagoon); and
- Rakitata Awa (Rangitata River); and
- Takapo (Lake Tekapo); and
- Te Ao Mārama (Lake Benmore); and
- Waitaki River; and
- Whakarukumoana (Lake McGregor).

Local Government Official Information and Meetings Act 1987

The CSI Fish and Game Council is subject to the *Local Government Official Information and Meetings Act 1987* where the purpose is to provide the public with official information held by local authorities and to promote the open and public transaction of business at meetings unless it meets criteria defined under the Act. All CSI Fish and Game Council meetings are open to the public and must be advertised.

Public Finance Act 1989

The CSI Fish and Game Council is subject to the provisions of the *Public Finance Act 1989*. The CSI Fish and Game Council is audited annually by the auditors appointed by the Office of the Auditor General and must produce an annual report including a statement of objectives and a comparative statement of service performance. The report must be presented to a publicly advertised annual general meeting and to Parliament. The CSI Fish and Game Council is a Public Entity in terms of the Act.

APPENDIX 3- SPECIES MANAGED BY FISH AND GAME

Freshwater Fisheries Regulations 1983- Schedule 1

For the purposes of the Act and these regulations, **sports fish** means—

(a) Brown trout (*Salmo trutta*):
(b) Rainbow trout (*Oncorhynchus mykiss*, formerly known as *Salmo gairdneri*):
(c) American brook trout or char (*Salvelinus fontinalis*):
(d) Lake trout or char (*Salvelinus namaycush*):
(e) Atlantic salmon (*Salmo salar*):
(f) Quinnat or chinook salmon (*Oncorhynchus tshawytscha*):
(g) Sockeye salmon (*Oncorhynchus nerka*):
(h) Perch (*Perca fluviatilis*):
(i) Tench (*Tinca tinca*):
(j) Rudd (*Scardinius erythrophthalmus*) found or taken in the area of jurisdiction of the Fish and Game Council for Auckland—

and includes any hybrid and the young, fry, ova, and spawn, and any part of any such fish; but does not include salmon preserved in cans and imported into New Zealand.

The sports fish species that inhabit the CSI Fish and Game Region are detailed below.

Brown Trout (Salmo trutta)

Brown trout were first introduced to New Zealand in the late 1860s and became widely distributed throughout the CSI Fish and Game Region's streams, rivers, and lakes. The brown trout fisheries resident in the Region's lakes are quite variable in terms of density and size of fish present. Some lakes have no brown trout at all. Resident brown trout generally average 0.5-1.5 kg throughout the Region with the canals being noted for larger than average fish.

Sea-run brown trout populations are found in the lower reaches of the East Coast rivers. These fish return from sea throughout the fishing season in preparation for spawning in the spring-fed tributaries and side channels of rivers before returning to sea. Sea-run brown trout are larger than the resident brown trout and average 2-3kg in weight and 40-50 cm long.

Rainbow Trout (Oncorhynchus mykiss)

The establishment of rainbow trout in New Zealand began in the early 1880s in the North Island. They gradually made their way south, becoming discretely distributed in the upper Ashburton catchment, the Rangitata catchment and the Waitaki catchment, both above and below the dam. Lake Opuha has developed a self-sustaining population of rainbow trout due to previous stocking efforts. On occasion, rainbow trout can be caught in most medium sized rivers that maintain a river mouth to the sea.

Lake Benmore and the hydro-canals in the Mackenzie Basin offer anglers good-sized rainbow trout. Lake Benmore is the second most fished lake in the country only behind Lake Taupo. The 'Canal Harvest Survey' conducted by CSI Fish and Game staff during the 2015-2016 fishing season estimates that 38% of all rainbow trout caught in the hydro-canals are greater than 10 lbs. Fish of this size has enticed anglers to this location from all over the country for their chance at catching a 'trophy' fish.

The Aviemore spawning race is an artificial stream channel constructed in 1968 to provide spawning grounds for sports fish in Lake Waitaki to compensate for the loss of natural spawning grounds that

resulted from the construction of Aviemore Dam. The annual rainbow spawning run in the race produces, on average, 300 rainbow trout redds, which makes a significant contribution to the lake fishery and to the lower Waitaki River below the Waitaki Dam. The CSI Fish and Game Council manages the race and works with Meridian Energy Limited to maintain the race through regular grooming, weed control and re-gravelling.

Chinook Salmon (Oncorhynchus tschawytscha)

The Hakataramea River is the birthplace of chinook salmon in New Zealand. During 1901-1906 from a purpose-built hatchery in the valley, the first successful releases from salmon ova imported from the McCloud River in North America began the South Island salmon fishery. Significant runs were established in the Waitaki and migrated north to rivers such as the Rangitata and Ashburton. From the lower Waitaki, salmon were reported spawning in the upper tributaries of the river in waterways such as Maryburn, Grays River and Haldon Stream.

