

## Part I            Process

### The application

1. The application was filed on 23 December 1999, by the New Zealand Fish and Game Council and the Central South Island Fish and Game Council (the applicant).
2. The application was made in respect of the Rangitata River and its tributaries together with shallow groundwater reserves within 15 metres from the surface and less than 1000 metres from the main river downstream from Arundel Bridge.
3. The reasons given for the application were as follows:
  - A nationally important and outstanding sports fish resource
  - Habitat for native fish
  - Recreational use including: rafting, canoeing, kayaking, jetboating, whitebaiting, floundering, picnicking and sightseeing
  - Native bird habitat
  - High level of accessibility
4. Natural features supporting these values were stated as:
  - Water temperature coupled with the incidence of fresh flows
  - Frequency and duration of fresh flows
  - Sufficient flow to ensure the mouth stays open
  - Sufficient flow to provide adequate fish passage
  - No dams
  - Pristine water quality
5. The application noted that the Rangitata River has special importance for Ngāi Tahu, recognised by the Crown in the Ngāi Tahu Deed of Settlement and the Ngāi Tahu Claims Settlement Act 1998. The application appended a letter (dated 22 December 1999) in support of the water conservation order from Te Rūnanga O Ngāi Tahu to the New Zealand Fish and Game Council.
6. The key provisions that the applicant sought in a water conservation order were:
  - Restriction on damming of water (not applying to existing rock weirs and river works to the same level and extent as occurring as at 1 January 2000, nor to work necessary for flood and asset protection)
  - Restriction on alterations of river flow and form, specifically no change to the channel cross section, meandering pattern and braided river channel characteristics of the river
  - Restriction on the diversion or taking of water contrary to the following:
    - o Total abstraction limited to 33 m<sup>3</sup>/s
    - o 1 September - 30 April a minimum flow of 20 m<sup>3</sup>/s and a ratio of 1:1 sharing instream and out-of-stream when flows are between 40 and 66 m<sup>3</sup>/s as measured at Klondyke. Flow in excess of 66 m<sup>3</sup>/s to remain instream

- o For the period 1 May – 1 August the minimum flow to be 15 m<sup>3</sup>/s and a ratio of 1:1 sharing instream and out-of-stream when flows are between 30 and 66 m<sup>3</sup>/s. Flow in excess of 66 m<sup>3</sup>/s to remain instream
- No alteration of water quality existing at 1 January 2000
- Maintenance of fish passage
- Prevention or minimisation of fish entering an intake to the satisfaction of the applicant

## **Water conservation order legislation**

7. Part IX of the Resource Management Act 1991 (RMA) sets out the purpose and meaning of water conservation orders and defines the mechanisms for an application and its processing.
8. In summary these are:
 

S199	Purpose of water conservation orders
S200	Meaning of “water conservation order”
S201	Application
S202	Minister’s obligations upon receipt of an application
S203	Special tribunal
S204	Notification
S205	Submissions
S206	Conduct of hearing
S207	Matters to be considered
S208	Special tribunal to report on application
S209-213	Environment Court process
S214	Making of a water conservation order
S215	Minister’s obligation to state reasons
S216	Revocation or variation of order
S217	Effect of water conservation order
9. We note that this is the first order to be initiated and considered solely under Part IX RMA, rather than previous legislation Water and Soil Conservation Act 1967 (W&S Act), although some applications begun under the W&S Act were completed under the RMA.

## **Accepting the application**

10. The application was sent to the Minister for the Environment with payment of the prescribed fee. The Minister acknowledged receipt of the application on 12 January 2000, and did not seek further information on the application (S201).
11. Section 202 obliges the Minister, as soon as practicable, to either appoint a special tribunal to hear and report on the application, or to reject the application supplying reasons for the rejection. Rejection of an application requires sound and relevant grounds to justify that decision. There were no grounds for rejection of the application.

## **Tribunal appointment process**

12. Tribunal appointments, which must be approved by the Appointments and Honours Committee of Cabinet, were made after wide consultation. Consultees included heads of Government Departments, Members of Parliament in the area local to the Rangitata River, as well as the Ministers of Conservation and Maori Affairs, as specified in section 202.
13. On 10 October 2000 the Minister for the Environment appointed the three person special tribunal to hear and report on the application for a water conservation order on the Rangitata River. She appointed Dr Jonet Ward to chair the special tribunal, and Claire Mulcock and Dr Murray Parsons as members.

### ***Role of the special tribunal***

14. The role of the special tribunal is to make a recommendation, not a decision. The recommendation is to the Minister for the Environment, who is the final decision-maker under section 214 or 215 RMA (positive or negative recommendation to the Governor-General that an order be made).
15. The tribunal is required to either prepare a draft water conservation order or to recommend that the application be declined. In either case it must give the reasons for its conclusion (s20A).

