

SPORTS FISH AND GAME MANAGEMENT PLAN FOR
AUCKLAND/WAIKATO FISH AND GAME REGION 2021 – 2031

AUCKLAND/WAIKATO FISH & GAME

156 BRYMER RD, RD 9, HAMILTON

PH: 07 849 1666

aucklandwaikato@fishandgame.org.nz

www.fishandgame.org.nz

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PART 1 BACKGROUND AND RESOURCE SUMMARY

1. How To Use this Plan

The Auckland/Waikato Sports Fish and Game Management Plan ('the Plan') provides a framework for the management of Auckland/Waikato's sports fish and game bird resources. The Plan has a ten-year horizon and is both strategic in outlining issues and providing long term organisational outcomes, and operational in outlining management objectives and policies.

Part I provides background information on the Plan and explains the role and responsibilities of the Auckland/Waikato Fish and Game Council ('the Council'). The Council is one of twelve regional Fish & Game Councils (FGCs) established under the Conservation Act 1987 for the management of sports fish and game bird resources within defined regions. A thirteenth council, the New Zealand Fish and Game Council (NZFGC), has a number of functions under the Conservation Act¹, including co-ordinating Anglers Notices and notices for game seasons, overseeing the electoral system, and advocating generally, and in NZFGC's interests and (with its agreement) the interests of any FGC in the management of sports fish and game, and habitats.

Part II of the Plan is divided into sections based largely on the functional areas currently used for FGC annual planning and reporting. This part of the Plan lists the issues identified through the plan development process and the policy responses to them.

1.1. Operation of Plan

This Plan was made operative on XX/XX/2020 and will remain in effect until such time as it is reviewed, which should be not later than 10 years from the date of its approval.

1.2. Plan Review

The Plan will be reviewed in ten years from the date of its approval by the Minister of Conservation unless it requires amendment sooner. Plan reviews are provided for under Section 17M of the Conservation Act.

1.3. Organisational management

The Fish and Game management system is based on twelve FGCs with coordination assistance provided by the NZ Council. With inter-availability of fishing and hunting between regions, funding of all 13 councils is linked through a national budget system which includes the setting of levies and payment of grants to redistribute revenue between all 13 councils. This means all councils must operate within the financial and human resources available to them. Therefore, resources will be allocated according to priorities established annually and will be affected by national priorities.

The resources being managed by each regional FGC belong to all New Zealanders, and all licence holders have a right to access those resources. When buying a licence, the licence purchaser is contributing to the management of the resource nation-wide – not just a particular region. This Plan, however, is directed entirely at the medium to long-term management of the Auckland/Waikato Region by the Council, within the context of the legislation.

¹ Conservation Act 1987, section 26C(1).

2. Introduction

Nationally some 150,000 hunting and fishing licences are sold annually making freshwater angling and game bird hunting one of the major recreational pursuits in New Zealand (sourced from Hillary Commission). Licence holders, both local and overseas, benefit from some of the finest fishing and hunting in the world, and so do a wide range of businesses with millions of dollars being expended by anglers and hunters on their sport; i.e. boats, motors, petrol, sporting goods and clothing, accommodation, vehicles and the like.

Hunting and fishing provide several important social aspects lacking in today's society, namely – self-reliance, pride in achievement, tolerance and patience and a genuine connection and respect for the environment learnt from practical hands-on experience.

The companionship of fellow sports people, the intrinsic beauty of the outdoors, fresh air and exercise, the closeness to nature, the escape to wilderness from the modern world, the anticipation of the experience, the early morning breakfasts over camp fires and then the later recounting of the day's exploits in the evening, the satisfaction of introducing the younger generation to an appreciation of what is our natural heritage in New Zealand – all aspects of the hunting/ angling experience, of which the actual taking of game and fish is only one aspect.

2.1. Fish and Game New Zealand

In 1990 the management of New Zealand's sports fish and game bird resources was restructured by an amendment to the Conservation Act 1987. The former Acclimatisation Societies were replaced by twelve FGCs and a national council – the NZFGC. These became Crown Entities (and later Public Entities under Schedule 4 of the Crown Entities Act 2004) with specific functions, responsibilities and powers as specified in the Conservation and Wildlife Acts to manage sports fish and game birds, and to represent the interests of anglers and hunters.

'Fish and Game New Zealand' is the operating name of the NZFGC and the regional FGCs collectively. FGCs are the statutory managers of sports fish and game bird resources and their sustainable recreational use by anglers and hunters New Zealand-wide, (except for the sports fisheries in the Lake Taupō catchment through to the Huka Falls, managed by the Department of Conservation, and the game bird resource in the Chatham Islands).

Fish and Game Councils receive no government funding to undertake their statutory purposes and their activity is financed mainly through the sale of sports fish and game bird licenses.

2.2. The Auckland/Waikato Fish and Game

The Auckland/Waikato Fish and Game Region (the Region) is one of the twelve Fish and Game regions in New Zealand. The Auckland/Waikato Fish and Game Council (the Council) is the major seller of game bird licenses in New Zealand with these forming approximately 60% of Council's licence income. Anglers and hunters purchase licences to fish or hunt and in return have input to the sports fish and game bird management in their region.

The Auckland/Waikato Council is unique in that the population it serves is far greater than that of any other FGC. With the bulk of the population centred north of the Bombay hills and the major resource located southwards, considerable travel and associated expense is incurred by the majority of game bird hunters and freshwater anglers in the region.

The core function of the Council, as set out in section 26Q (1) of the Conservation Act is to:

Manage, maintain and enhance the sports fish and game bird resource in the recreational interests of anglers and hunters.

Particular functions as set out in section 26Q of the Conservation Act include:

- assess and monitor sports fish and game populations
- assess and monitor angler and hunter success and satisfaction
- assess and monitor the condition and trend of ecosystems as habitats for sports fish and game
- maintain and improve access to sports fish and game resources
- provide information on sports fish and game and promote angling and hunting
- ensure compliance with angling and hunting conditions and promote ethical standards
- represent the interests and aspirations of anglers and hunters in statutory planning processes, including advocating for their interests in habitats
- implement Fish and Game national policies.

Since the early 1950's, as funds have been available the Auckland/Waikato Council, and its predecessor the Auckland Acclimatisation Society, has purchased some 1600 hectares of wetlands with a government valuation as of August 2017 of \$2.4 million. Besides protecting threatened wetland habitat, the land has been developed and enhanced to provide hunter opportunity, and currently holds some 120 constructed open water areas providing hunting opportunities for some 300 hunters on any one day of the season. In addition to the 235 balloted standholders, some 300 permits are issued to itinerant hunters annually. With many hunters coming from suburban Auckland, the Council wetlands provide an excellent opportunity for novice hunters to get started. It is Council's intention to continue to purchase and develop properties for habitat and hunting as opportunities become available.

In June 2019, Council purchased 14.6 hectares of farmland at Stone Jug Road, Kakahi, to provide public access to the Whakapapa River. This purchase has increased the number of public access points to this iconic trout fishery from two to three.

It should be noted that the works undertaken by the Council, funded exclusively by hunters and anglers licence fees, provide equal, and on occasions greater benefits to non-hunted and protected species. This gives rise to a situation where game bird hunters and freshwater anglers are subsidising conservation work for the public benefit, despite hunters and anglers only utilising their resource for a relatively short period of the year.

Council owns an office complex on the outskirts of Hamilton City. Hamilton is appropriate as it is virtually in the centre of Council's region, close to the main resource areas, and the base for government departments and local authorities that Council regularly deals with.

Council employs a fulltime Chief Executive, two Wildlife Managers, a Fisheries Manager, a Resource Management Act Officer, an Office Manager and part time staff as funds, work subsidies and circumstances provide. The staff are supplemented by the voluntary assistance provided by some 20 honorary rangers, fish and game associations, and other user groups who seek to put something back into their sport. Councillors receive no fees or remuneration for their contribution. Without this voluntary support, Council would have difficulty in functioning effectively.

The Council cannot consist of more than 12 elected members. Only those who hold a current adult whole season licence to fish for sports fish or hunt for game birds are eligible to become members of

the Council through the election process. Six of the elected councillors are from the six sub-regions (Auckland North, Auckland South, Northern Waikato, Central Waikato, Southern Waikato, and Hauraki/Coromandel) and six are elected from the region at large as the next highest polling candidates. Elections are held every three years, at which time all seats on the Council are up for re-election. The election process is democratic and prescribed in the Fish and Game Council Election Regulations 1990. In any given year, the Council represents the interests of around 5000 anglers and 7000 hunters.

3. Legal Context

The Council operates under its two principle acts – the Conservation Act 1987 and Wildlife Act 1953 - and within a number of other statutes.

3.1. Conservation Act 1987

The Council is established under the Conservation Act, which contains the legal authority for FGCs to manage the country's sports fish and game bird resources. The Conservation Act also contains provisions that are relevant to public access, freshwater fisheries management, controls on fish and game recreation and the requirement for FGCs to give effect to the principles of the Treaty of Waitangi. Anglers Notices are promulgated under this Act. The Conservation General Policy was approved by the Minister of Conservation in 2005 under section 17C of this Act and provides guidance for the Council to use in its management of fish and game.

3.2. Wildlife Act 1953

The Wildlife Act 1953 includes provisions relating to game bird management which:

- enable the Minister of Conservation to declare open seasons for game and the conditions controlling the taking of game
- allow the Director-General of the Department of Conservation to authorise the Council to take game for certain purposes
- describe the powers of rangers
- define wildlife species declared to be 'game' in the First Schedule to the Act and thus governed by Fish and Game Councils (Appendix 1).

In addition, the Act allows for the making of regulations including the Wildlife Regulations 1955.

4. Wider Legal Context

Management of sports fish and game bird resources occurs within a legal context defined by several key statutes described below:

4.1. Freshwater Regulations 1983

The Freshwater Fisheries Regulations are promulgated under the Conservation Act. These regulations provide for controls on licensing, controls on fish tagging, protection of fish passage, regulation on fish transfer and the management of indigenous and noxious fish species.

4.2. Resource Management Act 1991

The Resource Management Act 1991 (RMA) is the primary statute in New Zealand for resource management and planning. It places a strong emphasis on matters relevant to the habitat protection and access functions of Fish and Game Councils. It also provides linkages between statutory plans and opportunities for FGCs to have input into resource planning across regional and territorial local authorities.

Section 5 of the RMA describes the purpose of the RMA as being to promote the sustainable management of natural and physical resources. It defines sustainable management in a qualified way that requires the safeguarding of the life supporting capacity of ecosystems and the management of adverse effects on the environment where resource use occurs.

Section 6 outlines 'Matters of National Importance', requiring persons exercising powers and functions under the RMA to recognise and provide for priority matters. Those relevant to fish and game management are as follows:

- (a) 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
- (b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development
- (c) the protection of areas of significant vegetation and significant habitats of indigenous fauna
- (d) the maintenance and enhancement of public access to and along the coastal marine areas, lakes, and rivers.

Section 7, 'Other Matters' list other priority matters. Those of relevance to sports fish and game management objectives are:

- (c) the maintenance and enhancement of amenity values:
- (d) intrinsic values of ecosystems
- (f) maintenance and enhancement of the quality of the environment
- (h) the protection of the habitat of trout and salmon.

Other elements of Part II of the RMA relate to the priority placed by the Act on Maori cultural matters and the Treaty of Waitangi in sections 6(e), 7(a) and 8.

Sports Fish and Game Management wastes are linked to regional and district council policy and plan development through sections 61, 66, and 74 of the RMA. These sections require regional and district councils to 'have regard' to management plans and strategies prepared under other Acts in the preparation of policy statements and plans.

Other RMA provisions include Part 9 water conservation order application procedures which may be used where outstanding amenity or intrinsic values are present in waterways.

4.3. Biosecurity Act 1993

The Biosecurity Act 1993 includes provisions which the Council must follow in its operations. FGCs must also obtain approval under this Act if new species of sports fish or game birds are introduced to the country. The Biosecurity Act provides the legal framework for helping to keep harmful organisms out of New Zealand and for how to respond and manage them if any do arrive in the country.

The Council has worked closely with Biosecurity New Zealand over the arrival of the unwanted species including gudgeon, marron and didymo.

4.4. Local Government Act 1974

Part 21 of the Local Government Act 1974 describes local authority responsibilities for the maintenance and accessibility of local roads along waterways, including unformed legal roads. Section 342 and Schedule 10 cover the temporary closure of public roads and the procedure for the legal stopping of a road.

4.5. Reserves Act 1977

The Reserves Act 1977 provides for the acquisition of land for reserves, and the classification and management of reserves (including leases and licences). Reserves may be administered by the Department of Conservation or by other ministers of the Crown, boards, trustees, local authorities, societies and other organisations appointed to control and manage the reserve, or in whom reserves are vested.

Under section 2 of the Reserves Act 1977, Fish and Game Councils have been appointed to be local authorities for the purposes of this Act (*New Zealand Gazette 29 November 2001 Page 3949*). This enables them to exercise the powers and functions of a local authority under the Reserves Act.

The Auckland/Waikato Region of Fish and Game New Zealand is recognised as a covenanting body under the Reserves Act. Reserves established by other authorities may also provide protection for sports fish and game bird habitat.

4.6. Fish and Game Council Elections Regulations 1990

These regulations prescribe the procedure for the election of members of Fish and Game Councils and the appointment by such Councils of members to constitute the New Zealand Fish and Game Council.

4.7. Local Government Official Information and Meetings Act 1987

The Council is subject to the Local Bodies Official Information and Meetings Act 1987. Its meetings are open to the public and must be advertised. All meetings must be transacted openly unless criteria defined in the Act have been met.

4.8. Relationship with Tangata Whenua

The Auckland/Waikato Fish and Game Region overlaps that rohe of a considerable number of iwi and hapū authorities. These group include:

Auckland Region:

Ngāti Whātua
Ngāti Whātua o Kaipara
Ngāti Whātua o Ōrākei
Ngāti Rehua
Ngāti Manuhiri
Te Kawarau a Maki
Ngāti Tamaoho
Te Ākitai Waiohua
Ngāti Maru (Hauraki)
Te Patukirikiri
Ngāti Paoa
Ngāi Tai ki Tāmaki
Ngāti Tamaterā
Ngāti Whanaunga
Ngāti Te Ata

Waikato Region:

Waikato-Tainui
Maniapoto
Maraeroa
Ngai Tai ki Tamaki
Ngāti Hako
Ngāti Hauā
Ngāti Hei
Ngāti Hinerangi
Ngāti Kea / Ngāti Tuarā
Ngāti Koroki Kahukura
Ngāti Maru (Hauraki)
Ngāti Paoa
Ngāti Porou ki Haratauranga ki Mataora
Ngāti Pūkenga ki Waiau
Ngāti Rāhiri Tumutumu
Ngāti Tahī / Ngāti Whaoa
Ngāti Tamaoho
Ngāti Tamaterā
Ngāti Tara Tokanui
Ngāti Tūrangitukua
Ngāti Tūwharetoa
Ngāti Whanaunga
Pouākani
Raukawa
Te Patukirikiri

Some of these iwi/hapu have settled Treaty of Waitangi claims with the Crown while others are at various stages of moving towards settlement. During the process to reach settlements the Council has had varying levels of engagement with both iwi and the Crown and it has become increasingly important to actively become involved in relationship building and effectively communication with both parties to ensure the interests of licence holders are represented.

For example the Council made formal submissions in full support of Waikato-Tainui's claims and aspirations relevant to the Deed of Settlement on the Waikato River and looks forward to continuing to work closely with Waikato-Tainui and other iwi in continuance of shared interests. These groups have strong ties with the land and water resources and are often involved in resource management issues common to Council. Iwi and hapu share a common interest and values in maintaining clean water, healthy ecosystems and protecting the natural character of rivers, lakes and wetlands. The Council and iwi also have a common cause in seeking to manage wild populations of species for sustainable harvests. The bulk of the 1600ha of land owned by the Council is situated in the Whangamarino Wetland or adjacent to the lower Waikato River, wherein habitat restoration, protection and enhancement which enables sustainable harvest of sports fish and game birds for licence holders, also enables sustainable harvest of cultural resources of interest to iwi, such as eels, whitebait and flax.

Consultation between the Council and iwi should occur on matters of potential common interest or concern, including matters arising from the Waikato-Tainui Deed of Settlement or any other Treaty of Waitangi claim settlements, should they occur. There are instances where iwi knowledge may be beneficial for Council. Likewise, Council may be able to provide assistance to iwi/hapu groups on sports fish and game bird matters or resource management planning processes. Such sharing of information will enable informed decisions to be made. The Council is committed to continuing effective collaboration with iwi and hapu groups across the Auckland/Waikato Region.

Since the days of its predecessor the Auckland Acclimatisation Society, the Council has enjoyed an excellent working relationship with Waikato-Tainui having joined with them in opposing activities that would have had a detrimental effect upon the environment – the Council being invited to the formal signing of the Deed of Settlement on the Waikato River as one of the VIP guests. The Council shares precisely the same concerns as Waikato-Tainui relative to clean waters and functioning wetlands and fully supported Waikato-Tainui's claims and aspirations relevant to the settlement.

Conservation Act 1987, Section 4 Responsibilities

The Treaty of Waitangi establishes a partnership between the Crown and iwi.

Section 4 of the Conservation Act states that:

“this Act shall be so interpreted and administered as to give effect to the Principles of the Treaty of Waitangi”.

This places a statutory responsibility on the Council to give effect to these principles, unless the principles are clearly inconsistent with the legislation (*Ngai Tahu Maori Trust Board V Director-General of Conservation*, 1995 3 NZLR553).

When exercising its powers and functions under the Conservation Act the Council must give effect to the principles of the Treaty. It is only if those principles are clearly inconsistent with the legislation that the Council would be justified in departing from them; but such departure should be only to the extent necessary to apply the legislation and no further. Any decision by the Council under the Act must demonstrate how and to what extent the principles have been given effect to and, if not, why

not. A decision not to give effect to the principle must be based on clear and compelling inconsistency. Where the inconsistency is minor or not clear-cut there is an obligation to apply the Act and the principles to the extent possible.

The Council recognises that the Treaty encourages the partners to afford each other reasonable cooperation and act towards each other responsibly and with utmost good faith. This includes an obligation to consult and have respect for the other's point of view.

4.9. Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010; Ngati Tuwharetoa, Raukawa, and Te Arawa River Iwi Waikato River Act 2010; Nga Wai o Maniapoto (Waipā River) Act 2012.

Te Ture Whaimana o Te Awa o Waikato – the Vision and Strategy for the Waikato River (the Vision and Strategy), was developed as part of the Waikato River Settlement between the Crown and Waikato-Tainui

The Vision and Strategy is the direction-setting document for the Waikato River, and a cornerstone of the legislation to the settlements between the Waikato River iwi and the Crown, comprising the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010; Ngati Tuwharetoa, Raukawa, and Te Arawa River Iwi Waikato River Act 2010; Nga Wai o Maniapoto (Waipā River) Act 2012 (the three River Acts).

In accordance with the three River Acts², in preparing or changing a sports fish management plan, Fish and Game must:

- a) make an explicit statement in the document on how the Vision and Strategy has been given effect to; and
- b) provide a copy of the statement to the Authority no later than 20 business days after the document has been completed.

The Waikato River Authority is the custodian of the Vision and Strategy. The purpose of the Waikato River Authority is to:³

- *set the primary direction through the vision and strategy to achieve the restoration and protection of the health and wellbeing of the Waikato River for future generations:*
- *promote an integrated, holistic, and co-ordinated approach to the implementation of the vision and strategy and the management of the Waikato River:*
- *fund rehabilitation initiatives for the Waikato River in its role as trustee for the Waikato River Clean-up Trust.*

The duty of the members of the Authority is to act to achieve the purpose of the Authority.

The overarching purpose of the settlement is to restore and protect the health and wellbeing of the Waikato River for future generations and the three river Acts give effect to this.⁴

² Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010, s 15; Ngati Tuwharetoa, Raukawa, and Te Arawa River Iwi Waikato River Act 2010, s16; Nga Wai o Maniapoto (Waipā River) Act 2012, s8.

³ Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010, s 22.

⁴ Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010, s 10.

The Vision for the Waikato River is as follows:

Our Vision is for a future where a healthy Waikato river sustains abundant life and prosperous communities who, in turn, are all responsible for restoring and protecting the health and wellbeing of the Waikato river, and all it embraces, for generations to come.