In 1935, the Government's construction of the Waitaki Dam extinguished the salmon run into the upper catchment as it prevented fish from reaching the extensive spawning grounds in the upper Waitaki from the sea[6]. The engineered fish pass over the dam was a feeble attempt to provide fish passage; it was deemed a failure and observations noted thousands of fish perishing without spawning or fish redirecting themselves up the Hakataramea River[7]. The 20-metre dam proved impassable and the fish pass was demolished in 1951.

In conjunction with Meridian Energy Limited under the 'Agreement in relation to water rights', CSI Fish and Game staff undertake monitoring, access and habitat enhancement projects on the Waitaki River. The various projects include side braid enhancement for salmon spawning, which largely includes willow removal to promote better flow, spawning surveys to monitor populations, and river access maintenance to clear vegetation.

The Canterbury Land and Water Regional Plan has a number of provisions that afford salmon spawning sites additional protections in terms of permitted or consented activities undertaken in or near waterways.

Two salmon hatcheries operate within the CSI Fish and Game Region, McKinnons Creek on the Rangitata River and Welcome Stream on the Waitaki River. These hatcheries are operated by dedicated volunteers with the resource consents held by CSI Fish and Game Council. The hatcheries' purpose is to supplement angler harvest in the lower reaches of their respective rivers.

Sockeye Salmon (Oncorhynchus nerka)

The sockeye salmon of the Waitaki Lakes are the only self-sustaining population of sockeye in the Southern Hemisphere. Sockeye were introduced in 1901 in an effort to create a canning industry similar to that in British Columbia; however, no self-sustaining sea-run sockeye run was ever confirmed. The remaining sockeye occur as populations partially separated by dams that only allow downstream migration. Like all Pacific salmon, sockeye die shortly after spawning.

Sockeye salmon are filter-feeders that mostly feed on tiny zooplankton, meaning that competition with trout or chinook salmon for food in the lake environment is probably limited[8]. Being filter feeders also means that outside of the spawning season they tend to avoid lures or flies used by anglers.

[6] Gamekeepers for the Nation, 1994, p268.
[7] ibid, p269.
[8] Graynoth, Bennett, & Pollard, 1986.

Sockeye salmon are currently present in lakes Pukaki, Ōhau, Ruataniwha, Benmore, Aviemore and Waitaki and spawning occurs in most tributaries of these lakes.

It is estimated that more than 39,000 sockeye salmon spawned in Waitaki Catchment tributaries in 2018 and 73,000 in 2020. The growth of the population may be linked to changing productivity of the lakes and sockeye could be an important bio-indicator for the health of the lakes. If this is the case, then the continuing presence of a large sockeye population is important for sports fishing, and changes in the population may indicate changes to the trophic level and productivity of the lakes. In conjunction with Meridian Energy Limited, CSI Fish and Game staff undertake an intensive monitoring programme involving aerial and foot spawning counts to identify the temporal distribution and peak of sockeye spawning in each spawning stream, the relative value of each spawning stream in terms of the number of sockeye salmon spawning there, and the total run of salmon across all streams and catchments.

Brook Char (Salvelinus fontinalis)

Brook char were successfully introduced in New Zealand in the late 1800s; however, not much was known about their population size as they tended to retreat into the headwaters of the river system, occupying small streams often less than a metre wide, and usually deeply entrenched in tussocks[9]. Brook char do not coexist well with trout and where there are good numbers of char there are seldom any trout. Lake Emily provides the only fishery of note for the species in the region, and arguably the entire country, with fish up to 2kg possible.

Tench (Tinca tinca)

North Otago in the CSI Fish and Game Region is the indisputable home of tench and has been for over 100 years. They arrived in Canterbury in 1867 and made their way to Elderslie, near Oamaru, in 1880. Today, tench remain naturally only in the Kakanui River catchment within a 20-kilometre radius of the historical Elderslie site where suitable habitat exists such as in Waiareka Stream, Windsor Stream, Kakanui River and Island Stream. CSI Fish and Game Council has recently reintroduced tench at Centennial Park in Timaru to enhance angling opportunities in the area.

Tench are fish of lakes and ponds, or slow flowing rivers and streams containing deep pools. Their habitats are more often mud bottom, usually supporting aquatic plant growth. Whilst not a salmonid, they are acclimatised fish and remain under the jurisdiction of the Council.

Perch (Perca fluviatilis)

Perch established widely and quickly after first being brought to New Zealand in 1868. A healthy population exists in lakes Clearwater, Emma and Camp in the upper Ashburton catchment, Island Stream in the Kakanui Catchment, Saltwater Creek and Lake Hood. They are underrated as a sports fish species but do attract attention amongst some anglers, and it is argued that they provide a good target species for children learning to fish.

[9] Gamekeepers for the Nation, p290.