## **Notification**

16. In accordance with sections 205(7) and 37 of the RMA, the special tribunal publicly notified the application on 9 December 2000 with a closing date for submissions of 28 February 2001. The period selected contained 39 working days as, under section 2, the dates 20 December to 15 January and Waitangi Day are not counted as working days. A submission period longer than the 20 day minimum was chosen to allow potential submitters adequate time over the summer holiday break without causing undue delay.
17. As per the requirements of section 204, a public notice appeared in the New Zealand Herald, The Dominion, The Press, The Otago Daily Times, the Southland Times and Timaru Herald. Notice was served on the applicant, Environment Canterbury, the Timaru and Ashburton District Councils and Te Rūnanga O Ngāi Tahu.
18. Any person may make a submission to the application. Any person who supports the order but who would prefer preservation of a different but related water body in the same catchment, or that different features or qualities of the water body be preserved can include that in their submission along with reasons and suggested provisions. Any person who opposes the order should specify the reasons why the order is not justified.

19. Although the special tribunal may request further information from any submitter, no such requests were made.

## Submissions

20. The application attracted more than 1,100 submissions. The list of submitters is attached in Appendix 2. Despite pressure from the media to come up with the figures of submissions in support and in opposition to the application, these were never provided. The special tribunal deemed this irrelevant being firmly of the view that it is neither a vote, nor a numbers game. Further, it would be difficult to reach a final figure as some submitters neither supported nor opposed the application. Still others wrote clearly in support of an order but stated that they opposed it, and vice versa. Many of the submissions in support of an order were one page submissions on a form widely circulated amongst potential supporters.
21. The majority of submissions were made by people living locally or in the region with others from elsewhere in New Zealand or overseas. Submissions also came from people who had visited New Zealand as tourists.
22. Summary of submitter location

(note: numbers may not be exact)

Town/District	Support	Oppose	Other	Total
<i>Near Rangitata</i>				
Rakaia	7	1		8
Ashburton / Tinwald	177	85		262
Geraldine / Fairlie	84	26	1	111
Mayfield / Methven	9	0		9
Temuka & environs	62	24		86
Timaru & environs	156	17		173
Waimate	10	0		10
Upper Waitaki	5	1		6
Oamaru	10	1		11
<i>Other South Island</i>				
Nelson/Marlborough	21	0		21
West Coast	4	0		4
North Canterbury	27	1		28
Christchurch & environs	234	9	1	244
Central Otago	6	1		7
Dunedin & environs	24	1		25
Southland	13	0		13
<i>The Rest</i>				
North Island	57	5		62
Overseas	11	0		11
Other (address not given)	8	1	1	10

23. Submitters encompassed a wide range of backgrounds, ages, affiliations etc. They included:
- Individuals, families and organisations.

- Males and Females
- Old and young
- Instream interests and out of stream interests
- Local residents and overseas people
- Green groups, farming groups, recreational groups
- Government departments, iwi groups, industry groups

### ***Availability of submissions***

24. Submissions were made available for viewing at the offices of:
  - Ashburton District Council
  - Timaru District Council
  - Ministry for the Environment (Christchurch, Wellington and Auckland offices)
  - Christchurch Central Library (Aotearoa New Zealand section)
25. A full set of submissions could be bought at a cost of \$80 plus postage. A key point summary of submissions was made available in May 2001 at a cost of \$30.
26. As many submissions were hand-written, and all were submitted in hard copy it was not practical to make submissions available on the internet. The summary of submissions was provided on the Ministry for the Environment website ([www.mfe.govt.nz](http://www.mfe.govt.nz)).

### **Pre-hearing conference**

27. A pre-hearing conference was held on 4 April 2001 at the Desmond Unwin Tennis Centre in Timaru. All submitters were invited to attend. The purpose of the pre-hearing conference was to arrange the hearing process.
28. Counsel for Environment Canterbury, Rangitata Diversion Race Management Ltd and the Timaru District Council lodged memoranda with the special tribunal seeking an order for full exchange of evidence prior to the beginning of the hearing. Counsel for those submitters also sought a deferral of the proposed hearing dates from June 2001 until later in the year. The applicant concurred with this request.
29. Counsel for Rangitata Diversion Race Management Ltd and the Timaru District Council also sought provision of technical information. The suggestion was made that the special tribunal obtain for itself independent advice, information and review.
30. The special tribunal adjourned to consider the requests. Following the adjournment the special tribunal noted that it needed to take into account the interests of all submitters.

### ***Request for deferment of hearing***

31. The special tribunal agreed to a deferment with dates to be decided, but the hearing not to take place before September.

### ***Exchange of evidence***

32. The special tribunal did not make an order requiring exchange of evidence. It stated that with the deferment of the hearing, if the reports currently commissioned are made available, this should act fairly to inform parties of the necessary background information. The tribunal also noted its appreciation of the logistical difficulties that exchange of evidence would entail, bearing in mind the large number of submitters and the need to be fair to everyone who had an interest.

### ***Provision of technical information***

33. The special tribunal requested that all parties provide, to those who requested it, a list of reports being prepared. The tribunal asked all parties to be responsible in making reports available to those who wanted them.

### ***Other matters***

34. The tribunal declined to commission an independent report. It noted that a number of reports had been commissioned by various parties and it did not consider a further report necessary.
35. The tribunal did not consider that an independent review was required.
36. The tribunal did not propose to appoint an expert technical advisor.
37. After the pre-hearing conference, all submitters were notified in writing of the deferral of the hearing and given the opportunity to state that they wished to be heard at this later time, even if they had previously indicated that they did not wish to attend the hearing scheduled for June.
38. Submitters that had already indicated they wished to be heard were sent a letter advising them of the deferral, appending the resolutions made by the special tribunal and indicating the following procedural matters:
  - Submitters would not be required to swear an oath;
  - Submitters could request that sensitive information be protected;
  - There would be no cross examination, although questions of clarification could be requested through the chair.
39. Apart from the pre-hearing conference referred to above, the special tribunal did not hold any formal pre-hearing meetings.