In order to realise the Vision, specified Objectives will be pursued:

- a) The restoration and protection of the health and wellbeing of the Waikato River.
- b) The restoration and protection of the relationship of Waikato-Tainui with the Waikato River, including their economic, social, cultural, and spiritual relationships.
- c) The restoration and protection of the relationship of Waikato River iwi according to their tikanga and kawa, with the Waikato River, including their economic, social, cultural and spiritual relationships.
- d) The restoration and protection of the relationship of the Waikato region's communities with the Waikato River including their economic, social, cultural and spiritual relationships.
- e) The integrated, holistic and co-ordinated approach to management of the natural, physical, cultural and historic resources of the Waikato River.
- f) The adoption of a precautionary approach towards decisions that may result in significant adverse effects on the Waikato River, and in particular those effects that threaten serious or irreversible damage to the Waikato River.
- g) The recognition and avoidance of adverse cumulative effects, and potential cumulative effects, of activities undertaken both on the Waikato River and within the catchment on the health and wellbeing of the Waikato River.
- h) The recognition that the Waikato River is degraded and should not be required to absorb further degradation as a result of human activities.
- i) The protection and enhancement of significant sites, fisheries, flora and fauna.
- j) The recognition that the strategic importance of the Waikato River to New Zealand's social, cultural, environmental and economic wellbeing requires the restoration and protection of the health and wellbeing of the Waikato River.
- k) The restoration of water quality within the Waikato River so that it is safe for people to swim in and take food from over its entire length.
- l) The promotion of improved access to the Waikato River to better enable sporting, recreational, and cultural opportunities.
- m) The application to the above of both maatauranga Maaori and latest available scientific methods.

To achieve the Vision, specified strategies will be followed:

- a) Ensure that the highest level of recognition is given to the restoration and protection of the Waikato River.
- b) Establish what the current health status of the Waikato River is by utilising maatauranga Maaori and the latest available scientific methods.
- c) Develop targets for improving the health and wellbeing of the Waikato River by utilising maatauranga Maaori and the latest available scientific methods.
- d) Develop and implement a programme of action to achieve the targets for improving the health and wellbeing of the Waikato River.
- e) Develop and share local, national, and international expertise, including indigenous expertise, on rivers and activities within their catchments that may be applied to the restoration and protection of the health and wellbeing of the Waikato River.

- f) Recognise and protect waahi tapu and sites of significance to Waikato-Tainui and other Waikato River iwi (where they do decide) to promote their cultural, spiritual, and historic relationship with the Waikato River.
- g) Recognise and protect appropriate sites associated with the Waikato River that are of significance to the Waikato regional community.
- h) Actively promote and foster public knowledge and understanding of the health and wellbeing of the Waikato River among all sectors of the Waikato regional community.
- i) Encourage and foster a “whole of river” approach to the restoration and protection of the Waikato River, including the development, recognition, and promotion of best practice methods for restoring and protecting the health and wellbeing of the Waikato River.
- j) Establish new, and enhance existing, relationships between Waikato-Tainui, other Waikato River iwi (where they so decide), and stakeholders with an interest in advancing, restoring, and protecting the health and wellbeing of the Waikato River.
- k) Ensure that cumulative adverse effects on the Waikato River of activities are appropriately managed in statutory planning documents at the time of their review.
- l) Ensure appropriate public access to the Waikato River while protecting and enhancing the health and wellbeing of the Waikato River.

The Vision and Strategy is an instrument at the top of the planning hierarchy which Parliament has directed is intended to be the primary direction-setting document for the Waikato River and activities within its catchment affecting the River.

The Vision and Strategy applies to all activities in the catchments affecting the Waikato River.⁵ In consent applications for activities in the Waikato catchment, decision makers must have *particular regard* to the Vision and Strategy in addition to any requirement specified in the RMA.⁶ The Vision and Strategy is also part of the Regional Policy Statement and prevails over regionally and nationally inconsistent provisions.⁷

The objectives and policies in this Plan will give effect (implement) to the Vision and Strategy to the extent that it is practicable and given the statutory functions of Council under the Conservation Act.

Auckland/Waikato Fish and Game will continue to promote the overarching purpose of the settlement to restore and protect the health and well-being of the Waikato River, and respect the rights and responsibilities of Waikato-Tainui to the river.

4.10. Te Awa Tupua (Whanganui River Claims Settlement) Act 2017

The Te Awa Tupua legislation gives effect to the provisions of the Deed of Settlement for the historical claims of Whanganui Iwi which relate to the Whanganui River. In accordance with the Act, Fish and Game must recognise and provide for:⁸

- the status of Te Awa Tupua as an indivisible and living whole comprising the Wanganui River from the mountains to the sea, incorporating its tributaries and all its physical and metaphysical elements;
- Te Awa Tupua as a legal person; and
- Tupua Te Kawa, a set of intrinsic values which represent the essence of Te Awa Tupua.

⁵ Waikato-Tainui Raupato Claims (Waikato River) Settlement Act 2010, s 9.

⁶ Waikato-Tainui Raupato Claims (Waikato River) Settlement Act 2010, s 17.

⁷ Waikato-Tainui Raupato Claims (Waikato River) Settlement Act 2010, ss 11 - 12.

⁸ Te Awa Tupua (Whanganui River Claims Settlement) Act 2017, s 15.

A strategy group, Te Kōpuka nā Te Awa Tupua (Te Kōpuka), was established under Ruruku Whakatupua (the Whanganui River Deed of Settlement) to produce a strategy for the health and wellbeing of Te Awa Tupua that aligns with Tupua te Kawa, the innate values of Te Awa Tupua and of Whanganui Iwi and hapū. The NZFGC Council has a representative on Te Kōpuka.⁹

A fisheries co-ordination group is required to be established under the Act. The purpose of this group is to co-ordinate the planning and management activities of organisations with responsibility for fisheries or fish habitat management, and to provide a forum for the iwi with interests in the Whanganui River to contribute to the protection, management, and sustainable utilisation of fisheries and fish habitat.¹⁰ Membership is required to include representation from the NZFGC.

4.11. Crown Entities Act 2004, Public Finance Act 1989 and Public Audit Act 2001

All FGCs are subject to the provisions of the Crown Entities Act, the Public Finance Act and Public Audit Act. This requires them to be audited annually by the Audit Office and to provide 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. Councils are Public Entities in terms of these Acts.

4.12. Walking Access Act 2008

The Walking Access Act 2008 established the New Zealand Walking Access Commission, which has the objectives of providing the New Zealand public with “free, certain, enduring, and practical walking access to the outdoors”. Specific responsibilities of the Commission include placing a priority on access over private land to parts of rivers and lakes where there is not already walking access, and to sports fish and game resources.¹¹ These responsibilities align closely with the responsibilities and roles of FGCs for access under the Conservation Act. As such, the Auckland/Waikato FGC will work closely with the Commission and its regional field advisors in identifying mutual priority areas for access that require focus and resourcing. Fish and Game rangers and offices are, by right of office, enforcement officers under the Walking Access Act.¹²

4.13. Public Works Act 1981

Section 45 of the Public Works Act 1981 allows local authorities to lease or license any land held for a road, including adjacent unformed legal road, to adjacent landowners for activities such as grazing.

4.14. Relationship with the Department of Conservation (DOC)

The Council’s relationship with DOC is one of liaison between two agencies with responsibilities under the Conservation Act. There is some overlap in functions due to s6 (ab) of the Conservation Act which gives DOC the task of preserving so far as is practical “*all indigenous freshwater fisheries and protect recreational freshwater fisheries and freshwater fish habitats*”. This includes freshwater sports fisheries and habitats. While DOC is active in the fisheries/freshwater habitat conservation area, the relationship is complementary where water resource allocation, planning, and aquatic habitat issues are concerned. Auckland/Waikato FGC’s responsibilities under s26 of the Act fit well with the Department’s powers to advocate for the conservation of natural and historic resources under s6(b) of the Act.

⁹ As required by s 32(1) Te Awa Tupua (Whanganui River Claims Settlement) Act 2017

¹⁰ Te Awa Tupua (Whanganui River Claims Settlement) Act 2017, s 66.

¹¹ Walking Access Act, s 11.

¹² Walking Access Act, s 44.

The Director General of the Department or their nominee is entitled to attend and speak at Council meetings. A representative from the Department usually attends Council meetings.

A Memorandum of Understanding (MoU) has been developed and adopted at a national level by DOC and the NZFGC to guide the working relationship of the two organisations.

4.15. Relationship with the Regional and Local Authorities

The Auckland/Waikato FGC region includes 12 District Councils, 2 Regional Councils, 1 unitarity authority, and 1 City Council.

The 2 regional councils in the Auckland/Waikato Fish and Game Council district are:

- Waikato
- Manawatu/Wanganui (Horizons)

The Auckland Council came into effect on 1 November 2010 as a unitary authority, combining the functions of the previous regional council and the regions seven territorial authorities. The structure of the Auckland Council is set out broadly in the Local Government (Auckland Council) Act 2009.

The Council's relationship with the Regional Councils and Auckland Council is multi-faceted. Auckland/Waikato FGC is a statutory agency, landowner, and often an affected party on resource consents and planning processes under the RMA. The regional authorities have significant influence over sports fish and game bird habitat through their river management functions, the establishment of regional policies and plans for water resources, and their decision-making role on resource consent applications. The regional councils and Auckland Council's functions and activities are of critical importance to the Council and so engagement with them is frequent and at all levels.

Freshwater ecosystems and fish and game resources only really have 'security of tenure' through RMA legislation, policy and plans. The Auckland/Waikato FGC manages sports fish and game bird species, whilst the regional authorities (for the most part) are the primary managers and regulators of their habitat.

The 11 territorial local authorities (TLAs), one unitarity authority, and one City Council in the Auckland/Waikato FGC region are:

- Auckland Council
- Hamilton City Council
- Waikato District Council
- Hauraki District Council
- Matamata-Piako District Council
- Waipā District Council
- South Waikato District Council
- Otorohanga District Council
- Taupo District Council
- Franklin District
- Thames-Coromandel District
- Waitomo District
- Ruapehu District.

Council's primary relationship with the TLA's and Hamilton City Council is through official processes under the RMA and the Local Government Acts 1974 and 2002.

4.16. Waipā Peat Lakes and Wetland Accord

The Waipā Peat Lakes and Wetland Accord was signed in February 2002 and is an agreement between the Auckland/Waikato FGC, Waikato Regional Council, Waipā District Council, Department of Conservation and Ngā Iwi Tōpū Waipā. The Accord's purpose is to align the activities of management agencies when working with landowners, tanga whenua and interested parties towards the restoration and enhancement of lakes and wetlands in the Waipa District. The Accord was reaffirmed by the parties in February 2017.

4.17. Waikato District Lakes and Freshwater Wetlands Memorandum of Agreement

The Waikato District Lakes and Freshwater Wetlands Memorandum of Agreement was signed in 2011 and is an agreement between the Auckland/Waikato FGC, Waikato Regional Council, Waikato District Council, Department of Conservation and Waikato-Tainui. The purpose of the Memorandum is to recognise the values of freshwater lakes and wetlands of the Waikato District, and to protect, enhance and restore these through alignment of our activities when working with communities, landowners, tangata whenua and interested parties.

4.18. Relationship with the New Zealand Walking Access Commission

The relationship between the Auckland/Waikato Fish and Game Council and the New Zealand Walking Access Commission and its field advisors is important as both organisations have a statutory responsibility for maintaining and improving access for outdoor recreation.

4.19. Adjoining Fish and Game Councils (Northland, Eastern, Taranaki)

Political or administrative boundaries are not necessarily the best management units for species populations. Each species tends to lend itself to "geographic management units". For game birds, this means adjoining councils need to manage species in a consistent and coordinated fashion.

The Auckland/Waikato region works cooperatively with adjoining regions in the exchange of species data, ranging/compliance and other day to day aspects of fish and game operations as required.

4.20. New Zealand Game Bird Habitat Trust Board

The Trust Board was established under the Conservation Act 1987 primarily to improve New Zealand's game bird habitat and secondarily to improve the habitat of other wildlife. It is serviced by the NZ Council and its main function is to disperse funds by way of grants to any landowner or organisation that satisfies the Trust Board's criteria for the protection, restoration, improvement, creation or procurement of game bird habitat. The income used for this purpose is received from the proceeds of the Game Bird Habitat Stamp programme administered by FGCs. The Auckland/Waikato FGC has applied for (and received) grants to assist in important wetland restoration projects in its region and will continue to do so. It also promotes this fund to landowners and acts as a referee for applications to the Trust Board from this region. As a referee it provides progress reports to the Trust Board and signs off the authorisation that work has been completed for the Trust Board to make its payments to landowners.

4.21. Auckland and Waikato- Conservation Boards

The functions of the Conservation Board are set out in Section 6M of the Conservation Act and in the National Parks and Reserves Acts. The Conservation Boards focus on providing advice, planning and

strategic direction, but not the day-to-day operational details of the Department of Conservation's work. One specific function of Conservation Boards is to liaise with FGC (Conservation Act section 6M (1)(f)).

Auckland and Waikato Conservation Boards overseeing the Auckland and Waikato, Conservation Management Strategies (CMSs). A CMS is 10-year plans setting out how the Department will manage public conservation lands and waters and species within the respective conservancy. Once a CMS has been approved by the New Zealand Conservation Authority, the Conservation Board advises on its implementation. As mentioned previously, a Sports Fish and Game Management Plan shall not derogate from a CMS (Conservation Act section 17L (3)) so that it is important that the objectives and policies in this Plan are consistent with the relevant CMSs.

5. Resource Summary

5.1. Auckland / Waikato Fish and Game Region

The Auckland/Waikato Fish and Game Region (see Appendix 2) encompasses that area contained within a line in the north of the North Island running coast to coast from the middle of the Kaipara Harbour to just north of Te Ari Point, then down the East Coast to just below Waihi Beach, and then inland south along the summits of the Kaimai and Mamaku ranges to just below Kinleith, crossing the Waikato River at Maraetai and continuing along the summit of the Hauhungaroa Range to Mounts Tongariro, Ngauruhoe and Ruapehu then west to National Park, out to Mokau and up the West Coast back to the middle of the Kaipara Harbour. The region is very diverse, with dramatic landscapes and considerable variation in climate and land use. This is also recognised in the diversity of habitats and fishing and hunting opportunities in the region.

5.2. Topography

Topography ranges from flat plains in Hauraki/Thames region, and rolling hills with richly fertile soils through the greater Waikato region to mountain ranges, notably the Kaimai, Coromandel and Mamaku Ranges. There is extensive coastline from Kaipara Harbour down to Mokau on the west coast, the Hauraki Gulf, with many estuaries and bays with expansive sandy beaches on both the west and east coasts.

5.3. Climate

Climate varies from north to south. The north, Auckland and North Waikato, enjoy warm humid summers with cool, damp and often foggy winters, while further south the winters tend to be much colder with elevated inland places experiencing extremes of hot and cold. Winds tend to be westerly and south westerly from the Tasman Sea. High levels of rainfall occur year-round in all regions but can have dry spells January – February. Climate change predictions, if realised may have some significant adverse effects. Some of our streams especially from the central Waikato north, sit right on the suitable temperature threshold for trout and longer hotter summers will greatly increase the risk of large-scale epizootic botulism outbreaks. Rainfall varies from 800mm – 4,500mm, with higher rainfall in the Coromandel Peninsula area with averages of 3,000mm. North Central Waikato average about 1240mm. Alpine areas around Tongariro National Park experience high rainfall and very cold temperatures. The Lower Waikato and Hauraki Plain are sheltered by the Kaimai and Coromandel ranges and have the least rainfall.

5.4. History

FGCs in New Zealand owe their origins to acclimatisation societies that began to form during the 1860s. The Auckland society was the first with rules and objectives dated 1861. The Societies were initially established for both acclimatisation of species and the regulation of angling and hunting in a way which enabled access to all, unlike the situation prevailing in the United Kingdom at the time. By about 1900 the number of societies had spread so that virtually the whole country was covered. The number rose to as many as 40 societies.

Upon the formation of FGCs in 1990 Auckland/Waikato absorbed much of the old Waimarino Society area on its southern boundary which afforded more coherent catchment management in the area.

5.5. Habitats Present

Since most of the region's sports fish and game species have self-sustaining populations, maintenance of harvestable populations depends upon maintenance of habitat. Therefore, the bulk of the Council's efforts go into habitat protection, either directly by maintenance of habitat on Council owned or

administered areas, which approximates some 1600ha, or indirectly by statutory advocacy through the RMA, Conservation Act or other legislation which may have an impact on sports fish and game bird habitats.

5.6. Sports Fish Habitat

The sporting ethic and the relevant legislation holds that sports fish are a public resource managed by Fish and Game on behalf of licence holders. Sports fisheries are publicly owned and managed irrespective of their location. In addition, territorial authorities are required under the purpose and principles section of the RMA to have particular regard to the protection of the habitats of trout and salmon and to recognise and provide for the protection of significant habitats of indigenous species. Authorities must also have particular regard to the intrinsic values of ecosystems. Some game birds are indigenous species, and many habitats of trout and salmon are also significant native fish habitats.

Sports fish habitat is predominantly a public resource consisting of lakes and rivers, administered by a variety of public bodies according to various legislation. This Plan lists the various rivers and lakes and major wetlands in the region, and their sports fish and game values (Appendix 3 &4). Some habitats, like small wetlands and smaller trout spawning and nursery rivers are not included in this list as not all are known or even recognised. While these might be less important individually, all are extremely important as a whole and policy is required to protect them. Identification of habitats in this Plan ensures local authorities give due notice of major sports fish and game bird resources and habitats for their planning. The Department of Conservation is also required under Section 6(ab) of the Conservation Act as one of its functions, to “preserve so far as is practicable all indigenous freshwater fisheries”, and “protect recreational freshwater fisheries and freshwater fish habitats”. Section 53(3)(d) of the same Act also states that the Director-General “shall advocate the conservation of aquatic life and freshwater fisheries generally”. Similarly, a function of the Department under the Wildlife Act is to protect all absolutely protected wildlife throughout the country. Outside the hunting season defined by statute and Game Notices, all game species have the status of protected species. The Department’s statutory oversight of these species exists irrespective of whether they are native or not. The status of these species has been determined by statute, not their origin.

5.7. Game Bird Habitat

Game birds inhabit a wide range of habitats. Much of the larger areas of waterfowl habitat are located on public lands, although highly productive pockets of remnant or restored wetland habitat, important to some life phases can also be found on private land. Good quality breeding habitat is of concern in the Auckland Waikato region, with many wetlands continuing to face the threats of drainage and degradation through eutrophication.

For this reason, the Council has placed an emphasis on managing public land, assisting private habitat owners, and purchasing land to protect or enhance game bird habitat and hunting opportunities. While ownership or management of land is relatively costly, it provides greater certainty of ensuring habitat retention. Where there is resource input to private land from the Council, it may be appropriate to safeguard that by way of covenant on the title. Often, at the most minimal level, the Council can offer advice to landowners which can assist management of their private land to provide habitat. Fish and Game expertise in this field is now sought by landowners and other parties. There are opportunities to seek funding support to facilitate this process. A large proportion of game bird hunting opportunity exists on private land (see below). The Council works to promote or enhance positive contact with landowners to facilitate game bird habitat and hunting opportunities.

6. Resource Use

6.1. Sports Fish and Game Resources in Auckland and Waikato

Sports fish and game birds in New Zealand are a public resource. This is one of the underlying principles of the angling and hunting tradition in New Zealand.

The Auckland/Waikato Region offers abundant populations of sports fish and game birds in the many wetlands, lakes and rivers present throughout the region. In general, the northern waters are dominated by coarse fish, while further south both rainbow and brown trout are present in the extensive Waihou, Waikato and Whanganui river systems.

6.2. Sports fish

Rainbow trout

Rainbow trout (*Oncorhynchus mykiss*) are easily the most important sports fish in the region. Not only are rainbow trout abundant throughout the region but they also occur in a wide variety of habitats that provide many different angling opportunities.

Water quality is probably the most significant factor that affects distribution, as rainbow trout are absent from waterways with poor water quality including the Waitoa, Piako, Kumeu and Hoteo rivers. Rainbows are also present in only low numbers in the lower Waikato River below Huntly, again most likely due to low water quality. Water temperature is a significant factor limiting trout populations in the region with limited recruitment north of Hamilton. Rivers north of Hamilton with self-recruiting populations of rainbow trout, like the Wairoa River near Auckland and streams on the Coromandel Peninsula (e.g. Waiwawa and Tairua rivers), have cool water flowing out of high elevation (>200m) forest.

