

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of applications for resource consent by the Central Plains Water Trust and a notice of requirement for the designation of land by Central Plains Water Limited associated with the construction and operation of the Central Plains Water Scheme

**STATEMENT OF EVIDENCE OF GEOFFREY PAUL CANHAM ON BEHALF OF
THE NORTH CANTERBURY FISH AND GAME COUNCIL AND
THE DIRECTOR GENERAL OF CONSERVATION**

1. INTRODUCTION

Qualifications and experience

- 1.1 My name is Geoffrey Paul Canham. I am an Accredited Recreation Professional via the New Zealand Recreation Association. My tertiary and other qualifications (including foreign qualifications) are in horticulture and management, NDH, (RNZIH), Dip. Hort (Massey), NEBSM (Telford College) and NZTC Horticulture, NZTCI.
- 1.2 I have 24 years experience in the recreation and parks/open space sector, in project management, strategic planning, research and policy. I hold the role of Senior Project Manager: Parks and Recreation, employed by Opus International Consultants since 2006. Prior to this I was a project manager for the New Zealand Recreation Association, managing the national planning service and chairing the national peer review panel. Previous to this role I was the Manager of Parks and Leisure for Tauranga City Council, a senior position I held for 8 years. Prior to this I worked for local authorities in New Zealand and Scotland for over 12 years specialising in the open space/recreation and parks sector.
- 1.3 Examples of my recent work in 2007 for recreation studies include my authoring and co authoring of 2 physical activity strategies for the Westland and South Waikato Districts and analysis of recreation needs for Lake Rotorangi in South Taranaki. Prior to 2006 my work with the New Zealand Recreation Association was at a national level and involved the overseeing of 27 concurrent physical activity strategic projects over 35 local authorities.
- 1.4 In 2005 I was hosted in the United States by the US State Department for Agriculture (USDA) for a month to undertake a speaking tour in the US. This included presentations in Washington DC to the USDA, and in Chicago to the American Parks and Botanic Gardens industry on the roles of communities in open space management. I have given over 15 Conference presentations in New Zealand and the U.S and have had over 10 articles published.
- 1.5 I have undertaken a wide range of recreational assessment work involving user needs and survey data over my career, for recreation feasibility studies, review, planning, and policy projects. I have performed due diligence and independent

review roles for local authority's recreation services, and I have peer reviewed over 12 recreation/physical activity/feasibility projects and perform the role of industry mentor for the New Zealand Recreation Association.

1.6 I have received two industry awards for recreation projects. I am a member of the New Zealand Recreation Association with full accreditation, a member of the International Federation of Parks Administration, and a member of the American Association of Parks, Gardens and Arboreta.

1.7 I acknowledge that I have read the Code of Conduct for Expert Witnesses (31 July 2006) and agree to comply with it in the preparation of this evidence and in my appearance before this hearing.

Scope of evidence

1.8 In summary, my evidence addresses:

- a. Existing recreational use within the CPW Scheme area, based on a range of primary and secondary research.
- b. Future demand for recreation and non use values of the CPW Scheme area.
- c. The effects of the CPW Scheme on recreational opportunities in the scheme area, including a critique of the applicant's recreation assessment.

1.9 The following recreational activities are specifically considered in my evidence:

- a. Angling
- b. Kayaking
- c. Jet boating
- d. Whitebaiting
- e. Hunting
- f. Shooting
- g. Picnicking, Camping and Passive Recreation
- h. Swimming
- i. Recreational tourism

- 1.10 In preparing my evidence, I have reviewed and read the following:
- a. Documents prepared by the applicant, that were available at the time I prepared my evidence (April 2008). These include the proposal documentation (including the Assessments of Environmental Effects, 2001 and 2005), the Central Plains Water Enhancement scheme report: Effects of Construction, Damming, Diversion and Water Use on Fish and Recreation (Kingett Mitchell, 2006) and the evidence of Mr Nicholas Taylor (February 2008) presented at this hearing.
 - b. A range of relevant submissions lodged in relation to the proposal.
 - c. Relevant section 42A officer reports.
 - d. Recreation research relating to the CPW Scheme area (as identified in Appendix A to my evidence)
- 1.11 My team and I have also undertaken primary research to gain qualitative data on the recreation preferences of users in areas affected by the proposed CPW Scheme. The purpose of this was to better understand specific values attributed by recreation users to the recreation resources where they seek out experiences. The primary research involved survey work. The survey work relates in large to the CPW Scheme command area, but with a particular focus on the Waimakariri and Rakaia rivers and their environs. A key aspect of the survey work entailed interviewing informants conversant in recreation. I have personally interviewed individuals and groups with a broad range of recreational interests, including anglers, jetboaters, kayakers, campers, hunters and passive recreationalists. With some clarifications for information and 'follow ups' to these interviews, I have been assisted by my team. I have also specifically considered existing tourist operators and broader recreational tourism values in preparing my evidence. Details of this communication record and a list of interviewees can be provided if required.
- 1.12 I visited various sites throughout the proposed CPW Scheme command area during the course of 2007, spending a number of days in the field. The extent of these site visits involved upper and lower river areas for the Waimakariri and Rakaia Rivers, Hacketts Creek, and the Kowai River. I visited the locations of the proposed intake areas, and spent a day in the Waianiwaniwa Valley. I also visited sites within the proposed CPW Scheme command area and on its periphery where various parks, walkways, natural areas, anglers' access ways and sites associated with commercial and events activities involve or may involve recreation. Some of these site visits

involved meeting key informants at site, or as part of a debrief with other experts who are appearing in this hearing on behalf of Fish and Game/DoC. Nearly all site visits that I undertook were immediately preceded with a key informant interview, where that key informant subsequently provided experiential information and other data about the sites' recreation values to help inform my evidence.

- 1.13 In preparing my evidence I have also relied where appropriate on information provided by other technical witnesses for Fish and Game/DoC.

Summary of findings

- 1.14 Based on the interviews and surveys I have carried out, review of relevant literature and the evidence to be presented by a range of witnesses who will be appearing for various submitters at this hearing, it is apparent that the CPW Scheme has the potential to affect recreation values in a number of ways.

- 1.15 In my evidence I will identify that:

- a. The Waimakariri and Rakaia Rivers and their environs are nationally significant to recreation. They are revered as open space recreation areas by specific user groups and the wider populace. Accordingly, the level of protection afforded to recreational amenity values associated with these two rivers should be high.
- b. The Waimakariri River in particular experiences significant recreation usage. Based on the material I have reviewed and primary research undertaken, it is apparent that the pattern of variable flows should be maintained if the river is to continue to provide a recreation resource, particularly for anglers. Maintaining access to the river to the standard presently enjoyed by users is also an important consideration, as are the issues raised by introducing artificial structures and works in areas valued by users for their natural character.
- c. The Rakaia River may experience less quantity of usage in some respects, but the relative quality of the recreational experience is considered by some users to be higher. While the downstream effects of existing and proposed abstraction may to some degree be better protected by the provisions of the

Rakaia WCO, users have nonetheless expressed concerns about the implications on the CPW Scheme in terms of preferred flows, access and effects on popular recreational environments at or near to proposed intake areas.

- d. Affected lands (such as reserves) and waters (including foothill rivers) within the CPW Scheme area individually and collectively constitute a valued recreational resource at a district or local community level. A number of submissions speak to the loss of recreation resources and loss of recreation opportunity on land. The extent to which particular recreational uses in this area are affected by the CPW Scheme has not been comprehensively assessed by the applicant.
- e. Affected lands and water downstream of the command area offer a range of recreational uses, from the nationally significant uses such as gamebird hunting at and around Lake Ellesmere, through to more locally significant uses. Again, the extent to which particular recreational uses of this area are affected by the proposed CPW Scheme is not clear due to the lack of detailed assessment by the applicant.
- f. Suggestions that artificial waters created by the proposed CPW Scheme (including the reservoir, canals etc) may constitute off-set mitigation for lost or degraded recreational experiences elsewhere are, in my opinion, dubious at best. Insufficient information has been provided by the applicant to justify their perceived value or to demonstrate how that value will be provided for in practice. Users have also expressed doubt that these waters will be of value to them, and they do not appear to be seen as suitable substitutes for the resources already present that may be affected by the proposed CPW Scheme. With regards to the potential values of the reservoir, more attractive lake environments already exist within relatively close proximity to the area. Therefore its potential future value as a 'drawcard' for recreational users may be less than suggested by the applicant.
- g. Overall, I find that the applicant has not done sufficient work to establish the preferences of different users in different recreational environments. In particular, there were no baseline field surveys at the time I prepared my evidence (April 2008) which would in my opinion enable the applicant to

conclude that effects on recreation values will be, overall, minor or localised. Extensive field surveying is required to establish values, preferences and, where necessary, appropriate changes to the scheme to account for those values and preferences, before any decisions can be made as to appropriate mitigation. I also note that the applicant has given insufficient attention to potential future or non-use values, which may be potentially affected should the CPW Scheme proceed in its current form.

2. EXISTING RECREATIONAL USE OF THE CPW SCHEME AREA

2.1 In this section of my evidence I identify the key recreation resources and the values attributed to those resources. I then go on to describe the range of recreational activities and experiences that are currently associated with these areas.

Key recreation resources

2.2 The command area for the CPW Scheme includes a number of well used recreation resources. The higher profile and higher use areas within the application are the Rakaia River, the Waimakariri River and surrounding areas to these rivers. These areas attract local, national and international visitors for numerous recreational activities.

2.3 The state of the resource is particularly important for optimal recreational benefit. From the primary and secondary research undertaken these are critical factors that require consideration and do not appear to have been considered by the applicant in promoting the CPW Scheme.

2.4 There are a range of studies that have been undertaken over time in relation to the recreation values of instream environments (see Appendix A to my evidence). Survey work and interviews my team and I have undertaken have also provided key informant evidence of the recreational values attached with the Rakaia River, Waimakariri River and surrounds (see Appendix B to my evidence).

2.5 From this body of research material, a number of key conclusions can be drawn:

Waimakariri River

- a. The Waimakariri River is ‘revered’¹ by recreation users and is a main theme expressed when people describe their recreation opportunities near Christchurch and in the North Canterbury region. It is recognised as being nationally significant to recreation, having regard to the guideline criteria for Potential Water Bodies of National Importance for Recreational Values, MfE (2004)².
- b. The Waimakariri River is one of New Zealand’s most heavily fished and paddled rivers, not only due to its close proximity to Christchurch, but also because it is home to one of the best salmon fisheries in New Zealand in addition to excellent populations of brown and rainbow trout³. The Waimakariri is also a regionally important whitebaiting area⁴.
- c. The overall value of the Waimakariri recreation resource has been recognised in a major resource study for the Waimakariri⁵. This Resource Survey was conducted in 1984 and identified a range of issues for recreational users of the Waimakariri River. Some of the key features identified in this study remain current today, and are discussed below:
 - The great diversity of water related recreational activities which are carried out in the catchment.
 - The diversity of recreation settings available for these activities.
 - The diversity of recreational experiences which these activity/setting combinations provide: e.g. from the “social” experience of fishing in the more heavily used lower reaches to the remote experience of fishing the high country lakes or the less used middle braids; and from

¹ Elias, T (2007). A Reverence of Nature. In New Zealand Recreation National Conference 2007. Rotorua, New Zealand: New Zealand Recreation Association.