## **Range of the tribunal's inquiry**

40. Section 205 RMA which provides for submissions to be made to the tribunal enables submissions to seek an order for –
  - (a) a different but related water body; or
  - (b) different features and qualities to be preserved.
41. This indicates that the tribunal may have the range of its inquiry extended by the content of the submissions received.
42. We note that the applicant sought a water conservation order “for the whole of the river from the source to the sea, including all tributaries, lakes, tarns and wetlands ....”; “also seeks inclusion of “shallow groundwater reserves ....”. No submissions were received regarding different but related water bodies.
43. However, in addition to the protection sought by the applicant, submitters asked for an order to protect other characteristics and qualities including:
  - habitat for terrestrial or aquatic organisms - especially aquatic birds and native fish
  - scientific or ecological values - including glacial fed, braided river characteristics
  - historical purposes
  - characteristics in accordance with tikanga Māori
44. The special tribunal, therefore, included all these matters in its deliberations.

## **Hearing**

45. Approximately 150 submitters asked to be heard in support of their submissions. Including counsel and witnesses for each party, approximately 216 presentations were made to the special tribunal during the hearing. The list of appearances is given in Appendix 3.
46. The special tribunal sat for 27 days between 3 October and 20 December 2001 to hear the submitters and their witnesses. The hearing ran to time, but extra days had to be programmed along the way to provide for submitters' illnesses and adjusted requests for time.
47. Extra days were also required as submitters took the special tribunal on a number of field trips in order to point out particular features. Visits were made to the Mayfield-Hinds and Rangitata Diversion Race irrigation systems, to the upper catchment to see fish spawning and bird nesting sites, to the river mouth and estuary, and to the Opuha dam and Levels Plains irrigation system.
48. As well as traditional written evidence and power point or overhead projections, evidence presented took the form of oral statements, poems, music, slides, videos, and historic movie footage.

## Timeline

49. Key dates:
- |                         |  |
|-------------------------|--|
| 23 December 1999        | Application lodged   |
| 12 January 2000         | Minister for the Environment acknowledges receipt of the application |
| 21 March 2000           | Minister for the Environment accepts the application                 |
| 10 October 2000         | Minister appoints special tribunal                                   |
| 9 December 2000         | Public notification  |
| 14 December 2000        | Tour of the catchment by air   |
| 28 February 2001        | Close of submissions   |
| 4 April 2001            | Pre-hearing conference   |
| June 2001               | Proposed date for hearing  |
| October - December 2001 | Actual date for hearing  |
| 3 October 2001          | Applicant opens case   |
| 8 October 2001          | Submissions in support begin   |
| 29 October 2001         | Submissions in opposition begin                                      |
| 12 December 2001        | Last day of submissions  |
| 20 December 2001        | Applicant closes its case  |

## Field trips

50. The special tribunal made several visits:
- |                  |  |
|------------------|--|
| 14 December 2000 | Special tribunal tour of the Rangitata River catchment from mountains to sea by air                    |
| 10 October 2001  | Special tribunal visit to river mouth (south side)   |
| 28 October 2001  | Special tribunal visit to river mouth (north side)   |
| 7 November 2001  | Trip by bus to tour lower catchment and Rangitata Diversion Race and Mayfield Hinds Irrigation systems |
| 5 December 2001  | Four-wheel drive trip to upper catchment   |
| 11 December 2001 | Federated Farmers and Rangitata Community Catchment organised bus trip to the Opuha Dam                |
| 20 December 2001 | Special tribunal trip to the river mouth (south side)  |

## Tribunal decision-making and reporting process

51. Following the hearing the tribunal had to decide whether or not to recommend a draft water conservation order. The following steps were taken in order to reach a conclusion.
52. The special tribunal considered all the submissions, both those that were read and/or presented upon, and those submissions which were in writing and which were not spoken to or orally addressed in person at the hearing. This is in line with its statutory obligations under s207(a) RMA.
53. The tribunal first evaluated which, if any, of the characteristics, values or purposes able to be protected or preserved by a water conservation order were outstanding (Part III). We also considered whether or not the waters are in their

natural state (Part II). During this part of our deliberations we did not consider whether or how to recognise and provide for protection for any feature that we found to be outstanding.

54. Having concluded that there were outstanding features, the tribunal assessed the needs of primary and secondary industry and the community and reviewed relevant plans and policies (Part IV and Part V).
55. Next the conditions required to protect the outstanding features were determined, and then allowance given for industry and community needs that could be met while still protecting the outstanding features (Part VII). At this point the tribunal decided that a water conservation order was necessary to protect or preserve the outstanding features and a draft was prepared. (Part VIII and Appendix 1).