Rainbow trout are usually the only trout species present in the smaller river systems and in catchments above waterfalls (eg. upper reaches of the Waihou, Tawarau, Ongarue, and Whakapapa rivers).

The average size of rainbow trout appears to be directly related to water clarity with large trophy trout present in rivers with very clear water (eg Whakapapa River). By contrast, rainbow trout are rarely larger than 1.5kg in waters affected by agricultural runoff and or high temperatures.

The riverine rainbow fisheries are all self-recruiting. Supplementary stocking of rivers within the region has been trialled but was completely ineffective. Despite releasing over 2300 tagged one-year-old rainbow trout into rivers between 2005 and 2014 there has not been a single tag return. Rainbow trout are stocked in lakes throughout the region including regional and national significant fisheries in the Waikato hydro-lakes. Lake stocking of one-year-old fish in lakes where perch are not present has proven to be beneficial to anglers where spawning is not possible or limited (e.g. Lake Arapuni)

Brown trout

Brown trout (*Salmo trutta*) are present in the larger river systems but are usually not as common as rainbows. However brown trout are often considerably larger than their rainbow counterparts, and their large size is one of the main attractions to anglers.

Adult riverine brown trout are usually migratory, spending their summer months in cool headwater streams but moving downstream after spawning in autumn to spend the winter months in the lower reaches. This migratory movement allows brown trout to take advantage of the highly productive waters present in the lower reaches of the major river systems over the winter months.

Brown trout are limited to the southern waters of the region because of high water temperatures. They need water that is 2-3 °C cooler than required by rainbow trout to successfully spawn, and thus are only found spawning in waters south of Paeroa in the Waihou catchment and Huntly in the lower Waikato/Waipā catchment. Self-sustaining populations of brown trout are absent from the Auckland Region.

Brown trout are present in the Waikato hydro-lakes but represent less than 10% of the angler catch. Nevertheless, these fish are often of very large size and are targeted by some anglers.

Coarse fish

Rudd (*Scardinius erythrophthalmus*), perch (*Perca fluviatilis*), and tench (*Tinca tinca*) are abundant in many waters, especially in the Auckland Region. Rudd are also abundant throughout the Waikato River and hydro-lakes. Coarse fishing attracts a small but dedicated number of anglers, many of whom are recent immigrants from England and east Asia.

6.3. Game birds

Mallard Duck and Grey Duck

Mallard ducks (*Anas platyrhynchos*) and grey ducks (*Anas superciliosa*) are Council's major game birds providing approximately 77% of the total game bird harvest. They are widespread throughout the region in abundant numbers, with large concentrations in the Waikato and Hauraki Plains.

Due to the large amount of genetic introgression between the species, they are now classified as greylards and combined for management purposes. Mallards' advantage over native waterfowl is that they can tolerate a high level of human interference and tend to be the dominant duck in highly modified environments. Some pockets of more phenotypically representative grey ducks still exist in large wetlands such as Kopuatai, Whangamarino and Opuatia. For example, at the Opuatia banding site located adjacent to this large wetland, grey ducks can comprise up to 30% of the catch. In contrast they average less than 1% of the catch on the Hauraki Plains, where banding sites tend to be in a homogenised dairy farming landscape.

Estimates of greylard population have fluctuated since the inception of the banding programme in 2002 but have generally been low over the last decade or so. Given the importance of greylards to licence holders, consistently ranking as their most important game bird, this council has invested heavily in research into these species. Several studies have been conducted to help evaluate optimal habitat requirements and factors responsible for population change. A recent large-scale national PhD project, managed by staff in this region, developed a population model for greylards. When the telemetry data collected during the 3 years of the study was evaluated in concert with council's long-term banding data, it revealed for those years of the study the greylard population had negative population growth. The main population bottlenecks were related to extremely low duckling survival rates with low hen survival being another influential factor. Further research has also been done on habitat features that can increase these vital rates and maximise productivity. This research is being incorporated into design features and management actions for wetland projects being conducted in the region.

In the last decade, large scale botulism outbreaks occurring in the region are becoming of greater concern. In the 2019/2020 summer close to 4000 greylard carcasses were recovered from the lower Piako/Firth of Thames catchment alone. These types of events can severely impact recovery of local populations.

Due to the lower population estimates and concerns about greylard numbers in the region, harvest regulations have been tightened over the past decade. Most notably the season length has been

reduced from 8 to 4 weeks, pond feeding exemptions are no longer applied for and shotguns have been restricted back to 3 shot.

NZ shoveler

Native NZ shoveler ducks (*Anas rhynchos*) are often the waterfowl hunter's most admired species and are totally dependent on highly fertile wetlands for their survival. They are a mobile species and therefore population census are carried out across the country on the same day annually. Large numbers of shoveler are observed on the Firth of Thames during the hunting season, and counts in the region indicate their population to be stable with their harvest forming 0.6% of the waterfowl bag

Paradise shelduck

Paradise shelduck (*Tadorna variegata*) were once a rare species in the North Island until about 1945 when they first appeared in the King Country and began to acclimatise. Before the colonisation of New Zealand paradise shelduck habitat was lowland tussock grasslands, swamplands and around estuaries which were scarce native habitats with the species accordingly uncommon. The conversion of forest to pasture and native grasses to succulent clovers and ryegrasses, along with stocks ponds on hill country farmland allowed paradise shelduck numbers to increase. This makes it one of the few native birds to benefit from colonisation, thus the species is now widespread and numerous.

Paradise shelduck numbers in north Auckland have increased to the extent where grazing by the species on emerging grass and crops has necessitated the holding of a "special summer season" in February, to allow hunters a chance to harvest these birds, disperse large flocks and assist farmers.

A special season was also held for many years in the King Country, but annual moult counts had decreased significantly and therefore this season is no longer being held. Subsequently the population has stabilised, and council has determined appropriate moult count thresholds for when a special season will be held in the future.

In the Auckland/Waikato region, paradise shelduck contributes some 12% of the total game bird harvest which continues to gradually increase over time, making them the second most important game bird species based on harvested numbers.

Black swan

Although classified as a native, the black swan (*Cygnus stratus*) population was augmented through releases around the mid 1860's by the early Acclimatisation Societies across New Zealand.

As with grey duck and shoveler, man's intervention on the landscape has had a similarly negative effect on black swan. In the Auckland/Waikato region, Lakes Waikare, Waahi and Whangape which up to the early 1990s produced and supported thousands of black swan, are now almost bereft of the species. This has been attributed to the eutrophication and subsequent macrophyte collapse in these large shallow lakes which is closely linked to surrounding land-use practices. Healthy populations still exist on several western harbours, particularly those with extensive seagrass beds. Swan congregations around Auckland International Airport are causing concern with increased collision risk being reported. The airport has had to conduct some large culls to help mitigate this issue. Further research is being conducted regarding the spatial movement patterns of this problem population to determine whether opportunities exist to allow hunters to harvest them elsewhere. Although greatly reduced from former years due to the collapse of the vast majority of inland habitats, currently the population is perceived to be stable accounting for approximately 1% of the total game bird harvest.

Pukeko

Pukeko (*Porphyrio porphyrio*) are widespread across the region. They prefer wet swampy areas but have proven highly adaptable to land use change. They are particularly abundant in gullies and swamps around urban centres where there is little or no harvest pressure. A cunning bird, they are renowned for exploiting newly established pastures and crops, to the point where they are causing problems for many farmers, market gardeners and horticulturists, with Council receiving frequent requests for their control. Partly due to this, council sets liberal season regulations, with an extended season to give hunters and landowners the opportunity to manage local populations. Although often treated as 'by catch' by hunters they do form approximately 7% of the total game bird harvest.

Quail

Three species of quail are present in the region: California quail (*Callipepla californica*), Brown quail (*Synoicus ypsilophorus*), and Bobwhite quail (*Colinus virginianus*).

California quail are the most ubiquitous of the 3 species found in the region and although they are a highly valued game bird to a number of hunters, it contributes less than 0.5% of the total harvest.

California Quail thrive in edge habitat and historically tracts of hedgerows provided habitat for this species in the agricultural landscape. Over time, with habitat change quail have become more confined to pine forests and coastal scrub country. Changing forestry practices and the planned biological control of broom (a major component of quail diet), along with the same threats posed to pheasant, could have implications to the population.

Brown quail are found in small pockets throughout the region and bobwhite quail are being augmented through private liberations.

Pheasant

Despite only comprising approximately 4% of the total game bird harvest, the hunting of pheasants (*Phasianus colchicus*) attains almost a cult status amongst certain hunters. For some, pheasants are the only species they actively target during the game bird hunting season. They are found throughout the region and numbers appear to have benefited from the generally drier conditions over the past decade. Many of the better pheasant hunting opportunities for pheasants are confined to private land although fringe wetland habitat and forestry areas can be productive.

With modern farming practices, especially the use of insecticides and the increased use of clean farming techniques destroying rough cover and shrubby gullies which form prize pheasant habitat, the population is perceived as declining in intensively farmed areas.

Red Legged Partridge

In order to try and fill the niche caused by the decline in pheasant and quail populations, resulting from the decline in habitat brought about by farming practices, in 1977 the Auckland Acclimatisation Society resolved to import red legged partridge (*Alectoris rufa*). From 1981-1991 the Society released over 12,000 birds, and the Auckland/Waikato Fish and Game Council over 1,000 from 1991-1992. In 1994 Council's breeder ceased operations and the breeding pairs were distributed to private pen rearers who had shown an interest in the species. Red legged partridges are still released in large numbers by some landowners, in combination with extensive predator control programmes, but there is no evidence of viable wild populations becoming established.

Angling and Hunting Recreational Opportunities for Auckland and Waikato

The majority of recreational hunting occurs on private land mainly farm ponds and small natural lakes. Moreover, landowners can hunt on their own properties without requiring a licence and the numbers of landowners who use this opportunity is unknown but is likely to be significant. Many hunters also utilise Auckland/Waikato Fish and Game Council owned wetlands.

6.4. Hunting

Auckland North

Hunting opportunities are limited in the upper Waitemata Harbour due to extensive settlement, though mallards are quite numerous. Significant hunting opportunities on Kaipara Harbour, especially estuary zones and contributory rivers such as Kaipara and Kaukapakapa. Few opportunities on South Kaipara lakes due to low game numbers, though some, (such as Lake Kareta), used by shelduck as moulting area in summer. The Kaipara Harbour also contains swans by the thousands. Farm ponds, especially larger ones, drains, streams and rivers provide waterfowling opportunities in the hinterland. Forests provide pheasant and quail hunting as do farms with rough cover, especially in cropped areas, on private land.

Auckland South

Manukau Harbour provides numerous opportunities especially around Karaka's inlets. There are some opportunities in other parts of the harbour but limited due to dense housing to the water's edge. There are waterfowling opportunities around Clevedon coast and inland on the Wairoa River, especially in estuarine areas. Some hunting occurs on the Waiuku Peninsula on lakes, (but not on Lake Pokorua, which is a refuge), farm ponds, drains, natural swamps, etc.

North Waikato

Willows along the Waikato River edge provide drift shooting opportunities particularly when water levels are right. Further down the Waikato, at the Delta, this area is intensely hunted. Many lakes in the North Waikato provide opportunities for waterfowl hunting. The creation of the Whangamarino weir, to help restore a historical hydrological regime has recreated a large opportunity for waterfowl to live and breed in the area. NZ shoveler also have responded to the improved water levels with many hundreds present in pre-spring staging flocks. In some recent years, drought conditions leading into the open season has meant that many traditional hunting areas have not had any water through the entirety of the 4 week duck hunting season. This has impacted hunter opportunity and participation.

Hauraki-Coromandel

Harbours on the Coromandel Peninsula generally provide a good waterfowling experience for local hunters with bush edges and scrubby farms providing some reasonable upland game shooting for those willing to look for it.

The ravages of past flood control schemes (and more recent efforts too) have been felt in the Hauraki area with drains the only waterfowl habitat left in many areas. Despite this there are some large remnant wetlands such as the Kopuatai, flax block and the Firth of Thames itself. These are popular water fowling spots that can hold a good many birds when conditions are right. The Piako and Waihou river systems and interconnected canals also attract both hunters and ducks with some of the largest aggregation of mallards found anywhere in the region. Large numbers of waterfowl sit in rafts on the

Firth of Thames during the hunting season, until driven inland by poor weather conditions. Some hunters utilise specially designed boats to set up where these birds trade along the tideline in these locations.

Central Waikato

Much of the public hunting in the central Waikato is restricted to several smaller peat lakes and wetlands clustered around the Horsham downs and Waipa districts. These provide quick and easy access from nearby Hamilton and are therefore heavily hunted. Good numbers of dabbling ducks are found on these with birds often coming out of refuge areas in the Hamilton city boundary. The Waikato River from Cambridge north is also heavily used, especially by drift shooters, but this practice is becoming increasingly dangerous with urban sprawl and the creation of walk and cycleways. There is a potential that drift shooting could be restricted if conflict arises between different user groups in this space.

The rough farms around Raglan, Aotea, and Kawhia support a good number of upland game birds and the harbours have good populations of ducks. Swan numbers too are significant here too and therefore more liberal limits apply.

South Waikato

While this area lacks the large wetlands typical of the lower Waikato, it does have a mosaic of streams, rivers and farm dams that attract wild duck. Shelduck are much more common here and the general lack of ready water supplies have led many farmers to put in relatively large farm dams with all the coincidental sport that they provide. Pheasants are not now so numerous in this area.

Hydro dams provide waterfowling opportunities especially in sheltered bays, islands and other features. However, excessive fluctuating of water levels has lowered the feeding value of riparian wetlands which can be flooded, then completely dried out in a short period to best suit power demand.

6.5. Fishing

Auckland North

Trout fishing opportunities are limited to put-and-take fisheries in Lakes Rototoa and Pupuke. There are also many waters offering excellent coarse fishing opportunities.

Auckland South

Trout fisheries are limited to the Hunua Ranges including the Wairoa River, Mangatangi Reservoir and Mangatawhiri Reservoir.

North Waikato

Trout fishing opportunities are limited, although the lower Waikato does offer winter habitat for brown trout from the Waipā headwaters. Two small dune lakes near Waiuku are stocked annually with trout.

Hauraki/Coromandel

Many streams and rivers in the Coromandel and Kaimai Ranges hold good trout populations. The Ohinemuri River is the most popular and attracts many anglers from throughout the region.

Central Waikato

The Waikato River flows through both Cambridge and Hamilton providing good fishing for residents. The Karapiro Dam tailrace is easily accessible and is a significant fishery.

South Waikato

Spring-fed rivers are common throughout the South Waikato District offering abundant rainbow trout populations in generally clear water. Three Waikato River hydro lakes are in the Auckland/Waikato region hold rainbow and brown trout as well as rudd (which are a sports fish in this region). However supplementary stocking of rainbow trout is required in Lake Arapuni. Lake Arapuni is the most popular fishery in the region due to a reputation of consistently producing large trout. Further west, the headwaters of the Waipā River contain many excellent fisheries including the upper Waipā River, Puniu River and Mangatutu Stream. On the west coast the relatively isolated Awakino River offers superb fishing in spectacular scenery. In the south of the region, the Whanganui headwaters provide extensive fishing waters including highly regarded trout fisheries in the Ongarue River, Whakapapa River and the Whanganui River upstream of Taumarunui.

7. Angling and Hunting Recreational Opportunity Spectrum for Auckland/Waikato

To assist planning and management a recreational opportunity spectrum (ROS) has been developed for angling and hunting in Auckland/Waikato. This approach is used extensively in the USA and now in New Zealand by the Department of Conservation to maintain a range of settings in which recreation can take place. These enable managers to ensure that a wide range of settings is maintained and manage the sites to maintain the full range of recreational opportunities. The ROS recognises the diversity of recreational angling and hunting opportunities within the region and classifies them within a spectrum based on key characteristics, primarily recreational settings:

Key Characteristics:

- a) Settings - the combination of social physical, biological and managerial conditions that give value to a place. Six setting attributes have been identified namely:
 - access into and within the area
 - other non-recreational resource uses and their compatibility
 - on-site management
 - social interaction (user density);
 - level of regimentation (regulations);
 - acceptable level of visitor impacts.

- b) Activities – the specific things people do: fly fish, hunt upland game, troll from a boat etc. It is important to identify potential users, their expectations and the style of activity in which they participate.

- c) Experiences - the combination of activities (chosen by users) and the settings (managed as far as possible) result in experiences including challenge, risk, solitude, and companionship.

A recreational opportunity is defined as... ‘a chance for a person to participate in a specific recreational activity in a specific setting in order to realise a predictable recreational experience’.

The Council’s long-term aim is to maintain (or enhance) the range, quality and extent of angling and hunting opportunity in Auckland/Waikato to meet the preferences of individual users and provide the widest achievement of desired experiences. To achieve this aim the Council requires in some cases a better understanding of recreational user preferences and needs to actively manage settings for user experiences.

The following represents an opportunity spectrum based on five broad categories: Urban, Rural, Natural, Backcountry and Remote.

Urban

- Setting is within or adjacent to 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
- Fishery may be stocked

- Experience is characterised by open space but within a built or modified environment.

Rural

- Setting is rural and modified by farming activity
- Duration of activity may be short or long
- Access is relatively easy by road and duration of activity is commonly up to a day
- User levels can be high and encounter rates are moderate
- Fishable water area is extensive
- Hunting opportunity for waterfowl 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.

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 (including upland game)
- Experience is characterised by scenic beauty and is commonly associated with family activities such as boating, picnicking, and walking.

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.

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.

7.1. Significance grading

The following criteria have been considered in determining the significance of fish and game habitats, fisheries and hunting areas within Auckland/Waikato.

The significance of a fishery or game resource is not the same as the quality or value of that resource. For example, a locally significant fishery can be high, medium or low quality or value depending on its condition, character or specific fishery characteristics or attributes.

A habitat, fishery or hunting population/area needs to meet one or more of the criteria to be graded as nationally regionally or locally significant.

7.2. Nationally significant

- Habitat, fishery or hunting area is recognised as outstanding in a Water Conservation Order, or of 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/year
- 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 Auckland/Waikato
- Fishery or hunting area has significant attributes identified by survey or community consultation.
- Habitat that provides spawning, breeding, 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 habitat.

7.3. 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 2000-5000 angler visits per year
- Hunting area sustaining between 150 to 500 hunter visits per year
- Habitat, fishery or hunting area with at least one exceptional 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 Auckland/Waikato
- 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, rearing areas for a regionally significant fishery or game habitat ☐ Habitat that provides a migratory pathway or corridor for a regionally significant fishery or game habitat.

7.4. Locally significant

- Habitat, fishery or hunting area is recognised in surveys including NIWA National Anglers' Survey, in a decision from a public process or in a published technical report or statutory plan
- Fishery sustaining up to 2000 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 45 minutes' 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, rearing areas for a locally significant fishery or game habitat
- Habitat that provides a migratory pathway or corridor for a locally significant fishery or game habitat.

7.5. Review of significance

Habitat significance may be reviewed or amended in the light of new information and any changes that results will be incorporated into the Plan by way of section 17M (3) of the Conservation Act 1987.

PART II FISH AND GAME MANAGEMENT ISSUES AND POLICY RESPONSES

Part II of the Plan is divided into sections based on the functional areas currently used for Council annual planning and reporting. It details the issues identified through the plan development process and the policy responses to them.

'Outcomes' describe the future aim or goal.

'Issues' identified under each section describe the current situations which require active management - the "Where are we?" of the planning process.

'Objectives' give weight to the outcomes, describing more succinctly "Where we want to go" in terms of the future or the desired result.

'Policies' have been developed which describe in more specific terms the course of action intended to achieve the desired result or "How we are going to get there". Milestones for all functional areas are then specified jointly at the end of the Plan.

The Plan will be implemented progressively by assigning staff resources and funds to specific projects within each annual plan. A timetable for implementation of key action is included in section 12.

8. Species Management

In almost all cases sports fish and game species within the region are based on wild self-sustaining populations.

The principle underlying harvest management is that a wild population will produce each year a surplus above that required to replace natural mortality. That surplus can be harvested on a sustainable basis where all other factors, such as water quality and quantity, are more or less stable. The difficulty lies in identifying the threshold between sustainable harvest and unsustainable harvest given both the elasticity and dynamics of any given population, and then reflecting this in angling and hunting regulations.

