



New Zealand Recreational River Survey

PART III South Island rivers

by G.D. & J.H. Egarr

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NATIONAL WATER AND SOIL
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New Zealand Recreational River Survey

**An investigation into the recreational potential
of New Zealand's inland waterways**

PART III Summaries of South Island rivers

by

G. D. and J. H. Egarr

**with the assistance of
NZ Jet Boat Association, Department of Lands and Survey,
Ministry for Recreation and Sport, and
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An investigation into the potential of New Zealand rivers for recreation by motor launch, jet boat, drift boat, raft, canoe/kayak, pack floating and swimming has been made by the New Zealand Canoeing Association.

Part III contains the results for the South Island rivers and major lakes. Each river is described by location, river mouth/confluence location, map reference, length, average gradient, recreational use, scenic description, scenic value and recreational value.

Part I of the report contains conclusions and recommendations, while Part II describes the North Island rivers.

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CONTENTS

	page		page
Notes	3	Balclutha to Taieri	75
Cape Farewell to Westport	5	Taieri to Waitaki and Southern Lakes	89
Westport to Greymouth	11	South Canterbury	101
Greymouth to Franz Josef	25	North Canterbury	113
Franz Josef to Haast	35	Kaikoura Coast to Marlborough Sounds	129
Haast to Milford	45	Nelson to Cape Farewell	143
Fiordland	53	Index by river name	153
Western Southland	59	Index by catchment number	157
Bluff to Balclutha	69		

NOTES FOR PART III

This volume comprises summaries of the investigation into the recreational potential of the Inland Waterways of the South Island of New Zealand. These summaries must be read in conjunction with Part I which defines and explains the terms and definitions used. These summaries have been based upon the data collected from the 'River Recreation Assessment Sheets' discussed in Part I. However, the following points should be noted:

Numbers

All rivers of a sufficient size for recreation (of the types covered in this survey) have been numbered. Numbering begins at Cape Farewell and proceeds around the coastline numbering every river mouth in an anti-clockwise direction. These are the first-order rivers. Tributaries of the first-order rivers are given a further number in addition to the number of its main stream. Hence, the Tautuku River in the

south eastern coast of the South Island has been numbered 103.0. The Fleming River, a tributary of the Tautuku, has been numbered 103.1. For those rivers that alter dramatically in character along their length, each section has been dealt with as if it were a tributary of the main river. Consequently, the Buller River has been numbered 14.0, and its section from Lyell to Westport has been given the number 14.6. The Inangahua River, a large tributary of the Buller flowing into this section has been numbered 14.6.1 to 14.6.4 (third-order numbers). The tributaries of the Waitaki, however, have a slightly different numbering system because of the complex nature of the catchment. The tributaries have been given first-order numbers.

Location

There are brief notes on the location of each river to help identification. This is useful where there are rivers of the same name e.g. Waiau, Acheron, Kowhai, Blackwater.

River mouth/confluence location

To further help with identification, the river mouth, confluence or end of section has been given the grid reference as it appears on the New Zealand Map Series 1 Topographical maps of scale 1:63360.

Maps

Topographical maps of Series 1 and 18 (Scale 1:63360 and 1:250 000) that cover the particular river, or river section, are listed.

Length

The total length of the river in kilometres is given from its source as shown on the NZMS 1 maps.

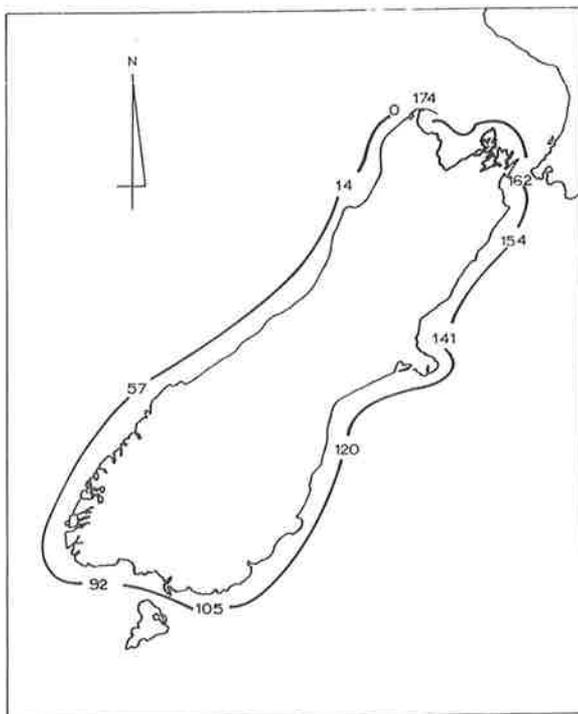
Average gradient

The gradient for the middle section of the river or river section is given. These are approximate only.

Recreational use

This section of each summary provides a short explanation of the river's use by those recreational groups covered in the survey. This description relates to potential use as well as to present, actual use. Reference should be made to Part I of the report where each recreational mode is described and the reasons why other recreational uses have been excluded from this survey.

Sequence of river numbers



The following recreational modes are used:

- Motor launches** — Includes all power-driven craft driven by submerged screw or propeller.
- Jet boats** — All jet boats except the very small 'mini-jets' which may navigate rivers further than the distances noted in the river summaries.
- Drift boats** — Oared or paddle-powered craft, generally small solid-skinned dinghies and inflatable rubber rafts of 3 metres or more. They usually drift downstream using oars or paddles for lateral movement across the current to avoid obstacles.
- Raft** — Generally constructed from vehicle inner tubes and propelled by paddles. Less manoeuvrable than canoes but are smaller than drift boats. Often used on small, rocky rivers of high gradient where numerous portages are required.
- Canoes/kayaks** — We refer to the modern glass-fibre craft now commercially available. Many of the older, canvas-skinned kayaks are not capable of handling the water conditions found on many New Zealand rivers.
- Pack floating** — Swimmers who float down rivers with the assistance of additional buoyancy such as small inner tubes, lilos (or air beds), tramping packs or life jackets. Crash helmets are usually worn.
- Swimming** — People who 'splash about' and swim in a separate pool on a river and who do not travel any distance downstream as do pack floaters.

Scenic description

This section comprises short notes on the appearance of the river and the valley as seen from the river level. No attempt has been made to scientifically analyse the vista in this section but we have attempted to reflect the aesthetic judgement of the

average informed layman, who will be the recreationalist using the resource. Refer to the relevant chapter in Part I.

Scenic value

All rivers have been given a value on a six-point scale, namely: — Dull

- Uninspiring
- Moderate
- Picturesque
- Impressive
- Exceptional

An explanation about the factors relating to this value will be found in Part I of the survey report.

Recreational value

Each river has been given a value according to its value as an actual and potential recreational resource. These values do **not** relate to actual usage numbers. The factors relating to this value include proximity to urban population, ease of access, degree of skill required in the resource use, absence of pollution and other health hazards, and absence of scenic misfits. A full list of relevant factors is provided in Part I of the survey report.

Where applicable, the skill factor (degree of difficulty encountered by recreationalists) has been noted according to the internationally recognised river grading from 1 to the most difficult, 6. A total recreational value has been given on a five-point scale, namely:

- Insignificant
- Low
- Intermediate
- High
- Exceptional

Conclusion

Conclusions and recommendations resulting from the survey can be found in Part I of the report.

Caution

These summaries are not intended as river guides and by noting present use of a resource we in no way recommend that use. We have assumed, at all times, that competent and experienced recreationalists will be using the resource so that, while we may note that certain rivers are used, this in no way implies that unskilled recreationalists may assume that they are capable of using that resource.

CAPE FAREWELL TO WESTPORT

1.0	Westhaven Inlet	7	8.0	Oparara River	8
2.0	Paturau River	7	9.0	Karamea River	8
3.0	Anatori River	7	10.0	Little Wanganui River	9
4.0	Turimawiwi River	7	11.0	Mokihinui River	9
5.0	Big River	7	12.0	Ngakawau River	9
6.0	Heaphy River	8	13.0	Coastal Streams	9
7.0	Kohaihai River	8			

1.0 WESTHAVEN INLET (WHANGANUI INLET)

Location: The Westhaven Inlet (also known as Whanganui Inlet or West Whanganui Inlet) is a large inlet in the West Coast below Farewell Spit. A scenic road passes along the inland shore of the inlet and over a number of causeways which span the numerous small rivers and creeks that flow into the inlet. The main rivers are Coal Creek, Mangarakau Stream, Muddy Creek, Bone Creek and the Wairoa River.

River mouth location: NZMS1, S1 & S3/965142.

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S1 & S3 Collingwood and Farewell.

Length: Main river — Wairoa: 8km (includes North Branch).

Average gradient: 1:166 6m/km.

Recreational use: The rivers flowing into Westhaven Inlet are all small rivers which are muddy and tidal for a great deal of their lower lengths. The upper reaches lie in thick bush without roads or tracks except for Bone Creek which has some old logging roads. Canoeists and small craft could navigate a short distance upstream provided they were to launch on the upstream side of the causeway.

Scenic description: The inlet lies in the remote bush-clad area of North West Nelson State Forest Park. The lower, tidal reaches of the inlet dry out at low tide exposing mud flats that are not particularly scenic. Otherwise, this is a remarkable area of bush and tranquil water.

Scenic value: Impressive.

Recreational value: Low.

2.0 PATURAU RIVER 971000

Location: The Paturau River flows north from the Wakamarua Range on the north-western coast to turn west and onto the coast a little south of Westhaven Inlet.

River mouth location: NZMS1, S2/863073.

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S2 Kahurangi.

Length: 29km.

Average Gradient: 1:375 2.7m/km.

Recreational use: A very shallow river with numerous snags. It is seldom used for boating except during the white-bait season. The river is sometimes canoed but needs above normal flows for satisfactory use. It is not noted for rapids. There are some logging tracks which provide access. The current is slow. The lower 5km are jet boatable but are seldom used and need high flow.

Scenic description: The upper catchment area of this river lies in thick bush. The lower river valley is farmed and is rather swampy in appearance with a good deal of scrub and blackberry. There are numerous snags in the river and tree stumps on the land.

Scenic value: Uninspiring.

Recreational value: Insignificant.

3.0 ANATORI RIVER 967000

Location: The Anatori River flows north through thick bush to flow onto the west coast at the road end, south of Westhaven Inlet.

River mouth location: NZMS1, S2/800002.

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S2 Kahurangi; NZMS1, Sheet S7 Heaphy.

Length: 20km (includes the North Branch).

Average gradient: 1:208 4.8m/km.

Recreational use: Access to the upper river is by walking track only, through steep country. A short section of the lower river has been canoed, and rafted — the length used has depended upon the enthusiasm of the boaters in walking up the valley with their equipment. The lower 14km from the confluence of the North and South Branches has sufficient water for small craft (rafts, canoes and drift boats).

Scenic description: The Anatori flows down a well defined valley in a rather twisting fashion. Thick bush covers the hill-sides over all but the lower 3km which have been cleared. High limestone bluffs lie to the west over the lower 3km of the river.

Scenic value: Impressive.

Recreational value: Insignificant.

4.0 TURIMAWIWI RIVER 965000

Location: The Turimawivi River flows north through bush onto the coast 5.5km below the Anatori River.

River mouth location: NZMS1, S2/751968.

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S2 Kahurangi; NZMS1, Sheet S7 Heaphy.

Length: 17km.

Average gradient: 1:150 6.7m/km.

Recreational use: The Turimawivi lies outside the reach of any easily negotiable roads and for this reason it is seldom used. The Anatori River is similar in most respects, and is more accessible. There is a four wheel drive track to the river mouth which goes a short distance upstream. The river is canoeable, raftable, and marginally drift boatable. Only in high flow would it be jet boatable. There are few rapids as the river flows over shingle for most of its length.

Scenic description: The Turimawivi lies in a remote, natural forest area in a deep, well defined valley. It is much like the Anatori.

Scenic value: Impressive

Recreational value: Insignificant.

5.0 BIG RIVER 962000

Location: The Big River, a little north of Kahurangi Point, flows into the Tasman in a wide, lagoon-like river mouth area and like the Turimawivi and Anatori Rivers, it lies in thick bush.

River mouth location: NZMS1, S2/700923.

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S2 Kahurangi; NZMS1, Sheet S7 Heaphy.

Length: 31km.

Average gradient: 1:85 11.8m/km.

RECREATIONAL USE:

Motor launches: The Big River lies in remote bush country without easy access. In the upper catchment a section of the Heaphy Track crosses the river by a swing bridge. The river has apparently never been canoed, rafted, or boated, although it is of sufficient size for boating and is certainly an attractive area for boaters. The problem of access is the sole reason for its neglect. Two massive fault lines cross the lower river and it is believed that these create rapids. The survey was not able to inspect this river and its full recreational potential is unknown. The sentiments of local boaters are that the Karamea and Anatori rivers offer similar recreational resources without the isolation problems.

Scenic description: The river lies in a remote bush-clad valley of steep gradient.

Scenic value: Impressive.

Recreational value: Low.

6.0 HEAPHY RIVER 959000

Location: The Heaphy River flows in a huge, semi-circular pattern out from the Tasman Mountains in North West Nelson State Forest Park, to enter the Tasman Sea north of Karamea.

River mouth location: NZMS1, S7/557657.

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S7 Heaphy.

Length: 37km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: No access and difficult river mouth bar. Not used.

Jet boats: 3km have been boated at low water, 10km when it is flowing high. Requires a 30km sea journey and a bar crossing. Not used to any great extent.

Drift boats: Difficult access and shallow water limits its use.

Rafts: Has been rafted over the lower 10km. Flat water not thought as being of great value apart from the scenery.

Canoes/kayaks: The lower 17km have been canoed over a shingle bed with snags. There are no real rapids in this section.

Pack floating, swimming: Often floated by trampers using the Heaphy Track but it is not of sufficient value to be the main reason for tramping in the area.

Scenic description: Limestone bluffs and the dense native bush impress upon one that this is a remote area, extremely scenic and tranquil. The Heaphy Track which follows the lower river is renowned as a scenic walk.

Scenic value: Impressive.

Recreational Value: Low.

7.0 KOHAIHAI RIVER 955000

Location: The Kohaihai River lies some 14km south of the Heaphy. It is much smaller.

River mouth location: NZMS1, S12/550511.

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S12 Karamea.

Length: 19km.

Average gradient: 1:21 48m/km.

Recreational use and scenic description: The Kohaihai River is a small river flowing through thick bush much like the Heaphy but it does not have the shingle flats and the wide valley floor which are found on the Heaphy. The bush comes down to the river channel itself and overhangs the water. The river has not been used by boaters although it is large enough, at least for canoeing. The gradient would create exciting rapids when flooded, but the exact extent of this is unknown. Access has been the main reason for its lack of use.

Scenic value: Impressive.

Recreational value: Insignificant.

8.0 OPARARA RIVER 952000

Location: The Oparara River flows south towards Karamea from the coastal hills, turning west onto the coast 5km north of the Karamea River mouth.

River mouth location: NZMS1, S12/553397.

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S12 Karamea.

Length: 30km.

Average gradient: 1:62 16m/km.

RECREATIONAL USE:

Motor launches: The large lagoon at the river mouth may be used by the smallest of powered craft. Water weeds could pose

problems and there are snags. The edges of the lagoon are swampy, making for difficult launching. The river is not navigable for any great distance due to snags.

Jet boats: Has been boated over the lower 4km to above the bridge with the best launching approximately one kilometre above the bridge.

Drift boats, rafts: Not used to any great extent, as the entire boatable length is of very low gradient, flat, slow moving and abounds with snags.

Canoes/kayaks: Canoeable from Fenian Creek but access is difficult.

Pack floating, swimming: Unused.

Scenic description: The Oparara River is a small river flowing through limestone bluffs and there are two fascinating and impressive natural arches of limestone over the river. The first is at NZMS1, S12/631450. Logging roads penetrate the bush and provide the only accessible route into the area.

Scenic value: Impressive.

Recreational value: Low.

9.0 KARAMEA RIVER 951000

Location: The Karamea makes a wide, northwards semi-circular track along the Arthur and Tasman Mountain Ranges to flow into the Tasman Sea in a westerly direction through a gorge at Karamea. It is probably one of the most interesting of all the West Coast rivers, lying in some of the most rugged country imaginable. During the Murchison earthquake of 1929, huge slips came down damming the river in a number of places. These slip dams now exist as huge, bouldery rapids.

River mouth location: NZMS1, S12/546337

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S12 Karamea; S13 Cobb; S18 Little Wanganui.

Length: 83km.

Average gradient: 1:62 16m/km.

RECREATIONAL USE:

Motor launches: Launching facilities are available in the river mouth lagoon with a number of boats using the river mouth for access to the sea. There is limited navigation upstream as the river shallows rapidly above the bridge.

Jet boats: 13km are normally navigable above the bridge which takes boaters up into the gorge. Rapids tend to restrict navigation at the Cuckoo River confluence. Considered to be excellent boating and difficult when the river is low.

Drift boats: Has been boated from Karamea Bend in 8-foot aluminium dinghies with numerous laborious portages around the earthquake slip dams. Between the dams the river is quite flat but moves at a steady pace. This river is actually much smaller than the maps would tend to indicate. There are numerous shallows.

Rafts: The river has been rafted from the Taipo confluence but there were numerous portages around boulder sieve rapids and shallows which made the trip rather laborious.

Canoes/kayaks: The Karamea has been canoed from the Taipo confluence but it is easier to consider it as only canoeable from Karamea Bend because numerous shallow rapids require difficult portages above that point. The river contains a number of difficult navigable rapids and is a trip for the more experienced only. This is a very remote area.

Pack floating, swimming: Considerable lengths of the Karamea and its tributaries have been floated but this is normally only as part of a hunting or tramping trip, not as a recreational activity in itself. Numerous snags and huge boulders can make pack floating hazardous and it is not recommended.

Scenic description: The Karamea flows through thick bush and extremely rugged terrain, so rugged that experienced bush-

men would find it difficult to cover 5km a day through the untracked areas. Access into the area is via walking tracks over low passes and this is the main reason for its lack of use. However, a number of parties have rafted, boated and canoed the river in recent years.

The Karamea is not of boatable size above the Taipo confluence and the Saxon Falls. From the Taipo to Karamea Bend there are a number of bony, rocky rapids with long lengths of quiet water created by earthquake slip dams with dead trees along the lake margins. The boulders which create the dams are huge, most at least the size of a house.

The lower river, below the Karamea Bend, consists of long lengths of shingle and stone rapids and five massive earthquake dams. The Karamea Gorge contains a number of good rapids and very fast water. Bush covers the hills over the entire length of the river coming right down to water level.

Scenic value: Exceptional.

Recreational value: Intermediate.

10.0 LITTLE WANGANUI RIVER 948000

Location: The Little Wanganui River is a small stream flowing westwards down a low valley onto the coast a little south of Karamea.

River mouth location: NZMS1, S17 & S18/508167.

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S17 & S18 Little Wanganui.

Length: 29km.

Average gradient: 1:60 16m/km.

RECREATIONAL USE:

Motor launches: Some small power craft use the river mouth area for launching for a sea trip. Otherwise not used.

Jet boats: It is generally navigable for 10km above the bridge and with high flow some of the tributaries offer interesting and scenic deviations. The launching site is immediately above the main road bridge. There are numerous snags and the river becomes narrow in places.

Drift boats, rafts: A popular trip is from the road end near Scobie Clearing down to the main road. It runs over a shingle bed with bush on either one bank or the other, but has a good deal of cleared land in the valley floor. This river provides 16km of quiet floating to the river mouth. Log snags need avoiding and there are some willows which sweep the water. Tidal Creek has been canoed and has access off the main road.

Pack floating, swimming: Not used to any great extent. Log snags could be hazardous.

Scenic description: Much of the lower river valley has been cleared and pongas, fern, blackberry and scrub tend to dominate. Native bush re-growth covers the hillsides. The river is small and quiet, flowing over a shingle bed. The water tends to be discoloured in the lower river area.

Scenic value: Picturesque.

Recreational value: Intermediate.

11.0 MOKIHINUI RIVER 943000

Location: The Mokihinui River consists of three main tributaries — the South Branch, the North Branch and the Hemphill River, which converge and flow out to the sea south of Karamea Bluffs, via a narrow gorge above Seddonville.

River mouth location: NZMS1, S17 & S18/399008

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S17 & S18 Little Wanganui; S23 & S24 Westport.

Length: 27km (from confluence of tributaries). 53km (including the South Branch).

Average gradient: 1:170 6m/km.

RECREATIONAL USE:

Motor launches: The river mouth area is often used for launching power craft but navigation is limited upstream because of shingle shallows.

Jet boats: 8km are navigable above the main road bridge before finally being stopped by a rocky rapid. It is boatable further with high flows.

Drift boats, rafts, canoes/kayaks: Most of the Mokihinui and its tributaries are of braided shingle, or at least have extensive shingle beaches along either bank. A massive slip brought down by the Murchison earthquake blocked the river in the upper gorge area and this has created unboatable rapids for a short distance. Below this, in the gorge itself, there are a number of bouldery rapids requiring skill to negotiate. An excellent trip but limited because of the lack of access to the upper river area. It is often canoed and rafted from the gorge down to the main road bridge and is a pleasant and easy trip.

Pack floating, swimming: Unknown. The upper river area is normally too shallow, the gorge is too boisterous and the lower river probably sees some local use only.

Scenic description: The Mokihinui River in the gorge area is a very scenic river valley with thick bush and rugged gorge walls. The upper river valley contains extensive grassy river flats and a good deal of swampy land. Most of this is a result of sedimentation behind the earthquake slip dam of 1929. The lake that formed behind the slip silted up in 10 years and one might expect the proposed dam in the lower area to silt up over a similar length of time, consequently destroying the ruggedness of the gorge as it is now.

The Mokihinui is a favourite trip for jet boaters who seem to appreciate the scenery.

Scenic value: Impressive.

Recreational value: Low.

12.0 NGAKAWAU RIVER 939000

Location: The Ngakawau is a small river flowing in a westerly direction through a deep gorge and onto the coast at Hector, north of Westport.

River mouth location: NZMS1, S23 & S24/343905.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S23 & S24 Westport; S25 Matiri.

Length: 23km.

Average gradient: 1:83 12m/km.

Recreational use and scenic description: The Ngakawau River gorge is said to be incredibly scenic but the survey members found it little different from the other river gorges on this section of the coast. The gorge is created by a cleft in the hills some 300m deep in the form of a deep vee and is bush-clad. The suddenness of the cutting is certainly surprising. The river bed is shingle with low shingle banks, normally with insufficient water for boating. There is no easy access above the gorge which is not itself boatable as much of the river's water comes from Charming Creek whose confluence is below the gorge. The lower section of the river provides some picnic areas but the derelict nature of this old coal town is not as attractive as many other river mouth areas.

Scenic value: Picturesque.

Recreational value: Low.

13.0 COASTAL STREAMS

Between the Ngakawau and the Buller river mouths, there are a number of small coastal streams. These include the Waimangaroa, Whareatea and Orowaiti Rivers. The first two

are both much the same; stony and shingle rivers with a wide bed with a small and shallow watercourse which wanders down the centre of the shingle. Toitoi, gorse and broom cover the banks giving a somewhat untidy appearance. Neither are normally boatable although the larger one, the Waimangaroa, may be canoeable when flooded. The Orowaiti River is muddy, swampy and boatable only over its tidal length.

Scenic value: Uninspiring.

Recreational value: Insignificant.

WESTPORT TO GREYMOUTH

14.0	Buller River	13	14.6.3	Lower Inangahua River	18
14.1	Buller River — Lake Rotoiti to Gowan confluence	13	14.6.4	Tributaries of the Inangahua	18
14.1.1	The Buller's Upper Tributaries	13	14.6.5	Ohika-nui River and Blackwater River	18
14.2	Buller River — Gowan River to Owen River	13	15.0	Totara (Big Totara) River	18
14.2.1	Gowan River	13	16.0	Waitakere (Nile) River	19
14.2.2	Owen River	14	17.0	Tiropahi (Four Mile) River	19
14.3	Buller River — Owen River to Murchison	14	18.0	Fox River	19
14.3.1	Mangles River	14	19.0	Bullock Creek	19
14.4	Buller River — Murchison to Newton Flat	14	20.0	Porarari River	19
14.4.1	Matakitaki River	15	21.0	Punakaiki River	19
14.4.2	Matiri River	15	22.0	Ten Mile Creek	20
14.4.3	Upper Maruia to Warwick River confluence	15	23.0	Grey River	20
14.4.4	Maruia River — Warwick River to Paenga	16	23.1	Upper Grey River	20
14.4.5	Maruia River — Paenga to the Buller	16	23.2	Middle Grey River	20
14.4.6	Tributaries of the Maruia	16	23.3	Lower Grey River	21
14.4.7	Rahu River	16	23.3.1	Mawheraiti (Little Grey) River	21
14.4.8	Deepdale River	16	23.3.2	Snowy River and Blackwater River	21
14.5	Buller River — Newton Flat to Lyell	17	23.3.3	Rough River and Big River	22
14.6	Buller River — Lyell to Westport	17	23.3.4	Ahaura River — Upper Tributaries	22
14.6.1	Inangahua River — inland of Reefton	17	23.3.5	Ahaura Gorge	22
14.6.2	Inangahua River — Reefton to Inangahua Landing	18	23.3.6	Hauptiri River	23
			23.3.7	Nelson Creek and Lake Hochstetter	23
			23.3.8	Crooked River	23
			23.3.9	Lake Brunner and Lady Lake	23
			23.3.10	Orangipuku, Eastern Hohonu and Poerua Rivers	24
			23.3.11	Arnold River	24

14.0 BULLER RIVER 932000

The Buller River is one of the largest rivers in New Zealand, rising in the central northern part of the South Island, with its headwaters on the St Arnaud and Spenser mountains. Lake Rotoiti, with its feeder, the Travers River, is the source of the main stream. From the lake the river flows quietly over shingle flats collecting water from Gowan, Hope and Howard Rivers, then trundles 30km down to the Four Rivers plain — (named after the Mangles, Matakitaki, Matiri and Maruia tributaries). Below Murchison lie the two gorges; the upper contains the big rapids and Ariki Falls; the lower gorge is the well known tourist attraction, a quiet flowing river hemmed in between hills of native bush. The entire Buller River is boatable and roads follow the river for almost its entire length so that access is never a problem. We have divided the river into six sections for this survey.

14.1 BULLER RIVER — LAKE ROTOITI TO GOWAN CONFLUENCE 932620 932520

Location: The Buller flows out of the West Bay of Lake Rotoiti over a steep, shingle and stony bed, flowing north-west to junction with the Gowan River at Gowan Bridge.

Section end location: NZMS1, S26/973772.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S26 Hope; S33 St Arnaud.

Length: 28.5km.

Average gradient: 1:40 24m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Only the lower section of this part of the Buller is negotiable, up to the Speargrass Creek confluence. Even with extreme high flow it is not negotiable above the main road bridge. The river is generally considered to offer water for experienced boaters except when flowing high.

Drift boats, rafts: The upper portion of the river, down to the Howard River confluence, is often too shallow and stony for the larger rafts and drift boats. This section is considered to provide excellent water, especially when flowing at above normal levels.

Canoes/kayaks: A very popular trip containing some easy water with a short, shallow section below the lake of moderate difficulty (Grade 2 to 3). A national slalom championship was held in 1971 on the river immediately above the main road bridge below the lake, but it is not quite up to international standards of water difficulty. This section of the river is normally canoed in a single day.

Pack floating: Excellent lilo trip from the lake to the bridge (2km) but it becomes too shallow over the smaller gravel below the bridge, and consequently is of less interest.

Swimming: There are a number of picnic spots along the river, but the one above the main road bridge is the most frequently used.

Scenic description: The Buller flows out of the West Bay of Lake Rotoiti over a steep shingle slide and then into large rocks creating constant white water for some 2km. The banks are clothed in beech, with grass and matagouri scrub in small clearings. There is a little manuka. Below the main road bridge the river opens out onto shingle flats and is braided in many places. The land is cleared and is in grass with matagouri scrub. Below the Howard River junction the river valley closes in again through a short section of beech forest, and in this section there are a number of easy rapids.

Scenic value: Picturesque.

Recreational value: Intermediate.

14.1.1 THE BULLER'S UPPER TRIBUTARIES

There are a number of small rivers that flow into the Nelson lakes and into the Upper Buller. Most of these can only be boated after rain, and contain insufficient flow for pack float ing for any significant length. Most lie within the Nelson Lakes National Park.

The Travers River flows into the head of Lake Rotoiti. To boat this river you need to portage from the lake head to a suitable point. The river is a shingle bed river from the Hopeless Creek confluence, with a swampy portion for the last few hundred metres before it enters the lake. Above the Hopeless Creek the river is very small but has some interesting swimming pools.

The D'Urville and Sabine Rivers flow into the head of Lake Rotoroa and like the Travers, boaters need to portage upstream. Both rivers are stony, shallow and flow over shingle through very scenic beech forest. Both the D'Urville and the Sabine have rapids of some difficulty with the Sabine having one narrow unnavigable saw-cut gorge.

The Howard River flows from the hills between the two lakes. It is a small river only boatable from the road end. The river is a shingle river with few rapids. It flows swiftly through open grassland with some high banks on corners.

The Hope River flows alongside State Highway 6 from Nelson and enters the Buller on the right bank. It is a small, shallow, but rocky river flowing through beech-forest. It is boatable by small craft only after Lamb Valley Creek enters but it does not become a reasonable size until much lower. Under flooded conditions it offers a very exciting trip.

Scenic value: Impressive.

Recreational value: Low.

14.2 BULLER RIVER — GOWAN RIVER TO OWEN RIVER 932520 932510

Location: From the junction with the Gowan River, the Buller runs over large rocks in a general westerly direction to junction with the Owen River.

Section end location: NZMS1, S25/864804.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S26 Hope; S25 Matiri.

Length: 13km.

Average gradient: 1:125 8m/km.

Recreational use: From the Gowan River down to the Owen River junction there are a number of difficult rapids, the most severe at Granity Creek. These rapids are sought after by experienced canoeists, rafters and drift boaters but are normally unnavigable for jet boats. The river is normally too boisterous for good lilo floating, although there have been a number of trips by lilos down this section. The most frequent user is the canoeist.

Scenic description: From the Gowan River the Buller flows between rocky banks with some high rock bluffs. Beech forest overhangs the river providing an attractive setting and effectively screening out all visible traces of the road on the right bank. Boulders in the stream create a number of rapids, the most noted being at Granity Creek. Below Granity Creek the river widens out and willows become prominent.

Scenic value: Picturesque.

Recreational value: High.

14.2.1 GOWAN RIVER 932520

Location: The Gowan River flows out of Lake Rotoroa into the Buller at a very fast rate (estimated in excess of 7 knots).

River confluence location: NZMS1, S26/973772.
Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S26 Hope; S33 St Arnaud.
Length: 11.5km.
Average gradient: 1:60 16m/km.

RECREATIONAL USE:

Motor launches: Too shallow.
Jet boats: Boatable for approximately 2km from the lake. At high flow a longer distance may be possible. Fallen trees frequently obstruct navigation.
Drift boats, rafts: A popular trip but can be hazardous as the fast current can sweep craft into fallen trees before the craft can take avoiding action. Rapids become bigger as the Buller is approached.
Canoes/kayaks: A very popular trip recommended for experienced canoeists only, as the sieve conditions created by the fast current and fallen trees can create dangerous situations. The river is fast flowing but is without large rapids.
Pack floating, swimming: Not used because of the very swift water.

Scenic description: The Gowan River flows through a beech forest with an often narrow margin between river and farmed land. From the river, this has all the appearance of a thick forest. The river runs clear and sparkling over shingle and small stones. There is a great deal of fern and blackberry in the undergrowth which tends to detract from the river's surroundings.

Scenic value: Picturesque.
Recreational value: High.

14.2.2 OWEN RIVER 932510

Location: The Owen River flows south from its beginnings in the Marino Mountains, through the Owen State Forest to join with the Buller on the right bank 20km above Murchison.
River confluence location: NZMS1, S25/864804.
Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S25 Matiri; S26 Hope.
Length: 24km.
Average gradient: 1:80 12m/km.

Recreational use and scenic description: The Owen River is a small, willow-lined, shingle river flowing into the Buller. It is seldom boated and would only have sufficient flow during or after rain. Willows are common over the lower lengths and may provide some problems when the river is flowing above normal levels.

Scenic value: Moderate.
Recreational value: Insignificant.

14.3 BULLER RIVER — OWEN RIVER TO MURCHISON

Location: From the Owen River confluence to a little above Murchison the Buller flows south, turning west after the Mangles River joins it. There are a number of short gorge sections but the river flows predominantly over a shingle bed with wide beaches.
Section end location: NZMS1, S32/746678.
Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S25 Matiri; S32 Murchison.
Length: 19km.
Average gradient: 1:170 6m/km.

RECREATIONAL USE:

Motor launches: Normally too shallow with only short sections of deep water.

Jet boats: Boatable over the entire section. A short, rocky gorge above Murchison has many shingle shallows. Considered as providing water for experienced boaters.
Drift boats, rafts: Excellent water without big rapids through an open, cleared valley and short, rocky gorges.
Canoes/kayaks: Excellent water suitable for novice canoeists but retaining sufficient rapids to keep the more experienced interested.

Pack floating, swimming: Some isolated swimming spots, particularly at the Murchison camping ground and on the small picnic spots a few kilometres above. Seldom floated.

Scenic description: At the Owen River confluence, the Buller flows through a narrow cutting between hills and in this short section there are a number of small rapids. Scrub and beech cover the hillsides. The valley soon opens up and willows make their appearance, but do not line the banks very thickly. Shingle beaches merge with the surrounding farmland with some short sections of rock banks. Short, gorge-like sections occur near Doctor's Creek, and then the river reverts back to open shingle flats. One kilometre above the Mangles River confluence the river enters a deep, narrow and rocky gorge, but with very low banks, opening up again near the Murchison camping ground and is quite open at Murchison itself. Farmland surrounds the river with high, rocky and fern-covered hills flanking the farmed valley floor. Rugged, bush-covered hills are visible in the near distance providing an attractive vista of farm and bush country.

Scenic value: Picturesque.
Recreational value: High.

14.3.1 MANGLES RIVER 932460

Location: The Mangles River collects its water from the Tiraumea and the Tutaki Rivers and flows west into the Buller through a narrow gorge upstream of Murchison.
River confluence location: NZMS1, S32/791682.
Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S32 Murchison; S33 St Arnaud.
Length: 32km (includes the Tiraumea River).
Average gradient: 1:125 8m/km.

Recreational use: The Tutaki and Tiraumea are normally too shallow for boating and the Mangles can only be used from the confluence of those streams. Generally, it can be boated only below the Blackwater confluence. The river flows through a number of narrow, smooth, water-worn rock gorges with a number of chute-type rapids. The river is a good canoeing, lilo and raft trip — a little too narrow for drift boats and too small for jet boats. There are a number of beautiful swimming holes and picnic spots.

Scenic description: The Mangles is a shingle bed river for some distance below the Tiraumea confluence. It then flows into a narrow channel before opening up again into a shingle river. Short gorges and open shingle flats alternate down the river. The gorges are enclosed between smooth water-worn rock and rocky banks. Shingle beaches line the river over most of its length. Beech, manuka and scrub cover the banks along the river. Willows occur only in isolated areas. The last gorge, the narrowest, leads directly into the Buller. The river is slow moving and there are a number of tranquil pools which are popular for picnicking.

Scenic value: Picturesque.
Recreational value: Intermediate.

14.4 BULLER RIVER — MURCHISON TO NEWTON FLAT

Location: From Murchison the Buller flows into the upper gorge and over the upthrust fault that created the Ariki Falls

during the 1929 Murchison earthquake. It is this section of the river which contains the big rapids.

Section end location: NZMS1, S32/603698.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S25 Matiri; S32 Murchison.

Length: 17km.

Average gradient: 1:350 2.9m/km.

RECREATIONAL USE: The Buller is the only major New Zealand river remaining that has its rapids intact and not drowned by hydro lakes. For this reason it is particularly valuable in providing powerful white water for those canoeists and jet boaters who may be seeking experience before tackling the larger rivers found overseas. This section of the Buller contains the hardest rapids on the river

Motor launches: Not used on this section of the Buller.

Jet boats: Generally only boatable in flood or near flood conditions which lessen the steepness of the rapids, particularly 'Jet Boat Rapid' and Arika Falls. Both rapids are navigable only by the most experienced boaters and then only when it is running very high.

Drift boats, rafts: A very popular trip — ideal for the larger dinghies and rubber rafts. Rapids of this degree of difficulty (Grade 3 and 4) on a river of this size are unusual in this country, which makes this section of river a very valuable resource.

Canoes/kayaks: One of the most popular trips in the area with rapids considered as suitable for experienced canoeists only, but all are portagable so that even the novice canoeist might use this section. These rapids generally become more difficult with lower flows and with extreme low flows they become un-navigable.

Pack floating, swimming: Unsuitable due to very boisterous water.

Scenic description: From Murchison the Buller flows quietly over a wide shingle bed with numerous shallows. The Matakita River flows in this area. Immediately above the State Highway 6 bridge (Sullivan's Bridge) the first of the big rapids begins. These lie within gorge-like rocky walls with heavy bush on the hills further back. Upstream, willows and farmland flank the river. Below the Sullivan's Bridge Rapid lie the Whale Creek Rapid and Jet Boat Rapid with the last of the big rapids (Arika Falls) as marked on the topographical maps. All are navigable by experienced boaters except during low flow. From the river the nearby road is not visible and the bush and rocky gorge walls dominate the scenery. Sandflies are thick in this area.

Scenic value: Impressive.

Recreational value: Exceptional.

14.4.1 MATAKITAKI RIVER 932450

Location: The Matakita River has its origins on the north-western slopes of the Spenser Mountains and flows north to join the Buller near Murchison.

River confluence location: NZMS1, S32/745678.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S32 Murchison; S33 St Arnaud; S40 Spenser.

Length: 74km.

Average gradient: 1:210 4.8m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Has been boated for 24km with a rocky rapid — Earthquake Rapid — splitting the river into two boatable sections. 19km of boating in the vicinity of Six Mile Creek. The rapid is at NZMS1, S32/749623. Difficult water except in the upper reaches where the river is open and braided. The river cannot be boated in summer if it is very low.

Drift boats, rafts: Some excellent water from the Glenroy River downstream to the Buller.

Canoes/kayaks: This river offers some of the best canoeing in the area, second only to the short section of the Buller below Murchison. Earthquake Rapid is used as a slalom site for one of the few international standard courses in the South Island. Most canoe trips begin at the Glenroy River and go down to the Buller confluence. Rapids are of Grade 3 difficulty.

Pack floating, swimming: Unused.

Scenic description: The Matakita flows down from the Spenser Range as a small, braided shingle river. It has a narrow bed above Horse Terrace Bridge. Farmland and scrub-covered hills flank the river. There is a great deal of blackberry and fern in the area. From the bridge the river flows over a stony, gravel bottom in a single channel, with a number of small rapids. Below Ten Mile Creek the river enters a short gorge. Rocky and scrub-covered banks flank the river and there are a number of large rapids in this area. From this gorge the river opens out into an area of low islands, gravel chutes and willows before tumbling over Earthquake Rapid, an old slip created by the Murchison earthquake. The river is fairly quiet below this rapid. Rocky banks, fern and blackberry with numerous willows dominate the river banks.

Scenic value: Moderate.

Recreational value: High.

14.4.2 MATIRI RIVER 932440

Location: The Matiri River drains the Matiri State Forest and flows into the Buller at Murchison, from the right bank. It has a number of small lakes in its upper reaches.

River confluence location: NZMS1, S32/741684.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S25 Matiri; S32 Murchison.

Length: 36km.

Average gradient: 1:125 8m/km.

Recreational use and scenic description: The Matiri River is a smaller river than either the Matakita or the Mangles, and can only be jet boated with high flow. It is canoeable and raftable for a considerable distance over a quiet flowing shingle bed. Beech trees which overhang the banks provide a pleasant scene; there is a lot of blackberry and fern on the banks. There are some good swimming holes but they are not used to any great extent.

Scenic value: Picturesque.

Recreational value: Low.

MARUIA RIVER 932420

The Maruia is one of the Buller's longest tributaries. It rises in the south-west Spenser Range and runs west as far as Springs Junction before turning north, flowing over the impressive Maruia Falls and into the Buller, a few kilometres below Murchison. The upper reaches of the Maruia are rather braided in a shingle bed, but the lower reaches flow quietly through a very pretty gorge. This river has been divided into three sections for the survey.

14.4.3 UPPER MARUIA TO WARWICK RIVER CONFLUENCE 932428

Location: The Maruia rises in the south-west Spenser Range and flows west to Springs Junction for 29km and then north for a further 32km where the Warwick River joins it on the right.

Section end location: NZMS1, S39/639305.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S39 Maruia; S46 Lewis.

Length: 61km.

Average gradient: 1:80 12m/km (at Springs Junction).

Recreational use and scenic description: The upper Maruia River is generally too small and shallow over a braided shingle bed for any craft other than the smallest rafts and canoes. Jet boats have been used, but only in flood conditions. Logs floating in the river during floods may cause some navigational problems. Picnicking and swimming are popular activities below the Maruia Springs Hotel in summer. The river, from the hotel which is the highest boatable point, is shallow and braided over a bed of stones and gravel. There are a number of steep rapids. In some places, such as immediately below the Alfred River confluence, the valley closes in a little and rock outcrops line the banks. The surrounding hills are covered in beech forest which makes the area particularly scenic. From the main road bridge the valley opens out into a large, farmed river flat of grassland with some matagouri scrub. The river flows swiftly through this area and is often bordered by willows.

Scenic value: Impressive.

Recreational value: Intermediate.

14.4.4 MARUIA RIVER — WARWICK RIVER TO PAENGA

Location: From the Warwick River confluence, the Maruia River flows away from the main road around the western side of Mount Rutland, then meets the main road again at NZMS1, S32/638455 and flows north for 5km to Paenga.

Section end location: NZMS1, S32/634504.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S32 Murchison; S39 Maruia.

Length: 22km.

Average gradient: 1:210 4.8m/km.

Recreational use and scenic description: From the Warwick River confluence, the Maruia River flows away from the main road around the western side of Mount Rutland, a beautiful area of dense beech forest. The river is narrowed down between rocky banks and there are a number of steep rapids between Deer Creek and Coffee Creek. Between the rapids are lengthy sections of quiet flowing pools. From where the river emerges from the bush it reverts to a shingle bed and willows occur at irregular intervals along the banks. The river is confined between farmland and scrub-covered hills (fern) and does not have the extensive valley flats found upstream. The river is a popular canoe and raft trip but jet boaters generally find the river very shallow. The section of river behind Mount Rutland is also an ideal lilo trip with good swimming pools between the rapids. Access to this area is by walking track only. The river is jet boated up to Coffee Creek only and this requires above normal flows.

Scenic value: Exceptional.

Recreational value: High.

14.4.5 MARUIA RIVER — PAENGA TO THE BULLER

Location: From Paenga the Maruia River flows quietly north for 11km to the falls (at NZMS1, S32/683594) which are some 10 metres in height. Below the falls the river flows quietly to the Buller.

River confluence location: NZMS1, S32/645686.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S32 Murchison.

Length: 21km.

Average gradient: Slight (except for the falls).

RECREATIONAL USE:

Motor launches: Normally too shallow.

Jet boats: Boatable up to the foot of the falls with above average flows. This section of the river is considered to be difficult and for experienced boaters only.

Drift boats, rafts, canoes/kayaks: Very good water for boaters and canoeists, generally very easy water down to the falls with some good, but easy rapids below. Above the falls, the gorge is considered to be very scenic with mossy clay banks and beech forest above.

Pack floating: Seldom used.

Swimming: Some deep pools in the section above the falls are used and the pool at their foot is used a great deal in summer.

Scenic description: From Paenga the river flows over shingle but becomes deeper approaching the Lower Maruia Bridge above Shenandoah where it becomes smooth, quiet and slow flowing. The river quietly flows down to the falls as a deep river between high clay banks with beech overhanging the banks. There is usually only a narrow margin of beech, but from the river the farmland and road are not apparent. The falls were created by the 1929 Murchison earthquake. Below the falls is a large pool and then the river flows between narrow shingle beaches and willows down to the Buller. Scrub (fern) and farmland flank the river.

Scenic value: Exceptional.

Recreational value: High.

14.4.6 TRIBUTARIES OF THE MARUIA

Apart from the Rahu, the Warwick is the only boatable river flowing into the Maruia. It has been canoed when flowing high, but normally is very shallow and stony. Willows overhang the channel obstructing navigation in some places.

14.4.7 RAHU RIVER

932429

Location: The Rahu River is a small stream of steep gradient carrying rain water run-off, but containing little water for most of its length. It rises from a lake in the Victoria Range and flows south-east until NZMS1 S46 588011, where it turns abruptly north to junction with the Maruia River below Springs Junction.

River confluence location: NZMS1, S46/621065.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S46 Lewis.

Length: 15km.

Average gradient: 1:60 16m/km.

Recreational use and scenic description: The Rahu is normally far too small to boat and flows through a jumble of rocks and boulders in a thick beech forest. With rain and high flow the river quickly swells to a torrent, creating a relentless stretch of difficult rapids for a considerable distance alongside State Highway 7.

Scenic value: Picturesque.

Recreational value: Insignificant.

14.4.8 DEEPDALE RIVER

932390

Location: This small river rises on the Victoria Range and flows north to join the Buller near Newton Flat. It lies within thick beech forest over its entire length and has no easy access.

River confluence location: NZMS1, S32/586699.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S32 Murchison.

Length: 32km.

Average gradient: 1:125 8m/km (lower river).

Recreational use and scenic description: Although of sufficient size for canoes and other small river craft, this river has never been used for recreation as far as is known. It lies in a narrow rocky bed through thick beech forest. It has no easy access as it lies on the left bank of the Buller where roads do not reach, and there is no walking track. The river has been ignored in favour of more accessible rivers.

Scenic value: Impressive.

Recreational value: Insignificant.

14.5 BULLER RIVER — NEWTON FLAT TO LYELL

Location: From Newton Flat the Buller loops northwards and thence into a deep valley. Earthquake slips in this section have made lakes with bouldery rapids at the end, the biggest being that formed by the Inangahua earthquake.

Section end location: NZMS1, S32/495672.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S32 Murchison.

Length: 19km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Unused although small power boats might use the lake built up behind the earthquake slip. However, there is no access to this part of the river except over the shallows.

Jet boats: Speed restrictions of 8km/h prevent the use of the river in the earthquake slip lake. Rapids above the Lyell Bridge (the Iron Bridge) are considered to be difficult for boating but are often run.

Drift boats, rafts: From the bottom of the earthquake lake a shore length of difficult, bouldery rapids exists and these are a very popular trip for the bigger rafts and drift boats.

Canoes/kayaks: The earthquake lake is considered to be a little uninteresting in comparison with the rapids above Ariki Falls and the easier rapids below the lake. The rapids from the lake to Lyell Bridge are at their best at high water but offer exciting canoeing at all water levels. This section of the river is a popular trip.

Pack floating, Swimming: Unused. Very boisterous water and the long scramble down the bank undoubtedly puts people off.

Scenic description: The 19km of the Buller below Newton Flat are predominantly flat as they contain the earthquake lake formed in 1968. Below this, however, the river flows over numerous boulders down to Lyell Creek and thereupon becomes quiet and placid again. The river flows deep in a valley with steep sides — not a gorge or canyon, but sloping, beech-covered hillsides. Some scrub, particularly fern and broom, grows on the river banks and on the right bank below the road. With the reflections on the more placid sections, and with the white water offset by the dark greens of the beech, this area is particularly scenic. The historic gold mining area also lends an air of interest.

Scenic value: Impressive.

Recreational value: High.

14.6 BULLER RIVER — LYELL TO WESTPORT

Location: From Lyell the Buller flows slowly westwards towards Westport, turning north-west, where State Highway 6 joins with S.H.69.

River mouth location: NZMS1, S23 & S24/082759.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S23 & S24 Westport; S31 Buller.

Length: 59km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Many powered craft use the river from the harbour at Westport upstream, although log snags and shallows may restrict navigation by larger craft. Only jet boats are able to navigate as far as Lyell.

Jet boats: Boatable, placid water exists as far as Lyell Creek, but the river is seldom boated as it lacks excitement; in fact, many boaters look upon it as little different from driving a car along a main road. (The upper reaches of the Buller near the Owen River are far more popular). The scenery is certainly interesting but not more so than other nearby rivers such as the Upper Grey.

Drift boats, rafts, canoes/kayaks: These craft seldom use this section of the river because of lack of current and rapids. Some service clubs run 'raft' races on sections of the river but this is more a gimmicky than a genuine recreational use of the river.

Pack floating: Unused.

Swimming: Not a great deal of use, although there are numerous excellent pools.

Scenic description: This section is said to be the most scenic on the river, and it undoubtedly is, although perhaps rivalled by the Maruia. It is, from a motorist's point of view, a particularly scenic area with the placid river winding towards the sea between bush-clad hills. Scenic reserves maintain the natural bush cover over most of this distance. The river is slow, almost sluggish and contains interesting reflections of the hillsides. Shingle beaches line the river over most of its length. Willows occur near the Inangahua Junction and downstream from that point. Rock bluffs such as those at Hawk's Crag add interest.

Scenic Value: Exceptional.

Recreational value: Intermediate.

INANGAHUA RIVER 932290

The Inangahua River is the biggest of the Buller's tributaries. It begins in the Victoria Range to the west of Springs Junction and flows beside State Highway 7 to Reefton and then beside S.H.69 to join the Buller in the middle of the Lower Buller Gorge at Inangahua Junction. The river has been divided into three sections.

14.6.1 INANGAHUA RIVER — INLAND OF REEFTON

Location: The Inangahua flows from the Victoria Range in a northerly direction through bush and farmland to Reefton.

Section end location: NZMS1, S38/316287.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S38 Reefton; S45 Ahaura.

Length: 29km.

Average Gradient: 1:105 9.6m/km.

Recreational use and scenic description: The Inangahua is a small, shallow river down to Reefton and flows predominantly through beech forest in a very rocky and bouldery bed. Shortly above Reefton the valley widens to provide open river flats that are farmed. In this area the river flows quietly over a shingle bed. The river has been canoed in high flow conditions from the Tobias Bridge and, no doubt, could be rafted under high flow conditions too. Most trips begin at Branch Bridge. The river is not jet boated above Reefton, nor is it used for swimming except at Black's Point.

Scenic value: Picturesque.

Recreational value: Intermediate.

14.6.2 INANGAHUA RIVER — REEFTON TO INANGAHUA LANDING

Location: From Reefton the Inangahua flows along a shingle bed and is very braided in a very wide river valley.

Section end location: NZMS1, S31/359536.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S31 Buller; S38 Reefton.

Length: 29km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Too shallow and stony.

Jet boats: Only with high flow may this river be boated up to Reefton. The new bridge at Inangahua Landing has left metal in the river which can create hazardous water. Otherwise good boating water.

Drift boats, rafts: Although not used a great deal, this section of the river contains a number of steep and swift shingle rapids that are most enjoyable. The long sections of quiet and shallow water between rapids detract from the excitement of the river.

Canoes/kayaks: Not used to any great extent except when flowing high. In these conditions the quieter sections maintain a fast current and the rapids become more difficult and interesting. Otherwise the river is considered as offering little for canoeists.

Pack floating, swimming: Seldom used.

Scenic description: Below Reefton the river flows over a wide, shingle bed over the very wide valley floor. The valley is farmed and is in grassland but retains bush and scrub-covered hillsides. Willows are common along the margin between farm and shingle and there is a great deal of gorse and broom on the farms and in the shingle islands in the river which detract from the scenery. There are numerous logs and driftwood deposited on the shingle beaches. In places the river bed is up to one kilometre wide and the river is braided. The river becomes confined to a single channel upstream of Inangahua Landing Bridge.

Scenic value: Uninspiring.

Recreational value: Low.

14.6.3 LOWER INANGAHUA RIVER

Location: The river, below Inangahua Landing, is confined to a single channel between low, rocky and shingle banks with blocks of stone placed on the banks on most corners to prevent erosion. The river flows north-east to join the Buller at Inangahua Junction.

River confluence location: NZMS1, S31/405608.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S31 Buller.

Length: 12km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Too shallow over most of its length although shallow draught boats might use the last kilometre or so.

Jet boats: Boatable to Inangahua Landing under most flow conditions with some interesting rapids to negotiate and some shingle shallows, but not particularly exciting.

Drift boats, rafts: There are some rapids created by isolated boulders in the river and a number of shingle shallows; otherwise the river is fast flowing but placid. The river is not used to any great extent over this length by rafters.

Canoes/kayaks: Canoeed often. Considered easy and inferior to the Buller which has the better scenery.

Pack floating, swimming: Not used to any great extent except

a little upstream of the junction. There are numerous good swimming holes.

Scenic description: From the Inangahua Landing Bridge the river is confined to a single channel with some depth, although there are a number of wide, shallow, shingle shoals. In numerous places rock has been placed on the river banks to prevent the erosion of soft shingle banks. Willows grow along most of the length of the river and gorse covers the banks. Not a particularly scenic area.

Scenic value: Uninspiring.

Recreational value: Intermediate.

14.6.4 TRIBUTARIES OF THE INANGAHUA

There are a number of boatable tributaries of the Inangahua of which those on the right bank have road access. The left bank tributaries are the Te Wharau (or Stony) River, Fletcher Creek, McMurray Creek and Giles Creek. Te Wharau River is the largest, a braided shingle river over most of its lower section but inaccessible in its upper reaches where there are a number of rapids. The other left bank tributaries are all very small shingle creeks.

The right bank tributaries are much larger and are the Waitahu River, the Awarau (or Larry) River, Boatman's Creek, Landing Creek and Rough Creek. The Waitahu River is accessible by road 8km above its confluence with the Inangahua and provides a short, braided, shingle trip for canoeists and small rafts. Beneath the main road bridge the old bridge piles (of wood) have been cut off at water level which creates lethal obstructions.

The Awarau River is small with dangerous snags and without access. Boatman's Creek is very shallow and small and is not used for boating. Landing Creek is much the same. Most of these rivers flow over wide shingle beds with a considerable amount of gorse and broom.

Scenic value: Uninspiring.

Recreational value: Insignificant.

14.6.5 OHIKA-NUI RIVER 932120 BLACKWATER RIVER 932170

Location: These two rivers flow north from the Paparua Range into the lower Buller Gorge. Neither has vehicle access into their upper river valleys.

River confluence location: Ohika-nui — NZMS1 S31/195616
Blackwater — NZMS1 S31/265612.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S31 Buller.

Length: Ohika-nui — 23km, Blackwater — 19km.

Average gradient: Ohika-nui — 1:80 12m/km, Blackwater — 1:125 8m/km.

River confluence location: Ohika-nui — NZMS1, S31/195616
Blackwater — NZMS1, S31/265612.

predominantly beech. The bed is clear of logs and with a higher than normal flow it is canoeable but is not navigable by larger craft. The Ohika-nui is larger, stony and contains some interesting rapids but access is awkward.

Scenic value: Picturesque.

Recreational value: Low.

15.0 TOTARA RIVER 929000 (BIG TOTARA RIVER)

Location: The Totara River flows west to the sea at the southern end of the Okari Lagoon, 17km south of Westport.

River mouth location: NZMS1, S30/966600.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S30 Charleston; S31 Buller.

Length: 19km.

Average gradient: Slight.

Recreational use and scenic description: The northernmost boatable river south of the Buller would normally be the Big Totara River which flows down to the Okari Lagoon. The Okari River, immediately to the north of the Big Totara River, is really too small and shallow. The Totara River has a shallow shingle bed with a large metal extraction plant near the main road which has widened the bed considerably. The river is shallow but does offer a quiet trip when running high over the 4km from road to lagoon. There is little gradient and the river is without rapids. The land in the vicinity is mostly pakihi scrub (gorse and manuka with some broom) and has a few stands of stunted native bush (the best has all been milled).

Scenic value: Uninspiring.

Recreational value: Insignificant.

16.0 WAITAKERE OR NILE RIVER 928000

Location: The Nile River is a small stream flowing onto the coast south of the Buller.

River mouth location: NZMS1, S30/949553.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S30 Charleston.

Length: 28km.

Average Gradient: Slight.

Recreational use and scenic description: The Nile River has vehicle access providing easy use of the lower 5km of its length down to the main road. The river is only usable by the smallest of craft such as canoes. Rafts frequently run aground on the shallows. The river is surrounded by pakihi country, scrub and gorse, and has some impressive limestone bluffs at the valley edge.

Scenic Value: Picturesque.

Recreational value: Low.

17.0 TIROPAHI OR FOUR MILE RIVER 926000

Location: The Tiropahi flows onto the west coast at Needle Point, 60km north of Greymouth.

River mouth location: NZMS1, S30/919482.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S30 Charleston.

Length: 19km.

Average Gradient: Slight.

Recreational use and scenic description: The Tiropahi is generally too small and shallow for any recreational use although it may be usable after heavy rain. It flows through low scrub country, pakihi, manuka, gorse and fern.

Scenic value: Uninspiring.

Recreational Value: Insignificant.

18.0 FOX RIVER 924000

Location: The Fox River flows onto the west coast at Woodpecker Bay (Tiromoana).

River mouth location: NZMS1, S37/894390.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S37 Punakaiki.

Length: 15km.

Average gradient: 1:125 8m/km.

Recreational use and scenic description: Unlike the rivers further north which flow through pakihi country, the Fox flows through native bush and is enclosed by large limestone bluffs. Short sections of the river are braided, but on the whole the river retains a single channel and flows quietly over a sandy and shingle bed. There is no easy access other than at the river mouth so that the river has not been used for boating. It is a small river and is very shallow.

Scenic value: Impressive.

Recreational value: Insignificant.

19.0 BULLOCK CREEK 923000

Location: A small creek flowing onto the west coast a little north of Punakaiki.

River mouth location: NZMS1, S37/855305.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S37 Punakaiki.

Length: 17km.

Average gradient: 1:125 8m/km.

Recreational use and scenic description: Bullock Creek has an old logging track following its right bank linking the upper valley to the coast road. The river is normally far too small for boating and over its last kilometre drops suddenly through thick bush to the coast in a narrow gutter. The river has a number of massive limestone caves in the upper valley and these are the biggest cave systems on the coast. Apart from the cleared valley, the area remains in logged-over bush with high limestone bluffs.

Scenic value: Picturesque.

Recreational value: Insignificant.

20.0 PORARARI RIVER 922000

Location: The Porarari River is a small, clear-flowing river that enters the sea at Punakaiki.

River mouth location: NZMS1, S37/852300.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S37 Punakaiki.

Length: 20km.

Average gradient: 1:125 8m/km.

Recreational use and scenic description: This is a small river without rapids, flowing over fine gravel through thick bush to the coast in a deep valley. It has impressive scenery in its upper valley where it wanders in a meandering fashion over a wide, flat, bush-covered valley before flowing through a narrow cutting to the sea. There is little force behind the current so that canoeists may portage upstream or paddle downstream. The river is not used by other boaters.

Scenic value: Impressive.

Recreational value: Insignificant.

21.0 PUNAKAIKI RIVER 921000

Location: The Punakaiki is a small river flowing onto the coast south of Dolomite Point, at Punakaiki.

River mouth location: NZMS1, S37/844278.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S37 Punakaiki.

Length: 24km.

Average gradient: 1:125 8m/km.

Recreational use and scenic description: The Punakaiki is normally a smaller river than the Porarari but can flood to a much larger river as it has a far bigger catchment area. The river has been canoed and the lower 10km or so jet boated when in flood. The river flows through a wide valley, with bush-covered hills on either side; the valley floor is in grass with a few willows; the river bed has fine gravel and sand. Large limestone bluffs occur on the valley edges and there are numerous caves in this area from which small creeks flow. A rough track up the valley could provide access for canoeists and other boaters, except that, when the river is flowing high and at its best, the track is flooded out.

Scenic value: Impressive.

Recreational value: Low.

22.0 TEN MILE CREEK 916000

Location: Ten Mile Creek flows onto the west coast 16km north of Greymouth.

River mouth location: NZMS1, S44/784021.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S44 Grey-mouth.

Length: 15km.

Average gradient: 1:40 25m/km.

Recreational use and scenic description: Ten Mile Creek is the most frequently used of all the small coastal streams on the west coast. It is best with above normal flows but is canoeable and raftable at normal flow and has been liloed. It is a shallow river with large rocks contained in a narrow channel between high banks. A road which services the numerous mines in the middle reaches of the river provides good access. Scrub and regenerated bush cover the hills.

Scenic value: Moderate.

Recreational value: Intermediate.

23.0 GREY RIVER 914000

The Grey River rises on the main alpine divide and flows westwards to the Tasman. Its major tributary, the Ahaura, also rises on the main divide. Several other important streams join the Grey from the coastal Paparoa Range. There are some incredibly scenic gorges in the middle and upper reaches of the river with the best in the Ahaura River. The wider, braided and terraced lower river area is farmed. Both the main valley and many of the tributaries saw alluvial gold mining and dredging operations which have left heaps of tailings now covered in gorse. The Ahaura saw gold mining on a larger scale by the Chinese community; relics of this era are still to be seen, providing one of the most historically interesting areas on the coast. The Grey and most of its tributaries drain lakes.

23.1 UPPER GREY RIVER 914000

Location: The Upper Grey River rises on Mount Alexander, west of Springs Junction. It flows south to join the Brown Grey River on the right bank and later, on the left bank, the Blue Grey River (often known as the Clear Grey River) flows in. From this point the river turns south-west, is joined by May Creek and 12km later the Robinson River joins from the left, as does the Tass River. The Grey then flows over a wide bed to Gentle Annie Gorge.

Section end location: NZMS1, S45/401991.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S45 Ahaura; S46 Lewis.

Length: 29km.

Average gradient: 1:190 5.3m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Some boaters, after negotiating Gentle Annie Gorge, have boated into the lower reaches of the Upper Grey River but the gorge is always the main object of the trip. The top section of the river, with road access, is too shallow for jet boating.

Drift boats, rafts: Only marginally boatable in size and has not seen a great deal of activity from rafters as the middle section is much preferred. There are a number of good rapids but they need above normal flows to provide good rafting water.

Canoes/kayaks: UPPER GREY — Canoeable from Brown Grey confluence. There are a number of shallow, rocky rapids and bouldery rapids that offer very good water for experienced canoeists but not so difficult as to prevent the novice from attempting the trip.

BROWN GREY — Generally too shallow except after rain.

BLUE GREY — Said to be canoeable from immediately below the lake. Stony and rocky with some good rapids.

MAY CREEK — Too shallow.

ROBINSON RIVER — Canoeable from the Forestry Hut area depending upon flow; needs rain. Has only walking access and is consequently seldom used.

Pack floating: Has been used for floating by hunters and trampers who have enjoyed the trip but the floating was only a by-product of their being in the area — not a primary recreational activity.

Swimming: Access restricts the Grey's use. The Maruia is more accessible and is similar.

Scenic description: The Blue Grey River (Clear Grey River) flows from Lake Christabel and is generally considered to be the source of the Grey River. The river is shallow and flows over sharp rocks in a very scenic beech forest area. The smaller Brown Grey River is much the same and it too, flows through thick beech forest. The rocks are covered in a thick carpet of mosses and delicate ferns. The Upper Grey River flows steeply down from the Mount Alexander area in a very rocky bed and into a wide and shallow valley area. From the Blue Grey confluence the river flows over a stony bed, often of gravel, but more usually of small bouldery rocks. The river is bordered by an attractive area of natural beech forest. From the Robinson River confluence the valley opens out onto braided shingle flats.

Scenic value: Exceptional.

Recreational value: Intermediate.

23.2 MIDDLE GREY RIVER

Location: From the braided river flats of the Upper Grey, the Grey flows into an impressive gorge opposite Mount Harata. A second gorge is situated a little downstream from the Alexander River confluence before opening up into braided river again beyond the Clarke River, down to Ikamatua.

Section end location: NZMS1, S45/153078.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S45 Ahaura.

Length: 31km.

Average gradient: 1:315 3.2m/km.

RECREATIONAL USE:

Motor launches: Normally too shallow.

Jet boats: Excellent water with large pressure waves in the gorge. Considered as suitable for experienced drivers only. Often an above normal flow is required to negotiate the shallows above Ikamatua which is the closest launching area.

Drift boats, rafts: Some of the best water on the coast, apart from the Buller, for drift boats and rafts. A number of large pressure-wave rapids in a particularly scenic gorge. The size of the river provides good, powerful water with ample room to manoeuvre.

Canoes/kayaks: Excellent water with plenty of rapids. Good access at the launching area and exit area with isolated scenic gorges between — a rarity on the coast. Water of Grade 3 suitable for the average canoeist as well as providing an interesting trip for the experts.

Pack floating: Not used specifically for floating trips, mainly because of the length of the trip between access points, and because of the powerful current in places. Some trampers have floated in the area.

Swimming: Only at the Ikamatua Bridge.

Scenic description: From the braided section of river valley the Grey flows into a narrow gorge known as the Gentle Annie Gorge. In this gorge there are a number of rapids containing large pressure waves. The majority of these rapids are created by large boulders placed in the river by massive earthquake slips. The rapids ease above the Alexander River confluence before plunging into a second gorge. This second gorge is unlike the first in that it has few rapids and is both placid and tranquil. The gorge is narrow with high, often overhanging clay cliffs, very mossy and dripping with water. The river bed is very deep and is a deep green colour. Below the Clarke River the gorge widens gradually and shingle beaches occur. The river then suddenly leaves the beech forest which has formerly enclosed the river, and now becomes braided over a wide river valley with broom, gorse and other such weeds growing on the shingle.

Scenic value: Exceptional.

Recreational value: Exceptional.

23.3 LOWER GREY RIVER

Location: The Grey River from the Ikamatua Bridge is usually referred to as the Lower Grey. From Ikamatua the river flows south-west, and south, after collecting water from the Mawheraiti River (Little Grey River). The river is very wide and braided except at Dobson where the bed closes in to a short gorge. The river is only tidal for a very short distance.

River mouth location: NZMS1, S44/724894.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S44 Grey-mouth; S45 Ahaura.

Length: 52km.

Average gradient: slight.

RECREATIONAL USE:

Motor Launches: Deep water suitable for small screw-driven craft exists at least as far upstream as the Arnold River confluence. The river is flat but has a swift current, particularly at Kiwi Point.

Jet boats: Boatable over the full length of this river section providing an easy and pleasant trip over the wide, braided river flats.

Drift boats: Not used to any great extent because of lack of current in the braided section where it may also be rather shallow. There are few rapids.

Rafts: Flat water and generally low scenic value has resulted in little use.

Canoes/kayaks: Not used a great deal because of the lack of rapids. Short sections may be used from time to time merely because of its close proximity to urban populations. Youngsters use small canoes for fishing at Greymouth itself.

Pack floating: Unused.

Swimming: Some use except at Kiwi Point where the increase in current has caused some drownings of which a suspected murder case has given notoriety to the area.

Scenic description: The Grey, from Ikamatua, is terribly braided from the bridge down as far as Stillwater where the Arnold River flows in. In places the river is over 1.5km wide from one channel to the other. The islands tend to be covered in broom, gorse, ragwort and other weeds with willows along

the banks of the main channels. The hills beyond the river are covered in stunted, logged-over bush and scrub; particularly prominent are gorse and bracken fern. The flat land beyond the actual river channel has remains of the gold dredge tailings and is swampy in places. At Stillwater the river flows into a narrow channel and has a swift current with numerous eddies. The river banks show the remains of old mining operations and the foundations of now abandoned buildings. The railway line is an eyesore. Below Dobson, the river widens a little again and becomes tidal below the main road bridge.

Scenic Value: Uninspiring.

Recreational value: Intermediate.

23.3.1 MAWHERAITI RIVER 914290 (LITTLE GREY RIVER)

Location: This river rises near the Inangahua River, north of Reefton, but flows southwards away from the Inangahua, to junction with the Grey near Ikamatua. It is also called the Little Grey River.

River confluence location: NZMS1, S45/139086.

Maps: NZMS18, Sheet 15 Buller; NZMS1 Sheet S38 Reefton; S45 Ahaura.

Length: 33km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Too shallow for most power craft. The river is shallow over shingle and old gold dredge tailings.

Jet boats: Seldom boated because it is too shallow, unlike the Grey which has far more water and it offers identical water to that found on the Grey below the gorge.

Drift boats, rafts, canoes/kayaks: Seldom used as the Grey is similar with more water.

Pack floating: Unused.

Swimming: Some swimming spots, but generally the river is very shallow and not suitable for swimming.

Scenic description: At the confluence of the Mawheraiti and the Grey there are large expanses of gold dredge tailings that have created braided river conditions. Gorse and similar scrub grows on the mounds of shingle. The river is essentially a gravel bed flowing through dairy farm country. Steep shingle streams such as Stony Creek, Rough and Tumble Creek and Casolis Creek all flow into the river, normally only a trickle of water over the stones except after rain when they become torrents of water. The hills on either side of the valley are bush or scrub-covered.

Scenic value: Uninspiring.

Recreational Value: Insignificant.

23.3.2 SNOWY RIVER 914292 BLACKWATER RIVER 914293

Location: The Snowy and Blackwater Rivers run roughly parallel to each other through attractive beech forest and then, in their lower reaches, over dredge tailings, before joining the Mawheraiti River. A number of tributaries enter the Blackwater River 4km above the main road; of these Big River is the only boatable one. The Snowy River is bigger but its characteristics are much the same.

River confluence location: Snowy — NZMS1, S38/169119

Blackwater — NZMS1, S38/169120.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S38 Reefton; Sheet S45 Ahaura.

Length: Snowy — 28km.

Blackwater — 30km (includes Big River).

Average gradient: Snowy — 1:105 9.6m/km.

Blackwater — 1:145 6.9m/km.

Recreational use and scenic description: The Snowy River flows between very rocky banks, almost a low gorge, through attractive beech forest. The river is often narrow so that in many places, the beech trees overhang and meet across the river, forming a canopy filtering the light through. The river bed is a popular area for recreational gold panners and is too shallow for boating of any sort except when flowing high after rain, when it offers a most exciting trip for canoeists, rafters, and drift boaters. The river is too narrow for jet boating. From the point where the river leaves the beech forest at Hukawai the rocky banks stop and the river flows over a wide valley floor of shingle — the remains of gold dredging operations. The valley floor is now farmed but contains a considerable amount of gorse. The Blackwater River is much the same but contains less beech. It has a number of feeders so that in the beech forest area the river exists only as a number of shallow creeks. The dredge tailing area is far more extensive.

Scenic value: Snowy — Impressive.

Blackwater — Uninspiring.

Recreational value: Snowy — Intermediate.

Blackwater — Insignificant.

23.3.3 ROUGH RIVER 914280 BIG RIVER 914220

Location: These two rivers are both tributaries flowing into the Grey River from the north. Big River should not be confused with the Big River which is the major feeder of the Blackwater River (23.3.2). Rough River is also known as the Otututu River.

River confluence location: Rough River — NZMS1, S45/136086.

Big River — NZMS1, S45/032028.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S38 Reefton; Sheet S45 Ahaura.

Length: Rough River — 27km (includes Gordon Creek).

Big River — 24km.

Average gradient: Rough River — Slight.

Big River — 1:145 6.9m/km.

Recreational use and scenic description: Both these rivers flow through low bush and, in the lower sections only, through open farmland. They are shallow, shingle rivers with some larger rocks. Rough River is the larger and is very braided in its lower reaches. Both are too shallow for boating in summer and require rain to raise their levels sufficiently even for canoeing. Big River has been jet boated in a fresh, but is normally too shallow for this. Gorse and other scrub is common.

Scenic value: Moderate.

Recreational value: Insignificant.

AHAURA RIVER 914190

The Ahaura River collects water from the Trent, Tutaekuri and Waiheke Rivers and flows west to join the Haupiri River which drains Lake Haupiri and Lake Ahaura. The river then flows north before swinging west again through the beautiful Ahaura Gorge to finally junction with the Grey on the Ohinetakitaki Plain. The lower gorge contains fascinating relics of the old Chinese gold diggings. The river has been divided into two sections for this survey.

23.3.4 AHAURA RIVER — UPPER TRIBUTARIES

Of the upper tributaries, the Waiheke and the Tutaekuri both were used as pack-tracks over the main divide into Canterbury. The Waiheke is the old track over Amuri Pass into the Doubt-

ful River Valley and the Tutaekuri has the Hope River on the other side of the divide.

The Waiheke River flows down a long, low valley and is predominantly a shingle bed river flowing through beech forest with a margin of tussock grass along the banks. The Tutaekuri is much like the Waiheke, only larger. The Trent River, to the south, is more braided and again, flows through beech forest. All these rivers are of canoeable or raftable size for most of the year except in late summer. Shallows may pose problems for the more bulky craft and the rivers are best with high flows or in spring with melting snow feeding them.

The Waikiti River is boatable by very small craft from the road down to the Ahaura and is used for access to the upper river area. The other rivers in this area, apart from the Haupiri, have no vehicle access. The Waikiti is a shallow, stony river, flowing very fast. The Ahaura in this area is a wide, braided river, running clear and fast but very shallow. The river valley is wide with extensive grassy flats between the river and the surrounding beech-clad hills. The Nancy River is much the same, but far smaller.

Jet boats have been launched in Lake Haupiri and have navigated the Haupiri and upper Ahaura Rivers, but high or spring flows are required for this, and the rivers are all too shallow in summer for jet boating. The Waiheke, Tutaekuri and Trent Rivers are all boatable for some distance with high flows.

Scenic value: Impressive.

Recreational value: High.

23.3.5 AHAURA GORGE

Location: The term 'gorge' hardly describes the section of the Ahaura below the Hamer Flat adequately as there are no really huge bluffs, nor is the bed particularly narrow. The former braided river does, however, become confined to a single channel. It junctions with the Grey at Ahaura.

River confluence location: NZMS1, S45/024007.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S45 Ahaura.

Length: 33km (Hamer Flat to confluence).

Average gradient: 1:500 1.9m/km.

RECREATIONAL USE:

Motor launches: Too shallow under most conditions.

Jet boats: Boatable all year round to the Earthquake Rapid at NZMS1 S45/212893 and with high flow boatable up to Lake Haupiri and into the upper tributaries. This is one of the most used rivers on the West Coast for boating.

Drift boats, rafts: Although not having big rapids, apart from Earthquake Rapid, this river offers excellent boating through quiet and tranquil gorges in sparkling clear water. The scenery is unmatched by anything else in the area. Suitable for novice rafters and boaters.

Canoes/kayaks: An extremely popular trip. The scenery is particularly attractive and the river is relatively easy for such a considerable distance without the sluggishness found in the lower Buller. The gorges are particularly unique, being somewhat akin to the papa gorges of the North Island's Wanganui River.

Pack floating: Seldom used although it would offer an enjoyable but slow trip.

Swimming: Considerable use is made of the river at the main road bridge.

Scenic description: From the braided upper area the river flows into a narrowing valley clothed in thick beech forest with some isolated pine. The river flows swiftly over crystal clear water with large deep green pools on the river corners. There are a number of shallow, shingle rapids and a few bouldery rapids about Earthquake Rapid, which is the largest rapid on the river. The river valley widens lower down providing a view of

the surrounding hills and becomes a wide, gentle-flowing river over shingle banks.

Scenic value: Exceptional.
Recreational value: Exceptional

23.3.6 HAUPIRI RIVER 914195

Location: The Haupiri River flows north past Kopara to junction with the Ahaura in its upper braided section. It collects water from Lakes Haupiri and Ahaura by small, short streams, before it joins the Ahaura River.

River confluence location: NZMS1, S52/268796.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S52 Harper Pass.

Length: 33km.

Average gradient: 1:475 2.1m/km.

Recreational use and scenic description: Lake Haupiri is a tranquil and scenic lake with thick beech forest along its northern shore, and swamp along its southern shore. It drains into the Haupiri River via a short channel. The Haupiri is often used by jet boaters and small craft from the lake down into the Ahaura. Only with higher flows is the river jet boated above the lake outlet but can be canoed year round (although lack of access has restricted its use). The Haupiri River is a shingle bed river and flows predominantly through beech forest with some farmed land along the river margins from Kopara downstream. Ferns and flax often cover the banks in the lower reaches of the river.

Scenic Value: Exceptional.
Recreational value: High.

23.3.7 NELSON CREEK AND LAKE HOCHSTETTER 914150

Location: Lake Hochstetter lies in an area of milled and standing beech forest, south of Ahaura and to the east of Ngahere. A small creek drains the southern, swampy shore of the lake and becomes the left branch of Nelson Creek. Nelson Creek proper drains the forested area south-west of the lake. It flows into the Grey at Ngahere.

River confluence location: NZMS1, S44/940956.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S44 Grey-mouth; S45 Ahaura.

Length: 30km (includes right branch).

Average gradient: 1:145 6.9m/km.

Recreational use and scenic description: Lake Hochstetter is often boated upon and has a rough boat launching ramp. The only access to the lake is via a logging road which has an often-locked gate. Nelson Creek has been jet boated but requires a minor flood to become boatable. The river is often canoed from Nelson Creek settlement, and from higher points when flowing high. It offers an easy trip over a shingle and stone bed with numerous shallows.

Lake Hochstetter is much like the other lakes in this area; native bush covers the shoreline (beech being the dominant species with some totara, miro and rimu). There is also a large pine plantation but this is not apparent from the lake or its shoreline. The lake does not have as scenic an outlook as other lakes in the area because the bush has been milled over and the lake is set at a higher altitude so that the surrounding hills are not visible. Thus the lake has a more windswept and bleak appearance. The shoreline is swampy to the south where the left branch of Nelson Creek drains the lake over a small weir. Wasps are a problem in this area in summer.