² Ministry for the Environment. (2004). Water Bodies of National Importance, Potential Water Bodies of National Importance for Recreational Values. Retrieved January 2008 from the Ministry for the Environment website.

³ Fish & Game North Canterbury. (2007) Access to the Waimakariri River Pamphlet. Canterbury, New Zealand.

⁴ Department of Conservation. (2000). Canterbury Conservation Management Strategy. Christchurch, New Zealand: Department of Conservation.

⁵ North Canterbury Catchment Board (NCCB) and Regional Water Board. Waimakariri River and Catchment Resource Survey. Canterbury, New Zealand.

competitive jet boating events to family or social boating to scenic or adventure boating in the gorge.

- The close proximity of much of the resource to Christchurch and surrounding population centres.
- The relatively good road and track access available to much of the lower catchment. An extensive system of tracks have been constructed around the lower reaches of the Waimakariri River over time. These tracks have been identified for providing a valuable resource to recreational river users. Boat access to the lower river for jet boating, power boating and yachting is also good, with a number of public and private boat ramps.
- With regard to specific recreation values, the study found that the most heavily used site for whitebaiting was Kairaki followed by the mainstem upstream of Brooklands Lagoon to the Motorway Bridge. The study also confirmed that salmon anglers predominantly visited McIntosh's Rocks (north bank between the Kaiapoi Confluence and Salt Water Creek) and the Banana Hole (north bank opposite Stewarts Gully) on the lower reaches of the river.

d. I have also reviewed the work by Rob Greenaway⁶ (The Lower Waimakariri River Recreation Survey 2006) and comment below on the findings of this study.

e. This data summarises the findings of a survey of recreational visitors to the Lower Waimakariri River area over summer 2005/06. The objective of the survey was to question a sample of 400 recreational visitors to the Lower Waimakariri River area during the survey period via face-to-face interviews.

f. Within the survey there were seven focus areas. These were; demographics, activity, location, conflicts, perception and satisfaction, improvement and general comments and information sources and flood protection measures. The report discusses in depth the various focus areas however of particular interest for the purposes of this study were the predominant activities identified, being salmon fishing, trout fishing, whitebaiting, motor biking (mostly 'dirt' bikes), jet boating and swimming. Family outings, dog walking,

⁶ Greenaway, Rob (2006) Lower Waimakariri River Recreation Survey, Environment Canterbury. Greenaway and Associates.

mountain biking and 4WD driving were other significant activities undertaken in the area.

- g. Respondents were asked to rank their top three most important 'features' of the Lower Waimakariri River area. Its closeness to home (45%) was the most important feature, followed by peacefulness. When asked about 'natural features', water quality (34%), trees (17%), the river (9%) and the wildlife (9%) were considered important. The survey results showed that 59% of respondents who were able to make a comparison ranked the Lower Waimakariri River area as the top in the region for their chosen activity. Reasons given for its high ranking included access (22%), quality of fishing (15%), peacefulness (13) and the natural environment (12%).
- h. Based on the material I have reviewed and primary research undertaken, it is apparent that the Waimakariri River's current pattern of variable flows and freshes, should be maintained if the river is to continue to provide a recreation resource, particularly for anglers. Maintaining access to the river to the standard presently enjoyed by users is also an important consideration, as are the issues raised by having major artificial structures and works in areas valued by a variety of recreationalists for their natural character.

Rakaia River

- i. The Rakaia River is nationally significant to recreation⁷. The significance of its values is recognised by the Rakaia River National Water Conservation Order in 1988 ("Rakaia WCO") which declares (at clause 3) that:

The Rakaia River and its tributaries include and provide for-

- (a) An outstanding natural characteristic in the form of a braided river;
- (b) Outstanding wildlife habitat above and below the Rakaia River Gorge, outstanding fisheries, and outstanding recreational, angling and jet boating features.

- j. The significance of the Rakaia to recreation is also evidenced by Daly (2004)⁸ who listed extensive recreation values for the Rakaia River catchments. Daly

⁷ Ministry for the Environment. (2004). Water Bodies of National Importance, Potential Water Bodies of National Importance for Recreational Values. Retrieved January 2008 from the Ministry for the Environment website.

identified that the lower plains of the Rakaia River contain a brown trout and Chinook salmon fishery of "national significance". The Rakaia River from the gorge to the sea was identified by Daly as having "high recreation values" for jet boating, salmon and trout angling.

k. The Resource Survey⁹ undertaken for the Rakaia River Catchment also identified a number of features of the lower river system, which continue to apply today:

- The great diversity of water related recreational activities which are carried out in the catchment.
- The diversity of recreation settings available for these activities.
- Good road and track access is available to much of the lower catchment below the Rakaia Gorge. However, because of the complex braiding patterns at the Rakaia, access to the riverbed does not necessarily secure direct access to water, and users are often forced to walk or use four wheel drive vehicles to reach it.
- With regard to specific recreation values, most jet boaters finding access either at the Gorge, or further downstream towards SH1 and the lagoon. Most salmon and trout anglers were found to range the whole river system east of the Gorge to the Mouth. Additionally it was found that Rakaia canoeists predominantly used the area between the Gorge and the White Posts to the west.

l. Both the Waimakariri and Rakaia Rivers are highly valued for their braided river nature, their variability in flow, amenity values and accessibility characteristics. The Waimakariri and Rakaia Rivers are important braided river systems providing regularly diverse braids for recreational users. These braids are part of the defining characteristic of these nationally significant rivers, and sought after for a variety of angling, jet boating and kayaking and passive recreation experiences (see Appendices B and C).

⁸ Daly, A. (2004) Inventory of Recreational Values of the Rivers and Lakes in Canterbury New Zealand, Environment Canterbury, April 2004.

⁹ North Canterbury Catchment Board and Regional Water Board. (1983). Rakaia River and Catchment Resource Survey. Canterbury, New Zealand.

Other resources

- m. The Selwyn River is the largest river within the Rakaia Selwyn groundwater allocation zone and is described by Environment Canterbury as having: "very high cultural values, especially mahinga kai (important for eel-weirs and gathering of birds and plants)" as sited in Selwyn District Council 2007¹⁰. It also has a high mauri value (ranking 7 out of 10) (Hayward 2006). While the trout fishery of the lower Selwyn is less popular now than in the past, it continues to support a good level of angler usage, as does the upper Selwyn.
- n. Angling is also popular on other Ellesmere tributaries particularly Harts Creek, the L2 River and the Halswell River. Until the mid-1990s foothill rivers such as the Hororata and Hawkins rivers were also valued fisheries, however these values have been severely degraded over the past decade or so.
- o. Te Waihora/Lake Ellesmere is New Zealand's most popular recreational duck-shooting area¹¹. There are two rifle ranges in the Waianiwaniwa Valley area, with active clubs involved¹². Informal hunting activities also take place in many areas within and surrounding the CPW Scheme command area.
- p. Affected lands, including reserves, camping spots and picnicking areas and so on, are valued recreational resources at a district and community level.

Recreational activities

2.6 As I have mentioned, that are a range of existing recreational activities within and on the periphery of the CPW Scheme command area, including both water based and land based recreational pursuits. The key recreational activities undertaken are summarised below and will be focussed on in my evidence. In preparing this summary of existing recreational use, I have relied on primary research, review of available literature and the evidence of other witnesses for Fish and Game/DOC. You will also hear from a number of individual and group submitters during the

¹⁰ Selwyn District Council. (2007). Reserve Management Plan for Chamberlains Ford Recreation Reserve. Christchurch, New Zealand: Lucas Associates & Selwyn District Council. (2007). Reserve Management Plan for Coes Ford Recreation Reserve. Christchurch, New Zealand: Lucas Associates.

¹¹ Department of Conservation. (2000). Canterbury Conservation Management Strategy. Christchurch, New Zealand: Department of Conservation.

¹² J. Snoyink, personal communication, April 2008

course of the hearing in terms of the specific recreational activities that are of interest to them.

2.7 As part of the primary research for this hearing, a recreation values survey was prepared by my team and distributed to over 120 registered recreational users. This took the form of a postal survey in October-November 2007. The users were self-selecting in that they registered interest following an email by Fish & Game to a list of subscribers to their e-news service.

2.8 A total of 33 surveys were returned as undertaken. This is a relatively small sample and should therefore be treated with some caution. The qualitative data nonetheless presented insights into how experienced recreation users conversant with their activity valued the recreation resource. The survey results indicated the following trends:

- a. As could be expected given the methodology followed in deriving participants, the most popular recreation activity overall was angling (54% of respondents rating angling as their primary activity), followed by jet boating and/or kayaking. Hunting was also identified as a favourable activity along the banks of the Waimakariri, Rakaia and Selwyn rivers.
- b. In terms of access, the majority of respondents stated that they currently access recreation areas by four wheel drive and foot access only.
- c. Remoteness was identified as an important recreational value.
- d. Respondents felt that it was very important that remote experiences exist within a reasonable distance to Christchurch City.
- e. The key needs and critical factors identified for a valued recreation experience included continual water flow, quality of water flow, solitude, peace and quiet, fish population, abundant wildlife, natural settings and unhindered access. The exceptional quality of the fishery on the braided rivers were also considered to be unique.
- f. A number of concerns were raised with respect to the CPW Scheme, which the majority of respondents felt could not be compensated by artificial recreational opportunities such as the proposed Waianiwiwa Reservoir, headrace canal and water race network.