Regulations need to take a precautionary approach to avoid over harvest.

Monitoring of populations and their trends over time and maintaining this information in up to date databases is critical. Sports fish monitoring techniques include drift dive surveys, netting surveys, tagging surveys, spawning surveys, electro-fishing and angler surveys. Game monitoring techniques include annual aerial counts, banding, annual harvest surveys and hunter surveys. Funding of species-specific research is also an important management tool. Collection of baseline data must be maintained but reviewed from time to time and changes to monitoring programmes made as required. The Auckland/Waikato region has also led significant targeted national research projects in the past decade focused on filling critical information gaps that give us a better understanding of game bird and sports fish population dynamics and produce tangible management outcomes based on sound scientific principles.

8.1. Outcome

To maintain sustainable populations of harvestable sports fish and game bird species. Throughout the region, publicly owned and managed fish and game resources are thriving within natural habitats and areas. Wild fish and game resources maintain a population which produces sufficient numbers for a self-sustaining annual harvest in the long term. Brown and rainbow trout continue to provide the mainstay of fishing opportunities. Wild fish and game species are valued by the community for the recreational opportunity that they provide, for the potential to harvest them for food, and as part of the Auckland/Waikato's natural heritage.

8.2. Issues

- 8.2.1 There is a statutory requirement to manage sports fish and game to ensure species and population sustainability. There is an ongoing need for information on sports fish and game populations dynamics and factors affecting their abundance, including harvest, as well as a precautionary approach to their management. Declines in habitat quality and quantity may also lead to declines in fish and game habitat values and productivity. As such, there is a need to demonstrate a cautious management approach in light of any perceived decline to the fish and game resource.
- 8.2.2 Sports fish and game management activities may impact on other resources or resource users and these external effects need to be carefully assessed. For example, the extension of the range of sports fish into areas where unmodified populations of native fish occur may put native fish conservation values at risk. There are also opportunities for co-operation with other freshwater fisheries agencies over management initiatives. Also, there are concerns amongst landowners that game birds can impact on crops or pasture and in some circumstances.
- 8.2.3 Game birds may compromise aviation safety in the vicinity of airports.
- 8.2.4 It is difficult to monitor all sports fish and game species and habitats to a desirable level of precision and therefore we must prioritise resourcing into areas and species where the populations are under greatest stress and where regulations are likely to influence population levels.
- 8.2.5 There is a risk of cementing in place fishing competitions that have a commercial focus, or which are unsustainable in terms of their harvest rate or have other impacts on the sports fish populations.
- 8.2.6 Auckland/Waikato Fish and Game continue to maintain a relationship with landholders over their management of Canada geese because they continue to offer hunting opportunities for licence holding waterfowl hunters despite the species no longer being defined as game under the Wildlife Act.
- 8.2.7 The introduction of new organisms into waters where they do not presently exist has the potential to adversely impact on sports fisheries and their habitats. Staff will continue to be actively involved in freshwater biosecurity at a local and national level.
- 8.2.8 There is a continued need for Fish and Game to adopt evidence-based decision making for actions involving sports fish and game bird resources. This includes sustaining and undertaking a systematic approach to scientific investigation of fisheries and habitats and the creation of mechanisms and processes to share and disseminate these findings. Without information about the status and trends of sports fish and game bird populations, good

management decisions cannot be made. Without monitoring information, involvement in RMA processes may not be as effective.

8.2.9

8.3. Objectives

Species management

- 8.3.1. To manage sports fisheries and game resources having regard to sustainability to meet the interests and recreational needs of present and future generations of anglers and hunters.
- 8.3.2. To primarily focus sports fisheries and game bird management on wild, self-sustaining populations.
- 8.3.3. To optimise angling and hunting opportunity and maintain or improve the recreational fishing and hunting opportunities available in Auckland/Waikato.
- 8.3.4. To manage sports fisheries and game populations in Auckland/Waikato within their existing ranges except where a risk assessment shows there is no significant effect from extending the distribution on indigenous biodiversity. Consultation with interested parties, including iwi and DOC, will be undertaken as part of the process for approval under the Freshwater Fisheries Regulations 1983 and similar laws.
- 8.3.5. To manage liberations of sports fish so that new sports fisheries will not be created where there are likely to be significant adverse effects on rare or threatened indigenous fish species, including non-migratory galaxiid.
- 8.3.6. To have regard to the effects of fish and game management activities on other natural resources and resource users.
- 8.3.7. To cooperate with other freshwater fisheries agencies over freshwater fisheries conservation and habitat protection.
- 8.3.8. To protect Auckland/Waikato sports fisheries from the adverse effects of releases of other exotic freshwater fish or other unwanted organisms.
- 8.3.9. To manage commercial activity relating to sports fish and game to avoid or minimise adverse effects on angling and hunting and ensure a reasonable contribution to fish and game management costs.

Game bird conflict

- 8.3.10. To minimise conflict between game birds and agricultural production.
- 8.3.11. To control game bird populations primarily through hunter harvest during gazetted game seasons.
- 8.3.12. To maintain a residual liaison between farmers and Auckland/Waikato Fish and Game over Canada goose issues.
- 8.3.13. To recognise that aviation safety in the vicinity of airports is paramount and care must be taken to ensure that hunter interests do not compromise such.

Hatchery and restocking

- 8.3.14. To restock fisheries only where:

- a) the benefits are measurable and bear a reasonable relationship to costs
- b) there is a strategic benefit in doing so
- c) there is no significant adverse effect on other natural resources or the users of those resources
- d) to expand the range of harvest opportunities
- e) to direct harvest pressure to where it can be sustained and managed.

Commercial use

- 8.3.15. To manage commercial activity relating to sports fish and game in ways that avoid or minimise adverse effects on angling and hunting and ensures a reasonable contribution to fish and game management costs.
- 8.3.16. To clearly define Council's jurisdiction over sports fish and game resources where commercial interests encroach on the interests of anglers and hunters.

8.4. Policies

Species management

- 8.4.1 Achieve sustainability through the following approach:
 - a) ensure that the sustainability of the resource has priority over utilisation (i.e., utilisation will be dependent on sustainability)
 - b) in the absence of reliable information or in the face of uncertain information, a precautionary approach will be adopted in managing fish and game populations
 - c) management decisions will be based on the best available information
 - d) the absence of information will not be used as a reason for failing to adopt management measures.
- 8.4.2 Maintain the inventory of sports fish and game resources in Auckland/Waikato given in this Plan including:
 - a) classification of individual sports fisheries and game habitats to allow management based on significance, key characteristics and the recreational opportunity provided within a spectrum
 - b) defined spawning grounds
 - c) include water quality and quantity information in the interpretation of monitoring data.
- 8.4.3 Prioritise sports fish and game species management activities through:
 - a) population trend monitoring
 - b) angler and hunter harvest and opinion surveys
 - c) identification of species management threats and opportunities
 - d) assessments of the effectiveness of species management activities.
- 8.4.4 Set game bird harvest regulations in order to provide acceptable levels of hunter opportunity, whilst balancing this against the potential impacts on the game bird resource.
- 8.4.5 Actively manage the risks of fish or game projects which extend the range of sports fish or game species within the region.
- 8.4.6 Prohibit sports fish liberation in waters where the creation of new sports fisheries would significantly impact on rare or threatened indigenous fish species, including non-migratory galaxiid.

8.4.7 Respond appropriately to reports of adverse effects arising from fish and game management projects on other natural resources or resource users. This may include discussions with landholders and/or their representatives.

8.4.8 Actively liaise with the Ministry of Primary Industries, the Department of Conservation and iwi over freshwater fisheries management issues and protection of freshwater habitats.

Commercial use

8.4.9 Monitor and/or manage commercial uses of sports fish and game birds to maintain licence holder access and sporting opportunities. Commercial uses that require monitoring include:

- a) angling and hunting guiding
- b) angling and hunting competitions for direct or indirect commercial gain to ensure that they meet the aims of this Plan and that the harvest is consistent with the long-term management ambition for the specific fishery
- c) sports fish displays
- d) hunting and game preserves and, where possible, to recover costs of monitoring and management.
- e) oppose the establishment of fish farms licenced under the Fish Farming Regulations 1983 where fish-out ponds are proposed as a primary activity.

Game bird conflict

8.4.10 Assist landholders to manage situations where there is conflict between game birds and agricultural production.

8.4.11 To maintain a residual liaison between farmers and Council over Canada Goose issues.

8.6.1 To maintain a liaison with the Auckland Airport Authority over issues with game birds, especially swan.

8.4.12

Hatchery and restocking

8.4.13 Use hatchery restocking to extend the spectrum of angling opportunity in Auckland/Waikato to include accessible put-and-take sports fish fisheries close to urban populations.

8.4.14 Oppose any releases of exotic freshwater fish which pose a risk to sports fisheries or their habitats.

8.4.15 Support efforts to prevent accidental transmission of unwanted aquatic organisms under the Biosecurity Act 1993 into or between waters in Auckland/Waikato.

9. Habitat Protection & Management

The distribution and abundance of fish and game species is largely related to the quality and extent of fish and game habitats. Council has a broad range of responsibilities under s 26Q of the Conservation Act relevant to habitat protection and management. These include:

- to manage, maintain, and enhance the sports fish and game bird resource
- to monitor the condition and trend of ecosystems as habitats for sports fish and game
- to undertake such works as may be necessary to maintain and enhance the habitat of sports fish and game (subject to appropriate approvals)
- to advocate for the interests of the Council, including its interests in habitats.

As such, the protection, maintenance and enhancement of rivers, streams, lakes and wetlands as habitats and ecosystems is vitally important in the maintenance of fish and waterfowl resources. The maintenance and enhancement of water quality, water quantity, water flow and water level regimes, ecosystem health and natural habitat characteristics (for example channel variability and riparian cover) are essential requirements.

Council has had a long and vigorous involvement in habitat protection, enhancement and rehabilitation as funds have allowed. Council has purchased wetlands to preserve waterfowl habitat since the early 1950's and is now holding some 1600 hectares, of which 700 lies within the internationally recognised Whangamarino Wetland. Council has an ongoing commitment to continued procurement of wetland as appropriate and the maintenance of the existing properties it owns. Council has also assisted in the management of similar areas of Crown land that have been restored to wetland at Council's own expense. Furthermore, Council has been a partner with the Department of Conservation in the rehabilitation of some 1600 hectares of wetland in Whangamarino by the establishment of a weir on the Whangamarino River and continues to commit funds and energies in this direction. Council regularly tenders and will continue to tender advice to individuals and organisations for habitat protection and enhancement with provision of grants for such where appropriate.

Intensification of agriculture, intensive land use, discharges to waterways and land, hydro power development, damage to riparian margins, surface water abstraction, vegetation clearance and harvest, wetland drainage, catchment management works and urban expansion have negatively impacted on sports fish and game bird habitats in the region. Today development activities continue to reduce the quality and quantity of available habitat. Therefore, Council is a particularly strong advocate on habitat issues and has contested inappropriate wetland drainage, pollution issues and the degradation of waterways and will continue to spend funds in this area where necessary. Council also expends considerable time and effort in submitting on plans and policies where their content affects freshwater habitats, freshwater quality, freshwater quantity, and ecosystem health.

The Council recognises that for the greater part habitat protection must be achieved through advocacy because the control and management of water and land resources lies with private interests or other statutory agencies. Under common law, water is assumed to be owned by no person. There are many ways to approach advocacy for habitat, and some of these are outlined below:

- the RMA resource consent application process
- district and regional policy and plan development and reviews under the RMA
- development of legislation and regulations affecting resource management
- policies, plans and strategies developed under other Acts

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

Proactive cooperation with other resource management organisations, landowners and managers, iwi, interest groups and individuals in the wider community can be used to realise positive outcomes for fish and game management.

A key strategy in the Council's advocacy activities will be the development of co-operative relationships with agencies and stakeholders with an interest in habitat. The Council and its staff are founding Trustees in the National Wetland Habitat Trust, Waikato Ecological Enhancement Trust, Waipā Peat Lakes and Wetland Accord, Waikato Lakes and Wetlands MOU Waikato RiverCare, South Waikato Environmental Initiatives Group, Lakes Rotokauri, D and Cameron Management Groups, and regularly attend wetland forums, biodiversity forums, LandCare and RiverCare meetings, local and regional council sector liaison meetings, and other like group meetings that have a focus on safeguarding wetlands and waterways.

The spread of pest fish, including coarse fish from illegal liberations, has led to the loss of valued trout fisheries in the region including the collapse of a significant fishery in Lake Rototoa. The impacts have been due to direct competition for food and/or impacts on habitat. Council will continue to liaise with other agencies regarding the spread and control of pest fish. Council is a member of the Freshwater Biosecurity Partnership Programme team.

Habitat protection is primarily the responsibility of local authorities (RMA) and the Department of Conservation (Conservation Act). The Council will continue to seek the implementation of these statutory responsibilities and encourage other habitat users to accept responsibility for avoiding, remedying or mitigating their adverse environmental effects.

9.1. Outcome

To protect and increase suitable habitat for sports fish and game bird species so that:

- Contaminant inputs, river flows and lake or wetland water levels combine with the natural characteristics of waterways to support healthy natural ecosystems functioning at a level that supports productive and diverse fish and game populations.
- Rivers are fishable and safe for food gathering.
- Auckland/Waikato wetlands are improving in terms of quality, diversity and species productivity and the overall area of wetlands is expanding, underpinned by the regional focus on protection of regionally significant and other smaller wetlands, as well as an active programme of wetland creation on private land.
- Degraded wetlands have been restored.
- Overall, rivers and wetlands are highly valued by the public for their intrinsic qualities and amenity values.

9.2. Issues

Issues affecting fish and game habitats are significant and complex, and with limited resources available, Auckland/Waikato Fish and Game needs to prioritise catchments for habitat protection, research and monitoring. Subcatchments will also be prioritised with extra emphasis on safeguarding high quality habitat and focusing restoration on rivers from the top down. Fish and game habitats in the Region are currently affected by a broad range of resource and land use activities causing incremental declines in habitat quality and extent. Trends of particular concern include the loss or

degradation of river and wetlands ecosystems, and accelerated enrichment of rivers and lakes with non-point source pollutants including sediment.

- 9.2.1 There has been extensive loss of wetlands, game bird habitat and hunting opportunities through land development in the region due to agricultural intensification and urban expansion. Despite regional plan provisions and national policies requiring that wetlands are safeguarded, the latest scientific evidence is indicating that significant portions of remnant wetlands in the Waikato are still facing partial or complete loss. High quality breeding habitat is in short supply and safeguarding or restoring this habitat type is critical to maintaining or enhancing waterfowl populations.
- 9.2.2 Non-point source pollution and sediment is a serious issue affecting water and habitat quality. Of particular concern are the more intensive agricultural land uses, particularly unconstrained and poorly managed dairying and intensive sheep and beef operations. Sedimentation primarily comes from the human or animal disturbance of soil, or forestry harvest activities without adequate buffers to trap the sediment between the land use activity and the waterway. Cumulatively, nutrient and sediment inputs from different sources across catchments is beyond many ecosystems' assimilative capacity and is degrading ecosystem health.
- 9.2.3 Catchment management activities, particularly in lowlands, have adversely affected fish and game habitats in the past and may degrade or enhance habitats and associated recreational amenity in the future depending upon the management regime employed. Management of flow regimes and riparian areas on waterways is of importance in the protection and enhancement of fish and game habitats and recreational amenity.
- 9.2.4 Development of rivers for the generation of hydroelectricity has impacted on fish and wildlife habitat. Existing hydro-electric dams along the Waikato River have increased angling opportunities but have ongoing effects on fish and game resources and associated recreational use. Dams and weirs block fish passage both up and down stream and flows fluctuate unnaturally downstream, limiting habitat for invertebrates and fish spawning sites including smelt, and impacting sediment loads.
- 9.2.5 The spread of aquatic pests has had a major impact on fisheries and game resources including the collapse of trout fisheries in some lakes and rivers. There is potential for new biosecurity threats and a lack of response capability from regional councils and the Department of Conservation.
- 9.2.6 Some rivers in Auckland/Waikato are fully or over allocated in terms of water abstraction for out of stream uses, resulting in degradation of aquatic habitats. For example, Watercare extracts nearly all the Mangatawhiri River the minimum flow for the dam is supplied by tributaries below the dam as the monitoring site is well downstream. Similarly, Intakes from the Western Diversion of the Tongariro Power Scheme has multiple intake sites that take entire streams with no residual flow.
- 9.2.7 Climate change may alter the hydrological patterns and aquatic ecosystem processes, decreasing their resilience. Consideration of the effects of climate change needs to be built into decision making.

- 9.2.8 There is a demand amongst anglers and hunters, and within the community, to restore degraded fish and game habitats and to create new habitats, especially close to centres of population.
- 9.2.9 Weed and pest species present in Auckland/Waikato may not always have adverse impacts on fish and game habitats.
- 9.2.10 Mining and gravel extraction adjacent to or within waterways can have serious adverse impacts on fishery values if not managed closely and under appropriate consent conditions.
- 9.2.11 Access opportunities to waterways can be lost through incremental changes, such as subdivision, the loss of accessways such as the closing of unformed legal roads, changes in landholder values and perceived conflicts between the farming community and national Fish and Game public advocacy policies. Landowners blocking legal access has also reduced angler and hunter opportunity.
- 9.2.12 Botulism outbreaks are becoming more prevalent with longer drier summers in parts of region and can severely impact local game bird population levels. WWTPs are particularly susceptible and large epizootic outbreaks are likely to provide a significant proportion of greylard non harvest mortality.

9.3. Objectives

- 9.3.1 To protect, maintain and enhance sports fish and game bird habitats in the Auckland/Waikato region with advocacy as the primary tool.
- 9.3.2 To restore or create fish and game habitat where the opportunity arises, and it is practical and, cost effective to do so.
- 9.3.3 To assess and monitor the condition and trend of sports fish and game bird habitat in the region.
- 9.3.4 To advocate for the protection and increase of sports fish and game bird habitats through statutory planning and non-statutory processes.
- 9.3.5 To actively promote limits and or targets for habitat quality and quantity which are consistent with healthy ecosystems, and where necessary, actively defend these limits and targets.
- 9.3.6 To advocate for the exclusion, eradication or effective management of risks posed by pests and diseases to sports fish and game bird habitats.
- 9.3.7 To protect and enhance access to fish and game bird habitat.

9.4. Policies

- 9.4.1 Priority is to be given to achieving outcomes through RMA planning processes and focussing in the first instance on habitat areas identified as nationally or regionally significant in Appendix 5 of this Plan, those identified as critically important through targeted research or those at risk from a specific threat.
- 9.4.2
- 9.4.3 Promote the protection, maintenance and enhancement of habitats through either public processes' and public advocacy including:
- a) resource consent application processes
 - b) regional and district policy and plan development

- c) legislation, planning and policy development under other Acts
 - d) Department of Conservation planning processes
 - e) Department of Conservation concession application processes
 - f) Development of national Regulations, Standards and Policy Statements under the RMA.
- 9.4.4 Maintain co-operative working relationships with the Department of Conservation, Waikato Regional Council, Auckland Council, District Councils, Iwi and hapu groups, Universities, conservation and recreation NGOs, community groups and resource user groups via liaison, formal and informal meetings, and working groups for information sharing.
- 9.4.5 Undertake a coordination role with other like-minded groups when engaged in similar work and where requested.
- 9.4.6 Develop an inventory of fish and game habitats within Auckland/Waikato based on a systematic ongoing assessment of fish and game resources and use including information on amenity value, ecosystem trend, habitat quality, population trends and desired outcome for individual habitats.
- 9.4.7 Promote community awareness of habitat issues and encourage support for environmental management benefiting fish and game habitats through:
- a) liaison with agencies and community groups
 - b) media releases and advocacy
 - c) give public talks including schools, user groups (fishing and hunting clubs) and conservation groups (e.g., stream care groups).
- 9.4.8 Protect fish and game habitats, particularly wetlands, by way of:
- a) purchase of suitable habitat areas
 - b) Undertaking and facilitating restoration works to maintain, enhance and increase the quantity of habitat on Council land and privately owned land, particularly wetlands
 - c) promotion of public (Crown or local body) reserve establishment
 - d) securing Council management authority for public reserve areas
 - e) negotiation of covenants or habitat enhancement agreements over freehold land by negotiation to maintain or improve ecosystems and/or sports fish and game bird resources.
 - f) inclusion of protective mechanisms in the regional plan
 - g) water conservation order applications
 - h) advocating in consenting, planning and policy processes to ensure wetland water levels and the hydrology of catchment management schemes hydrologically linked to wetlands are managed to ensure and maintain wetland ecosystem health
 - i) advocating in planning, consenting and policy making processes to ensure the cumulative inputs of contaminants to freshwater ecosystems do not exceed the levels required for healthy functioning ecosystems.
- Priority will depend on the value of the habitat concerned, present or future risks to habitat values, the practicality of protection, and opportunity for protection.
- 9.4.9 Press for appropriate action by agencies directly responsible where non-compliance with resource management, conservation or other laws, and plans and policies written under these laws is detected.