Nelson Creek is a very stony river of low gradient some 6 metres wide. The banks are scrubby with dead trunks standing proud above the fern, gorse and manuka. There is often a narrow

margin of beech forest along the river bank. In the lower river area the river flows in a serpentine manner over dredge tailings with higher banks set further back from the river channel.

Scenic value: Moderate.
Recreational value: Low.

23.3.8 CROOKED RIVER 914067

Location: Crooked River drains the northern slopes of the Kaimata Range through the Otira Kopara State Forest before flowing onto the flat, somewhat swampy land of Rotomanu and Te Kinga. It then meanders over an alluvial plain to form a delta on the northern shore of Lake Brunner which ultimately drains into the Grey via the Arnold River.

River confluence location: NZMS1, S50 & S51/974699.

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S52 Harper Pass; S50 & S51 Hokitika.

Length: 36km.

Average gradient: Lower river — slight.

Upper river — 1:70 14.3m/km.

RECREATIONAL USE:

Motor launches: Far too shallow.

Jet boats: Boatable to the gorge except in late summer when shallow water restricts travel upstream. Almost always boatable as far as Lady Lake Creek. Logs and railway iron groynes are a major obstacle.

Drift boats, rafts: Normally a little too shallow and slow over the lower reaches of the river and the upper river area can be too small with sudden drops. Seldom rafted.

Canoes/kayaks: The lower river is canoeable but seldom used, as it offers very easy water through farmland without any significant rapids. The upper river is, however, often canoed over the few kilometres above the bridge at the bottom of the gorge — from NZMS1, S52/112639 to 087662. A slalom of international standards of difficulty has been held over this section of water on a number of occasions. The river is of Grade 3 difficulty and said to be suitable for the more experienced only. Access is via a metalled farm track with a walking track going further upstream.

Pack floating: The upper gorge (the same area mentioned as used for canoeing) has often been liloed and floated and offers good water for these activities.

Swimming: Some good pools at the lower gorge area.

Scenic description: The river in the upper catchment is rocky with hard, sharp-edged bedrock and boulders with water cascading over short rapids with quiet pools between. Over the lower 4km there are three principal drops, the largest of which is a little over one metre in height. Below these chutes the bed gradually changes to gravel and shingle and flattens out considerably on reaching the Rotomanu Bridge, then flows from thick bush onto farmland. The river then meanders over shingle shallows and between willows and tree stumps down to the delta on the northern shore of Lake Brunner. Below Te Kinga the river becomes sluggish and a little muddy. The thick, attractive bush of the upper catchment changes suddenly at Rotomanu to open farmland with patches of native timber and swamp.

Scenic value: Upper river — Impressive.

Lower River — Uninspiring.

Recreational value: Upper river — High.

Lower river — Intermediate.

23.3.9 LAKE BRUNNER AND LADY LAKE 914067

Location: Lake Brunner (Maori name Moana Kotuku) lies in a glacial basin east of Greymouth. Crooked River, draining

from the alpine divide, has a large growing delta that has filled the eastern end of the lake, while in the south the small Orangipuku River is building a delta out from the glacial valley between the Hohonu Range and Te Kinga. The Eastern Hohonu River is smaller. The Arnold River drains the lake into the hydro lake (Lake Ullstrom) and thence into the Arnold River proper. To the east of Lake Brunner and in the river flats built up from silt from the Crooked River are two small lakes — Kangaroo Lake, which has no outlet except drainage through swampy land, and Lady Lake which has a small creek flowing into the Crooked River. South of Lake Brunner is the Poerua River. Lake Whitestone is a mere pond in the swamplands, south of Kangaroo Lake.

Recreational use and scenic description: Of the lakes, the small Lady Lake is the most scenic. Being smaller and sheltered (closer in behind the hills) it has a very tranquil air about it whilst Lake Brunner can be exposed to high winds. A yacht club races on Lake Brunner and it is a popular site for catamaran yachts which prefer flat water with high wind speeds. Power boat racing is also very popular on the lake. Lady Lake is surrounded by native bush with swamp growth on the southern shore. Reeds grow on the perimeter of the lake. Access to the smaller lakes is not easy — most lie within privately owned farm land. Lady Lake has a margin of bush, particularly kahikatea, which makes access awkward, but provides most of the lake's charm.

Lady Lake can be jet boated into by means of the very narrow Lady Lake Creek. However, a trip up this creek involves parting flax and other reeds in order that the boat may slip through. Canoeists often get into the lake from the road at Rotomanu and then across the lake and go down the creek to the Crooked River. This area is valued for its peace and quietness and the wealth of wildlife. Lake Brunner is seldom used by canoeists.

Scenic value: Lady Lake and Creek — Exceptional.
Lake Brunner — Moderate.

Recreational value: Lady Lake and Creek — High.
Lake Brunner — High.

23.3.10 ORANGIPUKU, EASTERN HOHONU AND POERUA RIVERS 914067

Location: The Orangipuku River drains the eastern edge of the Hohonu Range and flows for most of its length through the farmed flats at the foot of the range.

The Eastern Hohonu River drains the northern side of the Hohonu Range and makes a large, curving path through milled bush to enter Lake Brunner on its eastern shore. The Big Hohonu River is also known as the Greenstone River and is a tributary of the Taramakau River (q.v.). The Poerua drains Lake Poerua and flows into the Crooked River.

River confluence location: NZMS1, S50 & S51 —

Orangipuku — 941635

Eastern Hohonu — 923686

Poerua — 015671

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S52 Harper Pass; S50 & S51 Hokitika.

Lengths: Orangipuku — 11km. Eastern Hohonu — 19km. Poerua — 8km.

Average gradient: Slight (in all rivers).

Recreational use and scenic description: The Orangipuku is divided up into many tributaries of which Bruce Creek is the largest. None of the tributaries are of boatable size and tend to be little more than farm drains as the land at the foot of the Hohonu Range is rather swampy. The Orangipuku keeps close to the edge of the bush and does not drain farmland. It has a swampy bed, is shallow and flows quietly through the bush at the foot of the range with some swampy growth on the right bank. It has no rapids but the lower reaches may be canoed year round; jet boated only after rain and then not in the fish-

ing season. Lady Lake Creek and the Crooked River are to be preferred by all recreational groups.

The Eastern Hohonu River flows beneath the road west of Mit-chells. It is a very rocky and bouldery creek with a mere trickle of water and is unboatable except after rain when it becomes quite a torrent. It floods quickly and the water rushes down the bed at a terrific rate providing demanding white water. It may well be too violent for canoeing or rafting and certainly, with overhanging trees, is too dangerous for liloing. A few kilometres below the road the gradient eases and the river meanders through the bush, becoming swampy before entering the lake. The Poerua drains Lake Poerua and flows into the Crooked. It is much like the Orangipuku in character only smaller and more swampy.

Scenic value: Moderate.

Recreational value: Insignificant.

23.3.11 ARNOLD RIVER

914060

Location: The Arnold River drains Lake Brunner and flows north-west into the Grey at Stillwater. It has a hydro-electric dam on the upper river 13km below the lake and it backs up water for some 4km in what is known as Lake Ullstrom.

River confluence location: NZMS1, S44/876900.

Maps: NZMS18, Sheet 15 Buller; Sheet 17 Hokitika; NZMS1, Sheet S44 Greymouth; S51 Hokitika.

Length: 29km.

Average gradient: 1:600 1.7m/km.

RECREATIONAL USE:

Motor launches: Some small craft may, with care, navigate the upper reaches of the river from Lake Brunner down into Lake Ullstrom. There are shallows and the odd log snag to be watched for by screw-driven craft.

Jet boats: Easy boating over flat water from Lake Brunner to the hydro dam, launching at the lake or at the dam. The lower river is for experienced boaters only and contains numerous bouldery rapids with some over-hanging trees to make things even more interesting. The river has a fast current.

Drift boats: Excellent water from the dam and the powerhouse over bouldery rapids. Water covers the boulders so that tight manoeuvring is not required except at very low flows. Generally considered to be of moderate difficulty.

Canoes/kayaks: Excellent water for those canoeists of average ability. Rapids of Grade 2 decreasing in difficulty as you go down the river. Above the dam the river is flat and slow moving but the scenery makes up for lack of interest in river and rapids.

Pack floating: Many trees make floating a little hazardous, otherwise a good trip for the first 5km or so below the dam.

Swimming: Numerous pools, the best being at the powerhouse. Seldom swum in except by locals.

Scenic description: From Lake Brunner the river flows quietly through a very scenic area of native bush. The river is flat and almost still providing interesting reflections of the surrounding bush and its margins of swamp plants (reeds and flaxes). The native bush soon gives way to willows and open farmland. There is a noticeable current as the river enters the lake and spreads out with a mixture of bush and willows along the lake edge — the right bank being the section containing the bush.

From the dam the water flows over a number of bouldery rapids and is bordered by willows. The powerhouse tail-race boosts the water level back to normal and the river then flows quickly over bouldery rapids down the valley between willows. Gorse, blackberry and other scrub are noticeable in this area. Farmland lies on either bank, the right bank being lower and less interesting. The left bank contains a few exotic trees such as pine. From Kohiri the river becomes wider and splits around a large island the rapids become easier.

Scenic value: Moderate.

Recreational value: High.

GREYMOUTH TO FRANZ JOSEF

24.0	New River	27	28.2.4	Kaniere River	30
25.0	Taramakau River	27	29.0	Mahinapua Creek and Lake Mahinapua	30
25.1	Upper Taramakau River	27	30.0	Totara River	30
25.1.1	Otira River	27	31.0	Mikonui River	30
25.1.2	Rolleston River	27	32.0	Waitaha River	31
25.2	Lower Taramakau River	27	32.1	Kakapotahi (Little Waitaha) River	31
25.2.1	Taipo River and Wainihinihi Rivers	28	33.0	Wanganui River	31
25.2.2	Greenstone or Big Hohonu River ..	28	33.1	La Fontaine Stream and Ilanthe Creek	32
26.0	Arahura River	28	34.0	Poerua (Little Wanganui) River	32
27.0	Small Coastal Streams	28	35.0	Whataroa River	32
28.0	Hokitika River	29	35.1	Upper Whataroa and Perth Rivers	32
28.1	Upper Hokitika River	29	35.2	Lower Whataroa River	32
28.1.1	Mungo River	29	36.0	Waitangi-Taona River	33
28.1.2	Whitcombe River	29	37.0	Okarito River	33
28.2	Lower Hokitika River	29	38.0	Lake Mapourika and its streams ...	33
28.2.1	Kokotahi River	29			
28.2.2	Styx River	30			
28.2.3	Toaroha River	30			

24.0 NEW RIVER 912000

Location: Flowing out onto the west coast, south of Grey-mouth, are a number of small creeks of which Mill Creek and Saltwater Creek are little more than large drains. The largest of these creeks is New River which enters the sea at Camerons.

River mouth location: NZMS1, Sheet S50 & S51/675761.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S50 & S51 Hokitika.

Length: 36km.

Average gradient: Slight.

Recreational use and scenic description: New River is a shingle bottom river with many shallow, shingle shoals. There is little current except when flooded. It is a little swampy upstream of the main road bridge. The valley is bordered by bluffs and scrub land with bush country beyond the immediate valley floor. It has a somewhat untidy and neglected look, due to the scrub, pine and swamp in the valley area. The river has a number of feeding tributaries, all meandering and small. The river is canoeable from around Marsden and has been jet boated a short distance. It is considered to be of little interest.

Scenic value: Uninspiring.

Recreational value: Insignificant.

25.0 TARAMAKAU RIVER 911000

The Taramakau flows westwards from the main divide. At the head of the Taramakau is Harper Pass which was used by the pre-European Maoris as the principal pass from Canterbury to the West Coast on greenstone expeditions. The Taramakau has been extensively dredged for gold. The river has been divided into 2 sections for this survey.

25.1 UPPER TARAMAKAU RIVER 911000

Location: The Taramakau River begins on the western side of a wide, braided, shingle bed.

Section end location: NZMS1, S52/010530.

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S52 Harper Pass.

Length: 34km.

Average gradient: 1:42 24m/km — upper end. 1:165 6m/km — lower end.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Navigable above Jacksons only with high flow. Provides water for experienced boaters only.

Drift boats, rafts: Seldom used. No big rapids, numerous shallows.

Canoes/kayaks: Seldom used. Highest easily accessible point is from the Otira-Taramakau confluence. 'Shingle chute' type rapids of up to Grade 2 difficulty suitable for novice canoeists.

Pack floating: Unused.

Swimming: Unused.

Scenic description: From Harper Pass the river flows steeply down a beech-forested valley in a narrow stony bed. The bed of the river becomes steadily wider and the water channel meanders down the centre of the shingle bed. The hills flanking the valley are exceptionally steep so that numerous side streams enter as small waterfalls. In the shingle bed itself there is a lot of gorse and broom which becomes more noticeable towards the lower end of this river section. Numerous logs litter the bed. The river becomes split in numerous channels on meeting the waters of the Otira River.

Scenic value: Picturesque.

Recreational value: Low.

25.1.1 OTIRA RIVER 911360

Location: The Otira River flows north from the northern face of Mount Rolleston and thence into the Otira Gorge, later to junction with the Taramakau. Its main tributaries are the Rolleston and Deception Rivers. The Otira is one of the steepest rivers in the area.

River confluence location: NZMS1, S52/118514.

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S52 Harper Pass; S59 Otira.

Length: 22km.

Average gradient: Above Rolleston confluence — 1:9 111m/km. Below Rolleston confluence — 1:60 16m/km.

Recreational use and scenic description: Normally the Otira River has insufficient water for any form of recreational use. The water cascades down between boulders and rocks and then gradually flattens out before the Rolleston River joins it. The river is canoeable from a short distance above the Rolleston River confluence. If the water were not so cold, it would provide good lilo water too, although it is a little shallow.

From the Rolleston confluence the river is canoeable and raftable, becoming a trifle shallow and braided below Otira. Below Otira the river bed is flat between steep, bush-covered hillsides and bluffs. At high flow the river becomes a mass of white water.

Scenic value: Picturesque.

Recreational value: Low.

25.1.2 ROLLESTON RIVER 911384

Location: The Rolleston River, a tributary of the Otira River, begins between the Goldney and Barron Ranges. It is a similar river to the Otira in all respects except size.

River confluence location: NZMS1, S59/051390.

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S59 Otira.

Length: 6km.

Average gradient: 1:10 100m/km.

Recreational use and scenic description: This river is similar to the Otira River except that it is a little smaller, only becoming of sufficient size for canoeing or other recreational use when flowing high. In this case, most boaters will prefer the lower Otira. There is no road access to the Rolleston Valley.

Scenic value: Picturesque.

Recreational value: Insignificant.

25.2 LOWER TARAMAKAU RIVER

Location: Below Jacksons the river flows west to Wainihinihi and then north-west to enter the sea south of Camerons township. It is flatter and very braided in this section and has numerous bluffs on the valley walls.

River mouth location: NZMS1, S50 & S51/666743.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S50 & S51 Hokitika; S52 Harper Pass.

Length: 49km.

Average gradient: 1:650 1.5m/km.

RECREATIONAL USE:

Motor launches: Normally too shallow and swift for even small screw-driven craft.

Jet boats: Boatable year round from the river mouth area to Jacksons except with very low flow. Trees and logs may block numerous channels in some places. Offers skilled boating, both in route-finding over the exceptionally braided bed, and in tackling pressure waves often found on the corners of the upper end of this river section.

Drift boats, rafts: The swift water over most of the length of this river section offers good rafting water. However, there are many shallows created by the division of the river channel into braided channels. Each channel tends to have cut deeply into the shingle bed and this, with the broom covering the bed, obstructs any good view of the river valley from low craft such as rafts. Consequently, this river is not as attractive as it may first appear. The river is seldom boated.

Canoes/kayaks: Not often canoed for the reasons mentioned above. The lower river offers water of Grade 2 difficulty suitable for novice canoeists but still retains some interest for the more experienced canoeist.

Pack floating, swimming: Unused.

Scenic description: The predominant character of the Lower Taramakau is that of a braided river flowing over a wide, flat gravel bed. The bed contains a thick growth of gorse and broom with the various channels of water etched deep into the shingle. The valley walls are very steep and bush-covered and there are a number of bluffs created where ridges descend down to the valley floor. At Kumara the valley closes into a narrow gut where the river flows as a single channel and on either side of this point there are farmed river flats. Elsewhere, there is only a narrow margin of flat land between the shingle bed and the valley wall (all on the left bank). Dredge tailings are noticeable below Kumara.

Scenic value: Uninspiring.

Recreational value: Intermediate.

25.2.1 TAIPO RIVER 911310 WAINIHINIHI RIVERS

Location: The Taipo River begins where the Julia and Mary Creeks join in the Campbell Range. It flows steeply down a narrow valley and then plunges suddenly through a narrow, rocky gorge before spilling out into the Taramakau. The Big Wainihinihi (or Rough Wainihinihi) is now a small river as its headwaters have been diverted into the Dillmanstown hydro reservoir so that the Little Wainihinihi (also known as Small or Smooth Wainihinihi) is the bigger river.

River confluence location: Taipo — NZMS1, S50 & S51/893521

Wainihinihi — NZMS1, S50 & S51/853506.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S50 & S51 Hokitika; S58 Kanieri.

Length: Taipo — 32km (includes Mary Creek). Wainihinihi — 11km.

Average gradient: Taipo — 1:80 12m/km. Wainihinihi — 1:40 24m/km.

Recreational use and scenic description: The Upper Taipo River is steep, flowing down a shingle and stony bed, braided in places through a valley of beech and scrub. There are some willows but they are few. The valley suddenly closes in and drops over a steeper section of river bed for a distance of 4km. This is known as the gorge and is very rocky and bouldery, the water cascading over a number of rapids that are almost falls. The river has been canoed and could be rafted but requires skilled and experienced boaters. It is not boated often.

The Big Wainihinihi River is now of insufficient size for any recreational use, although it could become canoeable under flood conditions. It is a stony river much like the Taipo.

Scenic value: Moderate.

Recreational value: Insignificant.

25.2.2 GREENSTONE OR 911100 BIG HOHONU RIVER

Location: The Greenstone flows west from the Hohonu Range and into the Taramakau River at Kumara. The river was noted for its greenstone and later was the scene of a goldrush in the

area upstream of its confluence with the Taramakau.

River confluence location: NZMS1, S50 & S51/728666.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S50 & S51 Hokitika.

Length: 19km.

Average gradient: 1:60 16m/km.

Recreational use and scenic description: In the upper catchment area the river is very scenic and interesting, although too small for recreational use in all but exceptionally high flows. The river flows through native bush over a rocky bed. Below the Greenstone settlement (Pounamu) the bed is very stony and rocky with numerous logs in the channel. The river soon runs into the lower 5km which have the remains of the tailings from the gold dredge. It is very wide and is of shingle with scrub and gorse growing in the bed. The heavy bush of the upper catchment gives way to cleared land with scrub, especially gorse. Some areas of the lower river have extensive pine plantations.

Scenic value: Moderate.

Recreational value: Insignificant.

26.0 ARAHURA RIVER 908000

Location: The Arahura River rises in the Southern Alps at Browning Pass and Lake Browning. It flows west, then north, then west again to reach the western lowlands north of Lake Kanieri, whence it flows north-west to the sea, 8km north of Hokitika.

River confluence location: NZMS1, S50 & S51/568620.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S50 & S51 Hokitika; S58 Kanieri.

Length: 56km.

Average gradient: 1:20 48m/km (upper river area).

Recreational use and scenic description: In common with all the southern Westland rivers, the Arahura River has been glaciated, and extensively sluiced and dredged for gold. The valley was previously a source of greenstone. This river seems to have been neglected by boaters, jet boaters and canoeists alike although of ample size for boating of all kinds. The reason for its neglect is hard to fathom. The Arahura apparently contains three gorges of which the lower lies downstream of the road end above Millton, hence it does have access that other Westland river gorges lack. The top gorge has a steep gradient and the river tumbles over boulders. The river flows through extensively milled forest that is in the later stages of regeneration. The lower river valley is farmed and contains a great deal of scrub. The river here quietly flows over gravel.

Scenic value: Moderate.

Recreational value: Intermediate.

27.0 SMALL COASTAL STREAMS

Between the Taramakau and Arahura Rivers there are a number of small streams that are all too small for recreational use (canoeing and swimming). Serpentine Creek flows into a coastal lagoon at Kumara Junction. It drains swamp and is a brandy-coloured river flowing over whitish-coloured rocks. It is very narrow but could be canoed or floated on for a short distance. Acre Creek is much the same; slightly smaller. Kapitea Creek is longer and fast flowing but quite flat. It drains a swampy area too, and is bordered by ferns and flax. The Waimea Creek is similar in size but is a muddy, sandy river with little flow. Kawhaka Creek is a shingle bed creek, flowing into the Arahura. It drains farmland. Hou Hou Creek, south of Ara-

hura, is a very small creek flowing through flax swamp but has little water movement.

28.0 HOKITIKA RIVER 906000

The Hokitika River is a complex system of tributaries draining the alpine divide and joining into the one main stream, south of Lake Kanieri on the Westland lowlands. From there, it meanders northwest onto the coast at Hokitika. The river is considered in two sections in this survey.

28.1 UPPER HOKITIKA RIVER

Location: The Hokitika River flows from the main divide, meeting the Mungo River before plunging into a number of gorges. The Upper Hokitika is generally reckoned to end at the bottom end of its gorge.

Section end location: NZMS1, S58/571267.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S58 Kanieri; S65 Wilberforce.

Length: 31km.

Average gradient: 1:75 13.3m/km.

Recreational use and scenic description: This section of the Hokitika is jet boated with high flow to the junction with the Whitcombe River. Access to the upper river is by difficult walking track only and this has hampered the use of the river by canoeists, rafters and other groups. The river is very rough and boisterous and very cold, thus effectively preventing its use by those participating in activities requiring immersion in the water — i.e. pack floating, lilos and swimming. The river flows from an area of glaciers, rock and alpine grasses, through alpine scrub and beech, to lower levels of thick canopy forest. The river is very steep, tumbling over sharp, angular boulders. From the Mungo confluence the gradient drops to 1:33 and hurtles into the Frisco Canyon, the Omatane Canyon, the Kawau Gorge and the Kakariki Canyon, all within the space of 11km to the Whitcombe confluence. From the confluence with the Whitcombe there are 10km of steep, bouldery rapids of up to Grade 2+ difficulty. From this point the river flows out onto a wide alluvial valley of braided river flats.

Scenic value: Impressive.

Recreational value: Low.

28.1.1 MUNGO RIVER 906150

Location: The Mungo River is a very small tributary of the Hokitika high in the mountains to the east of Hokitika.

River confluence location: NZMS1, S65/669163.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S65 Wilberforce.

Length: 12km (includes Park Stream).

Average gradient: 1:20 50m/km.

Recreational use and scenic description: The river is much like the Upper Hokitika and lies in alpine scrub and beech forest as a bouldery, fast flowing river without sufficient flow to provide boatable water. Filter conditions exist for most of its length.

Scenic value: Impressive.

Recreational value: Insignificant.

28.1.2 WHITCOMBE RIVER 906140

Location: The Whitcombe River flows north to junction with the Hokitika at the upper end of its lower gorge. It contains

slightly more water than does the Hokitika at the Whitcombe confluence.

River confluence location: NZMS1, S65/573195.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S64 Ianthe; S65 Wilberforce.

Length: 23km.

Average gradient: 1:105 9.6m/km.

Recreational use and scenic description: Those comments made for the Hokitika apply also to the Whitcombe River. Its valley lies in a north-south direction and is lower than that of the Hokitika. It lies almost entirely in an area of beech forested hillsides. The water flows at a slower rate and is less boisterous. It offers a more practical canoe or raft trip, but again the access problems have prevented any great use. However, it does offer an exciting trip with rapids of up to Grade 3 + difficulty. Collier Gorge lies in the lower reaches and bouldery rapids in the area prevent the upstream navigation of jet boats.

Scenic value: Impressive.

Recreational Value: Low.

28.2 LOWER HOKITIKA RIVER

Location: From the Hokitika Gorge the river flows out onto extensive braided shingle flats and flows in a general north-westerly direction collecting water from a number of large tributaries. It flows onto the coast at Hokitika.

River mouth location: NZMS1, S50 & S51/507550.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S50 & S51 Hokitika; S57 Ross; S58 Kanieri.

Length: 42km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Boatable for most of the year except in late summer, up to the gorge and in good flow up to the Whitcombe confluence. The river is mostly braided shingle offering straightforward boating.

Drift boats: Tend to dislike the flat, braided sections. The upper river is preferred but seldom used because of the access problems.

Canoes/kayaks: Often canoed. Trips generally begin on the Styx-Kokatahi confluence. The river offers an easy trip with few rapids over a wide, often braided section of river. The scenery is not particularly notable.

Pack floating, swimming: Local use only and not significant.

Scenic description: The river flows over extensive alluvial shingle flats almost the entire distance from the gorge to the sea. The hills flanking the valley are in bush and scrub with farms (dairy farms) between the hills and the river bed, although willows and shore-line scrub (predominantly gorse) tend to obscure any sight of farms from the river itself. There are no rapids, the river flows quietly over shingle. There are large areas of swampy country on the southern (left) bank.

Scenic value: Uninspiring.

Recreational value: Intermediate.

28.2.1 KOKATAHI RIVER 906050

Location: The Kokatahi River flows westward from the main divide to junction with the Hokitika, south of Lake Kanieri. Its main tributary is the Styx River.

River confluence location: NZMS1, S58/570421.

Maps: NZMS18 Sheet 17 Hokitika; NZMS1, Sheet S58 Kanieri.

Length: 35km.

Average gradient: Slight (lower river).

Recreational use and scenic description: The Kokatahi is scenically more interesting than the Hokitika. Its lower reaches are more braided and contain larger patches of scrub and gorse but the hills are closer, particularly the hills at the southern end of Lake Kaniere. Above the Styx confluence the river lies in an area of bush in the valley between the main divide and the Browning Range. Rapids in the upper river catchment are similar to those found in the Upper Hokitika except that with a lower flow the filter conditions are more severe. The lower shingle reaches have steeper shingle rapids than the Hokitika. The lower 11km of the Kokatahi can be jet boated and the river is often canoed over its lower reaches from the bridge over the Styx confluence. Difficult access limits its use higher upstream.

Scenic value: Moderate.
Recreational value: High.

28.2.2 STYX RIVER 906055

Location: The Styx River is a small tributary of the Kokatahi and lies between the Kokatahi and Lake Kaniere. It does not originate on the main divide but drains the bushland between the Arahura Valley and Lake Kaniere.

River confluence location: NZMS1, S58/654356.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S58 Kaniere.

Length: 19km.

Average gradient: 1:125 8m/km.

Recreational use and scenic description: The Styx River is a small river flowing over a stony bed in a bush-clad valley. The valley floor contains a narrow margin of cleared land on either side of the river banks. Rapids are often very shallow, only barely canoeable and not rafted nor jet boated. It is generally only used as an avenue of access to the larger Kokatahi River.

Scenic value: Moderate.
Recreational value: Low.

28.2.3 TOAROHA RIVER 906054

Location: The Toaroha River is a north-flowing tributary of the Kokatahi River, joining the main stream a little upstream of the Styx confluence.

River confluence location: NZMS1, S58/665344.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S58 Kaniere.

Length: 18km (includes Mullin Creek).

Average gradient: 1:40 25m/km.

Recreational use and scenic description: The Toaroha River is similar to, but slightly smaller than, the Kokatahi River. It has a short length of braided river before it meets the Kokatahi and flows through gorges and narrow river bed through bush, particularly beech forest. Access is a problem except for the lower 3km. It requires exceptionally high flow to allow jet boats even into its lower reaches. It is seldom canoed or rafted because of the access difficulties and, if people are going to go to any considerable trouble to gain access to the upper reaches of a river in this area, the bigger Hokitika is preferred.

Scenic value: Impressive.
Recreational value: Insignificant.

28.2.4 KANIERE RIVER 906010

Location: The Kaniere River is a small creek that drains the northern shore of Lake Kaniere and flows for 15km before joining the Hokitika River. The upper river is diverted into a water race that flows through culverts. The creek is consequently too small for boating.

River confluence location: NZMS1, S50 & S51/558512.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S50 & S51 Hokitika; S58 Kaniere.

Length: 15km.

Average gradient: 1:100 10m/km.

Scenic value: Uninspiring.

Recreational value: Insignificant.

29.0 MAHINAPUA CREEK AND LAKE MAHINAPUA 905001

A number of small creeks between Ross and Hokitika drain into Lake Mahinapua to the coastal side of the main road. The largest of these creeks is Mirror Creek which is no more than 2 metres wide, flowing through swamplands and over some steep, rocky areas at the edge of the bush. The Mahinapua Creek is a very quiet flowing creek that drains the lake into the Hokitika River at the swampy lagoon of the river mouth area. Launch trips once took tourists up the creek and into the lake. Both the lake and the creek were noted for their reflections.

Scenic value: Impressive.

Recreational value: Low.

30.0 TOTARA RIVER 904000

Location: The Totara River is a small stream flowing north-westwards through bush country to enter the sea by a lengthy coastal lagoon north of Ross.

River mouth location: NZMS1, S57/394380.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S57 Ross.

Length: 25km.

Average gradient: Slight (lower reaches) 1:60 16m/km (upper reaches).

Recreational use and scenic description: The Totara River is a very small river, normally far too small for recreational use (canoeing, rafting and such). At the main road the river is gentle flowing over shingle in a single channel, but is braided immediately before reaching the river mouth lagoon. The upper reaches are stonier and flow through thick bush. There are numerous small tributaries. This river is one of the few which has vehicle access to its upper catchment.

Scenic value: Moderate.

Recreational value: Insignificant.

31.0 MIKONUI RIVER 903000

Location: The Mikonui River begins between the Mikonui and Totara State Forests and drains the extensive forest area to the south and east of Ross. The river enters the sea just south of Donoghues.

River mouth location: NZMS1, S57/338327.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S57 Ross; S64 Ianthe.

Length: 25km (includes Explorer Creek).

Average gradient: 1:125 8m/km.

Recreational use and scenic description: The Mikonui River is another small river, larger than the Totara but still too small for jet boating under normal conditions and only marginally canoeable. It collects most of its water in an area of extensive shingle flats known as Gribben Flat which is accessible by road from the Totara Valley. From this braided river area the river flows through a heavily bushed valley in a narrow channel, becoming braided again 6km above the main road bridge. The river bed is of stone and shingle and the rapids are shallow over shingle with some backlash off the rocky banks in the

narrow river valley area. Normally there is insufficient force of current to create real white water. Log snags are common.

Scenic value: Moderate.

Recreational value: Insignificant.

32.0 WAITAHA RIVER 901000

Location: The Waitaha flows west from the main divide through three gorges — (The Windhover Gorge then the longer Waitaha Gorge, then, after flowing through the short, braided Kiwi Flat, the Morgan Gorge).

River mouth location: NZMS1, S57/250260.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S57 Ross; S64 Ianthe.

Length: 39km (includes Stag Creek).

Average gradient: 1:166 6m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Boatable almost to Morgan Gorge but requires an above normal flow before reaching its best potential for jet boating. This river tends to rise and fall quicker than many of the other rivers in this area.

Drift boats, rafts, canoes/kayaks: Road access is provided as far upstream as the bottom of the gorge. From this point the river flows over shallow shingle stones giving some easy rapids with the odd log snag. The gorges offer excellent water but access is a problem.

Pack floating: Unused.

Swimming: Limited use immediately below the main road.

Scenic description: The Waitaha River flows from the main divide down a very steep, stony channel and into its first gorge, the Windhover Gorge, at about the tree line. From this point it flows down to Kiwi Flat in a narrow rocky channel through the bush. The river is wide, flowing over shingle at Kiwi Flat and then plunges into the short Morgan Gorge after which it gradually opens out before meeting the coastal plain. Normally the river is only used from the road end at the foot of Morgan Gorge and from this point the river bed is mostly wide and braided. The shingle covering the valley floor is coarse, creating some interesting shallow rapids with a number of logs which need to be avoided. The right bank of the river gradually rises to dry ground that is farmed. Steep bush-clad hills flank the river valley. There are few rapids below the main road bridge.

Scenic value: Moderate.

Recreational value: Intermediate.

32.1 KAKAPOTAHI RIVER 901100 (LITTLE WAITAHA)

Location: The Kakapotahi has its origins on the Hitchin Range and flows north-west to junction with the Waitaha at Kakapotahi (immediately below the main road bridge).

River confluence location: NZMS1, S57/273238.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S57 Ross; S64 Ianthe.

Length: 25km.

Average gradient: Slight (over lower river).

Recreational use and scenic description: The Kakapotahi River is normally too small and shallow for most forms of recreational use but would become canoeable after rain. It is seldom jet boatable and is never used as the Waitaha offers the better trip when the Kakapotahi is flowing high. The river is not braided like the Waitaha, but flows for most of its length

through bush with numerous logging tracks meeting by the river below a large, shingle flat area known as Happy Valley.

Scenic value: Moderate.

Recreational value: Insignificant.

33.0 WANGANUI RIVER 897000

Location: The Wanganui River flows from the main divide in a westerly direction and then in a north-westerly direction to enter the sea at Wanganui Heads. It is a very braided river over its lower length. Ianthe Creek drains into the Wanganui below the main road bridge.

River mouth location: NZMS1, S63/045164.

Maps: NZMS18, Sheet 17 Hokitika; NMZS1, Sheet S63 Okarito; S64 Ianthe.

Length: 55km.

Average gradient: 1:200 5m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Boatable for some 25km above the river mouth, launching into the lower river area below Lake Ianthe on the left bank. Considered to offer good boating and not particularly difficult. With high flows the river above the main road bridge may become boatable but it is difficult water suitable for the experienced only. Bridge piles from a former bridge above the main road bridge are a hazardous obstacle to be avoided.

Drift boats, rafts: Seldom used as the accessible length of the river is a little on the shallow side. Rapids are stony and shallow and do not offer the large waves sought by rafters. The first few kilometres below the main road bridge do offer a fast current, but then the river becomes frustratingly shallow and braided. The river is not used below Petersen's Road where most rafters will exit from the river onto the groyne at the rubbish dump.

Canoes/kayaks: Seldom used. Below the main road there are a few interesting steep shingle and stony rapids but these are inferior to those of the Whataroa to the south which offers similar, but slightly better canoeing water. Access above the main road is not easy and again, the Whataroa, being the larger of the two rivers, seems to be preferred if some expense and effort is to be made getting into the upper reaches.

Pack floating, swimming: Not used.

Scenic description: From the main road bridge there are 25km of braided river over a very wide shingle bed often littered with logs. Above the bridge the valley is narrower and there is a short road up the right bank and a walking track going up to the Lambert River confluence which is the highest point from which the river would ever be of sufficient size for any form of boating, canoeing or rafting. The Lambert River is very steep, flowing through the bouldery Impassable Gorge and into the Wanganui. From this point the Wanganui flows over a shallow, but narrow shingle bed through a bush-clad valley. There are numerous stony rapids. From a point a little upstream of the main road bridge the river width increases to become very wide upstream of Lake Ianthe. Stopbanks and groynes line the left bank and scrub-covered farmland is on the right bank, with bush-covered hills on the right bank coming down to the river bank from Lake Ianthe and downstream to the river mouth.

The river does not have the large areas of gorse on the shingle islands that other rivers in this area have.

Scenic value: Moderate.

Recreational value: Intermediate.

33.1 LA FONTAINE STREAM 897050
IANTHE CREEK 897060

Location: The La Fontaine Stream and Ianthe Creek are both tributaries of the lower Wanganui River. Ianthe Creek flows from the lake to the river and is the smaller of the tributaries.

River confluence location: La Fontaine Stream — NZMS1, S64/127136.

Ianthe Creek — NZMS1, S64/188117.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S64 Ianthe.

Length: La Fontaine — 17km. Ianthe Creek — 2.5km.

Average gradient: Slight.

Recreational use and scenic description: La Fontaine Stream and its main feeder, Harold Creek, are of canoeable size from the main road, but are seldom ever used from so high up. Most canoe trips start at the bridge on the La Fontaine Road. The upper reaches of the river flow slowly through farmland and are overhung by grass. Navigation is impeded by water weeds, mainly water cress. The lower 7km meander through farmland, flax and stands of bush. It was a favourite jet boating river but now cannot be used because of an 8km/h speed restriction on the river. Ianthe Creek flows through swamp and bush and is badly overgrown with swampy plants and weeds in many places. It is believed to be canoeable.

Scenic value: Impressive.

Recreational value: High.

34.0 POERUA RIVER 896000
(LITTLE WANGANUI)

Location: The Poerua River (also known as the Little Wanganui) rises between the Wilberg and Adams Ranges and then flows north to enter the sea just south of the Wanganui River.

River mouth location: NZMS1, S63/023147.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S63 Okarito; S64 Ianthe; S72 Godley.

Length: 35km.

Average gradient: 1:200 5m/km.

Recreational use and scenic description: The Poerua River is a small river compared to the Whataroa, Waitaha, Waiho and others in the area. It does not have any great power in its flows so that big rapids do not exist. The river flows from the hills in a heavily bushed valley and then spreads out onto wide, braided, river flats above the main road bridge. The upper river area is normally too small for most boating. At the main road bridge the river channels are very shallow and often littered with logs. The river is braided except for a short length in the lower area where it is confined to a single channel by low, rocky banks. There is only a small area of farmed land and the bush comes down to the shingle edge. The river is jet boated with high flow. The logs make for exciting boating and the bush is very pretty, particularly in the lower river near the Hikimutu Lagoon.

Scenic value: Impressive.

Recreational value: Intermediate.

35.0 WHATAROA RIVER 893000

The Whataroa drains the glaciers to the west of the main divide, north of the Tasman Glacier. The main feeding glacier is the Whymper Glacier, and the Whataroa's main upper tributary, the Butler River, drains those glaciers further north. The other main tributary is the Perth River which drains the area south of the Garden of Eden Ice Plateau. The river has been divided into two sections for this survey.

35.1 UPPER WHATAROA RIVER 893250
PERTH RIVER

Location: The Upper Whataroa begins in the glaciers and flows north down a narrow valley to the main road bridge whereupon the valley becomes very open.

Section end location: NZMS1, S71/027860.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S63 Okarito; S71 Waiho.

Length: 24km.

Average gradient: 1:60 16.7m/km.

Recreational use and scenic description: Jet boats may navigate, in good flow (high flow) conditions, up as far as the Perth confluence but the river contains steep, bouldery rapids above the main road bridge. Considered as excellent water for only the most experienced boaters. Canoeists have run the river from high up in the catchment using helicopters to fly in equipment as access is difficult. The river was reported as being very rough and suitable for experienced canoeists only, down to the Perth.

The river is particularly well liked for canoeing and rafting but its access problems place severe restrictions on its use. The Whataroa is steep and bouldery in its upper catchment. Below the Butler confluence the river drops between huge blocks of rock in a deep river valley with huge bluffs in places. The steep hillsides are clothed in thick bush. From the swing bridge above the Perth confluence the river opens out more and the flow is less powerful. Many canoeists have walked upstream with their craft to this point and canoed down. From this point the Perth adds sufficient flow to provide exciting water for rafters, canoeists and jet boaters alike.

The river valley is much wider, the hills less steep with a number of rocky beaches along the water's edge.

The Perth River enters the Whataroa through a narrow gorge. It has been jet boated some 3km. It is smaller than the Whataroa but otherwise is similar. Access to the Upper Perth is very difficult and the river is seldom used.

Scenic value: Impressive.

Recreational value: High.

35.2 LOWER WHATAROA RIVER

Location: From the main road bridge the Whataroa becomes exceptionally braided on its path to the sea at Abut Head.

River mouth location: NZMS1, S63/895066.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S63 Okarito; S71 Waiho.

Length: 29km.

Average gradient: 1:300 3.3m/km.

RECREATIONAL USE:

Motor launches: Too shallow except at the river mouth area where some whitebaiters have used outboard-powered dinghies to cross the lagoon.

Jet boats: Excellent boating from the launching site off Whataroa Gorge Road. Upstream to the main road bridge the river is exceptionally braided and some skill is needed in taking the correct channel. Rapids become more difficult as the bridge is approached. Downstream of the launching site the river is more confined, rapids are fewer and shallower. Some logs cause obstructions.

Drift boats, rafts: Not used a great deal. The first few kilometres below the main road bridge contain the only good rapids for these craft. Considered easy boating. The rapids then become shallow and wide over shingle shoals. The current becomes almost sluggish, increasing at the confined area below Lake Rotokino.

Canoes/kayaks: Good water for the less experienced canoeist, not used to any great extent.

Pack floating, swimming: Not used to any great extent.

Scenic description: From the main road bridge the Whataroa River flows out onto a very wide plain over a shingle bed. The river has a steep gradient over the first few kilometres and has high gravel banks topped with gorse and other scrub. As the gradient decreases so do the banks, so that boaters are able to see beyond the immediate river channel; the predominant view is of a wide shingle plain covered in gorse. The low hills beyond the shingle are heavily bushed with snow-capped peaks beyond. The river narrows lower in this section and the bush comes down to the river channel confining the river to a single channel. The river then opens up again over shallow, wide pools and flows sluggishly to the coastal lagoon. Flax and other such plants are dominant in this area now, and the gorse is less obvious.

Scenic value: Uninspiring.

Recreational value: High.

36.0 WAITANGI-TAONA RIVER 892000

Location: The Waitangi-Taona River rises in the bus country west of the main divide and south of the Whataroa. A small tributary draining swamp land to the west of the main river, the Waitangirotu River, has the famed white heron sanctuary on its lower reaches. It joins the Waitangi-Taona at the coast.

River mouth location: NZMS1, S63/882039.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S63 Okarito; S71 Waiho.

Length: 50km.

Average gradient: 1:300 3m/km.

Recreational use and scenic description: Only the lower 25km have sufficient water at normal flow for boating of any form; at the main road bridge the river is exceptionally wide and braided with most of the flow filtering through the shingle bed. Logs litter the bed creating snags in the lower river area. The river flows around the eastern edge of the Okarito State Forest and the bushed hillsides are visible from the river, but the dominant view is of grassy paddocks and swampy land in the lower river area. The lack of vehicle access to the lower river area has restricted the river's use by canoeists, rafters, and drift boaters, but the river is often jet boated.

Scenic value: Moderate.

Recreational value: Intermediate.

37.0 OKARITO RIVER 891000

Location: The Okarito River flows north beside State Highway 6 from Lake Mapourika into the Okarito Lagoon. The river flows through bush the entire distance and is joined by Zalas Creek at the Forks where there is a small power station.

River mouth location: NZMS1, S63/851940 (into Okarito Lagoon).

Maps: NZMS18 Sheet 17 Hokitika; NZMS1 Sheet S63 Okarito; S71 Waiho.

Length: 12km.

Average gradient: 1:90 11m/km.

RECREATIONAL USE:

Motor launches: It is possible to use the lagoon area but there is lots of weed about, particularly at low tide or towards the end of summer.

Jet boats: The lagoon is normally boatable although weedy at low tide or when the river is flowing below normal levels. The river is not normally boatable and is very swampy at the lower end.

Drift boats, rafts: The river from the lake is too narrow for most craft. Smaller craft could negotiate the river if care were taken to avoid fallen trees.

Canoes/kayaks: A tremendous river, narrow and fast flowing. The river is screened from the road by a narrow margin of bush

so that from the river there is no indication that the road even exists. There are a number of rapids of Grade 2 difficulty down as far as the Forks; thereupon the gradient eases to give a more placid trip, splitting into multiple channels and becoming swampy before entering the lagoon. Most trips will exit from the river at the Forks Bridge.

Pack floating: A nice lilo trip but has not been used to any great extent.

Swimming: Unknown. It seems that the sea is preferred.

Scenic description: From Lake Mapourika the Okarito River flows fast and shallow over a stony bed of water-worn boulders. Thick bush overhangs the river creating a passageway for the river. Mosses and ferns hang from the clay banks. The bush is very close to the river, often meeting overhead and it is difficult to see beyond the river banks themselves. The bush opens out and swamp plants become common in the lower river area. Zalas Creek is a dry, bouldery channel normally too shallow for recreation.

Scenic value: Impressive.

Recreational value: High.

38.0 LAKE MAPOURIKA AND ITS STREAMS 891210

Lake Mapourika is an attractive lake set in a scenic bush area. It has a jetty on the southern shore for launching. The lake is fed by a number of small creeks of which Potters Creek and MacDonalds Creek are the largest. The two streams are normally too small for any form of boating.

Scenic value: Impressive.

Recreational value: Intermediate.

FRANZ JOSEF TO HAAST

39.0	Waiho River	37	44.0	Manakiaua River	40
39.1	Upper Waiho River and Gorge	37	45.0	Makawhio (Jacobs) River	40
39.1.1	Callery River	37	46.0	Mahitahi River	40
39.2	Lower Waiho River	37	47.0	Ohinemaka River	40
39.2.1	Tatare River	37	48.0	Paringa River	41
39.2.2	Docherty Creek	37	48.1	Otoko River	41
40.0	Omoeroa River and Waikukupa River	38	48.2	Hall River	41
41.0	Cook — Fox River System	38	48.3	The Windbag	41
41.1	Cook River	38	49.0	Moeraki River	41
41.2	Fox River	38	50.0	Whakapohai River	41
41.3	Clearwater River	39	51.0	Tawharekiri Lakes and Waita River	42
41.4	Bullock Creek	39	52.0	Haast River	42
42.0	Ohinemataea River (Saltwater Creek)	39	52.1	Upper Haast River	42
43.0	Karangarua River	39	52.2	Lower Haast River	42
43.1	Upper Karangarua River	39	52.2.1	Burke River	42
43.2	Copland River	39	52.2.2	Wills River	42
43.3	Lower Karangarua River	40	52.2.3	Landsborough River	43
			52.2.4	Clarke River	43

39.0 WAIHO RIVER 888000

The Waiho River flows from the Franz Josef Glacier north-westwards through the Waiho Gorge onto the Westland Plain and thence onto the coast. The river is alluded to in old writings as the Waihu River and this name, meaning 'swirling waters' is probably the correct name. 'Waiho' is said to mean 'smoky waters' and probably refers to the smoky-milky colour of the glacial deposits and silt that colour the water. The river is considered in two sections.

39.1 UPPER WAIHO RIVER AND GORGE

Location: From the terminal of the Franz Josef Glacier the Waiho River flows into a narrow, bushed gorge joined by the Callery River before meeting the main road bridge and the open plain.

Section end location: NZMS1, S71/831726.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S71 Waiho.

Length: 6.5km.

Average gradient: 1:52 19m/km.

RECREATIONAL USE:

Motor launches: Too shallow and boisterous.

Jet boats: Not normally boated, probably too boisterous and difficult although could be boated by very experienced boaters given a high flow.

Drift boats: Very fast, bouldery rapids that could be too tight for the larger craft. Not used at the moment but will become a popular river when this branch of river floating develops more experienced boaters.

Rafts: Ideal water if somewhat cold. Rapids may be too tight for the larger craft.

Canoes/kayaks: Boisterous water and exceptionally cold. Suitable for very experienced canoeists only. The river is very fast and bouldery. Access is relatively straightforward by using the tourist road to the terminal face of the glacier.

Pack floating, swimming: Unusable because of the problem of silt getting in eyes. The water is exceptionally cold and rapids too boisterous. Undercut boulders and the fast current make this river too dangerous for swimmers.

Scenic description: From the glacier's terminal face, the Waiho flows swiftly over boulders between low banks of beech forest. The hills beyond the immediate valley floor are bush-covered. From the footbridge down to the Callery River confluence the gradient increases and the river cascades over a number of bouldery rapids. The river then eases out before passing under the main road bridge. The water is a milky blue or brown colour, due to glacial silt.

Scenic value: Moderate.

Recreational value: Intermediate.

39.1.1 CALLERY RIVER 888100

Location: The Callery River flows westwards from the Callery, Burton and Spenser Glacier area and joins the Waiho slightly upstream of the main road bridge.

River confluence location: NZMS1, S71/834720.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S71 Waiho.

Length: 17km.

Average gradient: 1:35 28.6m/km.

Recreational use and scenic description: The Callery River has no vehicle access, nor easy walking access and this is a severe restriction on its use. The river is normally too small for jet boating. The Waiho tends to be preferred by boaters and, as far as

is known, the Callery has never been boated, rafted or canoed. The river is exceptionally bouldery and very steep. We doubt that it is usable. Thick bush covers the gorge sides from the Waiho confluence to the tree line.

Scenic value: Impressive.

Recreational value: Insignificant.

39.2 LOWER WAIHO

Location: From the main road bridge the Waiho flows out onto a wide, coastal plain and the gradient eases considerably.

River mouth location: NZMS1, S71/716852.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S71 Waiho.

Length: 18km.

Average gradient: 1:150 6.7m/km.

Recreational use and scenic description: From the main road there are a number of steep, shingle rapids but the gradient soon eases as the valley opens out. The river bed is wide with shingle beaches bordering the channel. It is braided in places but tends to remain in a single channel. There is a dirt track following the river to the mouth that could be used to retrieve canoeists, rafters and other boaters, but this lower river is not used to a great degree because of a small water flow. The river is only jet boated with above normal flows.

Scenic value: Moderate.

Recreational value: Intermediate.

39.2.1 TATARE RIVER 888040

Location: The Tatara River flows from the hills to cross the main road a little north of Franz Josef. It junctions with the Waiho about 10km below the main road bridge.

River confluence location: NZMS1, S71/797795.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S71 Waiho.

Length: 18km.

Average gradient: 1:100 10m/km.

Recreational use and scenic description: The Tatara River is only marginally boatable (canoeable) in size, mainly because much of its water is collected 3.5km above the road bridge and diverted via a pipeline and tunnel down to Franz Josef. The river bed is of gravel and small rocks. Under normal flow the river filters over the rocks and is very shallow. From the main road the river is very wide but is squeezed up into a single channel as it breaches the old terminal moraine wall. Above the water intake the river is very steep and cascades over bouldery rapids. There is no easy access to this section of the river.

Scenic value: Moderate.

Recreational value: Insignificant.

39.2.2 DOCHERTY CREEK 888020

Location: Docherty Creek is a small stream that flows from the hills to cross the main road south of the Waiho River Bridge. It junctions with the main stream at the river mouth area.

River confluence location: NZMS1, S71/735839.

Maps: NZMS18, Sheet 17, Hokitika; NZMS1, Sheet S71 Waiho.

Length: 20km.

Average gradient: 1:150 6.7m/km.

Recreational use and scenic description: Docherty Creek flows down from the mountains as a very small and shallow, rocky creek, cascading between boulders. From the main road it flows over a steep shingle bed, gradually flattening out as it nears the Waiho River. It is only marginally boatable (canoeable) below the main road and is seldom, if ever, used as the Waiho itself offers a more practical trip.

Scenic value: Moderate.
Recreational value: Insignificant.

40.0 OMOEROA RIVER 887000
WAIKUKUPA RIVER 886000

Location: The Omoeroa and Waikukupa Rivers are two small streams flowing westwards from the Fritz Glacier area, to the coast south of Franz Josef.

River mouth location: Omoeroa — NZMS1, S71/696824. Waikukupa — NZMS1, S71/679795.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S71 Waiho.

Length: Omoeroa — 22km. Waikukupa — 25km.

Average gradient: Omoeroa — 1:12 83m/km. Waikukupa — 1:5 185m/km.

Recreational use and scenic description: Both these rivers are too small and shallow for any sort of recreational use. The Omoeroa is the smaller, being very shallow and stony with numerous large boulders. Below the main road it enters a narrow, bush-covered gorge until the last 4km before the coast when it opens out and flows quietly over shingle.

The Waikukupa River is very interesting because of its extremely steep gradient that reaches 1:4 over a short section and yet contains few waterfalls. The river may be canoeable when running high but the rapids created are extremely difficult because of the speed of the current. It has never been run to date. Access to the river other than at the main road is extremely awkward.

Scenic value: Moderate.
Recreational value: Insignificant.

41.0 COOK — FOX 882000
RIVER SYSTEM 882100

The Cook River, formerly called the Weheka River, has its main source on the La Perouse Glacier to the west of Mount Cook, but does not, in fact, come off Mount Cook as Mount Hicks and Mount Dampier intervene between the main divide and the La Perouse Glacier. The Balfour Glacier also spills water into the Cook River while the Fox Glacier feeds the Fox River which junctions with the Cook below the main road. The only other tributary of any size is the Clearwater River in the vicinity of Lake Matheson. Bullock Creek joins the Cook from the south, below the main road.

41.1 COOK RIVER 882000

Location: The Cook River flows steeply off the La Perouse Glacier and then north-west through the hills and onto the wide coastal plain in a very braided river area before entering the sea.

River mouth location: NZMS1, S70/478657.

Maps: NZMS18, Sheet 17 Hokitika; Sheet 20 Mount Cook; NZMS1, Sheet S70 Gillespie; S78 Bruce Bay; S79 Mount Cook.

Length: 33km.

Average gradient: 1:166 6m/km (lower river).

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Boatable with high flow over the lower 12km only and not above the Fox River confluence, where the river is too shallow. The river is normally too boisterous above the main road.

Drift boats, rafts: Only of interest above the main road and here access is by walking upstream carrying gear. The Fox, being more accessible, is preferred.

Canoes/kayaks: Access problems have restricted this river's use and as it is similar to the Fox in all respects other than size, the Fox is preferred. The lower river is canoeable but placid apart from some shallow, shingle shoals. The lower Cook is much like the Waiho and other rivers further north and consequently is neglected to a large degree.

Pack floating, swimming: Unused.

Scenic description: The Cook drops very steeply off La Perouse Glacier through alpine scrub and bush. The river is small and stony, cascading over boulders. The valley is narrow with wooded hillsides dropping steeply into the river, but not steep enough to form a gorge and there are no rocky bluffs. From the main road bridge the river suddenly opens out onto a wide shingle plain, the gradient decreases and the river becomes shallow and braided. Cleared farmland borders the river for the first 10km below the bridge, then the wooded hills of the old terminal moraine restrict the river and there is a great deal of swampland near the mouth.

Scenic value: Impressive.

Recreational value: Low.

41.2 FOX RIVER 882100

Location: The Fox River flows from the end of the Fox Glacier in a steep, rocky bed to junction with the Cook River well below the main road.

River confluence location: NZMS1, S70/625622.

Maps: NZMS18, Sheet 17 Hokitika; Sheet 20 Mount Cook; NZMS1, Sheet S70 Gillespie; S71 Waiho; S79 Mount Cook.

Length: 10km.

Average gradient: 1:40 25m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Normally too shallow but with high flow it may be possible to boat from the Cook confluence up to at least the main road. This would provide very fast, difficult water.

Drift boats, rafts, canoes/kayaks: Excellent fast and difficult water for the very experienced boaters and canoeists. The river is accessible from the tourist road to the terminal face of the glacier, or by walking track from the car park to the footbridge. The water cascades over boulders and is exceptionally fast and relentless. The difficulties ease at the main road and the river becomes shallow over the braided shingle area approaching the Cook confluence.

Pack floating, swimming: Too cold and boisterous.

Scenic description: From the terminal face of the glacier the river flows exceptionally fast over the moraine deposit — shingle and rock — in a wide valley with rock walls and stunted bush on either side. The water is a milky colour in common with all glacier-fed rivers and it tumbles over a number of steep, bouldery rapids. Thick, stunted bush lines the river down as far as the main road whereupon grassland grazed by sheep and beef cattle predominates.

Scenic value: Impressive.

Recreational value: High.

41.3 CLEARWATER RIVER 882050

Location: The Clearwater River has its origins at the Cook Saddle to the west of the main road, and has a number of small feeders draining the bush-covered hills between the Waikukupa and Fox Rivers. The river flows along the margin of bush between the Cook River flat and the Waikukupa Forest.

River confluence location: NZMS1, S70/535646.

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S70 Gillespie; S71 Waiho.

Length: 21km.

Average gradient: 1:150 6.6m/km.

Recreational use and scenic description: The Clearwater is well known as the small, gravel bed creek which you cross on the walking track to Lake Matheson — the noted tourist area so often depicted on postcards. The river flows along the southern boundary of the Waikukupa Forest and the open gravel and grassland of the Cook River. The river is not really of boatable size but can be used in the lower reaches, by canoeists who tow their craft upstream from the lower Cook. The river is of canoeable size from the confluence with the creek draining Lake Matheson but as the river spreads out in the lower shingle flats it becomes too shallow for boating and is seldom used. Scenically, the river is interesting but it flows through open grassland and paddocks for most of its length.

Scenic value: Moderate.

Recreational value: Insignificant.

41.4 BULLOCK CREEK 882060

Location: Bullock Creek flows west on the southern edge of the Cook River valley.

River confluence location: NZMS1, S70/579624.

Maps: NZMS18, Sheet 17 Hokitika; Sheet 20 Mount Cook; NZMS1, Sheet S70 Gillespie; S78 Bruce Bay.

Length: 11km.

Average gradient: 1:150 6.6m/km.

Recreational use and scenic description: Like the Clearwater River, Bullock Creek collects water from the bush at the edge of the Cook River. It is divided by numerous feeder creeks and is far too small for boating. Bullock Creek flows for a greater proportion of its length through bush and is perhaps more scenic than the Clearwater.

Scenic value: Moderate.

Recreational value: Insignificant.

42.0 OHINETAMATEA RIVER 881000 (SALTWATER CREEK)

Location: The Ohinetamatea River, often known as Saltwater Creek, flows from the Copland Range north before turning west into swamplands, then north again to the sea a little south of the Cook River mouth.

River mouth location: NZMS1, S70/466641.

Maps: NZMS18, Sheet 17 Hokitika; Sheet 20 Mount Cook; NZMS1, Sheet S70 Gillespie; S78 Bruce Bay.

Length: 46km.

Average gradient: Slight over lower reaches.

Recreational use and scenic description: The Ohinetamatea has often been quoted as the most scenically attractive river in this area. Our inspection failed to agree with this sentiment. The Ohinetamatea flows over a very stony bed from the bush and is far too small for any form of recreation. It then flows, from the main road, through grassland, and swings west into

swampland and bush (mostly kahikatea, rimu and other podocarp). After meandering about in the swamp it flows out to the coast through bush and scrub. We found the bush no more attractive than, for instance, that in the Okarito area and the river is swampy, sluggish and very small whilst rivers such as the Okarito and the Hall tend to flow at a greater rate and are clearer rivers. There is no access at the river mouth area and consequently it will not be used for recreation.

Scenic value: Moderate.

Recreational value: Insignificant.

43.0 KARANGARUA RIVER 880000

The Karangarua River flows north-west from the Hooker Range and the main divide, south of Mount Cook. Its main tributary is the Copland River which has, at its head, the Copland Pass, the main pass over the main divide into the Cook Region. The Karangarua has been considered in two sections for the survey.

43.1 UPPER KARANGARUA RIVER

Location: From the main divide the Karangarua River flows steeply down into a heavily bushed valley and out to the main road below the Copland confluence.

Section end location: NZMS1, S78/504500.

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S78 Bruce Bay.

Length: 26km.

Average gradient: 1:60 16.6m/km (lower valley).

Recreational use and scenic description: The Upper Karangarua drops very steeply from the main divide area into the bushed valley below, collecting water from a number of very small side creeks. Two and a half kilometres above Cassel Flat there is a waterfall, White Rose Falls, in a narrow gorge area. Below the falls the river is bouldery and steep, providing un-navigable water. Canoeing, rafting, and possibly pack floating are possible from Cassel Flat or the Douglas River confluence from which point the river is larger and less boisterous. Canoeists would consider the Douglas to Copland confluence section as Grade 3 water easing to Grade 2 below the Copland; that is, suitable for canoeists with some experience. Walking tracks provide the only access although there is an airstrip at Cassel Flat. Bush covers the steep hillsides and snowtopped mountains stand above the valley providing tremendous scenery, although people using the river are normally looking downstream. Jet boats may navigate up to the Copland confluence which provides a rough and exciting trip.

Scenic value: Impressive.

Recreational value: High.

43.2 COPLAND RIVER

Location: The Copland River lies to the north of the Upper Karangarua River. It has its origins on the main divide at Copland Pass and then flows west to junction with the Karangarua.

River confluence location: NZMS1, S78/531457.

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S78 Bruce Bay; S79 Mount Cook.

Length: 23km.

Average gradient: 1:70 14m/km.

Recreational use and scenic description: The lower 2km of the Copland can be jet boated before difficult rapids restrict further navigation. The river is said to be of canoeable and raftable size from Welcome Flat and from this point down to

the Karangarua confluence there are a number of cascading and difficult rapids, gradually easing, but of Grade 3 difficulty for most of its length. Access is by walking track only and this has limited use in the past. However, there seems to be an increasing interest in this river, due to the loss of good white water for rafting in the South Canterbury—Mackenzie Basin area. Thick bush clothes the hills and the area is scenically similar to the Upper Karangarua River. The entire river lies within Westland National Park.

Scenic value: Impressive.

Recreational value: Intermediate.

43.3 LOWER KARANGARUA RIVER

Location: From the main road bridge the river flows out onto a wide shingle plain and remains braided to the river mouth lagoon.

River mouth location: NZMS1, S78/435594.

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S78 Bruce Bay.

Length: 17km.

Average gradient: 1:310 3.2m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Boatable. Considered to be a relatively easy trip with normal or above normal flows but can become shallow at times. Launching point is just below the bridge and most boaters prefer to use the upper river, to the Copland confluence.

Drift boats, rafts: Not used a great deal below the bridge although there is vehicle access over private land (private road) to a hut on the bushy hill between the river and the Ohinetamatea Swamp that could be used for rafters leaving the river.

Canoes/kayaks: Not used a great deal, few good rapids. Most white water is created by shallow, shingle shoals. Access to the lower river is not always available.

Pack floating: Not used significantly below the bridge.

Swimming: Used at the main road bridge.

Scenic description: From the main road bridge the river valley opens out considerably to farmed river flats, very swampy in places. The hills on either side of the valley remain in bush. Scrub, particularly gorse, is common.

Scenic value: Uninspiring.

Recreational value: Intermediate.

44.0 MANAKAIAUA RIVER 879000

Location: The Manakiaua River flows from the hills south of the Karangarua River and onto the lower Karangarua River flats to the sea immediately north of Makawhio Point.

River mouth location: NZMS1, S78/405538.

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S78 Bruce Bay.

Length: 18km.

Average gradient: Slight (lower river).

Recreational use and scenic description: The Manakiaua River flows from the bush above the main road, as a very small, stony creek and then flows towards the sea in a shallow shingle bed. The river is not scenically very attractive as it flows through swamp and scrub (mainly gorse). It could float an unloaded canoe to give access to the beach, but has no recreational use other than for boating in the river mouth lagoon area.

Scenic value: Uninspiring.

Recreational value: Insignificant.

45.0 MAKAWHIO (JACOBS) RIVER 878000

Location: The Makawhio River flows west to the sea from the Hooker Range area, crossing the main road at the Jacobs River settlement.

River mouth location: NZMS1, S78/352505.

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S78 Bruce Bay.

Length: 33km.

Average gradient: 1:65 15.4m/km.

Recreational use and scenic description: The Makawhio River offers 5km of easy, flat and sluggish water for rafts (small craft only) and canoes down to the beach over gentle moving water. There are small shingle beaches but otherwise the water flows from bank to bank and is not braided. Snags offer some problems. Flax and grass overhang the banks. The upper river, above the main road, is of boatable size with small islands of grass over the first 6km. Above this point little is known of the river's character. There are no gorges in the upper river and it has a steady gradient down the valley. There is no easy access to the upper catchment so that when going to some effort to get into the headwaters of rivers in this area, larger rivers are preferred. Hence, this river is of 'picnic' value only.

Scenic value: Moderate.

Recreational value: Low.

46.0 MAHITAHU RIVER 877000

Location: The Mahitahu River flows north-west to enter the sea at Bruce Bay.

River mouth location: NZMS1, S78/314464.

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S78 Bruce Bay; S88 Landsborough.

Length: 35km.

Average gradient: 1:125 8m/km.

Recreational use and scenic description: The Mahitahu River is a shingle bed river flowing down a wide valley with many logs and snags in the river bed. The current is neither swift nor powerful. The river is braided over most of its lower length providing shallow water. Gorse is common in the lower 9km and tree stumps and logs litter the bed too, providing a somewhat untidy scene. The river is of low gradient over most of its length and is usable by canoes, rafts and dinghies for some distance. However, as mentioned with respect to the Makawhio River, the river is really only of 'picnic' interest, particularly with the very popular Hall and Paringa Rivers so close.

Scenic value: Moderate.

Recreational value: Low.

47.0 OHINEMAKA RIVER 876000

The Ohinemaka River has a number of tributaries, including Blackwater Creek, which flow across the main road. The Ohinemaka has an interesting lagoon at its mouth but this has no easy access and lies in low lying swampy country. The river and its tributaries are all far too small for boating or recreational use and need very high flows before becoming of sufficient depth for use. The river does flow through bush and is scenically interesting, but no more so than the Mahitahu.

Scenic value: Moderate.

Recreational value: Insignificant.

48.0 PARINGA RIVER 875000

Location: The Paringa River flows north-westwards from the outliers of the Southern Alps to enter the Westland Bight immediately above Tititira Point, south-west of Bruce Bay. The main upper tributary is the Otoko River. In the lower basin lies Lake Paringa which drains through the Hall River into the Paringa River.

River mouth location: NZMS1, S77/175424.

Maps: NZMS18, Sheet 19 Haast; Sheet 20 Mount Cook; NZMS1, Sheet S77 Paringa; S78 Bruce Bay; S88 Landsborough.

Length: 36km.

Average gradient: 1:250 4m/km.

RECREATIONAL USE:

Motor launches: Normally too shallow.

Jet boats: Boatable from the river mouth to the Otoko River confluence; with higher than mean flows, well above the confluence until shoaling water is reached. Considered a straightforward trip that is very attractive and scenic.

Drift boats, rafts, canoes/kayaks: Seldom used mainly because the river does not contain any significant rapids and is relatively shallow. The current is not particularly fast. The scenery below the highest point with vehicle access (the main road bridge) does not differ significantly from other rivers further north and south that do have access. Above the main road bridge access is not easy and this limits the river's use.

Pack floating, swimming: Unknown — probably only 'picnic' swimming in summer.

Scenic description: The Paringa, above the Otoko confluence, flows through thick bush over shingle shallows with some log snags and is considered to be a pleasant trip. Access is not easy. From the Otoko confluence the banks have a margin of grasses and swamp plants between river and bush with some exotic trees, mostly willows and pine. The river becomes progressively wider and shallower, being braided below the main road bridge. Bush covers the hills and there is little scrub.

Scenic value: Impressive.

Recreational value: Intermediate.

48.1 OTOKO RIVER 875200

Location: The Otoko River drains a small, glacier-fed lake beneath the McCardell Glacier. From this point the river flows west down a bush-clad valley to junction with the Paringa River.

River confluence location: NZMS1, S88/248261.

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S88 Landsborough.

Length: 20km.

Average gradient: 1:80 12.5m/km.

Recreational use and scenic description: The Otoko River is much like the upper Paringa, a gentle shingle bottom river for 3km above the Paringa confluence. Above this the river becomes progressively more stony. It is a pleasant bush lined river with some grassy flats at the confluence area. There are no rapids except in the higher catchment where it is too small for use. A walking track goes some way up the river. The Otoko is jet boated 5km or so, depending upon water flow. The walking track does offer access for canoeists and rafters but the river is seldom used as most people prefer a larger river such as the Landsborough.

Scenic value: Impressive.

Recreational value: Low

48.2 HALL RIVER 875100

Location: The Hall River drains Lake Paringa into the Paringa River.

River confluence location: NZMS1, S77/176370.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S77 Paringa.

Length: 6km.

Average gradient: Slight.

Recreational use and scenic description: The Hall River is a very pleasant and scenic river meandering slowly over a shingle and muddy bed between grassy banks and an overhanging canopy of bush. The river is narrow in places and has stumps and logs obstructing the passage. The lake exit is weedy. To float down the river is much like drifting down a bush track. The river is jet boated and could be canoed, rafted and drift boated although there is no access to the river confluence and it would be necessary to portage up the Paringa to the main road.

Scenic value: Exceptional.

Recreational value: High.

48.3 THE WINDBAG 875105

Location: The Windbag is the main stream feeding Lake Paringa. It has numerous feeder streams draining the bush country to the south of the lake.

River confluence location: NZMS1, S77/150309.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S77 Paringa; S87 Haast.

Length: 14km.

Average gradient: Slight.

Recreational use and scenic description: The Windbag is a river much like the Okarito, only much smaller. The river meanders beside the main road, but is screened off from the highway by a margin of bush — mainly beech and rimu. The river is shallow and stony with many logs obstructing the path. The bush is thinner than that around the Okarito, and is not so attractive. The river is of sufficient size for rafting and canoeing but is not used often; it requires above normal flow to become its best. The river is swampy around Panel Creek.

Scenic value: Moderate.

Recreational value: Intermediate.

49.0 MOERAKI RIVER 873000

Location: The Moeraki River flows north-west from the Mataketake Range and into the Westland Bight, forming Lake Moeraki on its way to the sea. It is locally called the Blue River.

River mouth location: NZMS1, S77/022336.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S77 Paringa; S87 Haast.

Length: 32km (includes the lake).

Average gradient: 1:70 14.3m/km.

Recreational use and scenic description: From the lake the river flows quietly down past the main road and then over shingle shallows to the sea. Some snags exist but do not obstruct the channel. The river banks are high, bush-clad and very scenic. Above the lake the river is of low gradient, flowing gently over shingle shoals and divided by grassy islands. At the point where the river first meets the main road it drops suddenly over a short section of steep gradient creating some rapids. Bush and scrub flank the river over its entire length. The river is canoeable and raftable, the upper river being reached by a badly overgrown track.

Scenic value: Moderate.

Recreational value: Intermediate.

50.0 WHAKAPOHAI RIVER 872000

Location: The Whakapohai (known locally as Little River) flows to the sea immediately to the south of Moeraki.

River mouth location: NZMS1, S77/012328.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S77 Paringa; S87 Haast.

Length: 17km.

Average gradient: 1:75 13.3m/km.

Recreational use and scenic description: The Whakapohai River is a fast flowing, small, shingle river with many stony banks filtering the current, making conditions too shallow for any form of boating. It has reasonable access to the river mouth but has none above the main road bridge. The flanking hills are steep and bush-clad and there is little in the way of a valley floor.

Scenic value: Moderate.

Recreational value: Insignificant.

51.0 TAWHAREKIRI LAKES AND WAITA RIVER 869011 869000

Location: Between the Haast and Whakapohai Rivers and west of the Mataketake Range lies an extensive swampy area, into which flow the Waita River and Bayou Creek. Maori River drains the swamp and the small Tawharekiri lakes.

River mouth location: NZMS1, S87/900226.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S87 Haast.

Length: 19km.

Average gradient: Slight.

Recreational use and scenic description: The Waita River is a very small creek flowing into swampy land, but maintaining a flow over shingle for its entire lower length through the swamp. Maori River is a small creek draining the areas of open water (known as the Tawharekiri Lakes) and the swamp. The Waita and Maori Rivers have been used to paddle upstream into the lakes and swamp which have scenic and wildlife interest. There is little intrinsic recreational interest, however.

Scenic value: Impressive.

Recreational value: Low

52.0 HAAST RIVER 868000

The Haast River is a large and swift flowing river rising on the western side of the Haast Pass. It is joined by a number of tributaries of which the Landsborough is the largest and best known. The upper river is very steep, the lower river is wide, flat and sluggish.

The river has been divided into two sections for this survey.

52.1 UPPER HAAST RIVER

Location: The Haast River has its origins in the main divide to the west of Mount Brewster and the David Glacier. It then flows in a northerly direction down steep mountain slopes into a wide alluvial valley at the Burke River confluence.

Section end location: NZMS1, S98/123941.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S98 Haast Pass.

Length: 14km.

Average gradient: 1:15 66.6m/km.

Recreational use and scenic description: Immediately north of Haast Pass the river flowing shallow over sharp rock meets the road. It is canoeable and raftable from this point, although a trifle shallow; the river has a reputation for rising at a phenomenal rate after rain. It is bordered by beech forest over most of its length. Rimu and other podocarp are common lower in the river system. From the Pyke Creek confluence the river starts to drop quickly through narrow gorges and becomes unnavigable by any craft. These wild conditions extend down to the 'Gates of Haast' bridge, whereupon the gradient

slackens and the river bed opens up to provide enjoyable canoeing and rafting conditions again, past Thundering Creek Falls to the Burke River Junction.

Scenic value: Impressive.

Recreational value: Low

52.2 LOWER HAAST RIVER

Location: From the Burke River confluence the Haast flows quietly over alluvial gravel and stone in a wide bed, very braided, particularly below the Landsborough junction.

River mouth location: NZMS1, S87/835167.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S87 Haast; S98 Haast Pass.

Length: 58km.

Average gradient: 1:630 1.6m/km.

Recreational use and scenic description: The Lower Haast is jet boated as far upstream as the Burke River confluence and is boatable by rafts and canoes from this point. From the Burke confluence the river is shallow, flowing quietly over shingle but with some areas of fast current where the river flows against the bank on corners. There are numerous large shingle beaches along the whole length of the river and it is braided from the Landsborough junction. Beyond the wide alluvial flats is a narrow margin of flat grassland and bush-covered hills are beyond that. The total appearance is one of a very wide and open valley; mountain peaks are visible inland.

The lower river is often jet boated, but is not used to any great extent by other boaters. The river has few rapids and is so wide that the scenery is really uninteresting. This is particularly so below the Thomas River.

Scenic value: Moderate.

Recreational value: Intermediate.

52.2.1 BURKE RIVER 868250

Location: The Burke is the only left bank tributary of the Haast of any consequence. It flows east to junction with the Haast at the point where the Haast flows out onto the flat, alluvial plain.

River confluence location: NZMS1, S98/122941.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S98 Haast Pass.

Length: 19km (includes Howe Creek).

Average gradient: 1:20 50m/km.

Recreational use and scenic description: The lower 2km of the Burke has a beautiful deep and quiet flowing gorge between dramatic cliffs and steep, bush-clad hills. Above the gorge lie the 'Churn Rapids' which mark the limit of upward navigation by jet boats. These rapids also mark the limit to which our survey penetrated as it was difficult to climb beyond the rapids. It is unlikely that boaters would persist in portaging equipment above these rapids and, consequently, the river has little potential use above the rapids. The gorge is a 'must' for jet boaters to visit and the scenery is certainly striking.

Scenic value: Impressive.

Recreational value: Low

52.2.2 WILLS RIVER 868280

Location: The Wills River flows east between the main divide and the Bealey Range to junction with the Haast above the Burke River.

River confluence location: NZMS1, S98/147919.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S98 Haast Pass; S99 Ohau.

Length: 18km.

Average gradient: 1:35 28.6m/km.

Recreational use and scenic description: The Wills River is very small and unboatable. The upper catchment is a stony gravel stream, small and quiet flowing, then tumbling down 300 metres over the last 3km through the Wills Gorge. The upper catchment area is accessible by a track, but it would not offer a practical trip. Low alpine scrub covers the upper catchment; thick bush covers the lower river area.

Scenic value: Moderate.

Recreational value: Insignificant.

52.2.3 LANDSBOROUGH RIVER 868200

Location: The Landsborough flows south-west, parallel to the main divide to join with the Haast as the Haast flows out onto braided flats at Clarkes Bluff.

River confluence location: NZMS1, S87/194012.

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S87 Haast; S88 Landsborough.

Length: 60km.

Average gradient: 1:166 6m/km.

RECREATIONAL USE:

Motor launches: Unnavigable. Too shallow.

Jet boats: Boatable to the Clarke River confluence under normal flow and to Mackenzie Creek (25km) with high flow. This section of the river has been described as fast, glacial, mean and hazardous — for the experienced only.

Drift boats: Good water although somewhat shallow in places.

Rafts: Normally raftable from Mackenzie Creek and Kea Flat when running high.

Canoes/kayaks: The river has been canoed a number of times from Hinds Flat and above but access has been by a laborious portage upstream or by helicopter. The river is really quite easy, offering difficult water only with low flows in the Upper Gates Gorge area. Otherwise Grade 2 to 3 — mostly over gentle flowing shingle beds and suitable for the average canoeist. The length of canoeable water offered by this river makes it an attractive proposition if helicopters are available for use.

Pack floating, swimming: Has been used by trampers. Glacier fed and cold.

Scenic description: The Landsborough flows down a gently-sloping valley flanked by high peaks and bush-covered hillsides. The valley floor contains areas of grassland and the river flows over shingle and stones. In a number of places the river is pinched between hillsides, creating bluffs and very short, gorge like sections, the most notable being the Upper Gates Gorge.

Scenic value: Impressive.

Recreational value: High.

52.2.4 CLARKE RIVER 868202

Location: The Clarke River flows south-west to the west of Landsborough Valley with which it joins above the Landsborough-Haast confluence.

River confluence location: NZMS1, S88/235048.

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S88 Landsborough.

Length: 26km.

Average gradient: 1:230 4.4m/km.

Recreational use and scenic description: The Clarke River is smaller than the Landsborough but contains more gorges and they are longer and more dramatic. The Clarke is jet boated above Rabbit Flat to the foot of the bottom gorge — a distance of around 9km. It offers better and more exciting water than the Landsborough but requires above normal flows to be raftable or canoeable. Access is more difficult than the Landsborough and consequently is used less.