2.9 I now discuss specific recreational values.

Angling

- 2.10 The Department of Conservation recognises that recreational fishing for indigenous species, whitebait and eel, and for introduced species such as trout and salmon, occur on many wetlands and rivers in the Plains area. Ongoing issues for the Department of Conservation include the maintenance of recreational access to rivers and the coast and the provision of adequate flows in the main rivers and streams to provide life supporting capacity for the aquatic ecosystems, wildlife, fish, and invertebrates that depend on adequate flows to live (which are an important component for recreation, particularly angling)¹³.
- 2.11 As I have mentioned, the Waimakariri and Rakaia braided rivers are considered significant rivers for their angling values. As Mr John Hayes outlines in his evidence, the Waimakariri and Rakaia rivers support regionally important trout and nationally important salmon fisheries.
- 2.12 The Upper and Lower Selwyn, Harts Creek, L2 River and the Halswell River also support popular trout fisheries.¹⁴
- 2.13 Particularly for salmon angling there are various parameters that make for a good angling experience and these are well respected on both the Waimakariri and Rakaia Rivers, hence contributing to their significance. My evidence focuses more on the 'human' qualitative aspects of the fishery. Technical issues as to fishability, the optimum conditions for angling and related ecological issues are addressed in detail by Mr Hayes.
- 2.14 Angling has long been part of the 'identity' and theme of the Canterbury community. As noted in the evidence of Mr Dirk Barr, the 'Take a Kid Fishing Day' at the Groynes in Christchurch attracts around 4-5,000 children and their parents each year. The annual Rakaia River Fishing Competition typically attracts 1,000 entries from anglers all over New Zealand and worldwide.

¹³ Department of Conservation. (2008) Activities at Waihora/Lake Ellesmere and wetlands and rivers in the Plains area, retrieved 15 April, 2008, from the Department of Conservation website: \

¹⁴ National Angler Surveys were undertaken in the fishing seasons of 1994/95 and 2001/02. Note that NAS data does not extend to the Taupo district fisheries which are managed by DOC. The total Selwyn River mainstem attracted 6700 angler days in 1994/95, and 2,130 in 2001/02. Harts Creek recorded 1010 and 480 angler days respectively; the L2 River 2130 and 680 angler days; and the Halswell River 1760 and 220 angler days. Other relevant waters that recorded some angler days included the Kowai River (10 and 270 respectively), Hawkins River (210 and 80), Hororata River (160 and 0), Irwell (430 and 30), and Lake Ellesmere (420 and 150).

- 2.15 The Waimakariri salmon fishery, in addition to being by far the most heavily fished salmon fishery in the country, ranks alongside the most popular fisheries in the country even during a poor salmon fishing season¹⁵. As discussed shortly, even in the less densely fished middle section, 'salmon angler effort' is comparable to total ('trout and salmon') angler effort for the entire Rangitata River.
- 2.16 In terms of trout values, the Waimakariri River supports populations of brown trout and rainbow trout. Trout fishing is popular throughout the river system. Of note is the sea-run trout fishery which sees high densities of anglers near the Old Highway Bridge early in the season, and fishing for resident trout in 'the Willows' (around the Courtenay area).
- 2.17 In a qualitative assessment undertaken during the 1978/79 National Angler's Survey, salmon anglers rated the Waimakariri River mainstem 5, on a scale of 1 (not highly valued) to 5 (very highly valued). Trout anglers rated the Waimakariri River mainstem 4 on the same scale. Also using the same scale, trout anglers rated the Waimakariri River mainstem 5 for 'distance from home', 'access' and 'area fishable', 3 for 'scenic beauty', 'solitude', and 'size of fish', and 2 for 'catch rate' (Salmon anglers were not polled for this part of the survey).¹⁶
- 2.18 The Rakaia River is generally considered to be the 'best' salmon fishery in New Zealand. This is because it generally has the highest salmon run, and also because of the diversity and physical area available to salmon anglers throughout the river system. Perhaps because it is further from a major city, it experiences less use than the Waimakariri. However it still ranks very highly for use on a national level.¹⁷
- 2.19 The Rakaia trout fishery differs from the Waimakariri in that rainbow trout are not found throughout the entire mainstem. Similar to the Waimakariri, the river supports trout fishing for resident fish throughout its length. The area of greatest significance, and highest use, is the mouth area. Fishing for sea-run brown trout, particularly during the early part of the season, often attracts huge numbers of anglers to that area.

¹⁵ The Waimakariri mainstem attracted the highest number of angling days in the 1994/95 National Angler Survey (58,360 angler days). In the second survey, which I understand occurred over a particularly bad salmon season (2001/02), the Waimakariri (48,950) was second only to the Mataura River (52,960) (excluding Taupo district waters).

¹⁶ Tierney LD, Richardson J & MJ Unwin (1987). The relative value of North Canterbury rivers to New Zealand Anglers. MAFFish: Wellington.

¹⁷ The Rakaia River mainstem recorded 34,650 and 21,460 angler days respectively in the 1994/95 and 2001/02 National Angler Surveys. This placed the Rakaia mainstem 6th and 11th respectively in terms of total angler usage of all rivers and lakes nationally

- 2.20 In a qualitative assessment undertaken during the 1978/79 National Angler's Survey, salmon anglers rated the Rakaia River mainstem 5, on a scale of 1 (not highly valued) to 5 (very highly valued). Trout anglers rated the Rakaia River mainstem 4, on the same scale. Also using the same scale, trout anglers rated the Rakaia River mainstem 4 for 'area fishable', 'scenic beauty' and 'solitude', 3 for 'size of fish', and 'access', and 2 for 'distance from home' and 'catch rate' (Salmon anglers were not polled for this part of the survey).¹⁸
- 2.21 I now proceed to a more specific discussion on the salmon angler values for the Waimakariri and Rakaia.
- 2.22 In relation to salmon angling on the Waimakariri, Mr Taylor states that "the Gorge to the sea is exceptionally important to anglers and surveys suggest that the area from the SH1 bridge to the sea is the most heavily used part of the river for angling." I consider this statement is broadly correct.
- 2.23 What Mr Taylor fails to illustrate is the distinct value of the salmon angling resource *above and below* the SH1 bridge. In evidence given for Fish and Game in the hearing of applications for Ngai Tahu Property to abstract water for irrigation purposes, Mr Holland quantified salmon angler usage in the lower (below SH1 bridge) and middle reaches (Woodstock to SH1 bridge) of the Waimakariri. The methodology used by Mr Holland was as follows:
- Total Waimakariri angler day figures were sourced from the most recent National Angler Survey (Unwin & Image, 2003). The total figure for the season 2001/02 was 48,950 angler days.
 - The salmon angling proportion of that total was derived (i.e. people fishing for trout, or for 'trout and salmon', were excluded). This was not part of more recent National Angler Surveys, but this question was included in the MAF 1978/79 National Angler Survey. That survey showed that 70% of angler effort on the Waimakariri is spent pursuing salmon only (this is considered an underestimate of total salmon angling effort because it excludes respondents

¹⁸ Tierney LD, Richardson J & MJ Unwin (1987). The relative value of North Canterbury rivers to New Zealand Anglers. MAFFish: Wellington.

who stated they were targeting both salmon and trout). 70% of 48,950 angler days gave a total figure for the Waimakariri as 34,265 salmon angling days.

- Relative salmon angling activity in different reaches of the river was calculated. This was established in the MAF (1983/4) angler survey which was cited in NCCB (1986). It showed that 69% of salmon angling occurred below the SH1 bridge, 28% between that bridge and Woodstock, and 4% above that point.

2.24 Using this approach Mr Holland approximated salmon angling effort in the middle and lower sections for the 2001/02 season as follows:

- Middle section: $48,950 \times 0.7 \times 0.28 = 9,594$ salmon angler days
- Lower section: $48,950 \times 0.7 \times 0.69 = 23,643$ salmon angler days

2.25 Mr Holland then provided comparative figures showing *total* (i.e. trout and salmon) angler day figures for the entire length of other rivers. I note in relation to the middle reaches only, that the figure of 9,594 salmon angler days on the Waimakariri is broadly comparable to total fishing effort on the Rangitata (12,710 angler days), Hurunui (8,380) and Wairau (8,410).

2.26 Therefore while it is accepted that the majority of salmon angling occurs below the SH1 bridge, the amount of salmon angling in the reach above the bridge is itself *very high*.

2.27 Mr Taylor does not attempt to explain the characteristics of the salmon angling 'experience' in different reaches of the Waimakariri River. I consider this to be an important omission because it fails to illustrate what elements of the angling experience are important to anglers upriver of the SH1 bridge.

2.28 From my interviews with anglers, the evidence of expert anglers and Dr Hayes presented at this hearing, and NCCB (1986), it is apparent to me that the salmon angling experience above the SH1 bridge differs from that of the lower river in the following ways:

- The concentration of anglers is lower. This is preferable to anglers who enjoy isolation and 'peace and quiet' as part of their fishing experience.

- Natural character is higher. In particular, the middle reaches are braided across a wide flood plain rather than being tightly constrained into one or two channels between floodbanks.
- More skill is required. Anglers need to be able to identify 'lies' where salmon are likely to be, as opposed to fishing the same spot each year. It also requires knowledge of when the river is in an optimal state for fishing. Given the lower river often flows in a relatively uniform single channel, knowledge of what constitutes a good lie is probably less important.

2.29 Based on the above factors, I would therefore characterise the salmon angler who fishes above the SH1 bridge as typically more likely to be physically active, experienced, and having a greater appreciation of 'peace and quiet' and natural character. Conversely, their counterparts downriver may be characterised as typically less mobile, perhaps with less time to investigate where good 'lies' have formed. They are also likely to enjoy the social experience of interacting with other anglers.

2.30 The critical difference between the upper river and lower river angler is perhaps that the upper river angler is probably more 'choosy' about when and where to fish. This means the quality of their experience is more vulnerable to being affected by:

- A reduction in availability of suitable river conditions (flows and associated parameters). Particularly for expert anglers, reducing the frequency of suitable conditions sets a temporal limitation on when they consider fishing is worthwhile.
- A reduction in the spatial area of good fishing 'lies'. This crowds more recreational users into the remaining space, potentially displacing some altogether, and for the remainder, degrading the 'remoteness' aspect of their experience.
- A reduction in the number and type of access points to and along the river. Because angling lies move frequently, anglers need to utilise a number of different access routes over time to gain access to them.

- Any major changes to what they perceive as the “natural character” of the river environment.

2.31 In relation to salmon angling on the Rakaia, Mr Taylor notes that “it is one of the best salmon fisheries in New Zealand with consistently the largest salmon runs between November and late March”. He also notes that “the Gorge to the river mouth has the greatest concentration of activities occurring”, although he gives no specific guidance as to the particular importance of different reaches for salmon angling.

2.32 Salmon angler use of the Rakaia appears to be more evenly spread throughout the river below the Gorge, than is the case for the Waimakariri. I note in particular that NCCB (1983, Volume 4, p.103) classified the reach between State Highway 1 and the Gorge as of “significant international value” to salmon anglers. Surveys in the early 1980s suggest this reach supports about 20-25% of all angling effort on the Rakaia.

2.33 However it may be that the characteristics of the up-river/down-river angler, as described for the Waimakariri, also apply to the Rakaia salmon angler.