- 9.4.10 Give priority to the monitoring and management of fish and game habitats within Auckland/Waikato region which are of national or regional significance and those that have the highest levels of angler and hunter participation to underpin licence sales.
- 9.4.11 Actively encourage projects by community groups that protect, maintain or enhance fish and game habitats.
- 9.4.12 Develop the potential of Council owned or managed wetlands as habitats and as hunting areas and contribute generally to improved wetland management in Auckland/Waikato.
- 9.4.13 Advocate and support the restoration of wetlands where they have been damaged or drained in the past.
- 9.4.14 Actively encourage and assist landholders to create or enhance habitat, secure funding for projects and to understand the many benefits from such enhancement including the benefits to downstream water quality.
- 9.4.15 When advocating the Council's interest in habitats, undertake a holistic assessment of the catchments ecosystem values and needs.
- 9.4.16 Undertake specific advocacy with landholders for the identification of wetlands and water yield areas and assess the possibility and mechanisms for restoration where possible due to the downstream ecosystem services that these areas provide.
- 9.4.17 Protect fish and game habitats and amenity values of rivers, streams and lakes in Auckland/Waikato by way of:
- a) involvement in consent and permission processes
 - b) involvement in the development of RMA policies and plan changes
 - c) applications for water conservation orders
 - d) involvement in collaborative community-based processes.
- 9.4.18 To ensure that water quality standards and flow regimes reflect the requirements of healthy and productive sports fish and game populations and the different stages in their life cycles.
- 9.4.19 Identify fish passage barriers that are limiting sports fish habitat use and advocate for their removal or remediation where appropriate.
- 9.4.20 Ensure all wastewater treatment plants that come up for re consenting have the requirement for botulism management plans and staff have input into the formulation of those plans.

10 Angler and Hunter Participation

The Council has a statutory requirement to promote recreation based on sports fish and game bird resources. With its revenue base for all its activities dependent on licence sales, it is also in the Council's interest to encourage potential anglers and hunters to take up these recreational activities. It is equally important that current anglers and hunters enjoy and can afford these activities and the factors that may limit participation are minimised. At the same time, the Council must ensure that increased use of the sports fish and game bird resource does not compromise their sustainability or the quality of the experience.

Protection of the quality of the angling experience, which in some areas includes feelings of solitude, remoteness and appreciation of natural surroundings and high-water quality, must remain a priority for the Council. Too much angling pressure can diminish the perceived value of the backcountry fishery. Similar pressures also impact on hunting.

The maintenance of a positive and mutually supportive relationship with licence holders, including prospective, present and past participants, is critical for the ongoing success of the Council to enable anglers and hunters to maximise opportunities in the region.

The availability of access to sports fishing and game bird hunting has been identified as a significant factor in limiting participation. This is especially important for public land. Maintenance and enhancement of access opportunities to the region's sports fish and game bird resource is a key responsibility for the Council.

Legal and physical access to water and land for angling and hunting is an issue for parts of the region. But it is also important that licence holders are aware of the opportunities that already exist. Anglers and hunters need to be informed of the areas open to them, how to reach these areas, and where public access points are located. The primary tools for identifying fishing and hunting opportunities is the Fish & Game web site in conjunction with the New Zealand Walking Access Commission web site (www.walkingaccess.govt.nz).

In addition to its statutory requirement to promote recreation based on sports fish and game bird resources, the Council also has a role in promoting ethical standards of behaviour.

Ethical standards of behaviour include:

- a desire to have others enjoy their hunting and angling opportunities
- acknowledgment that anglers and hunters often have no audience to ensure they behave ethically and that such behaviour is self-motivated and regulated
- an individual concern for the well-being of the environment
- promotion of uses which preserve the diversity, integrity, and beauty of ecosystems and the disapproval of those which do not
- acknowledgment and use of the accepted rural code of ethics and the importance of maintaining the traditional landowner-recreationalist relationship
- an acceptance that the health of the sports fish and game resource should not be measured by production of game birds and fish alone, but also by its ability to provide intangible values such as an appreciation of the wilderness, rivers, lakes and wetlands.

10.1 Outcome

To encourage maximum angler and hunter participation while maintaining the quality of the recreational experience

10.2 Issues

- 10.2.1 There is a demand for clear and simple angling and hunting regulations and some anglers and hunters want liberalisation of methods and season restrictions when sports fish and game populations allow for additional harvest. Angling and hunting methods must cater for all including the young and the elderly. Young anglers and hunters in particular are an important market and are the future of the sports. They may need assistance to learn about sports fishing and game bird hunting.
- 10.2.2 Participation levels, user density and methods of angler access are impacting on the quality of recreational experience in some circumstances such as in 'backcountry' and 'remote' fisheries where wilderness values are important. Problems with fisheries at this end of the recreational opportunity spectrum require active management to avoid conflicts between users over user densities or modes of access (e.g. aircraft or jet boats).
- 10.2.3 There is a demand for more regular updated information on the physical access available to fish and game resources, and a demand for more detailed information on how to hunt and fish.
- 10.2.4 Public access to fish and game resources is becoming progressively more restricted due to changing attitudes within the community resulting from:
- a) closer settlement and intensification of land use
 - b) concern over health and safety requirements
 - c) a hardening of attitude towards private property rights and concerns about security
 - d) a liberalisation of DOC policies governing commercial concessions, particularly aircraft landings in backcountry and remote fisheries.
 - e) increased awareness of commercial opportunities
 - f) commercial operators excluding private anglers and hunters.
- 10.2.5 Secure practical public access to fish and game resources via road reserves, marginal strips and esplanade reserves is important but sometimes it is difficult to identify on the ground. The New Zealand Walking Access Commission mapping system has drastically improved the ability of anglers and landowners to identify legal access points. However, Secure public access to rivers, lakes and wetlands and hunting areas is lacking in many areas of Auckland/Waikato. Many landholders acknowledge the security that they gain from granting access to responsible anglers and hunters who can keep landholders informed about issues on their property.
- 10.2.6 There has been a hardening of attitudes towards property rights, which has affected access to public fish and game resources.
- 10.2.7 Fishing competitions require management because:
- a) they have the potential to focus angling pressure in specific locations, leading to potential impacts on fish stocks and normal patterns of angling
 - b) they can be commercial in nature and can generate revenue for the organisers

- c) some fishing competitions do not cater to beginner or junior anglers and are of little benefit to promoting the sport.

Those operating fishing competitions need to explain the overall rationale for the competition in order for its sustainability and contribution to Council objectives to be assessed prior to its approval.

10.2.8 Undesirable angler or hunter behaviour may lead to access restrictions.

10.3 Objectives

Participation and behaviour

- 10.3.1 To encourage ethical standards of behaviour to be followed by anglers and hunters and have them recognised as responsible resource users and good neighbours.
- 10.3.2 To minimise and simplify regulations controlling angling and hunting so that they do not become an impediment to participation, but not at the expense of precautionary management.
- 10.3.3 To manage fishing competitions in order to maximise benefits, minimise adverse impacts and to ensure there is an equitable contribution to fish and game management from any revenue generated.
- 10.3.4 To foster greater awareness of and participation in conservation initiatives amongst anglers and hunters.
- 10.3.5 To utilise new technology, including mobile technology to promote understanding and participation amongst fish and game license holders.
- 10.3.6 To manage potential conflicts between recreational users over modes of access and methods.
- 10.3.7 To provide opportunities for new anglers and hunters to participate in sports fishing and game bird hunting.

Access and recreation

- 10.3.8 To maintain and improve secure public access to rivers, lakes and wetlands and land areas supporting fish and game resources.
- 10.3.9 To recognise the impact that access, particularly informal access arrangements, can have on landowners and their farming operations, and to negotiate access arrangements as far as possible.
- 10.3.10 To maintain and improve public access opportunities across private land as far as practicable.
- 10.3.11 To set limits on angler or hunter use of fisheries and hunting areas where pressure of use threatens or adversely affects the quality of recreational experience and to actively manage those areas for their key characteristics.
- 10.3.12 To keep anglers and hunters informed over access to fish and game resources and angling and hunting techniques.
- 10.3.13 To protect those elements of the public estate with importance to angling and hunting, particularly:
 - a) marginal strips

- b) esplanade reserves, esplanade strips and access strips
- c) recreation and conservation reserve land
- d) formed and unformed roads
- e) any government or local body owned land with value for angling and hunting, access, or fish and game habitat.

Licensing

10.3.14 To provide a range of licence categories that meet the needs of specific end users in terms of both coverage and affordability.

10.3.15 To provide licence purchase options to meet the needs of all clients.

Democracy

10.3.16 To facilitate angler and hunter participation in fish and game management.

10.4 Policies

Participation and behaviour

10.4.1 Promote angler and hunter codes of conduct for fish and game resource use and access.

10.4.2 Review tri-annually angling and hunting conditions and assess them for their relevance, clarity and simplicity.

10.4.3 Liaise with other regions over the annual review of angling and hunting conditions and to seek consistency between regions.

10.4.4 Seek outcomes in RMA plans and other statutory plans that manage conflicts between recreational users over matters including modes of access, compatibility of activities and user densities.

Fishing competitions

10.4.5 Approve fishing competitions in Auckland/Waikato on waters other than those supporting pressure sensitive fisheries where:

- a) the sustainability of fish stocks is not threatened and/or
- b) there is no significant impact on angling opportunity

subject to the fees set out in clause 57F of the Freshwater Fisheries Regulations 1983.

10.4.6 Apply revenue gained from competitions to:

- a) facilities which benefit anglers
- b) activities which promote angling and/or enhance angling opportunities
- c) activities which promote or assist fish habitat conservation.

10.4.7 Approve competitions subject to conditions and fees in accordance with objective 9.3.3 where:

- a) the competition is held in conjunction with, or as part of, a 'take-a-kid-fishing' or family fishing day
- b) the competition is a minor angling club competition without significant prizes or entry fee
- c) the competition is community based, aims to promote an area rather than a commercial business, and benefits sports fisheries management

- d) the event is consistent with the Council's fisheries management philosophy, competition conditions and rental are agreed to the Council's satisfaction and the Freshwater Fisheries Regulations 1983
- e) competitions are not held in water temperatures over 19°C
- f) no more than one competition is approved on a river per calendar year.

10.4.8 Encourage organisers of fishing events to place less emphasis on "heaviest bag" type competitions in order to promote sustainability.

Access and recreation

10.4.9 Establish where necessary controlling mechanisms for access to, and use of, fisheries within defined carrying capacities.

10.4.10 Monitor, manage and advocate for appropriate social carrying capacities to protect pressure sensitive remote or backcountry fisheries and to manage within those capacities to preserve high quality recreational experiences and the spectrum of fishing and hunting opportunity in Auckland/Waikato.

10.4.11 Provide accurate information to anglers and hunters on access to fish and game resources and angling and hunting techniques. Access information should be prepared in consultation with landowners and their representatives.

10.4.12 Participate in public processes relating to public land acquisitions and disposals including lease reviews, reserving of marginal strips, subdivisions and road stopping or taking to provide for public access, recreation and fish and game habitats.

10.4.13 Contribute to a register of secure public access ways to and along rivers, lakes and wetlands and to upland hunting areas, such as that operated by the NZ Walking Access Commission.

10.4.14 Establish access-ways across private land to fish and game resources through negotiation with landholders, and particularly when land use is changing or intensifying. A variety of options exist for negotiation, including legal easements and access covenants, through to informal marked accessways.

10.4.15 Advocate to maintain the existing unformed legal road network in Auckland/Waikato where this provides secure access to fish and game resources and agree to road stopping only where:

- a) there is no impact on present or future public access
- b) an alternative 'like for like' road access alternative is offered.

10.4.16 Undertake awareness programmes to educate anglers and hunters about access issues.

10.4.17 Actively pursue landowners that block legal access via the NZ Walking Access Commission.

10.4.18 Actively engage with territorial local authorities on policy for formed and unformed legal roads and other accessways.

10.4.19 Coordinate recreational and access advocacy groups where necessary.

10.4.20 Work with the Walking Access Commission and its regional field advisors in establishing and maintaining public access to fish and game-bird resources.

Licensing

10.4.21 Regularly review the range of licences offered and where necessary or desirable develop and promote new options.

10.4.22 Maintain and improve licence purchase options.

10.4.23 Provide supporting information for licence sales.

10.4.24 Support the co-ordination of licensing arrangements nationally and actively seek improvements in line with the expectations of the regional users.

Democracy

10.4.25 Encourage licence holder participation in Council elections as voters and candidates.

10.4.26 Ensure Council activities and processes are open, transparent and accessible to encourage maximum angler and hunter participation.

11 Public Interface

The protection of sports fish and game birds and their habitat is dependent on the support of Government, local authorities and the wider community. This requires community appreciation and support for the Fish and Game system.

Management responsibility of the sports fish and game bird resource involves relationships with many other stakeholders, including statutory organisations, iwi, interest groups and members of the wider community. The level of support from these other stakeholders impacts upon the Council's capacity to successfully achieve its purpose and functions. Public awareness of Council's role and activities, and the contribution it makes to environmental enhancement is important to achieving an acceptability of Fish and Game activities.

The Council is entering a future that involves changing demographics, changing land ownership practices (an increase in overseas, corporate and life-style owners), increasing commercialisation of recreation, and changing attitudes of a growing urban population to practices within the rural sector.

11.1 Outcome

To gain and maintain acceptance of the recreation of sports fishing and game bird hunting in the wider community.

11.2 Issues

11.2.1 There is relatively low public awareness of the Council's role in sports fish and game bird management, conservation work and environmental enhancement.

11.2.2 The Council will be most effective in its advocacy for fish and game resources and angler and hunter interests where it has community support. The public needs to be kept informed and have a high level of awareness of the Council's work and the wider benefits arising from it. The Council also faces risks where the wider community does not have a good understanding of recreational harvesting and its importance in community recreation. An example is the risk arising from anti-hunting groups arguing for restrictions or prohibitions on hunting.

11.2.3 The effectiveness of advocacy and public awareness within Auckland/Waikato also depends on the collective efforts of the other 12 regional Fish and Game Councils and particularly the national advocacy efforts of the New Zealand Fish and Game Council.

11.2.4 The achievement of fish and game management objectives will be assisted by developing and maintaining positive working relationships with all sectors of the community.

11.2.5 Due to its statutory requirement as an advocate for freshwater habitat, the Council may from time to time find itself engaged in potentially unpopular advocacy. This is likely to be most contentious when the advocacy involves the setting or recognition of limits on economic growth. Currently, the most contested issue is in the setting of limits to protect water quality and appropriate natural flows, but other areas are likely to emerge as economic activity arrives at further physical and biological limits.

11.2.6 The methods by which the Council communicates with licence holders and the public is also changing. Online tools of communication, such as websites and email, are becoming more important as the readership rate of traditional tools, such as newspapers and physical mail is dropping. The same applies with the shift to cellular phones. The Council needs to maintain both physical and electronic forms of communication, but slowly shift as demographics shift to electronic communication where possible.

- 11.2.7 Licence sales agencies and rangers play an important role in the public perceptions of the organisation as do rangers. They are often the everyday face of Fish and Game.
- 11.2.8 A functional working relationship with resource users is necessary to achieve Fish and Game management objectives. Important sector groups include farmers, miners, foresters, tourism interests and power companies.
- 11.2.9 A misperception of impact of trout on native fish is being promoted by agricultural lobbyist to undermine the credibility of Fish and Game.

11.3 Objectives

- 11.3.1 To project a positive public image as a regional organisation involved in environmental and natural resource management and to be perceived as professional, accessible, responsive, friendly, fair and community based.
- 11.3.2 To ensure the public has a good understanding of the wider benefits of the Council's work, the issues facing fish and game resources and the case for recreational harvesting.
- 11.3.3 To support the national advocacy efforts of the New Zealand Fish & Game Council and the collective advocacy and public awareness efforts of other Fish and Game Councils
- 11.3.4 To develop and maintain positive working relationships with groups within the community, especially land owners and land managers, local iwi, local bodies, local Conservation Boards, angler and hunter clubs and environmental interest groups, politicians, conservation and recreation groups, government departments and other statutory authorities.
- 11.3.5 Communicate the desire of the Council to protect native fish and the limited impact of trout on native fish within the region.

11.4 Policies

- 11.4.1 Educate and inform anglers and hunters so that they can in turn inform the community about fish and game management issues.
- 11.4.2 Promote and explain the Council's role and its activities to the public through the media.
- 11.4.3 Promote Council's projects that benefit all species (wetland creation, planting, involvement in invasive fish control and environmental advocacy) and highlight the positive work Fish and Game does with local landowners in restoring habitats and reducing their environmental footprint.
- 11.4.4 Promote Fish & Game as the leading environmental protection agency in the region to increase licence sales to non-anglers and hunters.
- 11.4.5 Liaise with groups within the community involved in environmental protection or resource management, especially local iwi, local bodies, local Conservation Boards, angler and hunter clubs and environmental interest groups, politicians, conservation and recreation groups, government departments and other statutory authorities.
- 11.4.6 Liaise with primary industry representatives, such as Federated Farmers.
- 11.4.7 Keep opinion leaders within the community informed of fish and game issues.

- 11.4.8 Liaise closely with the New Zealand Fish and Game Council and other regional Fish and Game Councils over the co-ordination of public awareness activities and advocacy.
- 11.4.9 Work co-operatively with other community groups where there is a mutual benefit in doing so.
- 11.4.10 Advocate the Council's position on legislation, policy and/or development proposals affecting fish and game resources, their use or public access.
- 11.4.11 Promote public appreciation of sports fish and game birds as a natural resource and their recreational use by anglers and hunters.
- 11.4.12 Promote the benefits of children participating in hunting and fishing as a means of securing an appreciation of New Zealand's natural resources for future generations.

12 Administration and Statutory Servicing

The Fish and Game management system is based on twelve regional Fish and Game Councils and the New Zealand Fish & Game Council and is described in section 2.1 above. Funding of all Councils is linked through a national budget system which includes the setting of levies and payment of grants to redistribute revenue between all 13 Councils.

Fish and Game is effectively a co-management system involving a delegation of management responsibility for fish and game resources from Government to elected anglers and hunters within regional communities. As such communication, openness, accountability, accessibility to the decision-making process and the fostering of participatory democracy are important elements of the system. This system, with some changes, has effectively been in operation in New Zealand for 150 years, and has proven to be a sound, well supported and cost-effective model for the management of these resources.

Licence holder ownership of fish and game management and involvement is based upon an elected council system. The Council is made up of no more than 12 council members elected for a three-year term. Holders of Auckland/Waikato adult whole season licences can enrol to vote and take part in those elections as voters or as candidates for Council. The Council is required to meet at least six times each year. The Council is subject to the Local Government Official Information and Meetings Act 1987. All Council meetings are open to licence holders and interested parties to attend. The Council's role, according to the Governance Procedures of Fish and Game Councils generally, is to approve regulations and budgets, set policies and appoint a Manager (Chief Executive).

Each Fish and Game Council appoints a Chief Executive for the efficient and economic administration of the affairs of the Council. Preparation of agendas, meeting reports and minutes are part of the Chief Executive's requirement to the Council. These papers associated with meetings are available to licence holders and the general public. Any organisation or individual may contact the Council for consideration of agenda items for discussion at meetings.

Auckland/Waikato Fish and Game Council is a Public Entity. It reports annually to Parliament and the Minister of Conservation and presents its annual report to a publicly advertised annual general meeting. The Council governs fish and game management in the Auckland/Waikato Fish and Game Region.

12.1 Outcome

To provide for the governance of the fish and game system by fish and game licence holders.