Scenic value: Impressive.

Recreational value: High.

HAAST TO MILFORD

53.0	Okuru River	47	60.0	Gorge River	49
54.0	Turnbull River	47	61.0	Awarua River	49
55.0	Hapuka River	47	62.0	Hollyford River	49
56.0	Waiatoto River	47	62.1	Upper Hollyford River	49
57.0	Arawata River	47	62.2	Lower Hollyford River	50
57.1	Arawata River — Upper Tributaries	48	62.2.1	Pyke River	50
57.2	Jackson River	48	63.0	Kaipō River	50
57.2.1	Ellery Lake and Creek	48	64.0	John O'Groats River	50
58.0	Cascade River	48	65.0	Harrison River	50
58.1	Martyr River and Old Man River ...	49	66.0	Bowen River	51
59.0	Hope River	49	67.0	Cleddau River	51
			67.1	Tutoko River	51

53.0 OKURU RIVER 867000

Location: The Okuru River flows north-west from the main divide south of Haast, to enter the sea via a large lagoon. The Okuru's main tributary is the Ngatau River which flows north-east to join the Okuru as it flows onto its lower valley area.

River mouth location: NZMS1, S86/730085.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S86 Okuru; S87 Haast; S98 Haast Pass.

Length: 43km.

Average gradient: 1:435 2.3m/km.

Recreational use and scenic description: The Okuru flows steeply through beech forest to junction with the smaller and similar Ngatau River and then onto a shingle bed in a wider valley of lower gradient. The banks are flanked by bush (mainly beech) and some grassland and swamp are on the perimeter of the river bed area. In the lagoon area and for some short distance upstream there are extensive swamplands. The river is seldom used for any form of recreation mainly because of the proximity of larger, similar rivers such as the Waiatoto. Access is also a limiting factor, there being only a badly overgrown walking track. The area is used by shooters and some jet boaters.

Scenic value: Picturesque.

Recreational value: Low

54.0 TURNBULL RIVER 866000

Location: The Turnbull River, immediately to the south of the Okuru River (with which it shares the same coastal lagoon) is smaller than the Okuru and drains the Browning Range but not the main divide. The main tributary of the Turnbull is the Mueller River.

River mouth location: NZMS1, S86/719078.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S86 Okuru; S87 Haast; S98 Haast Pass.

Length: 34km.

Average gradient: 1:210 4.8m/km.

Recreational use and scenic description: The Turnbull River is similar to the Okuru. However, the valley is more confined and there are a number of gorges as the river flows over a bouldery bed. Above the Mueller confluence lies Uproar Gorge which is particularly steep and wild. Lower is Venture Gorge with very steep, bush-clad walls. Between the gorges lies a length of quietly flowing shingle bed river, and below Venture Gorge the river becomes very sluggish, particularly with some water backed up by the tide in the lagoon. Logging roads penetrate only the lower 7km, after which thick bush remains, with a good deal of rimu and other podocarp. The river is smaller than the Okuru and sees little recreational use.

Scenic value: Moderate.

Recreational value: Low

55.0 HAPUKA RIVER 865000

Location: The Hapuka River is the third and most southerly of the rivers flowing into the Okuru Lagoon. It is the smallest of the rivers and drains the extensive swampland inland of Carters Mill. The swampland is fed by numerous small streams flowing off the hills between the Waiatoto and Turnbull Rivers.

River mouth location: NZMS1, S86/712076.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S86 Okuru; S97 Jackson Bay.

Length: 15km (including McPherson Gully).

Average gradient: Slight.

Recreational use and scenic description: The Hapuka lies with almost all its length in swamplands and has a multitude of channels. Flax and other swamp vegetation crowd in on the main water channel. It is possible to paddle a canoe or dinghy upstream through the swamplands but this is seldom ever done. It is also possible to jet boat into the first 4km or so but logs and weeds restrict navigation considerably.

Scenic value: Moderate.

Recreational value: Low

56.0 WAIATOTO RIVER 864000

Location: The Waiatoto is a large and a particularly beautiful river which flows north-west from the main divide in the vicinity of Mount Aspiring. In the lower valley it squeezes between the Haast and Selbourne Ranges and enters the sea 9km north of the Arawata River mouth.

River mouth location: NZMS1, S97/608984.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S97 Jackson Bay; S106 Aspiring.

Length: 64km.

Average gradient: Slight over lower reaches.

RECREATIONAL USE:

Motor launches: Nil.

Jet boats: Considerable use is made of this river by jet boaters and it is thought of as being one of the best rivers on the West Coast for boating. Approximately 23km is boatable through the lower gorge. The scenery is one of the river's drawcards, together with very clear water and thick bush cover.

Drift boats, rafts, canoes/kayaks: Because of the difficulty of access and the rugged mountain passes giving access from the east, this river valley has not been used to the extent that its fine water and scenery would warrant. Some rafters and canoeists have flown into the upper reaches where there are airstrips.

Pack floating, swimming: Unused except by the odd shooter or jet boater.

Scenic description: The Waiatoto is probably one of the most beautiful rivers in the South Westland district. The bush covered valley closes in more than it does on the similar Arawata River to the south, and there are two gorges on the river. The first gorge is 16km above the main road bridge and the upper gorge is another 7km upstream. There are rapids in both gorges although they are not difficult for rafts, canoes or jet boats but the river does narrow down to about 2 metres in places as it flows between massive boulders, forming fast chutes of water. Most of the Waiatoto flows quietly through the bush with a narrow shingle beach margin. Rock outcrops and boulders are common. In places the river is sluggish through deep, clear pools that reflect the snow-capped mountains beyond. There may be logs and other debris in the bed. The upper gorge is a succession of huge deep pools with short bouldery chutes from one pool to the next. Hindley Creek, a southern bank tributary of the lower river, flows through the lowland bush country as a bush-lined corridor. It has massive log jams and a slow current. It has been canoed.

Scenic value: Exceptional.

Recreational value: High.

57.0 ARAWATA RIVER 863000

Location: The Arawata River is south of, and slightly larger than, the Waiatoto River. It is a wide shingle bed river that rises on the northern slopes of the Barrier Range and the adjoining high country. It flows north-west to the termination of the Olivine Range and then swings north-west to enter the sea at Jackson Bay. Notable tributaries are Joe River flowing off

Bonar Glacier, and Jackson River in the lower catchment area. Lake Ellery drains into the left bank of Jackson River.

River mouth location: NZMS1, S97/520963.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S97 Jackson Bay; S106 Aspiring.

Length: 77km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Nil.

Jet boats: Considerable use is made of the Arawata River, considering its isolation from populated areas. It is a favourite area for jet boaters who hunt. The river is navigable into Ten Hour Gorge, 47km above the main road bridge. The river is wide and braided, offering easy and very scenic river conditions.

Drift boats, rafts, canoes/kayaks: Like the Waitotō, this river has very poor access except by a long portage upstream. The river is wide and braided below Ten Hour Gorge. The river bed is, in places, in excess of 1.5km wide and this tends to make the scenery less interesting for boaters sitting close to the water level in rafts and canoes — for this reason the Waitotō is to be preferred. Ten Hour Gorge contains excellent Grade 3 rapids while the gorge above, between McArthur Flat and Williamson Flat, contains more difficult rapids, steeper and with less water.

Pack floating, swimming: Little use except by trampers and hunters who happen to be in the area.

Scenic description: The Arawata River flows off the main divide and the Snow White and Mercer Glaciers down a steep, rocky bed through beech forest to the Williamson Flat where it meets Joe River. From this point the river is of raftable and canoeable size. The river then flows through a gorge containing a number of boisterous rapids. At the foot of the gorge the river meets the Williamson River and the McArthur Flat and then plunges into Ten Hour Gorge. This contains steep, beech-clad hillsides rather than massive bluffs. Ten Hour Gorge is often jet boated by competent boaters. From the foot of this gorge the river flows out onto a wide, braided shingle valley and remains like this down to the main road. In places the river is confined to a single channel with a wide margin of shingle on the beaches. The bush remains some way from the water and one can clearly see the snow-capped mountains beyond the bush. The valley is open giving a splendid view of the surrounding countryside. Between the main road and the sea, the river is confined between bush and scrub-covered banks (with a great deal of gorse) and flows swiftly to the sea.

Scenic value: Exceptional.

Recreational value: High.

57.1 ARAWATA RIVER — UPPER TRIBUTARIES

In the headwaters of the Arawata River are a number of swift-flowing rivers. These include the Joe, Williamson, and Waipara Rivers. Those people seeking recreation in the area tend to prefer the larger mainstream, leaving the tributaries virtually unused by boaters. The Waipara River is the largest of the tributaries and the most interesting. It drains a small cirque lake at the foot of the Bonar Glacier and flows through two gorges forming Cabin Pass Rapids and Companion Ladder Rapids which are particularly boisterous and have never been attempted by boaters.

57.2 JACKSON RIVER 863100

Location: The Jackson River flows north-east parallel to the coast and some 12km inland. It junctions with the Arawata at Arawata Bridge. It drains the thick beech forest between the Thompson and McArthur Ranges. A good deal of the flow in the lower river comes from Lake Ellery.

River confluence location: NZMS1, S97/562892.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S97 Jackson's Bay.

Length: 21km.

Average gradient: 1:205 4.9m/km.

Recreational use: The Jackson, because it has vehicle access up its left bank, is greatly used by canoeists and other boaters. It is jet boated for a short distance depending upon water flow. The river is swift flowing and clear but without rapids.

Scenic description: The Jackson flows down a gravel bed in a valley of steady although steep gradient, giving a fast current, clear but without rapids. Thick beech forest comes down to the river banks and overhangs the river giving a very pleasant trip for canoeists and drift boaters. Some logs litter the gravel bed in the lower river area.

Scenic value: Impressive.

Recreational value: High.

57.2.1 ELLERY LAKE AND CREEK 863103

Location: Ellery Creek drains Lake Ellery into the lower reaches of the Jackson River, 2km above the Arawata confluence.

River confluence location: NZMS1, S97/540879.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S97 Jacksons Bay.

Length: 1.5km (Ellery Creek only).

Average gradient: Slight.

Recreational use and scenic description: Lake Ellery is a small lake nestled among beech forest inland of Jackson Bay. It is an attractive lake without access other than along the banks of Ellery Creek which drains the lake. Jet boaters, canoeists and very shallow, powered craft might navigate the creek to gain access to the lake. The creek is overhung by dense beech forest which suddenly opens up to reveal the lake, tranquil and quiet. It is a scenic area.

Scenic value: Impressive.

Recreational value: Intermediate.

58.0 CASCADE RIVER 859000

Location: The Cascade River has its origins in the Red Hills Range and flows north-east, then turns north-west to the sea, south of Cascade Point.

River mouth location: NZMS1, S96/248908.

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S96 Cascade; S97 Jackson Bay; S105 Martins Bay; S106 Aspiring.

Length: 70km.

Average gradient: Slight over lower reaches.

Recreational use and scenic description: The Cascade River lies in very isolated country and has no vehicle access. Jet boaters have used the river but they launch at Jackson Bay then run the 25km sea trip along the coast and into the river mouth — weather permitting, a most hazardous trip at the best of times. The river has not been canoed or rafted to our knowledge although there has been some resurgence of interest in this area by canoeists and rafters. Farming operations in the lower river area are carried out by using an airstrip and it is thought that this strip offers the most feasible means of access to the area. The river originates in the Red Hills and drops over the 46 metre Durwards Falls into the Cascade Gorge which is some 4km in length — all in fairly thick bush. From the foot of the gorge the river is said to be stony and fast flowing for some 15km before turning west and onto the coast over braided shingle and the Hermitage Swamp. There are numerous

meanders in this lower section and ox-bow lakes. The river is peaceful and of low gradient.

Scenic value: Impressive.

Recreational value: Low

58.1 **MARTYR RIVER** 859120
OLD MAN RIVER 859020

The Martyr and Old Man Rivers are both right bank tributaries of the lower Cascade River. The survey team did not inspect either river and consequently, the following information is reported from conversations with persons claiming to know the area.

Both these streams are reported to be small. The Martyr River flows through Monkey Puzzle Gorge before entering the lower Cascade River flats. Old Man River is a meandering creek flowing through swampy land over shingle below the Cascade Plateau. Neither river is said to be of sufficient size for boating and we are of the opinion that those persons who take the considerable effort to get into this region will prefer to use the larger Cascade River. There is a possibility that trampers coming up the Jackson River over the Martyr Saddle might pack float Monkey Puzzle Gorge although there is barely sufficient depth to provide good water here.

Scenic value: Moderate.

Recreational value: Intermediate.

59.0 **HOPE RIVER** 858000

Location: The Hope River flows westward to the sea which it enters via Barn Bay 7km south of the Cascade River mouth.

River mouth location: NZMS1, S96/215839

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S96 Cascade; S97 Jackson Bay.

Length: 16km.

Average gradient: 1:15 66.6m/km.

Recreational use and scenic description: The Hope River is a very small river lying in thick bush country south of the Cascade River. It is very isolated and is not used by boaters and is seldom visited.

Scenic value: Impressive.

Recreational value: Insignificant.

60.0 **GORGE RIVER** 856000

Location: The Gorge River flows west to the sea north of Big Bay draining the land west of the Red Hills Range. It lies in a deep, bush-clad valley entering the sea through a narrow cleft in the hills, which gives the river its name.

River mouth location: NZMS1, S96/110717.

Maps: NZMS18, Sheet 19 Haast; NZMS1, S96 Cascade; S105 Martins Bay.

Length: 24km.

Average gradient: 1:190 5.3m/km.

Recreational use and scenic description: The Gorge River, like the Hope and Cascade Rivers, is very isolated and lies in thick bush. The upper reaches are of lower gradient than the lower reaches and, strangely for this area, there are sections of the river with numerous willows. They are possibly remnants of former days when this area was cleared and settled, especially at Big Bay. The river lies in a bush-clad valley with a good deal of

scrub, otherwise little is known of the river — it has been neither jet boated, canoed nor rafted. It is probably too small except after rain.

Scenic value: Picturesque.

Recreational value: Insignificant.

61.0 **AWARUA RIVER** 853000

Location: The Awarua River is a small tidal creek flowing onto the northern end of Big Bay (or Awarua Bay).

River mouth location: NZMS1, S105/047586

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S105 Martins Bay.

Length: 19km (includes the Dry Awarua).

Average gradient: Slight (tidal).

Recreational use and scenic description: The Awarua drains the small Waiuna Lagoon through bush to Big Bay (Awarua Bay). A significant length of this portion of the river is tidal, and flows very slowly. The bush overhangs the water and the banks tend to be swampy. The river is seldom much more than knee deep. The river receives most of its use from whitebaiters who use dinghies to travel up and down the river. Above Waiuna Lagoon a number of small creeks flow in, including the Dry Awarua River which is the largest. It would be possible to jet boat in this area but the Hollyford tends to be used rather than the Awarua.

Scenic value: Impressive.

Recreational value: Low

62.0 **HOLLYFORD RIVER** 851000

The Hollyford River rises near the Homer Saddle on the road to Milford Sound, and after curving eastwards, flows northwards and north-westwards to enter the Tasman Sea at the northern end of Martins Bay. Nearing the coast the river widens out in its lower valley to form the long Lake McKerrow. The main tributary is the Pyke River which flows through Lake Wilmot to join the Hollyford above Lake McKerrow. The river is considered in two parts.

62.1 **UPPER HOLLYFORD RIVER** 851000

Location: The Upper Hollyford is that part of the river from its origin in the Gertrude Valley and Black Lake, down to Gunn's Camp.

Section end location: NZMS1, S122/089015

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S122 Hollyford.

Length: 23km.

Average gradient: 1:83 12m/km.

RECREATIONAL USE:

Motor launches: Nil.

Jet boats: Generally too small to boat except under very high flow conditions and then only for a short distance.

Drift boats, rafts: Most trips begin at Gunn's Camp although the upper section has been run a few times with high flow.

Canoes/kayaks: The Upper Hollyford is a very popular trip with experienced canoeists, especially when the river is flowing at spring or high flows. Rapids are difficult and are of Grade 3 to 4 difficulty. From Homer Huts to Falls Creek the river is generally too small. The highest usual canoeable point is Camera Flat or Falls Creek confluence. (This is *not* Hidden Falls Creek which is much lower downstream). The best water is just below the Marion Creek confluence with extremely difficult water again below Roaring Creek.

Pack floating: A popular lilo trip amongst climbers who may be waiting at Homer Huts for the weather to clear before attempting a climb in the Darrans.

Swimming: As above — not a warm river!

Scenic description: The Upper Hollyford does not carry a great deal of water and this creates interesting white water over its bouldery bed. Above Falls Creek the river is small but scenic — being a popular postcard view upstream towards Mount Talbot. The thick bush that is a noted feature of the lower Hollyford does not appear over much of the upper river valley and the vegetation has a more stunted sub-alpine appearance that is possibly not so attractive. The steep sheer bluffs of Mount Christina and Ngatimamoe dominate the vista.

Scenic value: Impressive.

Recreational value: Intermediate.

62.2 LOWER HOLLYFORD RIVER

Location: From Gunn's Camp the Hollyford flows north through bush country in a scenic valley. It joins the Pyke River and then forms Lake McKerrow before joining the sea at Martins Bay via a channel through flat coastal land.

River mouth location: NZMS1, S105/950523

Maps: NZMS18, Sheet 19 Haast; Sheet 22 Wakatipu; NZMS1, Sheet S105 Martins Bay; S113 Tutoko; S122 Hollyford.

Length: 61km (includes Lake McKerrow).

Average gradient: 1:150 6.7m/km (upper section).

RECREATIONAL USE:

Motor launches: Confined to Lake McKerrow and the river between the lake and the sea, provided snags are avoided.

Jet boats: Generally boated as far upstream as the Little Homer Rapids just below Hidden Falls Creek (often mistakenly called Hidden Falls). Little Homer Rapids are usually impassable to boats although they have been navigated at high flow by exceptionally experienced boaters. The river is again boatable from Little Homer Rapids to the end of the Hollyford Valley Road but no further. Access to the lake and lower river is by sea only and the bar commands respect.

Drift boats: Tends to be a little shallow except after rain. Seldom used.

Rafts: Not often run although the Little Homer Rapids are considered of high value when the river is high. A television film produced by Sir Edmund Hillary used a good deal of footage of rafts on the Little Homer Rapids and the Cleddau River. This film has aroused rafters' interest in the region and we might expect more use of the river by rafters in future.

Canoes/kayaks: Excellent water for canoeists with notable rapids at Moraine Creek (not always passable by canoes) and the Little Homer Rapids below Hidden Falls Creek. Rapid difficulty can exceed Grade 5 at high flow and consequently, parts of the river can only be run by the most experienced canoeists. Inexperienced canoeists may easily portage the worst rapids. Below the Little Homer Rapids the river is easy, placid and attractive.

Pack floating: Unknown. The river is usually too shallow for good floating.

Swimming: Some good pools. Water is cool.

Scenic description: From Gunn's Camp the river flows steadily over shingle with many logs down to Moraine Creek where the bed narrows with boulders as in the upper river section. The river then eases somewhat over shingle and stones to the Little Homer Rapids below Hidden Falls Creek. Below these rapids the river becomes placid and a little swampy before entering the head of Lake McKerrow. Below the lake the river is tidal and flat. The bush in the deep, formerly glaciated valley is the most notable feature of the Hollyford.

Scenic value: Exceptional.

Recreational value: High.

62.2.1 PYKE RIVER 851050

Location: The Pyke River flows south-west into the Hollyford a short distance above Lake McKerrow. It has two large lakes

— Alabaster and Wilmot.

River confluence location: NZMS1, S113/068261

Maps: NZMS18, Sheet 19 Haast; Sheet 22 Wakatipu; NZMS1, Sheet S105 Martins Bay; S113 Tutoko.

Length: 48km (including lakes).

Average gradient: 0.8m/km (including lakes).

RECREATIONAL USE:

Motor launches: Nil.

Jet boats: Navigable for approximately 40km through Lakes Alabaster and Wilmot. Generally clear of obstructions except for log jams in the upper reaches. Considered good boating.

Drift boats, rafts: Better than the Hollyford in that the water is deeper and rocky rapids are absent, but the current can be sluggish and access awkward. The river is seldom used.

Canoes/kayaks: Because of the difficulty of access this river is seldom used — the faster Hollyford is preferred.

Pack floating: Occasional trampers do use the river.

Swimming: In the lakes.

Scenic description: Fine Fiordland bush scenery with a great deal of swamp-like vegetation around the lake perimeter and downstream. Otherwise, as for the Hollyford.

Scenic value: Impressive.

Recreational value: Intermediate.

63.0 KAIPO RIVER 850000

Location: The Kaipo River flows north-west into the sea south of the Hollyford and Martins Bay.

River mouth location: NZMS1, S105/879435

Maps: NZMS18, Sheet S22 Wakatipu; NZMS1, Sheet S105 Martins Bay; S113 Tutoko.

Length: 26km.

Average gradient: 1:166 6m/km.

Recreational use and scenic description: The Kaipo is a small and seldom used river. It falls steeply from the hills into a heavily bushed area and becomes a shingle bed river as the gradient decreases. There are some rapids in the lower river but otherwise the river is much like the lower Hollyford or Pyke, smaller and less accessible.

Scenic value: Impressive.

Recreational value: Insignificant.

64.0 JOHN O'GROATS RIVER 848000

The John O'Groats River is a steep, small river flowing into the sea between Kaipo Bay and Milford Sound. Unusable because of its gradient and size. Inaccessible and seldom visited.

65.0 HARRISON RIVER 847020

Location: The Harrison River flows south into Milford Sound, 5km from the settlement of Milford Sound.

River mouth location: NZMS1, S113/882168

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S113 Tutoko.

Length: 11km.

Average gradient: Approximately 1:40 25m/km.

Recreational use and scenic description: The Harrison River was not inspected for the survey. It is very steep and unlikely to be used for any form of recreation. It flows through thick bush and has the high Wairereata Falls which are said to be worth a visit.

Scenic value: Impressive.

Recreational value: Insignificant.

66.0 BOWEN RIVER 847030

Location: The Bowen River flows into Milford Sound a little north of the head and is noted for the falls at the river mouth.

River mouth location: NZMS1, S113/898122

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S113 Tutoko.

Length: 9km.

Average gradient: Steep.

Recreational use and scenic description: The Bowen River is very small and steep, tumbling over the 162 metre Bowen Falls into the sound. It has tourist potential only and is inaccessible in the upper reaches.

Scenic value: Impressive.

Recreational value: Insignificant.

67.0 CLEDDAU RIVER 847000

Location: The Cleddau River flows north from the Homer Tunnel area to Milford Sound.

River mouth location: NZMS1, S113/900106

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S113 Tutoko; S122 Hollyford.

Length: 15km (includes South Branch).

Average gradient: 1:40 25m/km.

RECREATIONAL USE:

Motor launches: Nil except at river mouth area.

Jet boats: Limited. There have been boats as far upstream as the Tutoko confluence — 3.5km. Very shallow boating.

Drift boats, rafts: With high flow good water is provided and access is no problem as the main road is so near. Good white water below the Chasm to the Donne-Gulliver confluences, then it becomes shallow.

Canoes/kayaks: Excellent water although shallow except after rain. Most trips are over the section between the Chasm and the Donne-Gulliver confluences. Very scenic. Needs high flow before offering a practical trip.

Pack floating: Little used. Very shallow.

Swimming: Various swimming holes are used, particularly near the Hostel in the lower reaches.

Scenic description: A beautiful bush-lined river with interesting little rapids as the river flows over shingle, rocks and between boulders. The valley is flanked by high mountains, often snow-capped.

Scenic value: Impressive.

Recreational value: Low

67.1 TUTOKO RIVER 847040

Location: The Tutoko River flows off Mount Tutoko and the Darran Mountains and joins the Cleddau 3.5km above the head of the sound.

River confluence location: NZMS1, S113/927101

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S113 Tutoko.

Length: 13km.

Average gradient: 1:20 50m/km.

Recreational use and scenic description: The Tutoko River is a very steep and fast flowing mountain stream and has very demanding rapids. It has been canoed a number of times by very competent canoeists and has been rafted a few times. The rapids are of Grade 3 and 4 in the lower reaches. The river normally needs above normal flow (if Fiordland rivers can ever be said to have a normal flow as their levels fluctuate rapidly with rain). The river is clothed in thick stunted bush, typical of the Fiordland area.

Scenic value: Impressive.

Recreational value: Low

FIORDLAND

A NOTE ON FIORDLAND'S RIVERS

The survey attempts to measure the recreational use, both present and potential, of all New Zealand's rivers of any significant size, and consequently the rivers of Fiordland must be included. These rivers are extremely remote and are seldom visited (if at all) by the recreational boater. No one river stands out as being scenically unique or much more significant than any other, although we would not claim that the scenery becomes monotonous.

On a national scale, these rivers would all have to be graded as being scenically impressive. Recreationally, they are insignifi-

cant with a few possible exceptions — namely the Arthur River and the Wairaurahiri River which are accessible. We shall not grade the scenic or recreational values unless we are of the opinion that the rivers are likely to be used.

No detailed study or inspection was made of the rivers between the Arthur and Wairaurahiri. Some have been observed from a fixed wing aircraft, others were studied by aerial photographs and we might expect our descriptions to be less accurate than for other rivers included in this survey.

68.0	Arthur River	55	83.0	Rivers of Breaksea Sound	56
69.0	Sinbad Gully	55	84.0	Rivers of Dusky Sound	56
70.0	Transit River	55	85.0	Rivers of Chalky Inlet	56
71.0	Light River and Dark River	55	86.0	Rivers of Preservation Inlet	57
72.0	Wild Natives River	55	87.0	Wilson River	57
73.0	Catseye River	55	88.0	Kiwi Burn	57
74.0	George River and Edith River	55	89.0	Cavendish River	57
75.0	Whitewater River	55	90.0	Big River	57
76.0	Stillwater River	56	91.0	Waitutu River	57
77.0	Irene River	56	91.1	Princess Burn and Lake Poteriteri	57
78.0	Rivers of Nancy Sound	56	92.0	Wairaurahiri River	58
79.0	Rivers of Thompson Sound	56	92.1	Lake Hauroko's Streams	58
80.0	Rivers of Bradshaw Sound	56	93.0	Waikoau River and Rowallan Burn	58
81.0	Rivers of Doubtful Sound	56			
82.0	Rivers of Dagg Sound	56			

68.0 ARTHUR RIVER 846000

Location: The Arthur River has its origins in Lake Quill from where the river drops over the Sutherland Falls in one of the country's most spectacular falls — 579 metres in height. The river flows beside the lower Milford Track to the head of Milford Sound.

River mouth location: NZMS1, S112/888104

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S112 Milford; S113 Tutoko; S120 & S121 Bligh.

Length: 27km. (Includes Lake Ada).

Average gradient: 1:27 36.5m/km.

Description: From the foot of the Sutherland Falls the river drops down to a lower level to become a placid river entering Lake Ada over a shingle bed. The river is very peaceful on its journey from Lake Ada to the sound. The tributaries of the Arthur River are all very small and steep and not of sufficient size for recreational use. The existence of the Milford Track would allow small craft (canoes) to be portaged upstream as far as, say, the Quinton Huts and the river could be used from that point down. We are not aware of any such trip ever having been undertaken and should imagine that canoeists in this area would use the more accessible Cleddau, Tutoko, Hollyford and Eglinton Rivers, which are of a similar nature.

69.0 SINBAD GULLY 846020

Sinbad Gully is the valley formed on the southern face of Mitre Peak and its creek flows eastwards into Milford Sound. It is not of recreational size.

70.0 TRANSIT RIVER 845000

Location: Transit River originates in Lake Morton to the west of Lake Ada. From the lake, the river drops steeply into Transit Valley and thence to the beach immediately south of Milford Sound.

River mouth location: NZMS1, S112/740203

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S112 Milford; S120 & S121 Bligh.

Length: 16km.

Average gradient: 1:18.6 54m/km.

Description: Transit River is not a big river and has a considerable portion of its lower reaches flowing through a flat area of its valley and in swamp. A tributary, the McKenzie River, drains Lake Ronald, drops over McKenzie Falls and joins Transit River in its lower swampy area. To the south of Transit Beach is Poison Bay, which has an unnamed river flowing down the valley at its head. It is probably too small for any form of recreational use.

71.0 LIGHT RIVER 843300 DARK RIVER 843100

Location: Into the head of Sutherland Sound tumble two main rivers — the Light and the Dark Rivers.

River mouth location: NZMS1, S120 & S121/645965

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S120 & S121 Bligh.

Length: Light — 10km. Dark — 18km.

Average gradient: 1:20 49.5m/km.

Description: The Light River is very small and rough, dropping 150 metres from Lake Dale in a very bouldery gorge before easing in gradient. Filter conditions exist over most of its length. The Dark River, at the head of the sound, is small but may be of canoeable or raftable size below Swanmere, a small lake at its headwaters. It flows into Lake Grave and then drops steeply into the sound over a bouldery bed. Sutherland Sound is much like a lagoon, being silted up at the mouth.

72.0 WILD NATIVES RIVER 842100

Location: Wild Natives River flows into the head of Bligh Sound at Bounty Haven.

River mouth location: NZMS1, S120 & S121/572844

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S120 & S121 Bligh.

Length: 12km.

Average gradient: 1:19.7 51m/km.

Description: Wild Natives River was so named by Captain Stokes of the *Acheron* in 1851 who claimed to have come across the legendary 'lost tribe of Fiordland' here. The river is small although the lower reaches have been jet boated for a short distance. Above the Pitt River confluence the river is a raging torrent of white water flowing over boulders. The lower river is a quiet, shallow, gravel bed stream with numerous log snags. Trout are common in the numerous creeks and pools.

73.0 CATSEYE RIVER 842200

Location: The Catseye River flows out onto Catseye Bay via a large lagoon between Bligh and George Sounds.

River mouth location: NZMS1, S120 & S121/450919

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S120 & S121 Bligh.

Length: 11km.

Average gradient: 1:205 5m/km (over lower reaches).

Description: The Catseye River flows out into the sea via a large lagoon much larger than the topographical maps would seem to indicate. A significant length of the lower river is tidally affected and it is possible to boat upstream between logs and over mud for some distance. Log jams prevent navigation in the upper reaches.

74.0 GEORGE RIVER 841000 EDITH RIVER 841100

Location: Flowing into the head of George Sound are two rivers, the George and the Edith Rivers. Both rivers flow westward from the Glaisnock Wilderness Area.

River mouth location: NZMS1, S130/499723

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S130 Stuart.

Length: George River — 13km. Edith River — 17km.

Average gradient: 1:28 36m/km.

Description: The Edith River, towards the head of the Sound, is the largest of the rivers in George Sound. It flows into the sound via Lake Alice and the Alice Falls of some 50 metres in height. The section of the river between Lake Alice and the sound is very swift flowing and bouldery. The upper river is small.

The George River is steep and bouldery except over the lower 2km where the river splits into a number of channels over tussock-covered flats and pools of water in the shingle bed. Katherine Creek is smaller still and lies along the track into the Sound from the northwest arm of Lake Te Anau (middle fiord).

75.0 WHITEWATER RIVER 841200

Location: The Whitewater River flows eastward onto the western shore of George Sound.

River mouth location: NZMS1, S130/420757

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S129 Caswell; S130 Stuart.

Length: 9km.

Average gradient: 1:22 44.7m/km.

Description: The Whitewater River flows from a small lake and drops steeply over the first 2km before the gradient eases. The

river is, no doubt, aptly named but probably far too small and wild for recreational use.

76.0 STILLWATER RIVER 839100

Location: The Stillwater River is one of the largest rivers which flow into the fiords. It lies at the head of Caswell Sound. It has its origins to the west of Lake Hankinson.

River mouth location: NZMS1, S129/376632

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S129 Caswell; S130 Stuart.

Length: 28km.

Average gradient: 1:105 9.5m/km.

Description: The Stillwater is of low gradient compared with most Fiordland rivers. It flows down a wide valley through thick bush to Lake Marchant before entering the sound. There are two short gorges above Lake Marchant where rapids exist. The river is said to be jet boatable into Lake Marchant and probably higher; the river is definitely canoeable and raftable in size for some distance.

Caswell Sound has a number of other smaller rivers. The northern coast has Looking Glass Bay and Two Thumb Bay — both with rivers of some size but of high gradient. To the south lies the Juno River which drops steeply to the sea and is probably too rough for recreational use.

77.0 IRENE RIVER 837200

Location: The Irene River flows in a large semi-circle into the Emelius Arm (Northern Arm) of Charles Sound.

River mouth location: NZMS1, S129/300560

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S129 Caswell; S130 Stuart; S140 Te Anau.

Length: 27km.

Average gradient: 1:59 17m/km.

Description: The Irene River is another large Fiordland river. It flows in a valley of low gradient over the lower 11km. The river tends to be wide and shallow over a shingle bed in places, with sections of stony bed between overhanging bush. The river mouth is wide and muddy, drying to a wide delta at low tide. The river could be jet boated for some distance and is certainly of raftable and canoeable size.

The Gold Arm of Charles Sound has the small Windward River flowing into it. This river has a number of tributaries and is too small for boating much above the shoreline.

78.0 RIVERS OF NANCY SOUND 835000

Nancy Sound is a seldom visited area and has a number of small streams but all drop very steeply into the sound, making impossible floating water for boaters.

79.0 RIVERS OF THOMPSON SOUND 834000

Thompson Sound is the channel lying along the northern shore of Secretary Island, the large island to the north in the entrance of Doubtful Sound. Into this channel flow two main rivers — Namu River and the Pandora River. Both are probably too small for recreational use.

80.0 RIVERS OF BRADSHAW SOUND

Bradshaw Sound is an extension of Thompson Sound, going north-east from the junction of Thompson and Doubtful Sounds. Into the northern shore of Bradshaw flows the Rum River, a small stream. At the head of the two arms of Bradshaw Sound lie the Rea River and the Camelot River — the Camelot is the larger and is possibly of sufficient size to boat. Its head-

waters are accessible by a rugged track over the Te Au Pass via Lakes Te Au, Hilda and the south fiord of Te Anau. The river begins at Hidden Lake and flows over a bouldery bed and over the Bedivere Falls before it becomes of a marginal boatable size.

81.0 RIVERS OF DOUBTFUL SOUND 832000

Doubtful Sound now has access by means of the hydro road that services Deep Cove. However, the public are denied access, although a tourist company does use the road. The road crosses the Lyvia River, but this stream is very small, and is not likely to be used for recreational activities. It is very rocky and steep. There are a number of streams flowing into Doubtful Sound, but they are all small, exceptionally steep, and isolated. The land to the south of Doubtful Sound, the 'forgotten sector' of New Zealand, is the remotest found anywhere in the country and access other than by sea is almost impossible. The bush is very thick, the terrain difficult. It is bad enough tramping through this country with a pack — to portage a raft or canoe is next to impossible. The track north from Lake Hauroko offers the only real possibility — it provides access to the Seaforth River and Dusky Sound.

82.0 RIVERS OF DAGG SOUND 830000

Dagg Sound is one of the smallest of Fiordland's Sounds and, at its head, almost links with Crooked Arm of Doubtful Sound. There is only a low land bridge between the two areas of water. Rivers dropping into the sound are all very small creeks.

83.0 RIVERS OF BREAKSEA SOUND 828000

Between Dagg Sound and Breaksea Sound there is a small bay with a sandy beach onto which flows the Coal River. The river has its origins near the head of Dagg Sound and flows south from Lake Paradise, through Lake Swann and Lake Beattie before turning west to the coast. The river is small but probably canoeable from Lake Beattie. Coal River is the longest of the rivers in this area, and possibly the largest. All the rivers flowing into Breaksea Sound are, like those of Dagg Sound, short and very steep. The Acheron Passage leads south from the entrance of Breaksea Sound to Dusky Sound, forming Resolution Island. Wet Jacket Arm leads off the Acheron Passage at its midpoint. Herrick Creek is its largest stream and is too small for recreational activity.

84.0 RIVERS OF DUSKY SOUND 824000

Dusky Sound is very indented with small bays and coves. There are numerous islands in the sound itself, offering much shelter and interest. The rivers are all small except for the Mike River to the south, flowing into Cook Channel opposite Cooper Island. It links up four large lakes but is probably too steep and bouldery for any of the recreational activities we are concerned with here. At the head of the sound lies the sizeable Seaforth River.

The Seaforth River has access in the form of a track that links Lake Hauroko and Deep Cove. The track follows the river for a considerable distance. The river should be of boatable size (rafts, canoes) from Loch Maree where a number of tributaries add to its bulk. The river is of low gradient from Loch Maree to the sea.

85.0 RIVERS OF CHALKY INLET

Flowing onto the coast between the entrances of Dusky Sound

and Chalky Inlet is a small river draining Lake Fraser which is of low gradient and may well be of boatable size. Lake Macarthur, further inland, is some 370 metres higher in altitude, providing a particularly steep descent down to Lake Fraser. The river, presumably called Fraser River, would only be boatable from Lake Fraser and not above that point.

Chalky Inlet is shaped much like a 'Y' with the southern arm (Cunaris Sound) almost linking with Long Sound, an arm of Preservation Inlet.

Two good sized rivers flowing into Edwardson Sound, the northern arm of Chalky Inlet, have a low enough gradient to offer reasonable trips. They are Lumaluma Creek and Oho Creek, which converge near the head of the sound. Oho Creek links a number of lakes with the low Cora Lynn Falls blocking the short distance between Lake Cadman and the sound. Lumaluma Creek is probably too small to offer a good trip except after rain.

Flowing into Cunaris Sound is the Carrick River which also links a number of lakes. The small Kohe Creek entering Southport at the entrance to Chalky Inlet is too small to be used for boating.

86.0 RIVERS OF PRESERVATION INLET

Preservation Inlet is the large bay to the north of Puysegur Point. Long Sound leads north-east from the centre of the inlet. There are no rivers flowing into the inlet that are of canoeable size. Long Sound contains a number of small streams, but all are steep and shallow, the largest being on the southern shore. At the head of the sound lies Long Burn which is boatable in size and of low enough gradient to offer a feasible trip. However, access is awkward. There is a 43 metre waterfall between Widgeon Lake and the sound; consequently, any trip would be down to the lake only.

87.0 WILSON RIVER 819000

Location: The Wilson River flows south-west, east of Puysegur Point to enter the sea at Windsor Point.

River mouth location: NZMS1, S173 & S174/903212

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S173 & S174 Preservation.

Length: 14km.

Average gradient: 1:46 21.7m/km.

Description: The Wilson River flows in deep bush, scrub and tussock-covered country, onto the windswept south-western coast of Fiordland. The river is small and stony and does not offer a practical trip, being too shallow over most of its length.

88.0 KIWI BURN 818000

Location: East of the Wilson River and 10km east of Puysegur Point lighthouse is the mouth of the Kiwi Burn. It flows south through a bush-covered valley and Lake Kiwi.

River mouth location: NZMS1, S173 & S174/971193

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S166 Cameron; S173 & S174 Preservation.

Length: 21km.

Average gradient: 1:83.3 12m/km.

Description: The Kiwi Burn has a lower gradient than the Wilson River and is slightly larger, making for a more feasible trip. It runs through regenerated, rather stunted bush, that is quite attractive. Above Lake Kiwi is a 70 metre waterfall and other steep rapids that appear to be unnavigable. Provided access could be arranged (float plane to Lake Kiwi) this river does present a more likely trip than other rivers in the area. Access from the river mouth would be quite a problem because of the large surf usually found along this coast.

89.0 CAVENDISH RIVER 816000

Location: Flowing south between Lake Hakapoua and the Kiwi Burn is the small Cavendish River, which tumbles into the sea over rocks.

River mouth location: NZMS1, S173 & S174/093199

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S166 Cameron; S173 & S174 Preservation.

Length: 19km.

Average gradient: 1:46 21.7m/km.

Description: The Cavendish River is steep and bouldery and does not represent a feasible trip for canoeists, rafters or other boaters. There are numerous tight rapids that we believe to be unnavigable. The river lies in heavy bush country.

90.0 BIG RIVER 815000

Location: Big River (Maori name — Patupo) has its origins to the west of Long Sound in the Cameron Mountains. It flows south-east, junctions with a tributary draining Lake Monk and then enters the northern end of Lake Hakapoua. The lake is tidal and the river between the lake and the sea is a tidal channel.

River mouth location: NZMS1, S173 & S174/140190

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S166 Cameron; S173 & S174 Preservation.

Length: 29km (including Lake Hakapoua).

Average gradient: 1:133 7.5m/km.

Description: Big River is of insufficient size for boating (canoeing or rafting) above the Lake Monk tributary, although it may become big enough after rain. There is a short, bouldery gorge some 5km above the Lake Monk tributary confluence with very wild white water. The river is fast flowing and stony down to the lake. Below the lake there are 2km of wide, quiet flowing river that is affected by the tide — the river remains very shallow.

To the east of Big River lies the Aan River draining Lake Innes. It is too small for any recreational use.

91.0 WAITUTU RIVER 813000

Location: East of Big River and Lake Hakapoua lies Lake Poteriteri which drains into the sea via the Waitutu River. The lake is fed by the Princess Burn.

River mouth location: NZMS1, S173 & S174/261169

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S166 Cameron; S173 & S174 Preservation.

Length: 10km.

Average gradient: 1:437 2.3m/km.

Description: The Waitutu River would seem to offer a feasible trip for canoeists, rafters and drift boaters although it may be a little too shallow for jet boats. It is of low gradient and does not flow as fast as many of the rivers in this locality. Little is known of the river but we suspect that it is much the same as the Wairaurahiri — a shingle and stone bed river with easy, shallow rapids. The forest canopy overhangs the river so that it is difficult to construct a picture of it even from low flying aircraft. Access would be a severe limitation on recreational use although float planes could fly in equipment to Lake Poteriteri.

91.1 PRINCESS BURN LAKE POTERITERI 813000 813001

Location: Princess Burn feeds Lake Poteriteri which lies between the Princess and Cameron Mountains, east of Lake Hakapoua and west of the larger Lake Hauroko.

River confluence location: NZMS1, S166/265542.

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S157 Heath; S166 Cameron.

Length: 15km (Princess Burn).
Average gradient: 1:83 12m/km.

Description: Lake Poteriteri lies in a deep valley between bush-clad hills. The hills are particularly steep except at the south-eastern end and it is difficult to even see the lake by aircraft until you are directly above it. The hills shelter the lake but cause strong gusts to ripple the water. Into the northern end of the lake flows the Princess Burn, the largest of the lake's tributaries. The burn is really too small and shallow for boating — it, too, lies in thick bush which forms a canopy over much of the river's length. Another small, shingle bed stream joins the Waitutu below the lake outlet and it appears to be too shallow for boating.

92.0 WAIRAURAHIRI RIVER 809000

Location: East of Lake Poteriteri lies the largest of the very southern lakes, Lake Hauroko. The Wairaurahiri River drains Lake Hauroko to the sea.

River mouth location: NZMS1, S173 & S174/388151

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S167 Tuatapere; S173 & S174 Preservation; S175 Orepuki.

Length: 33km.

Average gradient: 1:234 4.3m/km.

RECREATIONAL USE:

Motor launches: Not beyond the lake as the river is shallow and very fast flowing.

Jet boats: With above normal flows the river can be boated from the lake to the sea and return. Access to the lake is available by road. The river is fast, rough and requires experienced drivers to run it. Considered an excellent trip.

Drift boats, rafts, canoes/kayaks: Excellent water — fast and shallow with some problems from overhanging branches from the thick bush. The lake must be paddled some distance to the river first and it is prone to strong gusts of wind that can be dangerous to small craft. Access from the river mouth is not easy. Most canoeists who have run the river have portaged along the track to Port Craig and then paddled to Te Waewae Bay. The river contains continuous white water of Grade 2+ difficulty in an isolated and scenic area.

Pack floating: Nil. Could be used but organising food dumps would be difficult.

Swimming: Nil.

Scenic description: The river is fast and shallow over stones, smooth rock and shingle. There is almost continuous white water from the lake to the sea. The forest is particularly scenic and overhangs the banks in a number of places. The river banks are low and without gorges. There are few beaches.

Scenic value: Exceptional.

Recreational value: High.

92.1 LAKE HAUROKO'S STREAMS 809050

Flowing into Lake Hauroko are a number of small streams. The largest is the Hauroko Burn at the northern end of the lake. It is along this stream that the track to Manapouri's West Arm follows and it may be possible to portage canoes and other small craft upstream to a suitable launching point for a trip. No more than 8km of the stream would ever be of boatable size. The Russet Burn on the eastern shore and the Caroline Burn on the western shore of the lake may also be of boatable size but have no access. The Rooney River is too small.

Scenic value: Impressive.

Recreational value: Insignificant.

93.0 WAIKOAU RIVER 803000 ROWALLAN BURN 802000

Between Port Craig and the Waiau River lie two small rivers, the Waikoau River and Rowallan Burn. Both are small and shallow, being fed by numerous tributaries within a short distance of the coast; consequently, they are not of boatable length for any distance. Logging roads approach the rivers in a number of places, providing good access. These rivers are seldom, if ever, used. They lie in logged bush.

Scenic value: Picturesque.

Recreational value: Insignificant.

WESTERN SOUTHLAND

94.0	Waiau River	61	94.6	Waiau River — Monowai to Clifden	64
94.1	Waiau River — Upper Tributaries	61	94.6.1	Monowai River	64
94.1.1	Eglinton River	61	94.6.2	Wairaki River	64
94.1.2	Upukerora River	61	94.7	Waiau River — Clifden to Te Waewae Bay	65
94.1.3	Clinton River	61	94.7.1	Orauea River	65
94.1.4	Worsley River and Glaisnock River	61	95.0	Aparima (Jacobs) River	65
94.1.5	Hankinson River	61	95.1	Tributaries of the Aparima River ...	65
94.2	Waiau River — Te Anau to Manapouri	62	96.0	Oreti River	66
94.3	Rivers of Lake Manapouri	62	96.1	Upper Oreti River — to Lumsden ..	66
94.3.1	Grebe River	62	96.2	Oreti River — Lumsden to Winton	66
94.4	Waiau River — Manapouri to Mararoa	62	96.3	Lower Oreti River — Winton to the Sea	66
94.4.1	Upper Mararoa River	63	96.3.1	Makarewa River	66
94.4.2	Middle Mararoa River	63	96.3.2	Hedgehope and Titipua Streams ...	67
94.4.3	Lower Mararoa River	63	97.0	Waihopai River	67
94.5	Waiau River — Mararoa to Monowai	64			

94.0 WAI AU RIVER 797000

The Waiau River is Southland's largest river in terms of water volume. It flows swiftly but smoothly from Lake Te Anau down to Lake Manapouri. This section is often jet boated and rafted by tourist companies as well as by private individuals — it is an easy but scenic trip. From Manapouri the river flows quietly over a wide shingle bed but is dammed just below the Mararoa. The water is turned back here to flow through the hydro at Deep Cove, Fiordland. This leaves the river very low down to the Monowai Lake outlet and the river is not used at all down to this point. The river then flows peacefully to the sea at Te Waewae Bay.

The survey considered the Waiau in five sections.

94.1 WAI AU RIVER.— UPPER TRIBUTARIES

The principal river flowing into Lake Te Anau is the Eglinton River which flows beside the Te Anau-Milford Highway. Along with the Upukerora River, which flows into the lake immediately to the north of Te Anau township, the Eglinton is the only river with vehicle access at a point which provides a trip for canoeists, rafters and drift boaters. All the other rivers have difficult access and are small. On the western shore of Lake Te Anau, between Middle Fiord and South Fiord, is the area prohibited because of the presence of the Notornis. No entry is allowed except 500 metres up each stream from the lake shore. The lake itself is used to a great extent by power boats and some yachts. It would appear that the bush-covered hillsides have led to a greater recreational use of this lake than the more barren lakes such as Wakatipu, Hawea, Pukaki, Benmore and the other Waitaki hydro lakes.

94.1.1 EGLINTON RIVER 797520

Location: The Eglinton River has its origins near the Hollyford River. It then flows south-westwards through Lake Fergus and Lake Gunn, through beech forest and grassy river flats to finally flow into the northern end of Lake Te Anau.

River confluence location: NZMS1, S130/831518

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S122 Hollyford; S130 Stuart; S131 Eglinton.

Length: 61km.

Average gradient: 1:150 6.7m/km.

RECREATIONAL USE:

Motor launches: Nil.

Jet boats: When flowing high it has been boated for around 35km over some interesting but not particularly difficult water. It is a popular fishing river and so jet boaters tend to leave it to the fishermen.

Drift boats: Has received little use, possibly because it can be shallow at normal flow. No particularly difficult rapids.

Rafts: Of sufficient size but seldom used.

Canoes/kayaks: Of sufficient size to be canoed from Lake Gunn with above normal flows only. Seldom a fast current and most of the rapids are shallow. Very scenic.

Pack floating, swimming: Some good swimming pools but not used generally.

Scenic description: The Eglinton drops rather quickly from Lake Gunn through beech forest and grassy river glades, often with foxgloves adding a splash of colour that makes the area rather pretty. The river is normally shallow, flowing quietly over shingle with a number of long pools of crystal clear water. There are steep rocky stretches in the bush. Cascade Creek boosts the river's flow considerably. From the confluence with Smithy Creek the river flows quietly over fine shingle and stones with occasional logs and clumps of grass. The river re-

mains like this, becoming wider, almost braided, down to a short, gorge-like section between Boyd and Dunton Creeks a few kilometres above the lake. The river then flows out over a wide shingle delta to the lake. For the most part the river flows through beech forest and grassy river flats and is very attractive.

Scenic value: Impressive.

Recreational value: Intermediate.

94.1.2 UPUKERORA RIVER 797500

Location: The Upukerora River flows south-west through the outskirts of Te Anau from the Livingstone Mountains.

River confluence location: NZMS1, S140/783227

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S131 Eglinton; S140 Te Anau; S141 Mavora.

Length: 57km.

Average gradient: 1:133 7.5m/km.

Recreational use and scenic description: The Upukerora River is very small and often dry in late summer but has been jet boated a short distance when in a fresh. It flows over a shingle bed for its entire length in somewhat barren grassland and tussock. There is little recorded use of the river for boating although it is known to attain boatable size after heavy rain. There is access to the upper river via the road to Takaro Lodge where the beech forest and somewhat marshy land provide a scenic area. The river is not likely to be in high demand for recreation with the larger Eglinton and Waiau rivers so close.

Scenic value: Uninspiring.

Recreational value: Insignificant.

94.1.3 CLINTON RIVER 797600

Location: The Clinton flows south into the northern end of Lake Te Anau and the Milford Track follows it.

River mouth location: NZMS1, S122/915800.

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S120 & S121 Bligh; S122 Hollyford.

Length: 26km.

Average gradient: 1:150 6.7m/km.

Recreational use and scenic description: The lower section of the Clinton is of boatable size. It is jet boated as far as the Neale Burn confluence and is canoeable and raftable for some distance further. However, canoeists and rafters will need to portage some distance up the Milford Track and will also have to paddle across the lake to the river mouth — this may explain why relatively few trips are made on the river. The river is much like the lower Hollyford and Eglinton which, with better access, are to be preferred.

Scenic value: Impressive.

Recreational value: Low

94.1.4 WORSLEY RIVER 797800 GLAISNOCK RIVER 797700

The Worsley and Glaisnock Rivers flow east onto Lake Te Anau's western shore. The Worsley River flows into the Worsley Arm and the Glaisnock into the North Fiord. The Worsley is sometimes of sufficient depth to jet boat but the Glaisnock, being smaller, is seldom boated. Both rivers are of sufficient size to canoe and raft but access is awkward and they are never used. Scenically they are much like the Clinton.

94.1.5 HANKINSON RIVER 797900

Location: The Hankinson River is the short channel between Lake Hankinson and Prospectors Bay in the North West Arm

of Lake Te Anau.

River mouth location: NZMS1, S130/621586.

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S130 Stuart.

Length: 0.5km.

Average gradient: 1:96.5 10.3m/km.

Recreational use and scenic description: The Hankinson River is short and steep, very rocky and is one continuous rapid of white water. It is considered to be a most exciting and enjoyable jet boat and canoe trip even though it is so short. The river gives access to the lakes. Lake Thompson is some 61 metres higher in altitude, 2.5km upstream from Lake Hankinson, providing a very steep, fast and rough trip — probably too shallow for jet boaters. Access is a limiting factor in its use. The Wapiti River flows into Lake Thompson and is thought to be too small for boating. These lakes and rivers lie in thick forest, mostly of beech.

Scenic value: Impressive.

Recreational value: Intermediate.

94.2 WAI AU RIVER — 797490 TE ANAU TO MANAPOURI 797450

Location: From Lake Te Anau the Wai au flows south to Lake Manapouri bordering Fiordland National Park on the right bank, with grassland on the left bank.

Section end location: NZMS1, S149/670101.

Maps: NZMS18, Sheet 24 Invercargill, NZMS1, Sheet S149 Manapouri.

Length: 20km.

Average gradient: Approximately 1:650 1.5m/km.

RECREATIONAL USE:

Motor launches: It is possible to use this section of the river with small, outboard-powered craft provided care is taken to lift the motor in areas of shallows. It is not used often by powered craft.

Jet boats: A very popular trip considered to be easy and suitable for learners and family outings. The river has some shallows that are easily avoided and no rapids. Scenically interesting.

Drift boats: A popular trip although without the thrill of white water.

Rafts: A commercial tourist company operates along this section of the river and it is a particularly popular trip.

Canoes/kayaks: Not used a great deal because of the lack of white water. However, it is a valued trip scenically.

Pack floating: Unused — probably because of lack of white water.

Swimming: Powerful and fast flowing water discourages swimmers. Few quiet pools that are easily accessible. The lake is preferred.

Scenic description: The outlet from Lake Te Anau is controlled and intending boaters must launch below the control works. From this point the river flows very swiftly but smoothly over a rocky bed between bush-lined (beech) banks. The left bank has high clay cliffs, often crumbling into the water. The right bank is lower. The river is clear and the bed is rocky but there is ample depth over the rocks so that white water and pressure waves do not develop. Eddies are common. From Horseshoe Bend down to Boulder Reach, small white top waves may develop in the wide bed. The river twists and turns through large loops.

Scenic value: Impressive.

Recreational value: High.

94.3 RIVERS OF LAKE 797450 MANAPOURI

The only river of any significant size flowing into Lake Manapouri is the Grebe River.

94.3.1 GREBE RIVER

797452

Location: The Grebe River flows north into the South Arm of Lake Manapouri.

River confluence location: NZMS1, S149/476982.

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S149 Manapouri; S158 Monowai.

Length: 37km.

Average gradient: 1:290 3.4m/km.

Recreational use and scenic description: The Grebe River is accessible from the Monowai-Deep Cove road. However, the road is closed to the public although permission can be obtained from the Borland Saddle Tours Company.

The Grebe River is small and flows over shingle with steep rocky sections in places, through beech forest and open grassland with matagouri and other scrub.

The upper section, down to the Percy Stream confluence, is usually too small for boating, but with high flow it offers a quiet trip not unlike the Eglinton River. Below Percy Stream the gradient increases and the river flows over boulders with numerous sharp falls creating interesting white water enjoyed by canoeists and similar craft. In high water conditions this section of the river becomes continuous white water. The river is not jet boated.

Scenic value: Moderate.

Recreational value: Intermediate.

94.4 WAI AU RIVER — MANAPOURI TO MARAROA

Location: The Wai au River leaves the southern end of Lake Manapouri and flows south-east to junction with the Mararoa River. Immediately below the Mararoa junction lies a dam which diverts the Wai au water back to Lake Manapouri. The lake now drains through the Deep Cove Hydro-electric Scheme.

Section end location: NZMS1, S149/673012.

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S149 Manapouri.

Length: 10km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Most of the 10km to the dam is now negotiable by small craft. The former lake outlet is now used as a small marina for mooring launches used on the lake. The river is flat with a barely perceptible current.

Jet boats: Flat water navigable to the dam.

Drift boats, rafts, canoes/kayaks: Flat water scenically similar to the Wai au between Te Anau and Manapouri and not used greatly by these recreational groups because of the lack of current and rapids.

Pack floating: Nil.

Swimming: Limited use — the lake seems to be preferred.

Scenic description: The river flows from the lake in a deep, bush-lined channel, placid and tranquil. The bush on the left bank soon gives way to barren tussock grassland and the banks tend to be of crumbling clay and shingle. There are a number of shingle beaches especially lower in the section where the Mararoa flows in.

Scenic value: Picturesque.

Recreational value: Intermediate.

MARAROA RIVER

797420

The Mararoa River is one of the most heavily used recreational rivers in Southland although in summer it becomes too shallow.

It has its origins between Lakes Te Anau and Wakatipu in a valley dividing the Livingstone and Thompson Ranges. From this upper tussock valley the river forms the two Mavora Lakes then flows south through small rocky gorges and into wide alluvial plains before joining the Waiau below Lake Manapouri. The upper section near the Mavora Lakes is the most used. The survey considered the Mararoa in three sections.

94.4.1 UPPER MARAROA RIVER

Location: The Mararoa River has its origins in the Livingstone Mountains from where it flows south to junction with the small Windon Burn and forms the North and South Mavora Lakes.

Section end location: NZMS 1, S141/152340.

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S131 Eglinton; S141 Mavora.

Length: Including the two lakes — 50km.

Average gradient: Slight.

Recreational use and scenic description: Above the lakes the Mararoa is a small, shallow river meandering via numerous separate channels through swampy tussock country and through numerous tarns. The river is a slow moving creek, running over shingle for most of its length.

The Windon Burn joins the river shortly before the Mararoa flows into the North Mavora Lake. The river is certainly too small for recreational use in this area. The lakes themselves are quite beautiful, quiet, peaceful and tranquil. Beech forest covers the hills down to the water's edge in the South Lake, with open tussock country around the North Lake. In places, especially in late summer, the beaches can be muddy. The river between the two lakes is quiet flowing through a tussock area. The South Lake is smaller and considerably more scenic. Power boats are prohibited on the lower lake.

Scenic value: Picturesque.

Recreational Value: Low.

94.4.2 MIDDLE MARAROA RIVER

Location: From the South Mavora Lake the river flows south alongside the Snowden Forest on the right bank and open tussock-covered river terraces on the left.

Section end location: NZMS1, S150/060170.

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S141 Mavora; S150 Mossburn.

Length: 25km.

Average gradient: 1:125 8m/km.

RECREATIONAL USE:

Motor launches: Not possible to use the river below the South Mavora Lake.

Jet boats: Normally too shallow to go beyond the lake.

Drift boats: The first gorge may be a little too narrow and rough for all but the smallest craft. With above normal flows good water exists. One rapid may need to be portaged.

Rafts: Possible to raft from the lake at high flow. Exciting water for the first 5km or so.

Canoes/kayaks: Rapids of Grade 3+ can be generated in the first gorge. The Southland Canoe Club uses a section of the river below the small foot swing bridge as a slalom site. It is normally too small in summer for use, but with a good flow it is the only slalom course south of the Ahuriri River with Grade 3 water needed for slaloms of national standard and as such is a particularly valuable stretch of river.

Pack floating: Unused at the moment but does offer a good trip.

Swimming: Little used — most picnicking is centred on the eastern shore of the South Mavora Lake and swimming is more frequent there.

Scenic description: From the lake the current gradually

increases but flows smoothly without rapids for some distance, then enters a gorge-like section with hard rock banks and sharp edged rock fragments in the bed. The rapids become progressively larger as the gradient increases, with three notable drops over boulders. The river banks are not high and portages are straightforward through the beech forest. In late summer the river can become too low for boating. The rapids ease and the river bank on the left opens out onto grassy tussock country with matagouri scrub. The river is shallow and of gravel down to a small swing bridge whereupon it squeezes through another short stretch of low, gorge-like banks. (This is the slalom canoeing site). The bed then widens again over fine shingle with some larger lumps of rock creating white water. The river gradually becomes wider and shallower with rapids less frequent.

Scenic value: Impressive.

Recreational value: High.

94.4.3 LOWER MARAROA RIVER

Location: From the point where the river leaves the Snowden Forest and the road, it flows out onto a wide grassy plain, south to the Waiau.

River confluence location: NZMS1, S149/746962.

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S149 Manapouri; S150 Mossburn.

Length: 45km.

Average gradient: 1:190 5.3m/km.

RECREATIONAL USE:

Motor launches: Too shallow. Not used at all.

Jet boats: Exciting few kilometres from the Waiau junction when the river is flowing high. Length will depend upon levels. The river is shallow and stony and some skill is required to pick the deepest channels. The water is swift and steep as it flows into the Waiau.

Drift boats, rafts: Not used as the river becomes very shallow and the rapids are little more than riffles over shoals. The upper section is preferred and this section is ignored.

Canoes/kayaks: Canoeable except in late summer when the river is very shallow. Rapids are easy riffles over shoals in the main part — suitable for novice use and not used often. The Oreti and Aparima rivers are similar and closer to population centres.

Pack floating: Too shallow.

Swimming: Some deep pools but the Oreti and Aparima, being similar and closer to towns, are much more heavily used.

Scenic description: From the point where the river leaves the road it flows out onto wide alluvial shingle flats and old river terraces now covered in tussock and grassland. The river is wide and shallow, braided in places and with a slow current. There are numerous shingle shoals. In some places, as beneath the State Highway 94 bridge, the current is squeezed up against low, crumbling, stony banks. Some broom, gorse and the occasional low stunted willow grow along the banks in the lower end of this river section. Matagouri is the most frequent river bank scrub. From the main road down to the Mararoa confluence the river tends to run in a single channel as the gradient increases. The landscape tends to be dry and barren. The White-stone River is much smaller than the Mararoa and much too small for boating. It joins the Mararoa some distance below the S.H. 94 bridge.

Scenic value: Uninspiring.

Recreational value: Intermediate.

94.5 **WAIAU RIVER — 797000**
MARAROA TO MONOWAI 797370

Location: The Waiau River, upon leaving the diversion dam below the Mararoa, flows south through scrub and tussock country to the Monowai confluence.

Section end location: NZMS1, S158/695759.

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S149 Manapouri; S158 Monowai.

Length: 27km.

Average gradient: Slight.

Recreational use and scenic description: Below the diversion dam there seems to be a certain amount of seepage so that water lies in the old river bed even in late summer, with a perceptible flow in winter and spring. However, it is shallow and seldom deep enough for recreational use. The bed is stony with wide beaches of rocks with crumbling banks clothed in coarse tussock and matagouri scrub. A number of small creeks flow into the river along the left bank and these add to the flow sufficiently to create moving water by the time the Waiau reaches the Monowai junction. The tussock country with some beech forest is somewhat akin to the Upper Mararoa River which is to be preferred. This section of the river was used a lot until the dam was built. The main side creeks are Whare Creek and Redcliff Creek but neither is of sufficient size for boating, being steep and stony with normally only a trickle of water. At Monowai the river banks change dramatically from high, crumbling shingle to a narrow rocky gorge. There is insufficient flow to create rapids but there is a large quiet pool near the road bridge to Monowai which is used for splashing about and swimming in summer.

Scenic value: Uninspiring.

Recreational value: Insignificant.

94.6 **WAIAU RIVER —**
MONOWAI TO CLIFDEN

Location: From the Monowai confluence the Waiau River flows south in a somewhat meandering pattern to Clifden.

Section end location: NZMS1, S167/795454

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S158 Monowai; S167 Tuatapere.

Length: 43km.

Average gradient: 1:575 1.7m/km.

RECREATIONAL USE:

Motor launches: Normally far too shallow.

Jet boats: Excellent water with high flow. The hydro works have left only marginal boating water for most of the year. Few rapids.

Drift boats, rafts: Good water although it tends to be shallow, especially in summer when it may be unnavigable. Few good rapids although the scenery tends to make up for it.

Canoes/kayaks: This is now the most frequently used section of the Waiau for canoeists. Considered as offering a good trip for the less experienced canoeists without demanding rapids.

Pack floating: Unused.

Swimming: Some good pools but not used to any great extent.

Scenic description: Below Blackmount the Waiau flows through the eastern extremity of the Dean Forest and on the left bank, Taylors Bush and Mangapiri Bush, which add greatly to the scenic attributes of the area. For the most part the river lies in tussock grassland that becomes very dry and barren in summer. Most of the river's use comes in winter or spring when water levels are at their maximum. The banks tend to be of crumbling shingle with narrow gravel beaches although there are areas of rock banks which are low and not large enough to be described as bluffs. Some outcrops of hard rock occur in the river bed creating some small rapids. Willows occur in the lower

end of this river section. The river does not flow swiftly and is quiet and peaceful at Clifden.

From the Wairaki River confluence the river splits over shallow shingle islands.

Scenic value: Moderate.

Recreational value: High.

94.6.1 **MONOWAI RIVER 797370**

Location: The Monowai River drains Lake Monowai into the Waiau River near Blackmount. The lake has been raised to provide extra storage for hydro-electricity generation. The river is controlled by a dam at the lake outlet and has a powerhouse at the Waiau confluence.

River confluence location: NZMS1, S158/695759

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S158 Monowai.

Length: 10km.

Average gradient: 1:137 7.3m/km.

RECREATIONAL USE:

Motor launches: Nil.

Jet boats: Nil — too shallow. The dam at the lake outlet prevents the passage of boats and the lower end is blocked by the powerhouse and its canals. There is no satisfactory launching along the river which would probably be too short to offer a worthwhile trip by itself.

Drift boats, rafts: Too shallow for most of its length with overhanging trees creating awkward obstructions in a number of places.

Canoes/kayaks: Not used a great deal although of sufficient size when the dam is letting water pass. Rapids are of shallow shingle and are easy, provided that canoeists exit before reaching the beginning of the canals flowing down to the powerhouse.

Pack floating: Not used.

Swimming: At the lake end. Swimming is prohibited at the lower end.

Scenic description: The river leaves the lake outlet dam to flow over a shallow gravel bed between overhanging trees — mostly beech with some willows. For most of the river's length beech, manuka and matagouri grow along the river banks. Most of the river's gradient occurs in the lower end of the river where canoeing or boating is ill-advised because the canals take water into the powerhouse. The old river bed carries little water over the lower 2km to the Waiau.

Scenic value: Moderate.

Recreational value: Low.

94.6.2 **WAIRAKI RIVER 797320**

Location: The Wairaki River flows into the Waiau between Monowai and Clifden, draining the dry tussock country to the north.

River confluence location: NZMS1, S167/766568

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S158 Monowai; S159 Morley; S167 Tuatapere.

Length: 45km (includes Letham Burn).

Average gradient: 1:80 12.5m/km.

Recreational use and scenic description: The Wairaki River flows in a steep shingle and stony bed with only a small quantity of water trickling down it in channels around islands covered in scrub. The river passes through open grassland for most of its length. With rain the river can rise suddenly to become a torrent of water flowing swiftly but remaining shallow. It is not boated at all as far as is known.

Scenic value: Uninspiring.

Recreational value: Insignificant.

94.7 WAIU RIVER — CLIFDEN TO TE WAEWAE BAY

Location: From the road bridge at Clifden the Waiau River flows slowly south to the sea at Te Waewae.

River mouth location: NZMS1, S175/716250

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S167 Tuatapere; S175 Orepuke.

Length: 29km.

Average gradient: 1:900 1.1m/km.

RECREATIONAL USE:

Motor launches: It is possible to use small craft with outboard motors over this length of the river provided the propeller is lifted when passing over shallows. The river is not used to any great extent by such craft.

Jet boats: Most jet boaters prefer the upper river between Manapouri and Te Anau. However, the bottom section is often boated to Clifden and beyond depending upon water levels. Considered easy boating to Clifden with the river shallowing out above that point.

Drift boats, rafts: Slow current becoming sluggish does not offer attractive water for these craft. Used, but not often.

Canoes/kayaks: Not used to any great extent because of the sluggish current and the lack of rapids. An easy trip.

Pack floating: Unused.

Swimming: Some quiet pools are used.

Scenic description: The Waiau River from Clifden runs wide and flat with a number of shallow shingle shoals, particularly in summer. At a number of points along this reach of river, beech trees overhang and there are numerous willows. Grassland with scattered scrub covers the country beyond the immediate river banks. There is generally a narrow shingle beach between river bank and water channel. The water is clear with a steady, sluggish current. Below the Tuatapere Bridge the river becomes braided into two or three channels in places and is shallow.

Scenic value: Moderate.

Recreational value: Intermediate.

94.7.1 ORAUUA RIVER 797170

Location: The Orauea River has its origins in the swampy land immediately to the south of Ohai between Nightcaps and Birchwood. It flows west for a short distance to join the slightly larger Ohai Stream and its tributary, the Morley Stream, and then flows south to junction with the Waiau a little upstream of Tuatapere.

River confluence location: NZMS1, S167/797364

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S167 Tuatapere; S168 Nightcaps.

Length: 72km (includes Ohai and Morley Streams)

Average gradient: Slight.

Recreational use and scenic description: This river is often of canoeable size from Ohai but is seldom used. It cannot be used by wide craft because it is choked with willows in many places. The river tends to be narrow and muddy, flowing between grassy banks with willows and log snags. Below Fendwick the willows stand back further from the river allowing easier navigation. The stream is quiet flowing and without rapids or white water. Below Pukemaori a few beech trees add interest but the predominant vista is of open, swampy, farmland. It is, in fact, little more than a farm creek and drain meandering through its rural setting.

Scenic value: Uninspiring.

Recreational value: Insignificant.

95.0 APARIMA (JACOBS) RIVER 789000

Location: The Aparima River rises in the swampy valleys of the Takitimu Mountains to the south of Mossburn. It then flows south over a shallow alluvial shingle bed to enter Foveaux Strait at Riverton through a large estuary. The river is also known as Jacobs River, although Aparima is the more common name, but Jacobs River Estuary is the usual name for the river mouth area.

River mouth location: NZMS1, S176/073067

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S150 Mossburn; S159 Morley; S168 Nightcaps; S176 Riverton.

Length: 145km (includes Waterloo Burn)

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Only used in the estuary and the tidal length of the river. A number of fishing craft are based in the estuary.

Jet boats: When high can be boated for the lower 32km and is considered to be tricky and exciting with numerous shallow rapids and snags. Most trips launch at Thornby and not at the estuary.

Drift boats, rafts: Generally little use is made of this river by such craft, due to the shallow water and lack of big rapids except when flooded, in which case rivers such as the Mataura offer better water. Not used to any great extent.

Canoes/kayaks: Not used to any great extent except by those canoeists who live locally and by some 'picnic' canoeists. Generally, this river is thought inferior, although similar to the Oreti, and the nearby Mataura and Waiau Rivers tend to be used in preference. Most canoeists use the upper Mararoa when there are high water levels.

Pack floating: Unused.

Swimming: Some pools are used, especially in the lower river area, usually associated with picnicking.

Scenic description: The river can flood very quickly and disastrously — then it becomes very swift and there is a danger of being swept into the riverside willows. This presents a real hazard and has been the cause of a number of near fatalities. Experienced boaters keep well away when this river is running high. The same applies to the Oreti. The Southland Catchment Board is currently investigating flood control on this river which may well affect (for the better) recreation in this area. In late summer there is little surface water in the river and large expanses of shingle are left exposed. Roads follow much of the river allowing easy access.

The river is seldom used above the Dunrobin Valley where the river is very shallow, even in spring. From this valley downstream the river flows over shallow shingle, often split into numerous channels around gorse and broom-covered islets. The river steadily increases in size but remains as a shallow channel meandering over a wide gravel bed. Small willows appear along the banks some 5km below Hamilton Burn confluence — flax clumps and gorse may also flank the river channel. Willows become a major problem for boaters below Wreys Bush and they obstruct any view beyond the immediate river bed.

Scenic value: Moderate.

Recreational value: Low.

95.1 TRIBUTARIES OF THE APARIMA

There are three main tributaries of the Aparima. They are the Hamilton Burn, the Otautau Stream and the Pourakino River. Hamilton Burn and a number of small creeks flow into the Aparima in the upper catchment area. These creeks are almost dry in late summer but rise quickly with rain. They flow between crumbling shingle banks covered in gorse and broom, with grassland flanking the river beyond the banks. There are

few trees. The Otautau Stream is a small, shallow, shingle bed stream flowing between grassy banks — much like an open drain. None are of sufficient size for recreational use except when flowing well above normal water levels.

Scenic value: Uninspiring.

Recreational value: Low.

96.0 ORETI RIVER 786000

The Oreti River has its origins in the Thompson Mountains immediately to the east of the North Mavora Lake. It then flows south from the hills into the Oreti Valley. The Hidden Burn tributary almost links with the Von River that flows into Lake Wakatipu. Once into the tussock-covered valley the river flows quietly over a shingle bed south and southeast to Mossburn, and to Lumsden where it turns south through a pass in the Hokonui Hills at Dipton. The river then wanders over the plains to the sea at the New River estuary, south of Invercargill. The river remains much the same over its entire length, without gorges, in a fashion much like the Aparima River. For convenience we have considered the river in three sections.

96.1 UPPER ORETI RIVER — TO LUMSDEN

Location: From the river's origin, the Oreti flows south through a well-defined valley and onto a wider, tussock-covered plain near the Mavora lakes, and then continues south and east to Mossburn and Lumsden where the river resumes its southerly course again.

Section end location: NZMS1, S160/386860

Maps: NZMS18, Sheet 22 Wakatipu; Sheet 24 Invercargill; NZMS1, Sheet S141 Mavora; S150 Mossburn; S160 Lumsden.

Length: 92km.

Average gradient: Slight.

Recreational use and scenic description: This upper section of the Oreti is usually too shallow for boating, except between Mossburn and Lumsden where there is good canoeing water without rapids and requiring a low skill factor in its use. The river flows through a grassy valley in a shingle bed between crumbling shingle banks. The valley hills are often covered in scrub and beech but tussock grasslands grazed by sheep and beef cattle predominate. The water channel is braided over most of its length, particularly from the Windley River confluence downstream. Just above Mossburn, scrub makes its appearance on the low islands in the river bed and along the banks — mostly broom and gorse. Small willows appear at Lumsden but the river bed is clear of obstructions to this point. Immediately above the S.H. 94 bridge at Lumsden the river turns a sharp right hand bend known as 'The Elbow' and rapids may be encountered here at high flow. The Mossburn to Lumsden section is the most practical trip on the river for canoeists when there is sufficient flow. The lower river sections lack interest.

Scenic value: Moderate.

Recreational value: Low.

96.2 ORETI RIVER — LUMSDEN TO WINTON

Location: From Lumsden the Oreti flows south over alluvial plains broken only above Dipton by the Hokonui Hills.

Section end location: NZMS1, S168/293360

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S160 Lumsden; S168 Nightcaps; S169 Winton.

Length: 60km.

Average gradient: 1:400 2.5m/km.

Recreational use and scenic description: From Lumsden to Winton the river is flat and braided, flowing over a wide shingle bed with numerous small, low islands of grass, scrub (gorse and broom) and other weedy growths. The river banks are lined with willows effectively blocking any view from the river of the surrounding flat landscape. Short lengths of stopbanks comprised of boulders occur from time to time. Willow snags create the only major obstacles for boaters.

Other than in late summer, the river can be jet boated to Dipton and with above normal flows, to Lumsden. Canoeists could use the river except in summer but they seldom do as the river is shallow and of little interest. Some swimming holes occur from time to time.

Scenic value: Uninspiring.

Recreational value: Low.

96.3 LOWER ORETI RIVER — WINTON TO THE SEA

Location: From Winton the river flows on its southerly path in a somewhat meandering fashion to enter the sea at Invercargill in the New River Estuary.

River mouth location: NZMS1, S181/300950

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S168 Nightcaps; S176 Riverton; S181 and S182 Omanui and Bluff.

Length: 60km.

Average gradient: Slight.

Recreational use and scenic description: Below the Winton Bridge (on S.H. 96) the river remains much the same as in the upper section, but the meanders are bigger and more pronounced, the willows thicker and more constant, the river less braided and the bed narrower. Willows can create problems for navigation and there are occasional snags. As the river approaches the S.H. 99 bridge and the Makarewa confluence the banks become muddy and swampy with flax and other swamp vegetation. Stopbanks occur more often than in the upper river. The river is of sufficient size to be jet boated for most of the year and is regularly canoed. It is considered an easy trip and not particularly interesting. There are a number of swimming holes.

Scenic value: Uninspiring.

Recreational value: Intermediate.

96.3.1 MAKAREWA RIVER 786120

Location: The Makarewa River drains the low lying, slightly swampy and drained farmland to the north-east of Invercargill and empties into the Oreti River below Wallacetown. It is the Oreti's largest tributary.

River confluence location: NZMS1, S176/268069

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S169 Winton; S176 Riverton; S177 Invercargill.

Length: 105km.

Average gradient: Slight.

Recreational use and scenic description: The Makarewa is a very meandering stream which exists for part of its length as a drain through former swampland. Much of its length has been artificially deepened and straightened out. It is of canoeable size from the S.H. 96 bridge near Hedgehope but is not used much at all. The river is narrow, flowing between soil banks of around 3 to 5 metres in height. There are no rapids and the current is slow with water weeds on the edges of the channel. There are few willows and the river channel is open for most of its length with gorse being the tallest vegetation. A freezing works and sewage treatment station are situated in the lower reaches and may affect the water quality.

Scenic value: Uninspiring.

Recreational value: Insignificant.