Wildlife Act 1953- Schedule 1

Black swan (*Cygnus atratus*): except on Chatham Islands
Chukar (*Alectoris chukar*): except on Chatham Islands
Duck:

Australasian shoveler (*Anas rhynchotis*)
Grey duck (*Anas superciliosa*) and any cross of that species with any other species, variety, or kind of duck (except on Chatham Islands)
Mallard duck (*Anas platyrhynchos*) and any cross of that species with any other species, variety, or kind of duck (except on Chatham Islands)
Paradise shelduck (*Tadorna variegata*)

Partridge:

Grey partridge (*Perdix perdix*): except on Chatham Islands
Red-legged partridge (*Alectoris rufa rufa*): except on Chatham Islands

Pheasant:

any bird, not being a domestic bird, of the genus *Phasianus* and any cross of any such bird with any other species, variety, or kind of pheasant: except on Chatham Islands

Pukeko (*Porphyrio melanotus*): except on Chatham Islands
Quail:

Bobwhite quail (*Colinus virginianus*): except on Chatham Islands
Brown quail (*Coturnix ypsilophora*): except on Chatham Islands
California quail (*Callipepla californica*): except on Chatham Islands

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The game bird species that inhabit the CSI Fish and Game Region are detailed below.

Mallard (Anas platyrhynchos)

Mallards originally released in New Zealand were of stock from Great Britain in the 1860s. The early releases did poorly in the wild and for decades were not a significant part of the wild populations.[10] In the early 1900s mallards were finally established. They were included in the birds listed on the game licence in 1931. In 1937, American mallards were imported; they soon multiplied and became widely dispersed[11]. Mallards are abundant in lowland waterways, wetlands and water storage ponds. As with other wildfowl, mallards are crop predators and can have significant populations in agricultural areas. Their population is managed as a game bird species within the hunting regulations.

By the mid-1950s, hybridisation between mallards and the native grey duck was significant and today, mallard/grey duck are the most sought-after game bird in the CSI Fish and Game Region and make up around 80 percent of the total season waterfowl harvest. Relaxed bag limits, summer extended season and nationally high average season bag and harvest rate contribute to enhanced hunting opportunities.

Paradise Shelduck (Tadorna variegata)

The paradise shelduck is New Zealand's only shelduck and are widely distributed in agricultural areas, tussock grasslands and wetlands around the country. The shelduck underwent a decline in the late nineteenth century due to intensive hunting but have increased throughout the country since then.

[10] ibid, p307.
[11] ibid.

The paradise shelduck is one species that have benefitted from conversion of native forest to pasture along with the construction of water storage and stockwater ponds. Ponds can be safe refuges and shelduck take advantage of this during their moult period. Additionally, hunting is managed via bag limits and seasonal permits. Today, the population is considered healthy.

CSI Fish and Game staff conduct annual population monitoring surveys and paradise shelduck have shown increasing trends over the last decade. There are minor fluctuations from year to year around routinely monitored sites across the region, but the population index ranges from between 8,000 to almost 16,000 birds. Hunting appears to be able to have an impact on population trends and harvest is monitored.

Black Swan (Cygnus atratus)

Importations of black swan from Australia began to take place in the 1860s; however, it is thought that the bird appeared to have flown to New Zealand from Australia around that same time[12]. Black swans dispersed widely after that becoming abundant in some areas.

Annual population monitoring and harvest surveys provide valuable data to estimate the population size of black swan in the CSI Fish and Game Region. Overall, the black swan population in the region has remained relatively stable with the exception of Lake Wainono where black swan numbers can fluctuate widely year to year due to the presence or absence of large mobs migrating along the East Coast of the South Island. Restrictions on swan harvest have been implemented in the past in order to boost population numbers to sustainable levels. The CSI Fish and Game Council recognises 2,000 birds as an appropriate regional trend count threshold to develop any necessary management parameters around should numbers fall below this.

Shoveler (Anas rhynchotis)

The shoveler, a native duck, is a highly mobile species that tends to disperse nationally. Shoveler are commonly found in lowland waterways such as ponds and lakes. The bird seems to add variety rather than substance to hunters' bags and harvest rates are typically low. Due to their mobility, shoveler are monitored annually through a national survey across all Fish and Game Regions. The survey indicates that since 2000, there has been no change in shoveler population size at the 250 sites counted nationally and the population at those sites is stable. Locally, annual harvest averages around 350 birds.

Pukeko (Porphyrio melanotis)

Pukeko are defined as a native game bird and are present throughout the coastal areas of the CSI Fish and Game Region. They are also found around wetlands and swampy areas. Long-term pukeko harvest in the region averages around 150 birds annually. Annual population trend monitoring is carried out across 32 sites within the CSI Fish and Game Region. Given harvest is low, fluctuations in population are thought to be due to habitat changes and their clumped distribution, where they may be abundant to nuisance levels one year and absent the next.

Grey Duck (Anas superciliosa)

The grey duck is an endemic dabbling duck once found in New Zealand's wetlands and streams. Habitat loss is thought to play a role in its decline; however, the introduction of the mallard has led to the hybridisation of the two species. Pure grey ducks are now considered rare.