12.2 Issues

12.2.1 Council needs to be effectively serviced to carry out its governance role.

12.2.2 Fish and game management must be transparent, accountable, accessible and responsive. The accessibility is important as the Council is seen as part of the community, rather than as a more remote centrally controlled agency. This aspect is vital to continued acceptance and success. Furthermore, some anglers and hunters want to have the opportunity to actively participate in fish and game management and particularly to participate in the review of angling and hunting licence conditions.

12.2.3 Fish and Game Councils all derive the revenue they need to operate from licence sales. To a large extent the sale of licences in Auckland/Waikato is related to the quality and extent of fish and game resources within the region. Auckland/Waikato's fish and game resources are the natural capital the Council is charged with maintaining. The recreational use of the resources and the harvest of fish and game is the return provided on that natural capital.

12.2.4 As a levy paying region Auckland/Waikato needs to:

- a) optimise its licence sales to balance user pressure for lower fees and more flexibility within the license system with the need to generate income
- b) financially support the fish and game system
- c) as a priority protect the region's fish and game resources and adequately service its client base on behalf of the 'owners', Auckland/Waikato licence holders.

12.2.5 The Council is confronted with a substantial workload across a range of functional areas yet the fish and game system is resource short and is liable to remain so. It must manage its assets carefully.

12.2.6 The Council operates in a regional community which supports it through the purchase of licences.

12.3 Objectives

12.3.1 To establish and maintain governance and management arrangements which allow for efficient and effective use of Council resources including staff.

12.3.2 To ensure Council meetings and other Council processes are open and accessible to licence holders and the public.

12.3.3 To ensure the Council is adequately resourced to protect the fish and game resources on which licence sales are based and to support existing clients.

12.3.4 To cooperate actively with other Fish and Game Councils and the New Zealand Fish and Game Council and to ensure the latter is fully informed on the views and aspirations of anglers and hunters in Auckland/Waikato.

12.4 Policies

12.4.1 Assess the cost effectiveness of Council activities where possible.

12.4.2 Routinely supply the media with Council agendas, reports and media releases to keep them informed of Council activities.

12.4.3 Invite anglers and hunters, and iwi to participate in Anglers Notice and Game Gazette reviews.

12.4.4 Seek a review of the fish and game financial allocation process.

13. Compliance

Maintaining compliance with the region's fishing and hunting regulations is important to ensure that all anglers and hunters contribute to the costs of fish and game management by purchasing a licence and adhering to the method restrictions, season lengths and bag limits to ensure the sustainable management of the sports fish and game resource.

Illegal activities are not condoned by licence holders. Increasing numbers of anglers and hunters and members of the community report illegal activities to the Council, often involving immigrants who are perceived by to be unfamiliar with hunting and fishing regulations or ethics. However, combating racial profiling of immigrants is a vital role for Fish & Game to ensure all communities feel safe and welcome when hunting and fishing in New Zealand. One of the strengths of the Fish and Game system is the ability for users of the resource to police their own system.

The size of the region and the isolated nature of many of the fishing and hunting areas mean that significant coverage by staff is not possible. Honorary Fish and Game Rangers make a large contribution to enforcement and compliance efforts in the region. Fish and Game Rangers are warranted by the Director (Chief Executive) of the New Zealand Fish and Game Council and trained and administered by the Auckland/Waikato Fish and Game Council. They are often the front-line contact between licence holders and the Auckland/Waikato Fish and Game Council.

It is important that Council effectively encourages reporting of offences and makes use of the assistance of licence holders and the general public to achieve a high level of compliance.

13.1 Outcome

To ensure a sustainable harvest of the resource by enforcing fishing and hunting regulations and promoting ethical behaviour.

13.2 Issues

Management of sports fish and game bird populations requires ongoing compliance monitoring at levels which provide an effective deterrent. Compliance monitoring requires active co-ordination and support because concentrated compliance monitoring activities can cause irritation to law abiding anglers and hunters.

13.2.1 Poaching and non-compliance threaten the sustainability of the sports fish and game bird resource and the Council. Non-compliance with resource management laws and plans can cause damage to fish and game habitats. Spawning streams and game bird moulting and feeding sites are particularly susceptible to poaching activities and game bird poisoning.

13.2.2 Licence holders expect that compliance with laws controlling angling and hunting will be strictly enforced. However, prosecution of offences through the courts is costly and results are variable.

13.2.3 Promoting ethical behaviour via publications and online material does not always translate into acceptable behaviour in the field.

13.3 Objectives

- 13.3.1 To be perceived as professional, consistent, fair and reasonable in carrying out compliance monitoring and enforcement activities relating to fish and game laws, regulations and conditions.
- 13.3.2 To maintain and manage an effective compliance monitoring and enforcement capability based on staff and voluntary Fish & Game rangers.
- 13.3.3 To secure action by the statutory agency directly responsible for offences under other legislation which adversely affect fish and game resources.
- 13.3.4 To have a minimum of 95% compliance with fish and game rules by those licence holders checked.
- 13.3.5 To have majority community support for Council compliance activities including legal action.
- 13.3.6 To record and monitor all offences, seizures and court verdicts, ranger register and training programmes.
- 13.3.7 To ensure ethical behaviour is monitored along with compliance.

13.4 Policies

- 13.4.1 Support staff and voluntary rangers involved in compliance monitoring by providing appropriate training, equipment, information, and support.
- 13.4.2 Emphasize the need for staff and voluntary rangers involved in compliance monitoring to encourage ethical behaviour.
- 13.4.3 Liaise with other agencies involved in natural resource compliance monitoring and enforcement including iwi.
- 13.4.4 Encourage appropriate action by Auckland Council and Waikato Regional Council over resource use offences affecting sports fish and game resources.

14 Plan Implementation

The Sports Fish and Game Bird Management Plan for Auckland/Waikato is implemented through the Council's annual planning process. The life of the Plan is ten years from the date of approval, at which time it will become due for review. However, part or the entire Plan may be reviewed and amended at any time should the Council consider it necessary to do so. Plan reviews must be conducted in accordance with Section 17M (5) of the Conservation Act 1987.

14.1 Target Dates for Key Actions

The Plan will be progressively implemented over its ten-year life and each year the Council will review priorities depending on the circumstances at the time. Successive annual work plans will detail the relative allocation of efforts and funds to the implementation of the plan in each financial year within the overall directions set by the Plan. Many actions requiring implementation through annual plans are routine and will arise annually or at regular intervals. Others identified below with their target completion date have been identified as key actions or projects which will move fish and game management forward a significant step.

14.1.1 Key actions to be completed by the end of the second year after plan approval include:

- All publishable fish and game resource information, survey results and reports to be made available to the public and licence holders.
- The health of the upper Whanganui fishery reviewed and subject of a report.
- Game bird banding programme reviewed and subject of a report.
- All wastewater treatment plants that have oxidation ponds and come up for reconsenting have botulism management plans in place.
- Establish three banding sites in the Auckland region that contribute a minimum of 1000 birds to the banding project annually. The Murray Young wetland is completed, and management has been vested in Fish & Game.

14.1.2 Key actions to be completed by the end of the fifth year after plan approval include:

- The Auckland/Waikato Fish and Game Region habitat resources listed in Appendix 5 to this Plan is complete and updated regularly. This will include updating the spawning and fish habitat layers for the region.
- Ranger distribution is reviewed to take into account areas of greatest need and pressure.
- Public awareness of matters affecting fish and game resources is high and results in good outcomes in regional and district public processes.
- Apply for external funding to conduct wetland restoration initiatives with total annual value of at least \$100,000 on either private or public land.
- Create and update a database of all consent renewals where Fish & Game are an interested party to allow for early dialogue with applicants.

14.1.3 Key actions to be completed by the end of the seventh year after plan approval include:

- A minimum of 40% turnout of enrolled licence-holders is achieved in Auckland/Waikato Fish and Game Council elections.
- Minimum or residual flows are advocated for all Auckland/Waikato rivers that maintain or restore aquatic ecosystems to a healthy and productive state when opportunities arise. For example, many consents permit complete takes of streams and rivers with no residual flow. As these consents are reviewed or renewed staff will advocate for minimum flows.

- All WWTPs that experience botulism outbreaks in the region have either statutory or voluntary botulism management plans in place.
- Review and report on aerial transect, particularly whether they are providing adequate information to inform management decisions.

APPENDIX 1. LEGAL STATUS OF FISH & GAME SPECIES

Freshwater Fisheries Regulations 1983, First Schedule:

Brown trout

Rainbow trout

Perch

Tench

Rudd (found or taken in the Auckland Fish and Game Region)

and includes any hybrid and the young, fry, ova and spawn and any part of any such fish

Wildlife Act 1953, First Schedule:

Black swan

Duck –

 Grey duck and any cross of that species with any other species, variety, or kind of duck

 Mallard duck and any cross of that species with any other species, variety, or kind of duck

 NZ shoveler duck

Paradise shelduck

Partridge –

 Red legged partridge

Pheasant

Pukeko

Quail –

 Brown quail

 California quail

 Bobtail quail

APPENDIX 3. AUCKLAND/WAIKATO FISH AND GAME RESOURCES

The Auckland/Waikato Fish and Game Region's waterways provide a diverse range of freshwater sports fisheries supporting angler use. Similarly, Auckland/Waikato's waterways and wetlands collectively support valued populations of waterfowl and upland game bird habitat. 45 trout rivers/streams, 10 lake trout fisheries and 5 coarse fisheries have been identified through the National Anglers Survey (NAS) conducted by NIWA once every five to seven years (Unwin & Rouse 2016). The NAS provides a comparable long-term reference point for the use of sports fishery resources by anglers. Unfortunately, due to underreporting from non-English speaking anglers there are gaps in the data. Over time, new fisheries can be created through pond and reservoir development and stocking or flow restoration, for example Lake Moananui was dredged by the local council in 2017 and now hosts a kids fishing day that attracted over 300 children in October of 2019 on a single weekend but has no recorded use in the NAS.

Changes in angler use within the Auckland/Waikato Region are primarily driven by water quality, access and the impact of invasive species. Significant declines in water quality throughout the region have decreased fish habitat reducing angler opportunity. In general point source discharges have been reduced within the region but diffuse pollution from intensive agriculture has significantly increased far exceeding the gains made with point source discharges. Combating the decline in water quality requires land use change that can only be driven by changes to the regional plan in which Fish & Game have been and will continue to be heavily engaged.

Invasive species, primarily perch, have devastated several key trout fisheries including Lakes Rototoa and Pupuke by wiping out forage fish. Currently preventing the spread of perch is the only available tool limit their impact. At present there are no examples of large-scale successful perch removals. Fish and Game staff will continue to foster pest fish research and will keep a close watch on the progress of YY male technology overseas.

Loss of access on public and private land continues to be an issue for anglers throughout New Zealand. The lack of penalties for individuals that block legal access to public by posting misleading signs or physically blocking paper roads severely limits the tools available to reopen public access. The misguided fear of health and safety laws is frequently used to block public access on private land. Fish & Game staff have worked diligently with Walking Access Commission staff to address access issues when they arise and will continue to do so.

Lakes

Description: The Auckland/Waikato Region is home to some the nation's most polluted lakes due to intensive farming. Most rainfed lakes in the region have extremely high levels of nutrients. Most of the fishable lakes in the region are protected drinking water reservoirs or Waikato River hydro lakes. Lakes Waipapa, Arapuni and Karapiro offer great trout fishing but have declining water quality.

Participation: The decline in lake use in the region (Table 1 & 2) has largely been driven by declining water quality, reduced access and the impact of invasive species described above. Although all three issues impact participation access could be improved at some sites. Mangatawhiri and Mangatangi Reservoirs have stable water quality and the potential to have high recreational value but have restricted access due to safety concerns. The long walk required to access the lake and no boat access have resulted in a substantial decline in use. This process can only be addressed through the RMA process as Watercare have not been receptive to improving access.

Table 1. Angler days on Auckland/Waikato trout fishing lakes from the 2001, 2007 and 2015 derived from the national angler survey (Unwin 2017). Change is the difference in use between the mean use from the 2001 and 2007 surveys compared to 2014. Comparisons that could not be made or lack data are indicated with *.

Lake (trout fisheries)	2001/02	2007/08	2014/15	Change
Lake Arapuni	9730	5990	3370	-57%
Lake Karapiro	2320	1160	1690	-3%
Lake Pupuke	610	920	310	-59%
Lake Waipapa	1370	540	230	-76%
Mangatawhiri Reservoir	300	40	150	-12%
Parkinsons Lake	40	40	140	250%
Lake Whatihua	110	*	90	64%
Lake Moananui	330	300	*	-100%
Mangatangi Reservoir	140	50	10	-89%
Lake Rototoa	1250	210	0	-100%
Total	17080	9820	6050	-55%

Table 2. Angler days on Auckland/Waikato coarse fishing lakes from the 2001, 2007 and 2015 derived from the national angler survey (Unwin 2017). Change is the difference in use between the mean use from the 2001 and 2007 surveys compared to 2014. Comparisons that could not be made or lack data are indicated with *.

Lake (coarse fish)	2001/02	2007/08	2014/15	Change
Piggott Wetland	*	*	20	*
Waahi	*	*	20	*
Rotoroa (Hamilton)	70	*	10	-71%
Waikare	*	100	*	-100%
Hakanoa	30	180	10	-90%
Total	100	280	60	-70%

Risk: the greatest risk to the region's lakes are invasive fish as most already have invasive weeds. Working to stop the spread of perch and finding removal techniques will be a key factor for protecting fisheries. Further declines in water quality including clarity could also impact on fish habitat but the threat of further declines is largely linked to agricultural intensification and should be address in subsequent regional plan changes.

Rivers

Description: The Auckland/Waikato Region has a large range of quality trout fishing rivers primarily south of Auckland. High temperatures restrict quality river fisheries north of Auckland. The availability of rural spring creeks and stunning natural setting within three hours of Auckland make the Auckland/Waikato Region's fisheries critical on a national scale.

Participation: Participation in river fisheries has been relatively stable overall with large increases in the use of river that have had stable water quality and steep declines in rivers like the Waikato that have declining water quality. In general angler use is being pushed upriver as rivers are becoming degraded closer to the bush line as farm intensification and conversions continue.

Continuing to oppose the intensive farming on public land and working to accelerate fencing and planting of hill country areas could improve water quality over the next decade. Vision and Strategy for the Waikato River if implemented could significantly improve water quality and expand fish habitat.

Figure 3. Angler days on Auckland/Waikato rivers from the 2001, 2007 and 2015 derived from the national angler survey (Unwin 2017). Rivers highlighted in blue are spring fed. Change is the difference in use between the mean use from the 2001 and 2007 surveys compared to 2014. Comparisons that could not be made are indicated with *

River	2001/02	2007/08	2014/15	Change
Whanganui River	1260	900	4550	321%
Waikato River	4830	6150	3090	-44%
Whakapapa River	1030	2500	2590	47%
Waipa River	1560	1620	2340	47%
Waihou River	2640	1370	1520	-24%
Ohinemuri River	2600	1500	700	-66%
Mangatutu Stream	1070	860	500	-48%
Little Waipa Stream	170	100	390	189%
Awakino River	840	600	380	-47%
Mangakino Stream	0	0	370	*
Waimakariri Stream	770	370	350	-39%
Puniu River	840	440	340	-47%
Waitawheta River	650	480	320	-43%
Kaniwhaniwha Stream	370	110	310	29%
Mangaotaki River	70	150	230	109%
Waipapa River	220	440	210	-36%
Ongarue River	290	210	150	-40%
Oraka Stream	100	20	150	150%
Piopiotea Stream	10	20	130	767%
Waiomou Stream	490	0	130	-47%
Pokaiwhenua Stream	230	120	120	-31%
Marokopa River	100	30	110	69%
Wairoa River (Auckland)	50	0	100	300%
Mangaokewa Stream	20	10	90	500%
Hikutaia River	0	0	90	*
Tairua River	60	440	90	-64%
Taringamotu River	50	30	80	100%
Mangaohae Stream	180	40	80	-27%
Moakurarua Stream	150	90	60	-50%
Rangiriri Stream	250	260	50	-80%
Waipari River	70	0	50	43%
Maratoto Stream	0	10	50	900%
Rapurapu Stream	150	20	50	-41%
Mangawhero Stream	50	40	40	-11%
Kakahu Stream	250	80	30	-82%
Kumeu River	0	340	30	-82%

River	2001/02	2007/08	2014/15	Change
Mangawara Stream	90	130	20	-82%
Ngakoaohia Stream	430	120	20	-93%
Mangawhio Stream	70	10	20	-50%
Manganui River	0	0	20	*
Mangatepopo Stream	0	0	10	*
Waiwawa River	60	0	10	-67%
Whangape Stream	0	0	10	*
Waitekauri River	190	90	10	-93%
Mokau River	190	90	10	-93%
Total	22450	19790	20000	-5%

Game bird resources

Waterfowl, upland game

Description: Mallard and grey/ mallard hybrids are the most significant species in term of harvest in the region. Paradise shelduck harvest has increased over time and ranks second. Black swan, grey and shoveler ducks, upland game, (pheasants, quail and partridge), and pukeko make up relatively minor but valued contributions to the overall harvest.

Participation: Approximately 7,000 licensed hunters in this region. A number of local land-occupiers, (presumed to be less than 1,000 in total), use Section 19 of the Wildlife Act, (1953). Participations has been relatively steady over the past 15 years

Availability: This can be broken down into availability of both hunting locations and harvestable game bird populations. The large number of waterfowl hunters in this region means that hunting opportunity in prime public land hunting areas is somewhat limited by competition, especially around opening weekend. However thereafter any unoccupied marked-up public land spot becomes free one hour after opening, (i.e. after 7:30am). Upland bird hunting, (for pheasants, quail and partridge), is mostly limited to private land. Fish and Game issue permits on behalf of forestry companies and substantial areas of pine plantations are available for upland hunters. Upland Game Properties with Special Conditions also provide new upland game possibilities for their syndicate members and guests.

The availability of some waterfowl species in particularly mallard and grey ducks has fluctuated and in some years, hunters are maximising the allocation of the harvestable surplus of birds.

Risk: More intensive “clean-farming”, where new and improved agrichemical sprays remove significant amounts, (if not all), rough cover, has significantly reduced habitat-cover formerly used by pheasants and quail. Waterfowl habitat continues to decline in both quality and extent. Seasonal wetlands are particularly susceptible to further modification through direct drainage efforts and are an important habitat for ducklings. Survival rates of ducklings and juvenile mallard hens are low and in some years the population is unable to sustain itself. Overharvest may become an issue for mallards, especially at times when the population is diminished and under stress. In a number of areas, housing subdivision has taken over or has been located right next to hunting locations and brings with it a variety of conflicts. Botulism is an increasing risk, particularly at wastewater treatment plants. In

more natural environments, botulism is exacerbated by climate change and factors that significantly degrade water quality.

Knowledge: Annual monitoring programmes are conducted to measure population levels and harvest. The annual game bird harvest survey is conducted every 2 weeks during the game bird hunting season to obtain knowledge of harvest and hunter effort. Duck banding is conducted every summer at various locations around the region, band returns from hunters are then used to calculate harvest rates and when coupled with harvest survey data, population estimates are obtained. Banding data can also be used to calculate survival rates and movement data. On top of this aerial transect counts are used to obtain an independent estimate of relative abundance over time. Aerial moult surveys are used to determine changes in paradise shelduck populations and national ground surveys are conducted for shoveler duck. The Auckland/Waikato Fish and Game Region has led many of the national research programmes conducted in recent years and several papers have been published in reputable journals. This information allows staff to make better informed recommendations to the council regarding changes to harvest regulations and more targeted habitat management and restoration programmes.

APPENDIX 4. RECREATIONAL OPPORTUNITY SPECTRUM

Table 4. Classification of angling opportunities in Auckland/Waikato within a Recreational Opportunity Spectrum. Categories include **Significance**: [national (N), regional (R), local(L)]; **Setting**: (urban, rural, natural, backcountry (BC), remote); **Activity**: [fly (F), spin (S), troll (T), Bait (B)]; **Users**: [local (L), regional (R), national (N), international (I), commercial (C), Juniors (J)]. Multiple designations such as Rural/Natural indicate a transition from one state to next as you move upstream. 2014/15 Use is derived from Unwin (2016). No data is indicated with *. Streams highlighted in grey are spring fed.