96.3.2 HEDGEHOPE STREAM 786126
TITIPUA STREAM 786126

The Hedgehope Stream is the largest tributary of the Makarewa. It joins the main stream some distance below the S.H. 96 bridge. It is similar to the Makarewa but smaller, shallower and is more a drain with water weeds floating across the surface. The Titipua Stream is smaller and similar, as is the Otapiri Stream. None are of sufficient size for boating or canoeing.

Scenic value: Uninspiring.

Recreational value: Insignificant.

97.0 WAIHOPAI RIVER 785000

Location: The Waihopai River is a very small creek that flows in a general westerly direction through the northern suburbs of Invercargill and into the New River Estuary.

River mouth location: NZMS1, S181/344960

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S177 Invercargill; S181 & S182 Omanui and Bluff.

Length: 38km (drains).

Average gradient: Slight.

Recreational use and scenic description: The Waihopai is a very small creek existing as a drain through former swampland with the last few kilometres being tidal. It is normally quite flat with barely any current. The river could be used for a quiet paddle on a summer evening when the tide is in, otherwise only a few local children seem to derive any use from this river.

Scenic value: Uninspiring.

Recreational value: Insignificant.

BLUFF TO BALCLUTHA

98.0	Mataura River	71	98.5.1	Mokoreta (Wyndham) River and Mimihau Stream	72
98.1	Upper Mataura River — to Athol ..	71	99.0	Waimahaka and Titiroa Streams ...	73
98.2	Mataura Gorge — Athol to Tomogalak	71	100.0	Tokanui River and Waipapa Stream	73
98.3	Mataura River — Tomogalak to Gore	71	101.0	Waikawa River	73
98.3.1	Waikaia River	71	102.0	Waipati River	73
98.3.2	Waimea Stream	72	103.0	Tautuku River	73
98.3.3	Waikaka Stream	72	103.1	Fleming River	73
98.4	Mataura River — Gore to Wyndham	72	104.0	Tahakopa River	73
98.5	Mataura River — Wyndham to the Sea	72	105.0	Catlins River	74
			106.0	Owaka, Glenomaru and Puerua Rivers	74

98.0 MATAURA RIVER 775000

The Mataura River rises on the eastern side of the Eyre Mountains and flows east to the valley extending from the southern shores of Lake Wakatipu. The river turns south, then east, to run through a pass between the Mataura and Garvie mountains. The remainder of its course is through the rolling flat farmlands of the Waikaia, Waimea and Mataura Plains.

The main tributaries are the Waikaia and Mokoreta Rivers. The river has been considered in five sections.

98.1 UPPER MATAURA RIVER 775870 TO ATHOL

Location: The Mataura has its origins to the west of Lake Wakatipu and flows as a small creek down to the valley forming the southern shore of Lake Wakatipu. The river flows as a quiet stream south-west to Athol where it joins the Eyre Stream and turns east.

Section end location: NZMS1, S151/488094

Maps: NZMS18, Sheet 22 Wakatipu; Sheet 24 Invercargill; NZMS1, Sheet S142 Kingston; S151 Nokomai.

Length: 57km.

Average gradient: 1:600 1.7m/km.

Recreational use and scenic description: The Mataura River is seldom of sufficient size for canoeing down to Athol, although it becomes so with flooding. The river has been jet boated between Athol and Garston when in flood, although some problems are experienced with the willows that line the banks. The current is not fast and the river flows quietly over shingle, with numerous shoals and snags to be avoided. The river is very small from its beginnings down to the railway bridge at Fairlight. Immediately above Fairlight, willows appear along the river banks and in the bed itself. The river bed is shallow with shingle beaches sloping down into the water channel.

From Fairlight to Garston the river moves along with a good current but willows overhang the river providing some problems to navigation. The land here is rather bare with tussock grassland and willows provide the only trees in the area. Below Garston low stopbanks are common and the willows become worse.

Scenic value: Picturesque.

Recreational value: Low.

98.2 MATAURA GORGE — 775720 ATHOL TO TOMOGALAK

Location: From the Eyre Stream confluence at Athol the Mataura turns east and flows through a shallow gorge, joining the Nokomai before flowing out onto the plains near Waikaia where the Tomogalak Stream joins it.

Section end location: NZMS1, S160/558808

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S151 Nokomai; S160 Lumsden.

Length: 55km.

Average gradient: 1:650 1.5m/km.

Recreational use and scenic description: The Mataura collects water from the Eyre Stream except in late summer when the river may be dry. The Eyre Stream has a shallow shingle bed running between stopbanks over its lower length, down to the Mataura in somewhat barren surroundings. The Mataura continues from the Eyre Stream in a shallow shingle bed lined by willows. The river banks are of low, crumbling shingle and soil, often covered in gorse and matagouri scrub. The area is very dry in summer, leaving the river too low for recreational use except for fishing and canoeing over short distances. There are no rapids in the 33km of gorge. With high flow there may be some backlash off bluffs. The river is seldom of sufficient depth for jet boating except in near flood. Because of the lack of white

water the river has not been used greatly in this region and fishermen have the river largely to themselves. This may well change with the damming of the Clutha rivers, as this area has a rugged interesting character.

There are willows for most of the river's length but these become more common from the point where it leaves the hills and flows onto the Waikaia Plains. The water is generally clean and pleasant to paddle on. From the gorge end down to the Tomogalak confluence the bed widens and becomes shallower. Both the Nokomai River and Tomogalak Stream are too small and shallow for recreational use.

Scenic value: Impressive.

Recreational value: Intermediate.

98.3 MATAURA RIVER — TOMOGALAK TO GORE

Location: From the Tomogalak confluence the Mataura turns east over the Waimea Plains to Gore.

River section end: NZMS1, S170/843412

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S160 Lumsden; S169 Winton; S170 Gore.

Length: 66km.

Average gradient: 1:770 1.3m/km.

Recreational use and scenic description: From the confluence with the Tomogalak Stream the Mataura River spreads out onto the Waimea Plains, becoming wider and shallower. Willows continue to line the banks and sweep the water with their branches for most of the distance to Gore. In the 10km above the Waikaia River confluence the river becomes braided and splits around grass-covered islands. The river, in summer, becomes hopelessly shallow for boating and is not often used for recreation. There are no rapids other than shingle shallows until almost to Gore, where there are the first signs of hard bedrock that creates rock ledges throwing up small rapids. Such rapids are more common in the lower river.

Scenic value: Moderate.

Recreational value: Low.

98.3.1 WAIKAIA RIVER 775670

Location: The Waikaia River has its origins in a scenic beech-clad valley south of the Garrick Range between the Garvie and Umbrella Mountains. It flows south to join the Mataura, east of Riversdale at Wendon.

River confluence location: NZMS1, S160/709673

Maps: NZMS18, Sheet 24 Invercargill; Sheet 25 Dunedin; NZMS1, Sheet S143 Alexandra; S152 Roxburgh; S160 Lumsden; S161 Heriot.

Length: 109km (includes East Branch).

Average gradient: Slight (lower river area).

Recreational use and scenic description: The Waikaia begins in two branches (the East and West) to the west of Alexandra high in rugged tussock country and flows as a tiny bouldery channel in a deep valley down to an incredibly scenic beech-clad valley west of the Umbrella Range. Unfortunately the river is too small to boat in at this point, although there are some good swimming pools. The river flows out onto a narrow farmed valley, across which it meanders between low, willow-lined banks. The river might be canoed from the Waikaia settlement, particularly below the Dome Burn confluence whilst rafts and other craft could use the river below, depending upon water flows at the time. The river here is of low gradient and has a tendency to wander across its wide shingle bed, leaving a deep channel flowing into the willows in many places. There are no rapids to speak of. Unfortunately, the most scenic area does

not coincide with that section of the river with sufficient depth and flow to be recreationally useful.

Scenic value: Moderate.

Recreational value: Low.

98.3.2 WAIMEA STREAM 775560

Location: The Waimea Stream flows over the Waimea Plains, a tract of level gravelly land between Gore and Lumsden. The stream meanders south-east to join the Mataura at Mandeville.

River confluence location: NZMS1, S169/735542

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S160 Lumsden; S169 Winton.

Length: 57km.

Average gradient: Slight.

Recreational use and scenic description: The Waimea has its origins as a very small creek in the hills to the east of Lumsden near the Tomogalak Stream. Below Lumsden the river exists as a drain which becomes steadily larger and flows into a natural, meandering bed near Balfour. Willows are common and obstruct the flow in places. The banks are grassy, almost swampy, although the bed is of gravel and not mud. Logs and snags may also pose problems for boaters. Stopbanks confine the river near Mandeville. The river may be canoed although it is flat and canoeists prefer the Mataura which is similar but larger. Other larger craft would find difficulty in navigating the stream.

Scenic value: Uninspiring.

Recreational value: Insignificant.

98.3.3 WAIKAKA STREAM 775420

Location: The Waikaka Stream flows south from the hill country north of Gore and drains the farmland between Gore and the Pomahaka catchment. It enters the Mataura River at Gore.

River confluence location: NZMS1, S170/846399

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S161 Heriot, S170 Gore.

Length: 70km.

Average gradient: Slight.

Recreational use and scenic description: The Waikaka exists as a very small stream in two branches (the east and west) which combine north of Maitland before flowing south through Willowbank to East Gore. There is normally little flow in the river but it could be canoed from Maitland and boated by larger craft further downstream. It would not attain sufficient size for jet boating, except with extreme floods at which time the numerous willows would hamper navigation. Willows choke the river bed for most of its length making impossible boating conditions for anything other than very short lengths. The stream enters the Mataura as a shallow ditch. There are no rapids. The main area of willow problems is between Maitland and McNab, the river having clear lengths above there, but broom and gorse detract from the appearance of the river in the upper reaches. The Pukerau Stream, which follows the main road to Gore and enters the Waikaka at McNab, is a mere creek.

Scenic value: Uninspiring.

Recreational value: Insignificant.

98.4 MATAURA RIVER — GORE TO WYNDHAM

Location: From Gore the Mataura flows south as a flat, sluggish river through Mataura and on to Wyndham over a number of rock ledges.

Section end location: NZMS1, S178/751137

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S170 Gore; S178 Wyndham.

Length: 36km.

Average gradient: 1:700 1.4m/km.

Recreational use and scenic description: Below Gore the essential nature of the Mataura, a wide shingle bed river flanked by willows, does not alter except that the shingle beaches on either side of the river are smaller and there are periodic outcrops of a hard, smooth rock which creates some mild rapids. Between the paper mill and the freezing works at Mataura there is a weir about 1.5 metres in height; 200 metres downstream there is a natural rock weir or small waterfall. These obstructions effectively prevent the upstream navigation of jet boats and are not run by canoeists, rafters or other craft. Possibly the waterfall could be run but the presence of the weir, which creates a powerful and dangerous stopper wave close beneath the sill of the weir, convinces most boaters to portage this section.

Below Gore extensive willow clearing has been carried out and this may eventually extend downstream. However, the river is wide enough so that small craft can avoid running into the willows. Gravel and sandy beaches flank the river channel but they are not as extensive as in the upper river. Beneath the Wyndham Bridge lie old wooden bridge piles cut off just below normal summer water level. These can be hazardous. Jet boats use the river up to Mataura and this section is also a popular, easy trip for canoeists. Other craft seldom use the river.

Scenic value: Moderate.

Recreational value: Intermediate.

98.5 MATAURA RIVER — WYNDHAM TO THE SEA

Location: From Wyndham the Mataura flows quietly and sluggishly down to the sea via Toetoes Harbour at Fortrose.

River mouth location: NZMS1, S181 & S182/734821

Maps: NZMS18, Sheet 24 Invercargill; NZMS1, Sheet S177 Invercargill; S178 Wyndham; S181 & S182 Omanui and Bluff.

Length: 57km.

Average gradient: Slight.

Recreational use and scenic description: The river below Wyndham tends to flow quietly between low beaches and grassy banks. Large willows line the banks draping their branches into the water. They become smaller and occur only occasionally below the Seaward Downs. The river becomes tidal and swampy, the shingle bed giving way to mud. The river is jet boated along this section and sometimes canoed and navigated by power boats.

Scenic value: Moderate.

Recreational value: Intermediate.

98.5.1 MOKORETA (WYNDHAM) 775130 RIVER AND MIMIHAU 775180 STREAM

The Mimiha and Mokoreta Streams are two small rivers flowing west into the Mataura at Wyndham. The Mokoreta River lies in the valley to the south of the smaller Mimiha. Both drain the western edge of the Tautuku Forest. They are of low gradient and flow quietly through the branches of overhanging willows. Both rivers are said to be canoeable but it is hard to imagine why anyone would want to do so. Farmland flanks the rivers and they are both muddy and discoloured from drainage. Most boaters prefer the larger Mataura.

Scenic value: Uninspiring.

Recreational value: Insignificant.

99.0 **WAIMAHAKA AND TITIROA STREAMS** 774010
774000

The Waimahaka and Titiroa Streams flow south into Toetoes Harbour, draining the swampy land south of Wyndham. Both these streams are very small, more like drains than rivers, flowing between grassy banks through dairy farms. There is hardly any current and fences often cross the channel. In the lower river, near the harbour, scrub and gorse grow along the banks. Canoeists and small power craft could use the lower, tidal sections of these rivers, or the Titiroa could be floated down from Fleming Road. The rivers are used, particularly in association with whitebaiting, but have no particular recreational value.

Scenic value: Uninspiring.
Recreational value: Low.

100.0 **TOKANUI RIVER WAIPAPA STREAM** 772000
770000

The Tokanui River lies in a wide well defined valley to the west of Catlins State Forest through which the main road (S.H. 92) passes. The Waipapa is a smaller stream flowing south to the coast east of the Tokanui River mouth. The Tokanui River is a meandering, muddy creek which it may be possible to canoe from Tokanui itself. However, the river lies within farmland for its entire length and is very muddy and contains discarded farm equipment and other assorted junk. It is not likely to be used for recreation. Swamps tend to be the major obstacle to be portaged although willows also occur.

The Waipapa Stream is similar but smaller. The Waipohatu and Waikopikopiko Streams further east, which flow into the Haldane Estuary, drain a segment of Catlins Forest but they too are swampy and do not offer recreational facilities.

Scenic value: Uninspiring.
Recreational value: Insignificant.

101.0 **WAIKAWA RIVER** 766000

Location: The Waikawa River flows south from the Mokoreta and Catlins Forests in a number of tributaries; (the East and West Branches are the main feeder streams). The river then flows as a meandering creek into Waikawa Harbour.

River mouth location: NZMS1, S183/013801

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S183 Tokanui.

Length: 38km (includes West Branch).

Average gradient: Slight.

Recreational use and scenic description: The river may be canoed from the main road, or from a point immediately above the main road but is not of sufficient size for larger craft. The river flows over a bed of mud and shingle between overgrown banks of grasses and weeds. The valley floor is swampy but the river has a definite current. There are numerous snags to be avoided but no rapids. Waikawa Harbour has wide mud flats exposed at low tide. The river itself, separate from the tidal harbour, is seldom used.

Scenic value: Moderate.
Recreational value: Insignificant.

102.0 **WAIPATI RIVER** 763000

Location: The Waipati River is a small river flowing to the sea east of Waikawa Harbour near Chaslands Mistake.

River mouth location: NZMS1, S184/202788

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S183 Tokanui; S184 Papatowai.

Length: 23km.

Average gradient: Slight.

Recreational use and scenic description: The Waipati River is small and overgrown with broom, gorse and other weeds before it enters the bush below the main road. The river is small and shallow and there are numerous log jams to be portaged around in the bush section. The river is only just of sufficient size for canoeing and would not offer suitable water for other craft. The bush is very scenic.

Scenic value: Picturesque.
Recreational value: Insignificant.

103.0 **TAUTUKU RIVER** 761000

Location: The Tautuku River and its main tributary, the Fleming River, flow east through rugged bush country on the Maclellan Range and onto the sea at Tautuku Bay, which is the site of an old whaling station.

River mouth location: NZMS1, S184/268817

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S183 Tokanui; S184 Papatowai.

Length: 19km.

Average gradient: 1:460 2.2m/km.

Recreational use and scenic description: The Tautuku River flows for its entire length through dense bush and is not a large river. Canoeists could float down the lower length of the river from the main road bridge, by pushing aside the vegetation as they go. This would be easier at full tide than at other times. It would be easier, however, to get into the tidal section by using the Fleming River which is more open. Above the main road, the river is not of boatable size for craft larger than canoes.

Scenic value: Exceptional.
Recreational value: Low.

103.1 **FLEMING RIVER** 761010

The Fleming River flows south-east to join the Tautuku at the tidal river mouth area. It crosses the main road in a large clearing, whilst the remainder of the river lies in dense bush. This river is much smaller than the Tautuku and is badly overgrown, with numerous logs blocking the channel. It is not of sufficient size for canoeing above the main road.

Scenic value: Impressive.
Recreational value: Low.

104.0 **TAHAKOPA RIVER** 759000

Location: The Tahakopa River flows east to the sea a little south of Long Point, south of the Catlins River estuary.

River mouth location: NZMS1, S184/304863

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S178 Wyndham; S183 Tokanui; S184 Papatowai.

Length: 44km.

Average gradient: 1:460 2.2m/km.

RECREATIONAL USE:

Motor launches: Used in the river mouth and estuary only. Too shallow for boating above the tidal limit.

Jet boats: Estuary area and tidal section of river only.

Drift boats: Local people have rowed downstream to the estuary from Tahakopa settlement, although it can be shallow in summer unless there has been heavy rain.

Rafts: Considerable use is made of the river by local people, mostly below Tahakopa settlement.

Canoes/kayaks: A local outdoor adventure school makes considerable use of the river, particularly the lower 15km and the estuary.

Pack floating: Unknown — possibly little used.

Swimming: Unknown. Some good pools exist, especially at Tahakopa.

Scenic Description: A margin of native bush (beech and the native white pine in particular) screens off the cleared valley through which the river flows and the roads that follow it, but the thickly-bushed hillsides are visible giving a wilderness appearance for river users. The river is shallow and slow, flowing over shingle and logs.

In the lower river a swampy forest provides a change in scenery and the bird life is a notable feature.

The river opens to a large lagoon hemmed in by thick bush. There are no rapids of any significance on the river.

Scenic value: Impressive.

Recreational value: High.

105.0 CATLINS RIVER 755000

Location: The Catlins River is a small creek flowing south-east and opening out to a tidal lake and estuary south of Nugget Point.

River mouth location: NZMS1, S184/500964

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S179 Balclutha; S184 Papatowai.

Length: 54km.

Average gradient: Slight.

Recreational use and scenic description: Above the tidal limit the Catlins River is not of sufficient size for recreational use; however, the lower Catlins lake and estuary is a popular wild-fowl shooting area in the season, and is also used for boating, especially when the tide is in.

The river has only a little flow and the banks are muddy and covered in flax and similar vegetation. Snags are common in the river.

Scenic value: Moderate.

Recreational value: Low.

106.0 OWAKA RIVER 755030 GLENOMARU RIVER 752012 PUERUA RIVER 752010

Between the Catlins River and the mouth of the Clutha lie three small rivers, no more than creeks. The Owaka flows south-east into the Catlins River mouth lagoon itself, whilst the Glenomaru and the Puerua flow out to Port Molyneux, just south of the Clutha River mouth. None of these rivers are normally boated as all are slow moving and choked with willows. They function as drains to carry water off the low-lying land south of the Clutha delta. The Puerua has deviation drains cut to avoid the worst of its meanders and has stopbanks along its lower length.

Scenic value: Uninspiring.

Recreational value: Insignificant.

BALCLUTHA TO TAIERI

107.0	Clutha Catchment	77	107.5	Clutha River — Roxburgh Hydro ..	83
107.1	Lake Wanaka and Tributaries	77	107.5.1	Manuherikia River — to Falls Dam	83
107.1.1	Makarora River	77	107.5.2	Manuherikia River — The Three Gorges	84
107.1.2	Fish River	77	107.5.3	Lower Manuherikia River	84
107.1.3	Young River	77	107.5.4	Ida Burn	84
107.1.4	Wilkin River	78	107.5.5	Dunstan Creek	84
107.1.5	Matukituki River	78	107.5.6	Manor Burn	85
107.1.6	Motatapu River	78	107.6	Clutha River — Roxburgh to Beaumont	85
107.2	Clutha River — Wanaka to Lowburn	78	107.6.1	Teviot River	85
107.2.1	Hunter River	79	107.7	Clutha River — Beaumont to Balclutha	85
107.2.2	Timaru River	79	107.7.1	Tuapeka River	86
107.2.3	Dingle Burn	79	107.7.2	Waitahuna River	86
107.2.4	Hawea River	79	107.7.3	Upper Pomahaka River — to the Leithen Burn	86
107.2.5	Cardrona River	79	107.7.4	Pomahaka River — Leithen Burn to Conical Hill	86
107.2.6	Lindis River	80	107.7.5	Pomahaka River — Conical Hill to Clydevale	86
107.3	Clutha River — The Cromwell Gap	80	107.7.6	Pomahaka River — Clydevale to the Clutha	86
107.3.1	Kawarau River	80	107.7.7	Waikoikoi Stream	87
107.3.2	Shotover River	81	107.7.8	Waipahi Stream	87
107.3.3	Arrow River	81	107.7.9	Waiwera River	87
107.3.4	Nevis River	81	107.8	Clutha River — Inchclutha	87
107.3.5	Bannockburn	82	107.8.1	Lake Tuakitoto	87
107.3.6	Dart River	82	108.0	Tokomairiro River	87
107.3.7	Rees River	82	109.0	Akatore Creek	87
107.3.8	Greenstone River	82			
107.3.9	Caples River	82			
107.4	Clutha River — Cromwell to Alexandra	82			
107.4.1	Fraser River	83			

107.0 THE CLUTHA CATCHMENT

752000

The Clutha has the largest catchment of any river in New Zealand and is reputed to have the greatest mean volume of water — it is certainly the largest river in the South Island. (We believe that the Buller River, when flooding in about 1926, attained 13000 cumecs — the largest volume of water recorded in any New Zealand river).

The Clutha's catchment is diverse — on the far western edge the country is mountainous; in the centre there are large basins of essentially dry landscape with rugged ranges and extensive river flats; on the eastern and southern fringe the country is generally lower, with rolling, mature landscape and swamp.

The Maori name for the Clutha is 'Mata-au', said to refer to surface currents, a reference no doubt to the swirling eddies to be encountered over most of its length. The Europeans named the river the Clutha down as far as Cromwell where the Kawarau comes in, and the remainder was known as the Molyneux, but now the whole of the river is referred to as the Clutha.

The Clutha drains Lake Wanaka, and its two main tributaries drain Lake Hawea (Hawea River) and Lake Wakatipu (Kawarau River). The other main tributaries are the Manuherikia and the Pomahaka. When considering the rivers of the Clutha catchment which include the Shotover and the Makarora, it is soon realised that these are the best recreational rivers in the Southland-Otago area. Unfortunately the hydro schemes centred on Clyde threaten to destroy most of the white water, and associated works such as silt dams in the Shotover, will effectively pacify the remainder.

This survey looked at the rivers assuming that the dams were not to be built, i.e. as they existed over the summer of 1977/1978. We will deal firstly with the rivers of Lake Wanaka, then take the Clutha, segment by segment in seven parts, and with each we will discuss the tributaries coming in. This will mean that after the first segment we will follow with the Hawea River, Lake Hawea and its tributaries. After the third segment will come the Kawarau and tributaries of Lake Wakatipu.

107.1 LAKE WANAKA AND TRIBUTARIES

752990

Lake Wanaka is the feeder lake of the Clutha River. Into the lake flow a number of good canoeing rivers, the most popular being the Matukituki which flows from Mount Aspiring. The main tributary feeding Lake Wanaka is the Makarora River which flows south from Haast Pass. The Wilkin River is a tributary of the Makarora and is well used.

107.1.1 MAKARORA RIVER

752994

Location: The Makarora River flows westwards from a valley between the main divide and the Young Range, meets the Fish River and the main Haast Pass highway and turns south onto a wide river flat. It then flows south-west into the head of Lake Wanaka.

River confluence location: NZMS1, S107/966586

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S98 Haast Pass; S107 Makarora.

Length: 44km.

Average gradient: 1:190 5.3m/km (lower river).

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Navigable from Lake Wanaka to the Blue Junction with above normal flow, although the river has been boated to Cameron Flat with very high flow. Considered excellent boating especially exciting in the upper reaches. Shallow rocky rapids and very attractive.

Drift boats: Tends to be a little shallow, especially in the lower river near the outlet into the lake.

Rafts: Acceptable for rafts, although no big pressure waves.

Canoes/kayaks: Excellent water — considered suitable for novices.

Pack floating: Not used although the gorge provides a magnificent lilo trip which is thoroughly enjoyable, if a little cold.

Swimming: Little used except by trampers in the area. Cold water.

Scenic description: The Makarora collects its water in a narrow river valley and then tumbles down a ravine between tall, bush-lined gorge walls. In the gorge there are a number of difficult rapids. Upon meeting the Fish River the gorge opens out onto Kiwi and Cameron Flats, providing a level, grass-covered area over which the river flows in a gravel bed. The river then passes through a number of such flats with a short, rocky gorge separating one flat from the next. Thick bush encloses the river on both banks. Finally, upstream of the Wilkin River, the river opens out onto the last river flat which lasts down to the head of the lake; the river becomes shallow and braided.

There are some stunted willows but they do not dominate the scene.

Scenic value: Impressive.

Recreational value: High.

107.1.2 FISH RIVER

752994

Location: The Fish River flows east off the main divide to Haast Pass, turning south to join the Makarora below the Makarora Gorge.

River confluence location: NZMS1, S98/109818

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S98 Haast Pass.

Length: 10km.

Average gradient: 1:10 100m/km.

Recreational use and scenic description: The Fish River is similar to the upper Makarora Gorge except that it is smaller and steeper. Logs often obstruct the flow.

The river is beautifully clear and tumbles over low waterfalls, all of which could be run by a competent canoeist. Access is difficult. The river offers an excellent lilo or pack-floating trip provided care is taken to avoid logs that may obstruct the main channel.

Scenic value: Impressive.

Recreational value: Low.

107.1.3 YOUNG RIVER

752994

Location: The Young River flows in two main branches from the northern and southern sides of Mount Awful. These branches join to flow as a single channel down to the Makarora River, 4km north of Makarora.

River confluence location: NZMS1, S98/023726

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S98 Haast Pass.

Length: 21km (includes North Branch).

Average gradient: 1:75 13m/km.

Recreational use and scenic description: From the confluence of the North and South Branches, the Young River is canoeable over shingle flats but it then enters a long gorge that is particularly boisterous and is thought to be too tight and rough for canoeing, although it is often pack-floated. Canoeing could begin at Ram Flat, giving 2km of good enjoyable water. Access is not easy however. Only the lower one kilometre is jet boated before the rapids become too tight and shallow. With extreme high flow the river could be boated to Ram Flat. Beech forest overhangs the river and is particularly attractive.

Scenic value: Impressive.

Recreational value: Low.

107.1.4 WILKIN RIVER

752994

Location: The Wilkin River flows east from the main divide to join the Makarora 5km above the lake.

River confluence location: NZMS1, S107/977640

Maps: NZMS18, Sheet 19 Haast; NZMS1, Sheet S106 Aspiring; S107 Makarora.

Length: 34km (includes South Branch).

Average gradient: 1:150 6.7m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: 13km of water to Kerin Forks under normal flow and only a little further with high flow. Considered fast and exciting with the very upper section needing experienced boaters.

Drift boats: As for jet boats. Access upstream a problem.

Rafts: From Kerin Forks. The river has few big rapids.

Canoes/kayaks: Three sections are canoeable — the upper river flats below the confluence of the North and South Branches which provide easy shallow canoeing; a short section over Jumboland Flats; and the main canoeing section from Kerin Forks down to the Makarora confluence. Between these sections lie boisterous gorge conditions that are not canoeable.

Pack floating: Excellent water with short sections of the gorges able to be floated.

Swimming: Some good pools often used by trampers and climbers in the valley. Very cold water.

Scenic description: The Wilkin begins in two main branches, the North Branch originating in a very bleak corrie or cirque lake, the South Branch off the main divide. The rivers tumble over a steep gradient to the upper river flats where they combine. The river then flows placidly, never more than waist deep, over river flats in a very braided fashion. It then tumbles down a 2km gorge and onto the Jumboland Flats where it flows swiftly over a shingle bed. This is followed by a longer gorge that is very boisterous and contains a number of small waterfalls. The river becomes placid at Kerin Forks and flows swiftly without rapids over a shingle bed down to the Makarora. The river flats are grassy with some swamp in the upper river flat. Beech forest clothes the hills.

Scenic value: Impressive.

Recreational value: High.

107.1.5 MATUKITUKI RIVER

752992

Location: From Mount Aspiring, the Matukituki River flows into the south—western shore of Lake Wanaka. A smaller tributary known as the East Branch flows south to join the West Branch some 32km above the lake. A major tributary of the lower river is the Motatapu River.

River confluence location: NZMS1, S115/850205

Maps: NZMS18, Sheet 22 Wakatipu; Sheet 23 Oamaru; NZMS1, Sheet S106 Aspiring; S114 Earnslaw; S115 Wanaka.

Length: 57km (Includes West Branch).

Average gradient: 1:520 1.9m/km (lower river).

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Navigable for up to 40km, including 8km of the West Branch, to Raspberry Hut. The East Branch may be navigable for a few kilometres too. Considered easy and scenic, without big rapids.

Drift boats: Has received considerable use from Raspberry Hut.

Rafts: One commercial tourist rafting company uses this river.

Canoes/kayaks: The best canoeing is from Rob Roy Stream confluence down to Raspberry Creek which contains excellent white water of up to Grade 3 difficulty. Below Raspberry Creek the river is easy and is a popular trip with the less experienced canoeists.

Pack floating: Numerous trampers and climbers use the river for pack floating.

Swimming: The upper reaches are used by trampers and climbers. Limited use is made of the lower river which is considered less polluted than the lake.

Scenic description: Both the East and West Branches of the Matukituki flow south in well defined beech-clad valleys. The river bed alternates between gravel of low gradient, and bouldery sections of higher gradient. The snow-clad peaks, including the pinnacle of Mount Aspiring, are visible over most of the river valley. From the Aspiring Hut area the river bed becomes noticeably wider, with numerous steep bouldery rapids. The best white water lies below the Rob Roy Stream. From Raspberry Hut the gradient decreases and willows make their appearance for the first time. The river becomes excessively braided from this point down to the lake. In late summer the river can be too shallow over the lower stretch. The river valley is particularly steep and bush-clad only over the lower section.

Scenic value: Impressive.

Recreational value: High.

107.1.6 MOTATAPU RIVER

752992

Location: The Motatapu River is the main tributary of the Matukituki. It rises between Mount Cardrona and the Harris Mountains and flows north to join the Matukituki below Cattle Flat, a short distance above the lake.

River confluence location: NZMS1, S115/780227

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S115 Wanaka; S123 Skippers; S124 Cardrona.

Length: 46km.

Average gradient: 1:270 3.7m/km.

Recreational use and scenic description: Where the Motatapu River crosses the Motatapu Station Road there is a short ravine or saw cut gorge with boisterous rapids. This area is not navigable by small craft although pack floaters might float through the gorge when it is at summer levels. At high flow the rapids may be drowned. Generally, the river is not used above this gorge as it can be shallow. The gorge itself is quite a spectacle and well worth a visit. Below the gorge the river flows over a shallow bed of rocks and shingle. A second gorge, not nearly so narrow or deep, exists above the Wanaka–Aspiring Road and can generate white water when flowing high. Easy, shallow water exists down to the Matukituki.

Scenic value: Moderate.

Recreational value: Low.

107.2 CLUTHA RIVER — WANAKA TO LOWBURN

Location: From Lake Wanaka the Clutha River flows east, junctioning with the Cardrona and Hawea Rivers, then flowing in large looping bends to the Lindis confluence whereupon the river divides around numerous willowed islands.

Section end location: NZMS1, S133/034743

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S115 Wanaka; S124 Cardrona; S133 Cromwell.

Length: 69km.

Average gradient: 1:625 1.6m/km.

RECREATIONAL USE:

Motor launches: Limited use is possible as there are numerous shallows with a swift current. Generally unsuitable for power boats.

Jet boats: Excellent boating requiring some skill but navigable by the average boater.

Drift boats: Excellent water with a swift current. No big rapids other than the whirlpool at 'Devil's Elbow'.

Rafts: This section of the river is frequently used. The numerous willows in the lower end of this section can be hazardous, otherwise it is an easy section of river.

Canoes/kayaks: A very popular trip, especially for the less experienced canoeist. Numerous swirling eddies and the vortex at 'Devil's Elbow' provide plenty of interest. Scenically interesting, particularly below the Lindis confluence.

Pack floating: Unused. Swift current and willows make this river too hazardous for pack floating.

Swimming: Not greatly used. Too swift, although there are some quiet back eddies that are used. However, the lakes seem to draw most swimmers.

Scenic description: From Lake Wanaka to the Albert Town Bridge the river flows swiftly from bank to bank over a seemingly deep section of river bed. There are a number of small, white top waves and the odd shallow spot creating easy rapids. The river banks are barren of vegetation and consist of a loose shingle. Flat grassland borders the river banks. There is usually a narrow margin of shingle beach and the occasional small willow tree, particularly on the approaches to the Luggate Bridge. There are numerous swirling cross currents and eddies. Below the Luggate Bridge lies the 'Devil's Elbow' Rapid, the most difficult on this length of the Clutha. Below the Lindis River confluence lies the most scenically interesting section of the whole of the Clutha River. Small, low islands suddenly occur, sprouting low willows among heaps of dredge tailings. In places the river is shallow and the willows drape into the channel. The landscape, beyond the river banks, remains dry and barren in appearance.

Scenic value: Impressive.

Recreational value: High.

107.2.1 HUNTER RIVER 752985

Location: Lake Hawea collects most of its water from the Hunter River off the main divide. The lake is also fed by the Timaru River and Dingle Burn. The lake ultimately drains into the Clutha via the Hawea River.

River confluence location: NZMS1, S108/216643

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S99 Ohau; S108 Diadem.

Length: 41km.

Average gradient: 1:190 5.3m/km.

Recreational use and scenic description: The Hunter River drains the Southern Alps in two main streams, the East and West Branches. These two join at 'The Forks' and then flow as one river down shingle river flats to Lake Hawea. Much of the valley is clothed in beech forest, with tussock grassland on the river flats between hills and the river channel. The river is jet boated up to Ferguson Creek, where a wire rope crosses it. The river is canoeable, or raftable, from 'The Forks' although this is seldom used as access is difficult, and the river is easy without notable rapids except for a short, bouldery channel between Forbes Flat and the lower river flat. The river becomes braided and very shallow in the lower section shortly before entering the lake.

Scenic value: Picturesque.

Recreational value: Intermediate.

107.2.2 TIMARU RIVER 752986

The Timaru River is a small stream flowing onto the eastern shore of Lake Hawea. It is often dry in summer and carries water only in winter and spring off the snowy peaks. The river has never been used for boating and would seldom attain sufficient size other than for canoeing. Access restricts its use.

107.2.3 DINGLE BURN 752986

The Dingle Burn is a small stream flowing out onto the eastern shore of Lake Hawea. Like the Timaru River it can be dry in summer and is not used for boating. It is slightly larger than the Timaru River.

107.2.4 HAWEA RIVER 752980

Location: The Hawea River flows south to join the Clutha River at Albert Town some 5km below Lake Wanaka.

River confluence location: NZMS1, S115/002143

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S115 Wanaka.

Length: 16km.

Average gradient: 1:205 4.9m/km.

RECREATIONAL USE:

Motor launches: Generally too shallow now that the lake outlet is controlled.

Jet boats: Boatable to the lake outlet dam when it is operating. Can be shallow and is not difficult.

Drift boats, rafts: Usable when the outlet is releasing water. Easy and not as interesting as the Upper Clutha River which is used in preference.

Canoes/kayaks: Not used greatly as the Upper Clutha is better and much preferred. Before the control dam was built the river often used to flow with a far greater volume and there was good, fast, white water with large pressure waves.

Pack floating: Unused.

Swimming: Not used greatly — the lake seems to be preferred.

Scenic description: There is a dam at the lake outlet which controls the flow, as the lake is used as a holding basin for the Roxburgh Hydro Scheme. The river tends to be low most of the time and is braided in places, particularly as it joins the Clutha. Large rocks and boulders litter the bed providing some small rapids when the river is flowing high. The river banks are gravel and are free of willows and snags.

Scenic value: Uninspiring.

Recreational value: Low.

107.2.5 CARDRONA RIVER 752970

Location: The Cardrona River flows in the Cardrona Valley north-east from the Crown Range to junction with the Clutha at Albert Town opposite the Hawea confluence. The valley and its small tributaries were the scene of extensive mining in the early 1860's and relics of this period still remain.

River confluence location: NZMS1, S115/005137

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S115 Wanaka; S124 Cardrona; S133 Cromwell.

Length: 42km.

Average gradient: 1:125 8m/km.

Recreational use and scenic description: The Crown Range to Wanaka road follows the river valley, providing excellent access to the river. The river is small and shallow, flowing over loose rock and gravel through tussock, briar, broom and matagouri scrub. The river gets steadily larger but is seldom of sufficient size to canoe above the Branch Burn. The river becomes braided with willows and scrub overhanging the banks. Only when flooded does the river offer a feasible trip for craft other than canoes. Water is extracted from the lower river for irrigation and some seeps through the shingle bed.

Scenic value: Picturesque.

Recreational value: Insignificant.

107.2.6 LINDIS RIVER 752880

Location: The Lindis River is generally well known, as it flows beside the Lindis Pass Highway linking the Mackenzie Basin area with the Clutha Valley.

River confluence location: NZMS1, S124/134908

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S116 Lindis; S124 Cardrona; S125 St Bathans.

Length: 72km.

Average gradient: 1:250 4m/km.

Recreational use and scenic description: In summer the Lindis is exceptionally shallow and small and is unable to be used for recreational boating. In winter it can be very cold and is seldom used. In spring the river is able to be canoed but only with high floods could it be jet boated or rafted. The river is a pleasant canoe trip and is canoeable with high flows from the Pass Burn confluence, where it flows over a rocky bed between willows. The willows generally sprout from the top of the river banks and do not interfere with the water flow. The river is confined to a single, narrow channel over most of the upper river reaches, opening up onto a wide shingle bed at Morven Hills before flowing into another gorge-like section. Another shallow shingle flat spreads out the river into a braided pattern at Georges Flat. The lower river is very wide and shallow. The valley is dry with tussock and outcrops of rock. The area is dusty in summer and the only green growth comes from the willows that shade the river. Overall, a pleasant trip but only used in spring when the river is flowing above its normal level.

Scenic value: Picturesque.

Recreational value: Intermediate.

107.3 CLUTHA RIVER — THE CROMWELL GAP

Location: Between Lowburn and the Kawarau River confluence the Clutha River squeezes through a narrow gorge known as the 'Cromwell Gap'. The Kawarau confluence at the end of the gorge is known as 'The Meeting of the Waters'.

Section end location: NZMS1, S133/030690

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S133 Cromwell.

Length: 5km.

Average gradient: Approximately 1:500 2m/km.

RECREATIONAL USE:

Motor launches: Not used because of the boisterous nature of the river and the rapids.

Jet boats: The Gap itself is a popular site for the most experienced drivers. Possibly, next to Fulljames Rapid on the Waikato River, it offers the safest area of extremely big water for boaters who wish to test their skills.

Drift boats: Not used by the small dinghies although the larger drift boats frequently run this area. The rapids become too boisterous with high flow. One of the most popular sites in the South Island. Most boaters would like the rapids to be longer in length.

Rafts: Excellent white water with big waves and generally a trip for the experienced only. One of the few areas providing good white water of sufficient size for rafting during the summer and early autumn months.

Canoes/kayaks: Probably the most popular series of rapids for experienced Southland/Otago canoeists. The rapids can be run at all river flows although a great deal of skill is required at very high flows. These rapids are often used to measure a canoeist's skill before progressing onto longer, harder rivers. Canoeists from the southern half of the South Island travel expressly to run this series of rapids.

Pack floating: Too boisterous.

Swimming: Only by accident.

Scenic description: Scenically this area is not of particular note although it is a much photographed scene, with the wild water of the Gap and the meeting with the waters from the Kawarau. From the Lowburn Bridge the river flows placidly between groves of willows. The low shingle beaches are suddenly replaced by low rocky banks that squeeze the river down to a narrow channel. The river tumbles over a rocky bed that throws up large pressure waves and white water. The rapids end in a large pool below the Cromwell Bridge into the far end of which flows the Kawarau River.

Unfortunately, this area will be flooded by the Clyde Dam.

Scenic value: Picturesque.

Recreational value: Exceptional.

107.3.1 KAWARAU RIVER 752740

Location: The Kawarau River is a major tributary of the Clutha River. It drains Lake Wakatipu from the head of the Frankton Arm and flows east through almost continuous gorges. It contains the longest sections of white water in the country — namely the Nevis Bluff Rapids and the Sargood's Weir Rapids.

River confluence location: NZMS1, S133/029691

Maps: NZMS18, Sheet 22 Wakatipu; Sheet 23 Oamaru; NZMS1, Sheet S132 Wakatipu; S133 Cromwell.

Length: 59km.

Average gradient: 1:540 1.9m/km.

RECREATIONAL USE:

Motor launches: Too boisterous with limited launching sites along the river.

Jet boats: Navigable for 9km upstream from Cromwell to the lower end of the gorge below the Sargood's Weir Rapids, where things become progressively more difficult.

Also navigable for about 17km downstream from the Lake Wakatipu outlet to the Arrow River junction after which severe rapids begin. One jet boater has been drowned in these rapids below the Arrow. The Kawarau Dam allows only one boat through at a time.

Drift boats, rafts, canoes/kayaks: Navigable down to the top of the Nevis Bluff Rapids (NZMS1, S133/843705) which are *unnavigable* and exceedingly dangerous. The river is again navigable down to the remains of the Natural Bridge above Roaring Meg, and again down to Sargood's Weir. These three areas of rapids are normally considered too difficult for boating. The Sargood's Weir Rapids are canoeable and raftable at low autumn flows but they have still to be attempted. One rafting company takes tourists on this river.

Pack floating: Not used — too boisterous.

Swimming: Not used.

Scenic description: The most notable feature of the Kawarau River is the extremely narrow gorge and particularly the thunderous Nevis Bluff Rapids — the most horrific rapids in the country. Other rapids of note are at Sargood's Weir and the rapids immediately upstream of the Roaring Meg powerhouse. At the latter site there used to be a natural rock bridge across the river. The bridge had been used from ancient times by the Maoris who passed up and down the valley. Unfortunately, a property owner on the far side of the river became ill-tempered with people crossing the river to his gold claim and he blasted the bridge into the river. This now creates a severe rapid which corkscrews into an undercut bluff. Between these sections of rapids the river flows swiftly but quietly between rock walls, often creating powerful swirling eddies and only occasionally small white-topped rapids that may be run in canoe or raft. The river is flanked by rock walls so that, from the river, the land above the river is not visible. In places there are small shingle beaches and small willows, but overall the landscape appears barren. The remains of old gold diggers' huts are still visible and there is still some recreational gold panning done, but the

river has been thoroughly panned over by now. The river is to be flooded by hydro dams in the Upper Clutha Valley Scheme and all the rapids will be drowned, as will all the impressive gorge scenery.

Scenic value: Impressive.

Recreational value: Intermediate.

TRIBUTARIES OF THE KAWARAU

The Kawarau has three very interesting tributaries — the Shotover, the Arrow and the Nevis. The Shotover is by far the biggest and is famed for its gorge scenery, having Skippers Canyon and the historic old gold workings along its length. The Arrow is seldom of sufficient size for boating whilst the Nevis is a 'recently-discovered' river for canoeists and will receive more use once the Kawarau goes under the hydro lakes.

107.3.2 SHOTOVER RIVER 752745

Location: The Shotover flows south between the Harris and Richardson Mountains, through Skippers Canyon, to junction with the Kawarau a few kilometres below the Lake Wakatipu outlet.

River confluence location: NZMS1, S132/647721

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S114 Earnslaw; S123 Skippers; S132 Wakatipu.

Length: 80km.

Average gradient: 1:250 4m/km (Skippers).

RECREATIONAL USE:

Motor launches: Not used.

Jet boats: Navigable for around 13km to 1km above Arthurs Point, provided arrangements are made with the jet boat tourist operator who has priority use of the lower gorge. The tourist trip up this gorge is very popular. There are few rapids, the best water being upstream in the Skippers Canyon. There are 17km of boating in the Skippers Canyon with difficult rapids blocking navigation at either end of these 17km. Considered exciting boating for experienced jet boaters only.

Drift boats: Not used a great deal but becoming popular. Excellent water from Skippers down to Arthurs Point with some narrow and fast water requiring a good deal of skill.

Rafts: Two commercial tourist companies use rafts on the upper river and one company runs the section from Arthurs Point down to Tucker Beach which is of less interest than the upper section.

Canoes/kayaks: The upper river above Skippers Canyon is popular with less experienced canoeists and is used a great deal. From Skippers down to Arthurs Point is a particularly exciting trip sought by the country's best canoeists, although it is not beyond the ability of the average paddler. A number of overseas canoeists have come to New Zealand with the intention of running this section of the Shotover River. From Arthurs Point down to the Kawarau is not used greatly because of the presence of the jet boat tourist company.

Pack floating, swimming: Unused.

Scenic description: Access to the Shotover is via the Skippers Road, which tends to discourage some would be rafters and canoeists as tourist buses are a hazard on the road. The upper river above Sixteen Mile Gorge is not visited often. From this gorge, the river emerges onto a wide shingle bed and this is often canoed down to the old silt retention dam. From the dam, the river narrows and rapids exist on corners as the river flows into bluffs.

From Deadman's Creek confluence the rapids increase. At Deep Creek the river enters the most impressive canyon with exceptionally narrow and sharp corners and bouldery rapids. Just above Sutherlands Beach lies a section of difficult white water, with the most difficult rapids between Moonlight Creek and Devil's Creek. The rapids ease as the river flows to Arthurs

Point, still in a deep gorge. The jet boat operator began to blast rocks from this section of gorge in order to enable him to take tourists up the gorge and, hopefully, to Skippers. Fortunately, he was prevented from completing his work as canoeists and rafters would not have been able to use the river without the possibility of being involved in a collision with the tourist boat. At Arthurs Point the river enters another gorge but this time it has placid water with strong eddies. The gorge opens out onto wide shingle beaches and remains like this down to the Kawarau. The area is rather barren with a few small willows to add a splash of green to an otherwise brown tussock vista and barren rock outcrops. Relics from the gold digging days remain along the banks and are of interest.

Scenic value: Exceptional.

Recreational value: Exceptional.

107.3.3 ARROW RIVER 752744

Location: The Arrow River is a small river flowing in a deep gorge from the hills to the north of Arrowtown. It joins the Kawarau downstream of Lake Hayes. The former gold town of Macetown is situated on the upper river.

River confluence location: NZMS1, S132/742737

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S123 Skippers; S132 Wakatipu.

Length: 42km.

Average gradient: 1:230 4.4m/km.

Recreational use and scenic description: Above Arrowtown, water is extracted from the river and the pipeline runs down the river bed to Arrowtown. The river from the pipeline intake, is seldom of sufficient size for recreational boating. Above the pipeline, is the ghost town of Macetown which is well worth a visit. The river lies in a deep valley, tussock-covered and barren, similar to but far smaller than the Shotover (it does not have the grandeur of the Shotover).

The river is seldom of boatable size and is not used. Willows clog the lower river as it flows into the Kawarau.

Scenic value: Picturesque.

Recreational value: Insignificant.

107.3.4 NEVIS RIVER 752743

Location: The Nevis River is a small stream rising between the Hector Mountains on the west and the Garvie Mountains on the east, flowing north between the Remarkables and the Carrick Range to join the Kawarau River between Queenstown and Cromwell.

River confluence location: NZMS1, S133/877676

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S133 Cromwell; S142 Kingston; S143 Alexandra.

Length: 58km.

Average gradient: 1:34 29.4m/km (lower river).

Recreational use and scenic description: The Nevis River lies in barren and isolated country, access being via Duffers Saddle which lies under snow most of winter. The road meets the river at Nevis Crossing and it is here that the Southland Canoe Club holds slalom canoeing competitions in spring, but for most of the year the river is either inaccessible (under snow) or is too shallow for boating. The river is not often of sufficient size for craft other than canoes. Above Nevis Crossing the river tends to be shallow, slow flowing and there are many split channels in swampy land, interspersed with sections of coarse gravel. Below Nevis Crossing the river flows into a narrow gorge with steep rapids that offer difficult canoeing water usually damaging canoes, mainly because the river does not have a great volume of water. Rapids are shallow and rocky.

Scenic value: Moderate.

Recreational value: Low.

107.3.5 BANNOCKBURN 752741

The Bannockburn is a small shallow river flowing north into the Kawarau a little upstream of the Clutha confluence. This river is subject to great fluctuations in flow from season to season but seldom reaches sufficient size even for canoeing. It is seldom, if ever, used.

Scenic value: Moderate.

Recreational value: Insignificant.

LAKE WAKATIPU AND ITS TRIBUTARIES 752746

Lake Wakatipu is a long, narrow 'S'-shaped lake, lying between a number of mountain ranges of which the Remarkables on the eastern shore are the most well known. Of all the natural southern lakes, Wakatipu appears the most barren and wind-swept — almost as barren as Lake Benmore and the other hydro lakes. The main rivers flowing into the lake are the Dart, the Rees, the Greenstone and the very small Von and Allen Creeks.

107.3.6 DART RIVER 752746

Location: The Dart River originates off the terminal face of the Dart Glacier, south-west of Mount Aspiring, and is fed by streams off a number of lesser glaciers. The river flows west through a number of short gorges before turning towards the south to enter Lake Wakatipu over braided river flats.

River confluence location: NZMS1, S122/291915

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S113 Tutoko; S114 Earnslaw; S122 Hollyford.

Length: 67km.

Average gradient: 1:350 2.9m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Generally boatable for 50km from the head of Lake Wakatipu to the swing bridge, one kilometre above Dredge Flat. The river mouth is often tricky boating due to the river being so braided over the lower 8km.

Considered easy boating in a scenic area.

Drift boats, rafts, canoes/kayaks: Easy water without difficult rapids but access is a problem and for this reason the river is seldom used.

Pack floating: Some climbers and trampers use the river but it is not thought of as being particularly valued for this activity alone.

Swimming: Not used except by trampers in the area.

Scenic description: The river flows over grassy river flats flanked by beech-covered hills. The river is a shingle bed river which becomes very braided in places, particularly over the lower 8km. It forms a delta into the head of Lake Wakatipu. The area is very scenic with the light brown grassland, the deep green beech, and the snow-capped mountains and glaciers along the skyline. In places the hills form small gorges through which the river squeezes over boulders.

Scenic value: Exceptional.

Recreational value: Low.

107.3.7 REES RIVER 752746

Location: The Rees River lies to the east of the Dart Valley, between the Forbes and Richardson Mountains. It joins the Dart at the lake shore near Glenorchy.

River confluence location: NZMS1, S123/301914

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S114 Earnslaw; S123 Skippers.

Length: 45km.

Average gradient: 1:166 6m/km.

Recreational use and scenic description: The Rees River is smaller than the Dart but has a greater gradient providing for swifter water. With a fresh, the river can be jet boated up to the gorge at the Invincible Creek confluence and there are tricky conditions for boaters, depending upon water levels. The river offers good canoeing and rafting without difficult rapids. Wires across the river in the lower reaches can be a hazard, especially for fast moving jet boats. The scenery is much like the Dart.

Scenic value: Impressive.

Recreational value: Low.

107.3.8 GREENSTONE RIVER 752746

Location: The Greenstone River flows east from the Livingstone Mountains, joins the Caples River and flows out into Lake Wakatipu on its western shore.

River confluence location: NZMS1, S122/293812

Maps: NZMS18, Sheet 22 Wakatipu; NZMS1, Sheet S122 Hollyford; S131 Eglinton.

Length: 35km.

Average gradient: 1:90 11m/km. (Gorge section).

RECREATIONAL USE:

Motor launches: Nil.

Jet boats: 2km to the beginning of the lower gorge is boated from Lake Wakatipu.

Drift boats, rafts: The Greenstone Gorge is normally too small for these craft.

Canoes/kayaks: Marginally canoeable through the gorge. It is generally of sufficient size through the smaller lower gorge below the Caples confluence. Access is a problem.

Pack floating: Probably too shallow. The gorge would offer an excellent lilo trip and being short is just about right for a day trip, tramping in through Lake Rene and floating downstream to the lake.

Swimming: Unknown. Probably little used.

Scenic description: The Greenstone is one of the country's most scenic rivers although a little on the small side for good recreational use. It flows down a relatively narrow river valley for most of its length but has a short gorge down to the Caples River confluence and then a second very short gorge. The gorge walls are low and contain attractive bush, mainly beech, which overhangs the walls. The river is shallow with a number of stony or bouldery drops over rapids. The upper river ripples over shingle shoals and is not of sufficient depth for boating.

Scenic value: Exceptional.

Recreational value: Low.

107.3.9 CAPLES RIVER 752746

The Caples River, a tributary of the Greenstone, is small and shallow flowing over shingle in a grassy river valley. It is not of sufficient size for boating or canoeing. The scenery is superb, although not as good as the Greenstone itself.

Scenic value: Impressive.

Recreational value: Insignificant.

107.4 CLUTHA RIVER — CROMWELL TO ALEXANDRA

Location: From Cromwell to Alexandra, or from the Kawarau confluence to the Manuherikia confluence, the Clutha flows through what is known as the Cromwell Gorge, a spectacular section of river but without white water of note.

Section end location: NZMS1, S143/192443

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S133 Cromwell; S143 Alexandra.

Length: 32km.

Average gradient: 1:890 1.1m/km.

RECREATIONAL USE:

Motor launches: Much of the gorge is of sufficient depth for boating in small outboards although rapids near Sonora Creek may create excessive cavitation around the propeller to make a loss of power. Some shallow rocks will need avoiding.

Jet boats: Considered as providing excellent water with some pressure waves and strong eddies to keep the best drivers occupied. Suitable for the average boater and scenic enough to maintain the interest of passengers.

Drift boats: Excellent water, swift almost to Alexandra but without big rapids.

Rafts: Good water although the lack of real white water creates some lack of interest, especially after the excitement of the Cromwell Gap. Scenic.

Canoes/kayaks: An excellent trip for the average canoeist and a popular club cruise. The strong cross currents and eddies provide excellent water for novice canoeists. The lower section of the river provides the venue for an annual long distance canoe race held in conjunction with the Alexandra Blossom Festival.

Pack floating, swimming: Unused.

Scenic description: From Cromwell, the Clutha flows between barren, rocky banks with strong eddies and cross currents created by the irregularly shaped gorge walls and the numerous fragmented boulders along the banks. 4.5km below Cromwell lie the first of the rapids — merely large pressure waves. The most difficult rapids are near Sonora Creek. Lower in the river is a rock island that splits the river and creates white water at high flow. The Cromwell Gorge proper ends at Clyde where shingle beaches become common and the river wider and flowing at a steady rate. The first, and major, dam of the Upper Clutha Hydro Scheme is to be built here and will drown out the scenic Cromwell Gorge and the Gap. The gorge, with its rock walls and road along the left bank provides excellent scenery and is a notable feature of the tourist circuit; with a hydro lake this area will depreciate in interest as the Benmore and Aviemore Lakes have. Dredge tailings line the river near Alexandra and the current slows as the head of the Roxburgh hydro lake floods back to this point.

Scenic value: Impressive.

Recreational value: High.

107.4.1 FRASER RIVER 752660

The Fraser River flows east to the Clutha at Clyde. It is very small and almost dry over the lower reaches in late summer as its waters are used for irrigation on nearby orchards. At the Domain camp site there is a length of river bed badly choked with willows. Consequently, this river has not been used for recreation apart from some swimming by the campers.

Scenic value: Moderate.

Recreational value: Insignificant.

107.5 CLUTHA RIVER — ROXBURGH HYDRO

Location: At Alexandra, after the confluence with the Manuherikia River, the Clutha floods out into a placid lake behind the Roxburgh Hydro Dam.

Section end location: NZMS1, S152/138179

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S143 Alexandra; S152 Roxburgh.

Length: 28km.

Average gradient: Nil.

Recreational use and scenic description: The Clutha, in the Roxburgh reservoir, is confined between barren hillsides. There is no current and the lake can be the subject of sudden gusts of wind. The river is used to some extent by canoeists, but not often as they prefer a moving current to assist them. Motor boats can often be seen on the lake and some jet boats, although in much lesser numbers than might be found on the Cromwell to Alexandra section of the Clutha. In fact, the Roxburgh Lake is not used to the same degree as the river above the lake. We might also expect that the new lake at Clyde will not be used to the same degree as the river is now, unless boaters are attracted with marinas and other facilities. A major attraction on the Roxburgh Lake are the relics of the old gold digging days along the banks, particularly the cave and rock dwellings. The lake has drowned out the spectacular Island Basin Narrows which were rivals to the present Cromwell Gap. The Doctors' Falls rapids are also drowned out — these rapids were well known and much appreciated by canoeists before the dam flooded them.

Scenic value: Uninspiring.

Recreational value: Intermediate.

MANUHERIKIA RIVER 752630

The Manuherikia flows from two main streams, the East and West Branches, which have their origins in the Hawkdun, Wether, Ewe and St Bathans Ranges. The river then collects behind the Falls Dam and flows south-west through Omakau to the Clutha at Alexandra. The main tributaries are the Dunstan Creek, Ida Burn and Manor Burn which are all small creeks almost dry in late summer. The Manuherikia itself can be very small in summer as its water is used for irrigation. The survey considers this river in three sections.

107.5.1 MANUHERIKIA RIVER — TO FALLS DAM

Location: The Manuherikia flows from the hills as a very small creek and collects in a large lake to the west of Ranfurly and north of St Bathans.

Section end location: NZMS1, S125/620924

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S116 Lindis; S125 St Bathans.

Length: 35km (includes West Branch).

Average gradient: Slight.

Recreational use and scenic description: The upper Manuherikia, above Falls Dam, does not offer suitable water for boating or canoeing. Above the confluence of the East and West Branches the river is very small with a good deal of the water flowing in drains or water races. The landscape is particularly barren and isolated, being tussock country with some stunted willows. The river flows quietly over shingle between low, tussock-covered banks. There are some fishermen's huts standing out in stark relief on the undulating valley floor. The reservoir itself may be boated. It acts as a holding basin to maintain a year-round flow of water in the Manuherikia so that there will be sufficient flow in summer for irrigation. In summer the reservoir will be very low with a wide perimeter of mud that is most unpleasant. The dam overflow consists of a huge funnel that has no safety barrier. With the reservoir at a high level it would be fatal to come within 100 metres of this overflow. We see no reason why this overflow should remain unprotected and without a safety grille.

Scenic value: Uninspiring.

Recreational value: Low.

107.5.2 MANUHERIKIA RIVER — THE THREE GORGES

Location: From Falls Dam the Manuherikia River flows in a general south or south-easterly direction through three gorges — the Falls Dam Gorge, the Lauder Gorge and the Ophir Gorge. There is a significant length of quiet water between the Falls Dam Gorge and the Lauder Gorge.

Section end location: NZMS1, S134/284552

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S125 St Bathans; S134 Omakau.

Length: 60km.

Average gradient: 1:230 4.4m/km.

Recreational use and scenic description: The Manuherikia River is small year round as the Falls Dam tends to even out the flow, reducing the peak flow and giving a good flow of water even in late summer. About the only craft able to successfully negotiate the river are canoes or kayaks. It would be possible to run the three gorges on a lilo but the rock is particularly sharp-edged and would probably damage inflatable craft and airbeds. The rock would also easily catch on clothing. One canoeist has been drowned in the Ophir Gorge after being wedged between rocks in a short section of fast current.

The upper gorge, below the Falls Dam, offers the best water for canoeing. The gorge walls are steep and are composed of loose rock fragments with briar and matagouri scrub. Only in the last few metres down to the water are there what could be described as rock walls. The river is shallow and tumbles over a number of rock ledges creating small falls. The bed of the river gradually changes to loose gravel and the banks become lower. Near St Bathans Road the river flows onto flat land in a wide shingle bed that becomes braided in places. Some water is drawn off into water races for irrigation. Willows appear and sprout from the river bed. Dunstan Creek does not add much water to the river flow. A little below Lauder, the river flows into Lauder Gorge — 4km of river flowing between low rock banks and high, steep, sloping hillsides of rough tussock, briar and loose rock. The river bed is composed of large pieces of rock and boulders. Some stunted willows sprout from the river edge. There are 4km of open braided river down to Omakau and then the river enters the Ophir Gorge which is much the same as the Lauder Gorge, although the hills appear to be steeper. In the lower end of the gorge is a small weir that must be portaged by canoeists.

Scenic value: Picturesque.

Recreational value: Low.

107.5.3 LOWER MANUHERIKIA RIVER

Location: Between the Chatto Creek confluence and Alexandra where the Manuherikia joins the Clutha, the river is open and braided.

River confluence location: NZMS1, S143/192443

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S134 Omakau; S143 Alexandra; S144 Manor Burn.

Length: 16km.

Average gradient: 1:808 1.2m/km.

Recreational use and scenic description: Below the Ophir Gorge where more water is drawn off for irrigation, the river is particularly shallow and flows quietly over shingle, flanked by willows. The land on either side of the river is used for grazing or orchards and is irrigated. The river is seldom of sufficient size for any form of boating except in flood when it may be canoed.

Scenic value: Uninspiring.

Recreational value: Insignificant.

TRIBUTARIES OF THE MANUHERIKIA

There are a number of creeks flowing into the Manuherikia; almost all are small and dry in summer — impossible for boating or canoeing. The largest are the Ida Burn, Dunstan Creek and the Manor Burn.

107.5.4 IDA BURN

752636

Location: East of the Falls Dam Reservoir, lies a complicated network of water races including the Johnstones Water Race, and the Mount Ida Water Race. They link up with the Ida Burn which flows into the Manuherikia from the east above the Lauder Gorge.

River confluence location: NZMS1, S134/457708

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S125 St Bathans; S126 Mt Ida; S134 Omakau; S135 Ranfurly.

Length: 46km.

Average gradient: Slight.

Recreational use and scenic description: The Ida Burn and the water races flow on the flat valley floor and around the hillsides flanking the valley. The country is barren and dry in summer but greens up in winter. There are few trees other than willows which are found in the lower sections of the natural waterways. Tussock and introduced grasses are the dominant vegetation. The burn flows in a shallow bed of shingle and there are few banks flanking the river. The water races lie on private land and there is no right of public access or use of the water races for recreation; therefore property owners' permission must be sought first. Numerous pipelines across gullies and low bridges need to be portaged but it is possible to paddle a canoe some distance along the water races and around the hillsides so that you can look down upon the valley — an unusual situation for canoeists. The water races are seldom used and the remaining water in the Ida Burn is usually insufficient for recreation.

Scenic value: Picturesque.

Recreational value: Insignificant.

107.5.5 DUNSTAN CREEK

752638

Location: Dunstan Creek flows south-west off the St Bathans Range, flowing through St Bathans to link with the Manuherikia upstream of Becks.

River confluence location: NZMS1, S134/501778

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S116 Lindis; S125 St Bathans; S134 Omakau.

Length: 61km.

Average gradient: 1:110 9m/km.

Recreational use and scenic description: Above St Bathans, Dunstan Creek is confined to a single channel in a deep valley — it is normally too small for boating or canoeing and a good deal of its water is drawn off into water races for irrigation. Below St Bathans the river becomes very braided as it flows out onto the wide valley floor of the Manuherikia. The river is shallow and meanders across the valley between willows, broom and gorse.

The river is never likely to attain sufficient size for recreational use. The small Blue Lake at St Bathans is used for boating in summer, and some swimming but its main use is in winter when ice skating and curling take place.

Scenic value: Uninspiring.

Recreational value: Insignificant.

107.5.6 MANOR BURN

752631

Location: The Manor Burn is a small stream flowing north, then west from the Rough Bridge Hills to enter the Manuherikia

kia upstream of Alexandra.

River confluence location: NZMS1, S144/212467

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S144 Manor Burn.

Length: 51km.

Average gradient: 1:49 20.4m/km (middle reaches).

Recreational use and scenic description: In the upper catchment the Manor Burn has been dammed, creating two large reservoirs linked by a narrow arm of water. These reservoirs are used for ice skating in winter, but their main purpose is to maintain water for summer irrigation. The river then flows down a narrow valley to the lower Manor Burn reservoir, also used for ice skating and irrigation. The reservoirs themselves are suitable for canoeing or small craft, although we believe that power craft are prohibited. Access to the upper reservoirs is difficult. The reservoirs lie in very barren country with marshy shores. Between the upper and lower reservoirs the Manor Burn is particularly steep and tumbles over a bouldery bed. There is one dam along this length. The river is too small for boating or canoeing.

Scenic value: Moderate.

Recreational value: Insignificant.

107.6 CLUTHA RIVER — ROXBURGH TO BEAUMONT

Location: From the Roxburgh Hydro Dam the Clutha flows with a steady current south to south-east down to Beaumont.

Section end location: NZMS1, S162/323767

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S152 Roxburgh; S153 Teviot; S162 Lawrence.

Length: 50km.

Average gradient: 1:1060 0.9m/km.

RECREATIONAL USE:

Motor launches: The river is deep for most of this section and it would be possible to use a small outboard-powered craft on the river, but it seems that this is not often done. We believe that there have been some attempts to water ski on the river although most of this activity is centred on the Roxburgh Lake.

Jet boats: Used a great deal, considered easy.

Drift boats, rafts: Used often; a good current to move these craft along but is not of great value because of lack of white water and rapids.

Canoes/kayaks: Not used a great deal above Miller's Flat. Most trips are centred along the lower part of this section. Considered easy and suitable for inexperienced canoeists.

Pack floating: Unused.

Swimming: Some local use in quieter sections where there is less current.

Scenic description: Below the Roxburgh Dam there is a deep ponding area and then the river moves off over a few shallow rocks that create eddies and small waves. The river is almost sluggish, moving slowly from bank to bank without the eddies and cross currents that are found in the upper reaches. Willows stand along the banks and screen off some of the surrounding countryside. The scenery is more interesting and varied than the Roxburgh lake area. The river is an aquamarine colour with areas of deep, quiet pools. The banks are large stones or rock outcrops but do not create waves or eddies.

Beaches occur in the lower end of this section from Miller's Flat. Below Craig Flat, there are outcrops of hard smooth rock in the river bed but they do not create white water.

Scenic value: Picturesque.

Recreational value: Intermediate.

107.6.1 TEVIOT RIVER 752470

Location: The Teviot River flows south through barren hill country into a swampy basin between the Lammerlaw and Lammermoor Ranges where a dam has created Lake Onslow. From the lake the river flows west to the Clutha at Roxburgh.

River confluence location: NZMS1, S152/137103

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S152 Roxburgh; S153 Teviot.

Length: 44km.

Average gradient: 1:48 20.7m/km.

Recreational use and scenic description: Between Lake Onslow and the Clutha the Teviot drops steeply over a narrow bouldery bed in a narrow valley. The river seldom carries sufficient water to allow the better white water sections to be canoed or rafted. In the lower reaches willows grow in the river bed and make it unnavigable even if there were sufficient flow. Over most of the river's length it cascades over boulders. The country tends to be very dry.

Scenic value: Moderate.

Recreational value: Insignificant.

107.7 CLUTHA RIVER — BEAUMONT TO BALCLUTHA

Location: From Beaumont the river leaves the main road and flows south through the Beaumont Forest and farmland, gathering water from the Tuapeka, Waitahuna and Pomahaka Rivers.

Section end location: NZMS1, S179/520265

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S162 Lawrence; S171 Waitahuna; S179 Balclutha.

Length: 62km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Navigable to the Pomahaka confluence by most power craft and further by smaller craft. It seems that this section of the river, to the Tuapeka mouth, is used often.

Jet boats: One of the heaviest used sections of the river next to the Cromwell Gorge. Considered easy boating although care must be taken in the Beaumont Forest area where outcrops of rock need avoiding.

Drift boats, rafts: There is an annual raft race and canoe race held over part of this section which is becoming more popular. Most boaters leave the water before reaching the Pomahaka River confluence where the current decreases and becomes very sluggish. The upper section is used considerably. Easy water and scenic.

Canoes/kayaks: Much use is made of the river from Beaumont Bridge and along the Beaumont Forest length.

Considered as excellent water for novice canoeists. Without rapids and the scenery is interesting.

Pack floating: Unused.

Swimming: Unknown. Some quiet backwaters probably used but the water is discoloured below the Tuapeka.

Scenic description: From Beaumont to Balclutha the river is wide and quiet flowing, between shelving shingle and mud beaches with willows and other trees lining the banks. Occasionally, as found beneath the Beaumont Bridge, there are low, water worn outcrops of rock that may create easy rapids. The Beaumont State Forest on the right bank and patches of native beech on the left bank provide a welcome sight of greenery that is not common in this area of Otago. Willows occur again below the forest and become larger and thicker from the Tuapeka River mouth. At Tuapeka the river bed widens and there are few rapids, riffles or eddies as are found further upstream. Islands of willows split the flow in a number of places and become common below Clydevale. Below the Pomahaka confluence the river is very sluggish and muddy without rapids. The river remains wide and flat, lined with willows, down to Balclutha.

Scenic value: Moderate.

Recreational value: High.

107.7.1 TUAPEKA RIVER 752190

Location: The Tuapeka River flows south-west to the lower Clutha River from the rolling hill country between Milton and Beaumont. It flows through the small town of Lawrence.

River confluence location: NZMS1, S171/316530

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S162 Lawrence; S171 Waitahuna.

Length: 42km.

Average gradient: Slight.

Recreational use and scenic description: The Tuapeka is a small, muddy stream that meanders through the rolling hill country and is lined by willows that may impede navigation by small craft. The river is marginally canoeable from Lawrence, and most of the year from Tuapeka Flat. The river is flat and there are no rapids. From the Clutha, small craft may be able to travel a short distance upstream.

Scenic value: Uninspiring.

Recreational value: Low.

107.7.2 WAITAHUNA RIVER 752120

Location: The Waitahuna is a small stream, slightly larger than the Tuapeka, and flows south-west to the Clutha opposite the Pomahaka River.

River confluence location: NZMS1, S171/382361

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S162 Lawrence; S171 Waitahuna.

Length: 63km.

Average gradient: Slight.

Recreational use and scenic description: The Waitahuna, like the Tuapeka, is a small, rather muddy stream meandering around the hillsides in a willow-lined bed. Farmland drains into the river. The river is not used for recreation although canoeable from the main road, depending upon water levels. Willows may obstruct navigation in places.

Scenic value: Uninspiring.

Recreational value: Insignificant.

POMAHAKA RIVER 752140

The Pomahaka River flows south from the Umbrella Mountains turning east, south of the Blue Mountains to join the Clutha on its right bank above Balclutha. This survey considers the Pomahaka in four sections.

107.7.3 UPPER POMAHAKA RIVER — TO LEITHEN BURN 752146

Location: From its origin in the Umbrella Mountains the Pomahaka remains a small stream down to Leithen Burn.

Section end location: NZMS1, S161/978715

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S152 Roxburgh; S161 Heriot.

Length: 69km.

Average gradient: 1:150 6.7m/km.

Recreational use and scenic description: The Pomahaka is low in summer and unable to be used by recreational boaters. However, with sufficient flow it is often canoed, the most popular trip being from Hukarere (off Moa Flat Road) down to the picnic area at Leithen Burn (at the Dusky pine plantation). The river is small and flows in a narrow valley past old gold sluicing areas. There are willows along the bank that add greenery to the otherwise brown, dry colouring of the area. Access is usually by one of the rough roads that service the area's cattle grazing farms.

Scenic value: Picturesque.

Recreational value: Low.

107.7.4 POMAHAKA RIVER — LEITHEN BURN TO CONICAL HILL

Location: From the Leithen Burn confluence the Pomahaka turns east to flow over the flat farmland past Kelso, then south to Conical Hill.

Section end location: NZMS1, S170/089468

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S161 Heriot; S170 Gore.

Length: 44km.

Average gradient: Slight.

Recreational use and scenic description: From the Leithen picnic area the river flows through flat farmland on a shallow shingle bed. In places the main channel splits around islands, leaving it very shallow. Willows are thick along the banks blocking the channel in places below Kelso and as far downstream as Conical Hill. With high flow the river tends to flood and flow through the willows. There are no notable rapids in this section. The river is of little interest for boating along this section, being so shallow and flat. The willows also restrict navigation. Too small for jet boating and too shallow for rafting and drift boats.

Scenic value: Uninspiring.

Recreational value: Low.

107.7.5 POMAHAKA RIVER — CONICAL HILL TO CLYDEVALE

Location: From Conical Hill the Pomahaka turns east past the Conical Hill State Forest and south to Clydevale.

Section end location: NZMS1, S171/247419

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S170 Gore; S171 Waitahuna.

Length: 32km.

Average gradient: Slight.

Recreational use and scenic description: The section between Conical Hill and the Clydevale-Clinton Road Bridge is one of the most popular on the river. From Conical Hill the river continues as in the upper section, quiet flowing over fine shingle with a margin of willows along the bank. The river is clear of willows. As it approaches Rankleburn the river bed contains large sections of limestone outcrops creating some difficult rapids. With very high flow the rapids are drowned out, and with low summer flows the river can be too thin to boat or canoe.

The most dramatic rapids are downstream of the picnic area at the Rankleburn Forest. Willows and scrub line the banks making portages difficult. The river then suddenly reverts back to a shallow shingle bed with shoals and riffles being the only break from an otherwise smooth flowing river. With winter or spring flows the river may be canoed, rafted or drift boated. Jet boats can get up to the rapids but require near flood conditions to get beyond them. Alternatively, jet boats may launch at Conical Hill and boat down to the rapids. It is also a popular canoe trip.

Scenic value: Moderate.

Recreational value: High.

107.7.6 POMAHAKA RIVER — CLYDEVALE TO THE CLUTHA

Location: From Clydevale the Pomahaka flows east to the Clutha as a sluggish river.

River confluence location: NZMS1, S171/366365

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S171 Waitahuna.

Length: 15km.

Average gradient: Slight.

Recreational use and scenic description: From the Clydevale Bridge (Swans Bridge) the Pomahaka is flat and has only a barely perceptible flow in summer and remains sluggish even in winter as the Clutha floods back into the Pomahaka almost to the Black Bridge. The river is uninteresting, willows overhang the bank but there is generally a clear path through the centre. The bed is of shingle, changing to mud approaching the Clutha. Water weeds floating on the surface are common. This section of the river although usable by all forms of craft, is seldom used.

Scenic value: Uninspiring.
Recreational value: Low.

TRIBUTARIES OF THE POMAHAKA

The Pomahaka has a number of tributaries, all of which are very small, almost drains, flowing through the rolling farmland in this area. Most are choked with willows and are impossible to canoe. The main streams are the Waikoikoi, Waipahi and the Waiwera.

107.7.7 WAIKOIKOI STREAM 752145

The Waikoikoi Stream flows south, west of Kelso, through swampy country before turning east to flow into the Pomahaka, downstream of Pomahaka. It meanders considerably and for a short distance its main channel becomes obscured in swamp, reforming as a number of drains. Mostly it is choked by willows and has toetoe and flax-like vegetation overhanging the banks. It is not navigable by craft for any distance.

Scenic value: Uninspiring.
Recreational value: Insignificant.

107.7.8 WAIPAHI STREAM 752144

The Waipahi and its tributary, the Kaiwera Stream, flow north through swampy land and farmland country south of Arthurton meandering to join the Pomahaka at Conical Hill. The Waipahi has little flow and most of its water comes from farm drainage. Its bed is choked with willows and is overgrown with long grass and toetoe. The river may be canoed from Arthurton where willows have been cleared from the bed for a short distance. Most of the river is stagnant.

Scenic value: Uninspiring.
Recreational value: Insignificant.

107.7.9 WAIWERA RIVER 752130

The Waiwera River flows north-east from Clinton through rolling farmland to meet the Pomahaka at its confluence with the Clutha River. It is a small, shallow, willow-lined stream quite unnavigable by small craft. Downstream of Kuriwao Siding the river is clear of willows and flows over a number of small bed-rock ledges that might be attractive to local canoeists. The ledges form small waterfalls of up to 0.5 m in height.

Scenic value: Uninspiring.
Recreational value: Insignificant.

107.8 CLUTHA RIVER — INCHCLUTHA

Location: At Balclutha the Clutha River splits into two channels around an island named Inchclutha. The northern channel, Matau Branch, is the longer and more frequently used than the southern, or Koau Branch.

River mouth location: NZMS1, S179/575134 and 604151
Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S179 Balclutha.

Length: Matau Branch — 32km. Koau Branch — 20km.
Average gradient: Slight.

Recreational use and scenic description: The two channels around Inchclutha are almost tidal, flat, wide and prone to developing a short chop in the wind. The banks are muddy and raised with stopbanks. Willows grow along the stopbanks, although they have been cleared in places, particularly along the southern bank of the Koau channel. Snags are common. The river could be used by the full range of river craft although the man-powered craft are seldom to be seen, no doubt due to the lack of current.

Scenic value: Moderate.
Recreational value: Intermediate.

107.8.1 LAKE TUAKITOTO 752020

Lake Tuakitoto lies in a depression to the west of a range of hills north of Kaitangata near the mouth of the Clutha River. Small creeks empty into the lake, none of boatable size. The top end of the lake is swampy and infested with willows. Reeds and willows line the shore although the southern end tends to shallow out gradually and is clearer of swamp growth. The lake drains into the Matau Branch. The river is a wildlife (ducks) refuge.