[12] Gamekeepers for the Nation, p303.

California Quail (Lophortyx californicus)

First arriving in the mid-1860s, the California quail became abundant and spread over a large extent of the country. Over time, the population dwindled but can still be found in good numbers on the plains braided riverbeds and throughout the Waitaki and Mackenzie Country basins. Quail make up roughly 1% of game birds harvested.

Chukar (Alectoris chukar)

Chukar were originally released in the CSI Fish and Game Region near Ashburton in the 1920s and later releases saw them spread through the central/eastern South Island that included the upper Waitaki Valley, the Kakanui Mountains and eventually into the Hunter Hills and north towards Fairlie. It is believed that the progeny from the releases near Ashburton moved south to Burkes Pass where they eventually merged with the stocks originally released to the south. Chukar inhabit dry, steep, rocky faces at moderate to high elevations, often occupying remote and difficult country[13].

Despite the effort required to hunt chukar given the terrain one must cross, there are a number of hunters in the region that have success in bagging this member of the partridge family. CSI Fish and Game staff administer a chukar diary scheme each season to collect data on hunter harvest to help inform population distribution and size. The Mackenzie basin often accounts for the majority of the chukar harvest; however, chukar are present in the mid and lower Waitaki areas.

Pheasant (Phasianus colchicus)

Pheasants were first liberated in New Zealand in the 1840s. Their initial success was followed by steady decline in population with only pockets of populations remaining today. A shift from releases into the wild saw pheasants reared in captivity and then released specifically for hunting. The rearing and releasing of the bird was costly and today it is mostly carried out by hobbyists or commercial game bird hunting preserves.

Currently, private preserves or game bird properties operate within the CSI Fish and Game Region. They hold annual, organised hunts using reared pheasants specifically released for the hunt.

Small, naturalised populations of pheasant exist on the Rangitata and Ashburton rivers and within plains farmland in the northern part of the region. Most of these are the result of release of captive reared birds and continued artificial supplementation.

Red-legged Partridge (*Alectoris rufa rufa*)

The red-legged partridge is a species that CSI Fish and Game staff tried to establish in the wild around the Timaru area for years with no long-term success. Partridge cannot be hunted in the region as it has a closed season; however, they can be hunted on a private preserve or game property operating within the region as detailed in the hunting regulations.

[13] ibid, p335.

APPENDIX 4- RESOURCE ASSESSMENT AND ROS

ROS and assessment of resource

River Catchment	Waterbody type	Waterways	Setting Urban Rural Natural Backcountry Remote	Activities Fly (F) Spin (S) Bait (B) Hunt gamebird (H)	Users Local (L) Regional (R) National (N) International (I) Commercial (C) Junior (J)	Sports fish species	Spawning period including tributary spawning	Risks	National Angling Survey	Significance	RMA recognition
Rakaia River catchment	Major lake	Lake Heron	Natural	FSB	LRNJ	chinook salmon rainbow trout brown trout	1 April - 30 November	Water quality Surrounding land use Access	2,580-3,170	National	National Water Conservation (Rakaia River) Order 1988 Mellish Stream- LWRP Sch 17 Salmon Spawning Site
Wakanui Creek	Rain-fed	Wakanui Creek	Urban	FSB	LJ	brown trout	1 May- 30 September	Water quality Surrounding land use	60	Local	
Ashburton River catchment	Rain-fed	Ashburton River	Rural	FSBH	LRJ	brown trout chinook salmon	1 April- 30 September	Water quality Water quantity Mouth closures Access Flood protection works	2,360-5,480	Regional	Spring Creek- LWRP Sch 17 Salmon Spawning Site

Rain-fed	Bowyers Stream	Rural	FS	LR	brown trout chinook salmon	1 April- 30 September	Flood protection works Sediment Surrounding land use	30-280	Regional	LWRP Sch 17 Salmon Spawning Site
Rain-fed	Taylors Stream	Rural	FS	L	brown trout	1 May- 30 September	Invasive plants Surrounding land use	10-40	Local	
Major lake	Lake Clearwater	Natural	FS	LRNJ	brown trout perch	1 May- 30 September	Water quality Surrounding land use	1,480-4,600	Regional	High Naturalness Waterbody (LWRP)
Small lake	Lake Camp	Rural	FS	LRJ	perch rainbow trout		Surrounding land use Water levels Recruitment	400-1,150	Local	High Naturalness Waterbody (LWRP)
Small lake	Lake Emma	Natural	FSH	LRNJ	brown trout perch	1 May- 30 September	Water quality Surrounding land use	370-1,240	Local	High Naturalness Waterbody (LWRP)
Small lake	Lake Emily	Backcountry	F	LRN	brook char	1 May- 30 September	Water quality Access	10-250	Local	High Naturalness Waterbody (LWRP)
Small lake	Lake Hood	Urban	FSB	LRJ	perch brown trout	1 May- 30 September	Water quality	310-1,800	Local	
Small lake	Maori Lakes	Natural	F	LR	brown trout rainbow trout	1 May- 30 September	Water quality Trout removal proposals	70-220	Regional	Maori Lakes outlet- LWRP Sch 17 Salmon Spawning Site
Small lake	Lake Roundabout	Natural	FH	LR	brown trout	1 May- 30 September	Water quality	50	Local	