Class	Water body	Significance	Setting	Activity	Users	2014/15 Angler Use
River/stream	Whanganui	National	Rural/natural/BC	F,S	L,R,N,I,C	4550
River/stream	Waikato	National	Urban	F,S,B	L,R,J	3090
River/stream	Whakapapa	National	Natural/BC	F,S	L,R,N,I,C	2590
River/stream	Waipa	National	Rural/natural	F,S	L,R,N	2340
River/stream	Waihou	Regional	Rural	F,S	L,R,N,C	1520
River/stream	Ohinemuri	Regional	Rural	F,S	L,R	700
River/stream	Mangatutu	Regional	Rural	F,S	L,R	500
River/stream	Little Waipa	Local	Rural	F,S	L	390
River/stream	Awakino	National	Natural	F,S	L,R,N,C	380
River/stream	Mangakino	Local	Rural	F,S	L	370
River/stream	Waimakariri	Regional	Rural	F,S	L,R,N,I	350
River/stream	Puniu	Local	Rural	F,S	L,R	340
River/stream	Waitawheta	Local	Rural/natural/BC	F,S	L,R	320
River/stream	Kaniwhaniwha	Local	Rural/natural	F	L,R	310
River/stream	Mangaotaki	Local	Rural	F,S	L,R	230
River/stream	Waipapa	Regional	Natural	F,S	L,R	210
River/stream	Ongarue	Regional	Rural	F,S	L,R	150
River/stream	Oraka	Local	Rural	F,S	L,R	150
River/stream	Piopiotea	Local	Rural	F,S	L,R	130
River/stream	Waiomou	Local	Rural	F,S	L,R	130
River/stream	Pokaiwhenua	Local	Rural	F,S	L,R,N	120
River/stream	Marokopa	Local	Rural/natural	F,S	L	110
River/stream	Wairoa	Local	Rural	F,S	L	100
River/stream	Mangaokewa	Local	Rural	F,S	L,R	90
River/stream	Hikutaia	Local	Rural	F,S	L,R	90
River/stream	Tairua	Local	Rural/natural	F,S	L,R	90
River/stream	Taringamotu	Local	Rural	F,S	L,R	80
River/stream	Mangaohae	Local	Natural	F,S	L,R,N,I	80
River/stream	Moakurarua	Local	Rural	F,S	L,R	60
River/stream	Rangiriri	Local	Rural	S,B	L,R	50
River/stream	Waipari	Local	Rural	F,S	L,R	50
River/stream	Maratoto	Local	Rural	F,S	L,R	50
River/stream	Rapurapu	Local	Rural	F,S	L,R	50
River/stream	Mangawhero	Local	Rural	F,S	L,R	40

Class	Water body	Significance	Setting	Activity	Users	2014/15 Angler Use
River/stream	Kakahu	Local	Rural	F	L,R	30
River/stream	Kumeu	Local	Rural	F,S	L,R	30
River/stream	Mangawara	Local	Rural	S	L,R	20
River/stream	Ngakoaohia	Local	Rural	F,S	L,R	20
River/stream	Mangawhio	Local	Rural	F,S	L,R	20
River/stream	Manganui	Local	Rural	F,S	L,R	20
River/stream	Mangatepopo	Regional	Natural	F,S	L,R,N,C	10
River/stream	Waiwawa	Local	Rural	F,S	L,R	10
River/stream	Whangape	Local	Rural	S,B	L,R	10
River/stream	Waitekauri	Local	Rural	F,S	L,R	10
River/stream	Mokau	Local	Rural	F,S	L,R	10
Reservoir	Arapuni	National	Rural/natural	T,F,S	L,R,J	3 370
Reservoir	Karapiro	Regional	Rural	T,F,S	L,R,J	1 690
Lake	Pupuke	Local	Urban	F,S	L,R,J	310
Reservoir	Waipapa	Local	Natural	T,F,S	L,R	230
Reservoir	Mangatawhiri	Local	Natural	F,S	L	150
Lake	Parkinsons	Local	Rural	F,S	L	140
Lake	Whatihua	Local	Rural	F,S	L	90
Reservoir	Moananui	Local	Urban	F,S	L,J	*
Reservoir	Mangatangi	Local	Natural	F,S	L	10
Lake	Rototoa	Regional	Urban	F,S	L,R	0

APPENDIX 5. SPORTS FISH AND GAME BIRD RESOURCE SIGNIFICANCE

Multiple information sources are used to determine the significance of sports fish or game bird resources. The highest significance rating determined in one source of information is the significance that applies to the habitat. These include:

Existing published reports or articles.

The primary source of published reports and articles on the significance of fisheries are published reports by Acclimatisation Societies and the Ministry of Fisheries Research Division in the 1980s. These reports contained detailed assessments of the significance of rivers, lakes and wetlands and their catchments.

Recognition of the fishery or game bird resource in law

Law includes statutory instruments (formerly referred to as “regulations” such as national water conservation orders, former local water conservation notices (which have been since amalgamated with regional water plans), references to fishery and game bird values within subordinate legislation such as regional policy and plans, district plans, and also other documents such as Department of Conservation management strategies and plans. Resource consents, particularly ‘global’ consents that deal with whole catchments or sub-catchments, may also contain reference to fishery and game bird values.

Angler and hunter use

Angler use, as reported in the 7-yearly national angler survey, conducted by NIWA on behalf of the New Zealand Fish and Game Council. This survey has a dataset dating back to the mid-1990s.

Hunter use is reported primarily through the hunter diary scheme.

Angling and hunting recreational opportunity spectrum

The Auckland/Waikato Fish and Game Region has an operative recreational opportunity spectrum (Appendix 5) which classifies fisheries and game bird resources based on setting, type of activity, and type of user. Recreational opportunity spectra are used as a conservation management tool when there is a diverse range of recreational experiences within a region.

Angler perceptions

Anger perception surveys have been undertaken in New Zealand in 1978 and 2013 Unwin (2009, 2013; New Zealand Acclimatisation Societies, 1978). These are large-scale exercises which require participants to rank their experiences, perceptions and values of fishing in different rivers. The following criteria have been used:

- Close to home – (‘close to where you normally live’) This relates to travel distance to a fishery
- Close to holiday location – (‘close to where you live while on holiday’) This also relates to travel distance
- Ease of access
- Large areas of fishable water
- Scenic beauty

- Wilderness character
- Anticipation of a good catch rate
- Anticipation of landing large fish

Anglers are also asked to identify the “overall” value of a fishery on a 1-5 scale, based on the following criteria:

1. This fishery can provide enjoyable angling, but is not exceptional;
2. This fishery often provides enjoyable angling, but is not exceptional;
3. This fishery consistently provides enjoyable angling;
4. This fishery provides a very enjoyable angling experience, and is one of my personal favourites;
5. This fishery provides an exceptional angling experience and has few peers.

Degraded Habitats and Populations

Where a fishery or hunting area or population has been degraded or has deteriorated over time because of identified or unidentified external factors its former significance status and potential for restoration deserve recognition. No fishery or game hunting area/population should be removed from a former status of nationally or regionally importance due to a human-induced decline in water quality or physical habitat. Instead, the appropriate response is to note the change and the reasons for the change in status and suggest remediation.

Habitat components of significance

Significance of fish or game habitats will include the following habitat considerations:

- the size or value of the fish or game population supported including for game, the proportion of a national population
- the importance to the life cycle requirements of a fishery or game population including spawning or breeding areas, areas for juvenile rearing
- role as migratory pathways or habitat corridors
- special characteristics of the habitats.

Significant declines

Significant declines in angler and hunter use fall under three main categories in the Auckland/Waikato Region; decline in water quality, impact of invasive species and loss of access. The most common impact to waterways within the region has been the continued intensification of land use causing significant declines in the life supporting capacity of waterways. Many rivers that have had significant declines in use have had suitable trout habitat gradually move upstream as downstream habitat has been degraded. Rivers in the Auckland Waikato Region without a significant portion of intact headwater habitat (native forest) rarely have viable trout populations due to poor water quality, unless they are spring fed.

5.1 Nationally Significant Sports Fish Habitats in the Auckland/Waikato Region

Lake Arapuni

A large nationally important lake for both sports fishing, (and regionally important game bird hunting). Lake Arapuni has been impacted by invasive aquatic weeds, power peaking (rapid pool level variation due to sudden power generation demands) and declining water quality including a twofold increase in nitrogen from pine to pasture conversions in the upper catchment. Trout condition appears to be

linked to water clarity. Improving lake water quality will require significant land use restrictions and reductions in point source discharges.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Trout fishing, game bird hunting

Users: Primarily used by trout anglers shallow trolling

Awakino River

A medium sized nationally important river for trout fishing. Steep hill country farms have deteriorated this otherwise pristine river by contributing moderate sediment loads. Only a small portion of the upper river and tributaries are fenced or planted. The fishery does not appear to be in decline but could be significantly improved with fencing and planting in the upper catchment.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Trout fishing and game bird hunting

Users: Primarily used by fly anglers above State HW3 bridge with the occasional game bird hunter

Whanganui and Whakapapa Rivers

Both are large nationally important rivers for sports fishing and are primarily used by fly anglers. The upper reaches of both rivers have difficult hike in access and have important back country sections. The water quality of both rivers has been protected by conservation land in the upper catchment and anglers have flocked to the clean water as other options closer to urban centres have been degraded by intensive agriculture. Both rivers are internationally renowned offering large rainbow trout in addition to easily accessible quality water below the confluence. Both rivers are occasionally used for waterfowl hunting.

Recreational Opportunity Spectrum

Setting: Below the confluence of the Whakapapa and above Taumarunui the setting is rural and above the confluence of the two rivers both are natural.

Activities: Trout fishing and game bird hunting

Users: Fly and spin fishing with the occasional game bird hunter

5.2 Nationally Significant Game Bird Habitats in the Auckland/Waikato Region

Kopuatai Peat Dome

A large nationally important wetland for game bird hunting in rural surrounds. Hunters registered by DOC to specific pond sites and itinerants.

Recreational Opportunity Spectrum

Setting: Natural

Activities: Waterfowl hunting

Users: waterfowl hunters

Whangamarino Wetland

A large nationally important wetland for game bird hunting. Waterfowl hunting on DOC, Fish & Game land, and private land. Some upland hunting also for pheasants and Californian quail. Brown quail also present in small numbers. Occasional coarse fishing matches alongside Whangamarino River downstream Raeo Arm, also frequent casual coarse fishing alongside the Whangamarino River beside Falls Road "Humpback" bridge and adjoining Island Block Road Bridge and boat ramp.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Coarse fishing and game bird hunting

Users: Game bird hunters and coarse fishers

5.3 Regionally Significant Sports fish Habitats

Lake Karapiro

A large regionally important lake for both game bird hunting and sports fishing. Lake Karapiro has been impacted by intensive regulations on boating with large no wake zones making it less popular with anglers. Invasive aquatic weeds, power peaking (rapidly changing pool level associated with sudden power generation demands) and declining water quality have also impacted the lake. Improving the fishery will require significant land use restrictions and reductions in point source discharges.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Fishing for trout and rudd in addition to game bird hunting

Users: Spin, boat and fly anglers in addition to and game bird hunters

Mangatepopo Stream

A small regionally significant trout fishing stream that is a major tributary of the nationally significant upper Whanganui River.

Recreational Opportunity Spectrum

Setting: Natural

Activities: Trout fishing

Users: Spin and fly anglers primarily.

Mangatutu Stream

A medium sized regionally important river for sports fishing that has had a significant decline in water clarity after dairy conversions in the upper catchment. Water clarity has dropped by 25% after dairy conversions and intensification occurred on farms in the upper catchment. The dairy conversion impacting the river was largely on public land including leased DOC land. This stream has high potential for restoration if public land in the upper catchment is retired from intensive production.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Trout fishing

Users: fly anglers

Ohinemuri River

A medium sized regionally important river for sports fishing that had significant declines in water quality. High water temperature, a historic migration barrier and low flows presumably caused by water extraction continue to impact the Ohinemuri. Significant planting and fencing will be required to enhance the trout population to the mainstem. A large portion of the upper river is obstructed by a historic water abstraction dam. Removing or bypassing the dam could improve access to summer habitat.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Trout fishing

Users: Fly and spin fishers

Ongarue River

A medium regionally important river for sports fishing. The lower river is threatened by poor land use management resulting in heavy sediment loads. Fencing regulations for dry stock farms are likely to improve water quality in the next 10 years.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Trout fishing

Users: Spin and fly fishers

Waihou River

A medium sized spring fed regionally important river for sports fishing. High density of small trout makes the upper Waihou ideal for beginners. The Blue Springs Walkway is frequently used for regional fly-fishing competitions due to the high density of trout and clear water. Also, a very popular river for game bird hunters especially in lower, wider reaches. Although, this river is spring fed it rapidly deteriorates due to intensive dairy farming. Stricter regulations on nutrient and sediment loss will be necessary to improve water clarity in the Waihou.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Trout fishing and game bird hunting

Users: Spin and fly fishers along with game bird hunters

Waimakariri River

A medium sized spring fed regionally important river for sports fishing. Ideal beginner's trout fishery with high density of small trout. The river is frequently used for regional fly fishing competitions due to the high density of trout and clear water. Although this river is spring fed it rapidly deteriorates due to intensive dairy farming. Stricter regulations on nutrient and sediment loss will be necessary to improve water clarity.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Trout fishing

Users: Spin and fly anglers

Waipa River

A large regionally important river for sports fishing that has had significant water quality declines over several decades in the mainstem and tributaries. Intensive agriculture and soil loss on hill country farms have contributed to high sediment and nutrient loads. To restore or improve water quality significant land use change must occur. Game bird hunting popular on various associated backwaters. Somewhat limited access points to the main river downstream.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Sport fishing and game bird hunting

Users: Spin and fly fishers and game bird hunters

Waipapa River

A medium sized regionally important river for trout fishing with high densities of resident trout. Like many Waikato streams excessive sediment loads have limited fish condition in this otherwise ideal trout stream.

Recreational Opportunity Spectrum

Setting: Natural

Activities: Trout fishing

Users: Spin and fly anglers

5.4 Regionally Significant Game bird Habitat

Firth of Thames

A large regionally important estuary for game bird hunting with a coastal mangrove edge. In times of drought many thousands of ducks can be rafted up just offshore, including large numbers of shoveler and perhaps the largest concentration of grey teal in New Zealand at peak periods. Game bird hunting especially from "Floaters", (boats dressed up as maimais) is common. Some limited fixed stand hunting near Miranda end and at the Piako, Waihou and Waitakaruru river mouths. Potential conflict with coastal cycle trails is being actively managed.

Recreational Opportunity Spectrum

Setting: Natural

Activities: Game bird hunting

Users: Game bird hunters

Mangatawhiri Wetland

A medium regionally important wetland for game bird hunting. Fish & Game land here is also used for gun-dog training and the Mangatawhiri River is sometimes used for casual coarse fishing especially near the Pioneer Road bridge. The wetland has a mixed catchment of farmland, lifestyle blocks and new high-density housing to the north. The area provides for waterfowl with some pheasants and Californian quail. Ponds are balloted to hunters on the Fish & Game wetlands here but are also available to itinerant hunters. There is also waterfowl hunting on adjoining privately owned wetlands, managed for that purpose.

Recreational Opportunity Spectrum

Setting: Natural

Activities: Game bird hunting and coarse fishing

Users: Game bird hunters and coarse anglers

Maramarua Forest

A large regionally important forest for game bird hunting. Pine forest in a rural setting. Mostly pheasant and quail hunting with some waterfowl hunting on a group of ponds present.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting

Users: Game bird hunters

Tokoroa Forest

A large regionally important forest for game bird hunting. Popular pheasant and especially quail hunting site.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Upland hunting

Users: Upland game bird hunters

Lake Waahi

A large regionally important lake for game bird hunting. Game bird hunting for ducks, swans and geese. Historically trout fishing was also occasional done at the lake outlet. The extremely poor water quality in the lake has led to a dramatic decline in waterfowl numbers.

Recreational Opportunity Spectrum

Setting: rural

Activities: Game bird hunting and fishing

Users: Game bird hunters, coarse and trout fishers

Waihou Forest

A large regionally important forest for game bird hunting

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting

Users: Game bird hunters

Lake Waikare

A large regionally important lake for game bird hunting. The waterfowl hunters who use this area are a dedicated bunch, many of whom have been hunting here all their lives, up to 60 years or more. Popular for hunting swans, geese, ducks, pukeko and pheasants. The Lower-Waikato's largest lake surrounded by a rural catchment and more recently also intensive housing. The extremely poor water quality in the lake has led to a dramatic decline in waterfowl numbers.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting

Users: Game bird hunters

Waikato Delta

A large regionally important wetland for game bird hunting. Very popular for game bird hunting. The Fish & Game wetlands in the Delta's salt-water-plume are not "flood protected" and are not developed into grassland, so probably form the most important whitebait breeding area of the Waikato River. Many whitebaiters are also game bird hunters according to season and for many their batches in this area are central to these activities. This site also used for mullet netting, water skiing, sea fishing access, possum shoots and more. The river delta has natural riparian wetlands and numerous islands but overall set in a rural catchment

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting

Users: Game bird hunters

Lake Whangape

A large regionally important lake for game bird hunting that formerly held trout. The Lower-Waikato's second largest lake. This site used to be an important swan hunting area, but their numbers collapsed when the lake-water reverted to an algal dominated state and has been turbid ever since. Swans which used to number many thousands now number less than 100.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Swan, goose and duck hunting

Users: Game bird hunters

5.5 Locally Significant Habitats

All sports fish and game bird habitats that are not listed as nationally or regionally significant above should be considered as locally significant in the first instance in the absence of further information about the habitat. All locally significant trout fisheries are described in Appendix 5 Table 4.

Lake Whakatangi

A small locally important lake for game bird hunting. Also known as Lake A.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting for ducks, geese and swans

Users: Game bird hunters

Aotea Harbour

A large locally important estuary for game bird hunting

Recreational Opportunity Spectrum

Setting: Natural

Activities: Game bird hunting for ducks, geese and especially swan.

Users: Waterfowl hunters

Lake Are Are

A small locally important lake for game bird hunting

Recreational Opportunity Spectrum

Setting: Rural

Activities: Waterfowl hunting

Users: Waterfowl hunters

Awaroa River

A small locally important river for sports fishing and game bird hunting

Recreational Opportunity Spectrum

Setting: Rural

Activities: Trout fishing in upper reaches, waterfowl hunting in lower reaches.

Users: Waterfowl hunters and trout fishers

Lake Kaituna

A small locally important lake for game bird hunting. Hamilton Fish and Game club managed, (planted, trapped etc.) this waterfowl hunting area.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Waterfowl hunting

Users: Waterfowl hunters

Lake Komakorau

A small locally important lake for game bird hunting, also known as Lake C.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Waterfowl hunting

Users: Waterfowl hunters

Lake Kainui

A small locally important lake for sports fishing and game bird hunting, also known as Lake D. Managed by a Fish & Game user group. Access issues have been an ongoing problem.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Waterfowl hunting

Users: Waterfowl hunters

Lake Tunawhakaheke

A small locally important lake for game bird hunting. Part of this lake is a Wildlife Refuge, and the other half is shot over. Also known as Lake E.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Waterfowl hunting

Users: Waterfowl hunters

Lake Hakanoa

A small locally important lake for coarse fishing that is also a roosting place for geese and a wildlife refuge.

Recreational Opportunity Spectrum

Setting: Urban with increasing housing.

Activities: Coarse fishing

Users: Coarse fishers

Hikutaia River

A small locally important river for sports fishing and game bird hunting

Recreational Opportunity Spectrum

Setting: Rural

Activities: Waterfowl hunting

Users: Waterfowl hunters

Lake Hotoananga

A small locally important lake for game bird hunting. Also known as "Magazine Lake", the old magazine-houses, some of which look down on the lake, are lately being developed into homes, making the use of this lake for game bird hunting more problematical. However, a group of hunters is now trapping the lake margin for predators.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting

Users: Game bird hunters

Kaiaua Gravel Pits

A small locally important lake for coarse fishing and game bird hunting. A historically important coarse fishing location that is on private land and closed to the public.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Geese and shelduck hunting in addition to coarse fishing

Users: Game bird hunters and coarse fishers

Kaipara Harbour

A large locally important estuary for game bird hunting. Game bird hunting on the harbour, the rivers that supply it, (e.g. Hoteo, Kaipara and Kaukapakapa), and the margins of the harbour.

Recreational Opportunity Spectrum

Setting: Natural

Activities: Game bird hunting

Users: Waterfowl hunters

Kaipara River

A popular site for duck and shelduck hunting from maimais on the river, especially upstream of Helensville, but also popular for shelduck hunting on adjoining cut-maize fields.