2.34 As previously noted, the evidence of Mr Hayes will provide more guidance as to the optimal river conditions for salmon angling.

Kayaking

2.35 Kayaking is a recreation sport with a high social setting that leads to other recreation activities; although kayaking is the main activity, general camping, tramping and picnicking are all a part of the experience.

2.36 Kayaking on both the Waimakariri and Rakaia rivers is attractive to a wide variety of users. According to the primary research I have undertaken, the types of kayakers that are attracted to these rivers comprise not just Christchurch residents (due in part to the river’s proximity to the City) but also include a large number of visitors, particularly those taking part in or preparing for multi sports events such as the Speights Coast to Coast.

- 2.37 The upper Waimakariri is attractive to kayakers due to its variability and the presence of rapids. The lower Waimakariri has little in the way of rapids, but it is considered by kayakers to be valuable because of its proximity to Christchurch, its open environment and expansive views.
- 2.38 The Rakaia River (downstream of the Gorge Bridge) lacks rapids but is very swift, which makes it attractive to kayakers for other reasons. In recreation terms the Rakaia is considered to be a 'Giant of the Plains' with paddlers, jet boaters and trout and salmon fishermen all making the most of this river.
- 2.39 Different experiences are valued by paddlers. Interviewees advise that an ideal flow ("if there is such a thing") are difficult to generalise. Kayakers seek 'cruising flows' right through to white water as a recreation need and a prerequisite for their sport and experiences.
- 2.40 Desired flow is governed by personal taste and specific white-water features which are unique to each river. Users also gain different experiences from different visits to the same river stretch or to different rivers based on variables. Experienced kayakers also visit specific sections of the same river in specific conditions for a 'favourite flow' when the variability offered provides a preferred feature. Other people prefer quite different flows.
- 2.41 Interviewees have identified that variable flows are very important to the sport, as the same flow rate on an ongoing basis "gets boring", and varied flows therefore enhance the overall experience. Variable flows also change the river experience and act to 'clean' the river by removal of undesirable vegetation. Kayakers I have spoken to have indicated that they would like to see the current environment retained in respect to variable flows and also amenity characteristics.
- 2.42 Variable flows are therefore crucial to the recreation experience for kayakers, and a quality kayaking experience is in fact why many people seek to repeat kayaking at all. The themes associated with a quality kayaking experience, and therefore the needs of the code and what is important to their recreation settings, includes a wide variety of flows and a reliance on variability.
- 2.43 I understand that a number of submitters, including the New Zealand Recreational Canoeing Association ("NZRCA") and a range of individuals, will address you in more

detail later in this hearing on the optimum flow bands for their recreational use of the rivers.

Jet Boating

- 2.44 The Waimakariri River is the most heavily recreated jet boat river in the world¹⁹. The Waimakariri River is acknowledged as the most significant river to jet boaters, with key characteristics as a result of variable flows, and current accessibility and amenity settings.
- 2.45 Primary research indicates that the 'remoteness factor' being available so close to Christchurch, is important for the industry, and particularly tourism values. There are three commercial operators involved in the use of the Waimakariri River, and two on the Rakaia. It is also important to note that jet boating leads to further recreation activities including fishing, swimming, picnicking.
- 2.46 The primary research suggests that there are three main jet boat areas on the Waimakariri River:
- a. SH1 bridge – where the majority of the jet boating activity tends to take place.
 - b. Gorge area - which is considered an outing in itself, offering a remote wilderness experience.
 - c. Bealey Pub to Gorge – offering more difficult adventure boating.
- 2.47 Ease of access to the Waimakariri River is important; on top of all of the tourism values. "It's a playground at our backdoor", according to Rob Battersby, committee member, Canterbury Branch Jet Boating New Zealand, personal communication, October 2007.
- 2.48 The main group of jet boating uses involve the transportation for picnickers looking for peaceful areas/swimming holes, the 'throw people around/adventure rides', and the competitive element, e.g., the New Zealand Marathon (jet boat racing) which includes the Waimakariri River and the Rakaia River. For jet boating there is a remote experience during the time of boating, and then social environment in between times. Both are very important to the overall experience.

¹⁹ Rob Battersby, Committee member, Canterbury Branch Jet Boating New Zealand, pers comm., Oct, 2007.

- 2.49 The primary themes associated with a quality jet boating experience are: can the river be boated, is it safe and will it be enjoyable? Access to and use of waterways is critical, particularly for rescue operations. In the upper Waimakariri reaches, the only method of rescue is helicopter or by jet boat. The access points do change frequently, and this is accepted; however the presence of multiple braids is as important for access as it is for the experience.
- 2.50 Interviewees identified that the main requirements for jet boating are:
- a. The essential flows required for jet boating.
 - b. The untamed experience that is critical particularly for commercial jet boaters involved in recreation tourism.
 - c. Safety of the jet boaters near artificial structures.
 - d. Access points for entering and exiting the river, as well as for rescues.
 - e. Need for frequent exit points along river, as river can flood rapidly and there is also the risk of getting stuck.
- 2.51 Jet boaters do not tend to rely on huge water flows for function, however reasonable flow is preferable. Freshes are also important for the natural cycle of the river to present variable conditions sought by jet boaters and to provide the amenity and access values placed on the experience by jet boaters.
- 2.52 You will hear from a number of submitters during the course of this hearing, including Jet Boating New Zealand and recreation tourism operator Waimak Alpine Jet Limited, in more detail regarding the values including flow characteristics they consider important for this recreational activity.

Whitebaiting

- 2.53 Important themes exist for Canterbury around whitebaiting, and this recreation is related as being one of the seasonal themes for the region.

- 2.54 Whitebaiting on the Waimakariri River (in particular) is recognised to be potentially of national importance for recreational value (MfE 2004).²⁰
- 2.55 There is some early data regarding numbers of whitebaiters.²¹ I note that this information is 15-17 years old, but it does identify numbers from this period. An estimated 13,500 visits were made to the Waimakariri during the 1984 season. Overall it is estimated that just over half (53%) of the total whitebaiting on North Canterbury rivers at that time occurred on the lower Waimakariri and the lower Kaiapoi, Cam and Styx tributaries. The data also indicated that other significant whitebait fisheries are the Ashley, Avon and Rakaia Rivers (24%, 10%, and 7% of users respectively). The Waimakariri River is however considered the principal location for whitebaiting.
- 2.56 Whitebaiting is also a tourist attraction, with many people attending to watch whitebaiting. Whitebaiters advise that German and English tourists arrive keenly interested in the activity. Whitebaiting has become a tourist image associated with Canterbury and promoted as such. Interviewees advise that tourists are typically interested about what's going on with regard to whitebaiting, watching for periods of time as a form of attraction/entertainment and often ask local people if they can take away samples to eat, ask where they can buy the fish, how you fish for them, what all the structures are for, etc. Whitebaiters report this as an increasing trend to see and engage with overseas tourists.
- 2.57 Whitebaiters / fisherpersons have recently formed a regional association. This association is called Ashley Fishermans Association Incorporated, which hosts around 300 members. This group was formed to not only advocate for the protection of the fisheries resource, but also protect the rights to access using four wheel drive vehicles where it is difficult to walk the necessary equipment in to the fishing sites.
- 2.58 It is evident from discussion with various whitebaiters that the Waimakariri River in particular holds special value for its whitebaiting qualities.
- 2.59 The Sintes family, an intergenerational whitebaiting family, were interviewed during the course of fieldwork for this hearing. They related that the experience of

²⁰ It is important to note that the MfE presented its findings in order to promote further research and discussion around the values held in Canterbury. Other work undertaken to date on studying the impacts to recreation aspects for whitebaiting by other activities is subject to verification.

²¹ NCCB Resource Survey (1986) op. cit.

whitebaiting and fishing in these rivers in general is so important, and it's 'in our blood'. The following comments were made during the course of this interview:

“We enjoy the environment, things change every day – it's exciting 'being at one with nature'. It's a social thing (mates discussing methods, levels of catch etc) – and very special. An example of a great experience was back in 1988, when we had 4x 20L buckets & a kerosene tin full of whitebait in 48hrs. It has never been so good. Whitebait numbers are certainly dropping off.”

- 2.60 Users advise that whitebaiting is “totally affected by any and all fluctuations”. Most whitebaiters predominantly white bait by set netting at the river mouth. They go on to say that “a vehicle is a must as it is more than 1km to get to the right location for white baiting” and the essential equipment is heavy, “with traditional access points under threat continuously”.

Hunting

- 2.61 The primary and secondary research, and the evidence of other witnesses for Fish and Game, indicates that the areas around the Waimakariri, Rakaia and Selwyn rivers are of relevance to this recreational value, depending on the species hunted. As outlined in the evidence of Mr McCrory and others, ducks and Canadian geese settle in the more exposed open areas the Waimakariri River.
- 2.62 As I have noted earlier Te Waihora/Lake Ellesmere is New Zealand's most popular recreational duck shooting area by the Department of Conservation. Many areas within the Department of Conservation's Conservation Management Strategy for the Waimakariri area also support hunting activity as well²².

Shooting

- 2.63 There are two rifle ranges in the Waianiwaniwa Valley, with active clubs involved. The Malvern Branch of the NZ Deerstalkers Assn Inc. has been in existence since 1972. They share their Clubrooms which are located just outside Darfield with the Darfield Gun Club and Miniature Rifle Club. A side valley on the property of NZDA members' Craig and Sally Robertson, in the Waianiwaniwa Valley, is used as a

²² Department of Conservation. (2008) Activities at Waihora/Lake Ellesmere and wetlands and rivers in the Plains area, retrieved 15 April, 2008, from the Department of Conservation website.

'Centre Fire' Range, not only for 'sighting in' but also for firearms safety training. The sites are used on average at least once a week and for an annual club competition shoot.

- 2.64 The 'Centre Fire' facility is where high power/ big bore rifles can be fired. The big bore/long range rifle shooting site is ideally suited, being enclosed by two hills and a back slope. There are not many sites able to accommodate this type of rifle shooting. Such sites are very difficult to secure, and commonly clubs struggle to obtain or retain such sites as significant 'safety zones' behind ranges are required. Club members advise the site is a vital part of the Club`s activities.