## **Legal issues and terminology**

### ***Part IX of the RMA***

56. Part IX of the RMA deals with water conservation orders. The first statutory provision for the making of water conservation orders was introduced by an amendment to the Water and Soil Conservation Act 1967 in 1981. This amendment became known as the “Wild and Scenic Rivers” legislation. This 1981 amendment introduced sections 20A-20J to the Water and Soil Conservation Act 1967. Its purpose included ensuring that adequate account was taken of the needs of primary and secondary industry, community water supplies, all forms of water-based recreation, fisheries, and wildlife habitats, and of the preservation and the protection of the wild, scenic and other natural characteristics of rivers, streams, and lakes.
57. The purpose of water conservation orders is now set out under s199(1) RMA. This purpose is to recognise and sustain –
  - (a) Outstanding amenity or intrinsic values which are afforded by waters in their natural state:
  - (b) Where waters are no longer in their natural state, the amenity or intrinsic values of those waters which in themselves warrant protection because they are considered outstanding.
58. The preservation and protection aspects of the order introduced by the long title to the Water and Soil Conservation Act 1967 (as amended in 1981) is carried through in s199(2) RMA. That states that a water conservation may provide for any of the following:
  - (a) The preservation as far as possible in its natural state of any water body that is considered to be outstanding:
  - (b) The protection of characteristics which any water body has or contributes to, and which are considered to be outstanding, –

- (i) As a habitat for terrestrial or aquatic organisms:
  - (ii) As a fishery:
  - (iii) For its wild, scenic, or other natural characteristics:
  - (iv) For scientific and ecological values:
  - (v) For recreational, historical, spiritual, or cultural purposes:
- (c) The protection of characteristics which any water body has or contributes to and which are considered to be of outstanding significance in accordance with tikanga Māori.
59. In comparing the purpose of the wild and scenic rivers legislation with that set out in s199 RMA, the wording is broadly similar. However a comparison also requires reference to s20B(6) Water and Soil Conservation Act 1967 which required the Minister to take into account: “
- (a) All forms of water-based recreation, fisheries and wildlife habitats;
  - (b) The wild, scenic, or other natural characteristics of the river, stream, or lake;
  - (c) The needs of primary and secondary industry, and of the community; and
  - (d) The provisions of any relevant regional planning scheme and district scheme.”
60. Similar to this provision is s207 RMA, which directs the special tribunal to have particular regard to the purpose of the water conservation order and the other matters set out in s199, and also directs that the special tribunal shall have regard to –
- (a) The application and/or submissions; and
  - (b) The needs of primary and secondary industry, and of the community; and
  - (c) The relevant provisions of every national policy statement, New Zealand coastal policy statement, regional policy statement, regional plan, district plan, and any proposed plan.”
61. A significant difference between the two regimes is the introduction as a consideration into s199(2) RMA of the protection of characteristics which any water body may have or contribute to, where such characteristics are considered to be of outstanding significance in accordance with tikanga Maori. The Act defines “tikanga Maori” as: “Maori customary values and practices”.
62. Another significant difference under the RMA is that a water conservation order may now also provide for the protection of characteristics which any water body has or contributes to, and which are considered to be outstanding for historical, spiritual or cultural purposes.

### ***Quality of the application***

63. Some parties criticised the quality of the application and believed that a lack of information therein is grounds for rejection of the application or the seeking of further information.
64. In fact, acceptance by the Minister is a “triggering device” that sets the application on a process which itself takes the form of an inquiry. The information that is required to make a decision on the outcome of the application is then presented by the applicant and submitters to the independent special tribunal.

### ***Coastal Marine Area***

65. Several parties (including the Minister of Conservation and Federated Farmers NZ) highlighted the fact that an order cannot extend into the coastal marine area (as defined in the RMA).
66. We do not disagree with this, but note that we accept that outstanding characteristics that are identified within the coastal marine area are relevant to our considerations. If there are outstanding characteristics that depend on the functioning of the mouth and part of lower river to remain outstanding, we must take account of this.

### ***Sustainable management and water conservation orders***

67. Mr Christensen in his opening on behalf of the applicant at paragraph 3.8 stated that: “... *the water conservation order regime sits outside of the purpose and principles of the [RMA] as contained in Part II. In other words, the water conservation order regime is a code and in addressing this application, the special tribunal is not to consider the concept of “sustainable management” as it is defined in s5 of the Act. There is no balancing exercise to be undertaken.*”
68. Mr Christensen went on to refer to this code as being a clear and deliberate intent of Parliament.
69. As already noted, the provisions in the RMA controlling the application for and issuing of a water conservation order is in Part IX of the Act. Section 199(1) states: “Notwithstanding anything to the contrary in Part II, ....” and then goes on to state the purpose of a water conservation order already quoted above. With respect to Mr Christensen, the special tribunal does not wish to state that Part IX is a code. It relies on the comments of the then Planning Tribunal in *Re Draft Water Conservation Order (Mohaka River) Order W20/92*, where the Tribunal noted the purpose of a water conservation order was stated in wider terms in s199 RMA than it was under the Water and Soil Conservation Act, 1967.
70. That Tribunal noted that this was particularly so in respect of the amenity or intrinsic values of waters not in their natural state, and also in respect of the

scope of the order that might be made under the RMA. Importantly, the Planning Tribunal itself was not prepared to rule in *Re Draft Water Conservation Order (Kawarau) Order C33/96* that Part IX was a code, but it accepted, as we must also, that Part IX has primacy over Part II of the Act. Thus the only Part II matters of relevance to our considerations are those referred to in s199 and s212. To that extent we accept Mr Christensen's submissions, particularly his point that decisions about sustainable management are to occur subject to any water conservation order.