	Small lake	Mystery Lake	Backcountry	F	LR	brown trout	1 May- 30 September	Angling pressure (Te Araroa trail)	10-60	Local	
Hinds River	Rain-fed	Hinds River	Rural	FSB (child) FSH (adult)	LJ	brown trout, brook char	1 May- 30 September	Water quantity Water quality	210-320	Local	
Rangitata River catchment	Major river	Rangitata River	Natural (above gorge) Rural (below gorge)	FSBH (location dependent)	LRNICJ	chinook salmon rainbow trout brown trout	1 April-30 November	Lack of flow and allocation planning framework Flood protection works Risk of over-allocation Weedy/invasive plants Land use encroachment (braided river) Sediment Stock access Power boat access	12,710-35,960	National	Rangitata River- Water Conservation (Rangitata River) Order 2006 Brabazon Fan- Rangitata WCO, LWRP Sch 17 Salmon Spawning Site Black Mountain Stream- Rangitata WCO, LWRP Sch 17 Salmon Spawning Site Ealing Springs- Rangitata WCO, LWRP Sch 17 Salmon Spawning Site McKinnons Creek- Rangitata WCO, LWRP Sch 17 Salmon Spawning Site

	Canal	RDR Canal	Rural	FSB	LJ	chinook salmon rainbow trout brown trout		Dewatering	20-960	Local	
	Spring-fed	Deep Creek	Backcountry	FS	LRNCI	chinook salmon rainbow trout brown trout brook char	1 April- 30 November	Sediment Land use change Stock access Rangitata flooding Power boat access Water quality	10-80	National	Rangitata WCO, LWRP Sch 17 Salmon Spawning Site
	Spring-fed	Deep Stream	Rural	FSH	LRNCI	chinook salmon rainbow trout brown trout	1 April- 30 November	Sediment Surrounding land use Stock access Power boat access Water quality Invasive plants	10-190	National	Rangitata WCO, LWRP Sch 17 Salmon Spawning Site
Orari River catchment	Rain-fed	Orari River	Rural	FSBH	LRJ	chinook salmon brown trout	1 April- 30 September	Naturally drying middle reach Flood protection works Gravel extraction Water quality Sediment Invasive plants	Orari River total 570-6,330	Regional	LWRP Sch 17 Salmon Spawning Site
	Spring-fed	Ohapi Creek	Rural	FSH	LJ	chinook salmon brown trout	1 April- 30 September	Sediment Surrounding land use Invasive plants Water quality	120-190	Regional	LWRP Sch 17 Salmon Spawning Sites

	Spring-fed	Coopers Creek	Rural	FSBH	LJ	brown trout	1 May- 30 September	Surrounding land use Water quantity Water quality	30	Local	
Opihi River catchment	Rain-fed Dam controlled	Opihi River	Rural	FSBH	LRNICJ	chinook salmon rainbow trout brown trout	1 April- 30 November	Water quality Water quantity Dam-controlled Didymo Flood protection works Sediment *Phormidium*	8,450-19,160	Regional	LWRP Sch 17 Salmon Spawning Site
	Rain-fed	Temuka River	Rural	FSBH	LRJ	chinook salmon brown trout	1 April- 30 September	Water quality Water quantity Sediment Flood protection works	730-1,280	Regional	LWRP Sch 17 Salmon Spawning Site
	Rain-fed	Waihi River	Rural	FSBH	LJ	chinook salmon brown trout	1 April- 30 September	Water quality Water quantity Flood protection works	250-1,670	Regional	LWRP Sch 17 Salmon Spawning Site
	Rain-fed	Hae Te Moana River	Rural	FSBH	LJ	brown trout chinook salmon	1 May- 30 September	Water quality Water quantity Flood protection works	10	Local	
	Rain-fed	Kakahu River	Rural	FSBH	LJ	brown trout	1 May- 30 September	Water quality Water quantity Access	20-120	Local	