Scenic value: Moderate.
Recreational value: Low.

108.0 TOKOMAIRO RIVER 748000

Location: The Tokomairo River lies north of the Clutha River mouth. It rises in the rolling hill country north-west of Milton. It has two main branches — the West and East Branches, which converge downstream of Milton and flow south to the sea, south of Quoin Point on Chrystalls Beach.

River mouth location: NZMS1, S180/775290

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S172 Milton; S180 Wangaloa.

Length: 57km (includes East Branch).
Average gradient: Slight.

Recreational use and scenic description: The two upper branches of the Tokomairo River meander about considerably; they are not normally of boatable size and tend to be choked with willows and overgrown with grass and weeds. Below Milton, after the two branches have combined to form a single stream, the river becomes boatable by very small craft and canoes, but willows still block the river in places. The river is of low gradient and swampy in the lower reaches. The area through which most of the river flows is intensively grazed.

Scenic value: Moderate.
Recreational value: Insignificant.

109.0 AKATORE CREEK 745000

Akatore Creek is a small creek flowing onto the coast between the Tokomairo River and the Taieri River mouth. The creek enters the sea via a large area of tidal mud flats. It is not used greatly for recreation.

Scenic value: Moderate.
Recreational value: Low.

TAIERI TO WAITAKI AND SOUTHERN LAKES

110.0	Taieri River	91	121.3	Tekapo River	95
110.1	Upper Taieri River	91	121.3.1	Fork Stream	96
110.2	Taieri River — Kye Burn to Sutton	91	122.0	Rivers of Lake Pukaki	96
110.2.1	Kye Burn	91	122.1	Tasman River	96
110.3	Taieri River — Sutton to Hindon ..	91	122.2	Hooker River	96
110.4	Taieri River — Hindon to Outram ..	92	122.3	Murchison River	97
110.5	Taieri River — Outram to the Sea ..	92	122.4	Jollie River	97
110.5.1	Waipori River	92	122.5	Pukaki River	97
111.0	McColl Creek	92	123.0	Rivers of Lake Ohau	97
112.0	Kaikorai Stream	93	123.1	Hopkins River	97
113.0	Waters of the Leith	93	123.2	Dobson River	97
114.0	Waitati Stream	93	123.3	Temple Stream	98
115.0	Waikouaiti River	93	123.4	Ohau River	98
116.0	Pleasant River	93	123.5	Twizel River	98
117.0	Shag River	93	124.0	Ahuriri River	98
118.0	Waianakarua River	93	124.1	Omarama River	99
119.0	Kakanui River	94	125.0	Minor Tributaries of the Waitaki	99
120.0	Waitaki River Catchment	94	125.1	Otamatapaio River	99
120.1	Waitaki Hydro Lakes	94	125.2	Otematata River	99
120.2	Lower Waitaki River	94	125.3	Hakataramea River	99
121.0	Rivers of Lake Tekapo	95	125.4	Otiake and Otekaieke Rivers	99
121.1	Godley River	95	125.5	Maerewhenua River	99
121.1.1	Macaulay River	95	126.0	Waihao River	100
121.1.2	North-East Gorge Stream	95	127.0	Otaio, Makikihi and Hook Rivers ..	100
121.2	Cass River	95			

110.0 TAIERI RIVER 743000

The Taieri River originates near the headwaters of the Teviot Stream, in the Lammerlaw Range. It meanders northwards around the northern outliers of the Rock and Pillar Range. It is in this huge bend around the Rock and Pillar Range that the river has numerous ox-bow lakes. This area is often known as Taieri Lake and tends to flood easily. The river then combines with the south-flowing Kye Burn and turns south through Hyde and Middlemarch. There are a number of gorges between Hyde, Middlemarch, Sutton, Pukerangi, Hindon and Outram. The river flows onto the Taieri Plains, forming Lake Waihola, breaks through a range of hills and enters the sea. The river is considered in five separate sections.

110.1 UPPER TAIERI RIVER

Location: The Taieri River, from its origin in the Lammerlaw Range down to the confluence with the Kye Burn, is small and meandering. It flows north-east before turning almost 180 degrees around the Rock and Pillar Range.

Section end location: NZMS1, S135/907532

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S135 Ranfurly; S144 Manor Burn; S145 Hyde; S153 Teviot.

Length: 121km.

Average gradient: Slight.

Recreational use and scenic description: Generally speaking, the river as far downstream as the Kye Burn confluence, should be discounted as a recreational river — it is far too small, marshy and a trifle unpleasant in that numerous shallows in the boggy area would be terribly frustrating.

There is no significant length of good flowing water. The river has its source in a number of small creeks flowing in tussock country at the intersection of the Lammerlaw and Lammermoor Ranges. From this point the river flows north in a shallow valley over stones and rock slabs through barren tussock and out through a small gorge onto the Upper Taieri Plain, or Taieri Lake area. The area has numerous sites sluiced for gold and old stone slab huts and sod walls can still be seen. In the Taieri Lake area the river meanders about as a ditch in swamplands. It seems that after each flooding the river settles down in a different bed leaving behind ox-bow lakes and little sections of river bed that wriggle around in the swamp leading to no place in particular. These meanderings are at their worst west of Patearoa and down to Waipiata, after which the river settles down to a regular bed of shingle, swamp and small stunted willows. With the water from the Kye Burn the Taieri becomes marginally boatable although river levels fluctuate greatly from season to season.

Scenic value: Picturesque.

Recreational value: Insignificant.

110.2 TAIERI RIVER — KYE BURN TO SUTTON

Location: From the Kye Burn confluence the Taieri River turns south through a narrow river valley and through short gorges to Middlemarch, and over wide shingle beds to Sutton.

Section end location: NZMS1, S154/832073

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S135 Ranfurly; S145 Hyde; S154 Middlemarch.

Length: 72km.

Average gradient: 1:790 1.3m/km.

Recreational use and scenic description: This section of the Taieri River is normally too low for use in summer and receives most of its use in late winter and spring. In a wet year canoeists might use the river from winter right through to December. The river is seldom deep enough for craft other than

canoes. It has been canoed from the Kye Burn confluence. The river is small and shallow over fine shingle. The banks are low with shingle beaches along the river margins over which willows grow. In places the bed narrows between rocky banks, but retains its gravel bottom, although there may be outcrops of rock creating small rapids. The open shingle and narrow gorge sections tend to alternate down to Hyde where a more pronounced gorge exists and then the river flows out onto a long, meandering shingle bed down to Sutton. Willows overhang the river, particularly from Middlemarch downstream, but they do not obstruct the flow or navigation by canoeists.

Generally, this section of the river offers pleasant, easy paddling for the less experienced canoeist. The section from Middlemarch to Sutton is heavily used.

Scenic value: Picturesque.

Recreational value: Intermediate.

110.2.1 KYE BURN 743640

Location: The Kye Burn flows south from the Kakanui Mountains to junction with the Taieri River at the point where the course turns from north-east to south-east. The upper Kye Burn was a noted gold digging area and relics still exist today of the activities of this industry. The Kye Burn's main feeder streams are Little Kye Burn and German Creek.

River confluence location: NZMS1, S135/907532

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S126 Mt Ida; S135 Ranfurly.

Length: 39km.

Average gradient: 1:190 5.3m/km.

Recreational use and scenic description: The Kye Burn is generally too small for canoeing or any other form of boating, especially in the lower length as the river flows out onto a wide shingle bed. With high flow there is a fine section of rocky gorge near the Dansey Pass Scenic Reserve and the Kye Burn Diggings which has white water suitable for canoeing. These rapids would not exceed Grade 2 and few canoeists make the trip as when this river is suitable for canoeing the Taieri is even better. A short distance below Kye Burn Diggings the river flows out from its narrow, rocky banks and spreads into a wide shingle bed with patches of scrub and small willows. The hill-sides are tussock-covered with some gorse and rock outcrops.

Scenic value: Picturesque.

Recreational value: Insignificant.

110.3 TAIERI RIVER — SUTTON TO HINDON

Location: At Sutton the Taieri flows into a deep gorge in which it remains for a considerable distance down to Hindon, flowing south-east beside the railway line.

Section end location: NZMS1, S154/013910

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S154 Middlemarch.

Length: 31km.

Average gradient: 1:266 3.8m/km.

Recreational use and scenic description: The Taieri from Sutton to Hindon is one of the more interesting sections of the river in terms of recreation. In summer this portion can be too low for use, but in spring it provides excellent water for the more experienced canoeist and for the smaller rafts and drift boats. Down to the Sutton Stream confluence the Taieri continues as in the upper river section, flowing over shingle and between willows, but rock walls begin to close in on the river to form a rugged gorge from the Sutton Stream. There are a number of difficult rapids (up to Grade 3) in the gorge, the most difficult being upstream of the Castle Hill Stream confluence where the gorge is particularly narrow. From Castle Hill

Stream the rapids ease in difficulty and the gorge becomes less confined.

Boulders and large rocks provide most of the rapids. Small willows along the banks also pose problems to some degree. The river lies in a narrow gorge set in steep hill country that can be very dry in summer. Scrub is common.

Scenic value: Impressive.

Recreational value: Intermediate.

110.4 TAIERI RIVER — HINDON TO OUTRAM

Location: From Hindon the Taieri River opens out a little, remaining in its deep valley, then flowing into another gorge south to the main road and the flat land around Mosgiel at Outram.

Section end location: NZMS1, S163/929739

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S154 Middlemarch; S163 Mosgiel.

Length: 25km.

Average gradient: 1:700 1.4m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: The lower 15km are boatable depending upon water levels. The river gets gradually more difficult and is finally stopped by a steep rapid. Rocky and swift. The lower section is easy and requires an increasing amount of skill as you proceed up the river.

Drift boats: One rapid in particular will need to be portaged, otherwise an excellent trip if the water levels are right.

Rafts: A good trip with the right water levels. Not too boisterous. Rocks can be very sharp and inflatables could be damaged if they do not have a canvas cover.

Canoes/kayaks: An excellent trip of moderate difficulty. Most canoeists portage in at a point 15km below Hindon off Mt Hyde Station (NZMS1, S163/980800) as the best rapids lie below that point.

Pack floating: Not used a great deal because of long lengths of flat water. Possibly Mt Hyde to Outram offers a better trip than from Hindon. When the water levels are at their best the river is very cold.

Swimming: At Outram Bridge and picnic area. Very popular.

Scenic description: For the first 15km from Hindon the river lies in a deep valley without the rock walls common further upstream. The hillsides are a little barren and dry in summer but scrub and willows add a great deal of greenery to an otherwise dreary landscape. From Duck Point scrubby bush appears and the river bed becomes rockier. The first difficult rapid lies at the Mt Hyde launching area which is a bouldery rock garden and there are similar rapids down to the Lee Stream confluence, the river becoming flat again down to Outram with a small rapid below the Outram Bridge that is a popular training site for canoeists.

Scenic value: Picturesque.

Recreational value: High.

110.5 TAIERI RIVER — OUTRAM TO THE SEA

Location: From the Outram Bridge the Taieri flows onto a boggy area of flat land between Outram and Henley. Here the Waipori River enters and forms Lake Waipori and Lake Waiholo. The river then breaks through a range of coastal hills to the Taieri mouth.

River mouth location: NZMS1, S172/900494

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S163 Mosgiel; S172 Milton.

Length: 43km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Considerable use from the river mouth and upstream to Henley. Fishing boats often moor in the river mouth area. Lake Waiholo is used a great deal, especially for boat racing.

Jet boats: Navigable from the sea into Lake Waiholo and to Outram. Considered to be easy boating. Launching site is at Henley or the river mouth.

Drift boats, rafts, canoes/kayaks: Certainly usable but very slow moving and without rapids, consequently, does not get used a great deal. Lake Waiholo is a popular picnic area and is used for rowing regattas, sailing and generally paddling about.

Pack floating: Unused. No great current.

Swimming: Popular at the Outram Bridge and at a number of other points along the river.

Scenic description: From Outram, the Taieri becomes very sluggish and slow moving without rapids. The river can be very shallow in places down to Allanton, becoming deeper down to Henley. The river banks tend to be muddy, especially in the tidal section, with stopbanks and willows. The lower section of the river, from the Waipori River confluence, is particularly scenic with scrub and bush-covered hillsides down to the river level. Willows are absent.

Scenic value: Moderate.

Recreational value: Intermediate.

110.5.1 WAIPORI RIVER 743050

Location: The Waipori River flows south-east from the foot of the Lammerlaw Range directly over the range to the east from the beginnings of the Taieri. The middle reaches have been dammed forming Lake Mahinerangi, then the river falls down a steep gully onto the Taieri Plain, forms Lake Waipori and links up with the Taieri.

River confluence location: NZMS1, S172/852568

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S162 Lawrence; S163 Mosgiel; S172 Milton.

Length: 79km (includes Lakes Mahinerangi and Waipori).

Average gradient: 1:31.6 31.6m/km.

Recreational use and scenic description: Above Lake Mahinerangi the Waipori meanders through rolling hill country, barren and dry in summer, and consisting of grassland with a pine plantation on the shores of the lake. The river here is far too small for any form of boating. The lake itself is used for boating and power boat racing. From the lake water is piped down to the powerhouse at Waipori Falls, then into a second reservoir and another powerhouse before flowing free down a rocky bed and eventually onto the Taieri Plain. The lower reservoir can be lowered dramatically, exposing tree trunks and extensive mud flats that are unattractive. The river below the reservoirs can be canoed and liloed when it is running above normal, that is, when the powerhouse is releasing water.

Requests to the power board for information regarding the time of release of water so as to co-ordinate canoeing activities on the lower river, have not been successful and consequently, canoeing on this river has been spasmodic. The river flows in a narrow rocky bed with overhanging beech and willow trees. Upon reaching the plains around Mosgiel the river has stopbanks and flows into the swampy Lake Waipori which eventually drains into the Taieri.

Scenic value: Picturesque.

Recreational value: Low.

111.0 MCCOLL CREEK 741000

Flowing out onto the coast at Brighton, south of the Otago

Peninsula, is a small lagoon into which flows the small McColl Creek. The tidal section of this creek offers a pleasant spot for 'messaging about in boats'.

Scenic value: Uninspiring.

Recreational value: Low.

112.0 KAIKORAI STREAM 740000

The estuary to the north of Waldronville, south of the Otago Peninsula, is much larger than the McColl Creek Inlet and is swampy. After flowing through the outer suburbs of Dunedin and Green Island the Kaikorai Stream enters the Kaikorai Lagoon. It tends to be polluted and is not used for recreation.

Scenic value: Uninspiring.

Recreational value: Insignificant.

113.0 WATERS OF THE LEITH 735000

Location: The 'Waters of the Leith' flow south-east through the northern suburbs of Dunedin to enter the Otago Harbour opposite Burns Point.

River mouth location: NZMS1, S164/172720

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S164 Dunedin.

Length: 10km.

Average gradient: 1:66 15.2m/km.

Recreational use and scenic description: The Waters of the Leith flow out of the Leith Valley below the motorway as a shallow, stony and rock bedded stream. It is a very small river which can only be canoed at high flow. The lower river, from the gardens through the university to the sea, is encased in a smooth, concrete-walled channel and has a number of weirs that are unnavigable. At high flow, powerful stopper waves develop below the weirs and this creates extremely dangerous conditions, the worst being opposite the Law Library. It is difficult to imagine why the weirs were placed there, but they offer an unneeded obstruction to what could be an enjoyable paddle.

Scenic value: Moderate.

Recreational value: Low.

114.0 WAITATI STREAM 734000

The Waitati Stream flows north-eastwards from the hilly country north of Dunedin, and enters the sea via Blueskin Bay. The main highway south into Dunedin follows the river a short distance. Normally the stream is very shallow, almost dry, flowing over a stony bed with some lengths of shingle. The stream has been used by liloists and canoeists when it has been running high after a heavy fall of rain. However, it is not used often, nor for any distance.

Scenic value: Uninspiring.

Recreational value: Insignificant.

115.0 WAIKOUAITI RIVER 731000

Location: North of the Otago Peninsula, the Waikouaiti (formerly the Waikawaiti) flows northwards, in two main tributary streams — the North and South Branches, which unite a short distance above the main road before flowing into the sea at Waikouaiti and Karitane.

River mouth location: NZMS1, S155/285001

Maps: NZMS18, Sheet 25 Dunedin; NZMS1, Sheet S155 Waikouaiti.

Length: 44km (includes the South Branch).

Average gradient: Slight.

Recreational use and scenic description: Above the confluence of the two tributaries the Waikouaiti is not generally of boatable size for any distance. The tributaries are of low gradient and sluggish. The lower river is tidal for a good distance with rather muddy banks. The river flows through open farmland and much farm drainage empties into the river. A major hazard in the form of old bridge piles lies downstream of the bridge

and these must be avoided.

The South Branch is the larger of the two tributaries and is canoed a short distance in high flow. Jet boats and power boats often launch into the tidal section and cross the bar to go fishing. They do not navigate upstream, certainly seldom beyond the main road bridge.

Scenic value: Uninspiring.

Recreational value: Low.

116.0 PLEASANT RIVER 729000

The Pleasant River is a small tidal inlet and mudflat area between Palmerston and Waikouaiti. There is a small, swampy creek flowing into the inlet but it is a mere ditch in which water weeds float. It is not used for recreation to any significant degree. The upper river has willows choking it.

Scenic value: Uninspiring.

Recreational value: Insignificant.

117.0 SHAG RIVER 726000

Location: The Shag River flows south-east on the southern side of the Kakanui Mountains and the Horse Range, east of the Taieri Valley.

River mouth location: NZMS1, S155/416198

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S146 Moeraki; S155 Waikouaiti.

Length: 63km.

Average gradient: Slight.

Recreational use and scenic description: The Shag River flows beside S.H. 85 and there are numerous secondary roads leading off which cross the river, thus providing good access. The river tends to be slow-moving over a shingle bed, reverting to a muddy, swampy bed in the lower reaches. Recreational use depends upon water levels but is seldom used above McLew Road. The river is lined by large willows with swampy regions of reeds and long grass in the lower reaches. There are no rapids and the river wanders through quiet, shallow pools that tend to be very weedy with water plants. In places downstream of Craig Road willows choke much of the river bed (between Glenpark and Meadowbank). The river becomes swampy before joining the tidal lagoon area at the river mouth. In places fences cross the river upstream. The river is too small for jet boating and is not used much by craft larger than canoes.

Scenic value: Moderate.

Recreational value: Low.

118.0 WAIANAKARUA RIVER 720000

The Waianakarua River is a small stream flowing east to the coast, south of Oamaru and north of Hampden, draining the Herbert State Forest. It is narrow and shallow, bounded with overhanging willows and long grass. When in flood it is only marginally boatable and then by the smallest craft such as canoes. It has no rapids and does not represent a usable recreational resource.

Scenic value: Moderate.

Recreational value: Insignificant.

119.0 KAKANUI RIVER 717000

Location: The Kakanui River is a small stream rising in the Kakanui Mountains in two main branches (the North and South Branches) and flowing south-east to enter the sea south of Oamaru.

River mouth location: NZMS1, S136/484551

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S136 Oamaru.

Length: 67km.

Average gradient: 1:478 2.1m/km.

Recreational use and scenic description: The river is of boatable size from the confluence of the two main streams, launching off Kauru Road, although the usual launching point is lower, off Gemmels Crossing Road Bridge. In summer the river may be too low to boat. The river has a shallow flow over shingle and is lined with willows. No rapids are to be found on this quiet flowing rural stream. Willows present the only hazard to boaters. The river can be jet boated for up to 30km in fresh, or 13km at normal flow from the river mouth.

Scenic value: Moderate.

Recreational value: Intermediate.

120.0 WAITAKI RIVER CATCHMENT 711000

The Waitaki River system encompasses a large network of rivers and lakes draining the Southern Alps in the vicinity of Mount Cook and the mountains north of the Clutha River system. The main rivers are the Macaulay, Godley and Cass Rivers which drain into Lake Tekapo then via the Tekapo River into the Waitaki. The Murchison and Tasman Glaciers feed the Tasman River which is joined by the Hooker River to drain into Lake Pukaki then into the Waitaki via the Pukaki River. The Dobson, Hopkins, Huxley and Temple Rivers fill Lake Ohau, and the Ahuriri drains the mountains south of Lake Ohau into the Waitaki.

The Upper Waitaki used to flow through a wild, narrow ravine noted for its foaming and difficult rapids, but this has now been flooded by the massive Lake Benmore — a hydro reservoir. At the foot of Lake Benmore is the Aviemore hydro lake and then lies the Waitaki hydro lake. These lakes drown out some of the most impressive gorge country that we had, and braided river flats below Lake Waitaki are all that remain of the original river. The Upper Waitaki Hydro Scheme is now systematically destroying the Tekapo, Pukaki and Ohau Rivers and to complete the insult to nature, the local power board is investigating the hydro potential of the Ahuriri. All that remains now for the recreational boater are the inaccessible upper tributaries of the lakes and the small lower Waitaki tributaries — the Maerewhenua, Hakataramea, Otematata and Otamatapaio Rivers, but these are all very low in summer and are unable to be used.

The Waitaki River itself is considered here as being in two sections and then we look at the upper lakes and their tributaries.

120.1 THE WAITAKI HYDRO LAKES

Location: The original Waitaki River began at the confluence of the Tekapo, Pukaki and Ohau Rivers. Now, Lake Benmore floods this area and also forms another arm to the west up the Ahuriri River valley. To the east lie the Aviemore and Waitaki Lakes.

Section end location: NZMS1, S117/069153

Maps: NZMS18, Sheet 20 Mount Cook; Sheet 23 Oamaru; NZMS1, Sheet S109 Benmore; S117 Omarama.

Length: 55km.

Average gradient: Lakes — Nil. Total drop — 131 metres.

RECREATIONAL USE:

Motor launches, jet boats: Considerable use is made of the

three hydro lakes. Benmore has four launching areas; Aviemore — three; Waitaki — two. More use is made of the lower river and of the tributary rivers by jet boats, than the total number of power craft found on the lakes themselves. This may alter now that the Pukaki, Ohau and Tekapo Rivers are dry.

Drift boats, rafts: Unused.

Canoes/kayaks: Some limited paddling on the lake shore. The northern shore of Lake Aviemore seems to be the most popular spot. Total use is much less than the upper tributaries.

Pack floating: Unused.

Swimming: Some swimming on the lake shore.

Scenic description: The original Waitaki River began at the junction of the Tekapo, Pukaki and Ohau Rivers and flowed over tussock-covered plains for a short distance before entering the Waitaki Gorge which now lies beneath Lake Benmore. One of the first trips down the river and gorge was by G.E. Mannerling who reported that from the Pukaki confluence, which they had paddled down, the Waitaki was some 10km wide and it suddenly narrowed down so that you could 'throw a biscuit across'. He reported eddies and whirlpools of the most formidable character, with buffer waves wetting the gorge walls some 3 to 4 metres above water level. But this dramatic gorge now lies beneath the lake and sloping, tussock-covered hills now angle down to the water's edge, barren and scenically without interest. The West Arm of the lake has some low willows and has more life about it; however, the natural lakes of Ohau, Pukaki and Tekapo are considerably more interesting and have a greater variety. Below the Benmore spillway there is a short distance of flowing water with some white top waves and strong eddies. It then flows into Lake Aviemore which has more vegetation (willows and green grass) but this is only a narrow margin with bare tussock hills beyond. Below the Aviemore power house is another short distance of flowing water before entering Lake Waitaki. Strong gusts of wind may be encountered on Lakes Aviemore and Waitaki as they are open to the west and the hills tend to funnel the wind down onto the lake surface.

Scenic value: Moderate.

Recreational value: Intermediate.

120.2 LOWER WAITAKI RIVER

Location: Below the Waitaki Dam the Waitaki moves off towards the east, becoming badly braided, and then flows onto the coast north of Oamaru.

River mouth location: NZMS1, S128/694856

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S117 Omarama; S118 Hakataramea; S127 Duntroon; S128 Waitaki.

Length: 70km.

Average gradient: 1:300 3.3m/km.

RECREATIONAL USE:

Motor launches: Normally too shallow.

Jet boats: Considerable use is made of this portion of the Waitaki and, next to the Waimakariri, it is the most frequented river on the east coast of the South Island. It is navigable from the sea to the dam. Launching sites are all awkward and most need a four-wheel drive vehicle to retrieve boats.

Considered as being a straightforward river with water for skilled and novice boaters but without big white water.

Drift boats, rafts: Some sections of swift water but the braided nature of the river and willow snags tend to put people off. No big waves or white water but an enjoyable trip.

Canoes/kayaks: The upper sections of this part of the Waitaki see most of the canoeing use. The river is considered technically easy but willow snags can create dangerous situations. Not greatly used compared with the rivers to the north (Rakaia and Rangitata).

Pack floating: Unused.

Swimming: Some quiet back eddies are used.

Scenic description: Below the dam the river moves off for 4km flowing quickly before the bed widens and becomes braided upon reaching the Hakataramea Bridge. Wide shingle beaches and willows line the river from the Waitaki Dam to the sea and are at their worst below the Hakataramea. Rapids are shallow shingle chutes with swift water and small waves. Below the Hakataramea Bridge small, stubby willows cover the shingle islands and consolidate the shingle although the upstream edge of the islands may be undercut so that the willows fall out onto the water surface. Willows obscure the view considerably. Stopbanks are common as are groynes built at right angles to protect the river banks. Some water, especially along the southern bank, is drawn off into water races.

Scenic value: Moderate.

Recreational value: High.

121.0 RIVERS OF LAKE TEKAPO 711390

The principal river of Lake Tekapo is the Godley River which drains the main divide via the Godley and Maud Glaciers. The Macaulay flows into the Godley and is of sufficient size for boating. Flowing into the lake is the small Cass River and nearby lie the popular fishing Lakes Alexandrina and McGregor which drain into the lake via a small water race. The Tekapo River drains the lake into the Waitaki but is now dammed and its waters flow in a canal to Lake Pukaki.

121.1 GODLEY RIVER 711390

Location: The Godley River begins from a large cirque lake at the terminal face of the Godley and Maud Glaciers. It then flows south in a wide shingle bed to the head of Lake Tekapo.
River confluence location: NZMS1, S90/145253
Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S72 Godley; S79 Mount Cook; S80 Macaulay; S90 Lake Tekapo.
Length: 38km.
Average gradient: 1:166 6m/km.

Recreational use and scenic description: The Godley is rather isolated although it does have privately owned tracks going upstream on the narrow margin of river flats with some sections in the river bed itself. The most use comes from jet boaters who have boated the lower 19km. The river is shallow and terribly braided over gravel. The bed is continually changing and there are dangerous quicksands.

The Godley is interesting scenically but no more so than the upper Rangitata, Rakaia or Tasman which are similar and have better access. There are steep mountains flanking the river, barren and covered in snow grass, often under a layer of snow in winter.

Scenic value: Picturesque.

Recreational value: Low.

121.1.1 MACAULAY RIVER 711399

Location: The Macaulay is a westwards flowing tributary of the Godley River. It joins the Godley a short distance above Lake Tekapo.
River confluence location: NZMS1, S80/160310.
Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S80 Macaulay.
Length: 32km.
Average gradient: 1:230 4.4m/km.

Recreational use and scenic description: The Macaulay flows south from the Two Thumb Range before turning west to the Godley. It is much like the Godley except smaller and not so

steep. It is generally too low to be jet boated and needs near flood conditions to be used. Access is not easy for other boaters and consequently, the similar Tasman River tends to be used in preference.

Scenic value: Picturesque.

Recreational value: Insignificant..

121.1.2 NORTH-EAST GORGE STREAM 711399

The North-East Gorge Stream is a small tributary of the Macaulay. It flows south-west from the Balaclava Saddle on the Two Thumb Range and joins the Macaulay on its left bank. It has been reported as being a fast, narrow, cascading stream canoeable in spring or after rain. As far as is known it has not been canoed and our survey of the area indicates that it would seldom ever be considered as a trip and should be dismissed as having much recreational potential. You would need to be very energetic to portage a canoe or raft upstream to float down.

Scenic value: Impressive.

Recreational value: Insignificant.

121.2 CASS RIVER 711396

Location: The Cass River flows off the Liebig Range south of the Murchison Glacier and flows south below the Hazard Ridge to join Lake Tekapo on its western shore.
River confluence location: NZMS1, S90/130140
Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S79 Mount Cook; S89 Tasman; S90 Lake Tekapo.
Length: 41km.
Average gradient: 1:100 10m/km.

Recreational use and scenic description: The Cass River flows south from the Liebig Range as a wide, braided, shingle bed river and shortly before reaching Lake Tekapo, turns east and flows through a narrow gorge area at the Godley Peaks Station. The gorge is 4km in length but the bed remains in shingle so that there are no rapids except at high flow when there may be a few small pressure waves. Access is a problem, as for all the rivers in this area. At the end of the gorge the river fans out to enter the lake. A small water race leads off to Lake Alexandrina and Lake McGregor. The Cass is too shallow for most forms of boating but may become canoeable with above average flows.

Scenic value: Moderate.

Recreational value: Insignificant.

121.3 TEKAPO RIVER 711390

Location: The original Tekapo River flowed from Lake Tekapo, from its southern shore, south-west to join the Pukaki River shortly before it entered Lake Benmore. Now, however, the bed is dry and the hydro scheme diverts the river to the west to flow into Lake Pukaki.
River confluence location: NZMS1, S109/893610
Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S100 Pukaki; S101 Fairlie; S109 Benmore.
Length: 49km.
Average gradient: 1:141 7.1m/km.

Recreational use and scenic description: The Tekapo River bed is now dry except for a small amount of seepage into the river bed. Fork Stream, previously flowing into the Tekapo River at a point below the dam, is now diverted into the lake. Apart from the unlikely event of a dam failure, the Tekapo is now unable to be used by boaters. Previously, the river had good white water over the first 7km as the flow dropped over boulders, creating pressure waves of 1.5 metres in height. Below this the river spread out and became

braided, although it still flowed at a good speed. The lower river was prone to willow obstructions in the many braided river channels. Apart from the 7km down to Fork Stream confluence the trip was relatively straightforward and easy. The upper section contained good white water up to Grade 3 conditions depending upon water levels. We do not imagine that anyone would wish to boat the Tekapo Canal and we doubt if it is allowed; the water flows at a good speed. This river must, consequently, be considered as unusable for recreation now. The river bed lies in a dry tussock basin.

Scenic value: Moderate.

Recreational value: Insignificant.

121.3.1 FORK STREAM

711393

Location: Fork Stream flows south from the hills west of the Cass River and emptied into the Tekapo River below the dam. It is now included in the Upper Waitaki Hydro Scheme and is diverted into the lake.

River confluence location: NZMS1, S100/075946

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S89 Tasman; S100 Pukaki.

Length: 40km.

Average gradient: 1:105 9.5m/km.

Recreational use and scenic description: Fork Stream is now included in the Upper Waitaki Hydro Scheme and is dry over the lower reaches. The middle reach is included in an area used by the army for manoeuvres and artillery practice and, although not a prohibited area, it is clearly marked as a Dangerous Area. The stream is very small and normally too shallow for any form of recreational use. We should not imagine that the stream offers anything of value worth taking the risk of being shot at. It lies in barren tussock country with some small, stunted willows. When in flood the upper reaches may provide exciting white water for canoeists or lilo floaters.

Scenic value: Uninspiring.

Recreational value: Insignificant.

122.0 RIVERS OF LAKE PUKAKI 711380

The principal river flowing into Lake Pukaki is the Tasman which originates off the Tasman Glacier. Its main tributaries are the Murchison, the Hooker and the Jollie. Of these, the Hooker is the only one that is used to any great degree for recreation. The lake is not used a great deal.

122.1 TASMAN RIVER

Location: The Tasman River drains the terminal face of the Tasman Glacier and is a particularly wide river flowing south into the head of Lake Pukaki.

River confluence location: NZMS1, S100/810990

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S79 Mount Cook; S89 Tasman; S100 Pukaki.

Length: 41km.

Average gradient: 1:280 3.6m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Navigable for 32km or more to almost the face of the glacier. Considered as giving good boating of medium difficulty.

Drift boats, rafts: Not used a great deal, tends to be very shallow in places and not suitable for the deeper craft. No rapids other than ripples over shingle banks. Quicksands make portages difficult.

Canoes/kayaks: The Tasman, although flowing fast, has no big rapids and the river is not used a great deal except by some canoeists who paddle down the Hooker. Access is difficult because

of the width of the river which provides canoeable channels some considerable distance from the road.

Pack floating, swimming: Unused. Extremely cold water and contains glacial silt which can get into your eyes.

Scenic description: The Tasman River is a particularly wide river, being as wide as the full breadth of Lake Pukaki into which it flows. Over the extensive shingle bed the river meanders in numerous shallow channels. The water is very cold and discoloured with glacial silt. A margin of flat grassland and matagouri scrub flanks the river and the steep mountain faces on either side of the valley. Snow-capped peaks dominate the northern vista.

Scenic value: Impressive.

Recreational value: Intermediate.

122.2 HOOKER RIVER

711388

Location: The Hooker River drains the Hooker Glacier which divides the Mount Cook Range from the main divide. A small flow is contributed by the Mueller Glacier. The Hooker meets the Tasman River below the Hermitage at the Ball Hut Road.

River confluence location: NZMS1, S89/813280

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S79 Mount Cook; S89 Tasman.

Length: 18km.

Average gradient: 1:45 22m/km.

RECREATIONAL USE:

Motor launches: Unusable.

Jet boats: With very high flows jet boats may be able to navigate upstream so as to almost reach the bottom swing bridge. Generally, jet boats do not use this river.

Drift boats: Usable by the very experienced from the Mueller confluence. The most difficult section is below the lower swing bridge. To date it has not been used very often.

Rafts: The larger rafts may find the river too tight, especially below the lower swing bridge, then the river shallows out, giving only a short distance of usable water. Not navigable above the Mueller.

Canoes/kayaks: Considered as being one of the best white water trips in the area, although the short distance of rapids restricts its use to day trips with canoeists re-running the river a number of times in one day's recreation.

From the top bridge to the Mueller lies the most difficult water — Grade 4 to 5. Easier water, although still needing a great deal of skill at and below the lower swing bridge — Grade 3. The remainder of the river is suitable for inexperienced canoeists. Camping facilities are excellent.

Pack floating: Unused — far too cold.

Swimming: Unused. The cold silt laden water is not suitable for swimming.

Scenic description: The Hooker is one of the most exciting rivers in the Mackenzie Basin now that the Pukaki River has been left dry. The river lies in barren moraine shingle country between high, rugged, snow-covered mountains. Low cloud and rain are frequent, giving the area a dreary appearance, but with fine weather it is an interesting area.

Vegetation is low and stunted, sub-alpine in character. On the moraine wall above the Hooker Glacier is the Hooker Hut and the track to this hut crosses the river in two places by means of swing bridges. From the Hooker Glacier to the top swing bridge the river runs over coarse shingle and boulders, leaving little room to float a canoe. From a point some 100 metres above the top swing bridge and down to the confluence with the Mueller Glacier the Hooker squeezes through a narrow rocky channel and over a succession of bouldery drops. These cascades offer excellent canoeing water for very experienced canoeists, but may be too steep and narrow for other craft. The rock walls

give way to boulders and coarse moraine shingle. The gradient eases and the river is placid until a point some 50 metres above the lower swing bridge where it flows down a steep incline and cascades between high shingle banks and boulders. This section gradually eases, the boulders become smaller so that some 200 metres below the swing bridge the river is again placid with some small pressure waves and remains so down to the Tasman.

Scenic value: Impressive.
Recreational value: High.

122.3 MURCHISON RIVER 711389

Location: The Murchison River originates on the Murchison Glacier (east of the Tasman Glacier) and flows westwards as a braided, shingle bed stream to the Tasman Glacier near its terminal face and the origin of the Tasman River.

River confluence location: NZMS1, S79/846344

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S79 Mount Cook.

Length: 17km.

Average gradient: 1:80 12m/km.

Recreational use and scenic description: The Murchison River is inaccessible as the Tasman Glacier runs past the lower end of the Murchison Valley. To get into the valley it is necessary to cross the Tasman Glacier and its crevasses. Consequently, canoeists, rafters and other river recreationalists tend to use the Hooker and Tasman Rivers in preference. From the Murchison Glacier face down to the Tasman River the river is shallow and braided and if it were accessible it would only be usable by canoes and very small craft. Otherwise, the Murchison River is similar to the Upper Tasman.

Scenic value: Moderate.
Recreational value: Insignificant.

122.4 JOLLIE RIVER 711385

Little is known of the Jollie River as regards its use for recreation apart from the fact that it seldom carries sufficient water for boating or canoeing except when flowing very high. There is a narrow gorge area shortly before it joins the Tasman River which provides very rough and steep rapids. Access is from the left bank of the Tasman River and Lake Pukaki, some distance from the access points to other rivers in the area and consequently, the river is seldom visited.

Scenic value: Moderate.
Recreational value: Insignificant.

122.5 PUKAKI RIVER 711380

Location: The original Pukaki River flowed from the lower end of Lake Pukaki south and joined with the Tekapo immediately before entering Lake Benmore. The Pukaki was famed for its excellent white water rapids and was the mecca for all experienced canoeists. It is now a dry river bed.

River confluence location: NZMS1, S109/873575

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S100 Pukaki; S109 Benmore.

Length: 23km.

Average gradient: 1:177 5.6m/km.

Recreational use and scenic description: The Pukaki was once known as the best wild river in the Canterbury/North Otago region as in the first 5km or so it flowed over large boulders creating steep drops and foaming stoppers reaching Grade 4 in difficulty. The lake outlet has now been dammed and the water flows down to the Ohau A power station. The Pukaki river bed is retained as a floodway and emergency spillway in the unlikely event of a problem developing in the Pukaki or Ohau Canal

which would necessitate their diversion. Other than this, the only flows in the bed will be seepage, leaving the river quite unusable for any form of recreation. Originally the Pukaki flowed from the lake at a fantastic rate and surged down the river bed, creating dynamic stopper waves. The river then gradually decreased in violence as the gradient decreased and the width of the bed increased.

Scenic value: Uninspiring.
Recreational value: Insignificant.

123.0 RIVERS OF LAKE OHAU 711370

The main rivers flowing into Lake Ohau are the Hopkins and Dobson Rivers which join a short distance above the lake and flow together into the northern end of Lake Ohau. The small Temple Stream flows from the hills to the west of the lower Hopkins and this little river provides some of the better canoeing and liloing in the Ohau catchment, although it requires above normal flows to give its best. The Ohau River drains the lake into Lake Benmore.

123.1 HOPKINS RIVER 711370

Location: The Hopkins River flows off the main divide and the Richardson Glacier and through a narrow, rough valley to meet a wide shingle flat before entering the head of Lake Ohau.

River confluence location: NZMS1, S99/565766

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S88 Landsborough; S99 Ohau.

Length: 49km.

Average gradient: 1:500 2m:km.

Recreational use and scenic description: The Hopkins River has some access in the form of a road upstream to a little beyond the Temple Stream confluence, but the river below there to the lake is braided, shallow, and rather uninteresting for canoeists and rafters. To take advantage of the upper river a portage is required. The river can be jet boated to the Huxley and at high flow 17km above the Huxley confluence.

The river has a number of small rapids. Most have plenty of room for jet boats to get through. They are shallow and fast flowing with small pressure waves. The lower 45km is braided, becoming easier, with the lower 10km uninteresting and similar to the Tasman River which is used to a greater extent by canoeists and rafters.

Scenic value: Moderate.
Recreational value: Low.

123.2 DOBSON RIVER 711378

Location: The Dobson River flows from a valley between the main divide, Mueller Glacier and Ben Ohau Range. It joins the Hopkins a short distance above Lake Ohau.

River confluence location: NZMS1, S99/582880

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S88 Landsborough; S89 Tasman; S99 Ohau.

Length: 42km.

Average gradient: 1:200 5m:km.

Recreational use and scenic description: The valley of the Dobson is not as wide as that of the Hopkins and the river is less braided. However, its smaller flow creates rapids much the same as in the Hopkins — shallow over coarse gravel with some small pressure waves. Access is by a four wheel track along the flats beside the river bed.

Canoeists and rafters, who would need to portage their craft upstream, find that the water is little different from the Tasman, Upper Rakaia or Rangitata Rivers whilst access is more awkward. Jet boats navigate the lower 17km in good conditions or 30km with above normal flows. The river valley is flanked by

rugged and somewhat barren mountains.

Scenic value: Moderate.
Recreational value: Low.

123.3 TEMPLE STREAM 711377

Location: Temple Stream flows from the hills west of the road and above the Huxley Gorge Station on the right bank of the Hopkins River.

River confluence location: NZMS1, S99/546800

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S99 Ohau.

Length: 20km (South Branch).
Average gradient: 1:40 25m/km.

Recreational use and scenic description: Above the Temple Forest picnic ground the river has two tributaries that join to form the main stream. The South Branch is the larger of the two. With above normal flows Temple Stream provides a fast, rough trip for canoeists or lilo drifters. The river flows down a rough rock channel. Conditions will alter with the water flow levels and rapids of Grade 3 might be expected with high flows. The river is small and shallow, flanked by rock and beech forest. It offers a short but exciting trip for skilled canoeists and tyre rafters or liloists. It is far too small for larger craft.

Scenic value: Picturesque.
Recreational value: Low.

123.4 OHAU RIVER 711370

Location: The Ohau River flows south from the lower end of Lake Ohau and joins the Benmore hydro lake near the confluence of the Pukaki and Tekapo Rivers.

River confluence location: NZMS1, S109/860571

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S108 Diadem; S109 Benmore.

Length: 30km.
Average gradient: 1:175 5.7m/km.

Recreational use and scenic description: The Ohau River is still flowing at the time of writing, but will soon be a dry river bed like the Pukaki and Tekapo. At the present time it offers an excellent trip for canoeists, rafters and jet boaters of medium skill. With high flow the river gives a roller coaster ride over large pressure waves between Lake Ohau and the main road bridge, flattening out to be a typical Canterbury braided river below the main road as it flows onto the flat country on the shores of Lake Benmore. The river will be flooded at a point just below the main road, forming a new lake, Ruataniwha, and then the flow will be confined to a channel down to Lake Benmore.

Consequently, the best rapids will lie beneath the lake and the remainder of the river will be a dry bed. 6km below Lake Ohau lies the largest rapid — named the 'Big Whirlie' which has been the scene of a number of most enjoyable afternoons' paddling and swimming.

The Ohau area is scenically of low interest — tussock country, dusty and stony. The river banks are of shingle with some willows.

Scenic value: Uninspiring.
Recreational value: High (at present). Insignificant on completion of the scheme.

123.5 TWIZEL RIVER 711371

The Twizel River is a small tributary of the Ohau River, normally of insufficient size for boating or canoeing. A number of small, almost dry creeks converge at Twizel to form the river which flows through willows over a shallow shingle bed to the Ohau River. It is too small for recreation.

Scenic value: Moderate.
Recreational value: Insignificant.

124.0 AHURIRI RIVER 711310

Location: The Ahuriri River flows from the Barrier Range, west of Lake Ohau, and runs south over a wide shingle bed valley before running through a short gorge and swinging towards the east to Omarama. It enters the West Arm of Lake Benmore as a very braided and shallow river. Because it is the only major river of the Upper Waitaki catchment left in a free flowing state, it receives a great deal of recreational use. There are suggestions that this river too, will be dammed for hydro electric power. Such an event would be a great pity.

River confluence location: NZMS1, S177/744374

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S99 Ohau; S108 Diadem; S109 Benmore; S116 Lindis; S117 Omarama.

Length: 92km.
Average gradient: 1:145 6.9m/km.

RECREATIONAL USE:

Motor launches: Too shallow at the river mouth to allow craft to navigate upstream.

Jet boats: Navigable to the Ahuriri Drop a few kilometres above the Lindis turnoff. The upper reaches can be boated in high flow by launching at Birchwood Station giving 25km in good conditions.

Drift boats, rafts: Of sufficient size for rafting except in late summer. There are no big rapids except for the Ahuriri Drop and the short, rocky gorge in that vicinity. Not used to any great extent. The river may be rafted more once the Ohau becomes dry.

Canoes/kayaks: An extremely popular river, usually used in conjunction with the Ohau giving a two-day series of trips. Will now be used in conjunction with the Hooker River. Good water for inexperienced canoeists with the area around the Ahuriri giving good training water for harder river conditions. The river is also used for slalom competition canoeing and is of particular value for this reason.

Pack floating: Unused although the short gorge and river from the derelict bridge down to the Ahuriri Drop offers an excellent lilo trip.

Swimming: Used to some extent, especially in the short gorge area above the Ahuriri Drop where there are a number of large quiet pools of deep water. Most of the river is a little shallow for good swimming. The area around Omarama is used a great deal for swimming.

Scenic description: The section of river through the short gorge in the vicinity of the Ahuriri Drop (near the water measuring device) is the most used section of the river by canoeists and other groups who like white water. The remainder of the river is preferred by jet boaters so that all sections of this river offer a usable recreational facility. The river is not lake-fed and tends to become very low in summer, but it can rise quickly giving some high quality white water for canoeists and rafters. Access is good via the road at Birchwood Station.

The river tends to flow in a wide valley, in a single channel over a shingle bed giving shallow, easy rapids, and it meanders excessively near Ben Avon Station (Birch Creek). A short shingle section then leads down to rock outcrops, beneath a derelict bridge where the Dunedin Canoe Club hold slalom competitions and where the South Island National Championships were held in 1978.

The rock outcrops are followed by another open shingle section and then rock banks confine the river to a low gorge. The noted Ahuriri Drop — a small waterfall, is located a little upstream of the water flow measuring device. This is a favourite canoe training area which will be of great importance with the flooding of the Clutha's Cromwell Gap. The river then opens

onto wide shingle flats down to Lake Benmore and becomes braided. Willows are prominent from the Ahuriri Drop downstream, while above that point the main vegetation is matagouri scrub and grassland.

Scenic value: Picturesque.

Recreational value: High.

124.1 OMARAMA RIVER 711314

The Omarama River is a small creek flowing through Omarama to the Ahuriri River. At Omarama the river offers a pleasant pool for splashing about, although too shallow for swimming. The river is too small for other forms of recreation except in high flood when boaters are found on the larger Ahuriri or Otematata Rivers.

Scenic value: Uninspiring.

Recreational value: Insignificant.

125.0 MINOR TRIBUTARIES OF THE WAITAKI

Between Lake Benmore and the river mouth, the Waitaki has a number of small tributaries, the largest being the Hakataramea River. All these streams become very shallow in late summer, seldom boatable except after heavy rain and then only in spring do they provide a worthwhile trip. Most are excellent fishing rivers.

125.1 OTAMATAPAIO RIVER 711311

The Otamatapaio River flows north-east into Lake Benmore at Sailor's Cutting from the Hawkdun Range. It is a small, shingle bed stream which divides into a number of small creeks before crossing the main road and entering the lake. It is nearly always too small for any boating except in high flood. The area is rugged and without a great deal of vegetation cover.

Scenic value: Uninspiring.

Recreational value: Insignificant.

125.2 OTEMATATA RIVER 711300

Location: The Otematata River flows north from the Round Hills to Otematata below the Benmore Dam.

River confluence location: NZMS1, S117/875256

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S117 Omarama; S126 Mt Ida.

Length: 51km (includes Guffies Creek).

Average gradient: 1:125 8m/km.

Recreational use and scenic description: Normally this river carries insufficient flow for boating of any variety. It flows over a shingle bed between small willows as it meets the main road. However, upstream it flows through a short, bush-clad gorge which, with very high flows, becomes of canoeable size once or twice a year. We doubt that it would ever be usable by larger craft and certainly never by jet boats. Access to the upper reaches is by means of a privately-owned, rough vehicle track from Otematata. The canoeing is said to be fast and bouldery of up to Grade 3 conditions dependent on water levels. The landscape is akin to the Manuherikia River's Ophir Gorge — tussock grassland with scrub and some stunted bush.

Scenic value: Moderate.

Recreational value: Low.

125.3 HAKATARAMEA RIVER 711140

Location: The Hakataramea is a left bank tributary of the Waitaki River, flowing from the Kirkliston and Hunter Ranges

to join the Waitaki River at Kurow.

River confluence location: NZMS1, S118/122104

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S110 Cave; S118 Hakataramea.

Length: 69km.

Average gradient: 1:166 6m/km.

Recreational use and scenic description: The Hakataramea River is of major importance for fishing and because of this there is a tendency for most boaters to leave it alone so that the spawning grounds are not disturbed. It does not have any rapids of note and so is no great loss to recreationalists. The Hakataramea River Valley Road follows the river so access is not a problem. The river is of boatable size from the Meyers Pass Road Bridge for most of the year except in summer. Here, the river flows over a wide shingle bed stream with shingle beaches. The river maintains one or two main channels and is shallow with no banks to confine the river. Water weeds and a green algae slime are common. Willows become prominent in the lower reaches and offer some shade for picnics but the landscape is rather flat and empty of trees in the upper river area.

Scenic value: Uninspiring.

Recreational value: Low.

125.4 OTIAKE RIVER 711100 OTEKAIKE RIVER 711080

The Otiake and Otekaieke Rivers flow northwards onto the right bank of the Waitaki between Kurow and Duntroon. Both are very small creeks flowing over wide shingle beds, almost dry in summer and seldom carrying sufficient flow for canoeing or boating except with high floods. Broom and willows along the banks and in the river bed obstruct navigation even when flooding. There are no rapids.

Scenic value: Uninspiring.

Recreational value: Insignificant.

125.5 MAEREWHENUA RIVER 711040

Location: The Maerewhenua River (often spelt Maruwenua) flows north from the Kakanui Mountains in the vicinity of Dansey Pass. The river and its tributaries (the North Branch, South Branch and Thompsons Creek) all begin as small creeks flowing down narrow gorges in the ranges.

River confluence location: NZMS1, S127/307958

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S127 Duntroon.

Length: 34km (South Branch).

Average gradient: 1:105 9.6m/km.

Recreational use and scenic description: The Dansey' Pass Road follows the lower Maerewhenua River and provides reasonable access although much of the river lies in a shingle bed between rugged bluffs, often the water only barely covering the shingle bed leaving narrow beaches of shingle between the water and the rock bluffs. The river flattens out at the motor camp where it flows out of the hills and onto flat land before reaching the Waitaki. The upper valley lies in tussock and scrub country; in the lower river willows and broom are prominent. From the point where the Dansey Pass Road meets the Livingstone — Duntroon Road the river spreads out onto a wide shingle bed and becomes braided into two main channels with willows, gorse and broom along the banks. The river needs above normal flows to become boatable or canoeable, particularly along the lower reaches which are wide, shallow and meandering. With high flow the upper gorge can create rapids of up to Grade 3 difficulty. The river is not jet boated.

Scenic value: Moderate.

Recreational value: Low.

126.0 **WAIHAO RIVER** 709000

Location: The Waihao River flows from the Hunters Hills to enter the sea north of the Waitaki River mouth. It has two main branches, the North and South Branches, which converge at Waihao Forks.

River mouth location: NZMS1, S128/716059

Maps: NZMS18, Sheet 23 Oamaru; NZMS1, Sheet S118 Hakataramea; S127 Duntroon; S128 Waitaki.

Length: 50km (South Branch).

Average gradient: 1:350 2.9m/km.

RECREATIONAL USE:

Motor launches: Generally little used as it is shallow, even in the tidal river mouth area.

Jet boats: Can be boated in a fresh, about 7km upstream into both the North and South Branches, and down to the sea. Normally boats launch at the forks rather than lower in the river. Considered to give average boating and not noted as being anything special.

Drift boats, rafts: Not used — river tends to be flat and sluggish with some snags. No rapids.

Canoes/kayaks: Not used to any great extent. Willows are a major problem. The current is sluggish and the scenery is average. Canoeists have seldom taken the river seriously.

Pack floating: Unused.

Swimming: Some noted picnic spots and swimming holes which get used by the local inhabitants.

Scenic description: The Waihao is a river considered nothing special, although it is used for no other reason than because it is there. The North Branch is the larger of the two main tributaries, but it may be almost dry in summer. Its boatable length depends very much upon water levels but access to the river from Hayes Back Road is not always possible. The North Branch flows over a stony bed through a valley covered in broom and gorse. Some willows overhang the river channel but do not normally impede navigation except in the very upper reaches. The South Branch has better access and is said to have been boated from Waihaorunga. However, from this point the river is little more than a swampy creek with willows blocking the bed in a number of places. Lower, the willows are not so thick and allow small craft to get through. There is open water below the Waihaorunga Road Bridge where the valley is flanked by clay bluffs. The river bed is of shingle and, like the North Branch, does not have any rapids other than a few riffles. The river is boatable for most of the year over the gravel bed between willows and scrub (mainly broom).

Scenic value: Uninspiring.

Recreational value: Intermediate.

127.0 **OTAIO RIVER** 703000
MAKIKIHI RIVER 706000
HOOK RIVER 707000

The Otaio, Makikihi and Hook Rivers are small streams flowing east to the coast north of the Waihao River mouth. The Hook is the southern-most of the three rivers and is also the largest. It is dry in summer but may reach boatable size after rain, especially in spring and winter. However, most recreationalists will prefer to use the Waihao or part of the Opihi River system which is larger and carries more water. The Hook is flanked by trees but the river bed itself is clear of most obstructions. The lower reaches run into the swampy Wainono Lagoon before entering the sea.

The Makikihi River, north of the Hook, drains the Hunters Hills and, like the Hook, is dry in summer. Its bed wanders about considerably. It seldom reaches boatable size and is sluggish.

The Otaio is very small, flowing over a shallow shingle bed and between grassy banks and willows. In summer it is dry and never gets particularly deep. It is seldom used for boating as the Opihi is preferred.

Scenic value: Moderate.

Recreational value: Insignificant.

SOUTH CANTERBURY

128.0	Pareora River	103	134.1	Ashburton Upper Gorge	107
129.0	Saltwater Creek	103	134.2	Upper Ashburton River	107
130.0	Opihi River System	103	134.3	Lower Ashburton River	107
130.1	Opihi River	103	134.4	Ashburton River —	
130.2	Hae Hae Te Moana (Temuka)			North Branch	107
	River	103	134.5	Tributaries of the Ashburton	108
130.2.1	Waihi River	103	135.0	Rakaia River	108
130.2.2	Kakahu River	104	135.1	Upper Rakaia River	108
130.3	Opuha River	104	135.1.1	Mathias River	108
130.4	Tengawai River	104	135.1.2	Wilberforce River	108
131.0	Orari River	104	135.1.3	Harper River	109
131.1	Orari Gorge	104	135.1.4	Lake Stream	109
131.2	Lower Orari River	104	135.1.5	Acheron River	109
132.0	Rangitata River	104	135.2	Rakaia Gorge	109
132.1	Upper Rangitata River Valley	105	135.3	Lower Rakaia River	110
132.2	Rangitata Gorge	105	136.0	Selwyn River	110
132.3	Middle Rangitata River	105	136.1	Hororata River	110
132.4	Lower Rangitata River	106	137.0	Halswell River	111
132.5	Rangitata Diversion Water Race ...	106	138.0	Streams of Banks Peninsula	111
133.0	Hinds River	106	139.0	Heathcote River	111
134.0	Ashburton River	106			

128.0 PAREORA RIVER 701000

Location: The Pareora River rises in the Hunters Hills west of Cave, and flows east in a shallow shingle bed before turning south-east through a short gorge and onto a shallow, scrub-covered bed and thence to the sea at Pareora.

River mouth location: NZMS1, S119/752391

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S110 Cave; S111 Timaru; S119 Waimate.

Length: 52km.

Average gradient: Slight.

Recreational use and scenic description: This river is very small, being almost dry in late summer. The gorge has a dam and the water is extracted into a water race and pipes. A good deal of water spills over in all but very dry weather, but the river is almost always too low for boating of any kind. The gorge below the confluence with the South Branch is said to be of sufficient size for canoeing but only for a very short distance. Broom, gorse and other scrub in the bed make for awkward boating conditions even when flooded. Willows are common and would impede navigation. The river is not used.

Scenic value: Moderate.

Recreational value: Insignificant.

129.0 SALTWATER CREEK 699010

Saltwater Creek is the tidal arm of a small creek south of Timaru. The creek is flat and flows up or down depending upon the tide. The creek can be used by canoes and other small craft from the Coonor Road to the river mouth. Willows and weeds grow along the river banks. Not a particularly pleasant place to boat or picnic as the mud along the banks is thick and sticky. Most of the creek's use is from the younger canoeists.

Scenic value: Uninspiring.

Recreational value: Low.

130.0 THE OPIHI RIVER SYSTEM 696000

The Opihi River drains the Two Thumb Range and flows through Burke Pass, Fairlie and Pleasant Point to enter the sea a little south of Temuka. The Opihi has a number of tributaries. On the left bank, joining the Opihi at Temuka is the Hae Hae Te Moana River having a number of small feeders of which the largest are the Waihi River and the Kakahu River. Joining the Opihi at Pleasant Point is the Opuha River, and on the right bank is the Tengawai River. All these rivers are very small, and do not carry a great volume of water, being almost dry in summer. The lower reaches carry a lot of their flow in the shingle bed, leaving only a line of shallow pools on the surface during summer.

130.1 OPIHI RIVER 696000

Location: The Opihi flows north from Burke Pass and then turns south-east after flowing north of the Albury Range. It enters the sea near Temuka.

River mouth location: NZMS1, S111/870655

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S101 Fairlie; S102 Geraldine; S111 Timaru.

Length: 82km.

Average gradient: Slight.

Recreational use and scenic description: The Opihi River begins in a shallow basin at Burke Pass and then flows in a large loop towards Fairlie. At the northern extremity of the loop the river bed is shingle and very wide so that with high flow, the water rushes down the bed and is always shallow. Grass often grows in the river bed itself down to Fairlie and willows line the banks — open farmland lies beyond the willows. There are some

shallow pools that are used for swimming but in summer there is little flow. Below Fairlie the river is confined to a narrow bed for some 10km. This Opihi Gorge seldom contains sufficient flow for canoeing or rafting and we know of no attempt to float down the gorge.

At the foot of the gorge (Rockwood Bridge) the river bed opens up again to gravel as found in the upper reaches, and runs as a small stream meandering over shingle for the rest of its length to the sea. The river becomes braided and even shallower in the lower reaches below Pleasant Point. In places, such as at Hanging Rock (a very popular swimming and picnic point), the river narrows down to a single channel and there are deep swimming pools to be found. Large willows overhanging a wide shingle bed are prominent features. Shingle extraction sites are common. The river is canoed from the Temuka confluence downstream to the Milford Lagoon. The river cannot be jet boated except in high flood. Swimming is the predominant recreational use.

Scenic value: Moderate.

Recreational value: Low.

130.2 HAE HAE TE MOANA RIVER (TEMUKA RIVER) 696020

Location: The Hae Hae Te Moana River flows south from the Four Peaks Range and a little to the west of Geraldine. After joining the Waihi River, it is known as the Temuka River and then joins the Opihi.

River confluence location: NZMS1, S111/835680

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S91 Mount Peel; S102 Geraldine; S111 Timaru.

Length: 49km.

Average gradient: Slight.

Recreational use and scenic description: The lower Temuka River is often canoed from the Manse Bridge at Temuka and down to the Opihi River mouth (Milford Lagoon). It is the river most often used by the Timaru Canoe Club. This section is also a very popular picnic area, particularly between the main road and railway bridges.

Swimming is also a popular activity here. The Upper Hae Hae Te Moana River is much smaller than the Upper Opihi but similar, with the river bed not as wide but still flanked with tall willows and some poplars. There are no rapids even when the river is flooding, and it is a popular trip for novice canoeists and youngsters on tyres who float the river.

Scenic value: Picturesque.

Recreational value: Intermediate.

130.2.1 WAIHI RIVER 696025

Location: The Waihi River flows south through Geraldine to junction with the Hae Hae Te Moana above Temuka.

River confluence location: NZMS1, S102/794726

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S91 Mount Peel; S102 Geraldine.

Length: 44km.

Average gradient: 1:230 4.4m/km.

Recreational use and scenic description: The Waihi River is very small and quiet flowing over a shingle bed lined with grassy banks and willows. Unlike the Opihi and Hae Hae Te Moana, the Waihi flows between narrow, low banks without shingle beaches. With high flow the depth of the water increases to provide canoeable water from Geraldine to the Temuka confluence. There are no rapids and the only obstacles are willows. Below Geraldine the river is confined between stopbanks. There are a few swimming pools although most swimmers prefer the Temuka and Opihi.

Scenic value: Picturesque.

Recreational value: Low.

130.2.2 KAKAHU RIVER 696026

The Kakahu River is a small tributary of the Hae Hae Te Moana. It flows through Hilton and joins the Hae Hae Te Moana on its right bank. It is generally too small and shallow for recreational use and tends to be choked with willows over most of its length. Some pools may be found for splashing about in but the water tends to be discoloured with drainage from the farming area.

Scenic value: Uninspiring.
Recreational value: Insignificant.

130.3 OPUHA RIVER 696080

Location: The Opuha River flows south-east of Fairlie and joins the Opihi some distance upstream of Pleasant Point.
River confluence location: NZMS1, S102/556785
Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S90 Lake Tekapo; S101 Fairlie; S102 Geraldine.
Length: 51km.
Average gradient: 1:105 9.6m/km.

Recreational use and scenic description: The Opuha River is much the same as the Opihi — a wide shingle bed flanked by willows and with a small stream of water meandering across the bed, often split into two main streams. The river is not used above the Skipton Bridge (S.H. 79). It is small and shallow and would only be used for canoeing or boating with high water or flooding and even then the willows would make the river hazardous. There are some shallow pools which are used by children for swimming and low rock dams are often constructed to make the pools larger. The lower Opihi and Temuka rivers are used in preference.

Scenic value: Moderate.
Recreational value: Insignificant.

130.4 TENGAWAI RIVER 696050

Location: The Tengawai River drains the land south of Burke Pass and flows east through Albury and Cave to join the Opihi on its right bank at Pleasant Point.
River confluence location: NZMS1, S111/680698
Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S101 Fairlie; S110 Cave; S111 Timaru.
Length: 60km (includes Hayter Stream).
Average gradient: Slight.

Recreational use and scenic description: The Tengawai River does not carry much water except after heavy rain and is almost dry in summer. The river bed is wide with grass and weeds growing on the shingle islands. Willows line the river banks and often creep out onto the bed. In a number of places small gravel dams have been made to build up water for swimming holes. The river seldom obtains sufficient depth for boating, and when it does, is not usable above Cave. The only use the river has is for swimming and then only by youngsters.

Scenic value: Moderate.
Recreational value: Insignificant.

131.0 ORARI RIVER 695000

The Orari River is a small river south of the Rangitata River Valley, draining the Hewson Range and flowing through a lengthy gorge and out onto the south Canterbury Plains north of Temuka. This river can become very low in summer and is not boated to any great extent. The survey considers this river in two sections.

131.1 ORARI GORGE

Location: The Orari River has its origin in a shallow valley south of the Hewson Range and is boxed in by a number of low ranges. The river flows south-east through these ranges in a shallow gorge to the south Canterbury Plains near Coopers Creek.

Section end location: NZMS1, S91/734070
Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S90 Lake Tekapo; S91 Mount Peel.
Length: 40km.
Average gradient: 1:125 8m/km.

Recreational use and scenic description: The Upper Orari River is little more than a shallow, shingle creek flowing north-east through the hills where it meets the Phantom and Hewson Rivers and then turns south-east into the Orari Gorge in open tussock country, the gorge walls being of rock but not high. A road to Lochaber Station from Fairlie reaches the confluence of these streams and provides for those wishing to float down the gorge. The gorge begins with a wide shingle bed for 4km as the hills gradually close in, then, just below where Mount Peel Creek flows into the river, the gorge proper begins. The river bed is predominantly shingle, the gorge walls never more than 15 metres in height and the hills then gently slope upwards, covered in tussock and light scrub. Scrub becomes thicker lower in the gorge. The gorge is regularly canoed and is considered to be an easy trip suitable for inexperienced boaters although the river needs to be flowing at spring or winter levels to give a satisfactory trip. With high flows it could be rafted or drift boated but not jet boated.

Scenic value: Picturesque.
Recreational value: Intermediate.

131.2 LOWER ORARI RIVER

Location: From the lower end of the Orari Gorge the river flows south-east over the south Canterbury Plains and enters the sea north of Temuka.
River mouth location: NZMS1, S102/920703
Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S91 Mount Peel; S102 Geraldine.
Length: 41km.
Average gradient: Slight.

Recreational use and scenic description: The Orari River below the gorge should not be considered as offering a feasible recreational trip except with very high flows, and then most boaters will prefer the larger and nearby Rangitata River. The river is small and braided, very shallow between weedy banks of broom and willows. In places groynes of rock have been built out into the stream to help prevent the water channel flowing over the banks. Metal extraction plants operate in a number of places and may alter the stream bed from time to time. By the time the river reaches the Victoria Bridge much of it runs through the river bed shingle and there will be insufficient depth of water on the surface for boating. There are some swimming holes.

Scenic value: Uninspiring.
Recreational value: Insignificant.

132.0 RANGITATA RIVER 693000

The Rangitata River begins in the Southern Alps on the main divide in two main streams, the Clyde River and the Havelock River. These two rivers join at the foot of the Cloudy Peak Range and flow as one stream across a wide, braided river flat where the celebrated sheep station of Mesopotamia is found (Samuel Butler's 'Erewhon'). The river is then confined to the wild Rangitata Gorge before flowing out onto the Canterbury Plains. At the foot of the gorge, water is extracted for power

and irrigation purposes; the water race leads off to the east to eventually empty into the Rakaia River. The Rangitata is a large river and provides fast and exciting water, certainly the only accessible Grade 4 white water left on the east coast and, as it lies within a day's return trip from Christchurch, is much used. The river and its tributaries are considered in four sections here.

132.1 UPPER RANGITATA RIVER VALLEY

693171
693170
693180

Location: The Lawrence, Clyde and Havelock Rivers flow off the main divide and join to form the Rangitata River, an extremely wide, braided shingle river that flows south-east before tumbling down a short, narrow gorge.

Section end location: NZMS1, S81/720320

Maps: NZMS18, Sheet 17 Hokitika; Sheet 20 Mount Cook; NZMS1, Sheet S72 Godley; S80 Macaulay; S81 Mount Somers.

Length: 67km (includes Clyde and Frances Rivers).

Average gradient: 1:190 5.3m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Navigable for 40km above the gorge to the junction of the Clyde and Havelock Rivers by launching on the southern bank opposite the Mt Harper Ice Skating Rink. The river is flat and without rapids but very shallow and terribly braided.

Drift boats, rafts: Not used to any great degree mainly because of the shallow water and lack of rapids. The only use is the short distance from the launching area down to the gorge so that rafters can run the gorge.

Canoes/kayaks: Not used a great deal except by those canoeists intent on running the gorge. The upper river is braided in a fashion similar to the upper and lower Rakaia River which has easier access.

Pack floating: Unused. Too shallow.

Swimming: Unused. Dangerous quicksands abound and the river is very shallow, silt laden and cold.

Scenic description: The Havelock River, the Clyde River, and its tributary, the Lawrence River, are all wide, shingle rivers containing glacial deposits and lie at the foot of eroded and steep mountain ranges. Fast flowing, water is to be found in these rivers but they remain shallow and without rapids. The coarse shingle bed is continually changing and there are extensive areas of quicksands that can be dangerous. In the upper reaches of these rivers they flow off glaciers and down narrow bouldery channels to the valley floor. But the rivers are too steep and shallow for use.

From the confluence of the Clyde and Havelock Rivers the river flows out onto the very wide Rangitata Valley in four or five main channels that are braided and shallow. The smaller Potts River, Bush Stream and Forest Creek add to the flow but do not significantly alter it. The vegetation in the area is predominantly tussock grassland with some matagouri and briar scrub.

Scenic value: Picturesque.

Recreational value: Intermediate.

132.2 RANGITATA GORGE

Location: Between the Upper Rangitata Valley and the Canterbury Plains the river tumbles down a narrow ravine known as the Rangitata Gorge.

Section end location: NZMS1, S91/768283

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S81 Mount Somers; S91 Mount Peel.

Length: 6km.

Average gradient: 1:150 6.7m/km.

RECREATIONAL USE:

Motor launches: Too boisterous and shallow in the rapids.

Jet boats: Navigable some 3km upstream into the gorge before being stopped by a waterfall which, even in high flow, is too steep for jet boats. Very rough water requiring very skilled boaters. Not visited often.

Drift boats: Seldom used as the steep drops and large stopper waves cannot be run by the small 2.5 metre dinghies usually used as drift boats in this country. The larger dory type used overseas could run the gorge but as yet, these craft are not seen on New Zealand rivers.

Rafts: Ideal water, very boisterous and requires skilled rafters. Next to the Rangitikei River, the only really accessible, high grade, skilled water in the country, although the Buller would come close to equalling this section.

Canoes/kayaks: Very fast, rugged water of Grade 4 to 5 needing extremely skilled canoeists. This gorge is often seen as a goal for a South Island canoeist's career. Now that the Cromwell Gap on the Clutha is to be flooded, this section of water has assumed a greater importance.

Pack floating, swimming: Too boisterous.

Scenic description: There are a number of fast shingle chutes providing Grade 3 water before the first waterfall or rapid in the gorge. Centred in the first rapid is a large standing wave, called a 'haystack' by canoeists and rafters and some skill is needed to get through this wave. Large boulders lie on either side of the gorge at this rapid, then there is a 100 metre section of white water between solid rock walls. The hills beyond the gorge are scrub-covered — mainly matagouri, which gives them a deep green colour in contrast to the browner tussock further upstream. There are a number of difficult, boisterous rapids before the second and third short waterfalls are reached and then the river gradually gets easier for the lower 3km.

This gorge provides some of the wildest boatable white water in the country and of sufficient length to offer a trip in itself.

Scenic value: Impressive.

Recreational value: High.

132.3 MIDDLE RANGITATA RIVER

Location: This section of the Rangitata River which extends from the Klondyke Irrigation Intake down to Peel Forest is the most used section of the river in terms of number of people or hours spent on it, and as such, is a particularly valued section of river.

Section end location: NZMS1, S91/800130

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S91 Mount Peel.

Length: 19km.

Average gradient: 1:210 4.7m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Considered to be a rough, fast and demanding section of water that is best tackled only by experienced boaters although the section below this point is easier so that the less experienced boaters can boat upstream until reaching the limit of their skill. Because of this, this river is a valuable resource for boaters who desire to improve their driving skills. A popular trip.

Drift boats, rafts: An ideal trip although not used a great deal. The river begins with some boisterous water and gets steadily easier. Able to be run by the less experienced but still has enough good rapids for experienced rafters.

Canoes/kayaks: Steep rocky rapids easing to fast shingle chutes and shallows. Considered excellent for those canoeists who have had at least a little experience although novices have been known to run the river with one or two capsizes. The river generally has quiet pools below most of the more difficult rapids and rescues are straightforward except when flooded. A popular trip for the full range of canoeists, from novice to ex-

pert. The upper section contains an international slalom course.

Pack floating: Usable although the water tends to be cold and is often silt-laden. The rapids below the intake (Slalom Rapids) are very popular floating waters.

Swimming: Not often swum in intentionally although swimming is not unknown. The best pools are in the lower river, from the Peel Forest Camping Ground downstream.

Scenic description: At the water intake for the irrigation system a rock weir was built across the river. It is composed of river bed stones. The weir appears to be a natural feature and is easily run by canoeists and rafters, although jet boats must launch above it for boating into the gorge. Generally the first 2km below the weir are too shallow for jet boats. There are a number of steep, bouldery rapids below the weir and it was here that the British Commonwealth Invitation Slalom Canoe Competitions were held in conjunction with the Commonwealth Games in 1974. The course is one of the best in the country. The gorge has, by this time, opened out into a series of river terraces covered in grass and tussock. High clay bluffs line the river downstream and, apart from a few pine trees, the dominant vegetation is grass with broom along the banks. It is not until reaching Peel Forest that willows become apparent. The rapids in the lower river consist of fast, straight runs down shingle slopes with a number of small standing waves to be run.

Scenic value: Picturesque.

Recreational value: Exceptional.

132.4 LOWER RANGITATA RIVER

Location: From Peel Forest the Rangitata River continues to flow south-east to the sea, becoming progressively more braided and covered in broom, willows and scrub.

River mouth location: NZMS1, S103/004768

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S91 Mount Peel; S102 Geraldine; S103 Hinds.

Length: 44km.

Average gradient: 1:190 5.3m/km.

RECREATIONAL USE:

Motor launches: Too shallow. Unused.

Jet boats: Excellent boating in a braided stream — a popular trip.

Drift boats, rafts: Not used as the upper sections are used in preference. No notable rapids and tends to become very shallow as it becomes braided.

Canoes/kayaks: A popular trip for the inexperienced although those with even a little experience much prefer the upper section and use that to the exclusion of the lower section.

Pack floating: Unused.

Swimming: Numerous swimming holes and used a great deal.

Scenic description: From Peel Forest the river becomes progressively more braided and small willows appear along the banks, together with a great deal of broom and gorse on the low islands in the river. The river is still swift flowing with strong eddies but without rapids. There are some snags.

The clay cliffs that flanked the river in the upper section have disappeared and the landscape is quite flat. Because of the willows and scrub it is difficult to see beyond the banks from the river level.

Some river protection works involving rock groynes and railway iron may be encountered and can be hazardous. In the lower river large islands are common, most covered in broom and gorse.

Scenic value: Uninspiring.

Recreational value: High.

132.5 RANGITATA DIVERSION WATER RACE

The Rangitata Diversion Water Race flows from the foot of the Rangitata Gorge and turns east to enter the Rakaia River via the Highbank Power Station. The water race has a second channel that is used over the summer months which flows down the north bank of the Rangitata and turns north-east to end near Hinds. It is used for irrigation and its volume decreases as water is drawn off. In winter the water is used at Highbank for power generation. From the intake, canoeists use the water race and paddle down a fast flowing channel along the cliff top above the Rangitata River. In places you can look down on the river valley and you are given the somewhat weird illusion that you are paddling uphill. There are numerous low bridges that need to be portaged and flood gates which divert water into secondary channels. Half a kilometre above where the water race passes beneath Montalto Road the south flowing water race flows out. This is generally working in the summer months. The water is led off down a very steep spillway. The main water race then turns north east over a number of weirs (Uncanoable!). The water race siphons beneath the Hinds River, through a 3km pipeline, and siphons again beneath the North Branch of the Hinds River, the Ashburton South Branch, Caves Stream, Taylors Stream, and the North Branch of the Ashburton. The canal between the North Branch of the Ashburton siphon and the S.H. 77 siphon was used for marathon canoe races up until 1972 and provides an interesting flat water paddle. The smaller, south flowing water race has more weirs than the main canal but these are canoeable. Unlike rivers, water races have no right of public access and use. However, there never seems to be any objection to canoeists using the races. Powerboats, and water skiers towed by cars, are banned because the wake damages the clay banks.

Scenic value: Picturesque.

Recreational value: Intermediate.

133.0 HINDS RIVER

691000

Location: The Hinds River has two main branches, the North and South, of which the North Branch is the larger. It drains the Moorhouse Range to the south of the Ashburton River catchment, and enters the sea between the Rangitata and Ashburton Rivers.

River mouth location: NZMS1, S103/140862

Maps: NZMS18, Sheet 20 Mount Cook; Sheet 21 Christchurch; NZMS1, Sheet S81 Mount Somers; S91 Mount Peel; S92 Ashburton; S103 Hinds.

Length: 73km (North Branch).

Average gradient: Slight.

Recreational use and scenic description: The Hinds River flows over the Canterbury Plains with a good percentage flowing through the river bed shingle so the river is often dry in summer. It carries water in winter and after heavy rain. The two branches converge at the Mayfield Bridge and may be used by canoeists or for short lilo trips from that point when there is sufficient flow (which is usually in winter when the weather is too cold). The bed is lined with willows and grass often grows in the river bed shingle. The bed is wide and free of willows and the river, when flowing, keeps to a single channel down the centre. It is not used often.

Scenic value: Moderate.

Recreational value: Insignificant.

134.0 ASHBURTON RIVER

688000

Location: The Ashburton River flows south-westwards from its origins between the Winterslow and Moorhouse Ranges in the

Southern Alps in two main branches, of which the South Branch is the main stream. They flow out over the Canterbury Plains before joining a short distance above Ashburton and then flowing to the sea. The South Branch flows through two gorges of which the second is little more than a shallow valley; the upper gorge offers the only real white water and is highly thought of by experienced canoeists, but is only of usable size once or twice a year. The river has been considered in four sections.

134.1 ASHBURTON UPPER GORGE

Location: The South Branch of the Ashburton River originates on the Ashburton Glacier in the Arrowsmith Range. It flows down a valley between the Wild Mans Brother Range and Big Hill Range, west of Lake Heron then into a narrow gorge below the Boundary Creek confluence and out onto open country near Hakatere.

Section end location: NZMS1, S81/670530

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S72 Godley; S73 Lake Heron; S81 Mount Somers.

Length: 27km.

Average gradient: 1:40 25m/km (Gorge).