Picnicking, Camping and Passive Recreation

- 2.65 Picnicking on the banks of rivers, at times in the river beds, in reserve land overlooking the rivers and on land elsewhere in the CPW Scheme command area is a recreation experience valued highly by many people.
- 2.66 Many users interviewed as part of the primary research identified incidental physical activity benefits, planned or unplanned, as a part of their recreation time and experience (that occurred because they sought out recreation experiences, e.g. walking), and gave examples of other people in the area walking, running, mountain biking, walking their dog for example.
- 2.67 It is also evident from survey interviews that camping is a popular holiday recreation around river areas, particularly in summer at the lower Rakaia. Semi-permanent sites, including the site at the Rakaia Gorge, are popular with anglers year round. Anglers also note that they camp at the Steeles Road Anglers' Access, as part of an overall angling experience.
- 2.68 Nearly all interviewees in survey interviews cited a repeated element of their recreation experiences involving picnicking and similar activities, such as walking and sightseeing. This activity has also been evidenced in survey work particularly in the lower Waimakariri by Environment Canterbury.²³

²³ Greenaway, Rob (2006) Lower Waimakariri River Recreation Survey, Environment Canterbury. Greenaway and Associates.

2.69 A number of Parks and Reserves exist in the scheme area. Colgate Reserve in particular is bordered by the proposed level headrace canal and approximately 100m of the Reserve appears to be covered by the Notice of Requirement. This area extends over a walkway through the trees on the Reserve that is currently used for walking, exercising dogs, and horse riding. There is also a tennis court on the open area of the Reserve. I understand that you will hear more about the recreation values of Coalgate Reserve from the Township Committee, a submitter in this hearing.

Swimming

2.70 Swimming in the Rakaia, Waimakariri and Selwyn rivers is a recreation experience that is undertaken by many people, and is generally seasonally oriented rather than being a year round activity. Many interviewees also identified other recreation elements related directly to swimming, such as passive picnicking and similar activities, including walking and sightseeing.

2.71 The amenity and natural character of the surrounding environment are considered important to users. Readily accessible swimming holes of sufficient water depth and quality are sought after, with safety being an important aspect of this recreational activity.

Recreational tourism values

2.72 There are a number of major recreation and tourism events that rely on the function of various parts of the Waimakariri and Rakaia River catchments for their success. These include the Brass Monkey Kayak Race and the Speights Coast to Coast, as well as the year round tourist activities promoted by various operators such as Waimak Alpine Jet.

2.73 The Speights Coast to Coast event relies on the features and visual elements of the remote and wilderness settings of the Waimakariri River to promote internationally, this signature event. The event promotes the South Island and Canterbury as a pristine and unspoilt place, and a place that offers world class white water. The kayaking section is promoted by the managers of this event as a "Colorado River Experience, in New Zealand".

- 2.74 The Speights Coast to Coast generates c. \$ 6.5m in direct expenditure over 4 days in Canterbury/Westland (with 2 thirds of this expenditure in Canterbury) per event, with the total benefit to date of the event to the Canterbury/Westland economy being \$120 million over 26 years. The Speights Coast to Coast was awarded the NZ Tourism award for best event in 1990, and Canterbury Best Small Business in 2006. The event has experienced coverage in 120 countries, there have been 78 television documentaries regarding it, and 7 books published about the event, and every year, the event produces approximately 350 newspaper and magazine articles (R.Judkins, personal communication, October 2007).
- 2.75 The Brass Monkey Kayak Race, which is run by the Whitewater Canoe Club Inc (WWCC), comprises of a series of 5 races run in mid winter on the lower reaches of the Waimakariri River (from the area known as the Pylons to the take-out area just below the SH1 bridge). It has been an annual series for the last 20 years. In recent years it has attracted around 800 entrants annually across the five races. The event is used by many kayakers to form part of a programme of training for other kayak events throughout summer and to gauge progress against other competitors. For the competitive multisport paddler, it is a critical part of the build-up for multi-sport events, such as the Coast to Coast. In addition, it provides an ideal opportunity for novice kayakers to become involved in the sport (relatively easy, relatively safe, very close to Christchurch (enabling friends and family to easily support) and short in length). The mixed classes enable competitors to enter in sea kayaks etc, including double kayaks, which enable teenagers to accompany a parent – a great introduction to river paddling for future generations. The WWCC believe that the event is becoming increasingly nationally-focussed. You will hear from the WWCC during the course of this hearing, in more detail regarding the values they consider important for this recreational activity.
- 2.76 The commercial operator Waimak Alpine Jet has advised that its clientele are predominately from overseas and are increasingly seeking a remote and perceived wilderness setting. Over time it has been observed by this commercial operator that the clientele has changed. Originally, there was predominately pre-booked group tours as the customer base. As well these there are now more discerning, independent clients who expect nothing less than a “quality, untouched NZ experience.” This trend appears to be what the tourist in general is looking for. (W. Raymond, pers comm., April 2008).

3. FUTURE DEMAND FOR RECREATION AND NON-USE VALUES IN THE CPW SCHEME AREA

3.1 While existing recreational use is an important measure of recreation opportunities, it represents only part of the recreation picture. A recreation opportunity also includes the potential for future use – that is, an opportunity may exist but may not have been taken up as yet. It is therefore important to recognise that future-proofing aspect of recreation resource management.

3.2 From the literature review I have undertaken there is evidence that the Waimakariri and Rakaia River resources, in particular, do have a notable future recreation resource value.

Latent demand

3.3 Latent demand is an interest in undertaking recreation that is not realised. In the case of the recreation resources within the CPW Scheme area such as rivers, this involves recreation that has not occurred but where there is an interest in doing so. Latent demand can only be identified by off-site studies of the population, such as through a household survey which asks about people's recreational needs.

3.4 The latent demand for the Waimakariri and Rakaia rivers is generally unknown, although I do note that the proposed Waimakariri River Regional Park has the potential to generate interest in passive or active recreation in this area.

Future Demand and Recreational Use

3.5 Recreation opportunities for the future must be part of a full measurement of potential effects. The potential use of the recreation resource is an accepted dimension from which to measure recreational values. This is because the use of recreation resources is not static.²⁴

²⁴ Booth K.L (2006) Statement of evidence prepared for the Marlborough District Council hearing on the proposed Wairau Valley hydro-electric power scheme, page 13.

3.6 There is a great deal of recreation research identifying that water ways such as rivers, lakes, and beaches, are so popular for New Zealanders that it is suggested that this is a part of “New Zealanders’ sense of identity”.²⁵

3.7 Further, with regard to future demand and recreation use it is apparent that:

New Zealanders are water orientated, and water based recreation is likely to continue to grow in importance, especially coastal recreation, with lakes and rivers also fulfilling important recreation needs. Fishing may become a growth activity with New Zealand’s aging population base. Recreation management and planning needs to recognise the importance of water-based recreation and the need to provide a spectrum of opportunities for a diverse range of present and future users.²⁶

Non Use Values

3.8 Non use values have not been addressed by the applicant. Key informants spoken to constantly referred to the Waimakariri and Rakaia in terms of the ‘option value’ of the possibility of using the river resource in the future, and the ‘existence value’. That is, they were aware of the value the Canterbury region placed on knowing the river resource was there, even if people had no intention of using it; this existence value was attached to regional pride and identity, articulated as ‘rivers as playgrounds’ even if this was not directly representative as the numbers of visits to the rivers involved.

Summary

3.9 Any recreation assessment should consider the future and the values a population attaches to a recreation resource, even if they are not frequent users. A recreation resource is not only valued by how often or heavily it is used. For example, people value a park they know exists, but may have no plans to use it; they are comfortable in the knowledge that it is there for their children one day, and expect its presence in a condition as part of the overall make up of the community they reside in or may visit one day.

²⁵ Ibid. Page 14.

²⁶ Page 21, Allan, S and Booth, K (1992). River and Lake Recreation: Issues, Research Priorities and Annotated Bibliography

- 3.10 The proposed CPW Scheme does not address latent demand, potential future uses, and non-use values. In my opinion, these are major shortcomings in the assessment of effects of the CPW Scheme on recreational values.

4. THE EFFECTS OF THE CPW SCHEME ON RECREATION OPPORTUNITIES

- 4.1 In this section of my evidence I will discuss the likely effects of the proposed CPW Scheme on the key recreational activities within the command area and its periphery, based on primary and secondary research. In doing so, I have also relied on the advice of experts in terms of the optimum flow range for a range of recreation activities.

Angling

- 4.2 In addition to a postal survey conducted in October-November 2007 that I have mentioned earlier, interviews were held with five specialist anglers from both the Rakaia River and the Waimakariri River (see Appendix B to my evidence). At each interview, discussion was held around the current angling values of the chosen river, why the river is popular for angling, and also how the interviewee considers the proposed CPW Scheme to affect (whether positively or negatively) the nature of the river systems for their recreation activity. Key points taken from these interviews have been discussed in the following section of my evidence.
- 4.3 Other witnesses for Fish and Game describe in further detail what makes the Waimakariri and Rakaia Rivers in particular so important for angling (locally, regionally, nationally and internationally). I note Mr Hayes will also report on a number of surveys undertaken by Fish & Game to determine optimal conditions for angling.
- 4.4 As I have stated earlier, my evidence focuses more on the 'human', qualitative aspects of the fishery, including matters such as angling use and why anglers choose to recreate at the rivers in question (access, peace and quiet, appreciation of natural character). I do not address biological or ecological habitat-related issues, other than where users have related aspects or symptoms of these as potential barriers to their recreation.

- 4.5 There are a range of parameters that make for a good fishing experience. These parameters are crucially linked to the recreation experience as it occurs (whether fish are caught or not) but fundamentally lead to the frequency of angling that will be embarked on. This perception of the likely recreation experience is not only about the fish to be found; the settings around access and amenity are just as important as the direct angling experience itself and walking and picnicking that often accompanies this activity.
- 4.6 The recreation dimension for angling also includes anglers' activities through voluntary work, such as the Kowai, Hacketts Creek and Cabbage Tree Flat environmental restoration projects (John Hodgson, NZ Salmon Anglers Association, personal communication, October 2007). It is evident that the efforts undertaken to maintain/enhance spawning grounds is both an indicator of its value to the fishery, but also for recreation as a place where non-angling activity by anglers is considered to be an important recreation pastime (e.g., planting, debris/litter removal, the clearing of weeds, liaison with neighbouring landowners, ensuring spawning habitats are kept in optimum condition as a result). I note that the applicant has not taken the Kowai, Hacketts Creek and Cabbage Tree Flat area into account with respect to the recreation dimensions around the current spawning and fishery uses or recreation purposes or values attributed to it.
- 4.7 Another aspect of the primary research work was undertaken for this hearing to determine what is considered to be the importance of these rivers to "quality of life" for Christchurch residents. The importance of "freshes" for the river system to function naturally was a clear theme that emerged from these interviews. The anglers interviewed stated that freshes are beneficial in that they allow the river path to be redefined following long periods of deposition, and allow the migration events to take place for fish, among other benefits. This is expanded on in the evidence of various expert anglers for Fish and Game.
- 4.8 The following concerns were also raised by interviewees in relation to the proposed CPW Scheme:
- a. Is access going to be lost/ altered for fishermen?
 - b. Is the remote experience going to change significantly?