	Rain-fed	Te Ana Wai River	Rural	FSH	LRNICJ	chinook salmon brown trout	1 April- 30 September	Water quality Water quantity Flood protection works	70-890	Regional	LWRP Sch 17 Salmon Spawning Site
	Reservoir	Lake Opuha	Rural	FSBH	LRJ	rainbow trout brown trout	1 May- 30 November	High summer water temps Dissolved oxygen/aeration Bank erosion Water levels	2,670-4,750	Regional	
	Dam controlled	Opuha River	Rural	FSBH	LRJ	chinook salmon brown trout	1 April- 30 September	Didymo Dam-controlled flows Water quality	330-1,500	Regional	LWRP Sch 17 Salmon Spawning Site
	Rain-fed	North Opuha River	Rural	FSBH	LRICJ	rainbow trout brown trout	1 May- 30 November	Surrounding land use Water quality	420	Local	
Pareora River catchment	Rain-fed	Pareora River	Rural	FSBH	LRJ	brown trout	1 May- 30 September	Water quantity Fish passage Water quality Flood protection works	30-850	Local	
	Rain-fed	Pareora River (South Branch)	Rural	FSBH	LJ	brown trout	1 May- 30 September	Water quantity Water quality	10	Local	
Waimate Creek	Rain-fed	Waimate Creek	Rural	FSBH	L	brown trout	1 May- 30 September	Water quality	20-290	Local	

Waihao River catchment	Rain-fed	Waihao River	Rural	FSBH (location dependent)	LRJ	brown trout	1 May- 30 November	Water quality Water quantity Flood protection works Loss of augmentation from MGIC	60-1,100	Local	
	Rain-fed	Waihao River (North Branch)	Rural	FSH	L	brown trout	1 May- 30 September	Access Invasive plants Forestry	50-290	Local	
	Rain-fed	Waihao River (South Branch)	Rural	FSH	L	brown trout	1 May- 30 September	Access Invasive plants Forestry	10-300	Local	
Waitaki River catchment	Major lake	Lake Aviemore	Rural	FSB	LRNJ	rainbow trout brown trout sockeye salmon	15 February- 30 November	Invasive plants Water quality	8,850-22,920	National	
	Pond	Bells Pond	Rural	FSBH	LRJ	rainbow trout brown trout		Low water levels	110-220	Local	
	Major lake	Lake Benmore	Rural	FSBH	LRNICJ	sockeye salmon chinook salmon brown trout rainbow trout	15 February- 30 November	*Lagarosiphon* Changes to salmon farms Angling pressure Water quality	12,830-58,850	National	
	Major lake	Lake Waitaki	Rural	FSBH	LRJ	brown trout rainbow trout sockeye salmon	1 May- 30 November	Water quality	3,050-5,230	National	

Major river	Waitaki River	Rural	FSBH	LRNJ	chinook salmon rainbow trout brown trout	1 April- 30 November	Didymo Dam-controlled flows Flood protection works Water quality Access	26,250-34,500	National	Waitaki River- LWRP Sch 17 Salmon Spawning Site
Pond	Eckholds Pond	Rural	FSBH	LJ	brown trout rainbow trout chinook salmon		Access Weed growth	50	Local	
Rain-fed	Maerewhenua River	Rural (lower) Natural (upper)	FSH	LRNICJ	brown trout rainbow trout	1 May- 30 November	Water quantity Gravel extraction	200-1,010	Local	
Rain-fed	Hakataramea River	Rural	FSBH	LRNICJ	chinook salmon brown trout rainbow trout brook char	1 April- 30 November	Water quantity Water quality Surrounding land use Gravel extraction Access	350-1,920	National	LWRP Sch 17 Salmon Spawning Site
Rain-fed	Deep Stream (Aviemore)	Natural	FS	L	brown trout rainbow trout sockeye salmon	1 May- 30 November	Access Invasive plants	40	Local	
Rain-fed	Otematata River	Rural	FS	LRN	brown trout rainbow trout sockeye salmon	1 May- 30 November	Water quantity Flood protection works Access	20-1,030	Local	

Rain-fed	Clear Stream	Backcountry	FS	LRNIC	brown trout rainbow trout sockeye salmon	1 May- 30 November	Access	60-70	Local	
Rain-fed	Ahuriri River	Backcountry	FS	LRNIC	brown trout rainbow trout sockeye salmon	1 May- 30 November	Recreational conflict Access	1,550-2,900	National	National Water Conservation (Ahuriri River) Order 1990
Rain-fed	Andersons Creek	Rural	FSB		brown trout rainbow trout sockeye salmon	1 May- 30 September	Access Invasive plants	20	Local	
Rain-fed	Otamatapaio River	Rural	FS	LR	brown trout	1 May- 30 September	Water quality Water quantity	50	Local	
Spring-fed	Sutherlands Creek (top of Tekapo)	Remote	FSB	LRNIC	brown trout rainbow trout	1 May- 30 November	Water quality Access Stock access Surrounding land use Trout removal if National Park boundary extended	50-190	Local	
Rain-fed	Omarama Stream	Rural	FS	LR	brown trout rainbow trout sockeye salmon	1 May- 30 November	Water quality Access	70-540	National	National Water Conservation (Ahuriri River) Order 1990
Rain-fed	Hen Burn	Rural						20	Local	