Recreational Opportunity Spectrum

Setting: Rural, lower reaches are mangrove areas.

Activities: Waterfowl hunting

Users: Waterfowl hunters

Kakahu Stream

A small locally important river for trout fishing and game bird hunting

Recreational Opportunity Spectrum

Setting: Rural

Activities: Fly fishing and game bird hunting

Users: Waterfowl hunters and trout fishers

Kaniwhaniwha Stream

A small locally important river for sports fishing and game bird hunting. The Kaniwhaniwha is an important summer refuge for trout and has excellent access. This river is heavily used by local fishers.

Recreational Opportunity Spectrum

Setting: Rural

Activities: jump shooting waterfowl and trout angling

Users: Waterfowl hunters and trout fishers

Kauaeranga River

A heavily used swimming area with ample biking and camping opportunities. Rainbow and brown trout are present in the river, but high temperatures are an ongoing issue. Trout fishing is often a secondary activity that is done in conjunction with camping at the multiple DOC sites.

Recreational Opportunity Spectrum

Setting: Rural

Activities: swimming, camping and fishing

Users: spin and fly fishers

Kawhia Harbour

A large locally important estuary for game bird hunting

Recreational Opportunity Spectrum

Setting: Natural

Activities: A large number of swan on this harbour

Users: Game bird hunters

Komata River

A small locally important river for sports fishing and an important spawning stream for the Waihou River.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: spin and fly fishers

Little Waipa Stream

A medium locally important river for sports fishing and game bird hunting. The Little Waipa is also an important spawning stream for Lake Karapiro.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: spin and fly fishers

Mahurangi Forest

A large locally important forest for game bird hunting

Recreational Opportunity Spectrum

Setting: Rural

Activities: Pheasant and quail hunting

Users: Upland game bird hunters

Mangaohae Stream

A locally important river in native forest with a DOC track making it a highly desirable day trip. The surrounding DOC land has protected this stream to some extent, but the upper reaches are largely unfenced. Land use regulations could significantly improve this stream by providing shading and reducing sediment loads.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: spin and fly fishers

Mangaokewa Stream

A small locally important river for sports fishing and game bird hunting. The lower reaches of the stream are heavily impacted by agricultural runoff but the upper reaches, south of Te Kuiti, hold trout. A walkway along the river south of Te Kuiti provides great access and the stream holds small rainbow trout. Water clarity is an issue in the upper reaches of the river due to slips and steep hill country farms.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: Game bird hunters, spin, and fly fishers

Mangaotaki River

A locally important river for sports fishing with ample small rainbow trout. The river is primarily on private land, so access is a limitation.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: spin and fly fishers

Mangapehi Stream

A small formally locally important river that has been heavily impacted by sediment from surrounding farmland and high temperatures due to a lack of shading.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: spin and fly fishers

Mangatangi Reservoir

A medium locally important lake for sports fishing with ample rainbow trout. Access has been cut off by Water Care requiring a significant uphill walk. Boating has also been prohibited.

Recreational Opportunity Spectrum

Setting: Natural

Activities: Rainbow trout fishing

Users: spin and fly fishers

Mangatawhiri Reservoir

A medium locally important lake for sports fishing with ample rainbow trout. Access has been cut off by Water Care requiring a significant uphill walk. Boating has also been prohibited.

Recreational Opportunity Spectrum

Setting: Natural

Activities: Rainbow trout fishing

Users: spin and fly fishers

Mangatawhiri River

A medium locally important river for game bird hunting and trout fishing. Game bird hunting along stopbanks. This river should provide good trout habitat but the coolest and cleanest water from the upper catchment is taken for the Auckland water supply with no residual flow left in the river during summer. The remaining catchment is dominated by poorly managed agricultural land. The only remaining trout fishery is above Lyons Road. Setting minimum flows will be required to restore the river.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Limited game bird hunting and trout fishing

Users: Game bird hunters, spin and fly fishers, sometimes coarse fishers

Manguika Stream

A small locally important river for sports fishing and trout spawning stream. The stream mouth provides a thermal refuge and summer spin fishing.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Rainbow trout fishing

Users: Spin and fly fishers

Mangawara Stream

A historically important river for sports fishing that has been heavily impacted by intensive farming. The Mangawara has heavy sediment and nutrient loads requiring significant land use change to restore the river requiring restrictions on agricultural land use. Due to a lack of fencing riparian vegetation is limited in the upper catchment resulting in high water temperatures.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown trout fishing

Users: Spin fishers

Mangawhio Stream

A locally important river for sports fishing and a critical thermal refuge for trout from the Arapuni Reservoir. The lower Mangawhio has limited accessible habitat but holds large brown and rainbow trout during summer.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Rainbow trout fishing

Users: Spin and fly fishers

Manukau Harbour

A large locally important estuary for game bird hunting. The harbour has large numbers of black swan, but subdivision and new housing is making many areas now unshootable.

Recreational Opportunity Spectrum

Setting: Natural

Activities: Waterfowl hunting and upland hunting

Users: Game bird hunters

Maramataha River

A locally important river for sports fishing that has limited public access.

Recreational Opportunity Spectrum

Setting: Natural

Activities: Rainbow trout fishing

Users: Spin and fly fishers Activities

Maratoto Stream

A small locally important stream for sports fishing.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Rainbow trout fishing

Users: Spin and fly fishers

Marokopa River

A locally important river for sports fishing and game bird hunting that has a heavy sediment load and high temperatures limiting the current fishery.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing with limited game bird hunting

Users: Spin and fly fishers as well as game bird hunters

Matarawa Stream

A small locally important river for sports fishing that feed Lake Moananui. The stream has been heavily impacted by pine to pasture conversions and contributes a significant load of sediment to the Lake. The stream is a significant spawning site for fish in Lake Moananui.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Rainbow trout fishing

Users: Spin and fly fishers

Lake Moananui

A small locally important lake for sports fishing that is stocked annually and has recently been dredged by the district council drastically improving the productivity of the lake. To maintain this important local fishery land fencing and land use changes need to occur in the Matarawa Stream catchment. Lake Moananui is stocked annually to supplement the fish stocks. The Tokoroa Sports Fishing Assn. holds an annual kid's fishing day with up to 300 participants.

Recreational Opportunity Spectrum

Setting: Urban

Activities: Rainbow trout fishing

Users: Spin and fly fishers

Moakurarua Stream

A locally important river for sports fishing with moderate densities of trout with limited public access.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Rainbow trout fishing

Users: Spin and fly fishers

Mokau River

A large locally important river for sports fishing and game bird hunting. The river runs through steep highly erodible hill country with countless unfenced tributaries. The upper catchment is cut off by dams and natural barriers. The Mokau has restoration potential but is also lacking adequate public access.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Rainbow and brown trout fishing

Users: Game bird hunters, spin, and fly fishers

Ngakoahia Stream

A small locally important river for sports fishing and game bird hunting. The river is an important thermal refuge and spawning stream. The upper catchment is protected by forest park but there is limited public access.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: Spin and fly fishers

Lake Ngaroto

A small locally important lake for game bird hunting with large numbers of Canada geese, some swans and ducks.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting

Users: Game bird hunters

Ngutunui Stream

A small locally important river for sports fishing

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: Spin and fly fishers

Lake Ohinewai

A small locally important lake for game bird hunting. A number of maimais around this lake which has also has partially planted margins, which sometimes attracts pheasants. Excessive winter grazing of this reserve has been a problem that has probably exacerbated the silt-up of an adjacent wetland within this reserve.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting

Users: Game bird hunters

Ohura River

A medium locally important river for sports fishing and game bird hunting. The river has a substantial sediment load due to poorly managed hill-country farms. This river has high restoration potential but will require regulations on land use.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: Spin and fly fishers

Lake Okaihau

A small locally important lake for game bird hunting. Also known as Houghton's Lake. This lake is on private property.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Coarse fishing and limited game bird hunting

Users: Game bird hunters and coarse anglers

Opuatia Wetland

A medium locally important wetland for game bird hunting. This willow dominated wetland, surrounded by farmland, is a popular hunting location with public and private land at present. It is

prone to flooding but can also be quite dry over much of the wetland, depending on prevailing water levels of the nearby Waikato River.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting

Users: Game bird hunters

Oraka Stream

A small locally important river for sports fishing and game bird hunting. This spring fed stream has reasonable water quality in the upper reaches but is lacking access due to dense blackberry. The lower reaches of the river suffer from high nutrient and sediment loads from point sources and diffuse pollution.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Rainbow trout fishing

Users: Spin and fly fishers

Parkinsons Lake

A locally important lake for sports fishing. As one of the only trout fisheries left near Auckland this small highly valuable lake is stocked annually.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Rainbow trout fishing

Users: Spin and fly fishers

Penewaka Lagoon

A small locally important wetland for game bird hunting. It is used by game bird hunters for swan, geese and duck hunting, also pukeko and odd pheasant in the surrounding land. The original DOC Wildlife Management Reserves contain a number of recently constructed ponds.

Recreational Opportunity Spectrum

Setting: Natural

Activities: Game bird hunting

Users: Game bird hunters

Piako River

A medium locally important river for game bird hunting. An important area for duck hunters with occasional mobs of paradise shelduck.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting

Users: Game bird hunters

Lake Pikopiko

A small locally important lake for game bird hunting.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Duck hunting with the odd swan or goose

Users: Game bird hunters

Piopiotea Stram

A small locally important river for sports fishing with no public access.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: Spin and fly fishers

Pokaiwhenua Stream

A small locally important river for sports fishing and game bird hunting. The Pokaiwhenua Stream is an important thermal refuge and spawning stream with good fishing. This stream has limited public access but is a popular local fishery.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: Spin and fly fishers

Puniu River

A medium locally important river for sports fishing and game bird hunting. The Puniu River has high restoration potential but has been degraded by diffuse pollution from farming. Lack of riparian vegetation has led to high summer temperatures. The Puniu continues to be an important local fishery.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: Spin and fly fishers

Lake Pupuke

A medium locally important lake for sports fishing that is currently stocked annually. This is a fairly popular spot for trout angling and is used once a year by Auckland Anglers for a fishing competition.

Recreational Opportunity Spectrum

Setting: Urban

Activities: Brown and rainbow trout, also brook char fishing

Users: Coarse, spin and fly fishers

Raglan Harbour

A large locally important estuary for game bird hunting.

Recreational Opportunity Spectrum

Setting: Natural

Activities: Waterfowl hunting

Users: Game bird hunters

Te Onetea Stream

A locally important river for sports fishing and game bird hunting. Te Onetea Stream has a few ducks and pukeko but mostly it is used by duck hunters as access to Lake Waikare and Penewaka Lagoon. This artificial stream is popular for coarse angling with easy access right along its length.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Waterfowl hunting and coarse fishing

Users: Game bird hunters and coarse anglers

Rapurapu Stream

A small locally important stream for sports fishing. The Rapurapu has easy public access and is connected to the larger Waiomu Stream. The Rapurapu is a known trout spawning stream and thermal refuge.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: Spin and fly fishers

Lake Rotokauri

A small locally important lake for game bird hunting. There are maimais around the lake margin. Black swan used to be common here, in their hundreds, until this lake flipped to an algal dominated state due to agricultural runoff and the lake macrophytes died out.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting

Users: Game bird hunters

Lake Rotokawau

A small locally important lake for game bird hunting. Ducks, swan and geese are common. A number of maimai are on this lake which is, via a long and sometimes willow-overgrown canal, connected to Lake Waikare. There are also several constructed ponds associated with the adjacent reserve.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting

Users: Game bird hunters

Lake Rotomanuka

A small locally important lake for game bird hunting

Recreational Opportunity Spectrum

Setting: Rural

Activities: Waterfowl hunting

Users: Game bird hunters

Lake Rotongaro

A medium locally important lake for game bird hunting. This lake attracts large numbers of geese, but also has some swans and ducks. The odd pheasant also lives in revegetating margins of the smaller Lake Rotongaro-iti which is attached to Lake Rotongaro by a connecting canal.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting

Users: Game bird hunters

Lake Rotopataka

A small locally important lake for game bird hunting

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting

Users: Game bird hunters

Lake Rototoa (Lake Ototoa)

A large scenic locally important lake for sports fishing. A once popular rainbow trout fishery was decimated by the introduction of perch. This lake has a high restoration potential if perch can be removed or controlled. Lake Rototoa, (Lake Ototoa), is a Scenic Reserve and thus game bird hunting is not permitted. Due to the perch introduction the lake is only stocked with trout intermittently. The lake has limited public access and no motorised boats, but adequate access is available.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Rainbow trout fishing

Users: Spin and fly fishers

Lake Mangakarawe

A small locally important lake for game bird hunting, also known as Krippner's Lake.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Waterfowl hunting

Users: Game bird hunters

Tairua Forest

A large locally important forest for game bird hunting

Recreational Opportunity Spectrum

Setting: Rural

Activities: Upland game bird hunting

Users: Game bird hunters

Tairua Harbour

A medium locally important estuary for game bird hunting

Recreational Opportunity Spectrum

Setting: Natural

Activities: Game bird hunters

Users: Game bird hunters

Tairua River

A locally important river for sports fishing. This river is extremely warm in the summer and fish are pushed up into forest park land that is not easily accessible to anglers. The lower reaches are very popular for swimming and trout fishing is often a secondary activity. The tidal stretches of this river mouth are popular with waterfowl hunters.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Waterfowl hunting and rainbow trout fishing

Users: Waterfowl hunters, Spin, and fly fishers

Taringamotu River

A locally important river for sports fishing and game bird hunting. Taringamotu River is not performing well in terms of its potential to be a quality trout fishery like the other tributaries of the Ongerue River. The river is dominated by unfenced dry stock farms and has a high load of sediment. This river has a high potential for restoration if fencing is required in the catchment.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting, brown and rainbow trout fishing

Users: Game bird hunters, spin and fly fishers

Tawarau River

A locally important river in native forest with a DOC track following the Tawarau and the Mangaohae making it a highly desirable day trip. The surrounding DOC land has protected this stream to some extent, but the upper reaches are largely unfenced. Land use regulations could significantly improve this stream by providing shading and reducing sediment loads.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: spin and fly fishers

Lake Tomarata

A small locally important lake for coarse fishing. Lake Tomarata was formerly stocked with trout but the introduction of coarse fish considerably reduced trout growth, and thus stocking was discontinued. This lake has a high restoration potential if coarse fish could be removed.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: Spin and fly fishers

Waihou Forest

A large locally important forest for game bird hunting.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Upland game bird hunting

Users: Game bird hunters

Waimiha Stream

A small locally important river for sports fishing and game bird hunting. The Waimiha Stream has historically been a productive trout stream and spawning stream that has a largely intact upper catchment. Game bird hunting principally for shelduck.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting, brown and rainbow trout fishing

Users: Trout fishers and game bird hunters

Waiomou River

A locally important trout fishing and game bird hunting area. The Waiomou is an important spawning stream for the Waihou River and a nice small fishery that has been impacted by intensive dairy farming.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: Spin and fly fishers

Waione Stream

A locally important river for sports fishing with limited public access

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: Spin and fly fishers

Lake Waipapa

A large locally important lake for sports fishing and game bird hunting. Although water quality in the lake is still acceptable and spawning streams are intact, this lake has limited use due to heavy invasive weed beds inhibiting trolling.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: Boat anglers, spin fishers, and game bird hunters

Waipari Stream

A small locally important stream for sports fishing. The Waipari Stream has heavy sediment loads due a lack of appropriate land use restrictions. This stream has a public access and could recover with the implementation of fencing regulations.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: Spin and fly fishers

Waitawheta River

A medium locally important river for sports fishing. Due to excessive summer temperatures in the Ohinemuri the Waitawheta has become a popular alternative fishing location. The largely intact upper catchment is a hike in backcountry fishery that has good water quality although there is room for improvement in terms of land use in the mid to lower river. Ample walking tracks, swimming holes and camping areas make this an attractive stream for a day or weekend trip that includes trout fishing.

Recreational Opportunity Spectrum

Setting: Natural

Activities: Brown and rainbow trout fishing

Users: Spin and fly fishers

Waitekauri River

A small locally important river for trout fishing.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Brown and rainbow trout fishing

Users: Spin and fly fishers

Whitianga Harbour

A locally important estuary for game bird hunting.

Recreational Opportunity Spectrum

Setting: Natural

Activities: Waterfowl hunting

Users: Game bird hunters

Waiwawa River

A medium locally important river for trout fishing that is limited by high summer temperatures.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Rainbow trout fishing

Users: Spin and fly fishers

Whakauru Stream

A small locally important river for sports fishing with limited public access.

Recreational Opportunity Spectrum

Setting: Rural

Activities: Rainbow trout fishing

Users: Spin and fly fishers

Whangamarino River

A medium locally important river for sports fishing and game bird hunting. A very popular river for waterfowl hunters who use it for access to many adjoining wetlands. A number of these folk have maimais on the river margin or ponds near the river margin. The river also provides access to baches, bays and streams, (such as the Raeo Arm), from both Island Block Road and also the Falls Road boat ramps, as well as the Cocks Wetland boat-ramp, (accessed by Wattle Road). Although the river is heavily polluted from agricultural runoff, it is a popular coarse fishery with matches by the Raeo Arm and casual fishing from Falls Road, Island Block Road and Oram Road

Recreational Opportunity Spectrum

Setting: Rural

Activities: Game bird hunting and coarse fishing

Users: Game bird hunters and coarse fishers

APPENDIX 6. WETLANDS OWNED BY THE COUNCIL

Name	Location	Area (hectares)	Gazette Reference or Title Reference
Waikato Islands	Lower Waikato catchment	321.8	Kaiwaka C No 1 Block (<i>Waikato Is</i>), <i>Kaiwaka C No 2 Block</i> , Kaiwaka A & B Blocks, Pakipaki A Block, Pakipaki B & C Blocks, Puehunui No 1, 2A, & 2B Blocks, Ngahinapouri Block, Motutieke A No 2 & No 3 Blocks, Motutieke E No 1 Block.
Aka Aka Wetland	Lower Waikato catchment	116.3	Lot 3 & 4 Deposited plan 2621
Dean Wetland	Lower Mangatawhiri catchment	132.5	Allotment 20 & 132 Parish of Koheroa, Lot2 & 3 Deposited Plan 95539
McKenzie Wetland	Lower Mangatawhiri catchment	22.6	Lot 207 Mangatawhiri Parish
Blythen Wetland	Lower Mangatawhiri catchment	48.8	Lot 1 Deposited Plan 127872
Emmett Wetlands	Lower Mangatawhiri catchment	5.4	Part Allotment 131 Parish of Koheroa, Part Allotment 189 & 190 Parish of Mangatawhiri
Lake Waikare Island	Lake Waikare	74.4	Lot 1 Deposited Plan South Auckland 14511
Shepherd Wetlands	Whangamarino Wetland	137.5	Part Allotment 427 & 428 Parish of Whangamarino
Cocks Wetland	Whangamarino Wetland	246.9	Allotment 478A & 479 Parish of Whangamarino, Section 480 & 481 Parish of Whangamarino
Williamson Wetland	Whangamarino Wetland	354.5	Lot 34 & 35 Deposited Plan 10628, Lot 2 Deposited Plan South Auckland 8924, Allotment 62 Parish of Maramarua SO5566

APPENDIX 7. LAND OWNED BY THE COUNCIL OTHER THAN WETLANDS

Name	Location	Area (hectares)	Gazette Reference or Title Reference
Office	Hamilton	0.22	Lot 1 DP S76203
Stone Jug Access	Whakapapa River catchment	14.6	Lot 2 Deposited Plan 68491, Section 85 and Part section 28 Block VI Hunua Survey District

APPENDIX 8. PUT & TAKE STOCKING SCHEDULE

The following is the put-and-take fishery stocking schedule for Auckland/Waikato as of 2020. All fish are sourced from the Eastern Region hatchery. Fish are only stocked in waterways with limited or no natural spawning and no river fisheries are stocked due to low return rates.

Species	Age (years)	Number PA	Release Date	Fishery
Rainbow	1	2000	October	Lake Arapuni
Rainbow	1	200	May	Lake Moana-nui
Rainbow	2+	50	Nov	Lake Moana-nui
Rainbow	1	200	May	Lake Whatihua
Rainbow	1	50	May	Lake Parkinson

APPENDIX 7. APPROVAL

APPENDIX 8. REFERENCES

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