Recreational use and scenic description: In the upper valley, above the gorge, the river is very small and shallow, flowing over a shingle bed in tussock country. The river needs spring flow when the snow is melting to become of sufficient size for boating. The river suddenly passes into the gorge between rugged rock walls. One rapid lies beneath a huge chock-stone wedged in the gorge walls above the river. The gorge is some 5km in length and is particularly boisterous, depending upon water flows. Only very experienced canoeists should contemplate using the gorge although it may be possible to get a very small raft through, or to float down on a lilo or tyre — however, the spring flow is particularly cold. The river has not seen much activity other than by canoeists.

Scenic value: Impressive.

Recreational value: Low.

134.2 UPPER ASHBURTON RIVER

Location: From the foot of the Upper Ashburton Gorge the river collects water from numerous small tributaries in a large, tussock-covered basin before moving off through a narrow, shallow valley to the Canterbury Plains. The valley is often referred to as the Ashburton Gorge although it is not really a gorge in nature.

Section end location: NZMS1, S81/868376

Maps: NZMS18, Sheet 20 Mount Cook; NZMS1, Sheet S81 Mount Somers.

Length: 29km.

Average gradient: 1:105 9.5m/km.

Recreational use and scenic description: The Upper Ashburton River is confined between low stone and gravel banks and flanked by small willows. Because the river is so confined and does not flow over a wide shingle bed in a braided fashion, as it does lower downstream, it is this section of the river that offers a more feasible recreational trip. There are no big rapids but the river flows swiftly over the stones, creating small, white-topped waves that the less experienced canoeists and rafters tend to enjoy. The river is at its best in spring.

From the foot of the Upper Ashburton Gorge the river flows out onto a wide, tussock basin in a shallow bed. 9km lower the river becomes more confined as the hills narrow the valley down, although there is a wide margin of flat land on either side of the river. The so-called Ashburton Gorge begins at a small rock bluff known as Blowing Point. The gorge is no more than a valley between well-rounded, tussock-covered hills between the upper basin and the Canterbury Plains. The river

flows quietly but swiftly over coarse shingle and stones. It gradually widens as it leaves the hills and becomes braided with no more than two channels, and meanders a little.

The river is normally not of sufficient size for jet boating, tending to be narrow so that there is little scope for running the shallow spots from a deep channel as found on the wider rivers. With high flows, however, it is this section of the river which first attains jet boatable size. The river could be rafted, drift boated and liloed as well as canoed and these activities improve with higher flows.

Scenic value: Picturesque.

Recreational value: Intermediate.

134.3 LOWER ASHBURTON RIVER

Location: From the point where the Ashburton (South Branch) flows from the hills, near Cavendish, down to the sea, the volume of water gradually decreases, the bed width increases and the channel meanders over a shallow shingle bed.

River mouth location: NZMS1, S103/265932

Maps: NZMS18, Sheet 20 Mount Cook; Sheet 21 Christchurch; NZMS1, Sheet S81 Mount Somers; S82 Methven; S92 Ashburton; S103 Hinds.

Length: 64km.

Average gradient: 1:150 6.7m/km.

Recreational use and scenic description: From Cavendish, the Ashburton River (South Branch) becomes more braided, wider, shallower and has a decrease in water flow as a greater percentage seeps into the river bed shingle. Stopbanks may be encountered along the right bank above the Ashburton Bridge but these do not cause problems to river users when the river is high enough to be canoed, unlike the willows which hang over the river and may hamper navigation with their drooping and occasional broken branches.

There are no rapids in the river. The North Branch adds some flow to make the Ashburton canoeable down to the sea in all but low summer flows. There are some swimming holes, too.

Scenic value: Moderate.

Recreational value: Low.

134.4 ASHBURTON RIVER — 688010 NORTH BRANCH

Location: The North Branch of the Ashburton River flows north of the Winterslow Range from the Old Man Range. It is a shorter and smaller stream than the South Branch.

River confluence location: NZMS1, S92/195136

Maps: NZMS18, Sheet 20 Mount Cook; Sheet 21 Christchurch; NZMS1, Sheet S81 Mount Somers; S82 Methven; S92 Ashburton.

Length: 55km.

Average gradient: 1:190 5.3m/km.

Recreational use and scenic description: The North Branch is generally too small in terms of water volume to provide a recreational facility. The river flows onto the Canterbury Plains at the foot of Mount Hutt and from this point it usually disappears into the river bed shingle except in spring or after heavy rain. A great deal of scrub, including broom and gorse, grows in the river bed with willows particularly thick below the main road (S.H. 72). It is similar to, but smaller than, the lower region of the South Branch.

Scenic value: Moderate.

Recreational value: Insignificant.

134.5 TRIBUTARIES OF THE ASHBURTON

The main tributaries of the South Branch of the Ashburton are the Stour, Bowyers and Taylor Streams. All flow from the north and join the South Branch on its left bank, the Stour below the gorge while the other two join just above the confluence of the North and South Branches at Ashburton.

The Stour carries only a small volume of water and is very stony with a few small willows along the banks. It never attains sufficient depth to be boated or canoed although a few small swimming pools have been dug into the shingle bed. It flows very fast when carrying flood waters.

Bowyers Stream usually has only a trickle of water over its shingle bed. It does not attain sufficient depth for use except for a few deep pools used for swimming. Taylors Stream is the largest of all the tributaries although smaller and similar to the North Branch of the Ashburton. It is unlikely ever to attain boatable size and is lined with thick willows.

Pudding Hill Stream is the largest of the North Branch's tributaries and is generally dry, carrying run-off after rain and is not used for recreation.

Scenic value: Uninspiring.

Recreational value: Insignificant.

135.0 RAKAIA RIVER 685000

The Rakaia River is one of the largest rivers in Canterbury and rises on the main divide. It is fed initially by the Lyell Glacier and has a number of glacier-fed streams joining it. It then flows for some distance over braided shingle flats, through a gorge and becomes braided again over the alluvial plains of Canterbury. It enters the sea south of Lake Ellesmere. It is one of the better known rivers in the area, particularly because of the well known high country sheep stations in its headwaters — Mt Algidus is the best known because of the popular books of Mona Anderson. The river has no noted rapids but has some notoriety for a number of drownings — the very cold water and high winds in the gorge region have probably been contributing factors. The river is considered here in three sections as well as the numerous tributaries.

135.1 UPPER RAKAIA RIVER

Location: The Lyell Glacier terminates in a large lake with its downstream shore being formed by moraine shingle. From this lake the river flows east to the Rakaia Gorge.

Section end location: NZMS1, S74/109617

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S72 Godley; S73 Lake Heron; S74 Springfield.

Length: 80km.

Average gradient: 1:110 9.1m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Generally navigable to the Lake Stream confluence, further with high flows but often too low in late summer. Because of the fishing, there are restrictions on use of above the Wilberforce junction in April, May and June. The river provides good boating suitable for the skill of the average boater.

Drift boats, rafts: Generally not used except by those who launch in the lower reaches intent upon running the gorge. The river can be shallow, and braided water does not make for ideal rafting or drift boating water. There are no significant rapids.

Canoes/kayaks: Not a section of the river used for its own sake, but used as a means of access to the Rakaia Gorge. There have been some trips by novice canoeists to gain experience in using braided streams, because unlike the lower section of the river downstream, this upper section does not have willows to add additional hazards.

Pack floating, swimming: Unused. Very cold water and usually laden with silt.

Scenic description: From the Lyell Glacier Lake the river flows in a steep bed of shingle and rock, joins a similar small stream off the Ramsey Glacier and out onto a wide valley of shingle whereupon it splits into at least 4 or 5 main channels that link and divide again in a braided fashion. Many small tributary streams flow across the shingle bed a good distance before linking with the main streams. It remains thus for some 75km down to the beginning of the Rakaia Gorge. In places the bed is in excess of 4km across. Barren, tussock-covered hillsides flank the valley and in winter are snow-covered down to water level. Often dust storms can be seen blowing up or down the valley. Quicksands are common.

Scenic value: Picturesque.

Recreational value: Intermediate.

135.1.1 MATHIAS RIVER 685130

Location: The Mathias River runs south between the main divide on the right bank and the Rolleston Range on the left. It joins the Rakaia in its upper glaciated basin.

River confluence location: NZMS1, S73/806873

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S65 Wilberforce; S73 Lake Heron.

Length: 30km.

Average gradient: 1:90 11.1m/km.

Recreational use and scenic description: The Mathias is usually a little shallow for jet boating except when it is a raging torrent as it does become in spring after rain when the warmer weather and rain washes snow into the river. The water is swift and deep but does not create any notable rapids other than small wavelets as it flows over shallows.

The river is certainly large enough to canoe other than in late summer but its poor access and lack of good white water has resulted in its neglect. The river flows in tussock and bare scree-surfaced mountains with some stunted alpine scrub in the gullies and with some matagouri along the river banks amongst the tussock.

Scenic value: Moderate.

Recreational value: Insignificant.

135.1.2 WILBERFORCE RIVER 685080

Location: The Wilberforce River flows south between the Rolleston Range and the Birdwood Range to the east of, and parallel to, the Mathias River Valley. It joins the Rakaia a short distance above Lake Coleridge.

River confluence location: NZMS1, S73/931818

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S58 Kanieri; S65 Wilberforce; S73 Lake Heron.

Length: 55km.

Average gradient: 1:100 10m/km.

Recreational use and scenic description: The Wilberforce used to provide jet boatable water up to the Mt Algidus homestead and higher with above normal or spring flows, but much of the water is to be diverted into Lake Coleridge on completion of a major hydro scheme. This involves a dam at the river confluence.

At present the river offers a good jet boat trip over braided shingle, not unlike the Upper Rakaia or Rangitata. The river has been canoed by launching into the Harper River, a tributary of the Wilberforce but is not used often and offers nothing unique from other rivers in the area. Scenically the river is a little more interesting than the Upper Rakaia and Rangitata as the mountainsides have more bush and the river is less braided and confined to deeper channels.

Scenic value: Moderate.

Recreational value: Low.

135.1.3 HARPER RIVER 685081

The Harper River is a tributary of the Wilberforce with which it joins in the lower reaches near the northern shore of Lake Coleridge. The Avoca River is a small tributary of the Harper and flows south between the Harper and Wilberforce Valleys. The Harper used to be canoed down to the Wilberforce and thence into the Rakaia but it has now been diverted into the lake. The river is shallow, flowing over a wide shingle bed. Both the Harper and Avoca Rivers are small and not unlike the Rakaia. The valleys are, of course, much smaller so that canoeists would feel less exposed to the strong gusts of wind that are often encountered on the Rakaia.

Scenic value: Moderate.

Recreational value: Insignificant.

135.1.4 LAKE STREAM 685160

Location: Lake Stream flows north from Lake Heron to the Rakaia River through a wide glacial valley. Unlike the other rivers in the area, it is swampy and is not a braided shingle river.

River confluence location: NZMS1, S73/691839

Maps: NZMS18, Sheet 17 Hokitika; NZMS1, Sheet S73 Lake Heron.

Length: 18km (from the lake).

Average gradient: 1:125 8m/km.

RECREATIONAL USE:

Motor launches: Not usable below the lake outlet.

Jet boats: Navigable with some problems from swamp and weeds near the lake outlet. Some exciting rapids in the middle section and requires some skill to negotiate. A very popular trip combined with boating the gorge and Upper Rakaia.

Drift boats, rafts: Surprisingly little used and probably has still to be discovered by rafters. The slow, swampy section near the lake outlet may cause some frustration.

Canoes/kayaks: A very popular trip. The need to arrange permission to cross private land to get to the lake may be a restricting factor (although we have never heard of permission being refused to canoeists). Suitable for the less experienced with a wide variety of canoeing and some exciting rapids.

Pack floating, swimming: Generally too cold and isolated although some swimming is encountered in Lake Heron.

Scenic description: The first section of Lake Stream flows through swamplands, the last over shingle, so that this river offers a wide variety of interesting scenery. Tussock-covered hillsides with some beech and scrub flank the valley. Lake Heron is fed by a number of small creeks and streams of which the largest is the Swin River. The land to the south of the lake is swampy with some areas of open water, for example, the small Maori Lakes which are little more than mountain tarns — they are linked with Lake Heron by the Gentleman Smith Stream. The river flows out of the lake in a shingle bed with small willows and clumps of tussock in the stream. Large shingle scree fans flow down the Cameron and Smite Rivers confining Lake Stream to a single channel. The river then splits into a number of channels through swamp tussock. It collects at the lower end of the swamp and flows around Shaggy Hill in a rocky and shingle bed giving some enjoyable little rapids, becoming placid as it flows into the Rakaia.

Scenic value: Impressive.

Recreational value: High.

135.1.5 ACHERON RIVER 685050

Location: The Acheron River is a small rocky stream draining Lake Lyndon which lies in the Porters Pass region beside the Arthurs Pass highway. The river flows east to the Rakaia River below Lake Coleridge. Midway down the river there is a small dam which feeds a water race to the lake.

River confluence location: NZMS1, S74/064729

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S74 Springfield.

Length: 18km (from Lake Lyndon).

Average gradient: 1:50 20m/km.

Recreational use and scenic description: Lake Lyndon is a popular water ski area in summer with some ice skating in winter. It can be used for paddling in small craft and canoes although it is seldom used by these groups. The river, as it leaves the lake, is too small and shallow for use down to the diversion dam. The river is narrow and rocky and flows through a number of very short low gorges. The water race to Lake Coleridge is too small for canoeing.

The lower Acheron has a steep gradient and flows over sharp-edged boulders in a confined channel and may very occasionally flood to a sufficient depth for canoeing.

Lake Coleridge and the smaller Lake Georgina are very cold and are prone to strong gusts of wind which have been the cause of a number of drownings — the bodies are seldom recovered because of the low temperatures which prevent decay and the subsequent floating of the body. Lake Coleridge is particularly deep. The Acheron and the lakes lie in tussock country with some matagouri scrub and willows.

Scenic value: Picturesque.

Recreational value: Low.

135.2 RAKAIA GORGE

Location: The Rakaia Gorge lies between the upper glaciated basin beneath the Southern Alps, and the lower alluvial plains. The river runs through a narrow gorge but without turbulent rapids.

Section end location: NZMS1, S82/139584

Maps: NZMS18, Sheet 18 Hurunui; Sheet 21 Christchurch; NZMS1, Sheet S74 Springfield; S82 Methven.

Length: 6.5km.

Average gradient: 1:400 2.5m/km.

RECREATIONAL USE:

Motor launches: It would be possible to use an outboard-powered dinghy in the gorge itself although there are shallows at either end and there is the possibility of striking them on curves in the gorge. Few attempts have ever been made to outboard the gorge.

Jet boats: A frequently-used section of water. One commercial operator, whose service seems to be in some demand, operates from the lower gorge. The gorge is said to offer easy jet boating.

Drift boats, rafts: Rafts are a frequent sight in the gorge and provide one of the easiest ways that inexperienced river floaters can see such gorges. The Rakaia Gorge is easy boating — the scenery is the main object of the trip.

Canoes/kayaks: An easy trip. The most difficult aspect is the braided river above the gorge over which you must paddle because access to the river at the head of the gorge itself is not possible. High winds are the only real hazard.

Pack floating, swimming: Not used because of the very cold water although there are some swimmers who brave the conditions at the end of the gorge beneath the bridge. Strong currents also put people off.

Scenic description: Most river users launch their craft well above the gorge on the left bank and then must float downstream over a flat braided river valley to the gorge which appears to close in gradually as the various channels are squeezed down into a single swift flowing shingle bed stream. Rock bluffs form banks on either side of the narrow gorge with some small shingle beaches on the corners. Lower in the gorge the shingle beaches disappear and the water swirls off the bluffs providing strong eddies and whirlpools. The river's surface is

flat but very fast without pressure waves or rapids. The geological formations in the exposed rock bluffs are interesting.

Scenic value: Impressive.

Recreational value: High.

135.3 LOWER RAKAIA RIVER

Location: From the Rakaia Gorge the river flows out onto a wide river valley, flowing south-east to the sea.

River mouth location: NZMS1, S93/627118

Maps: NZMS18, Sheet 21 Christchurch; NZMS1, Sheet S82 Methven; S83 Burnham; S93 Rakaia.

Length: 70km.

Average gradient: 1:250 4m/km.

RECREATIONAL USE:

Motor launches: Generally too shallow for screw-driven craft except, perhaps, in the immediate river mouth area.

Jet boats: A very popular section of river from the mouth to the gorge bridge. The river is extremely braided and some skill is needed to work the various channels and maintain a deep channel to navigate. The very wide flat landscape is not scenically interesting and the value of the river lies in the skill in choosing the right channel.

Drift boats, rafts: Little use is made of the lower river below the gorge. The river is very braided with multiple shallow channels. There are few rapids other than small waves over shingle shallows and certainly little to offer skilled boaters.

Canoes/kayaks: Not used a great deal because of the shallow water. The similar Rangitata River generally has deeper and swifter channels which are preferred. Some canoeists use the river mainly because of its proximity. Christchurch canoeists tend to prefer the lower Waimakariri River.

Pack floating, swimming: Some swimming pools are used in the lower reaches. The river behind the Rakaia Huts fishing settlement and at Dobbins Ford appear to be the most popular sites with some use at the main road bridge.

Scenic description: Below the gorge bridge the Rakaia flows out onto a wide river valley and is very braided. Dust storms are common and are a major hazard. Small willows and vegetation often grow on the low shingle islands. Below the main road the river becomes particularly braided with more prominent scrub and gorse in the bed. Old bridge piles and logs near the rail bridge are unsightly and hazardous for canoeists and jet boaters.

Scenic value: Uninspiring.

Recreational value: Low.

136.0 SELWYN RIVER 680000

Location: The Selwyn River flows south-eastward from the Big Ben Range between the Rakaia River and Banks Peninsula and enters Lake Ellesmere. The Selwyn begins in a number of tributary streams in the Thirteen Mile Bush Forest on the south-eastern slopes of the Big Ben Range.

River mouth location: NZMS1, S83/838301

Maps: NZMS18, Sheet 18 Hurunui; Sheet 21 Christchurch; NZMS1, Sheet S74 Springfield; S82 Methven; S83 Burnham.

Length: 100km.

Average gradient: 1:166 6m/km.

RECREATIONAL USE:

Motor launches: It is possible to boat the lake and navigate a very short distance upstream, but this is severely limited by shallows.

Jet boats: Boatable at Selwyn Huts over shallows and some willow log snags. In high flood other sections have been boated for very short lengths. Because of the valuable fishing in the

river boaters are restricted to an 8km/h speed limit and consequently, deeper water than usual is required for the lower speeds.

Drift boats, rafts, canoes/kayaks: Only the lower section of the river offers sufficient water for boating except with exceptionally high flows. A 35km section of the middle river is dry in summer with only very slight flows above there. In many respects the Selwyn offers no more than one of the braided channels of the Rangitata, Rakaia or lower Waimakariri. Some 'picnic' canoeing takes place.

Pack floating: Unused.

Swimming: The Selwyn is one of the more popular rivers for swimming and picnics with good swimming holes from the headwaters in Thirteen Mile Bush down to the river mouth with the exception of the middle 35km which has a dry bed in summer. Coes Ford and the 1km of river from Miles Drain down to Silver Stream Drain are two of the most popular swimming places in Canterbury. There are good picnic spots at the bridges, too.

Scenic description: Bush Stream and the North Branch of the Selwyn are the biggest streams in the headwaters. The South Branch is the main stream and originates in the dry valley north of the Rakaia between the Big Ben Range and the Rockwood Range of hills. These rivers join and flow east through a small gorge dividing the Lady Barker Range and the Wyndale Hills and thence onto the Canterbury Plains at Glentunnel where S.H. 72 crosses the river. The river at times reaches boatable size above Glentunnel and may be boated by canoeists through the Wyndale Gorge. Most of the bed is composed of shingle and there are no significant rapids. The 'Selwyn Rapids' which lie upstream of Glentunnel have been so-named by fishermen and are merely shallow shingle shoals of no particular note. Below Glentunnel the water begins to dissipate into the river bed shingle leaving little surface flow. The river maintains a single channel over the shingle bed and is lined by willows with some gorse and broom in the bed. The flow increases in the lower area as the water is forced up from the bed, and the mainstream is confined by low stopbanks.

Scenic value: Moderate.

Recreational value: Intermediate.

136.1 HORORATA RIVER 680040

Location: The Hororata River drains the Rockwood Range and flows eastward to join the Selwyn some distance upstream of the main highway bridge.

River confluence location: NZMS1, S83/512478

Maps: NZMS18, Sheet 21 Christchurch; NZMS1, Sheet S82 Methven; S83 Burnham.

Length: 40km (includes Boundary Stream).

Average gradient: Slight.

Recreational use and scenic description: The Hororata is a smaller river than the Selwyn and tends to be dry in summer. It is not used for recreation other than for swimming. When in flood the water rushes down the bed creating swift water without rapids — it is not canoed, even when in flood. Willows line the banks. In the lower river the flow dissipates into the river bed shingle so that the river actually becomes smaller. The Waireka and Hawkins Rivers, left bank tributaries of the Selwyn, are similar but smaller than the Hororata and are unused even for swimming.

Scenic value: Moderate.

Recreational value: Insignificant.

137.0 HALSWELL RIVER 678000

Location: The Halswell River is the southern complement of the Heathcote River. It begins in the southern suburbs of Christchurch near Wigram and then flows through Halswell, Landsdowne, Taitapu and Motukarara around the southern end of the Port Hills to empty into Lake Ellesmere.

River mouth location: NZMS1, S94/945273

Maps: NZMS18, Sheet 21 Christchurch; NZMS1, Sheet S83 Burnham; S84 Christchurch; S94 Akaroa.

Length: 40km.

Average gradient: Slight.

Recreational use and scenic description: The Halswell River flows through suburbs of Christchurch as a mere drain, becomes bigger through shaded parklands and then as an open farm drain, becomes swampy and meanders through farmland and canals to finally empty into the lake. The landscape is flat and uninteresting with a muddy bottom. Long grass and the occasional willow are the dominant river bank vegetation. The river could be canoed from Taitapu and is often used although seldom below Motukarara as the river then flows into an uninteresting canal or drain. The river is not used for swimming because of the dirty water from drainage and suspected pollution. (The Halswell area uses septic tanks).

Scenic value: Uninspiring.

Recreational value: Low.

138.0 STREAMS OF BANKS PENINSULA

The streams flowing into Lyttelton Harbour are all extremely small and dry in summer. The hillsides are steep and barren so that the gullies do not link up to form streams of any significant size. The little stream flowing into the head of Port Levy is used to splash about in for picnics, but it is certainly too small for boating. Pigeon Bay's streams are even smaller. Okains Bay has a small lagoon or estuary that could be boated on and the tidal creek flowing into it could be floated for some 2km over muddy river bed. Le Bons Bay has a similar but smaller tidal creek. All the streams flowing into Akaroa Harbour are small, steep and unused.

Lake Forsyth lies to the west of Akaroa on the 'neck' of Banks Peninsula. The lake used to be popular for boating and for water skiing but weed and algae growth has prevented these activities now. It is dangerous for swimming because of algae and pollution.

Flowing into the lake is the stream at Little River named Okana River (often mis-named Little River). It is a very small creek meandering between grassy banks and willows. It becomes very muddy and swampy before entering Lake Forsyth but can be canoed from the bridge at Little River down to the lake. It has no other potential users. The Okana has a small tributary flowing into it from the east — the Okuti River which could be canoed but is not.

Other rivers flowing westwards from the Port Hills are all small and have the appearance of drains or ditches as they enter Lake Ellesmere. The only ones of any size are Price's River and the Kaituna River which have some small swimming holes and picnic areas.

Lake Ellesmere has some swimming and power boating, but more importantly, it is the only suitable water skiing area in the region with national championships having been held there some years ago.

Scenic value: Moderate.

Recreational value: Low.

139.0 HEATHCOTE RIVER 666400

Location: The Heathcote and the Avon Rivers are the two rivers that form the large estuary at Mount Pleasant, Christchurch. The Heathcote flows at the foot of the Port Hills and has its origins in springs in the south of Christchurch.

River mouth location: NZMS1, S84/068527

Maps: NZMS18, Sheet 21 Christchurch; NZMS1, Sheet S84 Christchurch.

Length: 27km.

Average gradient: Slight.

Recreational use and scenic description: This river, apart from a short length near the Princess Margaret Hospital, is not as aesthetically pleasing as the Avon and contains considerably more industrial waste discharge and some sewage from the Halswell area. The pollution becomes particularly noticeable near Woolston. The river flows through the residential and industrial areas of Christchurch City and the water quality tends to discourage most recreationalists who prefer the Avon. There used to be some boating at Pleasant Point Domain (especially water skiing) but because of pollution the area remains unused now. At the river mouth there is a yacht club which operates at high tide; white baiters use the river mouth area.

Scenic value: Uninspiring.

Recreational value: Low.

NORTH CANTERBURY

140.0	Avon River	115	146.0	Hurunui River	121
141.0	Waimakariri River	115	146.1	Upper Hurunui and Lakes	121
141.1	Upper Waimakariri River	115	146.2	Hurunui River — Sumner to South Branch	121
141.1.1	Crow, Bealey and Hawdon Rivers .	115	146.2.1	Hurunui River — South Branch	121
141.2	Waimakariri River — Mt White to the Gorge	116	146.3	Hurunui River — Maori Gully and Hawarden Gorge	122
141.2.1	Poulter River	116	146.4	Middle Hurunui River	122
141.2.2	Esk River	116	146.4.1	Waitohi River	122
141.3	Waimakariri Gorge	116	146.4.2	Pahau River	123
141.3.1	Broken River	117	146.5	Hurunui River — Lowry Peaks Gorge	123
141.4	Waimakariri River — Woodstock to Motorway	117	146.6	Lower Hurunui River	123
141.4.1	Kowai River System	117	146.6.1	Minor Tributaries of the Hurunui River	123
141.4.2	Eyre River	117	147.0	Buxton Creek and Jed River	124
141.5	Lower Waimakariri River	118	148.0	Waiau River	124
141.5.1	Cust River	118	148.1	Upper Waiau River	124
141.5.2	Cam River	118	148.2	Middle Waiau River — to Leslie Hills	124
141.5.3	Kaiapoi River	118	148.2.1	Hope River	124
141.5.4	Groynes Stream	118	148.2.2	Boyle River	125
141.5.5	Styx River	118	148.2.3	Lewis River	125
142.0	Ashley River	118	148.2.4	Hanmer River	125
142.1	Upper Ashley River	119	148.3	Waiau River — to Parnassus Gorge	125
142.2	Ashley Gorge	119	148.3.1	Lottery, Wandle and Mason Rivers	126
142.3	Lower Ashley River	119	148.4	Waiau River — Parnassus Gorge ...	126
142.3.1	Glentui and Garry Rivers	119	148.5	Lower Waiau River	126
142.3.2	Okuku River	120	148.5.1	Leader River	127
142.3.3	Makerikeri River	120			
142.3.4	Saltwater Creek	120			
143.0	Kowai (Kowhai) River	120			
144.0	Waipara River	120			
145.0	Blythe and Motunau Rivers	121			

140.0 AVON RIVER 666800

Location: The Avon first appears 14km upstream of Christchurch City in a number of small, spring-fed streams which flow south-east and eastwards through the residential areas of Christchurch and empty into the estuary with the Heathcote.

River mouth location: NZMS1, S84/082566

Maps: NZMS18, Sheet 21 Christchurch; NZMS1, Sheet S84 Christchurch.

Length: 26km (Ilam Stream).

Average gradient: Slight.

Recreational use and scenic description: The Avon River appears as small springs created by the underlying bedrock strata (the same as that forming the Port Hills) which forces the underground water towards the surface. The spring water is supplemented to a considerable degree by surface run-off and storm water drainage in the city.

The river begins in numerous small drains and creeks of which the largest is the Ilam Stream which is often canoed from the Canterbury University buildings at Ilam. The streams meander through the back gardens of the suburbs and then through Hagley Park and the Botanic Gardens, the commercial centre of the town and again through residential areas to the estuary. It does not flow through the industrial area and thus remains free of pollution than the Heathcote. The Okeover Stream, Waimari Stream and Wairarapa Streams are smaller than the Ilam Stream but all have been canoed often.

The Avon has a high aesthetic value, being bordered by trees, lawns and city parks. In the commercial area some of the older, more interesting architecture of the city borders the banks (the museum, university buildings, law courts) as well as the more modern town hall. There is a canoe hire firm operating near the city centre and the river receives high usage here, as well as from the rowing clubs in the lower river area which use Kerr's Reach for competition events. The annual Avon Canoe Race from the city centre to the estuary used to attract over 100 entries. Power boat and sailing clubs operate in the lower river and estuary area.

Scenic value: Impressive.

Recreational value: Exceptional.

141.0 WAIMAKARIRI RIVER 664000

The Waimakariri River begins on the Southern Alps a little south of Arthurs Pass. A tributary, the Bealey, flows from the pass itself. The Waimakariri flows in a shingle bed for some distance before passing down the very scenic gorge between the Puketeraki and Torlesse Ranges. The river continues its easterly course over the Canterbury Plains to meet the sea north of Christchurch in Pegasus Bay. The name apparently means 'cold waters' which is due to the fact that at its head there are a number of glaciers. The main tributaries are the Bealey, Poulter, Esk, Broken and the Kowai Rivers, and the Waimakariri North Branch. In the river mouth area lie the Kaiapoi, Cam and Styx Rivers.

141.1 UPPER WAIMAKARIRI RIVER

Location: The Waimakariri has its origins on the main divide below Carrington Peak, then flows south through a bouldery valley and thence into a wide, braided valley to Mount White Bridge. The Crow, Bealey and Hawdon are the main rivers flowing into the Waimakariri in this upper section.

Section end location: NZMS1, S59/220205

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S58 Kanieri; S59 Otira; S66 Broken River.

Length: 38km.

Average gradient: 1:180 5.6m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Boatable from the sea to the Bealey Bridge over braided shingle although the upper part of this river section becomes steeper with a swifter current over stony rapids, often very shallow. Jet boats are usually unable to penetrate beyond the Klondyke Corner.

Drift boats, rafts: Not used to any great degree mainly because the Mount White Bridge to Woodstock trip is such a highlight (the gorge) so that this upper section from Klondyke down to the Mount White Bridge gets left. To run the river above Klondyke Corner involves a portage upstream and the river offers nothing that cannot be found downstream.

Canoes/kayaks: Not used often although some canoeists do run the Bealey River and may go on down to the Mount White Bridge. Braided river, although swift-flowing with no big rapids. The lower gorge section seems to be such an attraction that the upper river is not used.

Pack floating, swimming: The water is generally far too cold and the river is largely ignored for this activity. Some trampers have floated the Upper Waimakariri but this is not common.

Scenic description: Above the Mount White Bridge the Waimakariri River flows swiftly but without any turbulence, over a wide shingle bed, maintaining one main channel with a few minor braided channels, particularly at high flow levels. In the upper catchment the river flows down a steep, bouldery channel in a gully lined with stunted beech forest. However, this soon flattens out onto shingle flats upon meeting the White River. Numerous little creeks boost the flow. Wide grass flats flank the river. It becomes braided from the Klondyke Corner where the Arthurs Pass Road meets the river and also becomes slower. Bush covers the hillsides beyond the river flats, with rugged and eroded mountain tops above the bush.

Scenic value: Impressive.

Recreational value: Intermediate.

141.1.1 CROW RIVER 664260 BEALEY RIVER 664240 HAWDON RIVER 664200

Location: The Crow, Bealey and Hawdon Rivers all flow south from the main divide to join the Waimakariri on its left bank. The Bealey is the largest of these rivers and has the Arthurs Pass Road running along its right bank. Otherwise, all three rivers are much the same.

River confluence location: NZMS1, S66/088191 (Bealey River).

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S59 Otira; S66 Broken River.

Length: 13km (Bealey River).

Average gradient: 1:150 6.7m/km (lower river).

Recreational use and scenic description: The Crow, Bealey and Hawdon Rivers are all quite small and similar to the Upper Waimakariri in that they tumble down bouldery beds before flowing out onto open river flats and joining the Waimakariri itself. These rivers are usually too shallow for canoeing except, perhaps, for the Bealey. All three, however, would make excellent lilo trips if the water were not so cold. The Bealey is particularly good after rain and in spring. The steep, bouldery sections are a little shallow and tight between the boulders to fit a canoe or raft through, but immediately below these bouldery sections the rivers flow over steep shingle rapids that can be fun for a short distance before the gradient trails out. A narrow margin of grassland flanks the water channel with beech forest covering the lower mountain sides. Snow grass and rock top off the beech. In the bouldery sections the beech comes down to the water's edge.

Scenic value: Impressive.

Recreational value: Low.

141.2 WAIMAKARIRI RIVER — MOUNT WHITE TO THE GORGE

Location: From the Mount White Bridge the Waimakariri flows south-east over braided river flats to the Esk River and the beginning of the gorge.

Section end location: NZMS1, S66/408089

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S59 Otira; S66 Broken River.

Length: 25km.

Average gradient: 1:166 6m/km.

RECREATIONAL USE:

Motor launches: Unused. Too shallow.

Jet boats: A popular and much used section of water which is used as an extension of the trip up the gorge. Easy boating suitable for the less experienced.

Drift boats, rafts, canoes/kayaks: This section of river is used as a means of access to the gorge. There is no satisfactory access to the top end of the gorge so that those craft that do not, or cannot, travel upstream, launch at the Mount White Bridge and spend a day navigating this upper section and a second day in the gorge, camping out above the gorge. This section of the river offers easy rafting and canoeing although the braided channels can be a little shallow at the upper end. The water is swift in places and is appreciated by rafters and drift boaters.

Pack floating, swimming: Unused.

Scenic description: From the Mount White Bridge the river flows in a braided fashion between the tussock-covered hills. Some scrub, mainly briar and matagouri, covers the river flats and gullies. The river channels gradually join up to form one main channel with a few smaller off-shoots by the time the river reaches the Poulter confluence. One or two boulders in the stream must be avoided between the Poulter and Esk River confluences. In places the river has eaten into the shingle and flows up against the banks, creating steep, scrub-covered, low bluffs.

Scenic value: Moderate.

Recreational value: High.

141.2.1 POULTER RIVER 664160

Location: The Poulter River flows south from the main divide in the Arthurs Pass National Park.

River confluence location: NZMS1, S66/367117

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S59 Otira; S66 Broken River.

Length: 42km.

Average gradient: 1:400 2.5m/km.

Recreational use and scenic description: The Poulter River lies in a confined valley, flowing over a braided river bed. The hillsides are covered in beech forest in the upper valley changing to scrub and then tussock in the lower valley. The valley floor has extensive grassed river flats and the river is braided into two or three main channels with a fine gravel bed. The river is often jet boated for up to 15km when there is a good flow of water. Access to the upper catchment is difficult as there are no roads other than a track which goes up the river bed itself.

Canoeists and rafters could use the river but because the river offers little that the Waimakariri and Bealey Rivers do not it remains unused.

Scenic value: Picturesque.

Recreational value: Low.

141.2.2 ESK RIVER 664150

Location: The Esk River lies downstream of the Poulter, flowing south to junction with the Waimakariri at the head of the gorge.

River confluence location: NZMS1, S66/404090

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S60 Damier; S66 Broken River; S67 Ashley.

Length: 48km.

Average gradient: 1:90 11.1m/km.

Recreational use and scenic description: Although the lower 13km are navigable by jet boats when flowing very high or flooded, the river is seldom used for recreational boating. The Esk is much smaller than the Poulter. The river is similar to the Poulter although it is in a lower and smaller valley and the river bed is more confined, narrower and less braided. The valley is predominantly a tussock-covered valley with scrub and beech in the gullies.

Scenic value: Moderate.

Recreational value: Insignificant.

141.3 WAIMAKARIRI GORGE

Location: The Waimakariri Gorge lies between the upper braided river basin and the Canterbury Plains. The river flows south in a dramatic gorge, cutting through the Torlesse Range.

Section end location: NZMS1, S74/403860

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S66 Broken River; S74 Springfield.

Length: 34km.

Average gradient: 1:333 3.3m/km.

RECREATIONAL USE:

Motor launches: Shallow rapids preclude the use of outboards or other screw-driven craft.

Jet boats: The most extensive use of the gorge is made by jet boats. The rapids are not particularly difficult and the scenery is very good considering the relatively easy access — it would not rival the wilderness areas as found, for example, on the Upper Grey or West Coast rivers. The river is used by a commercial organisation which takes tourists into the gorge, thus providing a means by which the average city dweller may view river gorge scenery with little effort.

Drift boats: A very popular trip although the need to run the shallow river down to the top of the gorge tends to be frustrating for the larger drift boats. Some good, but easy rapids.

Rafts: A popular trip and probably has been rafted more often than any other section of river in the South Island. The upper section to the gorge is often a little shallow over the shingle shoals, but the gorge is the obvious highlight of the trip.

Canoes/kayaks: A frequent trip and very popular — often regarded as a 'must' for all canoeists in the area. The rapids are relatively easy although with a wind the lower gorge can be very tricky. Suitable for the less experienced canoeist and is often one of the first multi-day trips for canoeists before tackling more isolated rivers such as the Clarence.

Pack floating: Not used to any degree.

Swimming: Woodstock, the access point below the gorge, is a much used swimming area although the water is often cold and fast flowing. After floods the river may alter its course a little but when there is a quiet pool near the left bank, the area is very popular.

Scenic description: Below the Esk confluence there are a number of shallow shingle rapids before the hills close in and confine the river to a gorge. The hillsides are covered in scrub and beech, although much has been cleared and sown in pasture. The hillsides slope steeply to the water's edge but it is not until reaching the Carrington Gorge area that the massive rock cliffs first appear. This dramatic gorge ends with the shallow Hamilton Rapids and the gorge opens out a little with narrow stony beaches on either side of the river. There are numerous rocky bluffs and scrub-covered hillsides down to Broken River where there is a short, very narrow gorge section. The river opens out yet again to the wide Horseshoe Bend which is a braided shingle area. The Otarama Gorge then begins. Steep

bluffs flank the river with ferns and other vegetation covering much of the walls. The gorge opens out onto braided river flats again at Woodstock. Features of the gorge are the high, rugged bluffs and the often peaceful stretches of water between the shallow rapids. The railway viaduct at Staircase Gully is also of interest.

The popularity of the gorge is reflected in the wealth of detail and names shown on the topographical maps.

Scenic value: Impressive.

Recreational value: Exceptional.

141.3.1 BROKEN RIVER 664130

Location: Broken River flows east from Porters Pass to the Waimakariri Gorge down a rugged gorge. A tributary, the Porter River, flows north to join the Broken River below Porters Pass highway.

River confluence location: NZMS1, S66/384959

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S66 Broken River.

Length: 32km.

Average gradient: 1:85 12m/km.

Recreational use and scenic description: Broken River is very small and shallow, flowing in a deep, narrow ravine that is choked with boulders and has a shingle bed in the quieter sections where the slower current has not washed it away. The river has been canoed and liloed a number of times, although it is necessary to float on down the Otarama Gorge to Woodstock before getting out of the river. In places there are very narrow passageways between boulders and walls of the ravine which makes for difficult navigation even by canoe; in high flows this is particularly awkward. The river is steep and wild so that canoeing is possible in short bursts between portages. The Porter River is not of sufficient size for use. Patches of scrub occur along the river banks.

Scenic value: Moderate.

Recreational value: Low.

141.4 WAIMAKARIRI RIVER — WOODSTOCK TO MOTORWAY

Location: From the foot of the Waimakariri Gorge the river flows east to the sea over the Canterbury Plains, passing beneath the motorway bridge a short distance above the tidal limit.

Section end location: NZMS1, S76/015702

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S74 Springfield; S75 Waimakariri; S76 Kaiapoi.

Length: 73km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Too shallow over the braided shingle flats.

Jet boats: A very popular trip from the launching ramp at the motorway bridge up to Woodstock and the gorge. This section of the river is used slightly less than the gorge. However, many boaters consider that the braided channels require a greater skill to navigate and this is appreciated by jet boaters.

Drift boats: Little use is made of the river below the Gorge Bridge, but some considerable use is made of the Woodstock-to-Gorge Bridge section. The lower, braided river gives very shallow boating.

Rafts: A large number of rafts use the upper portion of the river, down to Thompsons Road in particular. Below this point the braided channels become very shallow with few rapids.

Canoes/kayaks: A very popular section of river with the less-experienced canoeist and with youth groups who use canoes, Boys' Brigade and Scouts. Access is relatively easy and there is ample scope for camping along the river banks.

Pack floating: Unused. Very shallow water for most of the river's length with a danger of being trapped in river bank protection works and willows.

Swimming: Extensive use is made of the Waimakariri for picnics and swimming. On fine summer afternoons there can be as many as 50 people visible along the banks below Thompsons Road. This figure does not include picnickers in the shelter of the poplar and willow trees who may not be visible from the river itself. Wherever there is foot access to the river swimmers may be found.

Scenic description: The overall impression of this section of the river is one of a wide and braided river with low banks generally covered with willows and poplars. Extensive areas of pine trees are found along the banks in the middle reaches. The land is low lying and little is visible from the river itself, being screened by the willows. A double line of power lines crosses the river, which detracts from the overall aesthetic values. River protection works, including wire ropes and rock groynes, are often seen. There are few rapids other than shingle shallows and where a number of channels meet creating areas of turbulent currents.

Scenic value: Moderate.

Recreational value: Exceptional.

141.4.1 KOWAI RIVER SYSTEM 664070

Location: West of the Waimakariri Gorge lies an extensive network of small streams which join together to flow into the Waimakariri as the Kowai River. The main streams are the Little Kowai River, Rubicon River, Kowai River, West Branch Kowai River and Thirteen Mile Bush Stream.

River confluence location: NZMS1, S74/430825

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S74 Springfield.

Length: 29km.

Average gradient: 1:90 11m/km.

Recreational use and scenic description: The water levels in the Kowai River tend to fluctuate greatly, becoming torrents of fast moving water after heavy rain, but being almost dry over the summer months. There is usually a small trickle of water in the river and some good swimming holes have been dug into the river bed shingle — these are very popular, especially those that are shaded by the large willows found along the river banks. The most popular swimming area is on the Kowai River below the main road bridge to the Kowai Bush area and also on the lower Little Kowai River. The river may be canoed and liloed when flowing high but remains little used. Scrub and willows line the banks.

Scenic value: Picturesque.

Recreational value: Intermediate.

141.4.2 EYRE RIVER 664060

The Eyre River flows south-east to join the middle section of the Waimakariri River a little upstream of Coutts Island. It has a number of small tributaries — namely Coopers Creek, Gammans Creek and Washpen Stream which all drain off Mount Oxford. The Eyre is often quite dry in summer and flows over open farmland. The lower river is confined to stopbanks in the form of a drain. In the Mount Oxford area the Eyre River and its tributaries are used extensively for picnics and camping although the lack of water flow tends to restrict water-based recreational activities. Some swimming is often possible in Gammans Creek off Bush Road.

Scenic value: Moderate.

Recreational value: Insignificant.

141.5 LOWER WAIMAKARIRI RIVER

Location: From the motorway bridge the river continues to flow eastwards to the sea and to its mouth known as Brooklands Lagoon. In this short tidal section the Styx, Kaiapoi, Cust and Cam Rivers flow into the river.

River mouth location: NZMS1, S76/086864

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S76 Kaiapoi.

Length: 6.5km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Considerable use is made of the lower Waimakariri, by two yacht clubs and one combined yacht and power boat club. They are located at Kairaki and Stewarts Gully. A number of fishermen use the lower river and cross the bar to fish in the sea.

Jet boats: Little used in comparison with the upper river sections. Some jet boaters cross the bar for fishing expeditions.

Drift boats, rafts: Essentially unused.

Canoes/kayaks: Little used except by 'picnic canoeists' and by youth groups who use the area near Stewarts Gully for training purposes.

Pack floating: Unused.

Swimming: Some use is made of the Stewarts Gully area although pollution puts most people off.

Scenic description: From the motorway bridge the river becomes tidally affected with shingle banks and, lower, mud banks, drying at low tide. Willows line most of the river with reeds and swamp plants in the lower river area, from Stewarts Gully. The river is a little polluted and discoloured.

Scenic value: Uninspiring.

Recreational value: Intermediate.

141.5.1 CUST RIVER 664044

The Cust River flows east from the Springbank region over farmland and links up with a number of small drains to empty into the Kaiapoi River, near the motorway bridge. The river is often dry in summer, and even with flooding remains a slow moving stream. It has no known recreational use.

Scenic value: Dull.

Recreational value: Insignificant.

141.5.2 CAM RIVER 664042

The Cam River originates in Rangiora in the North and South Brooks, and after they join the river flows south to join the Kaiapoi River at Kaiapoi. The Kaiapoi River is often mistakenly called the Cam below the Cam confluence. The river remains a sluggish drain over its entire length and is polluted. Some small craft moor in the Cam and there is some canoeing by school-age children and youth groups. The lower section is tidal with water backing up from the Kaiapoi River.

Scenic value: Uninspiring.

Recreational value: Low.

141.5.3 KAIAPOI RIVER 664040

Location: The Kaiapoi River forms with the meeting of a number of drains and with the Cam and Cust Rivers. The river flows through Kaiapoi to join the Waimakariri in the river mouth area. It is tidally affected and should be considered a tidal arm of the river mouth lagoon.

River confluence location: NZMS1, S76/044732

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S76 Kaiapoi.

Length: 9km.

Average gradient: Slight.

Recreational use and scenic description: The Kaiapoi River is polluted and this tends to restrict recreational activities. There is no swimming and little canoeing except by the local school children who do not have the means of travelling further to a more suitable location. There used to be a rowing club which trained on the river but it no longer does so. Small fishing boats navigate up to Kaiapoi and some large fishing boats moor in the river. There used to be a coastal shipping port located at Kaiapoi itself but this has not been used for some time. A large scow is still berthed at the Quay. Below Kaiapoi the banks are covered in overhanging willows leaving a clear path down the centre of the river. Small dinghies and dories are tied up at short jetties along the banks. The river seems to have an appeal of its own, although you would not describe it as attractive. The area reminds one of the Tom Sawyer and Huckleberry Finn stories.

Scenic value: Picturesque.

Recreational value: Intermediate.

141.5.4 GROYNES STREAM 664050

On the outskirts of Christchurch, near the airport, is a small artificial pond known as 'The Groynes'. This pond is filled by a number of drains and empties via a small stream into the Waimakariri River. The pond is a very popular picnic and swimming area and is used for training purposes by local canoe clubs and the underwater club. Canoeists often float down the stream to the Waimakariri through quiet, willow-lined pools. Farmland lies beyond the stream.

Scenic value: Picturesque.

Recreational value: High.

141.5.5 STYX RIVER 664010

Location: The Styx River is a small, quiet stream flowing through the northern suburbs of Christchurch and Belfast. It joins the Waimakariri in Brooklands Lagoon.

River confluence location: NZMS1, S76/065723

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S76 Kaiapoi.

Length: 22km.

Average gradient: Slight.

Recreational use and scenic description: The river is flat and slow moving and has overhanging willows along most of its length. The river is canoed and sometimes swum in. The lack of current is a problem for rafts and consequently, rafters are seldom seen on the river. The Brooklands Lagoon is a popular water skiing and swimming area. Picnics are also popular. The river is polluted and muddy.

Scenic value: Uninspiring.

Recreational value: Low.

142.0 ASHLEY RIVER 662000

The Ashley is a small river flowing from the Puketeraki Range, a line of hills south of Lake Sumner and separated from the main divide by the Esk Valley, a tributary of the Waimakariri. The Ashley collects water from a number of small tributary streams in the Lees Valley and then flows eastwards through the rugged Ashley Gorge. The river then becomes very braided as it flows across the north Canterbury Plains to the sea at Rangiora. The main tributary of the Ashley is the Okuku. The river is considered in three sections.

142.1 UPPER ASHLEY RIVER

Location: The Upper Ashley River flows south along the eastern side of the Puketeraki Range in a well defined gully, then it flows into a wide, flat basin where a number of tributaries join it. The main tributaries are the Whistler, Lillburn and Townshend Rivers.

Section end location: NZMS1, S67/569979

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S60 Dampier; S67 Ashley.

Length: 35km.

Average gradient: 1:90 11m/km.

Recreational use and scenic description: The Ashley River, before entering the Lees Valley area, is very small, flowing steeply down a narrow shingle bed gully between scrub-lined banks. The Lillburn River joins the Ashley shortly before it flows out onto the Lees Valley. Swamp drainage adds some water on the left bank and the river turns south-west as a shallow shingle bed river over the flat grassland in the valley. The Whistler River flows across the valley from the north-west. It is slightly smaller than the Ashley at this point. The two rivers combine and the Ashley continues south-west and meets the Townshend immediately before it enters the gorge. The Townshend is another small river. It flows down a rocky gully through scrub to meet the Ashley; its upper catchment lies within the Oxford State Forest (predominantly beech).

The Upper Ashley is sometimes canoed and sees some picnicking, but overall, the main recreational pursuit is tramping and water based activities are not common. The rivers are all very shallow.

Scenic value: Moderate.

Recreational value: Insignificant.

142.2 ASHLEY GORGE

Location: From the Lees Valley and the Townshend confluence the Ashley River flows eastwards in a somewhat tortuous course through a gorge to the north Canterbury Plains.

River section end: NZMS1, S67/648932

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S67 Ashley.

Length: 21km.

Average gradient: 1:190 5.3m/km.

RECREATIONAL USE:

Motor launches: Too shallow and boisterous.

Jet boats: The upper section from the Lees Valley down to the middle bridge has been boated in spring when flowing high. Below the middle bridge the rapids become too narrow and boisterous for jet boats. The river is difficult boating and is run by enthusiasts only. It is easy to damage boats on the very sharp rock.

Drift boats: Often boated and considered excellent boating although one or two rapids are often portaged, depending upon flow levels. Requires experienced boaters and high spring flow.

Rafts: Inflatable craft are seldom used on the river except during floods. The rock has sharp edges which damages inflatable rafts. Smaller rafts run the gorge.

Canoes/kayaks: A very popular trip from August through to late November. The river is of insufficient size for most of the year. Larger craft such as the open canoe, as opposed to kayaks, tend to find the rapids very tight. Suitable for skilled boaters only — Grade 3 water.

Pack floating: Often used from the middle bridge down to the domain. The water can be very cold and hypothermia is a danger. This is one of the most well used floating rivers in the Christchurch area.

Swimming: Very popular pool at the domain at the foot of the gorge.

Scenic description: Over the first kilometre of the gorge below the Townshend River, the river flows in a shingle bed in a narrow rock ravine with coarse scrub growing on the rock walls and along the top. The shingle gives way to coarser rock fragments and solid bedrock creating easy rapids down to the middle bridge. From the middle bridge the coarse shingle persists for some distance and there is one large slide before the river flows around Bottle Hill where there are large bouldery rapids, still confined in a rugged gorge. These rapids persist almost to the domain. Low, thick bush and scrub grow on the hills flanking the gorge and in places there are erosion scars of scree, particularly below the road. The rock seems to fragment into sharp edges.

Scenic value: Impressive.

Recreational value: Exceptional.

142.3 LOWER ASHLEY RIVER

Location: From the foot of the Ashley Gorge the river flows east over a wide, braided, shingle bed, crossing the Canterbury Plains to the sea at the Waikuku Beach settlement.

River mouth location: NZMS1, S76/086863

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S67 Ashley; S75 Waimakariri; S76 Kaiapoi.

Length: 49km.

Average gradient: 1:270 3.7m/km.

RECREATIONAL USE:

Motor launches: Shallow water unsuitable for these craft.

Jet boats: Navigable from the sea to the gorge bridge when flowing high, especially in spring. For most of the year the river is almost dry with a good proportion of the flow seeping through the river bed shingle. Suitable for skilled boaters used to shallow water.

Drift boats, rafts: Not used on the lower river because of the shallow water and lack of rapids. In most respects the lower Waimakariri offers similar water and its larger size makes it more useful.

Canoes/kayaks: Not greatly used because of the shallow water. Some 'picnic' canoeing and short trips in the upper end of this section in spring when flows are up. No rapids.

Pack floating: Unused.

Swimming: There are numerous swimming holes. The Waimakariri catchment tends to be used in preference.

Scenic description: From the Ashley Gorge Domain the river flows out onto the wide Canterbury Plains and becomes a very shallow, braided river over fine shingle. A good percentage of the flow seeps through the shingle and pools are formed in the larger depressions. For much of the year you can walk across the river without getting your knees wet. In summer the bed is often quite dry. After rain, or in spring, the river can be boated. Some willows along the banks overhang the outer channels and numerous weeds, including broom and gorse, grow on the higher shingle islands. Stopbanks enclose the lower river and confine the flow to a single channel.

Scenic value: Uninspiring.

Recreational value: Low.

142.3.1 GLENTUI RIVER GARRY RIVER

662080

662070

The Glentui and Garry Rivers flow south-east to join the Ashley River between the gorge and the Okuku River. Both rivers are really small creeks flowing over shingle. In summer they are quite dry and carry only surface run-off after rain. Neither river is ever boatable and there are few holes for swimming. With willows and pine giving shade in summer, the area is popular with campers and picknickers. The Garry River has some broom and gorse in the river bed.

Scenic value: Moderate.
Recreational value: Insignificant.

142.3.2 OKUKU RIVER 662050

Location: The Okuku is the biggest tributary of the Ashley. The river originates on the southern slopes of the Puketeraki Range and flows west and then turns sharply south to flow through two noted gorges before entering the Ashley over a shingle bed.

River confluence location: NZMS1, S75/860888

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S60 Dam-pier; S67 Ashley; S75 Waimakariri.

Length: 65km.

Average gradient: 1:60 16.7m/km.

Recreational use: The Okuku is a small, rugged river which becomes usable for small craft only a few times in the year, notably in spring when snow melt and warm rain boost the river's flow. The river is an ideal rafting (very small rafts only) and canoe trip for the more experienced paddlers only. The lower river is used for swimming. There is a scheme to use the water of the Okuku to provide irrigation for the orchards of Rangiora. Because of the lower summer flows when irrigation water will be required, this will involve a dam and reservoir. At the present time the details of the scheme are unknown but it will probably have some effect on recreational use.

Scenic description: From the usual launching point at Pig Flat (off Dobsons Road) the river begins as a quiet flowing stream over a shingle bed. It flows into the first gorge which has sloping hillsides down to the water channel and is without rock walls normally associated with gorges. This gorge is some 6km in length, then 8km of shingle bed follow, below Boil Gully where the hills are less steep.

The second gorge begins where the South Branch flows in. This gorge is long and narrow, cascading over boulders. Its rapids are steep and there are some particularly sharp corners.

The gorge opens out onto a wide shingle bed and the river may split into two or three main channels and it becomes shallow. The lower gorge lies within the Mt Thomas State Forest (predominantly beech and rough scrub) and has a rugged charm. However, the difficult water encountered on this river requires concentration on rafting, canoeing or liloing, or whatever the sport is, and the scenery takes a secondary role.

Scenic value: Picturesque.

Recreational value: High.

142.3.3 MAKERIKERI RIVER 662040

The Makerikeri River flows south into the lower Ashley immediately upstream and across the river from Rangiora. The river was inspected in summer when it was quite dry; whether it ever attains sufficient size for boating is unknown. We have certainly never heard of it being boated. It would, we imagine, be canoeable when in flood and we believe that swimming holes exist. The river is lined with willows and these would provide some shade in summer. It has a fine gravel bed and is without interest for those seeking white water.

Scenic value: Moderate.

Recreational value: Insignificant.

142.3.4 SALTWATER CREEK 662010

Saltwater Creek flows quietly into the river mouth lagoon of the Ashley River. It is more of a pond in nature, flanked by reeds and marsh plants and has a muddy bottom. It is tidal. The creek is swum in although it has dirty water, probably polluted, and some picnic canoeing and boating is indulged in. It is a pleasant picnic spot. Pine trees stand by the main road bridge

and lupins are common on the sandy soil flanking the pool.

Scenic value: Uninspiring.

Recreational value: Low.

143.0 KOWAI (KOWHAI) RIVER 661000

Location: The Kowai River (often spelt incorrectly as Kowhai) flows from the eastern slopes of Mount Grey and then east in a number of tributary streams through Amberley to the sea. The South Branch drains the Ashley Forest and joins the main stream at Leithfield immediately inland of the river mouth.

River mouth location: NZMS1, S68 & S69/125970

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S68 & S69 Amberley and Motunau.

Length: 30km.

Average gradient: Slight.

Recreational use and scenic description: There is normally only a small volume of surface flow in the rivers that make up the Kowai catchment and most of the river's flow remains in the riverbed shingle. Consequently, the river is seldom used for recreation. Children do swim in isolated spots that have been deepened to create pools, notably in a shallow hole in the North Branch adjacent to the Lawcock's Road Bridge near Amberley. The river bed is of shingle and is wide, with large willows along the banks or in the bed itself. With flood conditions one could float down the river between the willows. The area has a rural atmosphere with the Leithfield river mouth area being a notable holiday and recreational area based at the beach rather than at the river.

Scenic value: Uninspiring.

Recreational value: Insignificant.

144.0 WAIPARA RIVER 659000

Location: The Waipara River rises in three tributaries in the hill country south of the Hurunui catchment. The North Branch flows south, inland of Culverden. The Middle Branch, flowing east, is the smallest. The South Branch originates in the Okuku Hills and flows east. The three branches join 17km inland of Waipara, with Weka Creek joining from the north at Waipara itself.

River mouth location: NZMS1, S68 & S69/155020

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S67 Ashley; Sheet S68 & S69 Amberley and Motunau.

Length: 60km.

Average gradient: Slight.

Recreational use and scenic description: Of the upper tributaries the Middle Branch is the smallest and is little more than a dry creek bed for most of the year. The North Branch is a small, willow-infested creek, far too small for recreational use and without a clear channel for any distance. It could be swum at some of the wider pools although it is generally very shallow. The South Branch is more open and flows in a low gorge but has insufficient flow for recreational use.

From the confluence of the three tributaries the river winds through low hill country in a narrow valley over a shingle bed. Upstream of the Lewis Pass Highway the valley opens out onto a wide bed with the water channel meandering over the shingle and it remains like this for the entire distance to the sea. After flooding the stream tends to settle into a different path. Willows line the banks with smaller ones growing in the shingle bed.

The lower area, below the main road bridge, is a favourite picnic and camping area as there are often shallow pools of water in the shingle bed. Only when there is sufficient water (after rain) could you swim in the depressions in the river bed.

Scenic value: Uninspiring.

Recreational value: Insignificant.

145.0 BLYTHE RIVER 652000
MOTUNAU RIVER 657000

The Motunau River is a small stream flowing onto the coast north of Waipara. The lower tidal area is a popular picnic and swimming area and associated water activities are possible. Small fishing boats use the river mouth area to launch into the sea; otherwise the river above the tidal limit remains unusable for recreation because of its small size. The Blythe River, to the north of the Motunau, is usually dry or has a slight trickle of water. It remains little used. The beach shingle can create a small backwater which can be used for swimming but few seem to use it because there is no easily accessible vehicle track to the river mouth, unlike the Motunau River mouth or Buxton Creek further north.

Scenic value: Uninspiring.
Recreational value: Low.

146.0 HURUNUI RIVER 651000

The Hurunui River rises on the main divide on the eastern slopes of the Harper Pass. The South Branch, a smaller tributary, lies to the south on the main divide and flows north-east to join the main stream. In the headwaters of the North Branch lie several lakes of which Lakes Sumner and Taylor are the largest and best known. The North Canterbury Electric Power Board propose to place a dam at the confluence of the North and South Branches to form a hydro reservoir back to link up with Lake Sumner. From the confluence, the Hurunui flows through a number of dramatic gorges before entering the Culverden Plains where the Mandamus, Waitohi and Pahau Rivers join the main stream. The river continues through another gorge before entering the sea. The Hurunui offers facilities for the full range of river-based activities and is a particularly valued recreational river. The river has been considered in six sections as well as the various tributaries.

146.1 UPPER HURUNUI AND LAKES

Location: From Harper Pass on the main divide the Hurunui River flows directly east down a well defined valley to Lake Sumner beside the Crawford Range.

Section end location: NZMS1, S53/693547

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S52 Harper Pass; S53 Lake Sumner.

Length: 37km (includes Lake).

Average gradient: 1:150 6.7m/km.

Recreational use: The river above Lake Sumner is not used a great deal. Canoeists, rafters and drift boaters would have to portage upstream in order to paddle down, and the river is somewhat like the Hope and Waiiau which are more accessible. Trampers use the area greatly and float down parts of the river before the shallow shingle lower reaches are met and the river flows into the lake. The lower section of the river is often too shallow for jet boaters to get beyond the lake itself.

Lake Sumner is a very popular boating area. Jet boats often launch into the lake if they haven't already come upstream through the gorge. Canoeists use the lake a great deal and the Boys' Brigade often hold their annual camps in the area and canoe on the lake. Scouts and the physical education department of the teachers college have used the lake for canoeing too. Canoeists also use the lake as a means of access to the river below. The water can be very cold and swimming is limited to the hotter, late summer period.

Scenic description: The upper Hurunui flows over a rocky bed through a beech-clad valley that is most attractive. As the gradient of the river decreases, it flows out onto a fine gravel bed between grassy river flats that become very wide immediately before entering Lake Sumner. The flats gradually shelve into the shallow head of the lake forming a marshy margin as it

meets the lake. Much of the lake shore is beech-clad and is very attractive. Strong winds can ruffle the lake waters and create problems for boaters. Tussock-covered hills stand above the tree-line. Lakes Mason, Katrine, Taylor and Sheppard lie in grassy basins to the south of Lake Sumner.

Scenic value: Impressive.

Recreational value: Intermediate.

146.2 HURUNUI RIVER — SUMNER TO SOUTH BRANCH

Location: From Lake Sumner the Hurunui flows south through tussock country to junction with the South Branch.

Section end location: NZMS1, S60/761423

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S53 Lake Sumner; S60 Dampier.

Length: 17km.

Average gradient: 1:255 3.9m/km.

RECREATIONAL USE:

Motor launches: Too shallow with boisterous rapids.

Jet boats: Considerable use by experienced boaters. This is a particularly valuable piece of jet boating water for the experienced jet boater. It contains a number of steep rapids and large waves to be negotiated, ending with a short lake trip to the launching ramp on the Lake Sumner shore. The river is generally used in an upstream direction with only a few trips being made downstream.

Drift boats, rafts: Used to some degree. Considered straightforward and a good 'warm-up' for the bigger rapids below the Seaward Stream confluence. Some shallow rapids below Jollie Brook may need to be portaged.

Canoes/kayaks: A very valuable section of water with the South Island National Slalom site situated below Jollie Brook. This slalom course is noted as being suitable for novice as well as experienced slalom canoeists.

Camping facilities are available here but not in the lower river. The gorge above the Jollie Brook is noted for its steep rapids that are navigable by the less experienced, and they are far more gentle than those below the Seaward Stream which require a fair degree of skill.

Pack floating: Used a good deal, especially from Jollie Brook down to the South Branch confluence, after which the river becomes very powerful and boisterous, and too hazardous for liloes.

Swimming: A number of good pools.

Scenic description: From Lake Sumner the Hurunui flows out in a gravel bed through patches of beech forest and tussock grassland on the river flats. A great deal of matagouri scrub covers the flats and the hillsides. There are isolated patches of manuka scrub too. The river flows over a shallow bed of rock down to a short gorge above Jollie Brook. The gorge is short and narrow with a number of ledge rapids. The rock walls are topped with manuka and beech. The river opens out on reaching Jollie Brook and flows over a bouldery bed with some confined sections between rock banks. Quiet pools are frequent. Another short gorge lies above the confluence of the North and South Branches, but there are no rapids here other than shingle shallows. Overall a gentle flowing section of river with open country and short gorges. Easily accessible from the road.

Scenic value: Moderate.

Recreational value: High.

146.2.1 HURUNUI RIVER — SOUTH BRANCH 651150

Location: The South Branch of the Hurunui River is much smaller than the North Branch. It flows east from the main

divide over a shallow shingle bed. Its main tributary is the small North Esk River which originates near the headwaters of the Esk River which flows into the Waimakariri.

River confluence location: NZMS1, S60/761423

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S52 Harper Pass; S53 Lake Sumner; S60 Dampier.

Length: 44km.

Average gradient: 1:117 8.6m/km.

Recreational use and scenic description: The South Branch of the Hurunui River is quiet flowing over a shallow shingle bed with some rocks and rock banks. The river flows through a dry tussock valley with a great deal of matagouri scrub. The North Esk River is smaller still but has beech and other bush on its valley sides. Access is more restricted in that no public road extends up the valley for any distance. Most recreationalists, when in the area, prefer the North Branch, and thus the South Branch has been ignored.

Scenic value: Uninspiring.

Recreational value: Insignificant.

146.3 HURUNUI RIVER — MAORI GULLY AND HAWARDEN GORGE

Location: From the confluence of the North and South Branches of the Hurunui, the river moves off to the east through a narrow gorge known as Maori Gully (so named because it was a section of the greenstone route to Westland, and numerous artifacts have been discovered there). The valley opens up and then enters a second gorge, Hawarden Gorge, before flowing onto the Culverden Plains.

Section end location: NZMS1, S61/944460

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S60 Dampier; S61 Culverden.

Length: 25km.

Average gradient: 1:111 9.0m/km.

RECREATIONAL USE:

Motor launches: Too shallow and boisterous.

Jet boats: This section contains the famed 'Chutes' in the Hawarden and Maori Gully Gorges which are sought by the more experienced boaters. This section is usable only with a good flow of water and any decrease in the mean flow will render this very valuable resource useless. Some quiet pools between each rapid are of value for taking things easy before the next rapid — a situation that does not always exist in white water trips. This section of the Hurunui has white water navigable by jet boats, as contrasted with the Rangitata Gorge where the rapids are too boisterous. The nearest high class white water is in the Cromwell Gap on the Clutha and this will soon lie beneath a hydro lake.

Drift boats: Excellent water suitable for the larger drift boats, without too many shallow shingle shoals.

Rafts: Excellent water although sharp-edged rock could be a problem for unprotected rubber inflatables. A steady current to assist the more cumbersome craft. Moderate to high skill required.

Canoes/kayaks: One of the more frequently used 'hard' white water trips in the area and particularly valuable when the river is flowing slightly above normal flows.

Generally considered as Grade 3 water and suitable for the average skilled canoeist but most rapids are portagable and hence the novice is not excluded from using the river. Some canoeists may spend a whole day on the first 2 kilometres below the Seaward Stream 'playing' the rapids.

Pack floating, swimming: Not used to any great extent as the rapids become too boisterous.

Scenic description: From the confluence of the South Branch down to the Seaward Stream on the right bank (4.5km) the

river flows quietly over shingle and stones with some small pressure waves. The river here is flanked by grassland and matagouri scrub. At Seaward Stream the river enters Maori Gully, a low rock gorge with a number of impressive ledge-type rapids. The banks are often littered with loose rock and with the upgrading of the road above the gorge and removal of the manuka and small stunted beech trees, the gorge walls are now badly eroded and loose scree falls into the river. Some silver poplar and willows have been planted to hold the banks and these are an obvious misfit to the natural vegetation in the area and detract somewhat from the rugged nature of the gorge.

The rapids ease at Surveyors Stream and easy rapids exist down to the Hawarden Gorge. Rapids in the lower gorge are not so difficult but the gorge walls are more impressive, higher and generally shaded. One particular rapid is a very narrow chute of fast white water. At the Mandamus River confluence it opens out onto braided shingle flats.

Scenic value: Moderate.

Recreational value: High.

146.4 MIDDLE HURUNUI RIVER

Location: From the Mandamus River confluence the Hurunui flows as a braided stream over the Culverden Plains past Balmoral Forest to the Lowry Peaks Gorge.

Section end location: NZMS1, S61/256400

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S61 Culverden.

Length: 36km.

Average gradient: 1:333 3m/km.

Recreational use: This portion of the Hurunui is regularly used by all recreational groups although not so much by rafts and pack floaters, probably because of the shallow, braided nature of the river. Jet boaters consider the river up to the foot of the Hawarden Gorge as being straightforward and suitable for the less experienced although a good deal of skill is required if the river is low. There are often problems encountered with debris on the piles of the rail bridge. Canoeists regularly use the river from 'The Peaks' Station (access over private property) and the river is used by clubs for instructional purposes.

There are a number of picnic spots. The most frequented are at the main road bridge, downstream on the right bank, and a very popular campsite upstream of the bridge on the left bank in a grove of willows and pine. The nearby Hurunui Hotel is of historic interest and is a tourist curiosity which adds to the charm of the picnic area.

Scenic description: From the Mandamus River confluence the Hurunui becomes braided, although it maintains a steady current. Willows line the banks and screen off much of Balmoral Forest and the farmland that flank the river. Gorse and broom scrub are common. The dry Lowry Peaks tend to dominate the downstream vista and add some interest to an otherwise flat and dusty landscape.

Scenic value: Uninspiring.

Recreational value: Intermediate.

146.4.1 WAITOHI RIVER

651100

Location: The Waitohi River flows east from the Puketeraki Range to join the Hurunui at the main road bridge at Balmoral Forest, the river flowing south of the main stream.

River confluence location: NZMS1, S61/130356

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S60 Dampier; S61 Culverden.

Length: 59km.

Average gradient: 1:200 5m/km (lower river).

Recreational use and scenic description: The Lake Sumner Road follows the river for some distance in its upper catchment in the Seven Hills where it is very narrow with a shingle bed between steep, low rock banks. This area is known as the Waitohi Gorge. In summer the river is almost completely dry with shallow pools of water. With high flow the water is discoloured and swift between its rocky banks without significant rapids. Willows occur spasmodically along the river banks but are small. The dominant landscape is of a small tussock grassland cover with some matagouri scrub. The river is generally too small for boating activities but picnickers and swimmers use the pools at the Sumner Road Bridge and the area appears to be very popular. Below the gorge the river flows out onto the Culverden Plains where willows screen the bed from the surrounding pasture land. The bed is often dry and farm fences cross the river. In the lower river, willows grow in the bed and almost choke the river off completely. There are other popular picnic and swimming areas near the main road and at the Hurunui Domain.

Scenic value: Uninspiring.
Recreational value: Low.

146.4.2 PAHAU RIVER 651080

The Pahau River flows south between the Culverden and Tekoa Ranges to the west of the Waiiau River. It then turns south-east to join the Hurunui upstream of the Lowry Peaks Range Gorge. In the upper catchment the river flows between low rock banks in a shingle bed, then out onto the Culverden Plains where it becomes very wide and braided with willows along it. In summer the river is a dry shingle bed with weeds. It requires a near flood to contain sufficient depth of water for any recreational use and it is not used at all.

Scenic value: Uninspiring.
Recreational value: Insignificant.

146.5 HURUNUI RIVER — LOWRY PEAKS GORGE

Location: Below the Culverden Plains and Balmoral Forest, the Hurunui flows in a shallow gorge south-east through the Lowry Peaks Range and onto a narrow coastal plain, south of Cheviot.

Section end location: NZMS1, S62/427323

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S61 Culverden; S62 Cheviot.

Length: 20km.

Average gradient: 1:230 4.4m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Boatable but requires above normal flows and is generally too low in summer. The river is narrow, shallow and straightforward boating when there is sufficient flow.

Drift boats, rafts: Used but because of the lack of white water, is considered inferior to the upper river sections.

Canoes/kayaks: An interesting trip, easy and suitable for novice canoeists. Many canoe clubs (four centred in Christchurch) and youth groups (Boys' Brigade and Scouts) use this section of the river for introductory trips to canoeing activities. Many trips launch at Cathill Station rather than use the whole of the gorge as this allows a shorter distance to organise transport between launching and exit points.

Pack floating: Not used to any great extent although the river offers a usable and gentle trip.

Swimming: Considerable use at the lower end of the gorge at the main road bridge. A large picnic and barbeque area here is well patronised.

Scenic description: The Lowry Peaks Gorge is a gentle flowing section of river over a shingle bed. There are no dramatic gorge walls; rather, gentle sloping tussock hills flank a narrowly confined river bed. Small willows grow along the river banks. There are no rapids but the river is swift flowing. Some pines may be seen on the higher slopes of the hillsides.

Scenic value: Moderate.
Recreational value: High.

146.6 LOWER HURUNUI RIVER

Location: From the foot of the Lowry Peaks Range Gorge and the main road the river flows north-east to the sea over a wide shingle bed.

River mouth location: NZMS1, S62/594304

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S62 Cheviot.

Length: 19km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Generally too shallow to boat above the river mouth area. Smaller craft launch off the beach for a sea trip associated with fishing trips.

Jet boats: Boatable from the river mouth although high flows are needed. Considered to be a gentle and easy trip with some problems from willows at the road bridge.

Drift boats, rafts: Not used greatly because of shallows.

Canoes/kayaks: Used, but not to any great extent. Most canoeing is associated with picnics at the main road and at the river mouth and camping area. Few dedicated canoeists bother with this section of the river. No rapids.

Pack floating: Unused.

Swimming: Considerable use at the river mouth area and at the camp site, also at the main road bridge.

Scenic description: A braided river trip over a wide shingle bed, flanked by some clay coastal cliffs and bluffs. Willows are common. There are few rapids. The farmland in this vicinity lies above the banks and bluffs and is not visible from the river for most of this section.

Scenic value: Moderate.
Recreational value: Intermediate.

146.6.1 MINOR TRIBUTARIES OF THE HURUNUI RIVER

There are three minor tributaries of the Hurunui River worth a mention.

The Greta River flows beside the main road to join the river below the bridge at the foot of the Lowry Peaks Range Gorge. It flows in a narrow cleft in the hills with scrub and willows in the bed. It is certainly far too small to boat but may form small pools for swimming.

The Waikari River joins the Hurunui upstream of the Greta at Ethelton. It meanders about through the hill country in a willow-infested bed. It is small and sluggish, little more than a drain and quite unusable.

The Kaiwara River, flowing south onto the Hurunui's left bank opposite the Waikari, is similar but much smaller. None of these rivers are usable for boating and even in flood would be unnavigable because of the thick willows.

Scenic value: Uninspiring.
Recreational value: Insignificant.

147.0 **BUXTON CREEK** 649010
JED RIVER 649000

North of the Hurunui River mouth and flowing through Cheviot to the sea is Jed River and Buxton Creek. They are small with numerous willows along the banks and in the river bed itself. Both rivers offer some swimming at their mouths. In particular Buxton Creek has a build-up of beach shingle which forms a pleasant backwater for swimming and generally splash-ing about.

Scenic value: Moderate.
Recreational value: Low.

148.0 **WAIAU RIVER** 646000

The Waiau River has its origins in the Spenser Mountains which lie north of the Lewis Pass area. The river flows south in the high country then down through a steep gorge onto the Hanmer Plains. The river then flows through the Leslie Hills in a second, less dramatic gorge and onto the Waiau Plains, through a third gorge and onto the flat land around Parnassus. A last range of hills is crossed before reaching the sea. The main tributaries are the Lewis, Hope, Boyle and Leader Rivers.

148.1 **UPPER WAIAU RIVER** 646370

Location: The Waiau River has its origins in the tiny Lake Thompson high in the Spenser Mountains. From this point it flows south through the Hanmer Range and into the Hope River. Its main tributary is the small Edwards River.

Section end location: NZMS1, S54/954701

Maps: NZMS18, Sheet 15 Buller; Sheet 18 Hurunui; NZMS1, Sheet S40 Spenser; S47 Jollies; S54 Hanmer.

Length: 68km.

Average gradient: 1:100 10m/km.

Recreational use: The Upper Waiau River is not used to any great extent for recreation other than by trampers and fishermen, mainly because of difficult access and its isolation. Some pack floaters have run short sections at the lower end, and the Waiau Gorge which lies above the Hope confluence. Jet boaters using the smaller than average 'mini jets' have penetrated some distance up the gorge but such trips are only possible with high flows. Canoeists have run the section from the Edwards River down to the Hope, but again, because of portages and difficult access to the Edwards, these trips are rare. Those who have run the gorge report that the river is somewhat similar to the Lewis and lower Boyle Rivers which would offer the recreational facilities with considerably easier access.

Scenic description: From its origins in Lake Thompson the Waiau flows down a steep gully, through beech forest and onto a tussock-covered valley floor over a shallow shingle bed as a small stream. In places the stream splits into a number of channels on the shingle bed, then is confined to a single channel before the Edwards River joins it to boost the flow. From the Edwards confluence the river flows over a shingle bed then through a short gorge known as 'The Narrows' which contains steep bouldery rapids. The river then opens up onto shingle flats for a short distance before entering the 11km Waiau Gorge, another narrow ravine with bouldery rapids but more open than 'The Narrows' upstream. Beech forest encloses the gorge and makes this section of the river one of the more attractive in Canterbury.

The Edwards River is small and shallow and not used for recreation. It is similar to the upper Waiau and Lewis Rivers.

Scenic value: Impressive.
Recreational value: Intermediate.

148.2 **MIDDLE WAIAU RIVER —**
TO LESLIE HILLS

Location: From the confluence with the Hope River the Waiau flows eastwards, through a short gorge and onto the Hanmer Plains. On meeting the Hanmer River the Waiau turns south through another gorge and onto the flat shingle plains known as the Waiau Plains.

Section end location: NZMS1, S54/166581

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S54 Hanmer.

Length: 38km.

Average gradient: 1:230 4.4m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Above average flows are required to give the best boating. Often too low in summer. A large irrigation scheme will prevent boating up into this section when it is completed. Some difficult boating is provided although the average boater should be able to run the gorge to the Hope junction.

Drift boats, rafts: Used on the section through the gorge from the Hanmer River down to the Manuka Island Bridge. Average skill is required. Considered to be a valuable river for rafting.