Rain-fed	Avon Burn	Rural						20-70	Local	
Rain-fed	Stony River	Rural		L	brown trout rainbow trout	1 May- 30 November	Access Water quantity	40	Local	
Small lake	Lake McGregor	Natural	FS	LRNI	brown trout rainbow trout	1 May- 30 November	Water quality Invasive plants	20-1,640	Local	High Natural Character (WCWARP)
Small lake	Lake Middleton	Natural	FSB	LRJ	rainbow trout brown trout	1 May- 30 November	Water quality	40-880	Local	High Natural Character (WCWARP)
Major lake	Lake Ōhau	Natural	FSB	LRNICJ	rainbow trout brown trout sockeye salmon	1 May- 30 November	Land use changes	1,520-9,690	National	Stockyard Creek-LWRP Sch 17 Salmon Spawning Site
Small lake	Lake Ruataniwha	Rural	FSB	LRJ	rainbow trout brown trout sockeye salmon	15 February-30 November	Water quality @ campground bay Changes to boat use	1,030-5,840	Regional	
Canal	Ōhau Canal	Rural	FSB	LRNICJ	chinook salmon brown trout rainbow trout		Salmon farm management Access Angling pressure	1,080-53,430	National	
Rain-fed Dam-controlled	Ōhau River (upper) Ōhau River (lower)	Natural Rural	FS FSB	LRNICJ LR	sockeye salmon brown trout rainbow trout	15 February-30 November	Angling pressure Access	480-950	National	

Canal	Pukaki-Ōhau A	Rural	FSB	LRNICJ	chinook salmon brown trout rainbow trout		Angling pressure Salmon farm management Access	430-10,670	National	
Canal	Tekapo Canal	Rural	FSB	LRNICJ	chinook salmon brown trout rainbow trout		Angling pressure Salmon farm management Access Hydro-scheme management	870-22,680	National	
Spring-fed	Larch Stream	Backcountry	FSB	LRNIC	sockeye salmon brown trout rainbow trout	15 February-30 November	Land use changes Flooding Access	50-100	Regional	LWRP Sch 17 Salmon Spawning Site
Small lake	Lake Wardell	Rural	FSB	LRJ	brown trout rainbow trout		Water quality Water quantity	20-30	Local	
Small lake	Loch Cameron	Rural	FSB (child) FS (adult)	LRJ	chinook salmon brown trout			60-120	Local	
Rain-fed	Twizel River	Rural	FS	LRNICJ	brown trout rainbow trout sockeye salmon	15 February-30 November	Water quality Flood protection works Gravel extraction	720-6,680	Regional	LWRP Sch 17 Salmon Spawning Site, High Natural Character (WCWARP)

Rain-fed	Fraser Stream	Rural	FS	LR	brown trout rainbow trout sockeye salmon	15 February-30 November	Gravel extraction Instream works	20	Regional	LWRP Sch 17 Salmon Spawning Site, High Natural Character u/s of Pukaki Canal (WCWARP)
Rain-fed	Maitland Stream	Remote	FSB	LR	brown trout rainbow trout	1 May- 30 November		10-90	Local	High Natural Character (WCWARP)
Rain-fed	Temple Stream	Remote	FSB	LR	brown trout rainbow trout	1 May- 30 November		10	Local	High Natural Character (WCWARP)
Rain-fed	Hopkins River	Remote	FSB	LR	brown trout rainbow trout	1 May- 30 November	Access	70-450	Local	High Natural Character (WCWARP)
Rain-fed	Dobson River	Remote	FSB	LR	brown trout rainbow trout	1 May- 30 November	Access	80-1,080	Local	High Natural Character (WCWARP)
Rain-fed	Huxley River	Remote	FSB	LR	brown trout rainbow trout	1 May- 30 November	Access	150-260	Local	High Natural Character (WCWARP)
Pond	Kellands Pond	Rural	FSB	LJ	brown trout rainbow trout		Water quality Surrounding land use	20-770	Local	
Small lake	Lake Merino	Rural	FSH	LR	brown trout rainbow trout			20-100	Local	

Spring-fed	Lake Poaka	Rural	F	LRI	brown trout rainbow trout		Access Water quality	10-790	Local	
Major lake	Lake Pukaki	Natural	FSB	LRIJ	brown trout rainbow trout sockeye salmon	15 February-30 November	Boating bylaws Hydro-scheme management	620-1,950	Regional	Glentanner Stream-LWRP Sch 17 Salmon Spawning Site
Rain-fed	Tasman River	Natural	FSB	LR	brown trout rainbow trout sockeye salmon	15 February-30 November	Trout removal due to changes to National Park boundary	250	Local	High Natural Character (WCWARP)
Rain-fed	Whale Stream	Natural	FSB	L	brown trout rainbow trout	1 May- 30 November		10	Local	High Natural Character (WCWARP)
Rain-fed	Jollie River	Natural	FSB	LR	brown trout rainbow trout	1 May- 30 November	Trout removal due to changes to National Park boundary	120	Local	High Natural Character (WCWARP)
Major lake	Lake Tekapo	Natural	FSB	LRNIJ	rainbow trout brown trout chinook salmon	1 April- 30 November	Changes to stocking policies	3,000-8,910	National	
Dam-controlled	Tekapo River	Rural	FSB	LRI	brown trout rainbow trout	1 May- 30 November	Didymo Dam-controlled flows Water quality Water quantity	1,390-4,910	Regional	