- 4.9 There appears to be a number of access routes whose future appears to be uncertain, should the CPW Scheme proceed. The key point I wish to make here is that because angling lies are not fixed, and may change from week to week depending on river behaviour, it is not appropriate to consider that the retention of *some* access points but not others 'will do'. All existing access is valued by anglers.
- 4.10 Mr Taylor in his evidence for CPW does not make specific mention of the salmon angling experience that is specific to the location of the proposed intakes on the Waimakariri. Again I consider this to be an important omission because it neglects the specific angling value of those areas, and the possible reasons why salmon anglers may often prefer to fish there.
- 4.11 Ian McCrory, a ranger giving evidence on behalf of Fish and Game, notes that anglers who frequent the Gorge and Woodstock areas attach 'great value' for the natural character of those environments. This is consistent with the evidence given by other expert anglers for Fish and Game.
- 4.12 Mr McCrory identifies a number of issues presented to angling should low flows arise as a result of the proposed CPW Scheme. Low flows and any reduction of freshes will be most notable if there is a reduction of fishable days. Natural floods on the Waimakariri and Rakaia rivers are an important part of a natural braided river and the most important thing they do is they guarantee an unimpeded safe passage for fish returning to spawn.

Kayaking

- 4.13 An interview was held with one specialist kayaker, and several short telephone/email conversations with other specialist kayakers. The information sought from these discussions has been drawn upon in the following section of my evidence. Evidence will also be given by a number of submitters, including NZRCA and others, later in this hearing regarding the potential effects of the CPW Scheme on this recreational activity.
- 4.14 The CPW Scheme appears to not fully address the recreation impacts of the activity of kayaking. For kayaking, often low flows are dangerous for exposing willow logs/roots where kayaks catch. Low flows also affect kayaking adversely; where the braids in the river stop then kayakers get out and then have to move on to another

braided. With lower flows this becomes more of an issue and less of an incentive to kayak.

- 4.15 Fish screens are also be potentially hazardous to the kayaker, with concerns expressed by interviewees of being sucked toward and in/against artificial structures which acts as a disincentive to kayaking, aside from the danger itself. Typically, these structures are accompanied by a proliferation of signage warning of the presence and hazards associated with such structures which are an active disincentive for even confident and skilled kayakers. Kayakers report the signs heighten anxiety that may even cause misadventure. The introduction of artificial structures and/or a number of unnatural management aids such a signs removes the present natural/wilderness setting and feeling of remoteness which is valued by the code. Survey responses from kayakers noted that “the natural un-tampered setting is very important for the overall experience”.
- 4.16 There are numerous ‘put in points’ further up the Rakaia River, such as the Coleridge hydro station. Although the usual ‘take out’ area is below the Rakaia Gorge bridge, beyond this kayakers would be potentially be using areas that would be affected by the proposed CPW Scheme. Under the proposed CPW Scheme, continued use of the access points at Steeles Road and Sleemans Road are also in question.
- 4.17 In terms of the Waimakariri River, the greater area for conflict and safety risk as a result of the CPW Scheme appears to be the Upper Waimakariri Intake and diversion channel. Kayakers have expressed concerns that natural flows at the Upper Waimakariri Intake will lead users toward the intake screens unless they are able to power away from it or in the case of mishap, will end up against the screens. Kayaks, like jet boats, are not designed to be stable alongside a static object in water flows and will roll over, with the pressure of water flow trying to keep them there. Escape from the kayak does not necessarily mean escape from the screen or the water pressure keeping the person trapped against the screen, or the water circulation around the static object will not necessarily flush a person to any safety.
- 4.18 An area of potential conflict and safety risk also exists at the diversion channel below the Upper Waimakariri Intake. This area is proposed to be changed from a braided river system to a single diversion channel which will be managed to remain this way and not to revert to braids. The users of this area including kayakers, together with jet boats, and a commercial jet boat operation located there, will all have to pass

through an area of narrower, faster moving water in close proximity to each other shortly after the tight corner where the Upper Waimakariri Intake is located. A form of 'pinch point' for a variety of users would occur. All these codes will also seek to continue to use the river when it is variable and often will seek out the changes at that location that come with freshes and the changing dynamics of flows.

- 4.19 Kayakers state that there are very low flows at times now, and at times would present a 'wet rocks' situation. Kayakers also seek out high flow conditions and the presence of structures, screens, and siphons in the river during these conditions is also considered by interviewees to be a potential hazard.
- 4.20 Recreationalists have also expressed concerns that the presence of earthmoving equipment (and the artificial diversion channel and the Upper Waimakariri Intake structures) may also remove the wilderness and remote settings for recreation at this location. This affects recreation users which also includes overseas and domestic tourists participating in events, using commercial tourist operators, or as active kayakers.
- 4.21 The popularity of kayaking is linked by kayak users to areas of natural landscapes that can be accessed and be a part of that recreation experience. While users are prepared to travel to use suitable recreational resources, it is felt by the kayakers I have spoken with that the flow variability and recreation setting currently available in proximity to Christchurch should not be affected further. These components are identified by kayakers as part of the identity and "way of life" for people living in the region and visitors to the area. Kayakers often travel considerable distances to kayak on these rivers, and I refer to the submission from the Wellington kayaking club in this respect.
- 4.22 Worldwide the pressure on natural white water rivers is an issue for the code, with some countries having to construct artificial facilities at great cost to attempt to compensate environments that are being lost. The infrastructural replacement cost for natural rivers with artificial venues offering a replicated experience is very high. Furthermore, placing a value on natural river assets where they exist can be expressed a number of ways, although I note that this is an area of emerging evidence.

Jet boating

- 4.23 As I have mentioned, the Waimakariri and Rakaia braided rivers are nationally significant for their jet boating opportunities.
- 4.24 Primary research has indicated that there are a number of concerns with the effects of the CPW Scheme on this recreational activity.
- 4.25 In low flow conditions where one or two channels are currently available, there is high competition for water, which can often get frustrating and diminishes the experience for river users. Jetboaters have expressed concerns that the CPW Scheme will create a 'pinch point' and an area of potential conflict with other users and the commercial operator which currently does not exist at the Upper Waimakariri Intake diversion channel location.
- 4.26 The Upper Waimakariri Intake is considered by interviewees to present a potentially significant hazard to jetboaters. This is where natural flows at the Upper Waimakariri Intake could lead a stalled jet boat toward the intake screens unless it is able to power away from it or in the case of mishap, the craft and the people from it will end up against the screens. Interviewees advise that jet boats are not designed to be stable alongside a static object in water flows and will roll over, and could potentially sink if rolled over/flipped in 2 seconds. Escape from the jet boat does not necessarily mean escape from the screen or the water pressure keeping the person trapped against the screen, or the water circulation around the static object will not necessarily flush a person to any safety.
- 4.27 Turbidity is also a concern to jet boaters, as dirty brown water detracts from visual experience and also makes it difficult to see what is going on in the river. While the Waimakariri is not usually a difficult river to navigate, interviewees have expressed concerns that the CPW Scheme will increase overall turbidity, and the frequency of it, within the river.
- 4.28 Jet Boating New Zealand representatives have expressed the view that the Waianiwiwa reservoir will have no value to jet boaters. The CPW Scheme does not evidence the need, access, management, or hazard issues associated with the Waianiwiwa reservoir. In any event, there are a number of existing lakes within the local area that already provide a valued resource for this recreational activity.

Whitebaiting

- 4.29 As I mention earlier in my evidence, an interview was held with an experienced whitebaiter and her family on the Waimakariri River. Information from this interview has been drawn upon in the following section of my evidence.
- 4.30 Whitebaiters have expressed concerns that the remaining water that sustains their fishery will be lost with any further irrigation takes, and anecdotally cite annually decreasing takes, as opposed to 'good years and bad years'. Long time and intergeneration whitebaiters give the example that once there were 'good years and bad years', but 'now there is simply a decreasing availability of the fish'.
- 4.31 Some whitebaiters keep previous interview records or newspaper clippings of records of 'good years and bad years'. While this anecdotal information provides important trends based data, it requires the kind of additional rigour that is hard to gain from a pastime where whitebaiters are often reluctant to share with fellow whitebaiters the success of their catches; let alone with any form of authority or as a self managed database resource amongst themselves.
- 4.32 Nonetheless, it is apparent from primary research that whitebaiters, particularly at the mouth of the Waimakariri River, have concerns about the ever decreasing water levels in the area and with particular regard to the CPW Scheme proposal.
- 4.33 Whitebaiters from the Canterbury area advise of the need for regular flows of water down stream, with their activity predominately a lower river and river mouth activity of the Waimakariri River, and to a lesser extent the Rakaia River. The Sintes family identified that water flow is critical for the family to undertake their sports, as is water colour.
- 4.34 Whitebaiters interviewed as part of primary research advise that less freshes and less variable flows will affect their recreation pastime as whitebaiting is always worse in these conditions, and vocalise an anecdotal perspective that their fishery is facing cessation at the Waimakariri River should the CPW Scheme be approved.
- 4.35 The area in the Waimakariri River which is sought after for whitebaiting also sees fishing occur, extending to catches of Eels, Flounder, Herring, Kawai. It is believed

by whitebaiters who undertake this fishing that these fish species have also diminished, due to the 'health' of the river. They draw a linkage to an ongoing removal of water and less freshes from the Waimakariri River.

- 4.36 Interviewees have also confirmed that any loss of access to the river will be crucial to whitebaiters, as they need to transport heavy equipment to the river braids in vehicles (the equipment being too heavy to walk across with). However it is difficult to see how the scheme could directly impact on access to the lower river.
- 4.37 The primary and secondary research I have undertaken indicates that the Waimakariri River is considered by whitebaiters to be the location synonymous with whitebaiting in New Zealand and is regarded as the national 'Headquarters' for whitebaiting. They believe that this pastime of national identity is under threat based on their understanding of the river's performance should the CPW Scheme proceed.

Hunting

- 4.38 Lower river flows is considered by recreationalists to also affect the hunting of wild fowl, as indicated in the evidence of other witnesses for Fish and Game. Concerns have been expressed that prolonged periods of low flow may result in potential reduction of bird habitat, increased predation and reduced hunting opportunities.