Canoes/kayaks: A very popular trip from Hanmer River confluence downstream. Suitable for the less experienced except when flowing high. A wide variety of rapid types. Rapid difficulty up to 2+ grade.

Pack floating: Not used.

Swimming: At Hanmer River confluence and at isolated points along the river where there are quiet pools.

Scenic description: From the Hope confluence the Waiau flows onto a wide area of shingle with a great deal of broom, flanked by low, crumbling rock banks. The hillsides are of tussock covered with lot of scrub, mainly broom. After 4km of braided river the Waiau enters a 2km gorge which is merely a narrowing of the rocky banks which confine it to a single channel, deep and without rapids.

The river then flows out onto the very wide and braided shingle flats that make up the Hanmer Plains. Willows are prominent along the banks. This area is a particularly colourful area in autumn and has been depicted on numerous post cards and tourist brochures.

At the Hanmer River confluence the river enters a gorge flanked by rock bluffs, topped with scrub-covered hills. The river flows swiftly but without great force through the gorge over a shingle bed with some outcrops of rock and boulders, opening out again suddenly at the foot of the gorge where there is a metal extraction plant and stone crusher working. Willows and broom are common along the river, especially where there are shingle beaches.

Scenic value: Moderate.

Recreational value: High.

148.2.1 **HOPE RIVER** 646320

Location: The Hope River flows east from the main divide to link up with the Boyle and Lewis rivers and then into the Waiau.

River confluence location: NZMS1, S54/954701

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S53 Lake Sumner; S54 Hanmer.

Length: 46km.

Average gradient: 1:250 4m/km.

Recreational use: The lower 5km are generally boatable by jet boats, and further when flowing above normal levels. The river is shallow and without notable rapids. Because of poor vehicle access, the river is not often used by man-powered craft above the Boyle confluence.

The upper river is sometimes pack floated by trampers and hunters. There is a popular swimming and picnic area at the Hope Bridge but otherwise the river appears to be neglected.

Scenic description: The river, above the Boyle confluence, flows over a shingle bed between open grassland with some beech forest on the lower slopes of the flanking hillsides. Mata-gouri scrub is common on the flats. In places, such as where the small Kiwi River flows into the river, there are short rocky areas where the hillsides have confined the river valley and the beech forest comes down to water level. Most recreational activity begins at the Boyle confluence where the river flows swiftly over a shallow shingle bed flanked by wide, grassy flats and scrub. The Hope then gradually closes in to a short gorge below the Hope Bridge. The river is deep so that no rapids develop. It begins to open out onto shingle shallows again shortly before meeting the Waiau River. Willows appear just before the Hope Bridge and broom and other scrub is common along the full length of the river below the Boyle confluence.

Scenic value: Moderate.

Recreational value: Intermediate.

148.2.2 BOYLE RIVER 646323

Location: The Boyle River flows in a southerly direction in a valley to the east of the Lewis River on the other side of the Libretto Range. It joins the Lewis upon meeting the Lewis Pass Highway and the two rivers flow combined as the Boyle River, south to the Hope River. The Doubtful is a main tributary below the Lewis confluence.

River confluence location: NZMS1, S53/814694.

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S46 Lewis; S53 Lake Sumner.

Length: 43km.

Average gradient: 1:150 6.7m/km.

Recreational use: The Boyle tends to be a shallow river but can flood quickly. The river is generally too shallow for jet boating and a narrow gorge a few kilometres above the Hope Junction offers water too boisterous for jet boats except when drowned out by high floods. The gorge is also a little too narrow for rafts and drift boats, although moderately high flows do make the gorge boatable. Canoeists, however, make considerable use of the river below the Lewis confluence. Above the Lewis, access is more difficult and few boaters, canoeists included, use the river. Some trampers and hunters float the river. Swimming is a popular pastime at the Lewis confluence and downstream near the Ministry of Works depot. There is also a very popular picnic spot and swimming area below the lower gorge and some 2.5km above the confluence with the Hope.

Scenic description: Above the Lewis River confluence the Boyle is very small, flowing in a beech-clad valley flanked by a narrow, grassy margin of river flats. From the Lewis confluence the river flows swiftly over shingle beyond the Doubtful River confluence. At the Ministry of Works camp the river flows into a short gorge with steep rocky rapids. Another open shingle reach occurs before the second gorge. There is another short open space of flat land and shingle bed before the third gorge of rugged rock bluffs with beech and scrub overhanging the tops. The river finally opens out again and flows 3km down to the Hope River.

Scenic value: Impressive.

Recreational value: High.

148.2.3 LEWIS RIVER 646396

Location: The Lewis River rises on the main divide at Lewis Pass and runs south beside the main highway to join the Boyle River.

River confluence location: NZMS1, S53/789797.

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S46 Lewis; S53 Lake Sumner.

Length: 17km.

Average gradient: 1:60 16m/km.

Recreational use and scenic description: The Lewis is a small, steep river, flowing over a bouldery bed through a low beech forest. The water, when flowing high, cascades over the boulders and there are a number of logs lying in, or across, the river. The river can be canoed over the lower reaches, below Patersons Creek Bridge and the Nina River confluence depending upon flow levels.

The river also offers exciting lilo trips for experienced floaters wearing crash helmets. Some quiet pools could be swum in. The main activity is picnicking on the numerous grassy areas beside the main road. The river is seldom boated as it becomes very wild and shallow. The beech forest and small grassy glades make for attractive scenery.

Scenic value: Impressive.

Recreational value: Low.

148.2.4 HANMER RIVER 646200

The Hanmer River is a small, shallow, shingle bed stream flowing west along the northern edge of the Amuri Range and south of the Hanmer Forest. The river is normally too small and shallow for any sort of boating or floating and is braided in sections which makes the shallowness more pronounced. It could be canoed when in flood but we should imagine that most boaters would prefer the Waiau River itself. The main value lies in the popular swimming and picnic area at the Waiau confluence above the Waiau Ferry Bridge. The nearby Percival River is very small and choked with willows and may be muddy.

Scenic value: Uninspiring.

Recreational value: Low.

148.3 WAIAU RIVER — TO PARNASSUS GORGE

Location: From the foot of the Leslie Hills Gorge the Waiau flows in a general easterly direction in an excessively wide and braided bed to the foot of Mount Parnassus where it enters the hills in a narrow valley.

Section end location: NZMS1, S55 & S56/468605

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S54 Hanmer; S55 and S56 Parnassus.

Length: 36km.

Average gradient: 1:230 4.4m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: A very popular trip requiring skilled boaters to pick the best of the excessively braided channels and avoid the extremely shallow shoals. A part of the annual jet boat marathon races are held on this section of the river and it is on this part that skill is the greatest advantage.

Unfortunately, the irrigation scheme currently under construction will ruin this part of the river for jet boating and, other than under high flood, it will be unboatable here.

Drift boats, rafts, canoes/kayaks: The very shallow nature of this section of the river is not attractive boating for rafts, drift boats and canoes and these craft seldom use this section of the river. Some youth groups do paddle parts of this flat section, particularly in order to float down the Parnassus Gorge. Most boaters, however, do not go beyond the Manuka Island Bridge.

Pack floating: Unused.

Swimming: Numerous swimming holes used by the local people with considerable use made of the pools at Waiau Bridge.

Scenic description: Below the Leslie Hills Gorge lie 24km of very braided shingle flats. From the Waiau Bridge, the braided channels tend to keep closer together, although the shingle is just as wide. The channels run deeper and swifter below Waiau to the Parnassus Gorge which is the river valley as it cuts through the Lowry Peaks Range below Mount Parnassus. Some stunted willows grow on the river bed shingle and the outer banks are generally thickly lined with willows and grass. From the river the farmland and surrounding country seem to be some considerable distance off across the river bed. There is often a dusty haze over the river as the wind whips up fine dust and sand. The bed is up to 2.5km in width near Rotherham. The Lowry Peaks Range is very dry and weathered.

Scenic value: Uninspiring.

Recreational value: Intermediate.

148.3.1	LOTTERY RIVER	646101
	WANDLE RIVER	646102
	MASON RIVER	646100

Location: The Lottery River flows south to join the Waiau River at Waiau. It has two main feeders entering well down in the catchment — the Mason and Wandle Rivers, which flow beside S.H. 70.

River confluence location: NZMS1, S55 & S56/375623 (Lottery River).

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S48 Charwell; S55 & S56 Parnassus.

Length: 36km.

Average gradient: 1:125 8m/km.

Recreational use and scenic description: The Lottery is a small river with little flow in summer but carrying considerable water after rain. It flows over shingle with clay banks often covered in willows and silver poplar. The water channel flows down the river between shingle beaches with crumbling clay banks further off. The channel splits and braids in the lower reaches especially after the Mason and Wandle flow in. The catchment is very eroded in places and the silver poplars have been planted to hold the banks. The river is much like some of the very eroded North Island East Cape rivers. The Wandle River is similar although smaller and the gravel bed is made up of a larger stone. The Mason River flows in a deeper and narrow gully but carries only a very small flow of water. There are some rock banks on the Mason between the Mason Hills Station and the Wandle confluence.

All these rivers are too small for boating except under high flood when boaters would probably prefer larger rivers anyway. The rivers are not used for swimming or picnicking as they become very dusty in summer.

Scenic value: Uninspiring.

Recreational value: Insignificant.

148.4 WAIAU RIVER — PARNASSUS GORGE

Location: The Parnassus Gorge is that section of the Waiau that flows through the Lowry Peaks Range and onto the narrow coastal plain.

Section end location: NZMS1, S55 & S56/515531

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S55 & S56 Parnassus.

Length: 17km.

Average gradient: 1:415 2.4m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Excellent boating over flat water without rapids, shallows or other obstacles. Easy boating.

Drift boats, rafts: Usable but not often used. Flat water through the gorge between sloping tussock-covered hillsides. No rugged bluffs.

Canoes/kayaks: Not used to any great extent by canoeists although youth groups who canoe use the river once or twice a year. Flat water of little real interest.

Pack floating, swimming: Unused.

Scenic description: The gorge is not a gorge in the true sense of the word. It is really only a narrow valley, being confined by the Lowry Peaks Range on the right bank and Mount Parnassus on the left. The river twists its way between the hills in a wide shingle bed, confined to a single channel in all but a few places and generally flanked by a wide beach on one side or the other. The hillsides are tussock-covered with some isolated patches of scrub. There are some small willows, but on the whole there is little vegetation other than the tussock. The river flows at a steady rate without disturbances or rapids.

Scenic value: Moderate.

Recreational value: Intermediate.

148.5 LOWER WAIAU RIVER

Location: From the foot of the Lowry Peaks Range the Waiau flows east over a braided shingle plain before being confined to a narrow valley as it cuts through the southern end of the Hawkwood Range and meets the sea.

River mouth location: NZMS1, S62/676462

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S55 & S56 Parnassus; S62 Cheviot.

Length: 22km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Some power boats could use the river mouth lagoon but there is no easy access by road to a deep enough pool for launching and the river is too shallow to navigate to the nearest road, the Waiau East Road. There is no significant use of the river by power boats other than jet boats.

Jet boats: Considerable use from the river mouth upstream. Most boats launch at the Waiau East Road. At present the very low rail and road bridge does not allow very easy navigation — in some places wires hang below the bridge deck. Hopefully, the new Waiau bridge will allow for easier boating provided the old bridge piles are fully removed and not merely cut off at water level as has been the habit on many rivers.

Drift boats, rafts: Because of the lack of vehicle access at the river mouth, most boaters do not go beyond the road/rail bridge.

Canoes/kayaks: Not used to any great extent except that those canoeists coming down the Parnassus Gorge may paddle to the main road/rail bridge. The lower river remains unused because of the lack of vehicle access to the mouth.

Pack floating: Unused.

Swimming: The river can be very swift in places and this discourages swimming. The river mouth area is a beautiful swimming spot but because of poor access, is seldom used.

Scenic description: From the foot of the gorge the Waiau spreads out again onto a very wide braided river bed. Frequent willows add a splash of green to an otherwise brown and dry landscape. The water flows diagonally through the bridge piles of the road/rail bridge and this creates an extreme hazard for slower moving craft. Most jet boats use the extreme left bank where the bridge appears higher above the water surface. Below the Leader River confluence the river narrows into a single, wide channel and meanders beside a bush-clad hillside on the left and tussock grassland on the right. It is a particularly attractive area with the green bush, light blue water and the wide shingle beaches. The area is peaceful, no doubt because the lack of vehicle access keeps the crowds away.

Scenic value: Impressive.
Recreational value: Intermediate.

148.5.1 LEADER RIVER 646020

Location: The Leader River is a small tributary of the Waiau entering the main stream from the north of Parnassus.

River confluence location: NZMS1, S55 & S56/621524

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S55 & S56 Parnassus.

Length: 30km.

Average gradient: 1:210 9.1m/km.

Recreational use and scenic description: Like the Hanmer, Lottery, Wandle and Mason Rivers, the Leader is a very shallow shingle bed river with willows and poplars planted along the banks to help prevent erosion. In summer the river seems to be little more than a series of stagnant pools, but after rain swells quickly to become a torrent of water.

Scenic value: Uninspiring.

Recreational value: Insignificant.

KAIKOURA COAST AND MARLBOROUGH SOUNDS

149.0	Conway River	131	161.3	Lower Awatere River	136
150.0	Kaikoura's Southern Streams	131	162.0	Wairau River	136
151.0	Kahutara River	131	162.1	Upper Wairau River	136
152.0	Kowhai River	131	162.1.1	Rainbow River	137
153.0	Hapuku and Puhi Puhi Rivers	131	162.2	Middle Wairau River	137
154.0	Clarence River	132	162.2.1	Branch River	137
154.1	Upper Clarence River	132	162.2.2	Leatham River	137
154.1.1	Acheron River	132	162.2.3	Goulter River	137
154.2	Clarence River — Top Gorge	132	162.2.4	Wye River	138
154.3	Clarence River — Middle Section ..	133	162.2.5	Waihopai River	138
154.4	Clarence River — Middle Gorge	133	162.3	Lower Wairau River	138
154.5	Clarence River — to the Lower Gorge	133	162.3.1	South Bank Tributaries	138
154.6	Clarence River — Sawtooth Gorge	133	162.3.2	Tuamarina and Waikakaho Rivers	139
154.7	Clarence River — Lower River	134	162.3.3	Seventeen Valley Stream and the Estuary Creeks	139
154.7.1	Minor Tributaries of the Clarence	134	163.0	Kaituna River	139
155.0	Kekerengu River	134	164.0	Pelorus River	139
156.0	Woodside Creek	134	164.1	Upper Pelorus River	139
157.0	Waima (Ure) River	134	164.1.1	Tinline River	139
158.0	Flaxbourne River	135	164.2	Lower Pelorus River	139
158.1	Lake Elterwater	135	164.2.1	Rai River	140
159.0	Lake Grassmere	135	164.2.2	Wakamarina River	140
160.0	Blind River Catchment	135	165.0	Whangamoia River	140
161.0	Awatere River	135	166.0	Wakapuaka River	140
161.1	Upper Awatere River	135	167.0	Maitai River	140
161.2	Awatere River Gorges	136			
161.2.1	Tributaries of the Middle Awatere	136			

149.0 CONWAY RIVER 643000

Location: The Conway River flows south-east from the Seaward Kaikoura Range, crosses under the S.H. 70 and links up with the Charwell River which flows in from the north. The Conway then twists its way through the hills to flow out to the main road at Hundalee, and thence to the coast.

River mouth location: NZMS1, S55 & S56/768663

Maps: NZMS18, Sheet 18 Hurunui; NZMS1, Sheet S48 Charwell; S55 & S56 Parnassus.

Length: 57km.

Average gradient: 1:190 5.3m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Too low normally but has been boated up into the gorge by some enthusiasts when the river is flowing well above normal or in flood. Rapids are of no great value and most boaters would prefer to use the Waiau, or the Clarence if they are skilled.

Drift boats, rafts: Only occasionally has sufficient flow for boating.

Canoes/kayaks: Has seen some use between the main road and the river mouth, and when in flood, from the S.H. 70 bridge down to the main road, through the gorge. Considered to offer nothing that the Waiau does not. When of sufficient size is an easy river.

Pack floating: Unused.

Swimming: Numerous holes in the river between the main road and the river mouth are used and are very popular.

Scenic description: Above the S.H. 70 bridge the Conway is a small river and flows over a wide shingle bed in a very eroded, rocky gully. At the bridge the river is exceptionally wide and braided with only a trickle of water in summer. The river then flows into a narrow gorge with bare rock bluffs and tussock hillsides. The river bed is of shingle and there are no rapids except at high flow when there may be some backlash off the walls. The river opens out a little on meeting the Charwell, then flows into another narrow gorge which opens out to become braided at Ferniehurst and which lasts down to Hundalee and the main road bridge. In this braided section willows line the bank quite thickly. From Hundalee to the sea, the river is again confined to a single channel over shingle shallows with some deep pools on the corners where the current sweeps into bluffs. The Charwell River, the largest tributary, is like the upper Conway River, except that it is smaller with less water and is generally unused.

Scenic value: Moderate.

Recreational value: Low.

150.0 KAIKOURA'S SOUTHERN STREAMS

There are a number of very small streams north of the Conway River mouth and south of Kaikoura that may provide some water at high flow for a limited canoe or small raft trip. Almost all are used for swimming and picnics where they cross the main road or, from Oaro, at the river mouth area.

The Okarahia Stream is small and as it crosses the main road it is little more than one metre wide over a gravel bed. It flows through native bush and beech forest, providing an attractive shady valley. For most of the year the Oaro is an almost dry shingle bed, remaining a very small stream, even when flooded. It offers a pleasant picnic spot where children swim or splash about in canoes or tyres. The Ote Makura Stream is very small, even when flooded. It flows into the sea at Goose Bay where it is used as a picnic and swimming spot.

Scenic value: Picturesque.

Recreational value: Low.

151.0 KAHUTARA RIVER 634000

Location: The Kahutara River has a number of tributaries (Sawyers Creek and Kahutara North Branch) that flow off the seaward Kaikoura Range and junction a little above where the river crosses S.H. 70. Linton Creek, Cribb Creek and the small Humbug Stream join the river, and combined flow to the sea immediately south of Kaikoura.

River mouth location: NZMS1, S49/880877

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S48 Charwell; S49 Kaikoura.

Length: 30km.

Average gradient: 1:103 9.6m/km.

Recreational use and scenic description: All the river tributaries and the river itself above the confluence of the tributaries, are very steep and rocky with lengths of coarse gravel. The main stream actually has a small waterfall. In summer the river has little flow but with rain the river quickly rises to become a fast torrent. There is no access above S.H. 70 and the rivers are not used above that point. Below S.H. 70 there are 16km of steep shingle bed river with numerous willows overhanging the stream. With very heavy flows the river could be canoed, floated and rafted, providing an extremely fast and exciting trip; however, such trips are rare. The river mouth area can be used for swimming although most tend to prefer the sea. Overall, the river is not used for recreation to any extent. Scenically, tussock, scrub and willows tend to make the river uninteresting.

Scenic value: Uninspiring.

Recreational value: Insignificant.

152.0 KOWHAI RIVER 632000

Location: The Kowhai River flows east off the seaward Kaikoura Range into South Bay at Kaikoura.

River mouth location: NZMS1, S49/920894

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S49 Kaikoura.

Length: 22km.

Average gradient: 1:62 16m/km.

Recreational use and scenic description: The Kowhai drops suddenly down the side of the seaward Kaikoura Range to the sea in a bed of coarse gravel which is erosion debris from the upper river catchment. The Kowhai carries little water except after rain or when carrying snow-melt. The river has a broad shingle bed braided by willows. Sheep and cattle graze the pasture on either side of the river. There is a good deal of scrub (manuka) in the upper catchment and in the gullies leading into the river. The river is not boatable except under high flood when canoeists and rafters may float downstream at some speed. There seems to be little demand for swimming in the river mouth area.

Scenic value: Uninspiring.

Recreational value: Insignificant.

153.0 HAPUKU RIVER 629000 PUHI PUHI RIVER 629010

Location: The Hapuku River flows east to the sea from the seaward Kaikoura Range north of Kaikoura. A tributary, the Puhi Puhi River, flows south to join the Hapuku at the main road bridge.

River mouth location: NZMS1, S49/015001

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S49 Kaikoura.

Length: 17km.

Average gradient: 1:40 25m/km.

Recreational use and scenic description: The Hapuku and the Puhi Puhi Rivers are much like the Kowhai — steep and flowing over shingle. The water flows in a wandering channel over the gravel bed. The rivers are flanked by low rock banks and willows. The Hapuku is a small river joined by numerous little rivers upstream of the main road.

The Puhi Puhi has a number of tributaries itself. Neither of these rivers nor their tributaries are of boatable size or suitable for swimming. When flooded the river flows very fast and often cuts into the shingle banks, washing it downstream.

Scenic value: Uninspiring.

Recreational value: Insignificant.

154.0 CLARENCE RIVER 621000

The Clarence River begins on the eastern slopes of the Spenser Mountains and flows south to Lake Tennyson before turning north-east to slice between the Inland and Seaward Kaikoura Ranges. The river then turns south-east to enter the sea between Cape Campbell and Kaikoura. The Middle Clarence Valley, between the Kaikoura Ranges, is actually a fault angle depression some 80km in length and it is this section of the river that offers some of the best boating trips in the whole of the country. It is unique because of its variation in countryside, from alpine scrub, through beech, exposed tussock country, manuka bush and rugged gorges. Lastly, it flows through rural sheep farming country. The river has one of the longest continuous rapids of a degree of difficulty to satisfy the most experienced canoeist and yet can still be run by relative newcomers to the sport. It is also one of the most frequently rafted and drift boated rivers in the country and is often jet boated. It is an isolated area with still visible signs of its early pioneering history.

154.1 UPPER CLARENCE RIVER

Location: The Clarence River originates off the southern slopes of Mount Belvedere and flows south through Lake Tennyson and on through a valley between the St James and Crimea Ranges, turning east as it meets the Hanmer Range, then north to the Acheron River.

Section end location: NZMS1, S47/322940

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S40 Spenser; S47 Jollies.

Length: 67km (including Lake Tennyson).

Average gradient: 1:230 4.4m/km.

Recreational use: The Upper Clarence is very small until the Acheron flows in. The river has been canoed often from the lake and is rafted by the smallest rafts. Ideally, high flow or spring flow offer the best water. Most use is made of the river during summer. The 11km above the Acheron River confluence have been jet boated but this requires spring or winter flows, or heavy rain.

The river is gentle flowing with numerous shallow rapids that are well liked by even novice canoeists and rafters. Shallows may need portaging in summer. Swimming holes are becoming very popular from where the river reaches Jacks Pass.

Scenic description: Above Lake Tennyson the river flows in barren tussock country and bare rock. From the lake the river is very small and shallow in a stony bed and with numerous boulders. Tussock and rock flank the river; snow lies on the ground in winter. In places the river flows between low rock banks and over shallow bouldery rapids; in other places the river has low, tussock-covered banks. Matagouri scrub is common and there may be briar in the lower reaches. Small willows may also be found. The area can be very cold in winter and dry in summer.

Scenic value: Picturesque.

Recreational value: Intermediate.

154.1.1 ACHERON RIVER 621590

Location: The Acheron flows south-west along the western part of the Inland Kaikoura Range to junction with the Clarence at the point where it turns on its north-easterly course along the fault line.

River confluence location: NZMS1, S47/322940

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S34 Saxton; S41 Molesworth; S47 Jollies; S48 Charwell.

Length: 71km.

Average gradient: 1:145 6.9m/km.

Recreational use and scenic description: The Acheron flows in a shallow shingle bed over rocks, boulders and shallow ledges between areas of sloping shingle beaches and low rock banks. The valley is predominantly tussock-covered with patches of matagouri and a considerable amount of briar. The river is not unlike the Upper Clarence and only slightly smaller. Immediately upstream of its confluence with the Clarence it flows through an incredibly narrow and steep ravine which twists and turns as it drops some distance to a lower level (probably not canoeable here). The river would be canoeable and raftable although it is not used because the Upper Clarence is similar, larger and has better access.

The road along the Acheron, going to Molesworth Station has a number of locked gates. Because of indiscriminate shooting, this area is now closed to most recreationalists — the run-holders are most unfriendly.

Scenic value: Picturesque.

Recreational value: Low.

154.2 CLARENCE RIVER — TOP GORGE

Location: From the Acheron confluence the Clarence turns east, then north again, firstly over braided shingle and then into the gorge through the Bullen Hills. The river opens onto a shingle bed again at Cloudy Hut.

Section end location: NZMS1, S48/493962

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S47 Jollies; S48 Charwell.

Length: 27km.

Average gradient: 1:300 3.3m/km.

RECREATIONAL USE:

Motor launches: Too shallow and boisterous.

Jet boats: Boatable with high flow, or spring flow. One particular rapid in the gorge, 'The Chute', may prevent navigation downstream for those who launch at the Acheron. The same rapid may prevent upstream travel from the sea, although it has been boated. It requires experienced boaters as the rapids can be hazardous — certainly a trip to be remembered.

Drift boats: One of the most frequently boated rivers in the country. Some rapids may need to be portaged in summer flows. Ideal water, especially when flowing high.

Rafts: Regularly rafted since the first trip in the early 1960's. Good rafting water although the rocks in this upper gorge can be very sharp. Suitable for the less experienced rafters.

Canoes/kayaks: One of the most popular 'expedition' trips, most canoeists taking a week to traverse the section from the Acheron to the sea. (It can be done in 3 days).

It is isolated and remote from 'civilization', which is a particular feature of this trip. Suitable for the less experienced. Some parties have numbered in excess of 20 members and most South Island canoe clubs run a regular annual trip. North Island canoeists are also common over summer, coming specifically to canoe this river.

Pack floating: Not ideal because of the difficulty in arranging food dumps and access is awkward.

Swimming: Very popular at the Acheron confluence and pools above that point.

Scenic description: The valley of the middle Clarence represents a long 'wilderness' trip or expedition of 3 to 6 days for most boaters (apart from jet boaters) so that although this survey has broken the river up into sections, the river ought to be considered as a whole. From where the Acheron joins the Clarence the river flows over shallow shingle shoals with some rocky banks and quiet pools. The open landscape and flanking hills are tussock-covered and badly eroded. From the Dillon confluence the river flows into the top gorge between extremely rugged cliffs with excessively contorted rock strata that is of interest. There is interesting bird life, particularly paradise duck and cormorants. The rapids are easy with interest to even the most experienced boaters with one, 'The Chute', a short waterfall that is navigable. Just before 'The Chute' is a huge flat rock in the middle of the river — it is a warning that the Chute is the next rapid.

Near Cloudy Hut the river flows from the gorge onto a shingle bed. The largest tributaries — the Dillon and Hossack Rivers are both shallow rivers in narrow gullies. They are without access and consequently, neither is used, nor likely to be used for recreation.

Scenic value: Impressive.

Recreational value: Exceptional.

154.3 CLARENCE RIVER — MIDDLE SECTION

Location: From the foot of the top gorge the Clarence continues north-east in the fault angle depression over a gentle valley of shingle to meet the middle gorge at the Gloster River confluence.

Section end location: NZMS1, S48/622092

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S48 Charwell.

Length: 23km.

Average gradient: 1:300 3.3m/km.

RECREATIONAL USE:

Motor launches: Too shallow and isolated, as this section is cut off by sections of boisterous rapids.

Jet boats: Easy boating although spring, or high flows, are needed to get into this section of the Clarence.

Some steep and shallow rapids but all are straightforward.

Drift boats, rafts: Frequently boated and rafted although this short section often tends to be shallow and frustrating. At present, there is sufficient flow even in summer to navigate the river. Any reduction in the mean summer flow would make this section of the river unnavigable.

Canoes/kayaks: A section of quiet flowing water after the boisterous top gorge. The water flows clear and sparkling between the tussock-covered hills. Some shallow rapids.

Pack floating: Unused.

Swimming: Numerous deep holes but lack of access cuts this valley off to all but those boating, tramping or hunting in the area.

Scenic description: This section of the Clarence flows out onto a shallow shingle bed, braided below the Palmer Stream confluence. The valley is tussock-covered and in mid-summer, the blue borage flowers and some green briar and willows add colour. The tops of the ranges may be snow-capped adding more colour and interest to the scene. The river is usually very clear with ducks and some sea birds nesting on the shingle beaches.

Scenic value: Picturesque.

Recreational value: High.

154.4 CLARENCE RIVER — MIDDLE GORGE

Location: From the Gloster River confluence the Clarence flows into a deep gorge for a short distance before flowing out onto Quail Flat.

Section end location: NZMS1, S41/735155

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S41 Molesworth; S48 Charwell.

Length: 24km.

Average gradient: 1:400 2.5m/km.

Recreational use and scenic description: The Middle Gorge of the Clarence does not contain any momentous rapids but does have some powerful eddies as the river sweeps around large bends between rock bluffs and steep hillsides. The river is generally deep with one or two shallow rapids such as the one directly below Seymour or Herring Stream which is one of the steepest shingle slides in the river — navigable by jet boats, rafts, drift boats and kayaks with ease. The river is generally flanked by willows and other vegetation with the upper hillsides covered in tussock and briar.

Scenic value: Picturesque.

Recreational value: High.

154.5 CLARENCE RIVER — TO THE LOWER GORGE

Location: From Quail Flat the Clarence continues north-east in a shingle bed interspersed with steep bouldery rapids down to the beginning of the lower gorge.

Section end location: NZMS1, S42 & S43/995321

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S41 Molesworth; S42 & S43 Clarence.

Length: 46km.

Average gradient: 1:166 6m/km.

Recreational use: This section of the river is navigable by the full range of river craft from jet boats to kayaks. The rapids are steep and exciting. Jet boaters require a great deal of skill to run the weir. Drift boaters find the river fast with a number of very exciting rapids. Rafters may find some rapids a little shallow. Canoeists enjoy the constant rapids of Grade 2+ difficulty which are ideal for the average canoeist, testing for the novice and still of interest to the expert.

Scenic description: This middle section of the Clarence is overlooked by the snow-capped peaks of Mount Alarm, Mount Tapuaenuku and Mitre Peak. The hills on either side of the valley are tussock-covered with large areas of scrub and erosion scars exposing rugged bluffs. The area around Ravine Hut is particularly impressive. The river is a series of steep bouldery rapids which become more difficult and longer approaching the gorge. The old station homesteads of Quail Flat and Bluff Station are of historic interest. Low, stunted beech and manuka forest begin to appear at the lower end of the section.

Scenic value: Impressive.

Recreational value: Exceptional.

154.6 CLARENCE RIVER — SAWTOOTH GORGE

Location: The Sawtooth Gorge, or lower gorge, of the Clarence is one of the most impressive river gorges in the country. It lies at the upper end of the Seaward Kaikoura Range.

Section end location: NZMS1, S42 & S43/187374

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S35 Awa-tere; S42 & S43 Clarence.

Length: 55km.

Average gradient: 1:230 4.4m/km.

RECREATIONAL USE:

Motor launches: Too shallow and boisterous.

Jet boats: Navigable with all but low flows. Fast, exciting, demanding and hazardous. Two rapids — 'The Jaw Breaker' and 'The Nosebasher' were named after incidents on jet boat trips and are typical of the gorge.

Drift boats: One of the best sections of drift boating water in the country with constant rapids but none too difficult for the average boater. Some rapids may be a little shallow in late summer.

Rafts: Excellent continuous rapids, some of which may be a little shallow and will inflict damage if care is not taken. Fast and exciting.

Canoes/kayaks: Almost continuous 50km of rapids of a degree of difficulty to keep the average canoeist occupied for a full day. Probably the longest section of sustained white water rapids in the country, whose fame is spreading rapidly. The number of canoeists tackling the river has doubled every year since 1970. The trip is regarded as a 'must' by all canoeists.

Pack floating: Limited use because of the difficult access.

Swimming: Little used. Swift water and difficult access. Canoeists are always swimming unintentionally in some of the rapids.

Scenic description: The lower gorge, or Sawtooth Gorge, is a constant series of steep, bouldery rapids leading onto sharp bluffs. The bluffs rise sheer and rugged from the water's edge although there is usually a narrow shingle beach on one side or the other of the gorge. Manuka scrub and some beech cover those hillsides not so steep. The snow-capped mountains are often glimpsed. There are extensive areas of grassland on the left bank but these are not apparent from the river. The boater is left with the impression that he is far from civilization and help. The lower end of the gorge becomes placid and deep-flowing between heavily-bushed hillsides that are most attractive and a reminiscent of the lower Motu River in the North Island.

Scenic value: Exceptional.

Recreational value: Exceptional.

154.7 CLARENCE RIVER — LOWER RIVER

Location: From the foot of the Sawtooth Gorge the Clarence turns south to flow to the sea, north of Kaikoura.

River mouth location: NZMS1, S42 & S43/201189

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S42 & S43 Clarence.

Length: 29km.

Average gradient: 1:166 6m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Exciting water from the river mouth up to the Glen Alton bridge, then becoming easier over braided shingle flats.

Drift boats: Exceptionally good water although the first few kilometres below the gorge may be a little shallow.

Rafts: Particularly good water after the shallows between the gorge and the Glen Alton bridge.

Canoes/kayaks: Numerous canoeists run the short section from the Glen Alton bridge to the sea because of the very long sections of white water — Grade 2 difficulty. The upper section offers a quiet end to a very exciting and eventful trip from the Acheron junction.

Pack floating, swimming: Not used. Water usually discoloured and has a heavy load of silt picked up from the end of the gorge. Water cold and very swift. Stopbank works consisting of blocks of concrete with protruding railway iron provides dangerous water.

Scenic description: The Sawtooth Gorge ends dramatically as the heavily-bushed narrow gorge suddenly opens out into pasture and gentle hillsides. The river spreads out onto a very wide braided bed, often with clouds of dust rushing across the river bed. The river is flanked by bluffs and high walls in places. A rural setting.

Some distance below the Glen Alton Station bridge the river increases its gradient and flows over bouldery rapids to the sea. Sea birds nest in the river shingle. Beef cattle graze the hillsides.

Scenic value: Impressive.

Recreational value: Exceptional.

154.7.1 MINOR TRIBUTARIES OF THE CLARENCE

All the tributaries of the Clarence, apart from the Acheron River, are very small and steep, and do not carry sufficient water for recreation. Almost without exception the rivers are inaccessible other than by arduous passes over the Inland or Seaward Ranges. The lower tributaries such as George Stream, Miller Stream and Wharekiri Stream are all wide shingle scree slopes down gullies. Most lie in thick scrub and bush.

Scenic value: Picturesque.

Recreational value: Insignificant.

155.0 KEKERENGU RIVER 616000

Location: The Kekerengu River flows east from the Seaward Kaikoura Range to the sea some distance north of the Clarence River mouth.

River mouth location: NZMS1, S42 & S43/277390

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S35 Awatere; S36 Ward; S42 & S43 Clarence.

Length: 14km.

Average gradient: 1:80 12m/km.

Recreational use and scenic description: The Kekerengu River is a very steep gully of shingle over which flows a small trickle of water. After rain the river becomes a torrent often moving a quantity of shingle down the bed as it flows. It is always a shallow creek, even when flowing high. There are no pools for swimming, even at the river mouth.

The river flows down a grassy valley with some pine and scrub. The small rivers to the south — Washdyke Stream and Deadman Stream, are very small and not used at all.

Scenic value: Uninspiring.

Recreational value: Insignificant.

156.0 WOODSIDE CREEK 613000

Woodside Creek, which flows onto the coast at Wharanui between the Kekerengu and Waima Rivers, is a very small, steep, shingle bed creek carrying little water. It is not used for recreation.

Scenic value: Uninspiring.

Recreational value: Insignificant.

157.0 WAIMA (URE) RIVER 612000

Location: The Waima (often called the Ure) River flows east to the sea south of Ward.

River mouth location: NZMS1, S36/380510

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S35 Awatere; S36 Ward.

Length: 33km.

Average gradient: 1:100 10m/km.

Recreational use and scenic description: The Upper Waima (or Ure) River flows down a narrow bouldery gorge that often has insufficient water to even wet your feet — should it ever have sufficient flow to float a tyre raft or a canoe you would have a thrilling time of it, but this river is generally very small and floods rapidly with rain.

One of its small tributaries, Isolation Creek, flows into the Waima through an incredibly narrow and deep ravine known as Sawcut Gorge. The area contains some interesting limestone formations and is well worth a visit. However, the river is too small to be of practical use for recreation. The river below the gorge flows out onto a wide shingle bed composed of white pebbles. The water channel meanders from side to side down the valley with numerous dead trees and driftwood in the bed. The valley is tussock-covered with much scrub in the gullies.

Scenic value: Moderate.
Recreational value: Insignificant.

158.0 FLAXBOURNE RIVER 609000

Location: The Flaxbourne and its numerous feeder streams lie inland and slightly to the north of Ward, flowing onto the coast forming the Ward beach.

River mouth location: NZMS1, S36/436574

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S36 Ward.

Length: 38km.

Average gradient: Slight.

Recreational use and scenic description: The Flaxbourne River is little more than a meandering dry water course of shingle, flowing through a shallow valley and collecting some water from small creeks. With rain it carries water, but otherwise remains dry. Willows line much of the bed below the main road bridge but a clear path is left down the centre of the river bed. Above the main road bridge the bed is clearer of willows but has some patches of scrub. The river mouth area is used for swimming but most of this is in the sea and tidal pools. The area tends to be very dry in summer and is predominantly pastureland.

Scenic value: Uninspiring.
Recreational value: Insignificant.

158.1 LAKE ELTERWATER 609030

Lake Elterwater is a small lake nestled in a swampy depression alongside the main road north of the Flaxbourne River bridge. The lake drains into the Flaxbourne via a small creek. Willows lining the western shore completely obscure the lake from the road. A picnic spot between the lake and the road is a very popular stopping place for motorists but the lake having a muddy bottom and swampy shore, is not used for swimming or boating. There are no public toilets at the picnic spot and consequently, extreme care must be exercised when walking along the lake shore!

Scenic value: Moderate.
Recreational value: Insignificant.

159.0 LAKE GRASSMERE 604000

Lake Grassmere is a large shallow lake south of Seddon which has a tidal inlet. The lake is used for the production of salt by the evaporation of the sea water in the lake and the northern and western shores have ponds constructed for this industry. It would be possible to boat along the southern shore but this is not done. The lake is shallow and lies in somewhat barren hill country. Scenically, the area is of little interest. A few small creeks drain into the lake.

Scenic value: Dull.
Recreational value: Insignificant.

160.0 THE BLIND RIVER CATCHMENT 603000

The Blind River is a network of small creeks flowing north-eastwards to the sea between Lake Grassmere and the Awatere River valley. The creeks consist of a number of dry water courses that converge a few kilometres above the coast. The biggest are Hog Swamp Creek and Blind River which usually contain sluggish or stagnant pools of water but become flowing streams with rain. The water is usually dirty. Willows are common only in the lower river reaches. It would be possible to canoe sections of these creeks when they are flowing high after rain, but this is not done, nor do people swim in them.

Scenic value: Dull.
Recreational value: Insignificant.

161.0 AWATERE RIVER 602000

The Awatere River flows north-east along the western edge of the Inland Kaikoura Range, draining the Kaikoura, Schooner and Blairich Ranges and the Molesworth area. This region is terribly dry in summer and deep under snow in winter so that the Awatere is a river of great seasonal fluctuations, being at its best in spring. It has no lake to act as a reservoir to even out the flow fluctuations.

The Molesworth area has a fast water run-off rate so that the Awatere will rise to flood with speed after rain. The river flows for a considerable length through rugged gorges before opening up to wide, braided flats. It is not used for recreation to any great extent; the Waihopai and Wairau being at their best when the Awatere is, are to be preferred. The Maori name means 'swiftly flowing water' which would apply to its spring flow, definitely not its summer flow. The survey considers the river in three sections.

161.1 UPPER AWATERE RIVER

Location: The Upper Awatere is generally considered to be that section of the river down to the bridge at the confluence of the Grey and Awatere Rivers (the Mount Gladstone Bridge).

Section end location: NZMS1, S35/903531

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S34 Saxton; S35 Awatere; S41 Molesworth.

Length: 67km.

Average gradient: 1:145 6.9m/km.

Recreational use and scenic description: Above the Molesworth Station the Awatere River is very small, dry in summer, and bounded by small willows as it flows over a shallow shingle bed through tussock country and briars, often split into two channels. Below Molesworth the river flows over extensive shingle flats through the tussock and becomes braided below the Tone River confluence. A short gorge area confines the river below the Castle River confluence, but flowing peacefully in its shingle bed. Only with very high flows are there rapids or white water off the rock banks. The rock banks persist almost to the Gladstone Bridge, opening out to a braided river 2km above the bridge. In summer this section of the Awatere can be very shallow; in winter the roads can be blocked with snow and the area is too cold for most water activities.

In spring the river could be canoed and perhaps rafted but it is unlikely ever to be jet boated. This section of river is not of great interest for boating. The area lies entirely in tussock country with scrub in the gullies and willows along the river banks. All the tributaries are small with wide, shallow, shingle beds, unusable for recreation.

Scenic value: Moderate.
Recreational value: Low.

161.2 THE AWATERE RIVER GORGES

Location: From the Gladstone Bridge the Awatere flows north-east through a number of gorges down to the Medway River confluence.

Section end location: NZMS1, S35/148686

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S35 Awatere.

Length: 38km.

Average gradient: 1:166 6m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Can only be navigated with high flows and is seldom boatable far into the gorge. Not used a great deal.

Drift boats: Seldom boated and requires very high flow to offer navigable water.

Rafts: Seldom rafted. Needs near flood conditions.

Canoes/kayaks: Used to some extent in spring although the main demand for canoeing water in this area comes from Christchurch (and these people prefer the Clarence) or from Blenheim whose people prefer the Wairau or the similar Waihopai which becomes excellent when the Awatere is of sufficient size. Only a small number of curious canoeists ever float the gorges.

Pack floating, swimming: Unused.

Scenic description: From the Gladstone Bridge the river flows over a short length of braided river before entering the first gorge. The river seems to have cut into the bedrock which has fractured, creating very sharp fragments. The bed has silted up with fine shingle so that at low flow the river flows down with narrow beaches on either side of the water channel up to the rock walls, which vary in height from a metre to 20 metres. With high flow the water rushes down with waves bouncing off the rock walls and off the larger rock boulders that have fallen into the river bed. The walls decrease a little in size where the Hodder River flows in. From the Cam River confluence the rock banks close in to create the central gorge which is some 9km in length. The gorge is very narrow from the Isis River confluence downstream. It contains some easy rapids, mostly boulders in midstream and shallow shingle shoals. The gorge has particularly high bluffs giving a very dramatic feeling to the boater floating peacefully over the shallows at the bottom of the gorge. The high mountains that flank the gorge are only barely visible from the bottom of the gorges. The main gorge opens up a little at the Jordan River bridge but soon closes in again, leaving sufficient width for the river to meander from wall-to-wall over the shingle at the bottom of the gorge. The gorge becomes wider and the bluffs lower to finally end at the Medway River.

The valley, above the gorge, is tussock-covered with a great deal of matagouri, briar and other scrub. Bare rock is common.

Scenic value: Impressive.

Recreational value: Intermediate.

161.2.1 TRIBUTARIES OF THE MIDDLE AWATERE

Almost all the tributaries of the Awatere are dry some time of the year except the Hodder River which drains the valley below the highest of the Kaikoura Peaks — Mounts Alarm and Tapuaenuku. All the rivers swell into torrents with rain and are particularly steep, flowing over coarse shingle and sharp-edged rock. The Hodder River is probably the only river that could ever be boated and then only by canoeists of some ability. The Isis River is very steep with the water filtering around boulders. The Medway River is small and of low gradient flowing through very eroded gorge country. None offer a practical recreational facility and the Awatere itself would more likely be the main attraction to recreationalists.

Scenic value: Impressive.

Recreational value: Insignificant.

161.3 LOWER AWATERE RIVER

Location: From the Medway River confluence the Awatere continues to flow north over a very braided river bed.

River mouth location: NZMS1, S29/432870

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S28 Blenheim; S29 Seddon; S35 Awatere.

Length: 49km.

Average gradient: 1:250 4m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Limited use seems to be made of the Awatere, probably due to the shallow water and the similarity with the Wairau which has easier access.

Drift boats, rafts: Not used. Very shallow water without rapids.

Canoes/kayaks: Not used to any great extent. Very similar to the Wairau which is used in preference. Easy water suitable for the novice and of little interest to the more experienced.

Pack floating: Unused.

Swimming: Little used. Again, mainly because of the high use of the Wairau, the Awatere tends to be neglected.

Scenic description: From the Medway River confluence the Awatere becomes a braided river with two or three main channels. Because of the very low flow even in the upper section, upon becoming braided, the Awatere is exceptionally shallow. It is only where the channels run together, such as at the main road bridge, that there is any deep, fast flowing water. In places the wide shingle bed is flanked by high, crumbly clay banks that are easily eroded. Pine and similar trees can be seen along the cliff edges, but the predominant vegetation is pasture grassland.

Scenic value: Moderate.

Recreational value: Low.

162.0 WAIRAU RIVER

601000

The Wairau River is the largest river in Marlborough, rising in the Spenser Mountains and flowing at first northwards between St Arnaud Range and Raglan Range, then north-eastwards to enter the sea at Cloudy Bay. The lower river, from where it leaves the St Arnaud area, is extremely braided and terminates in a large tidal inlet known as Big Lagoon. A long boulder bank called Te Pokohiwi extends south-eastwards towards the White Bluffs. Inland of the Boulder Bank are the Wairau Lagoons; the main one, Big Lagoon, is also known as Mataora. There are more than 14 other pools all connected with artificial canals, constructed, it is said, by the Rangitane tribe to facilitate the hunting of swamp wildlife. Moa hunter remains have been found in the area. The Opawa River also flows into the lagoons. For swimming and picnicking the Wairau ranks next in importance to the Waimakariri in the country.

162.1 UPPER WAIRAU RIVER

Location: From its origins on the northern slopes of the Crimea Range near the headwaters of the Clarence River the Wairau flows north through tussock country and beside the St Arnaud Range to S.H. 63 near the Nelson Lakes National Park — the origin of the Buller River.

Section end location: NZMS1, S33/345700

Maps: NZMS18, Sheet 15 Buller; NZMS1, Sheet S40 Spenser; S33 St Arnaud.

Length: 67km.

Average gradient: 1:105 9.5m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Seldom are jet boats ever able to navigate as far upstream as this section of the river.

Drift boats, rafts: The Upper Wairau can be, and usually is, a

little too shallow for these craft. A few times each year, particularly in spring and after spring rain, the river will rise giving some good white water that can be navigated by these craft. This is not so above Rainbow River.

Canoes/kayaks: This is the most popular section of the river amongst experienced canoeists but it requires spring or above normal flows to give its best water. Seldom canoed above the Rainbow confluence.

Pack floating: Has been floated in the upper catchment but not a river noted for this activity.

Swimming: Generally not swum in above the S.H. 63 area.

Scenic description: The hydro road linking the Wairau Valley with the Lake Tennyson area provides easy access, although it is not a public road and is locked. There never seems to be any problem in obtaining permission provided that there is a genuine reason for using the road and you are not a 'mere tourist'. The Wairau is small and bouldery in the mountain area and of low gradient. The river does not become of usable size until reaching the Rainbow confluence. The Wairau Gorge, above the Rainbow, is said to contain some difficult rocky rapids when running high. This is in tussock and briar country. Below the Rainbow confluence the river is basically a shingle bed stream with shallow water. There are a number of rocky rapids down below the Hamilton River confluence where the river flows in a narrow grassy bed between beech forest on the valley hillsides. At Woolshed Flat the bed becomes wider and has a braided channel that can be shallow. The beech forest and grassy river flats are scenically interesting, the river sparkling clear.

Scenic value: Impressive.

Recreational value: Intermediate.

162.1.1 RAINBOW RIVER 601490

The Rainbow River flows north-east to join the Wairau in its upper catchment. It collects water from a number of steep mountain gullies (Paske Creek, Begley Creek and Tanekaha Creek) and then flows along a wide braided valley floor to the Wairau. It is not of boatable size and lies in the upper tussock country with some scrub in the gullies and along the lower hillsides.

Scenic value: Moderate.

Recreational value: Insignificant.

162.2 MIDDLE WAIRAU RIVER

Location: Upon reaching the Richmond Range the Wairau turns north-east in a wide valley over a shingle bed to the Waihopai River confluence. This section is known as the Middle Wairau.

Section end location: NZMS1, S28/034997

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S26 Hope; S27 Wairau; S28 Blenheim.

Length: 53km.

Average gradient: 1:210 4.8m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: With normal flow the river is only boated to 2km above the Waihopai confluence, but with higher flows is boated much further depending upon water flow. The river provides some very good boating, needing a great deal of skill at low flow and becoming easier with higher flows. It is one of the few boatable rivers in the Nelson-Marlborough district and for this reason is a valuable boating river.

Drift boats, rafts: Frequently boated and rafted although needs above normal flows for the best water. The lower river can be maddeningly shallow in summer.

Canoes/kayaks: A frequently used section of river by clubs, individuals, youth groups and by the Outward Bound School

who all agree on the value of the river for instructing novice canoeists. The river is considered an easy one but with sufficient rapids (as below the Wash Bridge for example) to keep the more experienced occupied.

Pack floating: Unused.

Swimming: Although not as frequently used as the very lower river, this part of the river does get considerable use.

Scenic description: The Middle Wairau is a braided river over most of its length but has sufficient gradient to produce some fast shingle chute rapids, especially when flowing above normal. In places, such as beneath the Wash Bridge, the river flows as a single stream and flows hard against rock outcrops at the valley edge.

The river has a steady current the whole way but may have some shallow shingle shoals. The valley is very wide with the hills on the left bank having more bush (beech) than the tussock-covered hills to the right.

A little above the Waihopai confluence the braided shingle islands are covered in broom, gorse and some manuka scrub. Some stunted willows begin to make their appearance by this time too.

Scenic value: Moderate.

Recreational value: Intermediate.

162.2.1 BRANCH RIVER 601360

Location: The Branch River flows north from the Raglan Range to enter the Wairau below the Wash Bridge.

River confluence location: NZMS1, S27/527809

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S27 Wairau; S34 Saxton.

Length: 43km.

Average gradient: 1:105 9.5m/km.

Recreational use and scenic description: The Branch is a very gentle-flowing, shingle bed river with some rock outcrops and rough rock banks that can create small rapids at high flow. It can be canoed and rafted from the Leatham confluence almost to the Wairau, but as the river spreads out over a shingle fan to enter the Wairau, it becomes very shallow. With very high flow it provides a longer trip of some excitement. It offers good swimming holes all year round and is more sheltered from the wind than the larger Wairau Valley which can be prone to dust storms. Scrub (manuka, some stunted beech and matagouri) cover the hillsides.

Scenic value: Moderate.

Recreational value: Intermediate.

162.2.2 LEATHAM RIVER 601361

The Leatham River flows north in a valley to the east of the Branch and joins it some 7km above the Branch-Wairau confluence. It is in all respects similar to the Branch and of the same size. It has slightly better swimming holes and these receive a good deal of use.

Scenic value: Moderate.

Recreational value: Intermediate.

162.2.3 GOULTER RIVER 601350

The Goulter River is some 30km in length, flowing from Lake Chalice to the west, then turns south and east to join the northern bank of the Wairau around Mount Patriarch. The river is small and has no vehicle access but has a popular tramping track along its left bank. The river has been floated by lilo over a short distance but not canoed, although with high flow it could be, after a lengthy portage upstream. It flows through scrub and bush.

Scenic value: Picturesque.

Recreational value: Low.

162.2.4 WYE RIVER

601280

The Wye River is a very small stream with a wide stony bed. It flows north onto the south bank of the Wairau opposite the Goulter confluence. It flows through dry tussock country becoming a torrent of water after rain when it may provide boatable water suitable for canoeists. However, it is not likely to be used with the nearby Branch and Leatham offering good water when flowing above normal levels. Access is also a problem.

Scenic value: Uninspiring.

Recreational value: Insignificant.

162.2.5 WAIHOPAI RIVER

601120

Location: The Waihopai River begins in the hills east of the Leatham and Branch River valleys. It flows north and north-east to ultimately join the Wairau upstream of Renwick.

River confluence location: NZMS1, S28/034997

Maps: NZMS18, Sheet 16 Kaikoura; NZMS1, Sheet S27 Wairau; S28 Blenheim; S34 Saxton.

Length: 78km.

Average gradient: 1:200 5m/km.

RECREATIONAL USE:

Motor launches, jet boats: Too small and shallow, particularly over the shingle at the confluence with the Wairau.

Drift boats, rafts: With above normal flows or winter flows, the gorge below the powerhouse and dam offers exciting water for experienced boaters. The remainder of the river tends to be shallow and much like the Branch which would offer better boating.

Canoes/kayaks: Excellent water with high flows in the gorge below the dam and powerhouse. Previously, the river (now silted up behind the dam), may have provided a more lengthy trip in the gorge. The river has a number of steep rapids in the rock-walled gorge that are sought after by experienced and average skilled canoeists. Some of the best white water in the vicinity.

Pack floating: Unused.

Swimming: Numerous swimming pools along the river are very popular and all are easily accessible.

Scenic description: The Waihopai River is of interest because of a dam built in the Waihopai Gorge many years ago. The reservoir formed in the gorge behind the dam completely silted up over a mere 10 year period and now the former gorge contains braided shingle flats with the former gorge walls existing as low rock banks flanking the shingle.

The upper river is very small, flowing down a gravel bed of gentle gradient between rock banks, lined with scrub and tussock. There are occasional willows. The river is boosted with the flow of the Spray, but still remains small except after rain. From the Spray confluence the Waihopai enters the shingle flats where once the gorge stood. The river becomes a little braided in summer as it approaches the dam. With high flow there is usually sufficient water for rafting, drift boating and canoeing, but the water is flat, without rapids, similar to the Branch River which offers slightly better water. Rock banks at the edge of the shingle bed are all that remain of the former gorge. Some small willows grow along the banks. Tussock farmland flanks the valley. Large willows, pine and poplars grow around the dam area. The dam is built in a narrow section of the former gorge and when spilling water is an impressive sight. Normally a dry river bed choked with large boulders lies between the dam and the powerhouse. Below the powerhouse lie 7km of narrow gorge with high rock walls and bedrock ledge rapids of Grade 3 difficulty. Matagouri and gorse grow along the gorge top. The gorge gradually decreases in height and widens to become a shingle bed stream, then becomes braided between shallow, willow-lined banks.

Scenic value: Picturesque.

Recreational value: High (gorge area).

162.3 LOWER WAIRAU RIVER

Location: From the Waihopai confluence the Wairau continues east to the sea in a very braided fashion, turning south to flow into its coastal lagoon.

River mouth location: NZMS1, S29/339000

Maps: NZMS18, Sheet 14 Marlborough Sounds; NZMS1, Sheet S21 Kaituna; S22 Picton; S28 Blenheim; S29 Seddon.

Length: 40km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Some use is made of the lower river and the Wairau Bar. Generally associated with sea fishing. Some limited water skiing.

Jet boats: Boatable over the whole length of this section. The river is one of the few boatable rivers in the area that maintains sufficient flow all year round.

Generally considered an easy trip but needs some skill in summer when there are shallows to be avoided.

Drift boats, rafts: Not used by the serious boater because of the shallows and lack of rapids.

Canoes/kayaks: Considerable use associated with 'picnic' canoeists but not valued greatly by the enthusiast who prefers the upper reaches. Considered an easy trip. In late summer the section from Rock Ferry may be the only water in the region with canoeable depth and then this river becomes extremely important. Outward Bound find that this lower section is their only usable water in late summer. Many Scout and Boys' Brigade groups rely on this section for their summer programmes — often associated with overnight camps.

Pack floating: Unused although children do splash about on vehicle tyres.

Swimming: Very heavy usage wherever there is access to the river. Because the sea does not offer safe beaches this river gets considerable use from Rock Ferry downstream.

Scenic description: From the Waihopai confluence the Wairau becomes very braided amongst scrub-covered islands. The left bank is thickly wooded in willows with numerous muddy channels and somewhat swampy areas abound in the area. The right bank tends to have a more solid and a clearer bank although it is still shingle bedded.

There are stopbanks along much of the lower river. Open farmland, much of it in orchards, lies on the flat plains on the right bank whilst scrub and pasture-covered hillsides close in the valley on the left.

Below the Tuamarina confluence, numerous drains flow in and the river becomes sluggish. The river flows south to the coastal, tidal lagoons.

Scenic value: Moderate.

Recreational value: High.

162.3.1 SOUTH BANK TRIBUTARIES

The Omaka River flows north-east, a little east of the Waihopai River. It has a dry shingle bed for most of the year, carrying flood waters after rain in winter. From Renwick the dry bed is flanked by stopbanks and it is often called the Opawa River. The bed has numerous willows above the main road.

The Fairhall is also a dry water course for most of the year. These 'rivers' run through the outskirts of Blenheim and the lower reaches pick up water from numerous small drains, ditches and storm water drains, including the ditch-like Taylor River. From Blenheim there is usually moving water in its muddy Serpentine Creek, bounded by low stopbanks down to the estuary. It would be possible to float downstream on a tyre or canoe and some children certainly do. However, it is not normally considered to be a valuable recreational asset.

Scenic value: Moderate.

Recreational value: Low.

162.3.2 TUAMARINA RIVER 601060
WAIKAKAHO RIVER 601070

The Tuamarina and Waikakaho Rivers flow into the Wairau on its north bank near Blenheim. Both rivers are very small and swampy but usually have a narrow clear path through the reeds and willows. Dairy farmland flanks the lower ends of the rivers and drainage from the lowland discolours the water. There is usually only a barely perceptible flow in the rivers. They do not offer pleasant recreational water although some youngsters do float in them.

Scenic value: Picturesque.
Recreational value: Low.

162.3.3 SEVENTEEN VALLEY 601014
STREAM AND THE
ESTUARY CREEKS

The Seventeen Valley Stream and the Pukapuka Creek flow into the Big Lagoon. The former is very small and stony with flax and gorse along its banks. Only with heavy rain does it have any amount of moving water. Neither is used for recreation.

Scenic value: Uninspiring.
Recreational value: Insignificant.

163.0 KAITUNA RIVER 590000

Location: The Kaituna River flows north beside S.H. 6 to enter Pelorus Sound at Havelock.

River mouth location: NZMS1, S21/085274

Maps: NZMS18, Sheet 14 Marlborough Sounds; NZMS1, Sheet S21 Kaituna.

Length: 27km.

Average gradient: Slight.

Recreational use and scenic description: The Kaituna is a small, willow-blocked stream meandering across the farmed narrow valley between Pelorus Sound and the Wairau River valley. It has a number of swampy drain-like tributaries including the Okaramio and Atahaua Creeks. The Kaituna is very small and shallow, flowing over a shingle and mud bottom between grassy banks. The water is, however, clear when not flowing high. The current is sluggish. The river is not used for recreation although it does offer some pleasant picnic spots. It could be canoed over very short distances between willows but this is not done.

Scenic value: Moderate.
Recreational value: Low.

164.0 PELORUS RIVER 589000

The Pelorus River flows in a general east to north-easterly direction to enter Pelorus Sound at its head near Havelock. It has a number of large tributaries, including the Rai (itself having a number of tributaries including the Opouri, Tunakino and Ronga Rivers) and the Wakamarina. The Pelorus is considered in two sections.

164.1 UPPER PELORUS RIVER

Location: The Pelorus River has its origins in the Bryant and Richmond Ranges east of Nelson. It flows north-east through bush to Pelorus Bridge where the Rai flows in from the north.

Section end location: NZMS1, S21/900259

Maps: NZMS18, Sheet 14 Marlborough Sounds; NZMS1, Sheet S20 Nelson; S21 Kaituna.

Length: 48km.

Average gradient: 1:310 3.2m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Navigable some 7km above the Rai confluence over a bouldery bed with swift rapids suitable for experienced drivers only and needs a slight fresh to give boatable water. Normally too shallow in summer.

Drift boats, rafts: Boatable from Heringa Stream confluence year round except for late summer. Most trips begin at Tinline River confluence. Good water although can be shallow.

Canoes/kayaks: Excellent water considered suitable for novice canoeists except when flowing high. The river has a number of good rapids that are of interest to even the most experienced canoeists. Can become too shallow for canoeing in summer.

Pack floating: Little used except for the 2 to 3km around Pelorus Bridge.

Swimming: There are a number of popular swimming holes. The most popular at Pelorus Bridge gets heavy usage all through the summer period.

Scenic description: The Pelorus lies in heavily-bushed country over most of its length down to Pelorus Bridge. From Tinline River there is a narrow margin of cleared land along the left bank but this lies on the river flat some height above the river so that boaters float by, unaware that the land is not completely bush. Some gorse tends to spoil the natural bush. The river lies in a shingle and rock gorge with low rock banks. The water is very clear and swift.

Scenic value: Exceptional.
Recreational value: High.

164.1.1 TINLINE RIVER 589160

The Tinline River is very small, steep and stony. It flows south into the upper Pelorus River near the road-end. It has only a trickle of water in summer but can become a torrent of water. When flowing high it has been pack floated from the Tinline Road down to the Maungatapu Road giving an exciting trip. However, such trips are rare the river seldom being of sufficient depth and most people prefer the Pelorus.

Scenic value: Picturesque.
Recreational value: Low.

164.2 LOWER PELORUS RIVER

Location: From the Rai confluence the Pelorus continues to flow north-east to Pelorus Sound and lies in a farmed, willow-lined valley beside the main road.

River mouth location: NZMS1, S21/074297

Maps: NZMS18, Sheet 14 Marlborough Sounds; NZMS1, Sheet S21 Kaituna.

Length: 21km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Small craft can navigate a short distance up the Pelorus River from Havelock. Shallow mud banks and log snags can pose navigational problems.

Jet boats: Navigable to Pelorus Bridge, an easy trip with the last kilometre becoming bouldery and difficult. A popular trip.

Drift boats, rafts: Used to a large extent although without a great deal of white water. Suitable for the less experienced.

Canoes/kayaks: A popular trip among the less experienced canoeists and with youth groups. The more experienced canoeists prefer the upper river.

Pack floating: Not used below the Rai confluence.

Swimming: A great deal of use down to the Rai confluence and then usage tends to tail off. The lower river can be muddy and there are log snags.

Scenic description: Below the Rai confluence the river flattens

out considerably and becomes sluggish between mud and shingle banks and beaches. Willows line the banks for most of the distance down to the tidal limit where the willows cease and swampy land begins. There are numerous log snags in the river.

Scenic value: Moderate.

Recreational value: Intermediate.

164.2.1 RAI RIVER 589130

Location: The Rai originates on the land to the east of the Bryant Range and is formed by the confluence of the Ronga, Tunakino and Opouri Rivers. The Rai then flows south to join the Pelorus at Pelorus Bridge.

River confluence location: NZMS1, S21/900259

Maps: NZMS18, Sheet 14 Marlborough Sounds; NZMS1, Sheet S15 Rai; S21 Kaituna.

Length: 26km (includes Ronga River).

Average gradient: Slight over lower river.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Can be boated up to the falls when flowing well above normal. Too shallow in summer. Experienced boaters only.

Drift boats, rafts: Generally a little too shallow for these craft although the lower 3km have been rafted. Rapids can be a little tight. Good white water when above normal flows.

Canoes/kayaks: With above normal summer flows is a very good river over the lower 5km. In summer the river becomes too shallow and the pollution from the piggeries upstream can provide unhealthy water. In winter it is much used by the Outward Bound School which has a small cabin on the banks of the lower river.

Pack floating: Unused.

Swimming: Unhealthy water in summer but the pool below the falls receives a good deal of use.

Scenic description: The upper tributaries of the Rai lie in farmed valleys flanked by steep bushed hillsides. The valleys drain into the rivers which are mere creeks with willows lining the banks. A piggery pollutes the Brown River. From the confluence of the tributary streams the Rai flows peacefully through paddocks and between willows over a shingle and mud bed. There are a number of rock outcrops in the bed creating rapids from about 8km above the Pelorus junction. The largest rapid is a shallow ledge known as the Rai Falls which lies 1.5km above the Pelorus junction. Beech forest lines the banks over the lower 2km and the river is most attractive here.

Scenic value: Picturesque.

Recreational value: Intermediate.

164.2.2 WAKAMARINA RIVER 589050

Location: The Wakamarina River flows north off the Richmond Range to join the Pelorus River at Canvastown.

River confluence location: NZMS1, S21/990269

Maps: NZMS18, Sheet 14 Marlborough Sounds; NZMS1, Sheet S21 Kaituna.

Length: 27km.

Average gradient: 1:150 6.7m/km (middle river).

RECREATIONAL USE:

Motor launches; jet boats: Usually too shallow although with high flow jet boats may travel 5km up the river.

Drift boats, rafts: Only the lower 7km or so are boatable with high flow, less with normal or summer flows.

Canoes/kayaks: Regularly canoed from Dead Horse Creek confluence at the road end. This trip is only possible with high or winter flows with most ending at Muttontown Stream. Some difficult rapids in the upper narrow sections and a much sought after trip when the river is flowing well. Suitable for the more

experienced canoeists although some novice canoeists handle the river satisfactorily.

Pack floating: Not used a great deal although the upper section at the road end offers excellent lilo water.

Swimming: A great deal of swimming wherever there is good access to the river, which is not often.

Scenic description: From the road end (few boaters go further) the river flows through a shallow rock gorge between hillsides covered in thick bush. The river is full of rock ledges, outcrops and the odd boulder which, when flowing at high levels, create almost continuous white water. The river gradually changes to a shingle bed but the rock banks persist to almost the Mountain Camp Creek confluence. From the water level the cleared land on the right bank is not always visible; only the immediate rugged rock walls and the beech trees that overhang the rock are seen. As the river spreads out in the lower reaches willows become common and the river current slows to become quite sluggish.

Scenic value: Picturesque.

Recreational value: Intermediate.

165.0 WHANGAMOA RIVER 583000

Location: The Whangamo River is a very small stream flowing along the western edge of the Bryant Range and into the sea via a small tidal inlet south of Croisilles Harbour.

River mouth location: NZMS1, S15/878487

Maps: NZMS18, Sheet 14 Marlborough Sounds; NZMS1, Sheet S15 Rai.

Length: 22km.

Average gradient: 1:65 15.4m/km.

Recreational use and scenic description: The Whangamo River is very small and steep, flowing over a stony bed between rock banks. The river lies in part of the Whangamo Forest and the valley is covered in scrub and newly planted pine forest. Bracken fern and gorse are common along the banks. Normally this river is too small for canoeing, but a few times each year after heavy rainfall the river becomes fast and exciting. It can be floated by lilo. The gradient decreases and the river becomes swampy below the main road before it enters the tidal inlet. There are some pleasant picnic spots for swimming.

Scenic value: Moderate.

Recreational value: Low.

166.0 WAKAPUAKA RIVER 581000

The Wakapuaka River and its only sizeable tributary, the Lud River, converge at Hira, before flowing north into Delaware Bay below Pepin Island. At Hira both the Lud and the Wakapuaka are small shallow streams badly overgrown with willows and farmland weeds. Neither offers practical recreational use, being rather drain-like, of low gradient and sluggish. Willows obstruct the flow down to the sea. Above Hira the Wakapuaka flows through a young forest and in spite of the blackberry people go through it to swim in some of the quieter pools. The river has been liloed over a short distance.

Scenic value: Moderate.

Recreational value: Low.

167.0 MAITAI RIVER 578000

Location: The Maitai River is a small stream flowing from the Bryant Range to the south of the Hira State Forest. It passes through the centre of Nelson and into Nelson Haven at the boat harbour.

River mouth location: NZMS1, S14/632303

Maps: NZMS18, Sheet 14 Marlborough Sounds; NZMS1, Sheet S14 Motueka; S20 Nelson.

Length: 20km.

Average gradient: 1:125 8m/km.

RECREATIONAL USE:

Motor launches: Too shallow except at the tidal limit.

Jet boats: Has been boated in high flood for a short distance above the residential area.

Drift boats, rafts: Generally too shallow except when in flood.

Canoes/kayaks: Usable when flowing high. Some interesting rapids and one shallow concrete ford to run. Considered easy and of little interest.

Pack floating: Not used to any great extent because of shallow water.

Swimming: Extremely popular, being so close to Nelson.

Scenic description: The Maitai is an extremely popular picnic area and has numerous swimming pools. Most use is centred on the river above the residential area and below Pole Ford Bridge. The river is stony with the gravel becoming finer as you descend.

Near the Baptist Camp the river narrows and there are larger sized rocks that create some white water. The valley has open grassland including a golf course with scrub (predominantly bracken fern and gorse) and a new forestry scheme is being established which could affect water flows in the river.

Scenic value: Moderate.

Recreational value: Intermediate.

NELSON TO CAPE FAREWELL

168.0	Waimea River Catchment	145	170.3	Lower Motueka River	148
168.1	Waimea River	145	170.3.1	Graham River	148
168.2	Wairoa River	145	171.0	Riwaka River	148
168.3	Lee River	145	172.0	Golden Bay's Minor Streams	149
168.4	Roding River	145	173.0	Takaka River	149
168.5	Wai-iti River	146	173.1	Upper Takaka and Cobb Rivers	149
168.6	Eighty-eight Valley Stream	146	173.2	Lower Takaka River	149
169.0	Moutere Streams	146	173.2.1	Waingaro River	149
170.0	Motueka River	146	173.2.2	Anatoki River	149
170.1	Upper Motueka River	146	173.2.3	Waikoropupu Stream	150
170.1.1	Motupiko River	146	174.0	Aorere River	150
170.1.2	Rainy River	147	174.1	Aorere Gorges	150
170.2	Middle Motueka River	147	174.2	Lower Aorere River	150
170.2.1	Tadmor River	147	174.2.1	Kaituna River	150
170.2.2	Wangapeka River	147	174.2.2	George Creek	150
170.2.3	Baton River	148	175.0	Pakawau River	151
170.2.4	Stanley Brook	148			

168.0 WAIMEA RIVER CATCHMENT

The Waimea River system is a complex network of small streams and rivers flowing from the hills to the south-east of Nelson and onto the Waimea Plains where they converge to form the Waimea River. The main components of the system are the Wai-iti and the Wairoa Rivers. The main feeders of the Wai-iti are Pigeon Valley Stream and the Eighty-Eight Valley Stream. The feeders of the Wairoa are the Roding River, Hackett Creek, and Lee River.

The Waimea is important to the region as it feeds the Waimea Plains water supplies which form the basis of the horticultural irrigation. There is a proposal to construct a dam on the Wairoa to provide better flow for irrigation but unfortunately this scheme will destroy the present recreational patterns in the area. The Wairoa and the Lee are very heavily used by the river floaters.

168.1 WAIMEA RIVER 575000

Location: The Waimea River flows north from the confluence of the Wai-iti and Wairoa Rivers. It enters Tasman Bay south of Rabbit Island.

River mouth location: NZMS1, S20/501278

Maps: NZMS18, Sheet 14 Marlborough Sounds; NZMS1, Sheet S20 Nelson.

Length: 8km.

Average gradient: 1:425 2.4m/km.

Recreational use and scenic description: The Waimea River flows over the shingle-based Waimea Plains. The plains are predominantly dairy farms and orchards with some cropping. Small willows line the banks and from the river one can observe the surrounding countryside. Stopbanks enclose the river as it flows peacefully over shallow shingle. The river could be jet boated but is not used, mainly because it is so similar to the larger and better lower Motueka River. Because of the shallow water and lack of rapids, it is seldom rafted, drift-boated or canoed. The river is most used for swimming, particularly at Appleby Bridge.

Scenic value: Uninspiring.

Recreational value: Low.

168.2 WAIROA RIVER 575020

Location: The Wairoa River flows north off the Richmond Range through a short gorge to link with the Waimea River at Brightwater on the plains.

River confluence location: NZMS1, S20/480213

Maps: NZMS18, Sheet 14 Marlborough Sounds; NZMS1, Sheet S20 Nelson; S27 Wairau.

Length: 41km.

Average gradient: 1:105 9.5m/km.

RECREATIONAL USE:

Motor launches, jet boats: Too shallow.

Drift boats: Smaller drift boats use the gorge. Some rapids are very steep and tight and have to be portaged.

Rafts: Some use, mostly by smaller rafts.

Canoes/kayaks: Considerable use, especially in summer during the long evenings. Good quality white water very close to Nelson. Grade 3 water. Not greatly used below the Lee confluence.

Pack floating: Very high use by lilo and tyre floaters above the Lee.

Swimming: Numerous large, deep pools. Considerable use.

Scenic description: Above the meeting of the right and left branches the Wairoa is very steep and shallow. Most trips begin where Pig Valley Stream flows into the river. The Wairoa flows in a deep gorge from the Pig Valley Stream confluence over dif-

ficult bouldery rapids which become easier further down the gorge. Boaters may launch at a position comparable to their ability. The gorge has a margin of totara, scrub and gorse along its rough rock walls but this bush is not always apparent from water level. Some small willows grow among the rocks at water level. The hills are cleared of bush cover but contain a significant amount of scrub, fern and gorse. The river bed reverts to shingle as the gradient eases, becoming placid below the Lee River confluence.

Scenic value: Picturesque.

Recreational value: Exceptional.

168.3 LEE RIVER 575021

Location: The Lee River originates on the Richmond and Bryant Ranges to the east of the Wairoa. It flows north and joins the Wairoa before it reaches the Waimea Plains.

River confluence location: NZMS1, S20/491136

Maps: NZMS18, Sheet 14 Marlborough Sounds; NZMS1, Sheet S20 Nelson.

Length: 28km.

Average gradient: 1:105 9.5m/km.

Recreational use: The Lee River is similar to the Wairoa except that it has a lower flow. The gorge walls are much lower so that it is easier to scramble down the banks to the large pools of water and consequently, it has an even higher usage by swimmers and floaters. With high flow the Lee is preferred by all floating groups to the Wairoa as the rapids become much more difficult. The Lee and the Wairoa are used to the exclusion of most other Nelson rivers. Certainly the Pelorus, Baton and Takaka Rivers never offer the same combination of difficulty and accessibility. Being a greater distance from Nelson they are not in such high demand as the Lee and Wairoa. As far as is known, the Lee has never been jet boated.

Scenic description: The Lee flows down a gorge of low rock banks. There are numerous rock rapids and ledges offering good white water. Because the gorge walls are wider than those found on the Wairoa, the Lee in high flow offers more room for larger craft to run. There are numerous open spaces beside the river on the left bank where picnics are popular. One pool in particular (NZMS1, S20/506137) receives very heavy usage from picnickers and swimmers and is also used for canoe training. There are some willows in the short length of more placid river above the confluence with the Wairoa.

Scenic value: Picturesque.

Recreational value: Exceptional.

168.4 RODING RIVER 575021

Location: The Roding River flows south-west along the southern edge of the Barnicoat Range joining the Lee River and ultimately, the Wairoa and Waimea River system.

River confluence location: NZMS1, S20/507138

Maps: NZMS18, Sheet 14 Marlborough Sounds; NZMS1, Sheet S20 Nelson.

Length: 28km.

Average gradient: 1:150 6.7m/km.

Recreational use and scenic description: The Roding is a small river with some of its flow piped to Nelson for water supply. A short length of the river from Roding River Road down to the Lee River, has often been canoed and pack floated when flowing well above normal levels. The river flows down a narrow rock gorge with numerous rock and boulder rapids. It lies in steep scrub country of gorse and fern. There are a number of well-patronised swimming and picnic spots.

Scenic value: Uninspiring.

Recreational value: Low.

168.5 WAI-ITI RIVER 575010

Location: The Wai-iti, with the Wairoa, is the principal feeder of the Waimea River. It carries less water than the Wairoa as it flows for its whole length over the shingle Waimea Plains.

River confluence location: NZMS1, S20/480213

Maps: NZMS18, Sheet 14 Marlborough Sounds; NZMS1, Sheet S19 Tadmor; S20 Nelson.

Length: 30km.

Average gradient: Slight.

Recreational use and scenic description: The Wai-iti River flows quietly over a wide shingle bed. Stony beaches flank the water channel with low stone banks in places. Willows line the banks. Since the river is used for irrigation it is too shallow for boating. There are no rapids, few deep pools for swimming, with some sheltered picnic spots below Wakefield.

Scenic value: Uninspiring.

Recreational value: Low.

168.6 EIGHTY-EIGHT VALLEY STREAM 575013

The Eighty-Eight Valley Stream is small and shallow flowing over shingle and gravel. It is seldom of sufficient size even for swimming. It passes through farm and orchard areas and is used to some extent for irrigation; its headwaters are used for local water supply.

Scenic value: Uninspiring.

Recreational value: Insignificant.

169.0 MOUTERE STREAMS 571000

There are a number of small streams and drains in the Moutere area which flow together into the large tidal Moutere Inlet which is sheltered from the sea by Jacketts Island. The streams are all very muddy, small, sluggish and have their flow much reduced by irrigation from December to the end of the fruit season. The largest streams are the Moutere River and Powley Creek, which are only canoeable from the main road to the inlet (2km). Although white-baited it is seldom used for swimming. The rivers lie in grassy and willow-lined banks with a great deal of scrub. The upper catchment is predominantly farm drainage. An extensive irrigation scheme involving a number of small dams and ponding areas is being investigated at the moment. The area is not in high demand for recreation with the Wairoa and Motueka Rivers so close.

Scenic value: Uninspiring.

Recreational value: Insignificant.