### ***Outstanding***

71. The term "outstanding" was used under the previous legislation (refer s20D(2) Water and Soil Conservation Act 1967) and is carried through in s199(1) and s199(2).
72. We note that many of the earlier water conservation order decisions of the Planning Tribunal related to wording different from that now found in the RMA. Thus in *Re Draft Water Conservation (Mohaka River) Order W20/92* it was held that intrinsic values were not a matter for independent consideration under the 1981 amendment to the Water and Soil Conservation Act 1967, nor a feature to be specified in a conservation order. However, the outstanding amenity or intrinsic values afforded by waters in their natural state are now relevant as a specific purpose set out under s199(1)(a) "*outstanding amenity or intrinsic values*". Even when waters are no longer in their natural state, under s199(1)(b) we must consider the amenity or intrinsic value of the waters.
73. However, in other respects earlier case law does still apply. Thus the then Planning Tribunal's consideration, in cases such as the Mataura, the Mohaka and most recently the Buller Water Conservation Orders, that to be "outstanding", a reasonably rigorous test must apply. The Tribunal has held that this would mean that amenity would need to be out of the ordinary on a national basis. Against that comparison we have measured the evidence presented to this tribunal.
74. We are also guided by the Court of Appeal decision in *Ashburton Acclimatisation Society v Federated Farmers of New Zealand Incorporated* [1988] 1 NZLR 78, where at 91 the Court of Appeal found that a conservation order under the Water and Soil Conservation Act 1967 "*may and in some cases clearly should extend to an entire river system, including parts of the system which would not in themselves be worthy of preservation or protection but for their contribution to the system*" (our emphasis). The contribution by a water body to the protection of characteristics considered to be outstanding is specifically recognised in s199(2)(b) and (c).
75. However, that does not mean to say that an entire river system must necessarily be protected by the order. We remind ourselves of the then Planning Tribunal's conclusions in its decision on the *Re Draft Water Conservation (Buller River) Order C28/93*. There the Tribunal found that a catchment-wide or whole system approach did not accord with the relevant provisions of the Water and Soil Conservation Act. If a water body is contributing to another water body

which contains an outstanding feature, then the contributing water body may itself be worthy of inclusion in a conservation order if its contribution to the outstanding feature or characteristic is significant enough. As we understand the law, mere proximity to an outstanding water body is not sufficient.”

76. The Planning Tribunal stated in its report on the Mataura River that: “The test as to what is outstanding should be a reasonably rigorous test”.
77. This was repeated in the Buller and followed by another division of the Planning Tribunal in the Mohaka report. Reference to the Shorter Oxford English Dictionary gives the following definition for “outstanding”:
  - “1. That stands out or projects; projecting, prominent, detached.”
  - “2. Standing out from the rest; conspicuous; eminent; striking.”
  - “3. That stands over, that remains undetermined, unsettled or unpaid.”
78. Clearly, the ordinary meaning of the term indicates that the characteristics for which protection is sought have to be conspicuous, eminent or striking. They must stand out from the rest. In the Mataura case, the Planning Tribunal considered outstanding as “conspicuous”, “eminent”, “special by excellence” or “standing out from the rest” and applied these tests to the evidence presented about the fishing and angling features. In the Mohaka case the Tribunal found that, for a characteristic or feature to qualify as outstanding, it would need to be quite out of the ordinary on a national basis. In the case of the Buller, the Planning Tribunal held that, to qualify for inclusion in a national water conservation order, a water body either has to be outstanding in a national context or contribute in some significant way to outstanding characteristics or features.
79. The special tribunal concluded that “outstanding” is not synonymous with “unique”. To be unique, there can only be one. Clearly, the ordinary meaning of the term indicates that for characteristics to be outstanding they must be conspicuous, striking or eminent. They must stand out from the rest. We take this to mean that to be outstanding, characteristics must be quite out of the ordinary on a national basis. We also understand that the test for “outstandingness” is reasonably rigorous.

### ***Natural characteristics***

80. The RMA refers to “natural characteristics” in Part IX, rather than “natural character” which is referred to elsewhere in the Act. We have considered natural character cases, although our primary consideration has been on the evidence put before us as to whether the particular portions of the Rangitata addressed in that evidence have outstanding natural characteristics. We are not aware of any discussion in the earlier case law under the Water and Soil Conservation Act of the term “natural characteristics”, a phrase which also occurred under s20B of that Act. We have taken “natural character”, noting that

it may involve more component parts than would a broad, overall assessment of character.

81. When assessing what natural character there is in a particular riverine environment, the presence of human-made structures and modifications will not necessarily remove the natural character (National Water Conservation (Mataura) Order C32/90).

### ***Wild and Scenic***

82. When considering whether the waters have wild, scenic, or other natural characteristics, we note that wild and scenic is by implication related to “natural”. We have taken the approach that “wild” implies an untamed or relatively unmodified environment. In turn, “scenic” implies a visual environment, which has fine natural scenery, sometimes described as picturesque but not always so. It is the general appearance of natural features in a district which amount to the scenery. Every area has a scenery. However, the values people place upon that scenery differ according to the viewers’ perceptions. We have tried to be as objective as possible in determining whether there are scenic values associated with the Rangitata or portions of its main stem and tributaries. We again note that in addressing the application for this water conservation order it is a **national** water conservation order which is being sought.