Shooting

- 4.39 As I mention earlier in my evidence, there are two rifle ranges in the Waianiwaniwa Valley area, with active clubs involved. Both rifle range areas face removal if the proposed CPW Scheme is approved.
- 4.40 I understand at the time I prepared my evidence, the Applicant had recently been in discussions with the shooting clubs (excluding the deerstalkers club) about a general proposal to relocate the rifle ranges, but there is currently no guarantee that all their needs would be catered for should the CPW scheme proceed²⁷. I was advised by interviewees that the assurances given thus far do not address the funding to complete the series of compliance requirements to achieve a new site, or what will be done for the clubs should this is not be successful. Typically the costs and

²⁷ Geoff Smith, pers. comm, April 2008; Rosalie Snoyink pers. comm, April 2008

requirements of resource consent and range certification processes to secure approval for a 'big bore' site are significant, if not prohibitive for clubs such as this. Also, while plenty of land sites could be deemed suitable, typically these are not assisted by district plan rules and despite the suitability of any site usually face immediate and sustained opposition from neighbours.

Picnicking, camping, and passive recreation

- 4.41 The main issues emerging from primary research include a concern around the potential loss of amenity settings, which is considered to be very important for picnickers and campers, and safety problems when in proximity to earthworks, machinery present in the area or works in the river beds to maintain diversion channels.
- 4.42 Interviewees have expressed concerns that natural settings for remote/wilderness settings will be lost as a result of the CPW Scheme, and visual elements proposed to be introduced into natural settings such as structures in rivers would not be able to be mitigated for where they were not present before. In particular, the diversion channel below the Upper Waimakariri intake and the Rakaia diversion channel structures and associated maintenance machinery would introduce elements where they were not present before. These are all issues of concerns expressed by passive recreationalists interviewed as part of the primary research that supports my evidence.
- 4.43 As I have mentioned earlier, it appears that there will be the loss of at least one (and possibly two) important and well used vehicle and pedestrian access to the Rakaia River that currently provides an access for picnicking and camping. The Northern Rakaia area of the proposed CPW Scheme affects an existing and well used official "Anglers' Access" to the Rakaia River at Steeles Road. It may also affect the important Sleeman's Road access point. As Mr Dirk Barr outlines in his evidence on behalf of Fish and Game, this area is also used for camping as part of the angling experience. The application documentation failed to identify the activities associated with such accessways. There is also insufficient detail in the application to determine the extent to which other popular public/angler access points (such as Courtenay-Old West Coast Road) will be affected by this proposal.

Swimming

- 4.44 The main issues emerging from primary research with regard to the swimming experience include:
- a. Safety issues around fish screens, intake points, canals and the reservoir, and
 - b. Loss of amenity/natural environment.
- 4.45 Event holders also advise that multiple rescues are performed during events, and that competitors tend to train on the rivers they will compete on; therefore it is regarded that there are people present in the water in both a planned and unplanned way (R. Judkins, personal communication, October 2007).
- 4.46 The CPW Scheme will add a range of unnatural features for people in the water to contend with. Interviewees have expressed concerns that the CPW Scheme will also introduce potential hazards where previously these did not exist, including concentrated and engineered efficient flows (which also includes the canals and dam entry areas) screens, siphons, and surrounding features.
- 4.47 A proliferation of signage warning of the presence and hazards associated with such structures (should someone enter the water) may be a fear based disincentive for people to even enter the areas for any types of recreation. As noted above, the future of an important and well used vehicle and pedestrian access to the Rakaia River at Steeles Road that does provide for swimming has been called into question as a result of this proposal.
- 4.48 As Waimakariri River users, whitebaiters also advise that in the past swimming holes were dug out for people to swim 'however they can't do that now due to the water levels that now exist mean you now can't safely dive into the river'.

Recreational tourism

- 4.49 Interviews were held with two adventure sport and tourism operators and information gathered from these interviews have been included in the following section of my evidence.

- 4.50 Interviewees expressed concerns that the CPW Scheme would introduce features to the local environment which cannot be mitigated and which may detract from the remote/wilderness settings the events are located in and remarketed on the basis of.
- 4.51 The directors of Waimak Alpine Jet were interviewed as part of the primary research that supports my evidence. The operator advises that this commercial operation would not be successful without the pristine environment in which it operates. The launching site for this recreation tourism business is located in the vicinity of the Upper Waimakariri Intake. The operator considers the presence of any artificial structures, no guarantee of a “pristine environment”, a river resource with control measures not currently present, and potential cessation of business during the construction phase would spell the end of his business (W. Raymond, personal communication, April 2008.)
- 4.52 In terms of recreation based events, the main issues identified by interviewees are:
- a. Speights Coast to Coast - Safety of the kayaker, both during event and year round for training;
 - b. Speights Coast to Coast - Pristine environment lost for competitors and spectators;
 - c. Brass Monkey - Kayaker safety and amenity impact.
- 4.53 The event’s kayaking stage will have to pass various critical elements of the proposed CPW Scheme including the Upper Waimakariri Intake, the Diversion Channel, and the Lower Waimakariri Intake. Key features of the intake area exist at the end of the kayaking stage for the Speights Coast to Coast. This is when kayakers are most fatigued. Kayakers train year round for the event on this stretch and area of the river. Concerns have been expressed that these structures and modified river patterns proposed by the CPW Scheme within the Speights Coast to Coast course may present hazards in the event area to kayakers and event supervision/officiating jet boats, as well as to practicing kayakers operating outside of a facilitated and supervised event.
- 4.54 Interviewees also expressed concerns that the ability to promote wilderness and remote themes by these events would be hindered by the CPW Scheme proposal to a point that the future of the Speights Coast to Coast event could be under threat. You will hear more from Mr Robin Judkins later in the hearing regarding this iconic

event and other recreation based events that are, by necessity, based in the Waimakariri River and which may potentially be affected by the proposed CPW Scheme.

5. CRITIQUE OF THE APPLICANT'S RECREATION ASSESSMENT

- 5.1 As no detailed expert recreational evidence had been put forward by the applicant during the course of this hearing at the time I prepared my evidence in April 2008, other than the generic sociological evidence from Mr Nick Taylor (February 2008), I have focused my assessment on the Social Impact Assessment and report by Kingett Mitchell (2006) that accompanied the assessment of effects.
- 5.2 Overall the data used in the assessment of effects is insufficient to show consideration of recreation in a meaningful way. Put simply, the assessment of effects does not deal with the recreation implications of the proposed CPW Scheme. The data used does not inform the potential effects stated for recreation.
- 5.3 Kingett Mitchell (2006) included a brief specific section termed "Recreational Values", as part of a wider body of work²⁸ for the applicant. Their brevity on recreation is not helpful to their assessment of effects and could not in my opinion fully inform their conclusions. Their approach is noted as selective, especially given only one 4 year old document²⁹ appears to dominate the reliance for informing the Kingett Mitchell work. There a great deal more data of a specific and more recent nature that also is readily available, but does not appear to have been considered by the applicant.
- 5.4 The Kingett Mitchell (2006) report acknowledges the desk top nature of the work and that "*no dedicated fieldwork has been done to verify the values on the ground.*"³⁰ There is a substantive body of work that the assessment has not used, including data that is specific to the areas affected by the proposed CPW Scheme. Accordingly, the applicant has not been able to make factual statements on the degree of effects based on the work that has been sourced.

²⁸ Kingett Mitchell Limited. (September 2006). Central Plains Water Enhancement Scheme: Effects of Construction, Damming, Diversion and Water Use on Fish and Recreation. Christchurch, New Zealand, page 51.

²⁹ Daly, A. (2004) Inventory of Recreational Values of the Rivers and Lakes in Canterbury New Zealand, Environment Canterbury, April 2004

³⁰ Kingett Mitchell (2006), page 67.

- 5.5 The assessment of effects only speaks to the lower sections of the Waimakariri or Rakaia Rivers when referring to the recreational resources of those rivers. The recreation settings and the recreation pastimes in the upper sections of these rivers are of national significance to recreation, but this is not mentioned.
- 5.6 Notwithstanding the fact that there are no recreational references to the upper rivers in the assessment of effects, conclusions are nonetheless drawn that the effects will be “localised and minor”³¹. There is nothing to substantiate this, other than an informal concern, and without revealing designs for those structures proposed to be introduced into the river, that a safety hazard will be introduced as a result of construction of the proposed CPW Scheme.
- 5.7 In my opinion, the effects are neither localised nor minor.
- 5.8 The recreation activities listed in Kingett Mitchell (2006) also do not take into account swimmers. People who get themselves into difficulty swimming do so unintentionally, and the structures and modifications proposed within the river may exacerbate the situation where someone in difficulty has other factors present compounding to reduce their chances of survival. Kayakers point out that they can quickly become unintentional swimmers, and nearly always at the worst possible time; it is often how and why fatalities occur. The presence of intake structures and screens have the potential to reduce the chances of survival for an already desperate swimmer.
- 5.9 The potential effects on recreation for the Waianiwaniwa Valley and surrounding areas are more likely to relate to clubs and opportunities and recreation opportunities, than the informal pastimes listed in the Kingett Mitchell report. As I mention earlier in my evidence, clubs with buildings, including a shooting range and safety zones, e.g., the Darfield Gun Club, Miniature Gun Club, Malvern Rifle Club, and the Malvern Branch of New Zealand Deerstalkers Association are activities facing removal as a result of this proposal. With their viability unknown, it is also unknown if the proposed CPW Scheme means the end for those sports clubs' structures. This is particularly relevant for the large bore rifle shooting ranges, as their safety zones are large expanses with specific needs that finding new unencumbered sites can be fraught with difficulty.

³¹ Ibid, section 7.2.3.

- 5.10 The applicant's assessment does not fully take into account the impact on recreation during construction works. Specifically for the Waianiwaniwa reservoir area, the impact on recreation is simply dismissed as 'not applicable'³², notwithstanding that their information source quoted identifies there are multiple recreation activities happening in the area, e.g., horse riding, hunting & horse trekking, trail bike riding, mountain biking, cycling, walking and four wheel drive activity. The Canterbury Car Club organises an annual rally through the Waianiwaniwa Valley.
- 5.11 The assessment of constructive effects on recreational values is limited and, in my opinion, not representative of what is going on at the locations where the most disruption will occur. This is because the applicant fails to recognise the recreation pastimes occurring there, by simply acknowledging that in an ecological sense the applicant will "avoid works in waterways during the spawning period"³³ and "minimise time and works within the water". It remains unclear from the application documentation how recreation values will be protected. For example, the nature of works in progress may still preclude recreation in the area where the health and safety plans by contractors, as for any construction site, effectively closes public access while stages of work are in progress or in various states of completion.
- 5.12 The Waianiwaniwa Valley proposed dam has been highlighted by the applicant for its possible lake values that may contribute to associated recreation activities. I note that lake related activities can also currently be undertaken on other natural lakes within relatively close proximity to the proposed reservoir. According to Daly (2004)³⁴ Lake Coleridge contains "high recreational value" for diving, boating and salmon angling; Lakes Catherine, Evelyn, Selfe, Lilian Ida and Marymere have "high recreation value" for trout angling; and Lakes Lyndon and Pearson contains "high values" for waterskiing, picnicking and trout angling.³⁵ Lakes Grasmere, Sarah and Hawdon also support high recreational values. It is arguable whether the proposed dam will provide recreation benefits that are more suitable than the existing resources available.