170.0 MOTUEKA RIVER 570000

The Motueka River is the largest river in the Tasman Bay area. Its main sources rise in the very dissected northern off-shoots of the Southern Alps, close to the source of the Wairau and Buller Rivers. It flows northwards to enter Tasman Bay on the western shore opposite Nelson City. It is a river of low gradient and has few rapids. There are numerous tributaries of boatable size, including the Motupiko, Tadmor, Wangapeka, Baton and Graham Rivers. Most of the lower tributaries are steep and rocky and require rain to raise their level sufficiently to give good boating water. The Motueka is considered in three sections.

170.1 UPPER MOTUEKA RIVER

Location: The Upper Motueka River is that section of the river above Golden Downs down to the confluence with the Motupiko River at the Kohatu Junction Bridge.

Section end location: NZMS1, S19/218088

Maps: NZMS18, Sheet 13 Golden Bay; Sheet 15 Buller; NZMS1, Sheet S19 Tadmor; S26 Hope; S27 Wairau.

Length: 46km (includes Left Branch).

Average gradient: 1:105 9.5m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Can be boated to Golden Downs at well above normal flow over relatively easy and straightforward water. Some river protection works in the form of large rock boulders along the banks may cause some problems at Golden Downs. Shallow water.

Drift boats, rafts: Generally not used above the Kohatu Bridge as the water is very shallow and there are no rapids of note. Willows can cause problems on corners. The lower river is preferred.

Canoes/kayaks: Some use but not as much as in the lower river. Small river with problems from river bank willows.

Pack floating: Unused.

Swimming: A much-used picnic and swimming spot at the Kohatu Bridge and there is some swimming at Golden Downs itself.

Scenic description: The river in this upper section is very shallow, small and has a stony bed. Above Glen Creek the river is normally far too small for boating. The river flows beside shingle beaches and clay banks with a great deal of broom, gorse and other scrub in a newly-planted pine forest. There are often a number of small logs in the river — possibly from thinning operations in the forest upstream. More mature pines cover much of the valley hillsides although open grassland can be glimpsed on some hilltops. Willows become very common near Golden Downs, often draping their branches in the river, almost blocking the channel in places. Below the Golden Downs settlement, catchment board river bank protection works flank the river and, at the Kohatu Bridge, large blocks of concrete with railway iron can offer extremely dangerous conditions for boaters.

Scenic value: Uninspiring.

Recreational value: Low.

170.1.1 MOTUPIKO RIVER 570160

Location: The Motupiko River flows north down a shallow valley to join the Motueka at Kohatu Junction. The river has its origins near Tophouse close to the Wairau Valley.

River confluence location: NZMS1, S19/218088

Maps: NZMS18, Sheet 13 Golden Bay; Sheet 15 Buller; NZMS1, Sheet S19 Tadmor; S26 Hope.

Length: 45km.

Average gradient: 1:190 5.3m/km.

RECREATIONAL USE:

Motor launches: Far too shallow.

Jet boats: Boatable only with extremely high flows, over shingle and between willows.

Drift boats, rafts: Very shallow water between willows. Most rafters prefer the lower Motueka River.

Canoes/kayaks: Not used to any great extent as the river is similar to the Motueka but wider, shallower and with a slower flow. Canoeable from the Rainy River confluence downstream.

Pack floating: Unused.

Swimming: Numerous shallow swimming holes from Korere downstream. The most popular is at the Quinney Bush picnic area.

Scenic description: The Motupiko River is very small in terms of water flow. It meanders down a wide shingle bed between willows. In summer the river may be merely a series of still pools of water in the shingle. Farmland flanks the river bed with pine and scrub-covered hills beyond.

Scenic value: Uninspiring.

Recreational value: Low.

170.1.2 RAINY RIVER

570164

The Rainy River flows over a shallow shingle bed in a northerly direction to join the Motupiko some 22km above the Motueka confluence at Kohatu.

In the upper reaches the river is flanked by beech, manuka and willows which become prominent lower in the valley totally displacing the other trees. In summer the river is very shallow. With high flow the river flows peacefully over its stony bed without any great disturbance — certainly without rapids. The valley is not as wide as the Motupiko or Motueka River valleys and in one place, a high clay bluff confines the bed. The river could be canoed in flood, and some people swim in the river, although the Motupiko is preferred for this.

Scenic value: Uninspiring.

Recreational value: Low.

170.2 MIDDLE MOTUEKA RIVER

Location: From Kohatu down to the Baton Bridge, below the Baton River confluence, the Motueka River becomes steadily bigger, flowing in a deep bed, without rapids. The main tributaries in this section are the Wangapeka and Baton Rivers.

Section end location: NZMS1, S13/212320

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S13 Cobb; S19 Tadmor.

Length: 32km.

Average gradient: 1:230 4.4m/km.

RECREATIONAL USE:

Motor launches: Not used because of numerous shallows.

Jet boats: Boatable — considered easy although shallows in the upper reaches above the Wangapeka confluence can be tricky.

Drift boats, rafts: Used to some extent with a good steady flow. The lack of rapids, however, renders this a river for the less experienced. The enthusiasts do not use the river very much.

Canoes/kayaks: Considerable use from the Wangapeka confluence downstream. A quiet and easy trip popular with the less experienced.

Pack floating: Not used to any great extent, probably due to the fact that the river below Ngatimoti is similar and more accessible.

Swimming: Numerous very good swimming holes, particularly below the Stanley Brook confluence. The river receives high use from picnickers and swimmers. Another popular spot is at the Baton River confluence.

Scenic description: From Kohatu down to the Baton Bridge the river becomes much larger with the addition of the waters of the Wangapeka. This section of the river is the most scenically interesting of the whole river with large, deep, quiet pools and a peaceful rural setting. From the Motupiko to the Tapawera Bridge (8km) the river continues over its shallow shingle bed between willows. It is almost braided in places and has wide shingle beaches. Below the Tapawera Bridge the river tends to be more confined in a single channel, still in a shallow shingle bed. The previously wide open valley closes in immediately before the Wangapeka confluence where there are banks of rock which drop straight into the river creating very deep pools of clear water in which there are numerous trout.

Beech trees and some willows overhang the banks shading the river. Some large boulders along the banks add interest too. Below Stanley Brook the valley opens out again with willows along both banks, screening off any sight of the surrounding farmland. The steep hillsides of the valley are generally covered in fern and broom with some areas now being planted in forest. Immediately below the Baton confluence large boulders have created some small rapids and this is the only white water on the river.

Scenic value: Impressive.

Recreational value: Intermediate.

170.2.1 TADMOR RIVER

570150

The Tadmor River is a small stream flowing north to join the Motueka on its left bank just below the Tapawera Bridge. The Tadmor flows in a shallow bed of shingle, lined with willows as is characteristic of most streams in this area. In places the willows droop over the bed creating some obstructions to the flow. The river is normally only ankle deep and barely moving although it can rise suddenly to flood after rain. The bed is usually about 3 metres in width. It could be swum where there are depressions in the stream bed; however, it appears that most people prefer to use the Motueka. Farmland borders the river.

Scenic value: Uninspiring.

Recreational value: Insignificant.

170.2.2 WANGAPEKA RIVER

570130

Location: The Wangapeka begins as two branch tributaries on the north-eastern slopes of the Lyell Range. It flows north in a single stream to finally join the Motueka 7km below Tapawera. The main tributary of the Wangapeka is the Dart River.

River confluence location: NZMS1, S19/179235

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S17 & S18 Little Wanganui; S19 Tadmor.

Length: 50km.

Average gradient: 1:166 6m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Limited navigation is possible with above normal flow.

Drift boats, rafts: Ideal water from the Dart River confluence downstream although a short section from Sherry River down to McRae Creek can be a little shallow over shingle shoals.

Canoes/kayaks: A very popular trip. With high flow from the Rolling River confluence to the Dart there is excellent water of up to Grade 3 difficulty suitable for the more experienced. Below the Dart (canoeable in summer) there is a short section of good white water (Grade 2+) which eases to easy water.

Pack floating: Not used although the short section below the Rolling River has been run by lilo. The neglect has possibly been due to the fact that most Nelsonians prefer to use the Wairoa River and have not bothered to travel to this river with such excellent water close to their own city.

Swimming: Considerable use for those who prefer a quiet rural setting as against the Motueka with the main road so close.

Scenic description: Above the Dart River confluence there is a metalled track accessible over the Dart Ford; only the enthusiast tends to go beyond the Dart. The river flows fast over boulders and rocks creating exciting white water for the entire 8km to the Dart River.

The river banks have beech and willows overhanging them. High hills of beech forest and scrub flank the river, particularly on the left bank, with some cleared land on the right. From the Dart confluence the river valley opens out with willows becoming more prominent. There are a number of steep bouldery rapids, the river is swift and clear. Below the Sherry River the willows become particularly thick and obstruct the flow in places. The river closes in again below McRae Creek and there is a short, almost gorge-like section with beech trees and willows overhanging the banks. Willows are again prominent down to the Motueka confluence below the short gorge. Farmland flanks the river below the Dart, with high scrub-covered hills further back. A large limestone bluff stands above the river in the middle section.

Scenic value: Picturesque.

Recreational value: High.

170.2.3 BATON RIVER 570110

Location: The Baton River is a small rocky river flowing into the Motueka River 30km above Motueka. It flows east off the Arthur Range.

River confluence location: NZMS1, S19/197296

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S19 Tadmor.

Length: 27km.

Average gradient: 1:130 7.7m/km.

RECREATIONAL USE:

Motor launches: Too shallow and boisterous.

Jet boats: Normally a little too shallow with a ford across the river which effectively blocks it for navigation by jet boats a short distance above the Motueka confluence.

Drift boats, rafts: Navigable with high flows only, as the rapids can be very steep and tight with lower flows. When running high this is a very exciting length of water for the experienced drift boater and rafter.

Canoes/kayaks: A much-used and exciting length of white water from the road end. Generally considered suitable for the more experienced canoeist although all rapids can be easily portaged so that even a novice can use the river.

Pack floating: Good water, but not used greatly.

Swimming: Limited swimming — some very good swimming holes but the Motueka is quieter flowing and seems to be preferred.

Scenic description: The Baton River is quite small above the road end where it flows in a stony bed between beech forest and scrub (mostly fern and broom). Below the road end the river is steep and shallow, flowing over a shingle bed with some large boulders in the stream. From the Stony Creek confluence, it enters a low gorge with steep rocky chutes where the water tumbles over rock ledges. Lower, there are long, bouldery rapids. The river banks are of steep rock with beech and willow trees overhanging the bank. Over the lower reaches the river is enclosed by steep hillsides covered in gorse and thick bracken fern.

Scenic value: Picturesque.

Recreational value: High.

170.2.4 STANLEY BROOK 570120

The Stanley Brook is a narrow, shingle bed creek which flows onto the right bank of the Motueka 4km upstream of the Baton confluence. It is a very small stream meandering through willows in its shallow bed. It is not used for recreation.

Scenic value: Uninspiring.

Recreational value: Insignificant.

170.3 LOWER MOTUEKA RIVER

Location: From the Baton Bridge the Motueka continues to flow north as a slow-moving river to enter Tasman Bay at Motueka.

River mouth location: NZMS1, S14/400529

Maps: NZMS18, Sheet 13 Golden Bay; Sheet 14 Marlborough Sounds; NZMS1, Sheet S13 Cobb; S14 Motueka.

Length: 36km.

Average gradient: Slight.

RECREATIONAL USE:

Motor launches: Normally too shallow, even at the river mouth.

Jet boats: Would be used to a great extent were it not for the speed restrictions placed on the river. The Motueka is one of the few year-round boatable rivers. Considered to offer easy boating.

Drift boats, rafts: Used considerably from Ngatimoti Bridge down to Alexander Bluff Bridge. Easy water.

Canoes/kayaks: Considerable use, particularly by the less experienced canoeists. YWCA, YMCA, Scouts and Boys' Brigade groups use the river frequently. The experienced canoeists tend to use the Baton and Wangapeka in preference although they do use the Motueka for a peaceful trip.

Pack floating: Not used greatly because of the slow current.

Swimming: Considerable use all along the river. The most popular spots are at the bridges, especially the Ngatimoti Bridge, and the 3km either side of the main highway bridge near the river mouth.

Scenic description: From Baton Bridge the river is bordered by scrub and willows which overhang the river with their branches sweeping the water. It is seldom that you can glimpse the hills or the narrow margin of farmland (tobacco and berry fruits) that flank the river. There are numerous small landholders with craft industries (pottery, weaving) along the river and this adds interest for the picnickers. There are outcrops of rock in places which add variation to the river bank scenery and, at the Graham River confluence, large expanses of shingle beaches. In the lower river, there are numerous shingle beaches and the river may split into two or more channels.

Scenic value: Picturesque.

Recreational value: High.

170.3.1 GRAHAM RIVER 570080

The Graham River flows east off the Arthur Range into the Motueka near the Pokororo Bridge. It is very small and flows over coarse gravel and stone in a narrow bed, enclosed between low gravel banks. The river is not boatable but canoeists have run the lower 3km when flooded. The river provided a very fast exciting white water dash. However, it should not be considered as of any particular recreational value.

Scenic value: Moderate.

Recreational value: Insignificant.

171.0 RIWAKA RIVER 569000

Location: The Riwaka River is a small stream which issues from a deep underground cavern and flows east to Tasman Bay north of the Motueka River mouth.

River mouth location: NZMS1, S14/380552

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S13 Cobb; S14 Motueka.

Length: 12km.

Average gradient: Slight over lower reaches.

Recreational use: The Riwaka River is very small and is not boatable by craft other than canoes, above the tidal limit. Small motor vessels (and trailer yachts) moor in the river mouth area and sail to sea with high tide. The source of the river is of some curiosity and is a popular tourist site. Swimming in the deep pool is a popular activity although the water is very cold.

Scenic description: The water originates from a deep cavern in the hillside it is clear and cold. The source cavern goes deep into the hills. The pool is ringed with large boulders and the river filters through these and runs off down a short, steep section of river before the gradient eases from the South Branch confluence. From this point the river flows quietly over a shallow shingle bed. Willows line the lower river with extensive lengths of long grassy banks.

Scenic value: Moderate.

Recreational value: Low.

172.0 GOLDEN BAY'S MINOR STREAMS

There are a number of small streams and creeks flowing into Golden Bay between Separation Point and the Aorere River mouth. All are very small and not boatable except when flowing under flood, or near flood conditions. They are not used for swimming either, as the beaches seem to be a major attraction in this area.

The Motupipi River is little more than an overgrown tidal creek, which drains farmland near the Takaka dairy factory. It offers a quiet drift amongst reeds and flax but is very swampy. The Onakau and Puremahaia Streams are small with shingle beds flowing between low banks covered in fern and gorse. The Pariwhakaoho River is very stony and shallow with some willows overhanging the channel. The Onekaka River is a little larger than the other creeks in the area with some overhanging willows, too small for boating except after heavy rain. The Little Kaituna Stream and the Tukurua Creeks are much the same; slightly stony but very small flowing through farmlands.

The Parapara River flows into the large Parapara Inlet in a very small muddy bed. For its entire boatable length it is a tidal arm of the inlet, flanked with gorse and scrub. In the upper catchment there are a number of old abandoned water races and sluicing dams.

Scenic value: Dull.

Recreational value: Insignificant.

173.0 TAKAKA RIVER 529000

The Takaka River flows north from the Tasman Mountains into Golden Bay. In the upper reaches the river is very steep but soon reaches the flat land at the foot of the mountains and becomes a wide, slow-moving stream. The main tributaries are the Cobb (high in the Tasman Mountains), the very small Waitui Stream, the Waingaro River, Anatoki River and lastly, the small Waikoropupu which is fed by the Pupu Springs (properly called the Waikoropupu Springs).

The Takaka itself is considered in two sections.

173.1 UPPER TAKAKA RIVER 529180 COBB RIVER 529170

Location: The Takaka River flows from the Arthur and Peel Ranges as a very small, steep river. The Cobb River originates further west in Lake Cobb, flows east into the Cobb reservoir which is formed behind a hydro dam and then north to join the Takaka River. The combined stream then flows north to Upper Takaka.

Section end location: NZMS1, S13/197599

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S13 Cobb.

Length: 31km (includes the Flora Stream).

Average gradient: 1:185 5.4m/km (over lower reaches).

Recreational use: The Takaka is too small for boating above the Cobb junction other than during floods. The river is very steep and bouldery, unsuitable for craft other than river kayaks and the smallest rafts. The river is one of the most exciting in the area when the powerhouse is operating. As most rapids are littered with rocks they are tight, suitable only for the most experienced canoeists. There is limited swimming in some of the quiet back eddies such as that found at Apple Tree Flat.

Scenic description: Above the Cobb confluence the Takaka River is small, steep and bouldery, usually with insufficient water for canoeing or floating. The Cobb River is much the same, but smaller as its headwaters are dammed and the flow now drops down to the powerhouse in pipes. There is no access to the upper river area except by walking track. Most recreational activity begins at the powerhouse itself. From the powerhouse to Apple Tree Flat the road follows at river level

amongst pleasant, bush-covered hills. Below Apple Tree Flat the road climbs above the river which flows in a deep gorge. Excellent views of the river are provided from the road although, at river level, trees tend to obscure all traces of the road. The gradient decreases at the bridge and the river flows over shingle down to the water level measuring tower at the end of this river section. Although there is a good deal of scrub in the river valley there is a wide variety of bushy plants and the river is of considerably more interest than the fern and gorse-covered hillsides of the Baton River. The river, below the Cobb confluence, is a series of long bouldery rapids with pools in between. The rapids are of Grade 3 difficulty and contain much white water.

Scenic value: Impressive.

Recreational value: High.

173.2 LOWER TAKAKA RIVER

Location: From the foot of the Takaka Gorge the river moves off quietly north over a wide shingle bed. The main tributaries are the Waingaro, Anatoki and Waikoropupu Rivers.

River mouth location: NZMS1, S8/192873

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S8 Takaka.

Length: 32km.

Average gradient: 1:210 4.8m/km.

RECREATIONAL USE:

Motor launches: Limited use in tidal area.

Jet boats: Navigable 10km with normal flow and much further with higher flows. Shallow and suitable for the average boater.

Drift boats, rafts: Navigable but of low interest. Similar to the lower Motueka River.

Canoes/kayaks: An easy trip provided care is exercised to avoid the willows that overhang the banks.

Pack floating: Unused.

Swimming: Some use where bridges cross the river. A favourite pool is at Lindsays Bridge at Urewhenua.

Scenic description: The Takaka River, at the foot of the gorge, changes dramatically to a shallow, peaceful stream flowing over a wide shingle bed with numerous willows drooping into the river current and hampering navigation.

There is a great deal of river bank protection works involving large blocks of stone and willows tied along the banks. From the confluence of the Waingaro the river current slows with long sections of quiet pools and only a barely moving current.

Scenic value: Moderate.

Recreational value: Intermediate.

173.2.1 WAINGARO RIVER 529040

The Waingaro is a small river flowing out of the hills of the Lockett Range to join the Takaka River near Kotinga. It has vehicle access only in the lower section so that canoeists, rafters and boaters must portage some distance over privately-owned farmland to get to the upper river. The river is not used to any great extent although canoeists have run it when flowing at near flood levels. The river is quiet flowing with a shingle bed. It is much like the Lower Takaka which, with better access, is much preferred. There is a greater degree of manuka and beech, with willows only prominent in the lower river.

Scenic value: Moderate.

Recreational value: Low.

173.2.2 ANATOKI RIVER 529020

The Anatoki River, flowing parallel to, and west of, the Waingaro, is a scenic little river as it flows quietly over a shingle bed where it is bordered with manuka and beech trees. Willows ap-

pear only over the very lower river. The river can be canoed from the road end but it is too shallow for larger craft. There are few rapids. The river above the road end gives some rocky rapids but this is only boated with very high flows. Access is awkward. The lower reaches have large shingle banks much like the lower Takaka and Waingarō. The middle reaches have a colony of tame eels that are something of a tourist attraction.

Scenic value: Picturesque.

Recreational value: Low.

173.2.3 WAIKOROPUPU STREAM 529010

The Waikoropupu originates in the large Pupu Springs, said to be the largest fresh water springs in the southern hemisphere. The springs maintain an even flow of water year round and consequently the stream draining the pools into the Takaka River is also of constant flow. The water is beautifully clear but very cold. The stream is small but can be canoed, rafted and jet boated. The underwater club have also swum down the river a number of times and jet boaters have boated upstream to the springs. Some willows which had fallen across the river used to hamper navigation, but these have now been removed. The stream begins in manuka scrub country, soon reverting to dairy farm land with a margin of willows.

Scenic value: Picturesque.

Recreational value: Intermediate.

174.0 AORERE RIVER 520000

The Aorere has its beginnings in the Tasman Mountains and the various ranges that lie between the Takaka Valley and the north-western coast of Nelson. It flows in a general north-easterly direction to Ruataniwha Inlet at Collingwood. The Heaphy Track begins at the road end at the top of the valley. The river is considered in two sections.

174.1 AORERE GORGES

Location: The Aorere, down to James Road Bridge passes through a number of dramatic gorges on its northerly path to the sea.

Section end location: NZMS1, S1 & S3/999914

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S1 & S3 Collingwood and Farewell; S7 Heaphy; S8 Takaka.

Length: 54km.

Average gradient: 1:210 4.8m/km.

RECREATIONAL USE:

Motor launches: Too shallow.

Jet boats: Boatable up to the lower end of this section, then conditions become very shallow and rapids boisterous. Only boated with very high flow.

Drift boats, rafts: Excellent water from the road end. Some very exciting water but not particularly difficult. Dramatic gorge scenery.

Canoes/kayaks: Excellent water from the road end. Some shallow rapids and also some steep rapids with large pressure waves in the gorges. Becomes dangerous in the gorges when flooded.

Pack floating: Not used to any great extent.

Swimming: A few pools in the upper river area, near the road end, are used and also a pool near the James Road Bridge. However, there is not a large local population and the area is some distance off the usual route of tourists and holiday makers.

Scenic description: From the road end the Aorere flows fast and clear over small stones. The river is flanked by low beech forest. There are small shingle beaches and shallow shingle banks in the river. The river banks close in at Finney Creek which is the beginning of the first gorge where the river flow

slows down as it passes through deep pools in the shade of high, often overhanging, limestone cliffs. There are some shallow shingle shoals but otherwise the river is placid. This gorge ends at Denton Creek and from this point the river gradient increases and the more difficult rapids begin which are shallows leading into limestone bluffs creating backlash and whirlpools. The rapids become easier, wider and shallower down to the James Road Bridge. There are few willows in this upper river section.

Scenic value: Impressive.

Recreational value: High.

174.2 LOWER AORERE RIVER

Location: From the James Road Bridge the Aorere continues north through farmland to join Golden Bay at Collingwood.

River mouth location: NZMS1, S1 & S3/085033

Maps: NZMS18, Sheet 13 Golden Bay; NZMS1, Sheet S1 & S3 Collingwood and Farewell.

Length: 21km.

Average gradient: 1:700 1.4m/km.

RECREATIONAL USE:

Motor launches: The Collingwood fishing craft moor in the river mouth area and it is possible for quite large launches to motor upstream some distance to the tidal limits, then the river becomes very shallow.

Jet boats: Boated to the bridge with all but low summer flows. Considered easy.

Drift boats, rafts, canoes/kayaks: After the excitement of the upper river this slower section is not of great interest. Some boaters float down to the Rockville bridge but seldom beyond that point.

Pack floating: Unused.

Swimming: Some placid pools but not greatly used.

Scenic description: From the James Road Bridge the river becomes quite flat and placid, the current slows considerably. There are still some shallow shingle shoals creating some rapids with high flow. The river is bordered by outcrops of hard rock and low rock banks; these decrease as the river flows into lower country around Rockville. The river flats are farmed (dairy) with pakihi lands further from the river. Heavy bush covers the hills to the west which forms part of the North West Nelson State Forest Park. The river is lined with willows and becomes tidal midway between Rockville and Gibbstown.

Scenic value: Picturesque.

Recreational value: Intermediate.

174.2.1 KAITUNA RIVER 520010

The Kaituna River is a small left bank tributary of the Aorere. It is a shallow, shingle bed creek flowing between overhanging willows. From Carters Road it could be canoed other than during low summer flows. There seems to be little demand for swimming in the area although the river does have some pleasant swimming holes. The river becomes swampy and slow lower down where the Aorere floods back upstream.

Scenic value: Uninspiring.

Recreational value: Low.

174.2.2 GEORGE CREEK

George Creek is small, tidal and swampy flowing into the western shore of the Ruataniwha Inlet. It provides one kilometre of still water to boat in through flax and beneath overhanging bush. It is not used for recreation.

Scenic value: Moderate.

Recreational value: Insignificant.

175.0 PAKAWAU RIVER 510000

The Pakawau River is a small creek flowing east into Golden Bay a few kilometres north of Collingwood. It is swamplike and overgrown with gorse and other scrub. It is not used for recreation.

Scenic value: Uninspiring.

Recreational value: Insignificant.

INDEX BY RIVER NAME

In the Indexes which follow, bold entries indicate rivers flowing into the sea. Asterisks indicate waterways mentioned in the text but not in headings.

River and Catchment No.	Page	River and Catchment No.	Page	River and Catchment No.	Page
Aan River* 814000	57	Brunner (Lake) 914067	23	Dome Burn* 775674	71
Acheron River 685050	109	Buller River 932000	13	Donne River* 847060	51
Acheron River 621590	132	Bullock Creek 923000	19	Doubtful River* 646323	125
Acre Creek* 910000	28	Bullock Creek 882060	39	Douglas River* —	39
Ada (Lake)* 846000	55	Burke River 868250	42	Dove River* 651111	122
Ahaura (Lake) 914195	22	Bush Stream* 693130	105	Dry Awarua River* —	49
Ahaura River 914190	22	Butler River 893290	32	Dunstan Creek 752638	84
Ahuriri River 711310	98	Buxton Creek 649010	124	Dunton Creek* —	61
Akatore Creek 745000	87	Cadman (Lake)* —	57	D'Urville River* 932523	13
Alabaster (Lake)* 851050	50	Callery River 888100	37	Eastern Hohonu River —	24
Alexander River* 914350	20	Cam River 664042	118	Edith River 841100	55
Alexandrina (Lake)* —	95	Cam River* 602180	136	Edwards River 646370	124
Alfred River 932429	16	Camelot River* 832110	56	Eglinton River 797520	61
Alice (Lake)* —	55	Cameron River* 685165	109	Eighty-Eight Valley Stream 575012	145
Allen Creek* —	82	Caples River 752746	82	Ellery Creek 863103	48
Anatoki River 529020	149	Cardrona River 752970	79	Ellery (Lake) 863103	48
Anatori River 967000	7	Caroline Burn* 809051	58	Ellesmere (Lake) —	111
Aorere River 520000	150	Carrick River* 821100	57	Elterwater (Lake) 609030	135
Aparima River 789000	65	Cascade Creek* 797522	61	Esk River 664150	116
Arahura River 908000	28	Cascade River 859000	48	Eyre River 664060	117
Arawata River 863000	47	Casolis Creek 914298	21	Eyre Stream* 775870	71
Arnold River 914060	24	Cass River 711396	95	Fairhall River 601022	138
Arrow River 752744	81	Castle Hill Stream* —	91	Falls Creek* 851170	49
Arthur River 846000	55	Castle River* 602300	135	Feenian Creek* 952020	8
Ashburton River 688000	106	Catlins River 755000	74	Fergus (Lake)* —	61
Ashley River 662000	118	Catseye River 842200	55	Ferguson Creek* —	79
Atuhaua Creek 590050	139	Cavendish River 816000	57	Finney Creek* 520110	150
Aviemore (Lake)* —	94	Caves Stream* —	106	Fish River 752994	77
Avoca River* 685081	109	Chalice (Lake)* —	137	Flaxbourne River 609000	135
Avon River 666800	115	Charming Creek* 939040	10	Fleming River 761010	73
Awarau River 932294	18	Chatto Creek* 752632	84	Fletcher Creek 932293	18
Awarua River 853000	49	Charwell River* 643080	131	Forest Creek* 693110	105
Awatere River 602000	135	Christabel (Lake)* —	20	Fork Stream 711393	96
Bannockburn 752741	82	Clarence River 621000	132	Forsyth (Lake) 676000	111
Baton River 570110	148	Clarke River* 914320	20	Four Mile (Tiropahi) River 926000	19
Bayou Creek* —	42	Clarke River 868202	43	Fox River 924000	19
Bealey River 664240	115	Clear Grey (Blue Grey) River* 914410	20	Fox River 882100	38
Beattie (Lake)* —	56	Clearwater River 882050	39	Fraser (Lake)* 823500	57
Begley Creek* 601494	137	Cleddau River 847000	51	Fraser River* 823500	57
Benmore (Lake)* —	94	Clinton River 797600	61	Fraser River 752660	83
Big Hohonu River 911100	28	Clutha River 752000	77	Gammans Creek* 664062	117
Big Lagoon (Wairau Lagoons)* 601010	136	Clyde River* 693170	105	Garry River 662070	119
Big River 962000	7	Coal Creek* —	7	Gentleman Smith Stream* —	109
Big River* 914293	21	Coal River* 829000	56	George Creek —	150
Big River 914220	22	Cobb (Lake)* —	149	George River 841000	55
Big River 815000	57	Cobb River 529170	149	George Stream* 621070	134
Big Totara River 929000	18	Coffee Creek* 932426	16	Georgina (Lake)* —	109
Big Wainihinihi River 911250	28	Coleridge (Lake)* 685070	109	German Creek* —	91
Birch Creek* 711319	98	Conway River 643000	131	Giles Creek 932295	18
Black Lake* —	49	Cook River 882000	38	Glaisnock River 797800	61
Blackwater Creek 876020	40	Coopers Creek* 695070	104	Glen Creek* —	146
Blackwater River* 932463	14	Coopers Creek* 664062	117	Glenomaru Stream 752012	74
Blackwater River 932170	18	Copland River 880100	39	Glenroy River* 932456	15
Blackwater River 914293	21	Cribb Creek* 634040	131	Glentui River 662080	119
Blind River 603000	135	Crooked River 914067	23	Gloster River* 621480	133
Blue Grey River* 914410	20	Crow River 664260	115	Godley River 711390	95
Blue Lake* —	84	Cuckoo River* 951101	8	Gorge River 856000	49
Blue (Moeraki) River 873000	41	Cust River 664044	118	Goulter River 601350	137
Blue River 752994	77	Dale (Lake)* —	55	Gowan River 932520	13
Blythe River 652000	121	Dark River 843100	55	Graham River 570080	148
Boatmans Creek* 932295	18	Dart River 752746	82	Granity Creek* 932510	13
Bone Creek* 976000	7	Dart River* 570133	147	Grassmere (Lake) 604000	135
Boundary Creek* 688100	107	Dead Horse Creek* 589055	140	Grave (Lake)* —	55
Bowen River 847030	51	Deadmans Creek* —	81	Grebe River 797452	62
Bowyers Stream* 688021	108	Deadmans Stream* 617000	134	Greenstone (Big Hohonu) River 911100	28
Boyd Creek* —	61	Deep Creek* 752745	81	Greenstone River 752746	82
Boyle River 646323	125	Deepdale River 932390	16	Greta River* 651040	123
Branch Burn 752973	79	Deer Creek* 932427	16	Grey River 914000	20
Branch River 601360	137	Denton Creek* 520100	150	Grey River* 602240	135
Broken River 664130	117	Devils Creek* 752745	81	Groynes Stream 664050	118
Brooklands Lagoon* —	118	Dillon River* 621550	133	Gulliver River* 847070	51
Brown Grey River* 914403	20	Dingle Burn 752986	79	Gunn (Lake)* 797521	61
Browning (Lake)* —	28	Dobson River 711378	97	Haast River 868000	42
Brown River* 589136	140	Docherty Creek 888020	37	Hackett Creek* —	145
Bruce Creek* —	24	Doctor Creek* 932480	14	Hae Hae Te Moana River 696020	103

River and Catchment No.	Page	River and Catchment No.	Page	River and Catchment No.	Page
Hakapoua (Lake)* 815001	57	Jollie River 711385	97	McColl Creek 741000	92
Hakataramea River 711140	99	Jordan River* 602130	136	MacDonalds Creek* 891200	33
Haldane Estuary* 768000	73	Juno River* —	56	McGregor (Lake)* —	95
Hall River 875100	41	Kahutara River 634000	131	MacKenzie Creek* 868206	43
Halswell River 678000	111	Kaipoi River 664040	118	McKenzie River* 845000	55
Hamilton Burn 789600	65	Kaikorai Stream 740000	93	McKerrow (Lake)* —	49
Hamilton River* 601450	137	Kaipo River 850000	50	McMurray Creek* 932292	18
Hanmer River 646200	125	Kaituna River* 677020	111	McRae Creek* —	147
Hankinson (Lake) —	61	Kaituna River 590000	139	Maerewhenua River 711040	99
Hankinson River 797900	61	Kaituna River 520010	150	Mahinapua Creek 905001	30
Hapuka River 865000	47	Kaiwara River* 651050	123	Mahinapua Lake 905001	30
Hapuku River 629000	131	Kaiwera Stream* —	87	Mahitahi River 877000	40
Harold Creek* —	32	Kakahu River 696026	104	Maitai River 578000	140
Harper River 685081	109	Kakanui River 717000	94	Makarewa River 786120	66
Harrison River 847020	50	Kakapotahi River 901100	31	Makarora River 752994	77
Haupiri (Lake)* 914195	22	Kangaroo Lake* —	24	Makawhio River 878000	40
Haupiri River 914195	23	Kaniere (Lake)* 906015	30	Makerikeri River 662040	120
Hauroko Burn* 809053	58	Kaniere River 906010	30	Makikihi River 706000	100
Hauroko (Lake) 809050	58	Kapitea Creek* 910000	28	Manakiaiaua River 879000	40
Havelock River* 693180	105	Karamea River 951000	8	Manapouri (Lake) 797450	62
Hawden River 664200	115	Karangarua River 880000	39	Mandamau River* 651110	122
Hawea (Lake)* 752980	79	Katherine Creek* —	55	Mangarakau Stream 975000	7
Hawea River 752980	79	Katrine (Lake)* 651230	121	Mangles River 932460	14
Hawkins River 680030	110	Kawarau River 752740	80	Manor Burn 752631	84
Hayes (Lake)* —	81	Kawhaka Creek* 908020	28	Manuherikia River 752630	83
Heaphy River 959000	8	Keckerengu River 616000	134	Maori River* 869010	42
Heathcote River 666400	111	Kiwi Burn 818000	57	Mapourika (Lake) 891210	33
Hedgehope Stream 786126	67	Kiwi (Lake)* —	57	Mararua River 797420	62
Hemphill River 943161	9	Kiwi River* —	125	Marchant (Lake)* —	56
Heringa Stream 589170	139	Klondyke Irrigation Race* —	105	Maree (Loch)* —	56
Hermitage Swamp* —	49	Koau Branch* —	87	Marion Creek* —	49
Heron (Lake) 685167	106	Kohaihai River 955000	8	Martyr River 859120	49
Herrick Creek* —	56	Kohe Creek* —	57	Maruia River 932420	15
Herring (Seymour) Stream* 621430	133	Kokatahi River 906050	29	Maruenua (Maerewhenua) River 711040	99
Hewson River 695110	160	Kowai River 664070	117	Mason (Lake)* 651153	121
Hidden Burn* 786960	66	Kowai River 661000	120	Mason River 646100	126
Hidden Falls Creek* 851060	50	Kowhai River 632000	131	Matakitaki River 932450	15
Hidden Lake* —	56	Kowhai (Kowai) River 661000	120	Mataora Lagoon (Wairau Lagoons)* 601010	136
Hikimutu Lagoon* 895000	32	Kye Burn 743640	91	Matau Branch* —	87
Hilda (Lake)* —	56	Lady Lake 914067	23	Mataura River 775000	71
Hindley Creek* 864010	47	Lady Lake Creek* 914067	24	Matheson (Lake)* 882054	39
Hinds River 691000	106	La Fontaine Stream 897050	32	Mathias River 685130	108
Hochstetter (Lake) 914150	23	Lake Stream 685160	109	Matiri River 932440	15
Hodder River* 602210	136	Lambert River* 897300	31	Matukituki River 752992	78
Hog Swamp Creek 603010	135	Lamb Valley Creek* 932531	13	Mawheraiti River 914290	21
Hokitika River 906000	29	Landing Creek* 932293	18	May Creek* 914400	20
Hollyford River 851000	49	Landsborough River 868200	43	Medway River* 602080	136
Hooker River 711388	96	Larry (Awarau) River* 932294	18	Mike River* 824500	56
Hook River 707000	100	Lawrence River* 693171	105	Mikonui River 903000	30
Hopeless Creek* 932635	13	Leader River 646020	127	Miles Drain* 680021	110
Hope River* 932530	13	Leatham River 601361	137	Milford Lagoon* 696010	103
Hope River 858000	49	Lee River 575021	145	Mill Creek* —	27
Hope River 646320	124	Lee Stream* 743130	92	Miller Stream* 621050	134
Hopkins River 711370	97	Leithen Burn 752146	86	Mimihau Stream 775180	72
Hororata River 680040	110	Lewis River 646396	125	Mirror Creek* —	30
Hossack River* 621560	133	Light River 843300	55	Moana Kotuku (Lake Brunner) 914067	23
Houhou Creek* 907000	28	Lillburn River* 662160	119	Moeraki (Lake)* 873000	41
Howard River* 932560	13	Lindis River 752880	80	Moeraki River 873000	41
Humbug Stream* 634030	131	Linton Creek* 634050	131	Mokihinui River 943000	9
Hunter River 752985	79	Little Grey (Mawheraiti) River 914290	21	Mokoreta River 775130	72
Hurunui River 651000	121	Little Kaituna Stream* —	149	Monk (Lake)* —	57
Huxley River* 711379	97	Little Kowai River* 664071	117	Monowai (Lake)* 797371	64
Ianthe Creek 897060	32	Little Kye Burn* 743647	91	Monowai River 797370	64
Ianthe (Lake)* 897060	31	Little (Okana) River* 676010	111	Moonlight Creek* 752745	81
Ida Burn 752636	84	Little (Whakapohai) River 872000	41	Moraine Creek* 851120	50
Ilam Stream* 666800	115	Little Wainihinihi River 911300	28	Morley Stream* 797179	65
Inangahua River 932290	17	Little Waitaha (Kakapotahi) River 901100	31	Morton (Lake)* —	55
Innes (Lake)* 814010	57	Little Wanganui River 948000	9	Motatapu River 752992	78
Invincible Creek* —	82	Little Wanganui (Poerua) River 896000	32	Moteka River 570000	146
Irene River 837200	56	Long Burn* 820100	57	Motunau River 657000	121
Isis River* 602160	136	Lottery River 646101	126	Motupiko River 570160	146
Isolation Creek* 612030	135	Lud River* 581030	140	Motupipi River* 531000	149
Jackson River 863100	48	Lumaluma Creek* 822200	57	Mountain Camp Creek* 589054	140
Jacobs (Aparima) River 789000	65	Lyell Creek* 932350	17	Mount Ida Water Race* —	84
Jacobs (Makawhio) River 878000	40	Lyell Glacier Lake* —	108	Mt Peel Creek* 695100	104
Jed River 649000	124	Lyndon (Lake)* 685054	109	Moutere River 571000	148
Joe River* 863430	47	Lyvia River* —	56	Muddy Creek 978000	7
John O'Groats River 848000	50	Macarthur (Lake)* —	57	Mueller River* 866200	47
Johnstones Water Race* —	84	Macaulay River 711399	95		
Jollie Brook* 651170	121				

River and Catchment No.	Page	River and Catchment No.	Page	River and Catchment No.	Page
Mungo River 906150	29	Paske Creek* 601493	137	Sabine River* 932522	13
Murchison River 711389	97	Pass Burn* —	80	Saltwater Creek* 913000	27
Muttontown Stream* —	140	Patersons Creek* —	125	Salwater Creek 699010	103
Namu River 834200	56	Patupo (Big) River 815000	57	Saltwater Creek 662010	120
Nancy River* 914196	22	Paturau River 971000	7	Saltwater Creek (Ohinetamatea River) 881000	39
Neale Burn* —	61	Pelorus River 589000	139	Sawyers Creek* 634080	131
Nelson Creek 914150	23	Percival River* 642201	125	Seaforth River* 824100	56
Nevis River 752743	81	Percy Stream* 797452	62	Seaward Stream* 651140	122
New River 912000	27	Perth River 893250	32	Selwyn River 680000	110
New (Oreti) River 786000	66	Phantom River* 695120	104	Serpentine Creek* 910000	28
Ngakawau River 939000	9	Pig Valley Stream* 575022	145	Serpentine Creek* —	138
Ngatau River* 867200	47	Pigeon Valley Stream* 575011	145	Seventeen Valley Stream 601014	139
Nile (Waitakere) River 928000	19	Pitt River* —	55	Seymour Stream* 621430	133
Nina River* 646323	125	Pleasant River 729000	93	Shag River 726000	93
Nokomai River* 775780	71	Poerua (Lake)* —	24	Sheppard (Lake)* 651181	121
North-East Gorge Stream 711399	95	Poerua River 914067	24	Sherry River* 570132	147
North Esk River* 651151	122	Poerua River 896000	32	Shotover River 752745	81
North Mavora Lake* 797424	63	Pomahaka River 752140	86	Simbad Gully 846020	55
Oaro River* 683000	131	Porarari River 922000	19	Silverstream Drain* 680022	110
Ohai Stream 797178	65	Porter River 664134	117	Six Mile Creek* 932453	15
Ohau Canal* —	97	Poteriteri (Lake) 813001	57	Small Wainihinihi (Little Wainihinihi) River 911300	28
Ohau (Lake) 711370	97	Potikohua (Fox) River 924000	19	Smite River* 685164	109
Ohau River 711370	98	Potts River* 693140	105	Smithy Creek* —	61
Ohikanui River 932120	18	Potters Creek* 891300	33	Smooth Wainihinihi (Little Wainihinihi) River 911300	28
Ohinemaka River 876000	40	Poulter River 664160	116	Snowy River* 914292	21
Ohinetamatea River 881000	39	Pourakino River* 789050	65	Sonora Creek* 752710	83
Ohinetamatea Swamp* —	40	Powley Creek* 571001	146	South Mavora Lake* —	63
Oho Creek* 822100	57	Prices River* 677010	111	Speargrass Creek* 932580	13
Okana River* 676010	111	Princess Burn 813000	57	Stanley Brook 570120	148
Okarahia Stream* 640000	131	Pudding Hill Stream* 688012	108	Stillwater River 839100	56
Okaramio Creek* 590080	139	Puerua River 752010	74	Stony Creek* 914296	21
Okari River* 930000	19	Puhipuhi River 629010	131	Stony Creek* 570111	148
Okarito River 891000	33	Pukaki Canal* —	97	Stony (Te Wharau) River* 932294	18
Okarito Lagoon* 891010	33	Pukaki (Lake) 711380	96	Stour Stream* 688050	108
Okeover Stream* 666800	115	Pukaki River 711380	97	Styx River 906055	30
Okuku River 662050	120	Pukapuka Creek 601014	139	Styx River 664010	118
Okuru Lagoon* —	47	Pukerau Stream* 775421	72	Sumner (Lake)* 651000	121
Okuru River 867000	47	Punakaiki River 921000	19	Surveyors Stream* —	122
Okuti River* 676011	111	Pupu (Waikoropupu) Springs* 529011	150	Sutton Stream* 743250	91
Old Man River 859020	49	Puremahaia Stream* 527000	149	Swanmere* —	55
Omaka River* 601024	138	Pyke Creek* —	42	Swan (Lake)* —	56
Omarama River 711314	99	Pyke River 851050	50	Swin River* 687168	109
Omoeroa River 887000	38	Quail (Lake)* —	55	Tadmor River 570150	147
Onakau Stream* 528000	149	Rahu River 932429	16	Tahakopa River 759000	73
Onekaka River* 525000	149	Rai River 589130	140	Taieri Lake* —	91
Onslow (Lake)* —	85	Rainbow River 601490	137	Taieri River 743000	91
Oparara River 952000	8	Rainy River 570164	147	Taipo Creek 951200	8
Opawa River* 601020	138	Rakaia River 685000	108	Taipo River 911310	28
Opihi River 696000	103	Rangitata Diversion Water Race —	106	Takaka River 529000	149
Opouri River* 589139	140	Rangitata River 693000	104	Tanekaha Creek* 601492	137
Opuha River 696080	104	Raspberry Creek* 752992	78	Taramakau River 911000	27
Orangipuku River 914067	24	Rea River* 832120	56	Tasman River 711380	96
Orari River 695000	104	Redcliff Creek* 797380	64	Tass River* 914360	20
Orauea River 797170	65	Rees River 752746	82	Tatare River 888040	37
Oreti River 786000	66	Rene (Lake)* —	82	Tautuku River 761000	73
Orowaiti River* 933000	10	Riwaka River 569000	148	Tawharekiri Lakes 869011	42
Otaio River 703000	100	Roaring Creek* —	49	Taylor (Lake)* 651182	121
Otamatapaio River 711311	99	Roaring Meg* 752742	80	Taylor River* 601021	138
Otapiri Stream* 786128	67	Robinson River* 914370	20	Taylor Stream* 688020	108
Otautau Stream* 789200	66	Rob Roy Stream* 752992	78	Te Anau (Lake) 797490	62
Otekaieke River 711080	98	Roding River 575021	145	Te Au (Lake)* —	56
Ote Makura Stream 636000	131	Rolleston River 911384	27	Tekapo Canal* —	95
Otematata River 711300	98	Rolling River 570136	147	Tekapo (Lake) 711390	95
Otiakaeke River 711100	99	Ronald (Lake)* —	55	Tekapo River 711390	95
Otira River 911360	27	Ronga River* 589137	140	Temple Stream 711378	98
Otoko River 875200	41	Rooney River* —	58	Temuka (Hae Hae Te Moana) River 696020	103
Otututu (Rough) River 914280	22	Rotoititi (Lake)* 932620	13	Tengawai River 696050	104
Owaka River 755030	74	Rotokino (Lake)* 893100	32	Ten Mile Creek 916000	20
Owen River 932510	14	Rotoroa (Lake)* 932521	13	Tennyson (Lake)* —	132
Pahau River 651080	123	Rough and Tumble Creek 914295	21	Teviot River 752470	85
Palmer Stream 621490	133	Rough Creek* 932291	18	Te Wharau River* 932294	18
Pakawau River 510000	151	Rough River 914280	22	Thirteen Mile Bush Stream* —	117
Pandora River* 834100	56	Rough Wainihinihi (Big Wainihinihi) River 911310	28	Thomas River* 868100	42
Panel Creek* —	41	Rowallan Burn 802000	58	Thompson Creek* —	99
Paradise (Lake)* —	56	Roxburgh (Lake)* —	83	Thompson (Lake)* —	62
Parapara River* 522000	149	Ruataniwha (Lake)* —	98	Thompson (Lake)* —	124
Pareora River 701000	103	Rubicon River* 664072	117		
Paringa (Lake)* 875101	41	Rum River* 832130	56		
Paringa River 875000	41	Russet Burn* —	58		
Pariwhakaoho River* 526000	149				

River and Catchment No.	Page	River and Catchment No.	Page	River and Catchment No.	Page
Thundering Falls Creek* —	42	Waikaka Stream 775420	72	Waitutu River 813000	57
Tidal Creek* 948020	9	Waikakaho River 601070	139	Waiuna Lagoon* —	49
Timaru River 752986	79	Waikari River* 651060	123	Waiwera River 752130	87
Tinline River 589160	139	Waikawa River 766000	73	Wakamarina River 589050	134
Tiraumea River* 932464	14	Waikiti River 914197	22	Wakapuaka River 581000	140
Tiropahi River 926000	19	Waikoau River 803000	58	Wakatipu (Lake) 752746	82
Titipua Stream 786126	67	Waikoikoi Stream 752145	87	Wanaka (Lake) 752990	77
Titiroa Stream 774000	72	Waikopikopiko Stream 768021	73	Wandle River 646102	126
Toaroha River 906054	30	Waikoropupu Springs* 529011	150	Wanganui River 897000	31
Tokanui River 772000	73	Waikoropupu Stream 529010	150	Wangapeka River 570130	147
Tokomairiro River 748000	87	Waikouaiti River 731000	93	Wapiti River* 797940	62
Tomogalak Stream 775720	71	Waikukupa River 886000	38	Warwick River 932428	15
Tone River* 602320	135	Waima River 612000	134	Washdyke Stream* 619000	134
Totara River 929000	18	Waimahaka Stream 774010	72	Washpen Stream* —	117
Totara River 904000	30	Waimakiriri River 664000	115	Waterloo Burn* 789750	65
Townshend River* 662110	119	Waimangaroa River* 936000	9	Waters of the Leith 735000	93
Transit River 845000	55	Waimari Creek* 666881	115	Weheka (Cook) River 882000	38
Travers River* 932630	13	Waimea Creek* 909000	28	Weka Creek* 659020	120
Trent River* 914199	22	Waimea River 575000	145	Westhaven Inlet —	7
Tuakitoto (Lake) 752020	87	Waimea Stream 775560	72	Whakaea (Waikaia) River 775670	71
Tuamarina River 601060	139	Waingarō River 529040	149	Whakapohai River 872000	41
Tuapeka River 752190	86	Waipahi Stream 752144	87	Whangamoā River 583000	140
Tukurua Creek* 523000	149	Waipapa Stream 770000	73	Whare Creek* 797390	64
Tunakino River* 589138	140	Waipara River* 863200	48	Whareatea River* 935000	9
Turimawivi River 965000	7	Waipara River 659000	120	Wharekiri Stream 621040	134
Turnbull River 866000	47	Waipati River 763000	73	Whataroa River 893000	32
Tutaekuri River* 914198	22	Waipohatu Stream* 768020	73	Whistler River 662130	119
Tutaki River* 932464	14	Waipori (Lake)* —	92	Whitcombe River 906140	29
Tutoko River 847040	51	Waipori River 743050	92	Whitestone (Lake)* —	24
Twizel River 711371	98	Wairaki River 797320	64	Whitestone River 797421	63
Ullstrom (Lake)* —	24	Wairarapa Stream* 666880	115	Whitewater River 841200	55
Upukerora River 797500	61	Wairau Lagoons* 601010	136	Widgeon (Lake)* —	57
Ure (Waima) River 612000	134	Wairau River 601000	136	Wilberforce River 685080	108
Von Creek* 752746	82	Wairaurahiri River 809000	58	Wild Native River 842100	55
Waianakarua River 720000	93	Waireka River* 680050	110	Wilkin River 752994	78
Waianiwhaniwha (Ten Mile) Creek 916000	20	Wairoa River 977000	7	Williamson River* 863420	48
Waiatoto River 864000	47	Wairoa River 575020	145	Wills River 868280	42
Waiarau River 797000	61	Waita River 869000	42	Wilmot (Lake)* 851050	50
Waiarau River 646000	124	Waitaha River 901000	31	Windward River* —	56
Waihao River 709000	99	Waitahu River* 932296	18	Wilson River* 819000	57
Waiheke River* 914199	22	Waitahuna River 752120	86	The Windbag 875105	41
Waihi River 696025	103	Waitakere River 928000	19	Windley River 786940	66
Waiho River 888000	37	Waitaki (Lake)* —	94	Windon Burn* 797424	63
Waihola (Lake)* —	92	Waitaki River 711000	94	Woodside Creek 613000	134
Waihopai River 785000	67	Waitangirotō River* 892010	33	Worsley River 797700	61
Waihopai River 601120	138	Waitangi-Taona River 892000	33	Wye River 601280	138
Wai-iti River 575010	146	Waitati Stream 734000	93	Wyndham (Mokoreta) River 775130	72
Waikaia River 775670	71	Waitohi River 651100	122	Young River 752994	77
		Waitui Stream* 529110	149	Zalas Creek 891090	33

INDEX BY CATCHMENT NUMBER

Catchment			Catchment			Catchment		
No.	River Name	Page No.	No.	River Name	Page No.	No.	River Name	Page No.
510000	Pakawau River	151	601450	Hamilton River*	137	651181	Lake Sheppard*	121
520000	Aorere River	150	601490	Rainbow River	137	651182	Lake Taylor*	121
520010	Kaituna River	150	601492	Tanekaha Creek*	137	651230	Lake Katrine*	121
520100	Denton Creek*	150	601493	Paske Creek*	137	652000	Blythe River	121
520110	Finney Creek*	150	601494	Begley Creek*	137	657000	Motunau River	121
522000	Parapara River*	149	602000	Awatere River	135	659000	Waipara River	120
525000	Onekaka River*	149	602080	Medway River*	136	659020	Weka Creek*	120
526000	Pariwhakaoho River*	149	602130	Jordan River*	136	659050	Waipara River —	
527000	Puremahaia River*	149	602160	Isis River*	136		South Branch*	120
528000	Onakau River*	149	602180	Cam River*	136	659060	Waipara River —	
529000	Takaka River	149	602210	Hodder River*	136		Middle Branch*	120
529010	Waikoropupu Stream	150	602240	Grey River*	135	659080	Waipara River —	
529011	Waikoropupu (Pupu)		602300	Castle River*	135		North Branch*	120
	Springs*	150	603000	Blind River	135	661000	Kowai River	120
529020	Anatoki River	149	603010	Hog Swamp Creek*	135	661010	Kowai River —	
529040	Waingarō River	149	604000	Lake Grassmere	135		North Branch*	120
529110	Waitui Stream*	149	609000	Flaxbourne River	135	661020	Kowai River —	
529170	Cobb River	149	609030	Lake Elterwater	135		South Branch*	120
531000	Motupipi River*	149	612000	Waima (Ure) River	134	662000	Ashley River	118
569000	Riwaka River	148	612030	Isolation Creek*	135	662010	Saltwater Creek	120
570000	Motueka River	146	613000	Woodside Creek	134	662040	Makerikeri River	120
570080	Graham River	148	616000	Kekerengu River	134	662050	Okuku River	120
570110	Baton River	148	617000	Deadman Stream	134	662055	Okuku River —	
570111	Stony River*	148	619000	Washdyke Stream*	134		South Branch*	120
570120	Stanley Brook	148	621000	Clarence River	132	662070	Garry River	119
570130	Wangapeka River	147	621040	Wharekiri Stream*	134	662080	Glentui River	119
570132	Sherry River*	147	621050	Miller Stream*	134	662110	Townshend River*	119
570133	Dart River*	147	621070	George Creek*	134	662130	Whistler River*	119
570150	Tadmor River	147	621430	Seymour (Herring) Stream*	133	662160	Lillburn River*	119
570160	Motupiko River	146	621480	Gloster River*	133	664000	Waimakariri River	115
570164	Rainy River	147	621490	Palmer Stream*	133	664010	Styx River	118
571000	Moutere River	146	621550	Dillon River*	133	664040	Kaipoi River	118
571001	Powley Creek*	146	621560	Hossack River*	133	664042	Cam River	118
575000	Waimea River	145	621590	Acheron River	132	664044	Cust River	118
575010	Wai-iti River	146	629000	Hapuku River	131	664050	Groynes Stream	118
575012	Pigeon Valley Stream*	145	629010	Puhipuhi River	131	664060	Eyre River	117
575013	Eighty-eight Valley Stream	146	632000	Kowhai River	131	664062	Coopers Creek*	117
575020	Wairoa River	145	634000	Kahutara River	131	664062	Gammans Creek*	117
575021	Roding River	145	634030	Humburg Stream*	131	664070	Kowai River	117
575021	Lee River	145	634040	Cribb Creek*	131	664071	Little Kowai River*	117
575024	Pig Valley Stream*	145	634050	Linton Creek*	131	664072	Rubicon River*	117
578000	Maitai River	140	634080	Sawyers Creek*	131	664130	Broken River	117
581000	Wakapuaka River	140	636000	Ote Makura Creek*	131	664134	Porter River*	117
581030	Lud River*	140	638000	Oaro River*	131	664150	Esk River	116
583000	Whangamoā River	140	640000	Okarahia Stream*	131	664160	Poulter River	116
589000	Pelorus River	139	643000	Conway River	131	664200	Hawdon River	115
589050	Wakamarina River	140	643080	Charwell River*	131	664240	Bealey River	115
589054	Mountain Camp Creek*	140	646000	Waiāu (Waiāu-uha) River	124	664260	Crow River	115
589055	Dead Horse Creek*	140	646020	Leader River	127	666400	Heathcote River	111
589130	Rai River	140	646100	Mason River	126	666800	Avon River	115
589136	Brown River*	140	646101	Lottery River	126	666800	Ham Stream*	115
589137	Ronga River*	140	646102	Wandle River	126	666800	Okeover Stream*	115
589138	Tunakino River*	140	646200	Hanmer River	125	666880	Wairarapa Stream*	115
589139	Opouri River*	140	646201	Percival River*	125	666881	Waimari Creek*	115
589160	Tinline River	139	646320	Hope River	124	667000	Port Lyttelton*	111
589170	Heringa Stream*	139	646323	Boyle River	125	668000	Port Levy*	111
590000	Kaituna River	139	646323	Doubtful River*	125	669000	Pigeon Bay*	111
590050	Atuhaua Creek*	139	646323	Nina River*	125	670000	Okains Bay*	111
590080	Okaramio Creek*	139	646323	Lewis River*	125	671000	Le Bons Bay*	111
601000	Wairau River	136	646370	Edwards River*	124	674000	Akaroa Harbour*	111
601010	The Lagoons*	136	649000	Jed River	124	676000	Lake Forsyth	111
601014	Seventeen Valley Stream	139	649010	Buxton Creek	124	676010	Okana (Little) River*	111
601014	Pukapuka Creek*	139	651000	Hurunui River	121	676011	Okuti River*	111
601020	Opawa River*	138	651040	Greta River*	123	677010	Prices River*	111
601021	Taylor River	138	651050	Kaiwara River*	123	677020	Kaituna River*	111
601022	Fairhall River*	138	651060	Waikari River*	123	678000	Halswell River	111
601024	Omaka River*	138	651080	Pahau River	123	680000	Selwyn River	110
601060	Tuamarina River	139	651100	Waitohi River	122	680021	Miles Drain*	110
601070	Waikakaho River	139	651110	Mandamus River*	122	680022	Silverstream Drain*	110
601120	Waihopai River	138	651140	Seaward Stream*	122	680030	Hawkins River*	110
601125	Spray River*	138	651150	Hurunui River —		680040	Hororata River	110
601280	Wye River	138		South Branch	121	680050	Waireka (Wai-a-niwa-niwa)	
601350	Goulter River	137	651151	North Esk River	122		River*	110
601360	Branch River	137	651153	Lake Mason*	121	685000	Rakaia River	108
601361	Leatham River	137	651170	Jollie Brook*	121	685050	Acheron River	109

Catchment No.	River Name	Page No.	Catchment No.	River Name	Page No.	Catchment No.	River Name	Page No.
685054	Lake Lyndon*	109	711380	Lake Pukaki*	96	752973	Branch Burn*	79
685070	Lake Coleridge*	109	711380	Pukaki River	96	752980	Hawea River	79
685080	Wilberforce River	108	711380	Tasman River	96	752985	Hunter River	79
685081	Harper River	109	711385	Jollie River	97	752986	Timaru River	79
685081	Avoca River*	109	711388	Hooker River	96	752986	Dingle Burn	79
685130	Maihias River	108	711389	Murchison River	97	752990	Lake Wanaka	77
685160	Lake Stream	109	711390	Lake Tekapo*	95	752992	Matukituki River	78
685164	Smite River*	109	711390	Tekapo River	95	752992	Motatapu River	78
685165	Cameron River*	109	711390	Godley River	95	752992	Matukituki River — West Branch*	78
685167	Lake Heron*	109	711393	Fork Stream	96	752992	Matukituki River — East Branch*	78
685168	Swin River*	109	711394	Outlet of Lake Alexandrina*	95	752992	Raspberry Creek*	78
688000	Ashburton River	106	711396	Cass River	95	752992	Rob Roy Stream*	78
688010	Ashburton River — North Branch	107	711399	Macaulay River	95	752992	Makarora River	77
688012	Pudding Hill Stream*	108	711399	North-east Gorge Stream	95	752994	Blue River*	77
688020	Taylor Stream*	108	717000	Kakanui River	94	752994	Wilkin River	78
688021	Bowyers Stream*	108	717024	Kakanui River — North Branch*	94	752994	Young River	77
688050	Stour River*	108	717100	Kakanui River — South Branch*	94	752994	Fish River	77
688100	Boundary Creek*	107	720000	Waianakarua River	93	755000	Callins River	74
691000	Hinds River	106	726000	Shag River	93	755030	Owaka River	74
691010	Hinds River — North Branch*	106	729000	Pleasant River	93	759000	Tahakopa River	73
691020	Hinds River — South Branch*	106	731000	Waikouaiti River	93	761000	Tautuku River	73
693000	Rangitata River	104	731020	Waikouaiti River — South Branch*	93	761010	Fleming River	73
693110	Forest Creek*	105	734000	Waitai Stream	93	763000	Waipati River	73
693130	Bush Stream*	105	735000	Waters of the Leith	93	766000	Waikawa River	73
693140	Potts River*	105	740000	Kaikorai Stream	93	768000	Haldane Estuary*	73
693170	Clyde River*	105	740000	McCull Creek	92	768020	Waipohatu Stream*	73
693171	Lawrence River*	105	741000	Taieri River	91	768921	Waikopikopiko Stream*	73
693180	Havelock River*	105	743000	Waipori River	92	770000	Waipapa Stream	73
695000	Orari River	104	743050	Lee Stream*	92	772000	Tokanui River	73
695070	Coopers Creek*	104	743130	Sutton Stream*	91	774000	Titiroa Stream	72
695100	Mt Peel Creek*	104	743250	Kye Burn	91	774010	Waimahaka Stream	72
695110	Hewson River*	104	743640	Little Kye Burn*	91	775000	Mataura River	71
695120	Phantom River*	104	743647	Akatore Creek	87	775130	Mokoreta (Wyndham) River	72
696000	Opihi River	103	745000	Tokomairi River	87	775180	Mimiha Stream	72
696010	Milford Lagoon*	103	748000	Tokomairi River — East Branch*	87	775420	Waikaka Stream	72
696020	Temuka (Hae Hae Te Moana) River	103	748040	Clutha River	77	775421	Pukerau Stream*	72
696025	Waihi River*	103	752000	Puerua River	74	775560	Waimea Stream	72
696026	Kakahu River	104	752010	Glenomaru River	74	775670	Waikaia (Whakaea) River	71
696050	Tengawai River	104	752012	Lake Tuakitoto	87	775674	Dome Burn*	71
696080	Opuha River	104	752020	Inchclutha	87	775679	Waikaia River — West Branch*	71
699010	Saltwater (Otipuha) Creek	103	752030	Waitahuna River	86	775679	Waikaia River — East Branch*	71
701000	Pareora River	103	752120	Waiwera River	87	775720	Tomagalak Stream	71
701030	Pareora River — South Branch*	103	752130	Pomahaka River	86	775780	Nokomai River*	71
703000	Otaio River	100	752140	Waipahi Stream	87	775870	Eyre Stream*	71
706000	Makikihi River	100	752144	Waikoikoi Stream	87	785000	Waihapai River	67
707000	Hook River	100	752145	Leithen Burn	86	786000	Oreti River	66
707021	Wainono Lagoon*	100	752146	Tuapeka River	86	786120	Makarewa River	66
709000	Waihao River	100	752190	Teviot River	85	786126	Hedgehope Stream	67
709030	Waihao River — North Branch*	99	752470	Manuherikia River	83	786126	Titipua Stream	67
709040	Waihao River — South Branch*	99	752630	Manor Burn	84	786128	Otapiri Stream*	67
711000	Waitaki River	94	752631	Chatto Creek*	84	786940	Windley River	66
711040	Maerewhenua River	99	752632	Ida Burn	84	786960	Hidden Burn	66
711046	Maerewhenua River — South Branch*	99	752636	Manuherikia River — East Branch*	83	789000	Aparima (Jacobs) River	65
711047	Maerewhenua River — North Branch*	99	752637	Dunstan Creek	84	789050	Pourakino River*	65
711080	Otekaieke River	99	752638	Fraser River	83	789200	Otautau River*	66
711110	Otiake River	99	752660	Sonora Creek*	83	789600	Hamilton Burn*	65
711140	Hakataramea River	99	752710	Kawarau River	80	789750	Waterloo Burn*	65
711300	Otematata (Otematakau) River	99	752740	Bannockburn	82	797000	Waiu River	61
711310	Ahuriri River	98	752741	Roaring Meg*	80	797170	Orauea River	65
711311	Otamatapaio River	99	752742	Nevis River	81	797178	Ohai Stream*	65
711314	Omarama River	99	752743	Arrow River	81	797179	Morley Stream*	65
711319	Birch Creek*	98	752744	Shotover River	81	797320	Wairaki River	64
711370	Lake Ohau*	97	752745	Deep Creek*	81	797370	Monowai River	64
711370	Ohau River	98	752745	Devils Creek*	81	797371	Lake Monowai*	64
711370	Hopkins River	97	752745	Moonlight Creek*	81	797380	Redcliff Creek*	64
711371	Twizel River	98	752746	Lake Wakatipu	82	797390	Whare Creek*	64
711377	Temple Stream	98	752746	Von River*	82	797420	Mararoa River	62
711378	Dobson River	97	752746	Greenstone River	82	797421	Whitestone River*	63
711379	Huxley River*	97	752746	Caples River	82	797424	North Mavora Lake*	63
			752746	Dart River	82	797424	Windon Burn*	63
			752746	Rees River	82	797450	Lake Manapouri	62
			752880	Lindis River	80	797452	Grebe River	62
			752970	Cardrona River	79	797452	Percy Stream*	62
						797490	Lake Te Anau	62
						797500	Upukerora River	61

Catchment No.	River Name	Page No.	Catchment No.	River Name	Page No.	Catchment No.	River Name	Page No.
797520	Eglinton River	61	856000	Gorge River	49	905001	Mahinapua Creek	30
797521	Lake Gunn*	61	858000	Hope River	49	905001	Lake Mahinapua	30
797522	Cascade Creek*	61	859000	Cascade River	48	906000	Hokitika River	29
797600	Clinton River	61	859020	Old Man River	49	906010	Kaniere River	30
797700	Worsley River	61	859120	Martyr River	49	906015	Lake Kaniere*	30
797800	Glaisnock River	61	863000	Arawata River	47	906050	Kokatahi River	29
797900	Hankinson River	61	863100	Jackson River	48	906054	Toaroha River	30
797940	Wapiti River*	62	863103	Ellery Creek	48	906055	Styx River	30
797950	Lake Thompson*	62	863200	Waipara River*	48	906140	Whitcombe River	29
802000	Rowallan Burn	58	863420	Williamson River*	48	906150	Mungo River	29
803000	Waikoau River	58	863430	Joe River*	47	907000	Houhou Creek*	28
809000	Wairaurahiri River	58	864000	Waiaototo River	47	908000	Arahura River	28
809050	Lake Hauroko	58	864101	Hindley Creek*	47	908020	Kawhaka Creek*	28
809051	Caroline Burn*	58	865000	Hapuka River	47	909000	Waimea Creek*	28
809053	Hauroko Burn*	58	866000	Turnbull River	47	910000	Kapitea Creek*	28
813000	Waitutu River	57	866200	Mueller River	47	911000	Taramakau River	27
813000	Princess Burn	57	867000	Okuru River	47	911100	Greenstone (Big Hohonu) River	28
813001	Lake Poteriteri	57	867200	Ngatau River*	47	911250	Big (Rough) Wainihinihi River	28
814000	Aan River*	57	868000	Haast River	42	911310	Taipo River	28
814010	Lake Innes*	57	868100	Thomas River*	42	911360	Otira River	27
815000	Big (Patupo) River	57	868200	Landsborough River	43	911384	Rolleston River	27
815001	Lake Hakapoua*	57	868202	Clarke River	43	912000	New River	27
816000	Cavendish River	57	868202	Mackenzie Creek*	43	913000	Saltwater Creek*	27
818000	Kiwi Burn	57	868250	Burke River	42	914000	Grey River	20
819000	Wilson River	57	868280	Wills River	41	914060	Arnold River	24
820000	Long Sound*	57	869000	Waia River	42	914067	Lady Lake	23
820100	Long Burn*	57	869010	Maori River*	42	914067	Lady Lake Creek*	24
821000	Cunaris Sound*	57	869011	Tawharekiri Lakes	42	914067	Lake Brunner	23
821100	Carrick River	57	872000	Whakapohai (Little) River	41	914067	Crooked River	23
822000	Edwardson Sound	57	873000	Moeraki (Blue) River	41	914067	Poerua River	24
822100	Oho Creek*	57	875000	Paringa River	41	914067	Orangipuku River	24
822200	Luma Luma Creek*	57	875100	Hall River	41	914150	Nelson Creek	23
823500	Lake Fraser*	57	875101	Lake Paringa*	41	914150	Lake Hochstetter	23
823500	Fraser River*	57	875105	The Windbag	41	914190	Ahaura River	22
824000	Dusky Sound	56	875200	Otoko River	41	914195	Haupiri River	23
824100	Seaforth River*	56	876000	Ohinemaka River	40	914195	Lake Haupiri	22
824500	Mike River*	56	876020	Blackwater Creek*	40	914196	Nancy River*	22
828000	Breaksea Sound	56	877000	Mahitahi River	40	914197	Waikiti River*	22
829000	Coal River*	56	878000	Makawhio (Jacobs) River	40	914198	Tutaekuri River*	22
830000	Dagg Sound	56	879000	Manakiaua River	40	914199	Waiheke River*	22
832000	Doubtful Sound	56	880000	Karangarua River	39	914199	Trent River*	22
832110	Camelot River*	56	880100	Copland River	39	914220	Big River	22
832120	Rea River*	56	881000	Ohinetamatea River (Saltwater Creek)	39	914280	Rough (Otututu) River	22
832130	Rum River*	56	882000	Cook (Weheka) River	38	914290	Mawheraiti (Little Grey) River	21
834000	Thompson Sound	56	882050	Clearwater River	39	914292	Snowy River	21
834100	Pandora River*	56	882054	Lake Matheson*	39	914293	Blackwater River	21
834200	Namu River*	56	882060	Bullock Creek	39	914293	Big River*	21
835000	Nancy Sound	56	882100	Fox River	38	914295	Rough and Tumble Creek*	21
837000	Charles Sound*	56	882100	Waikukupu River	38	914296	Stony Creek*	21
837200	Irene River	56	886000	Omoeroa River	38	914298	Casolis Creek*	21
839000	Caswell Sound*	56	887000	Waiho River	37	914320	Clarke River*	20
839100	Stillwater River	56	888000	Docherty Creek	37	914320	Alexander River*	20
841000	George Sound*	55	888020	Tatare River	37	914320	Tass River*	20
841000	George River	55	888040	Callery River	37	914370	Robinson River*	20
841100	Edith River	55	888100	Okarito River	33	914400	May Creek*	20
841200	Whitewater River	55	891000	Okarito Lagoon*	33	914403	Brown Grey River*	20
842000	Bligh Sound*	55	891010	Zalas Creek*	33	914410	Blue (Clear) Grey River	20
842100	Wild Natives River	55	891090	MacDonalds Creek*	33	916000	Ten Mile (Waianiwhaniwha) Creek	20
842200	Catseye River	55	891200	Lake Mapourika	33	921000	Punakaiki River	19
843000	Sutherland Sound*	55	891212	Waitangi-taona River	33	922000	Porarari River	19
843100	Dark River	55	892000	Waitangi-iroto River*	32	923000	Bullock Creek	19
843300	Light River	55	892010	Whataroa River	32	924000	Fox (Potikohua) River	19
845000	Transit River	55	893000	Lake Rotokino*	32	926000	Tiropahi (Four Mile) River	19
846000	Arthur River	55	893100	Perth River	32	928000	Waitakere (Nile) River	19
846020	Sinbad Gully	55	893250	Butler River	32	929000	Totara (Big Totara) River	18
847000	Cleddau River	51	893290	Hikimutu Lagoon*	32	930000	Okari River*	19
847020	Harrison River	50	895000	Poerua (Little Wanganui) River	31	932000	Buller River	13
847030	Bowen River	51	896000	Wanganui River	31	932120	Ohika-nui River	18
847040	Tutoko River	51	897000	La Fontaine Stream	32	932170	Blackwater River	18
847060	Donne River*	51	897050	Ianthe Creek	32	932290	Inangahua River	17
847070	Gulliver River*	51	897060	Lake Ianthe*	31	932291	Rough Creek*	18
848000	John O'Groats River	50	897060	Lambert River*	31	932292	McMurray Creek*	18
850000	Kaipō River	50	897060	Waitaha River	31	932293	Landing Creek*	18
851000	Hollyford River	49	901000	Kakapotahi (Little Waitaha) River	31	932293	Fletcher Creek*	18
851050	Pyke River	50	901100	Mikonui River	30	932294	Awarua (Larry) Creek*	18
851060	Hidden Falls Creek*	50	903000	Totara River	30			
851120	Moraine Creek*	50	904000					
851170	Falls Creek*	49						
853000	Awarua River	49						

Catchment			Catchment			Catchment		
No.	River Name	Page No.	No.	River Name	Page No.	No.	River Name	Page No.
932294	Te Wharau (Stony) Creek*	18	932510	Granity Creek*	13	943180	Mokihinui River —	
932295	Boatman's Creek*	18	932520	Gowan River	13		North Branch*	9
932295	Giles Creek*	18	932521	Lake Rotoroa*	13	948000	Little Wanganui River	9
932296	Waitahu River*	18	932522	Sabine River*	13	948020	Tidal Creek*	9
932350	Lyell Creek*	17	932523	Durville River*	13	951000	Karamea River	8
932390	Deepdale River	16	932530	Hope River*	13	951101	Cuckoo River*	8
932420	Maruia River	15	932531	Lamb Valley Creek*	13	951200	Taipo Creek*	9
932426	Coffee Creek*	16	932560	Howard River*	13	952000	Oparara River	8
932427	Deer Creek*	16	932580	Speargrass Creek*	13	952020	Fenian Creek*	8
932428	Warwick River	15	932620	Lake Rotoiti	13	955000	Kohaihai River	8
932429	Alfred River*	16	932630	Travers River*	13	959000	Heaphy River	8
932429	Rahu River	16	932635	Hopeless Creek*	13	962000	Big River	7
932440	Matiri River	15	933000	Orowaiti River*	9	965000	Turimawiri River	7
932450	Matakitaki River	15	935000	Whareatea River*	9	967000	Anatori River	7
932453	Six Mile Creek*	15	936000	Waimangaroa River*	9	971000	Paturau River	7
932456	Glenroy River*	15	939000	Ngakawau River	9	975000	Mangarakau Stream*	7
932460	Mangles River	14	939040	Charming Creek*	9	976000	Bone Creek*	7
932463	Blackwater River*	14	943000	Mokihinui River	9	977000	Wairoa River*	7
932464	Tutaki River*	14	943161	Hemphill River*	9	978000	Muddy Creek*	7
932464	Tiraumea River*	14	943170	Mokihinui River —				
932480	Doctor Creek*	14		South Branch*	9			
932510	Owen River	14						

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 X018600455 1981





Port River(110.0)

108.0)

New Zealand Recreational River Survey

SOUTH ISLAND RIVERS

Accompanies Water and Soil Miscellaneous
Publication No. 15

by
G.D. & J.H. EGARR

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1979

Scale 1:1,000,000



RIVER CLASSIFICATION

The categories below are a combination of scenic
and recreational values. (Refer Vol I, Chapter 6.3).
Category A rivers have been rated "Exceptional"
for both their scenic and recreational values.

- Category A.....
- Category B.....
- Category C.....
- Category D.....



Lamberts Conformal Conic Projection
with Standard Parallels at 37°S and 45°S.

Cartography by
the Department of Lands & Survey, N.Z.,
under the authority of I.F. Stirling, Surveyor General.

L&S 318

EDITION 1 1979

171°

172°

173°

174°

175°E

46°

47°

48°
S

171°

172°

173°

174°E

40° S

41°

42°





(35.0) Whararoa River

(39.0) Waiho River
(40.0) Omoeroa R
(40.0) Waikukupa R

(41.0) Conk River
(42.0) Ohinetomatea R
(43.0) Karangarua River

PEGASUS BAY

CHRISTCHURCH

BANKS PENINSULA

Rakaia River (135.0)

Ashburton River (134.0)

CANTERBURY
BIGHT

Rangitata River (132.0)

Opihi River (130.0)

TIMARU

Pareora River (128.0)

Otaio R (127.0)

Waitaki R (120.0)

Waiakarua R (118.0)

Shag River (117.0)

44°

45°

46°



(58.0) Cascade River

Jackson Bay

Milford Sound

Caswell Sound

Dusky Sound

Preservation Inlet

Poison Bay

Nancy Sound

Breaksea Sd

Chalky In

Martins Bay

Bligh Sound

Doubtful Sound

Dusky Sound

Puysgur Pt

Lake Ellery

L. Alabaster

Stillwater

L. Manapouri

L. Hauroko

Lake Ellery

Mt. Earnslaw

Wakaiti

L. Manapouri

L. Potteriti

Jackson Bay

Martins Bay

Bligh Sound

Doubtful Sound

Breaksea Sd

L. Hauroko

Preservation Inlet

Martins Bay

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Breaksea Sd

Chalky In

Lake Ellery

L. Alabaster

Stillwater

L. Manapouri

L. Hauroko

L. Potteriti

Jackson Bay

Martins Bay

Bligh Sound

Doubtful Sound

Breaksea Sd

L. Hauroko

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