### ***Preservation s199(2)(a)***

83. This is referred to in s199(2)(a) RMA. Preservation is **only** available for water bodies in their natural state. In Part II of our decision we specifically address whether we have evidence to find that portions of the Rangitata River are in their natural state.

### ***Protection s199(2)(b)***

84. In determining whether a water conservation order should be recommended to the Minister, we recognise that two of the purposes set out under s199(2) are the “protection” of those characteristics specified under subparagraphs (b) and/or (c). Therefore, in making our recommendation we seek to identify which, if any of the relevant characteristics are outstanding for the Rangitata River, or that may contribute to outstanding characteristics. We then determine if they require protection for their “outstandingness” to be maintained. This report sets out our conclusions on each of the specific items given in s199(2).
85. However, we note that at least in the case of “as a fishery”, to some extent consideration of this matter could easily be duplicated by reference to “recreational purposes”. Again, using that example, there is an overlap between fisheries characteristics and “ecological values”, or “habitat of aquatic organisms”. Therefore to some extent the consideration of each individual item is somewhat artificial. Whilst we acknowledge this, we have tried not to

reproduce in other sections of the report those aspects which are primarily considered under one heading. Thus, the main discussion of salmon and salmon fishing will be found under the topic of “Fishery” rather than under any other subject heading, such as “Recreation”.

## **Description of the Rangitata River**

86. From its source to the sea the Rangitata is about 140 km long, with a total catchment area of about 1,600 km<sup>2</sup>. Tributary drainage from the snow covered ranges discharges onto a broad sub-alpine braided river plain up to 4 km wide and some 30 km long before entering a narrow gorge cut into the greywacke-argillite bedrock. On exiting the gorge the river initially has a quasi-meandering, single-thread channel, but by Peel Forest has become fully braided again, and maintains this nature for the remaining 50 km to the sea.
87. The river has four distinct sections:
  - the glaciated mountainous headwaters
  - the upper Rangitata River plain
  - the Rangitata gorge
  - the lower Rangitata River, including the mouth.
88. The headwater tributaries of the Clyde and Havelock are largely unmodified.
89. The main salmon spawning tributaries are in the upper river (Deep Creek, Deep Stream, Brabazon Fan, Black Mountain Stream) and are mostly spring-fed. This part of the river is little modified.
90. The gorge is unlike other Canterbury braided rivers in that it is cut into greywacke / argillite bedrock. Here the channel is much narrower, with a succession of rapids. Hillsides are covered with shrubland and unimproved pasture.
91. The lower river has two sub-sections: the primarily single-thread channel from the gorge to Arundel, and the lower braided reach from Arundel to the sea.
92. Tributaries on the plains include ephemeral and permanent springs in the Arundel area and Ealing Springs on the north bank, and spring-fed McKinnons Creek in the Rangitata Island area.
93. In the river below the gorge, the principal modifications are the major abstraction to the Rangitata Diversion Race (RDR); invasion of the river bed and bermlands by exotic vegetation; and training works to protect eroding banks, road and rail crossings etc.
94. The river mouth has a lagoon up to 2.5 km long contained by a shingle barrier. The size of the lagoon varies as the river outlet migrates northward, followed by periodic reinstatement of the outlet directly seawards of the river delta. Some witnesses recalled summers in the past when the lagoon area was large and many water sports were enjoyed. Although they attributed the change to the effects of abstractions, it seems more likely that these were years where flows in

the early summer were insufficient to move the outlet southward and it remained in a northerly position, keeping the lagoon large.

95. This is supported by Mosley (2001) who notes that periodic large floods return the outlet to a position directly seaward of the main river channel, and that this cycle is unlikely to be altered by either the present or conceivable changes to the flow regime.
96. Mouth closure occurs only rarely and never for more than a few tide cycles.

### ***Hydrological regime***

97. The hydrologic regime of the river reflects the fact that its headwaters come from the Main Divide, with snowmelt accounting for perhaps 15% of total runoff. All aspects of the hydrologic regime display considerable year-to-year variability; annual mean flow ranges from 80 m<sup>3</sup>/s to 128 m<sup>3</sup>/s. Flows have declined below 40 m<sup>3</sup>/s in 12 out of the 20 years of record, and long periods of sustained low flow can occur, especially in winter. The monthly 7-day low flow varies from an average of over 90 m<sup>3</sup>/s in November-January to 45-50 m<sup>3</sup>/s in July and August.
98. Some key hydrological statistics for the river as recorded at Klondyke are (from Scarf):
  - Mean flow 95 m<sup>3</sup>/s
  - Median flow 77 m<sup>3</sup>/s
  - Mean annual low flow 40 m<sup>3</sup>/s
  - 1:5 year low flow 36 m<sup>3</sup>/s
  - 1:10 year low flow 34 m<sup>3</sup>/s
  - Lowest daily flow recorded 32.7 m<sup>3</sup>/s.
99. We note that other submitters report different mean flows. With a variation in annual mean flow from 80 - 128 m<sup>3</sup>/s, and only a moderate length of flow record it is expected that the mean flow will vary depending which part of the record is analysed. The 1986 plan, using records from 1967-85 gives a mean flow of 93 m<sup>3</sup>/s, others as high as 100 m<sup>3</sup>/s. We consider that about 95 m<sup>3</sup>/s is a reasonable estimate of the long term mean.
100. The river hydrology is dominated by the annual cycle of snow pack accumulation and thaw. Low flows for the year invariably occur in the July-September period when the catchment is 'frozen up' and snow pack is accumulating. Snow melt each spring usually sets in about 22 September, firstly from the more coastal ranges followed some three weeks later by the commencement of snow melt from the Southern Alps.
101. The influence of snow melt is seen in higher than average flows through to late December beyond which the hydrology is dominated by the frequency and severity of nor-west rainstorms in the Southern Alps. By the end of March the incidence of such events has tailed away and it is not uncommon for the river to go through a low flow period during April and early May.