³² Ibid, page 90.

³³ Ibid, page 89.

³⁴ Daly, A. (2004) Inventory of Recreational Values of the Rivers and Lakes in Canterbury New Zealand, Environment Canterbury, April 2004.

³⁵ National Angler Survey figures for the 1994/95 and 2001/02 seasons for lakes mentioned in this paragraph are as follows: Lake Coleridge (7010 and 9210 angler days respectively); Catherine (620 and 250); Evelyn (0 and 50); Selfe (600 and 980); Lilian (0 and 30); Ida (510 and 740); Marymere (0 and 340); Lyndon (3290 and 1970); Pearson (1750 and 2290); Grasmere (820 and 440); Sarah (560 and 270); and Hawdon (180 and 380).

- 5.13 The "creation of some limited recreation activities"³⁶ in the Waianiwaniwa valley as a possible benefit is questionable. In particular, I note that there is little public land where these would be undertaken. As the Waianiwaniwa reservoir would still have the same private land surrounding it, I query whether public access would eventuate. This is due to a range of factors including the strength of feeling within the farming community and farming sector statements around public access across private land, submissions to the proposed CPW Scheme opposing public access across farmland in private ownership and safety issues keeping people away from the reservoir features. In my opinion, the artificially created recreational activities are unlikely to be accessible or attractive to potential users in an unfettered way to provide an enjoyable recreation experience.
- 5.14 It is also unclear what specific mitigation or benefits are to be secured as conditions of consent. For example, no commitment to the capital cost of infrastructure has been made to enable boat launching to occur. As such, the recreation opportunity does not exist in a reservoir subject to fluctuating levels with an earth edge. It appears the capital cost associated with this will be someone else's role as far as the applicant is concerned. Key informant interviews and surveys that my team and I have undertaken indicate that the applicant's promotion of alleged recreation benefits has led the majority of the people surveyed to believe that this infrastructure for recreation will be created by the CPW Scheme. However, this is far from clear. While the CPW scheme appears to have achieved a now widely held perception that all of this leisure infrastructure and its enabling operation will be simply occurring, there is no evidence of this.
- 5.15 The canals and water races have been identified by the proposed scheme for possible water way recreation values. As I have mentioned earlier in my evidence, there are a number of public access and safety issues that may limit the recreational values of these artificial water bodies. These elements, combined with the typical setting created by engineered structures in a productive farmland environment, suggest that the proposed canals and water races will not offer desirable settings to be sought out by people looking for a recreation experience.
- 5.16 The recreation opportunities proposed by the applicant are not based on extensive fieldwork or baseline data, nor are they responding to any need that is evidenced in

³⁶ Ibid, page 90

the application. The suggestion of possible recreation use is posed diminutively in the application and is in effect an option which somebody else would have to pursue. In reality the opportunities may still not exist, given the public access matters and the purpose of these waterways.

- 5.17 The creation of angling opportunities within the canals³⁷ (and other artificial structures carrying water) could be a positive effect if the setting actually permits it to occur. However, if designed as a viable fishery, a number of public access and design issues would need to be known first. As far as anglers are concerned, this is in any event less important than the setting itself. A point frequently made by anglers is that their recreation is also driven by a number of other imperatives, which lead to them to their decision to fish just as much or if not more than the fishing conditions themselves. Anglers cite the setting, that is 'remote' or perceived 'wilderness', where the surrounds and ability to partake in an enjoyable nature walk or picnic, is part the experience sought; if these settings are not present they will prefer to fish somewhere else.
- 5.18 "Publishing the opportunities and access"³⁸ may well remove barriers to recreation, but if the setting is not suitable or as attractive then no amount of promotion will sell a lesser recreation experience. Anglers also make the point that the logic of affecting a good fishery now to create another, artificial fishery with the same resource does not necessarily add another fishery but simply diminishes the existing natural one. I also understand that it is Fish and Game's policy not to stock waterways that are not publicly accessible.
- 5.19 I agree with the applicant's assessment of the potential effects of faecal contamination from stock³⁹ on recreational values. Contamination of waterways is likely to discourage recreation, even if mitigated. While fencing would probably be seen as a positive measure if it effectively excludes stock, it is important to ensure such fencing does not preclude access. No design nor riparian zone statement is provided that might accommodate public access.

³⁷ Ibid, page 91.

³⁸ Ibid.

³⁹ Ibid, page 92.

- 5.20 The impacts on the recreation setting due to farming intensification has the potential in my opinion to reduce the enjoyment of recreation activities. The dominance of farming changes to the landscape may have an impact on the recreation settings in the CPW Scheme area if it is to be accessible to the public.
- 5.21 The proposed CPW Scheme and assessment of effects fails to mention a number of well used and valued accessways and entry points to recreational areas. While the applicant has stated that public access will be protected, only certain areas have been identified, e.g. near the Waimakariri Gorge bridge. For example, various access points along Old West Coast Road (key ones including Cooks, Courtenay and Intake Roads) are used extensively by walkers, anglers and passive recreationalists. At Courtenay Road, for example, it appears that a canal travels down the road and into the paddock which is used for angler access. The Steeles Road angler access point to the Rakaia appears to be completely lost to traditional vehicle access, as a way to transport kayaks to the river and for general recreation access. The Sleemans Road access point may be similarly affected. There is no certainty that these and other accesses will be protected.
- 5.22 At the time I prepared my evidence, no evidence had been provided by the applicant with regard to the recreation needs of various user groups. The applicant appears to have overlooked the variable flow conditions needed by a wide range of recreational users. Recreation users my team and I interviewed and surveyed during the course of 2007 and 2008 were unaware of any similar work undertaken by the applicant within their recreation sector groups, memberships or networks to seek data to understand the issues created by the CPW Scheme.
- 5.23 This is of concern because, without the baseline data concerning flow requirements for recreation users (including events and commercial operators), the recreational impacts of the CPW Scheme could not in my opinion have been properly assessed by the applicant. I do not consider it appropriate for such a significant issue to be relegated to a 'management plan'. Reducing recreation use opportunity into compressed regimes is typically fraught with problems.
- 5.24 No specific concepts or designs for any proposed recreation assets as part of the CPW proposal have been made available. Nor is there any evidence of the management or ongoing cost implications for proposed new assets. In my experience, operational matters can quickly become complete 'barriers' to existing

and further activities, e.g., the need for some areas to be prohibited due to safety, the need for specific site regulations/specialised site access or resolving public access issues with the farming community that are traditionally not a sector to welcome public access.

5.25 The assessment work for the CPW scheme also fails to identify the number of potentially affected parks and recreation land parcels, including parks considered as the 'heart' of communities. The applicant has not had regard to recreation data regarding community assets involved within the Scheme's command area. I have undertaken desk top research involving Selwyn District Council (SDC) GIS data and land title information to establish a preliminary search to ascertain the extent of what is affected. Also, within the SDC Proposed District Plan there are a number of significant sites identified for recreation as well as other amenity, historical and cultural purposes. Although the application documentation lists affected land parcels, designations, heritage sites and cultural sites involving most of these areas, no cross checking has been made by the authors of that assessment to accurately state the potential effects

5.26 An example of where the CPW scheme is silent on potential adverse effects to recreation for parks is thought to exist at Colgate Reserve. The impact of a buffer/safety zone potentially and to what degree into Colgate Reserve from headrace and canal associated structures by the proposed scheme requires clarification. (Rosalie Snoyink, Pers. Comm., April 2008)

6. CONCLUSION

6.1 The surrounding natural environment is very important to recreational users. Disruption and changes to landscape have the potential to have a significant impact on recreational values. Registered recreational users cite the recreation experience they undertake on the Waimakariri and Rakaia Rivers in particular as a part of their 'way of life' and for kayaking, this 'way of life'. The Waimakariri and Rakaia Rivers are nationally significant to recreation. They are revered as open space recreation areas by specific user groups and the wider populace.

6.2 A number of barriers to recreation will potentially be created by the CPW Scheme. There may be limitations on codes such as kayaking and jet boating. There is also

likely to be a decline in general recreation settings that will be lost and which cannot be mitigated for, including the loss of key access points and angling locations.

- 6.3 Any loss of variable conditions for river flows is of serious concern to users and has the potential to have an adverse impact on recreation in a number of ways. It would have an adverse effect on the performance of the fishery, jet boating activity and kayaking, all of which rely on variable flows for their sport.
- 6.4 The potential recreation uses and possible opportunities proposed by the applicant are not evidenced by recreation/sport needs assessments. Without work being available to substantiate the alleged recreation benefits and proposed recreation opportunities that are proposed as part of the CPW Scheme for the headraces, canals and the Waianiwaniwa dam areas, no evidence exists to verify these visions.
- 6.5 It is inappropriate in my opinion to rely on management plans to attempt to resolve matters after any consents may be granted. This is relegating current users to 'fit in' with the operation of controlled rivers and use conditions as determined by the proposed CPW Scheme's needs after consents are granted. The inequity of placing recreation users in this position infers a greater decision has been made on the role of a river or recreation resource to people; and that they are secondary to it.
- 6.6 A further outcome of management plans occurring after consents are granted will be to impose a further 'resource race' onto current users for only the balance of a resource available, the conditions of which decided before the management plan process even commences. The 'fair and reasonable' dimension such a management plan process requires, post consent approval, typically relies on an eventual consensus approach where winners and losers within the recreation users are created.
- 6.7 Post consent management plans do not deal with the future requirements of the recreation resource and, in effect, set limits for future generations. This would ignore a future even for current communities, where recreation is a people orientated, variable behaviour where restrictions are in opposition to seeking a recreation experience itself.
- 6.8 In my opinion, the overall recreation amenity impact has been poorly assessed by the applicant. The adverse effects are neither local nor minor, as stated in the

application documentation. Mr Taylor has acknowledged in his evidence some recreational users are significantly affected, but states that there is some 'opportunity' for mitigation. However, there is insufficient evidence to confirm whether the mitigation measures or potential recreational benefits of the proposal will in fact be realised.

- 6.9 In my opinion, the adverse impact on overall recreation amenity will be significant. The implementation of the CPW Scheme is likely to result in a decline in the recreation resource overall, both within and beyond the proposed scheme area.

G Canham

May 2008

APPENDIX A**References: Bibliography**

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