Spring-fed	Mary Burn	Rural	FS	LRNIC	brown trout rainbow trout sockeye salmon	15 February-30 September	Water quality Access	30-270	Regional	LWRP Sch 17 Salmon Spawning Site, High Natural Character u/s of Braemar Rd (WCWARP)
Spring-fed	Irishman Creek	Rural	FSB	LR	brown trout	1 May- 30 September	Invasive plants Access	20-30	Local	High Natural Character u/s of Braemar Rd (WCWARP)
Spring-fed Rain-fed	Grays River	Rural	FS	LRN	brown trout rainbow trout sockeye salmon	15 February-30 November	Stock access Sediment Access	30-280	Regional	LWRP Sch 17 Salmon Spawning Site
Rain-fed	Fork Stream	Natural	FS	L	brown trout rainbow trout sockeye salmon	15 February-30 November	Access Fish passage	40	Local	High Natural Character u/s of Braemar Rd (WCWARP)
Small lake	Lake Alexandrina	Natural	FS	LRNIJ	brown trout rainbow trout	1 May- 30 November	Angling pressure Tourism pressure Spawning enhancement work required	4,480-9,470	National	High Natural Character (WCWARP)
Rain-fed	Cass River	Natural		LR	brown trout rainbow trout	1 May- 30 November		30-100	Local	High Natural Character (WCWARP)

	Rain-fed	Coal River	Natural		LR	brown trout rainbow trout	1 May- 30 November		20	Local	High Natural Character (WCWARP)
	Rain-fed	Godley River	Backcountry		LR	brown trout rainbow trout	1 May- 30 November	National Park boundary extension	30-220	Local	High Natural Character (WCWARP)
	Rain-fed	Macaulay River	Natural		LR	brown trout rainbow trout	1 May- 30 November	Gravel extraction	100-130	Local	High Natural Character (WCWARP)
Kakanui River catchment	Rain-fed	Kakanui River	Rural	FSBH (location dependent)	LRJ	brown trout tench	1 May- 30 September	Water quality Water quantity Surrounding land use Forestry Illegal gill netting	220-2,040	Local	
	Rain-fed	Kauru River	Rural	FSBH	L	brown trout	1 May- 30 September	Gravel extraction	110-180	Local	
Waianakarua River catchment	Rain-fed	Waianakarua River	Rural	FSBH	L	brown trout	1 May- 30 September	Water quantity Illegal gill netting Forestry	140-280	Local	

APPENDIX 5- PRIORITISATION PRINCIPLES

Prioritisation Principles

Because the resources controlled by CSI Fish and Game Council are finite, every item of work that might contribute to the achievement of our Goals and Outcomes cannot be undertaken. We necessarily must determine which items of work we will undertake and which we will postpone or not pursue.

CSI Fish and Game Council adopts the Prioritisation Principles set out below, to guide its decision making regarding which items of work it will support.

In determining its work programme, CSI Fish and Game Council will have regard to all of the Prioritisation Principles, without attempting to prescribe in advance the relative weight to be attached to each of them.

1. Feasibility

- Is CSI Fish and Game Council satisfied that the proposed work can be completed within a defined period of time?
- Is CSI Fish and Game Council satisfied that the proposed work has a sound scientific basis?
- Is the proposed work within the reasonable control of CSI Fish and Game Council?
- Can CSI Fish and Game Council support the proposed work with the staff and resources available to it?

2. Affordability

- Have the costs of the proposed work been determined to the satisfaction of CSI Fish and Game Council?
- Are the costs of the proposed work within the reasonable control of CSI Fish and Game Council?
- Can CSI Fish and Game Council meet the costs of the proposed work, for the full term it will be undertaken, within CSI Fish and Game Council's budget?

3. Enjoyment

- To what extent will completion of the proposed work contribute to sustainable opportunities for anglers' enjoyment of fishing or hunters' enjoyment of hunting within the CSI Fish and Game Region?

4. Populations

- To what extent will completion of the work contribute to there being sustainable populations of sports fish in the CSI Fish and Game Region?
- To what extent will completion of the work contribute to there being sustainable populations of game birds in the CSI Fish and Game Region?

5. Outcomes

- To what extent will successful completion of the work contribute to achievement of an Outcome which CSI Fish and Game Council aims to achieve?

6. Coherence

- To what extent does the work complement or reinforce the rest of CSI Fish and Game Council's work programme?