102. The Rangitata Diversion Race (RDR) has been operating since 1945, and since this time has been the dominant water abstraction from the Rangitata River. Under the present rules the RDR abstraction does not alter the overall shape of the annual flow regime, but mean monthly flows are reduced by 20-25 m<sup>3</sup>/s throughout the year. The impact is greatest on low and medium flows; abstraction has a negligible effect on flood peaks. With the principal effect on low and medium flows, which occur for much of the time, the RDR in effect causes at least a 30% reduction in discharge for over 70% of the time.

### ***Turbidity***

103. Water turbidity is a distinctive aspect of physical water quality. During the snow melt period the turbidity is slightly higher for the same flow than through the remainder of the year.

### ***Water quality***

104. The quality of water is similar to that observed in other braided rivers in the region, notably the Waimakariri and Rakaia rivers, with generally low nutrient concentrations and periphyton biomass and moderate concentrations of indicator bacteria.

### ***Water temperature***

105. In general, water temperatures are within guideline values for instream species.

### ***Groundwater***

106. Shallow groundwater is found at depths ranging between 6 and 15 metres below ground within the claybound gravels of the Rangitata fan. Deeper groundwater (greater than 50 metres depth) is also known to exist in an aquifer that appears to be semi-confined. However there is not a lot known about the groundwater resource on the north bank: “the availability of groundwater from deep aquifers underlying the Ashburton-Rangitata Plains has never been properly investigated.” “There is less known about groundwater in the Ashburton – Rangitata Plains than in any other part of the Canterbury Plains.” (Brown L.J. 2001: Canterbury *In* Groundwaters of New Zealand, M.R. Rosen and White P.A. (eds) NZ Hydrological Society Inc, Wellington pp 441- 459).
107. Groundwater at depths is known to exist between the Coast and (at least) to SH1 Bridge, however yields are extremely variable. There are numerous examples of bores that have low to moderate yields only, and other bores that only provide irrigable quantities of groundwater as a consequence of recharge from the Mayfield Hinds irrigation scheme (de Joux).

108. On the south bank, groundwater close to the river shows the influence of flows in the Rangitata, although some areas, especially on higher terraces appear to be fed from local rainfall, rather than the Rangitata River.
109. ECan (report U01/76) carried out a desk-top assessment of the likely stream depletion effects of groundwater abstraction on the Rangitata River and its tributaries, including McKinnons Creek. This noted that there will be variation between bores, and individual bores could display higher or lower effects than their calculations using estimated values. The report stated that “in some locations, it is probable that groundwater pumping, especially from galleries extending beneath creek beds, contribute to the drying out of tributaries of McKinnons Creek.” “On the north bank of the Rangitata, groundwater abstractions are likely to affect the flow of springs such as the Ealing Springs ...”
110. From concurrent gauging work carried out in the 1970s, 1984 and since 1999 (Ingles 2000) it is concluded that there are no significant channel losses or gains downstream from the Rangitata Diversion Race (RDR) intake to the sea, although when groundwater tables are higher than normal there is probably a small increase in flow (<5%) between Badhams Road and the sea.

### ***Consents***

111. Environment Canterbury (ECan) has issued some 27 consents to various landholders to take in total 1.74 m<sup>3</sup>/s from groundwater resources. Most of this is from shallow wells (<15m deep) that penetrate the unconfined aquifer within the Rangitata Island area. Pumping from these wells has a stream depletion effect on the river, McKinnons Creek or both. This stream flow depletion effect has been assessed by Aitchison-Earl for ECan to total almost 0.95 m<sup>3</sup>/s.

### ***Communities***

112. There are no major towns or cities within the catchment. Ashburton to the north and Timaru to the south are the closest major centres. The river lies wholly within the Canterbury Regional Council (Environment Canterbury – ECan) jurisdiction and forms the boundary between Ashburton and Timaru Districts.
113. Near the mouth there are small holiday settlements close to the River on both the north and south banks.
114. Ashburton District Council has a permit to take water at the Cracroft intake for community stock and domestic water, and from groundwater for the Montalto rural water supply (community stock and domestic piped water supply). Timaru District Council has a permit to take groundwater for public supply at Rangitata Huts, and from the main river at SH 1 for stockwater.

## ***Current management regime***

115. In the absence of a regional plan under the RMA that covers management of the Rangitata River, a non-statutory management plan “Rangitata River Water Management Plan 1986 – 1996” (South Canterbury Catchment Board and Regional Water Board) still provides the framework for management. We refer to this document as the 1986 Plan.

## ***1986 Plan***

116. The provisions in the 1986 Plan included:

- 1 June - 31 August, a minimum flow of 15 m<sup>3</sup>/s
- 1 September – 31 May, a minimum flow of 20 m<sup>3</sup>/s
- Above 64 m<sup>3</sup>/s there were no restrictions and available flows were to be shared on a 1:1 sharing regime
- Abstraction was progressively limited, according to the tables below, as river flow fell below 64 m<sup>3</sup>/s.

In addition there were requirements that:

- Wells deemed to be exploiting shallow aquifers directly linked to the surface water resource would be treated as surface water takes
- Water quality was to be maintained
- Water abstraction restricted according to the following rules:

For the period 1 June – 31 August (all flows in m<sup>3</sup>/s)

<b>Flow at Klondyke</b>	<b>RDRM Ltd Power</b>	<b>Stockwater</b>	<b>Other Irrigation</b>	<b>Residual Flow</b>
Above 64	30.7	1.0	0	GT 32.3
64.0 – 60.1	30.7	1.0	0	32.3 – 28.4
60.0 – 50.1	26.5	1.0	0	32.5 – 22.6
50.0 – 40.1	21.5	1.0	0	27.5 – 17.6
40.0 – 38.1	22	1.0	0	17.0 – 15.1
38.0 – 36.1	20	1.0	0	17.0 – 15.1
36.0 – 34.1	18	1.0	0	17.0 – 15.1
34.0 – 32.1	16	1.0	0	17.0 – 15.1
32.0 – 30.1	14	1.0	0	17.0 - 15.1

And for the period 1 September – 31 May (all flows in m<sup>3</sup>/s)

<b>Flow at Klondyke</b>	<b>RDRM Ltd</b>	<b>Stockwater</b>	<b>Other Irrigation</b>	<b>Residual Flow</b>
64.0 – 60.1	30.7	1.0	0.3	32.0 – 28.1
60.0 – 50.1	26.2	1.0	0.3	32.5 – 22.6
50.0 – 43.1	21.8	1.0	0.2	23.0 – 20.1
43.0 – 40.1	18.9	1.0	0.1	27.0 – 20.1
40.0 – 38.1	16.9	1.0	0.1	22.0 – 20.1
38.0 – 36.1	14.9	1.0	0.1	22.0 – 20.1
36.0 – 34.1	12.9	1.0	0.1	22.0 – 20.1
34.0 – 32.1	10.9	1.0	0.1	22.0 – 20.1

### ***Draft Natural Resources Regional Plan***

117. A discussion draft of some chapters of the “Canterbury Natural Resources Regional Plan” (NRRP) was released for public discussion during the hearing for this order. Management of the Rangitata River is included in these sections. This is discussed in Part V.

## **Part II                   Waters in a Natural State**

1. No particular evidence was presented to make a case for waters being in a natural state, although several witnesses identified waters they considered are or aren't in a natural state. We note that whether or not any party specifically provides evidence on waters being in their natural state, it is open to the special tribunal in conducting this inquiry to find that, on the evidence, portions of the waters are in fact in their natural state. If they are in their natural state they may then be preserved, in terms of Part IX of the legislation.
2. As preservation is only an option for those waters which are in their natural state we found it necessary to reach agreement on this, drawing on our own observations and from evidence presented on various topics.
3. Ruapuna Irrigation told us that the Rangitata River above and below gorge is not in its natural state as it is all affected by human occupation and farming.
4. New Zealand Recreational Canoeing Association and New Zealand Rafting Association told us that two reaches of the river are in a natural state: Stew Point – Coal Creek in the upper Rangitata and the gorge. Rackham (ECan) identified the river above the Rangitata Diversion Race intake as being essentially in its natural state. Forest and Bird stated that a water conservation order preserving the Rangitata River in and above gorge in its natural state is supported by evidence for outstanding amenity and intrinsic values.
5. In the headwaters (waters of the Clyde and Havelock Rivers and their tributaries) much of the catchment is in Crown land, managed for conservation purposes. Some of the land in the lower reaches of both the Clyde and Havelock is farmed but stocking levels are low, and there are no consents under the RMA that we are aware of relating to water use or riverbed activities. Evidence from Lucas, Davis, Mosley and Rackham was relevant.
6. The waters of the upper Rangitata River (and tributaries) from the Clyde/Havelock junction to below the Rangitata Gorge are also largely unmodified. However, there are river management works in the riverbed, as well as two water permits. Some suitable land on the river flats and terraces has been developed to improve farm production.
7. The major abstraction to the RDR occurs not far below the gorge, and although the water quality remains reasonably high, the flows are sufficiently altered for the waters not to be in their natural state. River training works and considerable invasion of exotic plants into the riverbed further modify the natural state.

### ***Conclusions***

8. We concluded that:
  - The Clyde and Havelock Rivers and their tributaries (“the headwaters”) remain in a natural state.
  - The waters of the upper Rangitata and the gorge are essentially in their natural state.
  - The waters below the RDR intake at Klondyke are not in their natural state.